澳門科技大學 MACAU UNIVERSITY OF SCIENCE AND TECHNOLOGY
FHTM 酒店與旅遊管理學院 Faculty of Hospitality and Tourism Management

IECR

2025 IECR Conference

The 2nd International Early-Career Researcher Conference in Hospitality and Tourism

IECR Conference Proceedings

May 9-11, 2025

Macau, China

Conference Proceedings
The 2nd International Early-Career Researcher Conference in Hospitality and Tourism
(IECR 2025)

May 9-11, 2025 Macau, China

Edited by

Ben K. Goh

Wong Weng Chou Jose

Pan Su Ying

Disclaimer

The responsibility for opinions expressed in articles, studies and other contributions in this publication rests solely with their authors, and this publication does not constitute an endorsement by the IECR of the opinions so expressed in them.

Official website of the conference

https://www.iecrconference.net/zh

IECR 2025 Conference Organizing Committee

Conference Chairs

Professor Ben K. GOH

Associate Professor Jose Weng Chou WONG

Program Chair

Associate Professor Su-Ying PAN

Hospitality Chairs

Assistant Professor Chieh Yun (Brenda) YANG

Assistant Professor Yan FENG

Committee Members

Associate Professor Chen-Kuo PAI

Associate Professor Juan TANG

Associate Professor Ming LEE (Hoffer)

Assistant Professor Ting Pong CHENG (Vincent)

Assistant Professor Jing LIU (Gloria)

Assistant Professor Chao LIU

Assistant Professor Jinkyung KIM (Jenny)

Assistant Professor Amr Al-Ansi

Assistant Professor Xiao HU

Assistant Professor Yihang ZHANG (Kelvin)

Assistant Professor Rui GOU (Gloria)

Assistant Professor Heewon KIM

Dr. Jing YU (Jasper)

Dr. Dimin WANG

Ms. Zhongying OU (Michelle)

Student Helpers

Liu XU
Doctor of Philosophy in Tourism Management

Jiaojiao WANG
Doctor of Philosophy in Tourism Management

Jingye DU
Doctor of Philosophy in Tourism Management

Yingan HUO
Doctor of Philosophy in Tourism Management

Yuxin SONG
Master of International Tourism Management

Shiyi ZHANG
Master of Hotel Management

Organized By:
Faculty of Hospitality and Tourism Management Macau University of Science and Technology

Publishers: Ben K. Goh, Wong Weng Chou Jose, Pan Su Ying
Publish Place and Date:
Avenida Wai Long, Taipa, Macao, China
May 2025
Printed organizer: Faculty of Hospitality and Tourism Management, Macau University of Science and Technology
Printed Place and Date:
Avenida Wai Long, Taipa, Macao, China
May 2025

ISBN 978-99981-60-60-6

Authors are fully responsible for corrections of any typographical, copyrighted materials, and technical and content error

Copyright ©2025 IECR
This work is subject to copyright. All rights are reserved by the Publisher, whether the whole or part of the material is concerned, specifically the rights of translation, reprinting, reuse of illustrations, recitation, broadcasting, reproduction on microfilms or in any other physical way, and transmission or information storage and retrieval, electronic adaptation, computer software, or by similar or dissimilar methodology now known or hereafter developed. The use of general descriptive names, registered names, trademarks, service marks, etc. in this publication does not imply, even in the absence of a specific statement, that such names are exempt from the relevant protective laws and regulations and therefore free for general use. The publisher, the authors and the editors are safe to assume that the advice and information in this book are believed to be true and accurate at the date of publication. Neither the publisher nor the authors or the editors give a warranty, express or implied, with respect to the material contained herein or for any errors or omissions that may have been made. The publisher remains neutral with regard to jurisdictional claims in published maps and institutional affiliations.

TABLE OF CONTENTS

Unlocking the power of multimodal online reviews: A multisensory perspective 1

Haoqiang SUN[1,2], Shaolong SUN[1,2*], Haozhe XU[1], Chunxu ZHENG[1], Hengyun LI[3], Shouyang WANG[4,5] 1*

Exploring the Impact of virtual reality presented museum tourism on senior tourist: The lens from sensory marketing 3

Runze MAO, Chris Zhengan ZHU 3

Can livestreaming affect female tourist sharing behavior and visit Intention? The lens from Macau gastronomy 5

Jingjing WANG[1], Christy Yingni LIU[2] 5*

Examining the relationship of work-family conflict to job and life satisfaction: A case of hotel frontline employees 7

Zhiyuan ZHU[1], Liu XU[2], Jose Weng Chou WONG[3] 7*

The Role of Internship in Shaping Students' Perception and Career Expectation of the Hospitality Industry: A Case Study in Macau 9

Zixuan LUO[*], Kelvin ZHANG 9

Research on Human Resource Practices, Leadership, and Employees' Work - Family Relationships in the Context of Disability Inclusion 10

Yingying WANG , Juan TANG[*] 10

Research on the influence of digital tourism on tourists' behavior intention 13

Tianjia ZHANG 13

A Study on Tourists' Willingness and Influencing Factors of Health Tourism in Macau 14

Yuexian XIAO, Hong FANG 14

Decoding Digital Engagement in The Museum: A Three-Factor Asymmetry Analysis . 15

Yunhan GONG 15

Which fragrances appeal to consumers and elicit positive responses in the hotel context? 17

Jinmei LI[1], Jinkyung KIM[2] 17

Immersive Spirituality: Exploring Temple Stay as a Unique Form of Tourism Experience 19

Qianlan LONG, Yifan LUO , Kelvin ZHANG* *19*

Green-Washing: the Credit Overdraft Crisis of Green Hotel? An Exploration of Establishing Loyalty of Tourists to Green Hotels **20**

Qianhui OUYANG *20*

Examining Risk Factors Influence Health and Wellness Tourists' Willingness to Travel: The Case of Macau **22**

Yuhao GUO[1] and Dimin WANG[2]* *22*

Effects of perceived tourism impacts on residents' support for tourism development: Evidence from overtourism in Macau **25**

Jiachen YAN, Juanye WANG, Qiaoyan ZHANG, KIM Jinok, Susanna, KIM Heewon *25*

The Impact of Gamified Experiences on Tourist Emotions and Behaviour **27**

Sisi WANG , Chunxiao LIU, Kim Jinok, Susanna *27*

The Impact of Perceived Value on Satisfaction and Revisit Intentions Using the Experiential Economy Model: A Focus on Heytea Experience Customers **28**

Juanye WANG, Qiaoyan ZHANG, Jiachen YAN, KIM, Jinok, Susanna *28*

Exploring the impact of awe on tourists' prosocial behavior in religious tourism: The Moderating effect of Religiosity **30**

Yihan ZHOU, Shiqian WANG, Kim Jinok, Susanna *30*

Research on the Factors Affecting User Loyalty to Chatbot Tools in Travel Apps **32**

*Yi LIU, Binghan XIA** *32*

Factors Influencing Community Residents' Attitudes Toward Community-Based Tourism **34**

Zhaojian LIU, Yan FENG *34*

Willingness of elderly users to use Intelligent Voice Assistant while traveling based on Technology Acceptance Model **35**

Xiaotong ZHU , Xuruizi SUN, KIM Jinok, Susanna *35*

The Differential Impact of AI- and Firm-generated Content on Tourists' Visit Intention in Tourism Destination: based on the Trust Transfer Theory **36**

Chuanji TU[1], Tianqi CHEN[2], Luebin SUN[1], Chen-Kuo PAI[3] *36*

"From Traditional to Creative": The Development and Validation of the Wet Market Tourism Experience Scale for Generation Z Tourists **38**

Junying LIANG[1], Zhiqian LONG[2], Jaeseok LEE[3], Chen-Kuo PAI[4]* *38*

Visual Stimuli of Destinations under Filters and Tourists' Behavioral Intentions: A Study on the Mediating Roles of Emotion and Trust **40**

Luebin SUN[1], Ce GUO[2], Chuanji TU[1] , Chen-Kuo PAI[3]* *40*

To Investigate the Synergy Effects of Integrating Drone Shows with Festival Activities **42**

Zhiqian LONG[1], Sangguk KANG[2], Kuan-Ting CHEN[1] , Chen-Kuo PAI[3] *42*

Exploring the Effects of Technology Agent Quality on Tourists' Intention to Use in a Destination **44**

Jingsong ZHANG[1], Jaeseok LEE[2], Junying LIANG[3], Chen-Kuo PAI[4] *44*

The Influence of "Grocery Store Tourism" Experience on Revisit Intention and Recommendation Intention: The Mediating Role of Destination Image **46**

Zequan LUO[1], Ce GUO[2], Chen-Kuo PAI[3] *46*

Explore the impact of tourists' motivation to participate in destination culinary activities on cultural identity and destination advocacy **48**

Kuan-Ting CHEN[1], Jingsong ZHANG[2], Sangguk KANG[3], Chen-Kuo PAI[4] *48*

The Effect of Cute Food Traits on Customer loyalty and Satisfaction:An Emotional Solidarity Perspective **50**

Wenlong WANG, Haoran CHEN, Zehan HUANG *50*

Exploring the Intrinsic Influence Mechanism of Memorable Brand Experience on Customer Loyalty: A Case of Luxury Branded Hotel **52**

Yingtong LIN[1], Haoran CHEN[2], Wenlong WANG[1], Chen-Kuo PAI[3] *52*

Exploring the Impact of Luxury Hotel Brand Image on Customer Brand Identification and Loyalty **54**

Yalin YANG[1], Yingtong LIN[1], Rongxuan ZHANG[1], Chen-Kuo PAI[2] *54*

Analysis of the success factors of DMO in creating a "Wanghong City" --Taking Harbin and Zibo as examples **56**

Tianche LIU, Wujie LU, Yiming MA *56*

Polluted Atmosphere: Regional Discrimination and Tourists' Pro-social Behavior ... **57**

Fengkexin FANG[1], Wen ZANG[1], Liwei GUO[1], Jing LIU[2]* *57*

Luxury Consumption Influences the Choice of Tourist Destination: The Mediating Role of Benign Envy of Focus Consumers **59**

Ruilin QIANG, Xiangjie CAO[*] *59*

Rural tourism transformation driven by social sustainability: the impact mechanism of perceived attributes on tourists' green consumption behavior: a case study of Hongcun, Yi County **61**

Chenjin DING, Fangqing ZHANG[*] *61*

To Try or to Avoid: An Exploration of the Relationship between Food UGC and Destination Image **63**

Weiyin XIA, Wenshu ZHANG, Juan TANG *63*

The relationship between heritage tourism motivation and perceived authenticity on tourist satisfaction and loyalty **65**

Hanshu ZHOU[*], Jiamei WANG *65*

Based on the S-O-R model: exploring how service quality and place attachment drive revisit and sustainable behavior of tourists in rural tourism **67**

Leyi GONG, Ruijie XU *67*

The impact of social media on honeymoon travel decisions and experiences **68**

Yetong FU *68*

The Impact of AI Technology on Exhibition Scenarios: Opportunities and Challenges of New Technology Applications **70**

Lejia LI[1], Ziyu LUO[2], Haoran CHEN[3]* *70*

Authenticity and Sustainable Tourism Behavior in Rural Tourism Destinations: The Mediating Role of Memory Impressions and the Moderating Role of Destination Image **71**

Xinrong YE, Yuxin LI[*] *71*

A Study on the Emotional Influence of Dragon Boat Sports Tourism Destinations on Youth Participation——Taking Jiujiang Dragon Boat Activity in Nanhai, Foshan, China as an Example **73**

Yuzhuo WANG *73*

Exploring the ESG impact of Macau gaming companies: A comparative analysis from the perspective of employees and customers **75**

Yuxuan WANG, Xiaonan ZHAO, Jinkyung KIM, Jenny *75*

Grandparents' perceptions, attitudes, and behavioral intention regarding grandtravel **77**

Tian HAI[1], Hyewon YOUN[12] *77*

What Makes Ethnic Restaurants Feel Authentic? **78**

Yifan ZHENG[1], Jong-Hyeong KIM[12*]* *78*

The effect of similarity between reviews and business profiles on travel review usefulness **79**

Tong YANG[1] and Jie WU[2]* *79*

Interaction Experiences and Social Value in Pet Tourism: Impacts on Memorable Tourism Experiences and Revisit Intentions **81**

Jiaojiao WANG[1], Ruhong XUE[2]* *81*

The influence of food culture marketing on tourists' travel intention, moderated by travel expectation - A case study of Japanese **83**

Haotian ZHU *83*

The Mechanism of the Quality of User-Generated Content (UGC) on Tourists' Willingness to Visit Tourist Destinations: Taking Qingdao Online Marine Tourism as an Example **84**

Yizhou CAI and Zihan LI[*] *84*

Camera Bullying: Power Dynamics and Digital Violence in Social Media and Reverse Gaze **86**

Weilin WANG, Yiwen LI *86*

Research on the influence mechanism of social media user generated content on tourist destination image construction --- Empirical analysis based on Xiaohongshu platform **88**

Jingyuan FENG *88*

The Uniqueness of Consumer Behavior in Girlfriends' Tourism: Investigating the Impact of "Appearance Economy" on Travel Destination Choice **90**

Ziyu LUO[1], Lejia LI[2], Haoran CHEN[3]* *90*

The impact of smart tourism technology in restaurants on customer attitudes and word-of-mouth **92**

Manrong GAN, Yingni LIU and Jingru LIU* *92*

What makes Macao's cultural tourism special? Exploring Tourist' Motivation and Behavioral Intentions Based on the Push-Pull Theory **93**

Zhenghao XIONG *93*

Digital Innovation Process of Hotels: An Actor-Network Theory Perspective..... 94

Hongjuan TAN[1]， Liutian LUO[1], Qi LIU[2] 94*

Exploring Tourism Creative Destruction in Shanwei Traditional Village..... 95

Liutian LUO, Hongjuan TAN, Duanni ZHAO[*] 95

The Convenience and Humanization of AI in Tourism—Towards a Balanced Future.. 97

Zilan LI[1] , Weng Lam HO[2], Kenneth Shiu Pong NG[3] 97*

Beyond Functional Outcomes: How Business Network Shape Emotional Solidarity in Tourism SMEs 99

Yangyan XU, Michael S. LIN 99

Understanding Generation Z’s Eco-Friendly Destination Selection: A Value-Belief-Norm Perspective 101

Duanni ZHAO[*], Liutian LUO 101

Research on the Impact of Artificial Intelligence Technology on Customer Loyalty in the Hotel Industry..... 102

Qilin WEI[1], Dimin WANG[2] 102*

Estimating tourists’ continuous sentiment scores: A refined large language model . 105

Tong YANG[1], Cathy H.C. HSU[2] 105

The Impact of Internet-Famous Landmarks on Local Communities: Negative Impacts and Tourism Development Support..... 106

Ce GUO[1], Haoran CHEN[1], Luebin SUN[2], Chen-Kuo PAI[3] 106*

Research on the Impact of New Quality Productive Forces on Tourism Economic Resilience..... 108

Yi LIN, Lijuan WANG, Xin QI..... 108

The relationship between human relationship skills and academic performance among international students..... 110

Jilian JIANG, Chengxun YANG, Jue WANG 110

On Track: An Ethnographic Study of Senior Tourists’ Train Travel..... 111

Miaomiao SHEN[1], Paola Ossola[2], Yunhan GONG[1], Yan FENG[3]..... 111

Research on Heritage Protection Willingness from the Perspective of User-Generated Content (UGC): A Case Study of Guangxi Zhuang Ethnic Cultural Heritage 113

Siyu LONG[1], Dimin WANG[2], Zhixian ZHONG[3]* *113*

Construction of the Dietary Cultural Gene Pedigree and Tourism Revitalization Pathways for the Huai' an-Yangzhou Section of the Grand Canal **115**

Weiye DING *115*

The drivers of the restaurant circular market system for packaging and food waste: A study of system stakeholders in New Zealand **119**

Sara Naderi KOUPAEI[1], Paul W. BALLANTINE[2], Lucie OZANNE[1]* *119*

Technology-empowered ICH Performances: A Study of Generational Differences in Tourists Experience and Cultura Identity -- A Case study on *Macau 2049* **126**

Yue LI , Yingan HUO *126*

The use of AI driven by customer personality traits and skills the perspective of Big Five personality **133**

Aria Rui Han WANG[1], Songhong CHEN[2]* *133*

A conceptual framework of reducing the food waste during the processing stage through the training of culinary art students **141**

Pengjin WANG, Chiehyun YANG *141*

Transformation of Urban Tourism: Text-mining on Robotaxi Adoption **145**

Boyu LIN[1], Rui YANG[2], Yifan FAN[3], Mingyang XU[1] *145*

Exploring Postmodern Authenticity in Hyper-Realistic Tourism: Emotional Engagement and Behavioral Impacts at The Venetian Macao **152**

Ziqin LIANG[1], Yuxuan WANG[1], Jiaojiao WANG[2]* *152*

Key Stakeholders' Perspectives of Coastal Ecotourism Development **157**

Yuyan DENG *157*

Senior Travelers' Intention to Use Trains: An Extended Theory of Planned Behavior Approach Integrating Service Quality, Accessibility, and Facility Convenience **161**

Chang LU[1], Wenjie TANG[2]* *161*

Investigating the Factors in Creating Destination Intellectual Property: A Study of Successful Business Case Replication **170**

Yuxian WANG[1], Ziqin LIANG[1], Su-Ying PAN[2]* *170*

Engagement Wars in the Hotel Ballroom: Are Personalized Virtual Influencers Stealing the Spotlight from Humans? **176**

Chon In (Alston) HO[1], Henrique F á tima Boyol NGAN[2] *176*

Exploring the impacts of service spirit on college students' efficient learning and employability skills in sport and tourism industry **183**

Chang QU[1], Yangpeng LIN [12]* *183*

The Impact of Interaction, Affordance, and Presence on Visit Intentions in Metaverse Tourism: Integrating the Use and Gratification Theory and the Theory of Planned Behavior **187**

Qiaoyan ZHANG, Juanye WANG, Jiachen YAN, KIM Jinok, Susanna *187*

Loyalty Customers Illustration,A Study of Luxury Hotel Brand Loyalty Customers Based on the Strategic, Experience Module and Q Methodology - A Case Study of Four Seasons Hotel in China **191**

Shuai BIAN, Xinling SHAO, KIM Jinok, Susanna *191*

Spatial Reconstruction of cultural Tourism driven by "Her Need": A Study on the Construction of female-friendly Tourism Destinations -- A Case Study of Chengdu ... **203**

Sunny Mingxuan FAN, Emma Junru XU, KIM Jinok, Susanna *203*

Festival Technologisation Leads to Festival Attachment **207**

Rongxuan ZHANG[1], Wenlong WANG[1], Yalin YANG[1], Chen-Kuo PAI[2] *207*

The Impact of Cultural Narrative Quality on Travel Intentions of Online Game Players **209**

Shaoqiang SONG[1], Tianqi CHEN[2], Zhiqian LONG[2], Chen-Kuo PAI[3] *209*

Work or Play? Exploring the Dual Impact of Work－Nonwork Interface on Leisure Travelers' Emotional Well-being. **214**

Junbin LI, Jing LIU, Wenjie TANG *214*

Green Awakening after Realizing Ecological Paralysis: Cognitive-Affect-Conation Mechanisms of Tourists' Environmental Transformation in Macau **220**

Felix Elvis OTOO[1], Ziheng JI[2], Qian YAO[2], Yu LIU[2] *220*

An Empirical Study on Residents' and Tourists' Awareness of Abnormal Behaviors and Tolerance for Service Failures **224**

Felix Elvis OTOO[1], Qunqin LIANG[2], Yueyue CHEN[2], Mier DENG[2] *224*

Hindrance or Challenge: Supervisors Unraveled by Employee Nostalgia **229**

Qiaoyan FENG[1], Liangliang ZHU[2], Feijing WU[2] *229*

Symbiosis or Substitution? A study of the impact of human-robot collaboration on job insecurity and job sustainability of frontline employees in high star hotels under self-determination theory 234

Zishu YU, Jing ZHONG, Yuxin YANG 234

A Study on ESG Awareness and Implementation Among Hotel Industry Employees in Taiwan 243

Tingting CHANG[1], Yiting NIEH[2] 243

Privacy Concerns of Generative AI 247

Xinyu MA[1], Henrique F á tima Boyol NGAN[2] 247

Effects of DMO-Generated and Tourist-Generated Social Media Content on Heritage Protection Attitudes 255

Shizheng WEN, Junrong LI 255

Visual spaces and eWOM in hotel YouTube videos: A deep learning analysis grounded in media richness theory 257

Juhwan LIM[1], Hyun Cheol LEE[2] 257*

Exploring Postpartum Mother Satisfaction in Postpartum Wellness Hotels 265

Chuanyang HE, Tuanyi WANG 265

Utilising LLM Models and SnowNLP to Analyse Negative Tourism Experiences in Macau: Social Media Sentiment Analysis and Service Quality Improvement Strategies 267

Zijie LIAO[1], Hio Nam IO[1], Henrique F á tima BOYOL NGAN[2] 267

A conceptual framework of restaurant wait staff’ s intention to dissuade customers from over-ordering: an integrative framework of the TPB and NAM 276

Ruiqi JIA, ChiehYun YANG 276

Reconstructing a war frontier into a tourist destination: a study on the image representation of border city in Guangxi Province under Implementation of the Belt and Road Initiative 282

Xiao WANG 282

Embracing or Resisting AI: Managerial Challenges in Adopting Artificial Intelligence in Vietnam’ s Hospitality Industry 308

Nuno F. RIBEIRO, Agnis STIBE, An Tran Ngoc PHUC 308

Grandparent vacations with grandchildren: Perceived benefits and challenges 316

Shufan LV[1], Jong-Hyeong KIM[12] 316

Cultural Co-Creation in Travel Photography: A Case Study of Consumer Engagement and Destination Marketing in Lijiang 323

Peng LIU[1], Yifei LI[1], Chunlong CAI[2], Mengmeng ZHANG[2] 323*

Ethnic Diversity and its implications for resident behavior and host-guest interaction329

Mingming TONG[1], Wai Tsz Serene TSE[2] 329

What Is Restaurant Yanhuo Chi? A Descriptive Study from Multi-stakeholder Value Co-creation Perspective 337

Regan LI, Michael S. LIN..... 337

Feminist Entrepreneurship and Trust in Female-Only B&Bs: A Signaling Theory Perspective 342

Canxi (Vicky) WU, Michael S. LIN 342

The Formation of Entrepreneurial Cognition of Female Tourism Entrepreneurs 348

Xing CHEN[1], Michael S. LIN[1], Xinrui WANG[2] 348*

The relationship between residents' perception and sustainable participation in overtourism: The mediating role of tourists' influx emotions 355

Haoxuan FENG[1], Heewon KIM[2], Jaehee GIM[3] 355

All the World's a Stage: Fandom ProSumption and its (Dis-)Attachment to Places . 361

Xiaoxue MA, KaihanYANG, Khan 361

From Virtual Games to Travel Intentions: An Application Study of the Destination Image Theory 365

Yiwen LONG[*], Miaoqing TIAN, Xi WANG 365

The Psychology of Wine e-Commerce: Personality, Sensory Preferences, and Digital Consumer Behavior 370

Xi WANG[1], Jie ZHENG[2] 370*

The understanding of consumers' attitude towards green hotels: A segmentation analysis 379

Yunlong FU, Wai Tsz Serene TSE..... 379

Mediating effect of trust in stimulating consumers' pro-behaviors towards humanoid service robots 390

Zephyrine ZHANG, Wai Tsz Serene TSE 390

Social Media's Effect on Destination Image and Tourists' Behavior 395

Salvador SUN, Shiwei SHEN, Marios SOTIRIADIS 395

Multiple Formation Mechanisms of Post-Trip Behaviors Among Self-Driving Tourists in the Tourism Context of Tibet 398

Mingyuan GAO, Xueji WANG 398

Using take-out to order food to experience food tourism: How does online food delivery service influence the travel experience? A goal conflict insight 402

Jing LIU[1], Wenjie TANG[2], Qingying LIU[3] 402*

Do Service Robots Empower Employees to Engage in More Proactive Service Behavior? An Experience Sampling Method Study 408

Xin LIU[1], Zhibin LIN[2], Min LIU[3], Lu ZHANG[4], Canmian LIU[56], Tengteng ZHU[78] 408*

The Power of Idols in Public Opinion Crisis: The Matching Effects of Endorser Type and Destination Gender 414

Zhen SU[123+], Chunmu WANG[1+], Dongwei YANG[4], Wei LAI[1] 414*

Revisiting the norm activation model: A multidimensional analysis of eco-friendly hotel consumer behavior with socio-cultural extensions 419

Shan DING[1], Jaeseok LEE[2], Sangguk KANG[2] 419*

Does rural tourism enhance the economic resilience in peripheries? Evidence from China's Leisure Agriculture and Rural Tourism Policy 424

Minkun LIU, Lianjian LIANG[*], Xiaogui DENG, Lili REN 424

Memory That Matters: How AI Memory Enhances Consumer Attitudes and When It Backfires 429

David CHAI[1], Jingqiu LI[1], Yidan MA[2], Yangjun LE[1], Jian LI[3*] 429*

Exploring the Influence Mechanism of Emotional Well-being on Tourists' Donation Intention: A Suppression Effect-Based Analysis of Donation Willingness at Tourist Destinations in Greater Bay Area 438

Xiang JING[1], Zhilan LUO[1], Wenyu YANG[1], Xiaoyi WU[2] 438

How Prepared Food Disclosure Timing Affects Tourists' Moral Judgments in Tourism Dining Contexts 445

Lei WANG, Ruobing YIN, Xueji WANG[*] 445

Sustaining Macao's Typographic Heritage with an Augmented Reality Experiential City Tour: Discovery of local historical and cultural resources 450

Mancheng NG[1], Poui TANG[2] 450*

Assistance or Indifference? The Impact of Customer incivility on Bystanders' Behavioral Intentions 455

Biyan WEN[12], Le LIN[1], Yaoyi DING[1], Cien WU[1] 455*

The value of service robots in the hotel industry: multi-stakeholder views 460

Hailey SHIN, Michael LIN, Qu XIAO 460

Emotional Recovery after Tourism Service Failures: The Impact of Narrative Restructuring and the Role of Recovery Experience 468

Zihang QIU[1], Xiaonan ZHANG[1], Dr. Ho-Kai CHAN[1], Danting CAI[1], Lingyan ZHANG (Lia)[2] 468

What Makes Macao Attractive? Exploring Multilevel Determinants of International Student's Study Abroad Decision 477

Linda CHEN, Su-Ying PAN, Ben K. Goh 477

酒吧為休閒空間的探索性研究 480

張明琳[*], 張一航 480

文化嵌入視角下倫理型領導對員工建言行為的影響路徑：錯誤管理氛圍和組織承諾的作用 481

李雨翰, 杜婧曄, 黃穎祥[*] 481

閨蜜旅行中的價值共同建設與共同毀滅：基於性格特質、溝通模式、情感支持的多維度研究 483

吳趙清, 王皎皎, 黃穎祥[*] 483

澳門旅遊紀念品的地方性建構及其對遊客情感價值與旅行後幸福感的影響 485

李雅文, 章詩怡, 黃穎祥[*] 485

探究中國寵物主人攜寵物旅遊的出行體驗感 487

王璽卓 , 張一航 487*

為何機會-資源整合在酒店與旅遊業中失效？動態能力理論的擴展視角 488

耿直，徐曄，劉敬 488

免簽政策對韓國青年遊客旅遊決策的影響及目的地選擇偏好研究：以上海為例 489

张睦琳[1]，陈芊卉[1]，赵晨晨[1]，唐娟[2] 489

美食旅遊中遊客的食物浪費行為：美食目的地形象、相機先吃行為、身份信號和衝動購買傾向的作用 490

林嫣然，張溯 490

包容性領導影響團隊績效的雙路徑機制：最優獨特性理論的解釋 491

劉敬[1]，王勇[2]，潘書恬[3]* 491

從“共生”到“共創”：數字遊民與旅居地的共生模式與優化路徑研究 492

鍾穎[1]，林彥希[2]，植接弟[1]* 492

目的地文化與酒店的融合對遊客選擇影響因素研究——以麗江和府洲際度假酒店為例 494

周宜翀，喻璇，葉昕榮* 494

氣溫上升對滑雪旅遊需求的影響 496

倪文盛，黃銳 496

探究服務機器人的外型設計對顧客服務失敗容忍度的影響 497

付果然，王碩，李俊檳 497

旅遊業如何實現高數字創新績效 ——基於數字創新生態系統的動態 QCA 分析 498

梁宸源 498

探討海洋康養旅遊中遊客感知目的地恢復質量對重訪意圖的影響 499

郭立威，衛作能 499

歸因風格視角下酒店及旅遊領域創業者心理健康差異及干預路徑研究 500

魏嘉怡 500

基於刺激-有機體-反應模型—AI 生成旅遊短視頻對消費者旅遊意向的影響研究 501

宋洽，羅聆瑞 501

澳門“花園城市”與“城市花園”身份的雙重探索：從歷史遺產到現代生態建設的演變 502

李畢星 502

整合型 TOD-文化遺產復興框架：車站-城市語境下的空間重構、數字沉浸與多元主體治理的文化遺產活化 503

何一行 503

美食旅遊體驗對遊客重遊意願的影響研究——以貴州省凱裏市為例 505

楊騫，張溯 505*

數據要素配置對旅遊業高質量發展的影響及空間效應 506

郭巒[12]，彭帥[1]，梁宸源[1] 506*

澳門的文化旅遊魅力何在？基於推拉理論探究其中的遊客動機與行為意向 508

熊崢灝 508

虛擬現實技術品質感知對主題公園遊客遊後行為意向影響研究 509

郭巒[12] 唐可昕[1]，鞏麗朵[1] 509*

旅遊商業化中文化迷失：原真性視角下傳統服飾體驗評價研究 511

羅清揚，許子悅 511

“鄉”得“意”彰：基於 LDA 和紮根理論的永州鄉村旅遊地意象研究 512

李敏瑩 512

消費者環境責任感對綠色酒店溢價支付意願的影響 514

劉姍姍 514

生態旅遊體驗要素對感知價值及行為意圖的影響-以環境意識的仲介作用為中心- 515

張蒙蒙，武揚，강상국(Sangguk KANG) 515

數字“增”綠：數位化轉型與旅遊企業碳排放效率 516

林軼，齊鑫 516

基於服務設計理論下影響 Brunch 餐廳服務體驗分析 520

寧震昆 520

機器人類型和服務情境塑造減少餐盤浪費意願 522

匡政 522

節慶活動故事敘述的選擇屬性與品牌資產，品牌態度，滿足度，行動 意圖間的影響關係研究——以蘇州端午節活動為例 524

武揚[1]，張蒙蒙[1]，강상국 Sangguk Kang[2] *524*

網紅動物的旅遊吸引力及其對目的地行銷的驅動機制作用研究——以上海動物園“紅糖寶寶”為例 **525**

任倩宜，周宜翀[*] *525*

深度休閒視角下大熊貓粉絲休閒行為影響過程與機制 **526**

程勵，袁圓 *526*

探究「網紅城市」的營銷與管理—以山東省淄博市為例 **527**

賈彤悅文[*]，張庭嘉，章于藍 *527*

酒店行業高學歷實習生——在實習過程中的資質過剩感、對員工的影響以及管理策略 **529**

林映棋 *529*

消費者對於餐飲循環經濟商品消費行為、消費動機與消費偏好之研究 **531**

楊蕙芬[*] *531*

心理所有權對聊天機器人服務用戶滿意度及客戶忠誠度的影響研究 **534**

黃一嘉，宋瑜欣[*] *534*

雙重評估路徑下的員工行爲分化：劣勢者成見對‘內卷’與‘躺平’的影響機制 ... **536**

生成式人工智慧（GenAI）在旅遊教育中的接受度研究：基於 UTAUT 模型對學生採納意願關鍵影響因素探析 **536**

林蘊柔，李遠航，黃藝菲 *536*

朱亮亮[1]，馮俏彥[1]，吳若希[2] *538*

“小院經濟”助推新興文旅業態拓展路徑開發——以山東省濟寧市爲例 **541**

趙月陽 *541*

基於 CIPP 模型的紅領巾兒童紅色研學旅遊，評價指標構建研究 **547**

沈潘琳[*]，吳俊，楊雯凱 *547*

酒店服務機器人的擬人化對顧客使用意願的影響 **551**

鄭子瑞 *551*

虛擬現實體驗因素對遊客滿意度和重遊意願的影響：基於 TAM 模型的分析 **556**

李澤龍[1]，吳曉紅[2*]* *556*

高密度都市的旅遊韌性重構——基於澳門可持續與負責任旅遊的概念辨析 559

阮楠欣，湯子萱，朱亮亮 559

名人依戀和影視屬性如何影響旅遊行為 563

楊海，張韻璇 563

解碼旅遊直播“種草”：雙路徑驅動與組態效應下的購買意願生成機制 567

王如，王學基，鄧夢巧 567*

欠發達地區旅遊發展與居民生活質量的耦合協調及互動效應研究 572

趙贊，張晶婧 572

如何做好賓客關係維護提升賓客對酒店的滿意度與忠誠度——以桂林雁山宋品酒店為列 593

陳亞妮 593

鄉村文化美學實驗：非遺民宿的場景表徵及其生成機制 596

牛欣慧，龐兆玲，王學基 596

從互動到行動：非遺數位化項目中互動對共創價值與遊客行為意圖的影響研究 601

蘭最，張玲 601

基於 GIS-ML 的廣西民族旅遊空間異質性與發展機制研究 604

臧雲飛[1]，譚湘燁[2] 604

Unlocking the power of multimodal online reviews: A multisensory perspective

Haoqiang SUN[1,2*], Shaolong SUN[1,2*], Haozhe XU[1], Chunxu ZHENG[1], Hengyun LI[3], Shouyang WANG[4,5]

[1]School of Management, Xi'an Jiaotong University, Xi'an 710049, China

[2]System Behavior and Management Laboratory, Xi'an Jiaotong University, Xi'an 710049, China

[3]School of Hotel and Tourism Management, The Hong Kong Polytechnic University, Hong Kong SAR, China

[4]Academy of Mathematics and Systems Science, Chinese Academy of Sciences, Beijing 100190, China

[5]School of Entrepreneurship and Management, ShanghaiTech University, 393 Middle Huaxia Road, Pudong, Shanghai, 201210

*Corresponding Email: sunhaoqiang@stu.xjtu.edu.cn, sunshaolong@xjtu.edu.cn

Abstract

User-generated content includes texts, images, videos, and other materials posted on social media platforms. These contents often contain rich sensory information such as visual, gustatory, auditory, tactile, and olfactory elements. These sensory cues play a crucial role in shaping customer experiences, allowing for an intuitive conveyance of the features and quality of products or services. This study investigates how sensory elements in hotel online reviews (i.e., text, images) influence customers' perceived review usefulness and experience. For the analysis of textual sensory elements, this study adopts a comprehensive approach combining an English sensory dictionary and the *Word2Vec* model for measurement. Additionally, to analyze the sensory content within images, this study utilizes a *vit-gpt2-image-captioning* model. This model is specifically designed for image-to-text conversion and is composed of *ViT* (Vision Transformer) and *GPT-2* (Generative Pre-trained Transformer-2). The proportion of sensory words in the text and image description is then calculated. Utilizing econometric models, the study measures the effects on perceived review usefulness and customer experience. The results indicate that (1) Descriptions of visual and gustatory elements in texts significantly enhance the usefulness of reviews and improve customer experience. Conversely, an excessive focus on tactile and olfactory elements may lead to a reduction in both review usefulness and customer experience. (2) Image content plays a crucial role in enhancing the usefulness of reviews by appealing to visual, gustatory, and olfactory senses, thereby intuitively conveying sensory experiences. However, expressions of auditory and tactile senses within images may have the opposite effect, potentially reducing the usefulness of reviews. (3) Discrepancies in

visual and olfactory perceptions between textual descriptions and images are found to have a negative impact on the usefulness of reviews and customer experience. In contrast, discrepancies in auditory perceptions can actually enhance customer experience. Moreover, robustness test results provide further validation of the study's conclusions, confirming the stability and reliability of the findings. These findings, derived from an analysis of online hotel reviews by tourists in Hong Kong, hold both practical and theoretical significance. (1) Our research contributes to the literature on sensory cues in hotel user-generated content by identifying the effects of sensory elements in both text and image content. Additionally, we explore the interaction mechanisms of sensory differences between text and images. (2) Our research offers guidance to hotel managers and customers on leveraging sensory elements effectively, underscoring the pivotal role of sensory cues in enhancing customer satisfaction and optimizing business strategies.

Keywords: user-generated content; review usefulness; customer experience; multisensory; text–image sensory disparity

Acknowledgments

The authors acknowledge the support of research funds from the National Key R&D Program for Young Scientists (Project No. 2022YFF0903000), Innovation Capability Support Program of Shaanxi Province (Project No. 2024ZC-KJXX-003) and the National Natural Science Foundation of China (Project No. 72101197).

Declaration of Interest statement

The authors declare that there is no conflict of interests regarding the publication of this paper.

Exploring the Impact of virtual reality presented museum tourism on senior tourist: The lens from sensory marketing

Runze MAO, Chris Zhengan ZHU

Shanghai Normal University, China.

Abstract

Virtual Reality (VR) tourism has been a research hotspot, and although previous studies have pointed to the important role VR tourism can play in museum tourism experience and marketing (Zhu et al., 2025; Wang et al., 2024). For museum tourism, many studies have explored how museum tourism can attract different groups of tourists and influence their travel intentions. For instance, Sang (2024) has shown that tourists can achieve nostalgia perception after experiencing museum tourism. However, the impact of museum experiences presented through VR technology on senior tourists has received limited attention. At present, the world is facing the trend of accelerating aging, and senior tourists have gradually become an important consumer group in the tourism industry (Yu et al., 2024). Against this background, this study aims to explore the impact of VR technology on the psychological perception of senior tourists from the perspective of sensory marketing in the context of museum tourism. To accomplish these research objectives, Study 1 aims to evaluate the influence of sensory experiences on the immersion and word-of-mouth behavior of senior tourists through an experimental design. To validate the conclusions of Study 1, Study 2 aims to further evaluate these findings by conducting in-depth interviews with 15 senior tourists. This study contributes to the theory of sensory marketing theory. Through a mixed methods research approach, the findings of this research can help museum scholars and managers better understand the impact of VR-presented museum tourism on senior tourists and provide effective measures to improve museum destination marketing.

Keywords: Senior tourist, Museum tourism, Virtual reality, Experimental research, In-depth interview

References:

[1]Wang, J., Sun, Y., Zhang, L., Zhang, S., Feng, L., & Morrison, A. M. (2024). Effect of display methods on intentions to use virtual reality in museum tourism. *Journal of Travel Research, 63*(2), 314-334. https://doi.org/10.1177/00472875231164987

[2]Sang, S. (2024). Digital-induced nostalgia: Homeland tourists' nostalgic experiences in traditional-village digital museums. *Journal of Hospitality and Tourism Management, 61*, 57-65. https://doi.org/10.1016/j.jhtm.2024.09.011

[3]Zhu, C., Io, M. U., Hall, C. M., Ngan, H. F. B., & Peralta, R. L. (2025). Exploring the influence of augmented reality on tourist word-of-mouth through the lens of museum tourism. *Journal of Heritage Tourism, 20*(1), 78-91. https://doi.org/10.1080/1743873X.2024.2393102

[4]Yu, J., Kim, S., Hailu, T. B., Park, J., & Han, H. (2024). The effects of virtual reality (VR) and augmented reality (AR) on senior tourists' experiential quality, perceived advantages, perceived

enjoyment, and reuse intention. *Current Issues in Tourism, 27*(3), 464-478. https://doi.org/10.1080/13683500.2023.2165483

Can livestreaming affect female tourist sharing behavior and visit Intention? The lens from Macau gastronomy

Jingjing WANG[1*], Christy Yingni LIU[2]

[1]Ph.D Candidate, Faculty of Hospitality and Tourism Management,
Macau University of Science & Technology, Avenida Wai Long, Taipa, Macau SAR

[2]Assistant Professor, Faculty of Hospitality and Tourism Management,
Macau University of Science & Technology, Avenida Wai Long, Taipa, Macau SAR

*Corresponding Email: 3240000033@student.must.edu.mo

Abstract

Livestreaming tourism has gained increasing attention in tourism research (Lin et al., 2022). Previous studies have demonstrated that livestreaming enhances tourist engagement and strengthens destination branding. However, most research primarily focuses on scenic attractions, overlooking the potential of food-related livestreaming. Gastronomy is not only a key component of leisure travel but also a driver of economic growth. Despite its significance, limited studies have explored the role of livestreaming in promoting local cuisine and its impact on tourist behavior (Yu et al., 2022).

To address this research gap, this study examines how Macau's gastronomy-based livestreaming influences female tourists' sharing and visit intentions. Drawing on theories of presence and cognitive appraisal theory (CAT), we develop an empirical model to explore the effects of interactivity, authenticity, and entertainment on female tourists' psychological perceptions and behaviors. Specifically, we investigate how presence and enjoyment mediate the relationships between livestreaming attributes and behavioral intentions.

This study offers several key contributions. First, it deepens the understanding of the antecedents and consequences of presence and enjoyment in the context of food livestreaming, shedding light on the psychological mechanisms driving female tourists' engagement. Second, it provides practical insights for destination marketers on how to effectively utilize gastronomy-based livestreaming to enhance tourism promotion and attract more visitors. By integrating livestreaming technology with gastronomic tourism, this study contributes to both tourism marketing strategies and theoretical advancements in digital engagement.

Keywords: Female tourist; Gastronomy tourism; Livestreaming; Presence; Cognitive appraisal theory ; Structural equation modeling

References

[1]Yu, C., Cheah, J. H., & Liu, Y. (2022). To stream or not to stream? Exploring factors influencing impulsive consumption through gastronomy livestreaming. *International Journal of Contemporary Hospitality Management, 34*(9), 3394-3416.

[2]Lin, K., Fong, L. H. N., & Law, R. (2022). Live streaming in tourism and hospitality: A literature review. *Asia Pacific Journal of Tourism Research*, *27*(3), 290-304.

Examining the relationship of work-family conflict to job and life satisfaction: A case of hotel frontline employees

Zhiyuan ZHU[1], Liu XU[2], Jose Weng Chou WONG[3*]

[1]Faculty of Hospitality and Tourism Management, Macau University of Science and Technology, Avenida Wai Long, Taipa, Macau SAR

[2]Faculty of Hospitality and Tourism Management, Macau University of Science and Technology, Avenida Wai Long, Taipa, Macau SAR, ORCID: 0000-0001-8735-3420

[3]Faculty of Hospitality and Tourism Management, Macau University of Science and Technology, Avenida Wai Long, Taipa, Macau SAR, ORCID: 0000-0002-3557-1829

*Corresponding Email: wcwong@must.edu.mo

Abstract

Work-family conflict is pervasive in the hospitality industry. Previous research has examined the impact of WFC on job satisfaction and managers well-being. However, current research ignores frontline employees who often experience high emotional labour, rigid schedules, and demanding workloads. Based on the Job demands-resources theory, and the conservation of resources theory, this study will try to investigate the relationship of work-family conflict to, employee well-being, burnout and life satisfaction. In addition, the moderating effect of job autonomy will be verified. 400 hotel frontline employees in China will be surveyed, to test the proposed hypotheses by Structural Equation Modeling (SEM). The expected result will indicate that work-family conflict can reduce frontline employees' life satisfaction. Well-being and burnout are important mediating variables in this process. Besides, both work interfering with family and family interfering with work will have significant associations with an individual's burnout with his/her job. Work interfering with family may more significantly reduce employees' well-being and thus affect frontline employees' life satisfaction. Furthermore, job autonomy will significantly moderate the relationship between Work-family conflict and well-being, with employees who have higher levels of job autonomy experiencing less burnout from work-family conflict. In this study, demand-resources theory and conservation of resources theory will be applied in the context of front-line hotel employees, which expands the application of the theory. Besides, this study will contribute to positive psychology and burnout research by validating the moderating role of job autonomy in reducing the negative effects of work-family conflict on employee well-being and burnout. Practical implications highlight the need for hotel managers to provide more flexible work arrangements and greater autonomy to frontline employees to improve their work-life balance, well-being, and overall job satisfaction.

Keywords: Work-Family Conflict, Job Autonomy, Hotel frontline employee, Well-being, Burnout, Life Satisfaction

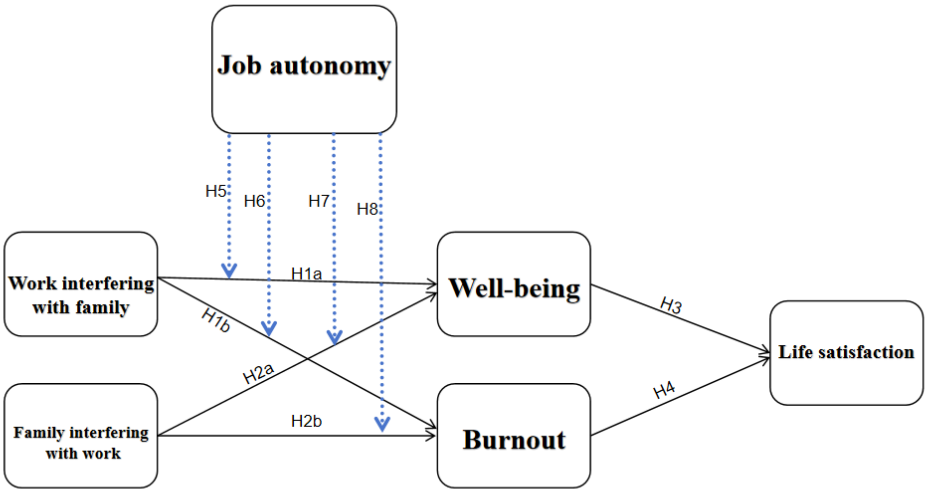


Fig. 1. The conceptual model. H, hypothesis.

The Role of Internship in Shaping Students' Perception and Career Expectation of the Hospitality Industry: A Case Study in Macau

Zixuan LUO*, Kelvin ZHANG

Macau University of Science and Technology

*Corresponding Email: 1220030736@student.must.edu.mo

Abstract

The hospitality industry in Macau, a cornerstone of the region's economy, relies heavily on its ability to attract millions of tourists annually to its renowned resorts and casinos, driving job creation and economic growth, which makes education and training critical to sustaining a skilled labor pool amid a competitive global market. Internships, as a form of experiential learning, have been widely integrated into higher education to bridge academic knowledge with practical industry demands. This study investigates the role of internship in shaping university students' perceptions and career expectations within Macau's hospitality industry, drawing on a qualitative approach involving semi-structured interviews with 14 participants, including undergraduate students and industry practitioners. Three key themes emerged: the nature of hospitality operations, perceived key skills, and expectation towards career trajectory. Findings reveal that internships significantly influence students' views on the hospitality industry, often negatively, due to intense workloads and challenging guest interactions, albeit a sense of professionalism fostered positive perceptions. Skill acquisition during internships highlights a tension between industry-specific competencies and broader lifelong learning, prompting varied interpretations of the usefulness of hospitality higher education. Moreover, internship experiences tend to dampen students' willingness to pursue hospitality careers, with many viewing the industry as a steppingstone rather than a long-term career path, exacerbated by perceived limited promotion opportunities and job insecurity. A notable mismatch exists between students' expectations and practitioners' perspectives, underscoring the need for enhanced collaboration between higher education institutions (HEIs) and industry stakeholders. This research offers insights into experiential learning's impact on career perceptions and implications for refining internship design to balance industry needs with educational outcomes. By addressing these dynamics, HEIs and hospitality organizations can better prepare students, aligning academic preparation with real-world demands to bolster graduate employability and industry sustainability in Macau. This study contributes to the ongoing discussions on optimizing experiential learning frameworks within the higher education contexts.

Keywords: internship, hospitality, experiential learning, career, higher education, Macau

Research on Human Resource Practices, Leadership, and Employees' Work - Family Relationships in the Context of Disability Inclusion

Yingying WANG , Juan TANG*

Faculty of Hospitality and Tourism Management, Macau University of Science and Technology

*Corresponding Email: jtang@must.edu.mo

Abstract

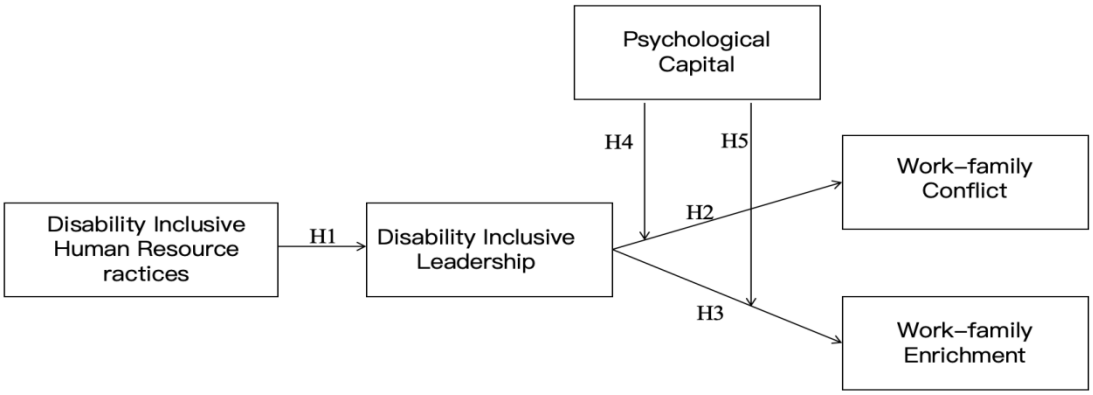
In the contemporary workplace landscape, employees with disabilities encounter a plethora of challenges. These encompass unequal access to employment opportunities, constrained career advancement prospects, and the pernicious influence of social prejudice. Such issues not only impede the professional growth of disabled individuals but also pose significant obstacles to the creation of an inclusive and diverse work environment.

Within the realm of tourism research, a notable gap exists in the exploration of the work and life experiences of employees with disabilities, as well as the impact of disability inclusive initiatives on these experiences. Inclusive human resource (HR) practices, such as flexible work arrangements, accessible infrastructure, and psychological support systems, have the potential to enhance the workplace adaptability of disabled employees. Nevertheless, the majority of existing research has predominantly centered on the general employee population, leaving the disabled community under explored. Moreover, in the context of disability inclusion, the moderating or mediating roles of psychological capital remain inadequately investigated. Additionally, research from the work - family relationship perspective has failed to comprehensively integrate organizational disability inclusive factors when examining employees with disabilities. Against this backdrop, this study is designed to elucidate the intricate mechanisms through which disability inclusive human resource practices influence the work - family relationship outcomes of employees with disabilities. Specifically, it endeavors to uncover how psychological capital, which encompasses dimensions such as self - efficacy, optimism, hope, and resilience, functions as a moderator in this context. The research sample comprises employees from ten renowned disability inclusive enterprises in China. The purposive sampling method was employed to conduct in - depth questionnaire surveys.

The findings of this study reveal that psychological capital indeed plays a moderating role in the relationship between disability inclusive leadership and employees' work - family relationships. Employees with disabilities who possess high levels of psychological capital are better positioned to derive benefits from organizational practices. Furthermore, this research enriches the theoretical understanding of the work - family relationships of employees with disabilities. It demonstrates that disability inclusive leadership can effectively mitigate work - family conflicts and enhance work - family enrichment among disabled employees.

From a theoretical contribution standpoint, the new model developed in this study significantly expands the disability inclusive human resource theory. By establishing

complex linkages among multiple factors, it offers a novel theoretical framework for scholars and practitioners alike. Additionally, it deepens the application of the psychological capital theory by clarifying its role in the interaction between employees with disabilities and organizational management, thereby expanding its scope of application. Moreover, this study delves deeper into the mechanism of action among these factors. Overall, this research provides a robust theoretical foundation for the management of employees with disabilities and serves as a catalyst for the development of the disability inclusive human resource management field.



Keywords: Disability inclusive human resource practices, Disability inclusive leadership,Work-family conflict,Work-family enrichment, Psychological Capital.

References

[1] Luu, T. T. (2022). A tale of two countries: How do employees with disabilities respond to disability inclusive HR practices in tourism and hospitality industry? *Journal of Sustainable T ourism*, 30(1), 299–329. https://doi.org/10.1080/09669582.2021.1876073

[2] Bartram, T., Cavanagh, J., Meacham, H., & Pariona-Cabrera, P. (2019). Re-calibrating HR M to improve the work experiences for workers with intellectual disability. *Asia Pacific Journa l of Human Resources*. Advance online publication. https://doi.org/10.1111/1744-7941.12230

[3] Baumgärtner, M. K., Böhm, S. A., & Dwertmann, D. J. (2014). Job performance of emplo yees with disabilities. *Equality, Diversity and Inclusion: An International Journal*, 33(4), 347–3 60.

[4] Beatty, J. E., Baldridge, D. C., Boehm, S. A., Kulkarni, M., & Colella, A. J. (2019). On t he treatment of persons with disabilities in organizations: A review and research agenda. *Huma nResource Management*, 58(2), 119–137.

[5] Boehm, S. A., & Dwertmann, D. J. (2015). Forging a single-edged sword: Facilitating posi tive age and disability diversity effects in the workplace through leadership, positive climates, and HR practices. *Work, Aging and Retirement*, 1(1), 41–63. https://doi.org/10.1093/workar/wau0 08.

[6] Cavanagh, J., Bartram, T., Meacham, H., Bigby, C., Oakman, J., & Fossey, E. (2017). Sup porting workers with disabilities: A scoping review of the role of human resource management in contemporary organisations. *Asia Pacific Journal of Human Resources*, 55(1), 6–43. https://d oi.org/10.1111/1744-7941.12111

[7] Cho, S., Kim, M. A., & Kwon, S. I. (2019). Using the photovoice method to understand e xperiences of people with physical disabilities working in social enterprises. *Disability and Hea lth Journal*, 12(4), 685–693. https://doi.org/10.1016/j.dhjo.2019.03.011

[8] Choi, S. B., Tran, T. B. H., & Kang, S. W. (2017). Inclusive leadership and employee we ll-being: The mediating role of person-job fit. *Journal of Happiness Studies*, 18(6), 1877–1901. https://doi.org/10.1007/s10902-016-9801-6

[9] Wu, C., Xu, T., & Dong, X. (2023). Review of research on psychological capital and emp loyee innovation behavior. *ModernManagement*, *13*(4),507–512.

[10] Xiong, M., & Ye, Y. (2024). The concept, measurement, influencing factors and effects o f psychological capital. *Journal of East China Normal University (Educational Sciences Editio n)*, 42(6), 75–85.

Research on the influence of digital tourism on tourists' behavior intention

Tianjia ZHANG

Macau University of Science and Technology

Abstract

The influence of digital tourism on tourists' destination choices is increasingly recognized and developed. The tourism industry leverages technologies such as virtual reality and artificial intelligence to create immersive tourism experiences for tourists, playing a significant role in promoting the development of the tourism sector. However, most previous studies have mainly focused on exploring the connotations and construction methods of digital tourism from the perspective of tourism managers, with relatively few studies examining how the integration of tourism destinations and digital technologies affects tourists' perceived value and behavioral intentions.

To fill this gap, this paper constructs a Structural Equation Model (SEM) based on the Technology Acceptance Model (TAM) and employs literature research and questionnaire surveys to analyze the relationship between digital tourism experiences at destinations and tourists' behavioral intentions. This study takes Mogao Grottoes of Dunhuang as a case site to explore the impact of digital tourism on tourists' behavior intention. This study explores how perceived usefulness and perceived ease of use affect tourists' satisfaction and attitudes, and investigates the impact of digital tourism experiences on tourists' intentions to revisit, share, or recommend destinations. Additionally, this paper examines the mediating role of tourists' satisfaction and attitudes, thereby expanding the application of the TAM model.

The research findings indicate that perceived usefulness and perceived ease of use of digital tourism have positive impacts on tourists' satisfaction and attitudes, and that tourists' satisfaction and attitudes significantly influence their intentions to share, recommend, and revisit destinations. This study can help relevant government departments at tourism destinations optimize tourism infrastructure and services, and explore cultural connotations. For tourists, personalized services can enhance emotional resonance, improve the overall image and attractiveness of the destination, and strengthen immersive experiences. In order to further optimize digital tourism services, it is recommended that relevant departments strengthen the construction of digital infrastructure and improve the quality and diversity of digital content. At the same time, we should focus on the continuous improvement of tourist satisfaction, and enhance the interaction between tourists and destinations through digital marketing and social media platforms.

Key words: digital tourism, tourist satisfaction, tourist attitude, TAM theory, behavior intention

A Study on Tourists' Willingness and Influencing Factors of Health Tourism in Macau

Yuexian XIAO, Hong FANG

Macau University of Science and Technology

Abstract

In recent years, the Macau SAR government has actively promoted the "Big Health" strategy, aiming to establish Macau as a health tourism destination (Liu et al., 2024). This study explores tourists' willingness toward health tourism in Macau and its influencing factors, supporting Macau's goal of becoming a "Big Health" tourism destination.

Previous studies show that the TPB model can be applied to medical tourism, and tourists' country of origin is a key factor in predicting their intention to use medical tourism services (Boguszewicz-Kreft et al., 2020). Additionally, studies using the push-pull theory have identified two distinct sets of factors influencing medical tourists' decision-making (Zhong & Chan, 2024). Therefore, this study combines both theories to construct a theoretical model and adopts a quantitative research approach. It examines the feasibility of developing health tourism in Macau, tourists' specific demands and attitudes toward health tourism, and evaluates the external and internal environment of Macau's health tourism industry, revealing how these factors influence tourists' health tourism decisions.

Finally, the study proposes strategic recommendations to enhance tourists' positive attitudes toward health tourism and improve their awareness of Macau's health tourism resources. The findings provide theoretical and practical guidance for increasing tourists' willingness to engage in health tourism and promoting the development of health tourism in Macau, helping Macau build a strong image in the international health tourism market.

Keywords: Health tourism, Theory of Planned Behavior, Push-pull Theory, Destination tourism

References

[1] Boguszewicz-Kreft, M., Kuczamer-Kłopotowska, S., Kozłowski, A., Ayci, A., & Abuhashesh, M. (2020). The theory of planned behaviour in medical tourism: International comparison in the young consumer segment. International journal of environmental research and public health, 17(5), 1626.

[2] Liu, M., Guan, J., Ren, L., Yang, H., & Zhuang, Y. (2024). Developing health tourism in a gaming city: Stakeholder perceptions of a proposed strategy. Journal of China Tourism Research, 20(1), 90-114.

[3] Zhong, X., & Chan, C. S. (2024). Opportunities, challenges and implications of medical tourism development in Hong Kong. International Journal of Tourism Research, 26(1), e2615.

Decoding Digital Engagement in The Museum: A Three-Factor Asymmetry Analysis

Yunhan GONG

Macau University of Science and Technology

Abstract

This research explores key factors affecting user satisfaction with the 'Daily Forbidden City' app, an innovative solution transforming cultural tourism experiences in the digital age, through the integrated lens of the Three-Factor Theory (basic, performance, and excitement factors) and Impact-Asymmetry Analysis (IAA). Departing from conventional symmetric models, the research examines how digital service attributes differentially influences satisfaction levels. The research used a combined qualitative and quantitative approach, conducting 22 semi-structured interviews with participants selected through dual criteria: (1) completion of the on-site visit and (2) demonstrated consistent use of the 'Daily Forbidden City' application during their experience. This method ensured the inclusion of individuals with direct experience of both the actual location and the application's key functions. During the quantitative phase, immediate visitor feedback was collected via a post-visit questionnaire administration. The evaluation encompassed 18 service components through standardized rating system, with assessments focusing on practical functionalities and subjective experience dimensions. Impact-Asymmetry Analysis was employed to classify factors: Basic factors (e.g., historical accuracy, loading speed) showed strong negative asymmetry—failure to meet thresholds triggered disproportionate dissatisfaction, yet exceeding expectations yielded minimal gains; performance factors (e.g. Panoramic views of the Imperial Palace, multilingual support for digital heritage repositories) demonstrated linear symmetric effects; while excitement factors (e.g. personalized storytelling, virtual relic interaction) exhibited positive asymmetry, disproportionately elevating satisfaction when present but not amplifying dissatisfaction when absent. Preliminary findings reveal unexpected culture-specific patterns: features like 'AR Forbidden City Exploration' straddled multiple factor categories depending on users' prior knowledge. This research develops a visitor satisfaction model to improve digital heritage experiences, uncovering non-linear relationships between museum application service attributes (basic/performance/excitement) and satisfaction dynamics in cultural-digital contexts. This study offers a template for managing satisfaction trade-offs in heritage digitization initiatives.

Keywords: museum application; Three-Factor Theory; Impact-Asymmetry Analysis; visitor satisfaction; digital experience at museum

References

[1] Doe, J., Smith, A., & Lee, S. (2023). Dynamic roles of hotel mobile application in customer satisfaction and dissatisfaction: Integrating text analytics and impact asymmetry analysis. *International*

Journal of Contemporary Hospitality Management, 35(12), 1–20. https://doi.org/10.1108/IJCHM-12-2023-1914

[2] Choi, H., & Mattila, A. S. (2018). Evaluating value co-creation activities in exhibitions: An impact-asymmetry analysis. *International Journal of Hospitality Management, 70*, 1–12. https://doi.org/10.1016/j.ijhm.2018.01.011

Which fragrances appeal to consumers and elicit positive responses in the hotel context?

Jinmei LI[1], Jinkyung KIM[2]

[1]Master Degree, Faculty of Hospitality and Tourism Management, Macau University of Science & Technology, Avenida Wai Long, Taipa, Macau SAR

[2]Assistant Professor, Faculty of Hospitality and Tourism Management, Macau University of Science and Technology, Avenida Wai Long, Taipa, Macau SAR

Abstract

Given the intensifying competition in the hotel industry, fragrance marketing has gradually become a key strategy to improve brand differentiation and industry competitiveness for hotels. However, existing research in hospitality differentiation marketing has largely overlooked the role of fragrance. Drawing on the Stimuli-Organism-Response (SOR) framework, prior studies confirm that environmental stimuli can influence behavior through emotions. As an environmental stimulus, fragrance plays a pivotal role in consumer decision-making. Notwithstanding, some critical questions remain underexplored. First, whether the fragrance scents in luxury hotels are pleasant for all kinds of consumers. The empirical evidence of individual differences (e.g., gender) may moderate the effects on environmental cues, emotion, and behavior remains scarce. Besides, previous studies have proved that the biological associations between olfaction and emotion plays an important role in making effects on people perception on smells, suggesting that individuals perceive scents differently, eliciting both positive and negative emotional responses. Therefore, the second question is whether negative emotional responses triggered by fragrances can have effects on purchase intention of consumers. However, little research examines the effects of negative emotions on consumer behaviors.

To address these gaps, this study investigates the personalized fragrance marketing in luxury hotel brands, mainly examine the relationship between personalized fragrance, emotional responses (i.e. positive emotion and negative emotion), attitude towards brand and purchase intentions with SOR model by identifying representative personalized fragrances in the luxury hotels (e.g., Ritz Carlton, Shangri-La, Mandarin Oriental, etc.), subdividing fragrance types. In addition, introducing gender variable to further explore the moderating effect on the relationship between emotions and brand attitude. This study is planned to employ the combination with experimental design and quantity survey method to collect data, and utilize SmartPLS to conduct Partial Least Squares Structural Equation Modeling (PLS-SEM) and MICOM, followed by multi-group analysis (MGA) to analyze data and test relationships of variables. The results of study will identify which fragrance notes can induce different emotional responses for Chinese consumers and explain how the emotional responses shed light on their brand attitude and purchase intention in luxury hotels. Additionally, this study will provide crucial practical implications for helping hotels carry out differentiate fragrance marketing strategy effectively.

Keywords: Fragrance marketing, Emotion, Positive response, SOR model, Purchase intention, Gender difference

Immersive Spirituality: Exploring Temple Stay as a Unique Form of Tourism Experience

Qianlan LONG*, Yifan LUO , Kelvin ZHANG

Macau University of Science and Technology

*Corresponding Email: 1210028990@student.must.edu.mo

Abstract

This study aims to explore tourism experiences associated with the participation of temple stay, which tourists immerse themselves temporarily in monastic lifestyle to seek transcendent experiences away from the mundane of every day. The demand for such experience signifies a shift in traditional travel motivation underpinned by hedonic and pleasure-seeking activities, to a growing trend towards spiritual and transformative tourism that is characterized by the pursuit of personal development, heightened self-reflexivity, and the search for meaning amidst the post-secular modern life. Underpinned by the interpretivist paradigm, semi-structured in-depth interviews were conducted with 16 participants who attended two temple-stay programs in China. A thematic analysis was undertaken to interpret the interview data. Results indicate that temple stay offers a liminal space which induces a sense of in-betweenness and a state of flux from participants, who underwent spiritually transformative experiences that are characterized by a shift in self – understanding, a reconsideration of relationships with others and with nature, a reinterpretation towards the mundane of every day, and a feeling of transcendence. In addition, these four dimensions of experience are interconnected and deeply embedded in the Chinese cultural and spiritual tradition. This study concludes temple stay tourism yields great implications for tourism studies to reconceptualize travel motivation and tourism experience, while suggesting practical implications for destination marketers and tourism operators towards incorporating spiritual and transformative values in developing tourism products. Future research areas may extend to exploring the impact of such transformative tourism experiences on host monastic communities, and the role of local cultural and spiritual traditions in shaping temple stay experiences.

Keywords: temple stay, spirituality, transformative tourism, experience, liminality, China

Green-Washing: the Credit Overdraft Crisis of Green Hotel? An Exploration of Establishing Loyalty of Tourists to Green Hotels

Qianhui OUYANG

Macau University of Science and Technology

Abstract

Green hotels, as a cornerstone of sustainable tourism, strive to reduce ecological footprints through energy conservation, waste reduction, and circular resource practices. However, their development faces significant challenges from pervasive "greenwashing" behaviors—where hotels employ exaggerated environmental claims, selective information disclosure, or low-cost "pseudo-green" measures to create a false ecological image while prioritizing cost-cutting motives. Such practices risk eroding consumer trust and undermining the effectiveness of regional green policies. While prior studies suggest that tourists' awareness of greenwashing may reduce their willingness to engage in environmental activities, systematic analysis remains scarce regarding the specific manifestations of greenwashing in the hospitality industry, the dynamics of tourist trust, and the pathways through which these factors influence loyalty behaviors (e.g., revisit intention, negative word-of-mouth). Furthermore, how government policies moderate the relationship between green trust and consumer behavior requires urgent exploration.

This study focuses on five hotels in Guangzhou implementing the "six small items" policy (discontinuing free disposable amenities). Through offline questionnaires, 426 valid responses were collected, utilizing a 7-point Likert scale to measure tourists' perceptions of greenwashing (e.g., deceptive labeling, cost-driven actions), levels of green trust, and behavioral intentions (revisit intention, negative word-of-mouth, environmental participation). By employing structural equation modeling (SEM) and hierarchical regression analysis, the research constructs a theoretical framework integrating greenwashing, green trust, policy perception, and loyalty behaviors (as illustrated in Figure 1). Key hypotheses tested include: greenwashing significantly erodes tourist trust (H1); green trust positively enhances revisit intention (H2) and environmental participation (H4) while suppressing negative word-of-mouth (H3); and policy perception moderates these relationships by amplifying or diminishing the role of green trust (H5ab-H7ab).

The findings reveal that tourists' sensitivity to greenwashing strongly correlates with their environmental awareness. Hotels that mask cost-cutting motives under labels like "recyclable packaging" or implement the "six small items" policy without providing sustainable alternatives (leading to service deficiencies) are primary triggers of trust crises. Green trust fully mediates the relationship between greenwashing and loyalty behaviors—when tourists trust a hotel's environmental commitments, their revisit intention is significantly enhanced, negative word-of-mouth is markedly reduced, and participation in hotel-led green initiatives increases substantially. Policy perception exhibits a dual-edged effect: high awareness of policy objectives strengthens the positive impact of green trust on revisit intention, whereas perceptions of policy

implementation as "tokenistic" (e.g., removing amenities without alternatives) exacerbate the negative association between green trust and negative word-of-mouth. Theoretically, this study extends the application of green trust theory to hospitality contexts through a behavioral-policy interaction lens, uncovering the "cognitive-affective-behavioral" chain mechanism in trust-building and redefining boundary conditions for policy interventions. Practically, it proposes a "transparency-participation" green strategy framework: Hotels must move beyond superficial measures by providing verifiable sustainability metrics and fostering tourist engagement through initiatives like eco-point reward systems. Governments should enhance policy support mechanisms (e.g., subsidies for biodegradable alternatives) and establish dynamic monitoring systems for green certifications, ensuring a balance between operational cost efficiency and tourist satisfaction to drive industry-wide green transformation.

Examining Risk Factors Influence Health and Wellness Tourists' Willingness to Travel: The Case of Macau

Yuhao GUO[1*] and Dimin WANG[2]

[1]Undergraduate student, Faculty of Hospitality and Tourism Management, Macau University of Science and Technology

[2]Lecturer, Faculty of Hospitality and Tourism Management, Macau University of Science and Technology

*Corresponding Email: 1230034172@student.must.edu.mo

Abstract

Health and wellness tourism are recognized as one of the most developed and thriving sectors within the tourism industry (Wang, et all 2020). Recently, with the rapid change of people's health concept, health and wellness tourism has shown a vigorous development trend (Gan et al., 2023). Macao is known for its gaming industry, which accounts for the majority of its local GDP; however, its singular economy has invoked much concern, especially when it is severely hit by the pandemic (Liu, et all 2023). As Macau seeks economic diversification, Macau can tap into its health tourism resources, such as Chinese traditional medical treatment capacities, as well as its private medical/wellness centers and clinics. As such, there are also opportunities to attract Chinese mainland tourists to engage health and wellness tourism in Macau (Liu, et all 2023).

Despite the promising outlook, the development of health and wellness tourism faces significant challenges, such as adapting to the industry's high standards of service and timeliness (Liu et al., 2023), alongside disputes regarding traditional Chinese medicine (Wang et al., 2024). These hurdles could potentially undermine the quality and reputation of Macau's health and wellness tourism industry, posing risks to its appeal as a tourism destination. According to risk theory, these challenges can be categorized into three risks: financial risk, performance risk, and time risk (Kaplan & Jacoby, 1972). This study prioritizes three core issues: financial risk, performance risk, and time risk. Financial risk in this study refers to the possibility that health and wellness tourism will not provide the desired value for the money spent (Qi et al., 2009), which may prompt consumers to feel they overpaid for the services. The performance risk arises when the service purchased will not be completed in the manner which will result in customer dissatisfaction and complaints (Mitchell, 1992), highlighting a potential gap between expected and actual service, and thus ultimately reducing Macau's attractiveness as a tourism destination (Cho, 2013). Additionally, time risk, defined as the possibility that a treatment or medical procedure in a foreign country may take too much time or is a complete waste of time (Bookman & Bookman, 2007), may push consumers towards more convenient alternatives. Addressing these potential challenges is essential for Macau's medical tourism to achieve sustainable development and diversify economically beyond the gaming sector.

This study proposes a theoretical framework to provoke an in-depth discussion and find solutions to tackle customers' low willingness related to their perceived risks when choosing Macau as a health and wellness tourism destination. By employing risk theory—specifically examining financial risk, performance risk, and time risk (Mitchell, 1992), this study will conduct a quantitative survey to measure potential tourists' general attitude toward health and wellness tourism in Macau. More specifically, this research addresses the following two research questions: 1) How the risk factors specifically influence tourists' satisfaction in choosing Macau as the health and wellness tourism destination?;2) Will customers' dissatisfaction and the risk factors directly decrease tourists' willingness to travel?

Theoretically, this study will enrich the extant literature by using risk theory to better understand tourists' travel behavior. Practically, this study will provide experts in the tourism industry to gain a better understanding of these challenges and provide implications for Macau to diversify its economy to cultivate a prosperous and sustainable health and wellness tourism industry.

Keywords: Health and Wellness tourism, Macau, Risk theory, Willingness to travel, Sustainable development

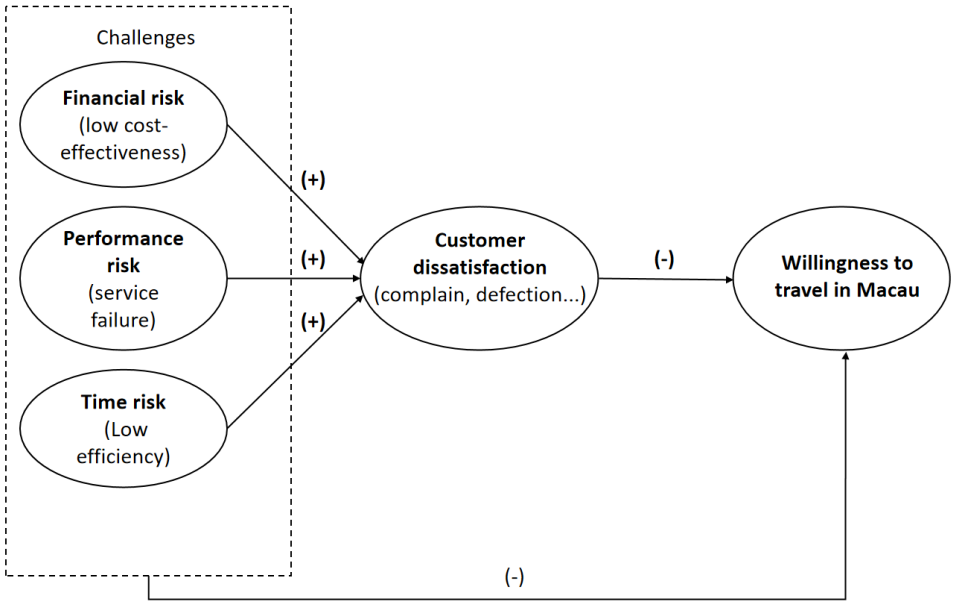


Figure 1. Risk Factors influencing on Customers' Willingness Framework

References

[1] Bookman, M. Z., & Bookman, K. R. (2007). Medical tourism in developing countries. New York: Palgrave Macmillan.

[2] Cho, Y. C. (2013). Exploring relationship among customer dissatisfaction, complaints, and loyalty in the virtualized environment: Roles of advanced services. *International Business & Economics Research Journal*, *12*(11), 1343-1360.

[3] Gan, T., Zheng, J., Li, W., Li, J., & Shen, J. (2023). Health and wellness tourists' motivation and behavior intention: The role of perceived value. *International Journal of Environmental Research and Public Health, 20*(5), 4339.

[4] Kaplan, L. B., Szybillo, G. J., & Jacoby, J. (1974). Components of perceived risk in product purchase: A cross-validation. *Journal of applied Psychology*, 59(3), 287.

[5] Liu, M., Guan, J., Ren, L., Yang, H., & Zhuang, Y. (2024). Developing health tourism in a gaming city: Stakeholder perceptions of a proposed strategy. *Journal of China Tourism Research, 20*(1), 90-114.

[6] Mitchell, V. W. (1992). Understanding consumers' behaviour: can perceived risk theory help? *Management decision, 30*(3).

[7] Qi, C. X., Gibson, H. J., & Zhang, J. J. (2009). Perceptions of risk and travel intentions: The case of China and the Beijing Olympic Games. *Journal of Sport & Tourism, 14*(1), 43-67.

[8]Wang, D., Lu, J., Zhou, J., & Wong, V.K. (2024). Useful or not? The discussion of traditional Chinese medicine to treat COVID-19 on a Chinese social networking site. *BMJ Global Health*, 9.

[9] Wang, J. H., Feng, H., & Wu, Y. (2020). Exploring key factors of medical tourism and its relation with tourism attraction and re-visit intention. *Cogent social sciences, 6*(1), 1746108.

Effects of perceived tourism impacts on residents' support for tourism development: Evidence from overtourism in Macau

Jiachen YAN, Juanye WANG, Qiaoyan ZHANG, KIM Jinok, Susanna, KIM Heewon

Faculty of Hospitality and Tourism Management, Macau University of Science and Technology

Abstract

In recent years, the swift expansion of global tourism has yielded substantial economic returns for many destinations, yet it has also generated challenges such as excessive resource consumption, overburdened infrastructure, and escalating socio-cultural conflicts. Since Macau's return to China in 1999, its economy has experienced continuous growth, with the tourism industry's rapid development providing robust support for Macau's economic advancement. However, this surge in tourism has likewise resulted in overtourism issues, encompassing urban traffic congestion, a decline in residents' quality of life, and heightened environmental pressure. In recent years, as the number of visitors has continued to rise, these problems have only intensified, posing a serious threat to both residents' daily lives and the city's socio-ecological balance. Consequently, pursuing sustainable development pathways for Macau's tourism has become increasingly urgent.

Theoretically, this study draws primarily on Social Exchange Theory (SET), Sustainable Tourism Development Theory, and Place Attachment Theory as an analytical framework. SET posits that residents' attitudes toward tourism largely depend on a balance between perceived benefits and perceived costs. Sustainable Tourism Development Theory stresses the need to account for economic, environmental, and socio-cultural considerations to maintain tourism's long-term stability. Place Attachment Theory examines residents' emotional and psychological ties to their locale and how these ties shape their support for tourism development.

The main goal of this study is to examine how Macau residents perceive the economic, environmental, and socio-cultural impacts of tourism development, and how these perceptions influence their quality of life, place attachment, and attitudes toward tourism. Employing quantitative methods and using Structural Equation Modeling (SEM), the study collects and analyzes data from Macau residents. The research process includes a literature review, construction of a theoretical model, questionnaire design, data collection and analysis, and the final empirical findings.

The primary finding of this study indicates that Macau residents' perceived tourism impacts play a pivotal role in shaping their support for tourism development, while their sense of place attachment to Macau serves as a moderator between perceived impacts and support. Moreover, residents exhibit notable differences in their economic, environmental, and socio-cultural perceptions of tourism, which in turn directly affect their attitudes toward tourism growth. These findings confirm the applicability of Social Exchange Theory (SET), sustainable tourism development theory, and place attachment theory in analyzing overtourism in Macau, thereby extending the current theoretical framework.

Keyword: Sustainable Tourism; Overtourism; Place Attachment Theory; Social. Exchange Theory; Quality of Life; Perceived Benefits.

The Impact of Gamified Experiences on Tourist Emotions and Behaviour

Sisi WANG , Chunxiao LIU, Kim Jinok, Susanna

Macau University of Science and Technology

Abstract

In recent years, the integration of gaming elements into various sectors, particularly tourism, has gained significant attention globally. The use of gamification as a strategic tool is considered a burgeoning trend, especially in enhancing tourist experiences (Olbrich & Fusté-Forné, 2023). With the growing interest in leveraging gamified experiences to motivate tourists, there is a surge in research exploring the various impacts of such experiences on tourist behavior (Bieszk-Stolorz et al., 2021).China's first 3A game, "Black Myth: Wukong," has brought the ancient architecture of Shanxi Province into the spotlight. Traditionally perceived as a coal-mining province, Shanxi has long been overlooked for tourism. However, with over 53,000 ancient buildings and 28,000 temples, the region offers a rich cultural heritage. The release of "Black Myth: Wukong" has transformed these ancient structures into destinations for gamers to explore, highlighting the potential of cultural tourism.

Hence, this study employs cognitive evaluation theory as its theoretical framework to analyze the influence of external outcomes on internal motivation, focusing on tourists' emotions. Cognitive evaluation theory, traditionally used in education (Riley, G., 2016), aims to explain how intrinsic motivations, such as enjoying an experience, drive engagement in activities. This study extends its application to the tourism field, exploring the factors affecting tourists' behavioral intentions through the lens of emotions.

Keywords: Behavioural Intentions, Gamified Experience, Positive Sentiment, Cognitive, Evaluation Theory, Destination Image

References

[1] Bieszk-Stolorz, B., Dmytrów, K., Eglinskiene, J., Marx, S., Miluniec, A., Muszyńska, K., Niedoszytko, G., Podlesińska, W., Rostoványi, A. v., Swacha, J., Vilsholm, R. L., & Vurzer, S. (2021). Impact of the availability of gamified e-guides on museum visit intention. *Proceedings of the International Conference on Computer Science*, 192, 4358–4366. https://doi.org/10.1016/j.procs.2021.09.212

[2] Olbrich, J., & Fusté-Forné, F. (2023). When tourism becomes a game: Gamification in Catalonia's cultural tourism. Pasos - Revista de Turismo y Patrimonio Cultural, 21(1), 9–21. https://doi.org/10.25145/j.pasos.2023.21.001

[3] Riley, G. (2016). The role of self-determination theory and cognitive evaluation theory in home education. Cogent Education, 3(1), 1–10.https://doi.org/10.1080/23311 86x.2016.1163651

The Impact of Perceived Value on Satisfaction and Revisit Intentions Using the Experiential Economy Model: A Focus on Heytea Experience Customers

Juanye WANG, Qiaoyan ZHANG, Jiachen YAN, KIM, Jinok, Susanna

Macau University of Science and Technology

Abstract

HEYTEA has held various events to improve customer satisfaction. Among them, as part of its marketing efforts, it introduced a campaign co-hosted with the Genshin Impact game, focusing on the experiential aspect. This event played a significant role in Heytea's marketing activities. On this particular occasion, the joint - brand promotion between Heytea and Genshin Impact played a crucial role in enticing customers to come back. Consequently, it is of great importance to gain a more profound understanding of customers' viewpoints regarding the collaborative branding initiative between Heytea and Genshin Impact. Drawing on the concept of the experience economy and the four types of experiences put forward by this concept, this research categorizes the four kinds of experiences of Heytea consumers who take part in the events. The objective is to investigate how these four types of experiences of Heytea consumers influence perceived value, as well as how the co - branding campaign between Heytea and Genshin Impact affects satisfaction and the likelihood of revisiting.

This research selects consumers of Heytea as the study sample and employs a combined online - offline method. A grand total of 400 reliable surveys were gathered via the distribution of digital questionnaires over the internet and in - person distribution of physical questionnaires. The collected data underwent analysis using the SPSS 22. 0 and Smart PLS 4. 0 statistical software packages. In the end, the findings of this research indicate that the educational, aesthetic, entertainment, and escapism experiences of consumers who participated in the co - branding project between Heytea and Genshin Impact have a favorable impact on hedonic value. Similarly, these four types of experiences also yield a positive outcome for utilitarian worth. Moreover, the perceived worth of consumers participating in the co - branding initiative between Heytea and Genshin Impact exerts a favorable influence on their satisfaction and their tendency to come back.

Based on the theory of the experience economy, this study innovatively classifies Heytea's consumers, mainly focusing on the experiences of customers participating in the co-branded campaign between Heytea and Genshin Impact, and explores the impact of Heytea customers' experiences on their perception and subsequent behavioral intentions of participating in the co-branded campaign between Heytea and Genshin Impact. The objective is to address the existing void in this domain and offer a more substantial theoretical foundation for subsequent research. Moreover, the outcomes of this investigation also intend to present more worthwhile insights or recommendations for the management and marketing staff of Heytea. By doing so, the overall competitiveness, allure, and dynamism of Heytea can be augmented.

Keywords: Experience economy, Perceived value, Customer satisfaction, Revisit Intention

Exploring the impact of awe on tourists' prosocial behavior in religious tourism: The Moderating effect of Religiosity

Yihan ZHOU, Shiqian WANG, Kim Jinok, Susanna

Macau University of Science and Technology

Abstract

With the development of tourism, religious tourism has attracted more and more tourists. Religious tourism combines spiritual experience and emotional communication, providing an ideal environment for studying the interaction between emotional stimulation and tourist behavior outcomes. However, current research on awe's effect on prosocial behavior rarely focuses on religious tourism, and there is little attention paid to the moderating effect of religious belief. Therefore, this study takes the religious tourism context as an entry point to explore in depth the mechanism by which tourists' awe in sacred sites triggers their prosocial behavior, and for the first time systematically examines the moderating effect of religiosity on this psychological mechanism. In terms of research methods, this study used a questionnaire survey method. Zhuhai Putuo Temple was selected as the survey site to compare tourists' prosocial tendencies before and after religious tourism triggers awe. At the same time, questions were included in the questionnaire to understand each participant's level of religious belief. The results of the survey show that awe has a positive impact on tourists' prosocial behavior. In addition, the study confirms that religiosity positively moderates the relationship between awe and prosocial behavior. This study has certain theoretical significance, which enriches related research, especially in the field of religious tourism. At the practical level, this study provides new ideas for the management of religious tourism destinations, such as deepening emotional stimulation by enhancing the interactivity of rituals and optimizing the narrative of sacred spaces. The limitation of the study lies in the cultural homogeneity of the sample, which can be expanded to comparative research across religions in the future.

Keywords: awe, prosocial behavior, religious tourism, religiosity

References

[1] Chang, B. R., Huang, J. X., & Fang, J. D. (2024). The awe promotes prosocial behavior: the mediating role of psychological resilience. *Current Psychology*, *43*(48), 36933-36943. https://doi.org/10.1007/s12144-024-07123-w

[2] Ejova, A., Krátky, J., Klocová, E. K., Kundt, R., Cigán, J., Kotherová, S., Bulbulia, J., & Gray, R. D. (2021). The awe-prosociality relationship: evidence for the role of context. *Religion Brain & Behavior*, *11*(3), 294-311. https://doi.org/10.1080/2153599x.2021.1940254

[3] Jiang, T. L., & Sedikides, C. (2022). Awe Motivates Authentic-Self Pursuit via Self-Transcendence: Implications for Prosociality. *Journal of Personality and Social Psychology*, *123*(3), 576-596. https://doi.org/10.1037/pspi0000381

[4] Li, R. Y., Hou, Z., Zhang, C., Xu, Q., & Nie, A. Q. (2024). A meta-analysis examining the relationship between awe and prosocial behavior. *Current Psychology*, *43*(29), 24702-24711. https://doi.org/10.1007/s12144-024-06039-9

[5] Perlin, J. D., & Li, L. (2020). Why Does Awe Have Prosocial Effects? New Perspectives on Awe and the Small Self. *Perspectives on Psychological Science*, *15*(2), 291-308, Article 1745691619886006. https://doi.org/10.1177/1745691619886006

[6]Vishkin, A., Schwartz, S. H., Ben-Nun Bloom, P., Solak, N., & Tamir, M. (2020). Religiosity and Desired Emotions: Belief Maintenance or Prosocial Facilitation? *Personality and Social Psychology Bulletin*, *46*(7), 1090-1106, Article 0146167219895140. https://doi.org/10.1177/0146167219895140

Research on the Factors Affecting User Loyalty to Chatbot Tools in Travel Apps

Yi LIU, Binghan XIA*

Faculty of Hospitality and Tourism Management, Macau University of Science and Technology

*Corresponding Email: 1220021171@student.must.edu.mo

Abstract

With the rapid advancement of artificial intelligence (AI) technology, its application within the tourism industry has garnered significant attention. As a crucial component of AI products, major travel companies have integrated AI chatbots into their applications. These chatbots enhance various facets of the travel experience, encompassing planning, booking, on-site services, and post-trip interactions. Nevertheless, despite the growing frequency of chatbot usage in travel applications, which have emerged as vital tools for travel companies to develop and attract consumers, the understanding of factors influencing user loyalty to these chatbots remains limited. This limitation persists in both academic and industry contexts, where related research remains scant.

This study seeks to explore the factors influencing user loyalty to AI products in tourism, employing an extended Technology Acceptance Model (TAM) that incorporates information quality and human-computer interaction. The research examines how information quality influences perceived ease of use and perceived usefulness, which in turn affect trust and user satisfaction. Furthermore, human-computer interaction—characterized by responsiveness and personalization—is investigated as a critical factor that enhances perceived usefulness, thereby impacting satisfaction. Ultimately, the level of satisfaction determines user loyalty.

The findings suggest that travel application companies should prioritize enhancing the quality of their chatbots and ensuring responsive and personalized interactions to elevate user satisfaction within the tourism sector. Such improvements are likely to encourage repeat usage and foster positive word-of-mouth. Within the proposed model, perceived usefulness and perceived ease of use serve as mediating variables. This study provides valuable insights for researchers and practitioners in the tourism industry, underscoring the significance of information quality and human-computer interaction in promoting user satisfaction and loyalty. Future research could further investigate additional factors that may influence user loyalty to AI products in tourism.

Keywords: Chatbot, User Loyalty, Travel App, Information Quality, Human-AI Interaction, Perceived Ease of Use

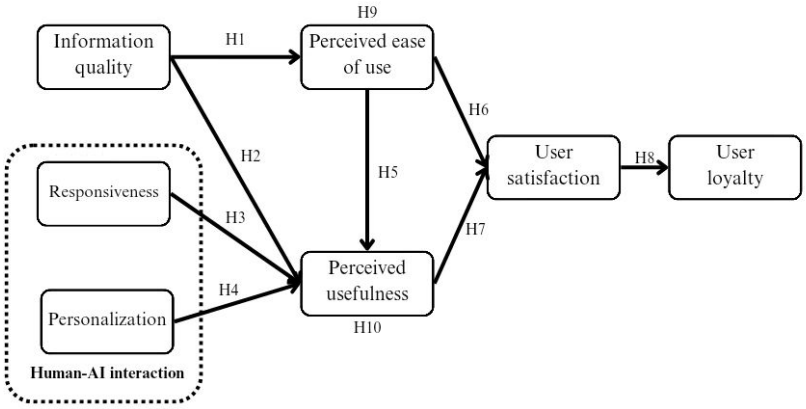


Figure 1 conceptual model

Factors Influencing Community Residents' Attitudes Toward Community-Based Tourism

Zhaojian LIU, Yan FENG

Macau University of Science and Technology

Abstract

In contemporary tourism development, a growing number of travelers are shifting their focus from conventional attractions to residential communities. These areas, though not originally designated as tourist destinations, have gained prominence due to their distinctive architectural heritage or culturally rich landscapes. Driven by social media platforms where visitors actively share photographic content, such communities have evolved into viral hotspots, propelling community-based tourism (CBT) to a critical position within sustainable tourism discourse. As a participatory development model, CBT contributes to socioeconomic advancement by generating localized revenue streams, diversifying employment opportunities, and reinforcing cultural preservation. Furthermore, by empowering residents through equitable benefit distribution, CBT fosters the long-term sustainability of both host communities and their tourism ecosystems. Previous studies have established that resident participation is central to community-based tourism, while residents' attitudes are a key factor influencing CBT development. Although scholars widely acknowledge CBT's potential benefits for community development, research also indicates that it may impose negative impacts on local residents. This duality represents a critical gap in current CBT scholarship. This study's methodology will include interviews with 25 residents from five CBT destinations in China: Liziba Light Rail Station in Chongqing, Baixiangju Residence in Chongqing, Choi Hung Estate in Hong Kong, Dongshankou in Guangzhou, and Yangmeizhu Xiejie in Beijing. At each site, five residents with over five years of residency will be interviewed for 30 minutes. In addition, all interviews will be documented through written transcripts, audio recordings, and video recordings, aiming to identify negative factors affecting residents' attitudes toward CBT. The findings demonstrate that these negative factors significantly influence residents' willingness to engage with CBT. The results underscore residents' fundamental role as stakeholders in community tourism development and offer valuable insights for sustainable tourism research. From a practical perspective, this study provides actionable recommendations for global CBT practitioners: standardized community management frameworks, data-driven policy adjustments by governments, and targeted strategies to enhance resident satisfaction. Collectively, these measures can strengthen the foundation for sustainable community tourism development.

Keywords: Community-Based Tourism (CBT), Sustainable Tourism, Resident Attitude, Local Community

Willingness of elderly users to use Intelligent Voice Assistant while traveling based on Technology Acceptance Model

Xiaotong ZHU , Xuruizi SUN, KIM Jinok, Susanna

Macau University of Science and Technology

Abstract

With the continuous progress of artificial intelligence and automation technology, intelligent voice assistants have developed diversified functions including voice recognition, question-and-answer communication and home control, and increasingly become an indispensable role in daily life. Exploring older adults' willingness to use intelligent voice assistants while traveling is particularly important in the context of global aging and the increasing number of travelers every year. However, the willingness of older adults to use intelligent voice assistants while traveling has not been discussed enough in previous research literature.

This study adopts the Technology Acceptance Model (TAM) to focus on how Perceived Usefulness (PU) and Perceived Ease of Use (PEU) affect older users' perception of Intelligent Voice Assistants (IVAs) during tourism, using older users in tourism scenarios as the research object.

In summary, the findings of this paper suggest that operability, perceivability, feedability, and convenience all have a significant impact on older adults' willingness to use intelligent voice assistants while traveling. These findings reveal the uniqueness of the technology acceptance behavior of the elderly population and provide valuable references for subsequent research.

This study not only helps to understand the actual needs and preferences of elderly users, but also provides targeted suggestions for the design and promotion of intelligent voice assistants in the field of tourism. It enriches the theoretical framework of technology acceptance modeling for older people's use of smart technologies, and also provides new perspectives and ideas for research in related fields.

The study will also help the government and related organizations to formulate more scientific and reasonable policies to guide and support the wide application of intelligent voice assistants in the field of tourism, and to promote the deep integration and development of science and technology with the tourism industry.

Keywords: Elderly Users, Intelligent Voice Assistant, TAM Model, Operability, Perceivability, Feedability, Convenience

The Differential Impact of AI- and Firm-generated Content on Tourists' Visit Intention in Tourism Destination: based on the Trust Transfer Theory

Chuanji TU[1], Tianqi CHEN[2], Luebin SUN[1], Chen-Kuo PAI[3]

[1]Ph.D. Student, Faculty of Hospitality and Tourism Management,
Macau University of Science & Technology, Avenida Wai Long, Taipa, Macau SAR

[2]Ph.D. Candidate, Faculty of Hospitality and Tourism Management,
Macau University of Science & Technology, Avenida Wai Long, Taipa, Macau SAR

[3]Ph.D. Associate Professor, Faculty of Hospitality and Tourism Management,

Macau University of Science & Technology, Avenida Wai Long, Taipa, Macau SAR

Abstract

Since AI (such as ChatGPT) has superior capabilities and efficiency in generating human-like natural language content (Zhang et., 2024), the content generation model represented by Artificial Intelligence Generated Content (AIGC) has reshaped the advertising industry (Gu et al., 2024). But in the field of tourism marketing, the application of AI in destination advertising is still in its infancy. Therefore, few research have explored the influence of AI-generated content to tourists' visit intention. Because of that, this study based on the trust transfer theory, aimed to explore the influence of AI-generated content and Firm-generated content's perceived credibility on tourists' visit intention under different AI label nudging. And answering the research question of this study: does AIGC enhance tourists' intention to travel more than FGC?

This study will conduct a 2*2 experiment based on the different type of content generated and the different AI label nudging. After experiment the data collection will be conducted through paper questionnaire surveys. The collected data will be analyzed using SPSS 20 and Smart-PLS 4 software, where structural equation modeling (SEM) will be employed to explore the relationship between the AIGC\FGC's perceived credibility and tourists' visit intention. The theoretical contribution of this study is to reveal the mechanism of tourists' trust and behavior towards AIGC based on the trust transfer theory and to enrich the boundary conditions of the target framework content of tourists' visit intention by using the content generation model as a moderating variable. In addition to this, this study provides guidance and suggestions for destination marketing organizations to better use AI for destination marketing.

Keywords：AI generated content, Firm generated content, AI label nudging,

Perceived credibility, Customer engagement

References

[1] Gu, C., Jia, S., Lai, J., Chen, R., & Chang, X. (2024). Exploring Consumer Acceptance of AI-Generated Advertisements: From the Perspectives of Perceived Eeriness and Perceived Intelligence. *Journal of Theoretical and Applied Electronic Commerce Research*, 19(3), 2218-2238.

[2]Zhang, M., Xu, Y., & Wei, X. (2024). AI-centered vs. Human-centered: Exploring Users' Attitude toward AIGC in Varying Forms of Human-AI Collaboration.

"From Traditional to Creative": The Development and Validation of the Wet Market Tourism Experience Scale for Generation Z Tourists

Junying LIANG[1], Zhiqian LONG[2], Jaeseok LEE[3], Chen-Kuo PAI[4*]

[1]PhD Student, Faculty of Hospitality and Tourism Management, Macau University of Science & Technology, Avenida Wai Long, Macau SAR, China.

[2]PhD Candidate, Faculty of Hospitality and Tourism Management, Macau University of Science & Technology, Avenida Wai Long, Macau SAR, China.

[3]Assistant Professor, Department of Tourism Management, Gangneung-Wonju National University, Gangneung, Gangwon-do, Korea

[4]Associate Professor, Faculty of Hospitality and Tourism Management, Macau University of Science & Technology, Avenida Wai Long, Macau SAR, China.

* Corresponding Email: ckpai@must.edu.mo

Abstract

The wet market is a common marketplace and fair in China, which consists of many individual retailers clustered together to sell fresh produce (Wu et al., 2023). The practice of visiting the wet market has recently become a popular form of tourism. It is noteworthy to observe that the younger generation has become the main consumer rather than the middle-aged and the elderly. The topic of "Wet Market Roaming" has amassed a significant viewership, with 110 million views and positive experiences shared on social media. Contrary to stereotypical influences, they seem to enjoy the process of roaming the markets, even if it may seem noisy and chaotic. In the process of urbanisation, some traditional wet markets have undergone renovation. Public markets that are distinct in both characteristics and customs have gradually evolved to become symbols of a destination image. "Yanhuo Chi" and the sense of place are synonymous with these places and strongly appeal to the novelty-seeking Gen Z demographic (Hu et al., 2024). However, there is still a lack of research on this particular form of tourist consumption. The elements that should be present in a successful and attractive wet market for Gen Z tourists are not yet known. Therefore, the research objective of the study aims to develop a research scale to help researchers better understand the value of wet market tourism.

This study will strictly adhere to standard procedures for scale development. Specifically, Study 1 will confirm the initial measurement items of the Gen Z Wet Market Tourism Experience Scale through semi-structured interviews and thematic analysis (UGC of web texts). The interviews were conducted with Gen Z tourists who met the screening criteria of having a wet market tourism experience. Finally, the preliminary scale containing five dimensions of aesthetic, nostalgic, social interaction, cultural education, and entertainment was generated. In Study 2, the reliability of the scale was tested by exploratory factor analysis (EFA), confirmatory factor analysis (CFA), and structural equation modeling (SEM).

Theoretically, the results of the study will enrich the existing literature and enhance the academic understanding of wet market tourism as a new form of tourism. Practically, the study provides targeted recommendations for destination marketing and enhancing the experience of tourists.

Keywords: Wet Market Tourism Experience, Generation Z Tourists, Everyday Aesthetics, Nostalgic experiences

References

[1] Hu, J., Miao, L., Jiang, T., & Chen, C. (2024). 'Yanhuo Chi': An everyday aesthetic tourism experience. *Annals of Tourism Research*, 109, 103850.

[2] Wu, J., Zeng, G., & Zhong, S. (2023). Between the everyday and the extraordinary: encounters in the wet market study tour. *Current Issues in Tourism*, 27(24), 4522–4541.

Visual Stimuli of Destinations under Filters and Tourists' Behavioral Intentions: A Study on the Mediating Roles of Emotion and Trust

Luebin SUN[1], Ce GUO[2], Chuanji TU[1] , Chen-Kuo PAI[3*]

[1]Ph.D. Student, Faculty of Hospitality and Tourism Management,
Macau University of Science and Technology, Avenida Wai Long, Taipa, Macau SAR

[2]Ph.D. Candidate, Faculty of Hospitality and Tourism Management,
Macau University of Science and Technology, Avenida Wai Long, Taipa, Macau SAR

[3]Ph.D. Associate Professor, Faculty of Hospitality and Tourism Management,
Macau University of Science and Technology, Avenida Wai Long, Taipa, Macau SAR

*Corresponding Email: ckpai@must.edu.mo

Abstract

In the current era when digital tourism marketing is prevalent, social media and travel apps have become the primary channels for tourists to obtain destination information, and photos are regarded as one of the important means for the dissemination and marketing of destination images (He, Deng, Li, & Gu, 2022). Filters are widely used in the production of destination promotional materials, and photos retouched with filters profoundly influence tourists' perceptions, emotions, and behavioral intentions towards the destination. With the continuous increase in tourists' requirements for the authenticity and individualization of travel experiences (Marcuta, Marcuta, & Vasile, 2024), whether the destination presentation under filters meets their expectations and how it affects their travel decisions have become important issues that urgently need to be studied.

This study focuses on the visual stimuli of destinations under filters and explores the mediating roles of emotion and trust. The study has two objectives: First, to clarify the differences in the impact of different degrees of filtering (mild and severe) on tourists' perception of destination authenticity; Second, to analyze the mechanism by which perceived authenticity, through emotional resonance and trust, affects tourists' revisit intentions and recommendation intentions, as well as the moderating role of the credibility of the picture source in this process. Based on this, this study proposes the following research questions: (1) How does the destination presentation under different degrees of filtering affect tourists' perceived authenticity? (2) Through what path does perceived authenticity affect tourists' emotional resonance and trust, and thus influence their revisit and recommendation intentions? (3) How does the credibility of the picture source moderate the relationships between perceived authenticity and emotional resonance, trust, as well as between emotional resonance, trust, and tourists' behavioral intentions?

This study employs an experimental method to explore the impacts of filters at different degrees. Data are collected through the design of experimental questionnaires. It is planned to distribute the questionnaires to 600 tourists in groups. Structural Equation

Modeling (SEM) is utilized for data analysis to verify the research hypotheses and reveal the relationships among variables.

The expected theoretical significance of this study lies in enriching the theoretical system regarding the relationship between visual stimuli and tourists' behavioral intentions in the tourism field and supplementing the relevant content on the mediating mechanism of emotion and trust. The practical significance lies in providing strategic references for tourist destinations and tourism enterprises when using filters for promotional activities, helping them optimize their promotional methods, enhance tourists' willingness to revisit and recommend, and thus promote the sustainable development of the tourism market.

Keywords: Filters, Destination image, Tourists' behavioral intentions, Cognitive theory of emotion

References

[1] He, Z., Deng, N., Li, X., & Gu, H. (2022). How to “read” a destination from images? Machine learning and network methods for DMOs’ image projection and photo evaluation. *Journal of Travel Research, 61*(3), 597–619. https://doi.org/10.1177/0047287521995134

[2] Marcuta, L., Marcuta, A., & Vasile, A. S. (2024). Development possibilities of the hospitality sector by creating and promoting authentic tourist experiences. *Scientific Papers Series Management, Economic Engineering in Agriculture & Rural Development, 24*(4).

To Investigate the Synergy Effects of Integrating Drone Shows with Festival Activities

Zhiqian LONG[1], Sangguk KANG[2], Kuan-Ting CHEN[1] , Chen-Kuo PAI[3]

[1]Ph.D. Candidate, Faculty of Hospitality and Tourism Management,
Macau University of Science & Technology, Avenida Wai Long, Taipa, Macau SAR

[2]Ph.D. Associate Professor, Department of Tourism Management, College of Social Sciences,Gangneung-Wonju National University, Building C-1 328, 25457, Jukheon-gil 7, Gangneung-si, Gangwon-do, Korea

[3]Ph.D. Associate Professor, Faculty of Hospitality and Tourism Management,
Macau University of Science & Technology, Avenida Wai Long, Taipa, Macau SAR

Abstract

The application of drone, an unmanned aerial vehicle (UAVs) has expanded widespread interest in various field, such as delivery, agriculture, military, and transportation (Ahirwar et al., 2019; Adnan & Khamis, 2022; Kim & Hwang, 2020; Kellermann et al., 2020). However, the importance of drone-based utilization is no exception to hospitality and tourism industry. Previous literatures have studied about virtual tourism, with drones can be used as an innovative tool to enhance customer experience (Sevilla-Sevilla et al., 2024). In recent years, destination management organizations (DMOs) and service providers start to integrate drone show into event and festival celebration in order to create memorable customer experience. This drone-based technology bears similarities to traditional fireworks displays, it offers greater flexibility, allowing for the creation of diverse visual patterns and designs through computer programming. Despite the growing relevance of drones application in tourism field, it would be critical and important for DMOs or service providers to understand whether the integration of drone show in event or festival can satisfy customer expectation. Research in Drone show, its synergy effect, and customer psychological perception of integration of drone show in event or festival context is still at its infancy. In respond to above discussion, this study aims (1) to investigate customer's perceived importance aspect of drone show as part of event or festival activities, (2) to assess effect of drone show during event or festival on customer emotional respond and behavior intention, (3) to develop a theoretical framework to evaluate the synergy effect of integration of drone show with event and festival activities based on stimuli-organism-response (SOR) theory. This study is expected to yield valuable insights for destination management organizations (DMOs) and service providers regarding customers' perceptions of the integration of drone shows in events and festivals. Furthermore, the findings will elucidate strategies for effectively managing the synergistic effects of drone shows to enhance the overall customer experience.

Keywords: Drone Shows, Synergy effect, Event Management, Stimuli-Organism-Response (SOR) Theory

References

[1] Ahirwar, S., Swarnkar, R., Bhukya, S., & Namwade, G. (2019). Application of drone. in agriculture. *International Journal of Current Microbiology and Applied Sciences, 8*(01), 2500-2505.

[2]Adnan, W. H., & Khamis, M. F. (2022). Drone use in military and civilian application: Risk to national security. *Journal of Media and Information Warfare (JMIW), 15*(1), 60-70.

[3]Kim, J. J., & Hwang, J. (2020). Merging the norm activation model and the theory of planned behavior in the context of drone food delivery services: Does the level of product knowledge really matter?. *Journal of Hospitality and Tourism Management, 42*, 1-11.

[4]Kellermann, R., Biehle, T., & Fischer, L. (2020). Drones for parcel and passenger transportation: A literature review. *Transportation Research Interdisciplinary Perspectives, 4*, 100088.

[5]Sevilla-Sevilla, C., Mendieta-Aragón, A., & Ruiz-Gómez, L. M. (2024). Drones in hospitality and tourism: A literature review and research agenda. *Tourism Review, 79*(2), 378-391.

Exploring the Effects of Technology Agent Quality on Tourists' Intention to Use in a Destination

Jingsong ZHANG[1], Jaeseok LEE[2], Junying LIANG[3], Chen-Kuo PAI[4]

[1]Ph.D Candidate, Faculty of Hospitality and Tourism Management,
Macau University of Science and Technology, Avenida Wai Long, Taipa, Macau SAR, China.

[2]Assistant Professor, Department of Tourism Management,
Gangneung-Wonju National University, Gangneung, South Korea

[3]Ph.D Student, Faculty of Hospitality and Tourism Management,
Macau University of Science & Technology, Avenida Wai Long, Taipa, Macau SAR, China.

[4]Associate Professor, Faculty of Hospitality and Tourism Management,
Macau University of Science and Technology, Avenida Wai Long, Taipa, Macau SAR, China.

Abstract

In recent years, big data analytics has become increasingly prominent and is recognized as a disruptive force in the modern era. Especially, in China, artificial intelligence (AI) has contributed significantly to the economy, boosting the Gross Domestic Product (GDP) by up to 26% (Doborjeh et al., 2022). Consequently, many enterprises across industries are growing more reliant on insights derived from the massive volumes of data generated through their operations. The hotel and tourism industry are no exception. Companies in this field increasingly depend on interpreting and analyzing vast datasets to understand tourist behavior (Samara et al., 2020). Previous research on AI-driven services has primarily focused on three categories: (1) AI providing recommendations, (2) acceptance of AI-powered services, and (3) letting AI make decisions for consumers (Morosan and Dursun-Cengizci, 2024). Notably, AI agents have evolved to autonomously make decisions and take actions on users' behalf without human intervention, leading to the emergence of technological agency (Kennedy and Hidalgo, 2021). Consequently, entrusting AI with consumer decision-making has become a viable solution. Previous research has primarily focused on investigating tourists' acceptance of technology agency in hospitality contexts. However, the attribute that constitutes a technological agency capable of satisfying tourists remains unexplored.

Based on the above discussion, the purpose of this study is to identify the attributes of technology agency quality and measure tourists' use Intention. Ultimately, this study aims to address the following research questions: (a) What components and measurement items constitute the attributes of technology agency quality? (b) Do the attributes of technology agency quality have an impact on tourists' intention to use it?

Therefore, this study will consist of two main parts: Study 1 identifies the attributes of technology agency quality through semi-structured interviews, leading to the development of a comprehensive set of measurement items. Study 2 examines the technology agency quality attribute scale through Exploratory Factor Analysis (EFA), Confirmatory Factor Analysis (CFA), and Structural Equation Modeling (SEM) to explore the impact of technology agency quality on tourists' intention to use in a

destination, while also validating the mediating role of the perceived service innovation and perceived functional benefits.

This study will construct and verify the reliability and validity of the technology agency quality scale through empirical research. The results of this study will enhance the academia's understanding of tourists' intention to use technology agency in tourism destinations and enrich the existing literature. In addition, this study will provide valuable insights for tourism companies and destination managers to enhance the attractiveness of destinations.

Keywords: Technology Agency, Perceived Service Innovation, Personal Innovativeness

References

[1]Doborjeh, Z., Hemmington, N., Doborjeh, M., & Kasabov, N. (2022). Artificial intelligence: a systematic review of methods and applications in hospitality and tourism. *International Journal of Contemporary Hospitality Management*, *34*(3), 1154-1176.

[2]Kennedy, D., & Hidalgo, M. (2021). Two-way human-agent trust relationships in adaptive cognitive agent, adaptive tasking scenarios: Literature metadata analysis. In *International Conference on Human-Computer Interaction* (pp. 191-205). Cham: Springer International Publishing.

[3]Morosan, C., & Dursun-Cengizci, A. (2024). Letting AI make decisions for me: an empirical examination of hotel guests' acceptance of technology agency. *International Journal of Contemporary Hospitality Management*, *36*(3), 946-974.

[4]Samara, D., Magnisalis, I., & Peristeras, V. (2020). Artificial intelligence and big data in tourism: a systematic literature review. *Journal of Hospitality and Tourism Technology*, *11*(2), 343-367.

The Influence of "Grocery Store Tourism" Experience on Revisit Intention and Recommendation Intention: The Mediating Role of Destination Image

Zequan LUO[1], Ce GUO[2], Chen-Kuo PAI[3]

[1]Master Student, Faculty of Hospitality and Tourism Management,
Macau University of Science and Technology, Avenida Wai Long, Taipa, Macau SAR

[2]Ph.D. Candidate, Faculty of Hospitality and Tourism Management,
Macau University of Science and Technology, Avenida Wai Long, Taipa, Macau SAR

[3]Ph.D. Associate Professor, Faculty of Hospitality and Tourism Management,
Macau University of Science and Technology, Avenida Wai Long, Taipa, Macau SAR

Abstract

"Grocery store tourism" has become an increasingly popular travel choice for tourists, allowing them to deeply experience life from a local's perspective. According to the 2025 travel trends report released by the online hotel booking platform Agoda, experiencing local culture is gradually becoming one of the primary motivations for travel (Agoda, 2024). Unlike local restaurants or food markets, grocery stores offer tourists a more authentic glimpse into the daily lives of residents, thereby better showcasing the unique charm of a destination (Li & Chantakit, 2023). Many public markets infused with local characteristics and customs have evolved into iconic symbols of cities, highlighting the cultural diversity and appeal of regional products (Wu et al., 2024). Grocery stores act as mirrors reflecting local culture, directly revealing a destination's preferences in product and food choices (Ruff et al., 2016). Consequently, through "grocery store tourism", visitors transform routine shopping into a meaningful travel experience by immersing themselves in scenes of local life.

However, existing research has yet to establish a comprehensive measurement scale for the "grocery store tourism" experience or fully explore its impact mechanisms on destination image, as well as how such effects further influence tourists' revisit intention and recommendation intention. To address this research gap, this study aims to develop and validate a reliable and effective scale for measuring the experiential attributes of "grocery store tourism" through empirical research, while advancing related studies on destination image, revisit intention, and recommendation intention. This paper seeks to answer the following research questions: (1) What components and measurement items constitute the experiential attributes of grocery store tourism? (2) How does the "grocery store tourism" experience influence destination image, revisit intention, and recommendation intention? (3) Does destination image play a mediating role between "grocery store tourism" experiences and revisit intention/recommendation intention?

In developing and designing the measurement scale for "grocery store tourism" experiences, this study will strictly follow standardized procedures for scale development. This process comprises two sequential studies: Study 1 is a qualitative investigation employing semi-structured in-depth interviews to explore the constituent

elements of "grocery store tourism" experiences; Study 2 is a quantitative analysis that validates these elements through structural equation modeling (SEM), mediation effect tests, and reliability-validity assessments.

In terms of theoretical contribution, this study is expected to incorporate the daily consumption scene of grocery store into the study of travel experience, and construct a complete "grocery store tourism" experience scale. Furthermore, this study emphasizes the significance of "grocery store tourism" in destination image marketing. The findings will provide destination marketing organizations (DMOs) and online platforms with an objective and holistic tool to evaluate user responses to destination image, enabling them to better meet user needs. By investigating how destination image influences users' revisit intention and recommendation intention, this study aims to enhance destinations' market competitiveness and offer new insights for destination image construction.

Keywords: Grocery Store Tourism Experience, Destination Image, Revisit Intention, Recommendation Intention

References

[1]Li, E., & Chantakit, P. (2023). Role of variety product, comfortability, and creditable in convenience stores of Chinese tourists in Thailand. *In Proceedings of the International Academic Multidisciplinary Research Conference in Oxford 2023* (pp. 252-260).

[2]Agoda. (2024, December 3). Agoda Shares Seven Travel Trends for 2025. Agoda Press. https://www.agoda.com/press/agoda-shares-seven-travel-trends-for-2025/

[3]Wu, J., Zeng, G., & Zhong, S. (2024). Between the everyday and the extraordinary: Encounters in the wet market study tour. *Current Issues in Tourism*, *27*(24), 4522-4541.

[4]Ruff, R. R., Akhund, A., & Adjoian, T. (2016). Small Convenience Stores and the Local Food Environment: An Analysis of Resident Shopping Behavior Using Multilevel Modeling. *American Journal of Health Promotion*, 30(3), 1

Explore the impact of tourists' motivation to participate in destination culinary activities on cultural identity and destination advocacy

Kuan-Ting CHEN[1], Jingsong ZHANG[2], Sangguk KANG[3], Chen-Kuo PAI[4]

[1]Lecturer, Faculty of Innovative Hospitality Management,
Macao University of Tourism, Colina de Mong-Ha, Macau SAR, China

[2]Ph.D Candidate, Faculty of Hospitality and Tourism Management,
Macau University of Science and Technology, Avenida Wai Long, Taipa, Macau SAR, China.

[3]Associate Professor, Department of Tourism Management,
College of Social Sciences, Gangneung-Wonju National University, Building C-1 328, 25457, Jukheon-gil 7, Gangneung-si, Gangwon-do, Korea

[4]Associate Professor, Faculty of Hospitality and Tourism Management,
Macau University of Science and Technology, Avenida Wai Long, Taipa, Macau SAR, China.

Abstract

Culinary activities can provide tourists with unique experiences. Tourists often use food-related activities to connect with a destination's heritage and experience. A culinary class, food tours, or traditional dining experiences foster cultural appreciation and a sense of belonging. Culinary destination experiences allow tourists to directly engage with and interact with local food culture, including exchanges with chefs, servers, and restaurant owners. These interactions create unforgettable memories and influence tourists' loyalty to restaurants and local tourism. As Macau deepens cooperation with surrounding regions and countries, culinary tourism will become important in promoting economic diversification. Early research on food tourism primarily focused on gastronomic consumption, visiting restaurants, tasting local foods, and attending food festivals (Hjalager & Richards, 2002). And, the positive culinary experiences lead to destination advocacy, where tourists promote locations through reviews and social media (Mariani et al., 2016). Drawing on existing literature, culinary tourism is recognized as a significant segment of the travel industry, where tourists seek immersive food-related experiences that transcend mere consumption (Hall & Sharples, 2003; Kim et al., 2019). However, what motivates tourists to participate in culinary activities in tourist destinations is less discussed. Therefore, this study explores the motivations behind tourists' participation in culinary activities at travel destinations, focusing on cultural identity, experience, and destination advocacy.

Based on the above discussion, this study aims to identify the attributes of culinary tourism and tourist motivation. Ultimately, this study is expected to address the following research questions: (a) What factors constitute tourists' motivation to participate in culinary activities in the destination? (b) Does experience affect cultural identity and destination advocacy? Therefore, this study will consist of two main parts:

Study 1 identifies the tourists' motivation to participate in culinary activities through semi-structured interviews, leading to the development of a comprehensive set of measurement items. Study 2 examines the scale of tourists' motivation to participate in culinary activities through Exploratory Factor Analysis (EFA), Confirmatory Factor Analysis (CFA), and Structural Equation Modeling (SEM) to explore the impact of tourists' motivation on tourists' experience, cultural identity and destination advocacy. This study will construct and verify the reliability and validity of the scale of tourists' motivation to participate in culinary activities through empirical research. The results of this study will enhance the academia's understanding of tourists' motivation to participate in culinary activities in tourism destinations and enrich the existing literature. In addition, this study will provide valuable insights for catering Industry and destination managers to enhance the attractiveness of destinations.

Keywords: Culinary tourism, Tourist motivation, Cultural identity, Travel experience, Destination advocacy

References

[1]Hall, C. M., & Sharples, L. (2004). The consumption of experiences or the experience of consumption? An introduction to the tourism of taste. In *Food tourism around the world* (pp. 1-24). Routledge.

[2]Hjalager, A. M., & Richards, G. (Eds.). (2002). *Tourism and gastronomy* (Vol. 11). London: Routledge.

Kim, S., Park, E., & Lamb, D. (2019). Extraordinary or ordinary? Food tourism motivations of [3]Japanese domestic noodle tourists. *Tourism Management Perspectives*, *29*, 176-186.

Mak, A. H., Lumbers, M., & Eves, A. (2012). Globalisation and food consumption in tourism. *Annals of tourism research*, *39*(1), 171-196.

The Effect of Cute Food Traits on Customer loyalty and Satisfaction:An Emotional Solidarity Perspective

Wenlong WANG, Haoran CHEN, Zehan HUANG

Faculty of Hospitality and Tourism Management, Macau University of Science and Technology, Macau, China

Abstract

With the popularity of cute marketing, more and more tourism products are incorporating cute elements to increase their attractiveness. Food, as one of the most important parts of tourism products, is no exception. In recent years, various types of cute food have become popular elements in the tourism market. With their unique appearance, they evoke people's positive and happy emotions, thereby generating emotional connections and resonance. Therefore, understanding the impact of cute food on emotional bonds is crucial for improving the tourist experience and strengthening their emotional connection with the destination. However, there is little research on cute food, and it focuses on tourists' cognition and response to it (Tang, 2023). There is a lack of research on the impact of cute food on tourists' behaviors and experiences. This study addresses this research gap and aims to explore the impact of cute food traits on tourist satisfaction and loyalty from the perspective of emotional solidarity.

Through a review of previous literature, we divided the characteristics of cute food into three dimensions: Shape, Size, and Color (Tang, 2023), and introduced the Emotional Solidarity Scale (ESS) into the model, which consists of three dimensions: Emotional closeness, Sympathetic Understanding, and Feeling Welcomed (Woosnam&Norman, 2010). Previous studies have shown that ESS can significantly predict the perceived impact of participants on tourism development and destination safety, and can be used to investigate tourist feelings (Ribeiro, M.A., 2018). Therefore, this research objectives are: 1) To explore the influence of cute food on customer loyalty and satisfaction. 2) To explore the role of emotional solidarity in variables. In order to achieve these objectives, the research questions are: 1) How does cute food trigger an emotional response in customers? 2) How do cute food traits affect customer’s behaviors?

In addition, this research will collect data in the form of an online questionnaire for quantitative research, and the questions will be presented in the form of a 7-point Likert scale. The collected data will be analyzed in the form of a structural equation model to explore the relationships between various variables. The researcher expects to collect 500 questionnaires.

The research is expected to have theoretical implications for the understanding of cute foods, contribute to a deeper understanding of its unique value and significance, and become a crucial element in the tourism experience. At the same time, it enriches the relevant literature on emotional solidarity research, and provides a new understanding for the field of emotional solidarity research by exploring the impact of cute food on emotional solidarity.

In terms of expected practical implications, this study provides a new perspective for destination marketing, where destination managers can enhance loyalty and satisfaction

among tourists by providing unique and attractive cute food experiences. This can include introducing cute food into destination meals and drinks, organizing activities related to cute food, or collaborating with brands and products related to cute food to create cultural IPs.

Keywords: Cute Food, Emotional Solidarity, Customer loyalty, Customer Satisfaction.

Exploring the Intrinsic Influence Mechanism of Memorable Brand Experience on Customer Loyalty: A Case of Luxury Branded Hotel

Yingtong LIN[1], Haoran CHEN[2], Wenlong WANG[1], Chen-Kuo PAI[3]

[1]Master Student, Faculty of Hospitality and Tourism Management,
Macau University of Science & Technology, Avenida Wai Long, Taipa, Macau SAR

[2]Ph.D. Student, Faculty of Hospitality and Tourism Management,
Macau University of Science & Technology, Avenida Wai Long, Taipa, Macau SAR

[3]Ph.D. Associate Professor, Faculty of Hospitality and Tourism Management,
Macau University of Science & Technology, Avenida Wai Long, Taipa, Macau SAR

Abstract

In the existing market, one of the brand categories with high profitability, huge growth potential and greatest influence is luxury fashion brand (Ahn et al., 2018). In recent years, with the rapid economic development, Chinese people's income has been greatly improved, which has contributed to the growth of the luxury market (Hung et al., 2021). Therefore, luxury brands are paying more and more attention to Chinese customer behavior. Many luxury brands with strong influence have already undergone brand extension and explored the hotel industry. For example, Bvlgari Hotel brand entered Beijing in 2017. Palazzo Versace opened in Macau in 2024. These luxury branded hotels uphold gorgeous style, high privacy, and high-end customization. Previous scholars have focused on important factors of the parent brand that drive successful brand extensions. However, no research has conducted in-depth research on the customer experience of extended brands of hotel sector. Considering that people's consumption preferences are gradually shifting towards the experience of luxury goods, this study argues that it is of great significance to focus on the memorable brand experience of luxury branded hotel. Based on this, the research objectives is to explore the impact of memorable brand experience on customer perceptions and favorable behavioral responses. The research questions include: (a) Does memorable brand experience affect perceived quality, perceived value and perceived brand authenticity? (b) Does customer perception subsequently affect their loyalty to the hotel and the luxury fashion brand? (c) Does luxury branded hotel loyalty affect luxury fashion brand loyalty?

This study will adopt a quantitative research method to validate the proposed conceptual model. A questionnaire survey will be conducted. The sample will consist of customers who have stayed in luxury branded hotels in the past six months. The estimated number of questionnaires to be distributed is 500. The valid data will be analyzed through structural equation modeling.

This study will provide theoretical contributions to the hospitality industry literature on brand experience, marketing, customer psychology, and luxury brand management. This study might also provide innovative insights for luxury branded hotel practitioners to optimize existing service experience and improve customers' assessment of the actual

performance, benefits provided, and authenticity of the hotel, which in turn helps to increase the operating profits, brand image, and even longer-term goals of luxury branded hotels and parent luxury brands.

Keywords: Memorable Brand Experience, Perceived Quality, Perceived Value, Perceived Brand Authenticity, Luxury Branded Hotel Loyalty, Luxury Fashion Brand Loyalty

References

[1]Ahn, J., Park, J. K., & Hyun, H. (2018). Luxury product to service brand extension and brand equity transfer. *Journal of Retailing and Consumer Services, 42*, 22-28.

[2]Hung, K., Ren, L., & Qiu, H. (2021). Luxury shopping abroad: What do Chinese tourists look for? *Tourism Management, 82*.

Exploring the Impact of Luxury Hotel Brand Image on Customer Brand Identification and Loyalty

Yalin YANG[1], Yingtong LIN[1], Rongxuan ZHANG[1], Chen-Kuo PAI[2]

[1]Master Student, Faculty of Hospitality and Tourism Management,
Macau University of Science & Technology, Avenida Wai Long, Taipa, Macau SAR

[2]Ph.D. Associate Professor, Faculty of Hospitality and Tourism Management,
Macau University of Science & Technology, Avenida Wai Long, Taipa, Macau SAR

Abstract

In today's fiercely competitive hotel industry, the relationships among brand image, perceived value, well-being, brand identification, and brand loyalty have become a research hot spot. As the socio-economic landscape evolves and consumer demands shift, how hotel brands can stand out in the market has become a core concern for enterprises. In recent years, the hotel industry has shown significant consolidation trends, with the franchising rate of high-end hotels continuously increasing. Meanwhile, growing research attention has been devoted to how brand image influences consumer brand loyalty through mediating variables such as perceived value and well-being. However, despite progress in understanding the relationships between these variables, existing studies predominantly focus on single-variable relationships, lacking a systematic exploration of their complex interactions.

So that, this study aims to fill this gap by focusing on luxury hotels and constructing an integrated theoretical model to delve into the relationships among brand image, perceived value, well-being, brand identification, and brand loyalty, as well as how perceived value and well-being respectively affect brand identification and brand loyalty. Based on this objective, the research questions are as follows: (1) Does brand image influence customers' perceived value and well-being? (2) Do perceived value and well-being respectively affect brand identification and brand loyalty, and which has a more significant impact? (3) How does brand identification influence brand loyalty?

This study will adopt quantitative research method, primarily through questionnaires to measure the five variables: brand image, perceived value, well-being, brand identification, and brand loyalty. Customers eligible for the survey will be chosen as the research subjects. The research subjects must have had an experience of staying in a luxury hotel within six months of filling out the questionnaire. The sample size is expected to be 500. Once the data collection is accomplished, structural equation modeling (SEM) will be employed for data analysis to verify the hypothesized relationships and assess the model fit. During this process, the reliability and validity of the scale will also be examined.

The research findings are expected to enrich and refine relevant theories in brand management, particularly regarding the relationship between brand image and brand loyalty, revealing the key roles of perceived value, well-being, and brand identification. By analyzing the relationships between variables, this study can offer theoretical guidance for luxury hotels, helping them enhance brand image and perceived value,

boost consumer well-being and brand identification, and improve brand competitiveness, thereby increasing customer brand loyalty.

Keywords: Luxury Hotel, Brand Image, Perceived Value, Well-being, Brand Identification, Brand Loyalty

Analysis of the success factors of DMO in creating a "Wanghong City" --Taking Harbin and Zibo as examples

Tianche LIU, Wujie LU, Yiming MA

Macau University of Science and Technology

Abstract

"Wanghong Cities" refer to cities that have become popular in a short period of time with the help of social media under the trend of media convergence, which will bring about a surge in online topic traffic and offline tourist numbers. In the context of the deep integration of the Internet and new media, building an image of "Wanghong City" is a relatively new way of marketing tourist destinations. It is also an important path for DMOs to promote urban tourism transformation and image construction. However, there are relatively few cities that can leave a lasting impression on tourists and attract a large number of tourists for a long time. Harbin and Zibo are the two representatively successful samples. This paper will analyze and summarize the similarities between the DMO destination marketing strategies of Harbin and Zibo and explore the factors for DMO to successfully achieve tourism destination marketing with the help of new media. Based on the analysis of user-generated content (UGC), the study systematically sorted out the successful marketing factors of the DMOs in the two places, in order to summarize some suggestions for the "Wanghong" destination marketing path for DMOs and provide new path options for stimulating new vitality and sustainable development of the tourism industry.

Keywords: Wanghong CIty; Destination Management Organization(DMO); new media marketing; User-generated Content (UGC); sustainable tourism

Polluted Atmosphere: Regional Discrimination and Tourists' Pro-social Behavior

Fengkexin FANG[1], Wen ZANG[1*], Liwei GUO[1], Jing LIU[2]

[1] Faculty of Hospitality and Tourism Management, Macao
Macau University of Science and Technology

[2]Assistant Professor of Faculty of Hospitality and Tourism Management, Macao, China
Macau University of Science and Technology

*Corresponding Email: 2240008432@student.must.edu.mo

Abstract

This study investigates the complex dynamics between regional discrimination and tourists' pro-social behavior, emphasizing the mediating role of psychological power distance and the moderating effect of self-efficacy. As global tourism grows, regional discrimination has become a significant barrier to positive tourist experiences, often discouraging pro-social actions(Knobloch et al., 2017; Li et al., 2023; Peng, 2021). Using the Stimulus-Organism-Response (SOR) model, this research frames regional discrimination as a stimulus that influences tourists' psychological power distance, which in turn affects their pro-social behavior. Additionally, self-efficacy is examined as a moderating factor that can mitigate the negative impact of regional discrimination(Bandura, 1997).

The study uses a mixed-methods approach, integrating scenario-based experiments with qualitative interviews to evaluate the proposed hypotheses. Results show that regional discrimination negatively impacts tourists' pro-social behavior, with psychological power distance serving as a key mediator(Li et al., 2023). Furthermore, higher levels of self-efficacy reduce the negative influence of regional discrimination on both psychological power distance and pro-social behavior.

This research contributes to understanding how regional discrimination shapes tourist behavior and offers practical recommendations for promoting sustainable tourism by fostering inclusive environments and reducing discriminatory practices(Li et al., 2023). The study highlights the importance of creating positive and equitable experiences for all tourists by addressing these issues.

Keywords: Psychological power distance; Tourists' pro-social behavior; Regional discrimination; Self-efficacy

Reference

[1]Bandura, A. (1997). *Self-efficacy: The exercise of control*. Macmillan.

[2]Knobloch, U., Robertson, K., & Aitken, R. (2017). Experience, emotion, and eudaimonia: A consideration of tourist experiences and well-being. *Journal of Travel Research*, *56*(5), 651-662.

[3]Li, Y., Tu, J., He, M., & Liu, P. (2023). Polluted psyche: the effect of regional discrimination on tourists' unethical behavior intention. *International Journal of Contemporary Hospitality Management*, *35*(11), 4051-4069.

[4]Peng, A. Y. (2021). Amplification of regional discrimination on Chinese news portals: an affective critical discourse analysis. *Convergence*, *27*(5), 1343-1359.

Luxury Consumption Influences the Choice of Tourist Destination: The Mediating Role of Benign Envy of Focus Consumers

Ruilin QIANG, Xiangjie CAO*

Faculty of Hospitality and Tourism Management, Macau University of Science and Technology

*Corresponding Email: 1220027470@student.must.edu.mo

Abstract

The trend of purchasing luxury products overseas is becoming increasingly prevalent, however, limited research has examined how luxury consumption influences the choice of travel destination (Hung et al., 2018). This study investigates which characteristics of luxury products effectively drive consumers' selection of travel destinations. Grounded in Social Comparison Theory (Liu et al., 2018) and Self-evaluation Maintenance Theory, this study constructs a Structural Equation Model (Figure 1) to explore the direct relationship between luxury prestige sensitivity, perceived uniqueness and vividness and consumers' positive attitude towards the luxury brand, and the indirect relationship between luxury prestige sensitivity, perceived uniqueness and vividness and consumers' choice of tourism destination. Meanwhile, focal consumers' benign envy mediates the relationship between consumer positive attitude and destination image.

The study commenced with a preliminary survey to assess the appropriateness of scale items. Online survey data were collected from 53 participants via convenience sampling, questionnaires were recovered through Wenjuanxing, data were analyzed using SPSS 26.0 for descriptive statistics, reliability analysis and validation factor analysis, and hypotheses of theoretical models were tested. Of the 53 responses collected, 51 were valid. The preliminary findings indicate that consumers' positive attitudes significantly influence tourism destination image, while focal consumers' benign envy mediates the relationship between positive brand attitudes and destination image. Furthermore, perceived product fit diagnosticity moderates the effects of prestige sensitivity, perceived uniqueness, and vividness. After the conclusion of the preliminary survey, the study will start the formal research, and it is expected that 260 respondents will be surveyed for the detailed research.

The theoretical contribution of this research model is based on existing research on luxury product consumption on brand episodes, but its applicability in the domain of luxury-to-consumer destination choice has not been fully explored. This study reveals the mediating role of the focal consumer's benign envy mechanism in the context of luxury-to-consumer travel destination choice by analyzing the relationship between consumer positive attitude and destination image variables. The findings contribute to the promotion of tourist destinations by providing consumers with diverse choices of tourist destinations and provide relevant suggestions for luxury marketing (Ku et al., 2024).

Keywords: Luxury product, Prestige sensitivity, Perceived uniqueness, Vividness, Focal consumer's destination visit, Focal consumer's benign envy

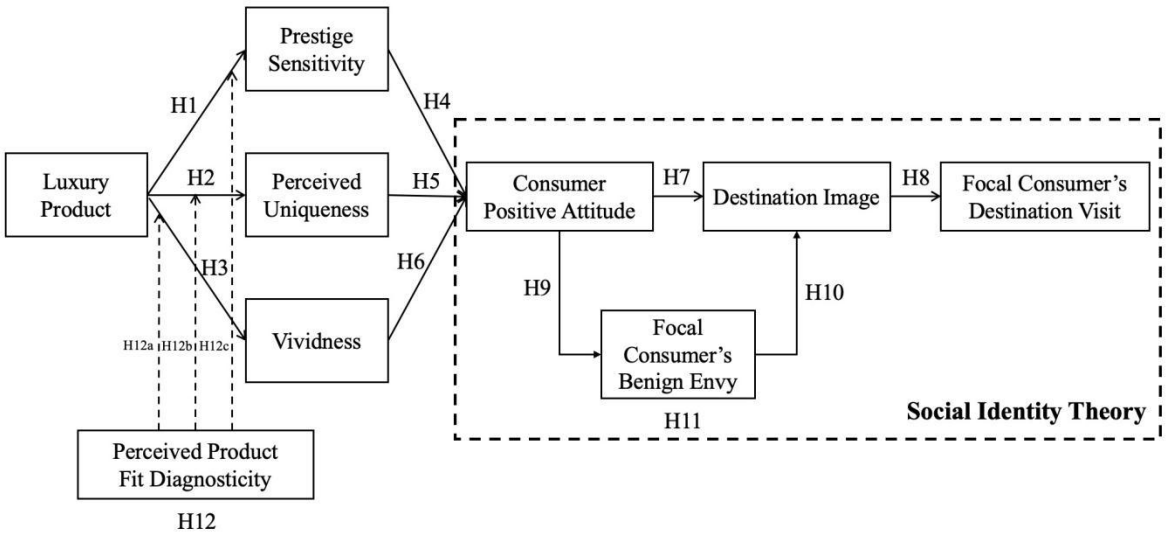


Figure 1. Theoretical modelling diagram

References

[1] Hung, K., Guillet, B. D., & Zhang, H. Q. (2018). Understanding luxury shopping destination preference using conjoint analysis and traditional item-based measurement. *Journal of Travel Research*, *58*(3), 411–426.

[2] Ku, E. C., Wu, S.-H., & Lai, T.-C. (2024). Elegant with leisurely: Luxury Tourism Consumption and Brand Love. *Journal of Hospitality & Tourism Research* 1-14.

[3] Liu, H., Wu, L., & Li, X. (Robert). (2019). Social Media Envy: How Experience Sharing on social networking sites drives millennials' aspirational tourism consumption. *Journal of Travel Research*, *58*(3), 355–369.

Rural tourism transformation driven by social sustainability: the impact mechanism of perceived attributes on tourists' green consumption behavior: a case study of Hongcun, Yi County

Chenjin DING, Fangqing ZHANG*

Faculty of Hospitality and Tourism Management, Macau University of Science and Technology

*Corresponding Email: 1220021412@student.must.edu.mo

Abstract

Sustainable tourism, as an important means to balance social, environmental, and economic needs, has seen increasing attention to its social dimension. This study, set against the background of rural tourism, explores how perceived social sustainability attributes influence tourists' environmental awareness and green consumption behavior. According to the expansion of the Theory of Planned Behavior (TPB) model, the research focuses on seven key attractiveness factors of rural tourism: cultural heritage, tourism facilities, local hospitality, self-improvement and learning, slow environment, local food, and local crafts. It constructs hypotheses (H3-H9) to test the mechanism through which these factors affect tourists' positive emotions, environmental awareness, and green consumption behavior. Analyze 550 valid questionnaires using the Amos model, the results show that the social sustainability attributes of rural tourism significantly influence tourists' environmental awareness, which in turn positively affects their green consumption behavior. The study confirms that environmental awareness plays a mediating role between social sustainability attributes and green consumption behavior.

This research fills a gap in the literature regarding how perceived social sustainability attributes affect tourists' green consumption behavior. It verifies the multidimensional value of social sustainability in tourism contexts and provides a theoretical basis for destination management. This study provides important inspiration for the ecological protection and tourism development of Hongcun. By optimizing tourism products and services, it can enhance the positive emotions of tourists, reduce the negative impact of tourism activities on the environment, and promote local ecological development. At the same time, it provides a scientific basis for the Yi County government and Hongcun tourism practitioners, suggesting that social sustainability should be integrated into tourism development through policy guidance and publicity and promotion to achieve a win-win situation for ecological protection and economic development.

Keywords: sustainable tourism; social sustainability; rural tourism; environmental awareness; green consumption behavior

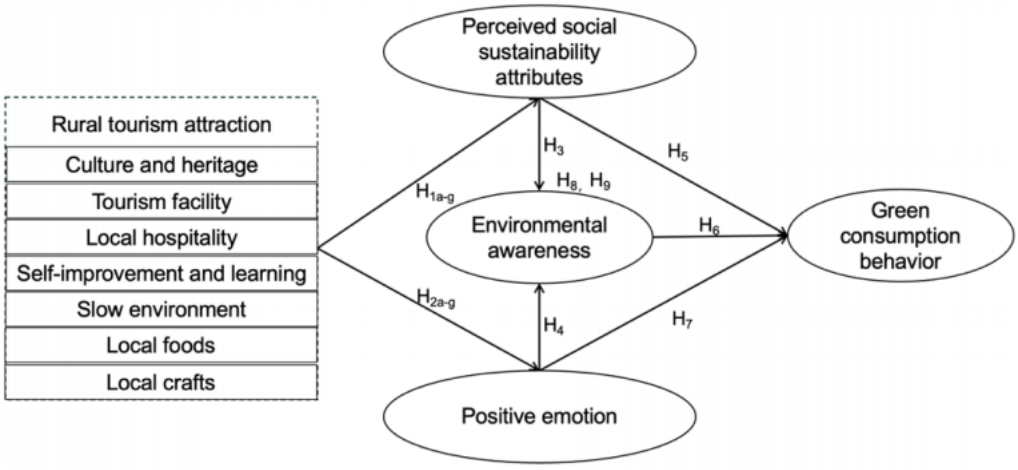


Figure 1 Hypotheses Model

To Try or to Avoid: An Exploration of the Relationship between Food UGC and Destination Image

Weiyin XIA, Wenshu ZHANG, Juan TANG

Faculty of Hospitality and Tourism Management, Macau University of Science and Technology, Avenida Wai Long, Taipa, Macau SAR

Abstract

Food has become an indispensable part of tourists' travel experience. Some food has strong regional and cultural characteristics that help build the destination image. For tourists, the destination food is likely to be novel, unknown, and untried, and it is a novel and adventurous challenge for tourists to savor these foods. Nowadays, with the development of online information technology, tourists are able to easily access user generated content (UGC) about the food of a destination, creating expectations and making judgements about whether to try the food or not in terms of taste, raw materials, and experiential feelings.

Based on dual-process theory, this study aims to explore how two different forms of UGC (i.e., emotional and rational) affect satisfaction and destination image through food neophobia and food neophobia, and to explore whether restaurant atmosphere may play a moderating role in this process. Yunnan, China, a tourist destination with diverse, unique and innovative food as a result of diverse minority cultures, is the perfect research destination for this paper. Using quantitative research methods, 350 questionnaires will be used to collect tourists who have experienced local specialties in Yunnan, China. Testing of moderated mediation effects will be conducted with SPSS 27 and Amos 26 software.

Previous literature has focused on the effects of food neophilia and food neophobia, but seldom explored their antecedents. This paper explores the antecedents that may affect the perceptions of food neophilia and food neophobia, and verifies the role of satisfaction as a mediator in the process of food neophilia and food neophobia affecting the image of a destination. and verified the role of satisfaction as a mediator in the process of food neophilia and food neophobia affecting destination image. This study provides a new direction for future research on food tourism, fills the research gaps in the academic field with new theoretical perspectives, and in practice has important implications for the marketing and promotion of destination image enhancement.

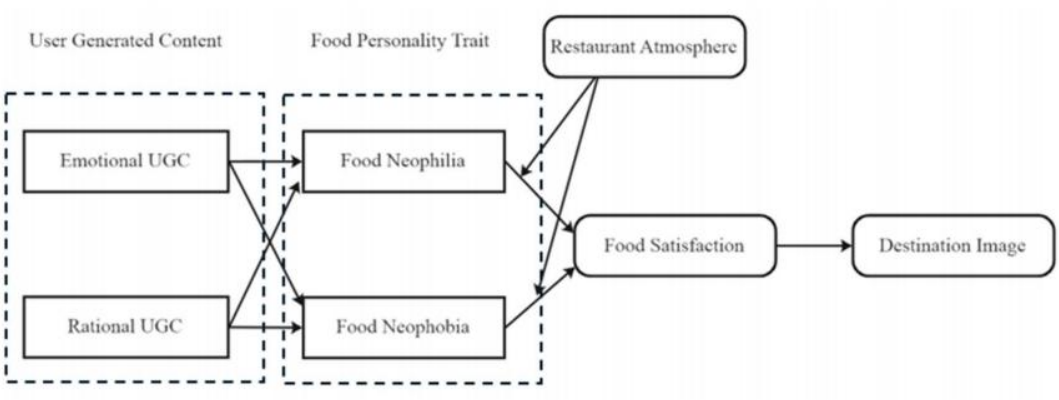


Figure 1 Research Model

Keywords: Users generated content, Food neophilia, Food neophobia, Dual-process theory, Restaurant atmosphere, Food satisfaction, Destination image

The relationship between heritage tourism motivation and perceived authenticity on tourist satisfaction and loyalty

Hanshu ZHOU*, Jiamei WANG

Macau University of Science and Technology, Faculty of Hospitality and Tourism Management

*Corresponding Email:1220012904@student.must.edu.mo

Abstract

In recent years, the integration of culture and tourism has become a key trend of economic development, and heritage tourism has also become an important cultural and economic activity. Most of the existing researches on heritage tourism focus on tourist behavior, recommendation and re-visit intention, and pay little attention to tourists' perception and psychological changes in the experience process. However, in-depth research on this mechanism is crucial for the sustainable development of heritage tourism destinations. By constructing an integrated framework, this study aims to reveal the mechanism of place attachment generated by perceived authenticity, such as objective authenticity and existential authenticity, on tourists' satisfaction and loyalty when they travel to destinations based on heritage tourism motivation. In this study, 398 sample data were collected through questionnaire survey, and structural equation model and SPSS, AMOs and other software were used for data analysis. The results show that heritage tourism motivation significantly affects objective authenticity and existential authenticity, while perceived authenticity and place attachment play mediating roles between heritage tourism motivation and tourist satisfaction. This study introduced perceived authenticity and place attachment into the research framework of heritage tourism motivation and tourist loyalty, expanded the research perspective of heritage tourism destinations and tourist psychology, enriched tourists' emotional perception in heritage tourism destinations, and provided a basis for tourism destination managers to design truth-driven experience and precise marketing strategies to enhance tourists' long-term participation. It provides theoretical guidance and practical reference for realizing the sustainable development of heritage tourism destinations.

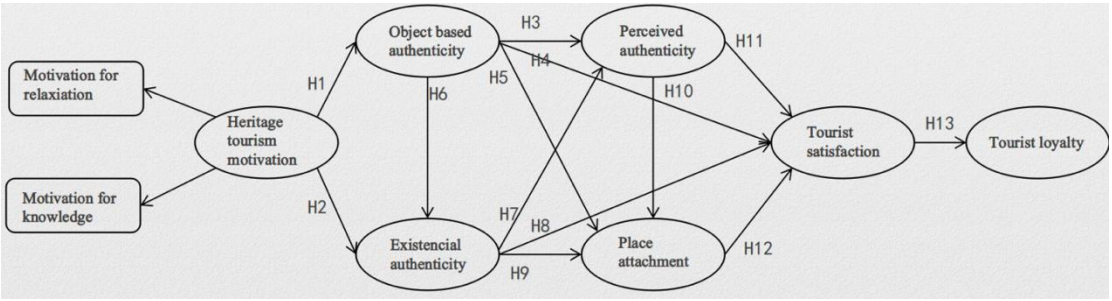
Keywords: Heritage tourism motivation; Object based authenticity; Existencial authenticity; Perceived authenticity; Place attachment; Tourist loyalty

Hypothesis :

H1: Heritage tourism motivation is positively related to Object based authenticity.
H2: Heritage tourism motivation is positively related to Existencial authenticity.H3: Object based authenticity is positively related to Perceived authenticity.
H4: Object based authenticity is positively related to Tourist satisfaction.
H5: Object based authenticity is positively related to Place attachment.
H6: Object based authenticity is positively related to Existencial authenticity.
H7: Existencial authenticity is positively related to Perceived authenticity.
H8: Existencial authenticity is positively related to Tourist satisfaction.
H9: Existencial authenticity is positively related to Place attachment.

H10: Perceived authenticity is positively related to Place attachment.
H11: Perceived authenticity is positively related to Tourist satisfaction.
H12: Place attachment is positively related to Tourist satisfaction.
H13: Tourist satisfaction is positively related to Tourist loyalty.

SEM model construction ：



Based on the S-O-R model: exploring how service quality and place attachment drive revisit and sustainable behavior of tourists in rural tourism

Leyi GONG, Ruijie XU

Faculty of Hospitality and Tourism Management, Macau University of Science and Technology

Abstract

In recent years, with the steady improvement of domestic living standards and significant changes in consumer attitudes, people immersed in high-pressure urban lifestyles increasingly seek rural destinations as outlets for relaxation, driving rural tourism development to gradually emerge as a new socioeconomic trend. While existing literature predominantly focuses on urban tourism, it critically overlooks the interaction mechanism between destination distinctiveness and environmental sensitivity within rural contexts. To fill this gap to some degree, in this study, the literature research method was used, the SOR model was adopted, and data were collected through a quantitative research questionnaire. The questionnaires were distributed on an online platform through random sampling, and a total of 300 valid responses were obtained from the tourists who have had rural tourism experience, with subsequent statistical analysis conducted through SPSS. The SOR model explored the direct relationship between environmental sensitivity and place identity, place dependence; destination distinctiveness and place identity, place dependence; service quality and tourist satisfaction; service quality, tourist satisfaction and intention to revisit; place attachment and intention to revisit; place identity and intention to engage in sustainable behaviors; place dependence and intention to engage in sustainable behaviors. Also, the relationship between environmental sensitivity, destination distinctiveness and sustainable behavioral intention, and revisit intention is mediated by place attachment (which contains both place identity and place dependence dimensions), while the relationship between service quality and revisit intention is mediated by tourist satisfaction. This study proposes a dual-mediation path of 'destination distinctiveness → place attachment → satisfaction → intention to revisit' to make up for the limitations of single-mediation analyses. This study will help rural tourism authorities to systematically clarify tourists' evolving needs, wants, and preferences through data-driven insights, thereby formulating targeted planning policies and strategically allocating resources. By implementing context-specific measures to improve service standards and strengthen ecological supervision mechanisms, these coordinated efforts will foster a balanced approach to promoting the environmentally conscious sustainable development of rural tourism.

Keywords： Rural tourism, Service quality, Place attachment, Revisit intention, Sustainability Behavioral Intention, S-O-R Model

The impact of social media on honeymoon travel decisions and experiences

Yetong FU

Macau University of Science and Technology

Abstract

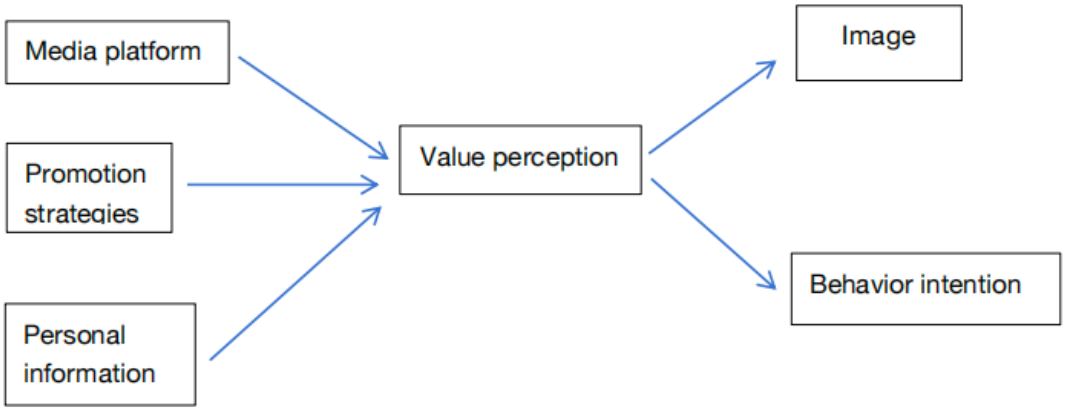
In the contemporary context, a honeymoon stands as a pivotal event in the lives of newlyweds, symbolizing the beginning of their joint journey. It is a time filled with anticipation and careful preparation, where every detail is meticulously planned to ensure a memorable experience. The rise of social media has significantly altered the landscape of travel planning, particularly for honeymooners. Couples are now leveraging the power of these digital platforms to not only select their dream honeymoon destinations but also to document and share their romantic adventures with the world.

This shift in behavior has profound implications for the travel industry. In-depth research into the role of social media in honeymoon travel is crucial for understanding the changing dynamics of consumer decision-making and sharing behaviors. By examining how newlyweds use social media to plan and share their honeymoons, the industry can gain valuable insights into the expectations and preferences of this particular demographic.

The findings of such research can guide travel businesses in optimizing their marketing strategies to better cater to honeymooners. By harnessing the influence of social media, travel companies can create more personalized and engaging experiences for newlyweds, thereby enhancing their satisfaction and fostering brand loyalty. Moreover, social media can serve as a powerful tool for destination branding and promotion, influencing the perceptions and choices of potential honeymooners.

In summary, the growing reliance of newlyweds on social media for honeymoon planning and sharing presents a unique opportunity for the travel industry. By conducting comprehensive research and leveraging the insights gained, travel businesses can effectively tap into this market, offering tailored experiences that meet the high expectations of honeymooners and ultimately driving satisfaction and loyalty. This dynamic interplay between social media and honeymoon travel not only shapes the experiences of newlyweds but also has the potential to reshape the way the travel industry operates and markets its services.

Model



Reference

[1] Leung, D., Law, R., van Hoof, H., & Buhalis, D. (2013). Social Media in Tourism and Hospitality: A Literature Review. Journal of Travel & Tourism Marketing, 30(1–2), 3–22. https://doi.org/10.1080/10548408.2013.750919

[2] Huang, Y., Basu, C., & Hsu, M. K. (2010). Exploring Motivations of Travel Knowledge Sharing on Social Network Sites: An Empirical Investigation of U.S. College Students. Journal of Hospitality Marketing & Management, 19(7), 717–734. https://doi.org/10.1080/19368623.2010.508002

The Impact of AI Technology on Exhibition Scenarios: Opportunities and Challenges of New Technology Applications

Lejia LI[1], Ziyu LUO[2], Haoran CHEN[3*]

[1]School of Business, Macau University of Science and Technology, Macau, China

[2]School of Liberal Arts, Macau University of Science and Technology, Macau, China

[3]Faculty of Hospitality and Tourism Management, Macau University of Science and Technology, Macau, China

*Corresponding Email: 3220000081@student.must.edu.mo

Abstract

With the rapid development of artificial intelligence technology, its application in exhibition scenarios has become a significant driver in transforming traditional exhibition models. Currently, AI technology has permeated areas such as virtual exhibitions, intelligent guided tours, personalized recommendations, and digital management of exhibits, significantly enhancing exhibition efficiency and interactivity (Wang, 2024). Traditional exhibitions rely on physical spaces and manual services, while technology-driven exhibitions emphasize digital experiences and intelligent services, profoundly impacting exhibitor behavior, exhibit management, and customer experience.

This study consists of two parts: Study 1 explores the attributes of the exhibition of artificial intelligence technology through semi-structured interviews and data analysis. Study 2 explores exhibitors' feedback on AI technology applications and their impact on participation decisions through empirical analysis, combining questionnaires and behavioral data. The study addresses the following research questions: (a) Can the application of AI technology enhance the attractiveness of exhibitions? (b) Does the digital display of exhibits affect their quantity and quality? (c) How does AI technology transform customer experience?

This study constructs an evaluation system for AI technology applications in exhibitions, providing theoretical support and practical guidance for the future intelligent development of exhibition scenarios. It also calls for the collaboration of stakeholders, including governments, enterprises, technology developers, and exhibitors, in formulating technical standards to seize innovation opportunities while proactively addressing the ethical and social challenges posed by technology.

Keywords: artificial intelligence, exhibition scenarios, digitalization of exhibits, algorithmic bias, customer experience

References

[1]Wang, Z. (2024). The Fusion of Virtual and Reality: The Innovation Road of Exhibition Industry Driven by Science and Technology. Advances in Economics Management and Political Sciences, 88(1), 187-192.

Authenticity and Sustainable Tourism Behavior in Rural Tourism Destinations: The Mediating Role of Memory Impressions and the Moderating Role of Destination Image

Xinrong YE, Yuxin LI*

Macau University of Science and Technology, Macao SAR, China;

*Corresponding Email: 1220026300@student.must.edu.mo

Abstract

Rural tourism refers to tourism activities that take place in rural areas and are typically rooted in the local natural environment, cultural traditions, and community life (Vaishar & Šťastná, 2022). As a vital tool for stimulating rural economies and supporting regional revitalization, rural tourism has attracted significant scholarly attention in recent years (Ayhan et al., 2020). Beyond its economic potential, rural tourism is also recognized for its role in promoting sustainable development at the destination level. However, the extent to which tourism contributes to sustainability largely depends on tourists' own behavioral choices and their willingness to engage in responsible and sustainable practices(Zhao, Shang & Pan, 2024). Despite its increasing relevance, the psychological mechanisms that drive tourists to adopt sustainable behaviors within rural tourism contexts remain insufficiently understood. In particular, the influence of authenticity—a central experiential element of rural tourism—on post-visit behavioral intentions has yet to be fully elucidated. This study develops a structural equation model to examine the mechanisms through which perceived authenticity influences tourists' sustainable tourism behavior. Memory impressions and place identity are incorporated as mediating variables, while destination image is introduced as a moderator. Authenticity is defined as tourists' perception of genuineness during their rural tourism experience, encompassing both object-based and existential dimensions. Memory impressions refer to enduring emotional and cognitive recollections of the experience, whereas place identity reflects the emotional attachment and sense of belonging tourists form toward a destination. Survey data were collected through structured questionnaires and analyzed using partial least squares structural equation modeling (PLS-SEM). The results indicate that perceived authenticity significantly enhances both memory impressions and place identity, which in turn positively influence sustainable tourism behavior. Moreover, destination image moderates the relationship between authenticity and memory impressions, strengthening the impact of perceived authenticity when the destination is perceived favorably. By unpacking the cognitive and emotional pathways that link authenticity to sustainable behavior, this study advances theoretical understanding within tourism research. It further broadens the scope of sustainable tourism inquiry by incorporating social and cultural dimensions alongside environmental concerns. From a practical perspective, the findings offer actionable insights for rural destination planners and marketers, emphasizing the importance of fostering perceived authenticity and cultivating a positive destination image to encourage long-term sustainable tourism practices.

Keywords: Rural Tourism; Authenticity; Sustainable Tourism Behavior; Structural Equation Modeling

References

[1]Ayhan, Ç. K., Taşlı, T. C. z., Özkök, F., & Tatlı, H. (2020). Land use suitability analysis of rural tourism activities: Yenice, Turkey. *Tourism Management, 76,* 103949. https://doi-org.libezproxy.must.edu.mo/10.1016/j.tourman.2019.07.003

[2]Vaishar, A., & Šťastná, M. (2022). Impact of the COVID-19 pandemic on rural tourism in Czechia Preliminary considerations. *Current Issues in Tourism*, *25*(2), 187–191. https://doi-org.libezproxy.must.edu.mo/10.1080/13683500.2020.1839027

[3]Zhao, C., Shang, Z., & Pan, Y. (2024). Beauty and tourists' sustainable behaviour in rural tourism: a self-transcendent emotions perspective. *Journal of Sustainable Tourism*, *32*(7), 1413–1432. https://doi.org/10.1080/09669582.2023.2238135

A Study on the Emotional Influence of Dragon Boat Sports Tourism Destinations on Youth Participation——Taking Jiujiang Dragon Boat Activity in Nanhai, Foshan, China as an Example

Yuzhuo WANG

Faculty of Hospitality and Tourism Management, Macau University of Science and Technology, Macau, 999078, China.

Abstract

Dragon boat racing, a major traditional folklore project in China is also a very representative Chinese sports activity, in the post epidemic era, the background of the large-scale re-opening of dragon boat activities across the country, there are more studies on the study of the traditional culture of dragon boat, competitive dragon boat skills, however, there are slightly fewer studies on cultivating young people's emotional identity of dragon boat and traditional cultural projects, in order to explore the impact of traditional sports in cultural tourism on the emotional identity of youth, the study will collect 600 questionnairesthrough the establishment of a SEM model to investigate the impact of traditional dragon boat concepts and forms and modern competitive dragon boat on In order to explore the influence of traditional sports in cultural tourism on the emotional identity of youth, the study will collect 600 valid questionnaires by establishing an SEM model and using the dragon boat activities of the Jiujiang Dungen community in Nanhai as a case study, in order to explore the emotional role of the traditional dragon boat concepts and forms and the modern competitive dragon boat on the participation of youth in the common. The study concluded that the establishment of the emotional identity of youths by the identification and inheritance of traditional dragon boat concepts and forms, and the role of the interactivity, attractiveness and credibility of modern competitive dragon boat on the youths‘ emotions jointly formed the multiple emotional outputs of youths’ participation in dragon boat sports, as well as the change of their identification with traditional culture. Finally, based on the prospect and potential of the development of modern dragon boat sport, the study provides experience sharing and reference opinions for the development of local ‘culture tourism + sports’ industry and event organizers.

Keywords: culture and sports tourism; dragon boat sport; traditional concepts; youth emotional identity

References

[1] Wang, E. C. & Wang, X. M.. (2025). The Actual Dilemma and Path Breakthrough of Folk Sports in Promoting Rural Revitalisation--The Dragon Boat Race in Longjue Town as an Example. Ice and Snow Sports Innovation Research (06), 194-196. doi: 10.20155/j.cnki.issn2096-8485.2025.06.064.

[2] T. Peng, T. Jia, H. Cheng & J. P. Li. (2025). Research on brand activation strategy of Wenzhou dragon boat in the post-Asian Games era. Zhejiang Sports Science (02), 73-77. doi: China Knowledge: SUN: ZJTK.0.2025-02-010.

[3] Iversen, O. S., Dindler, C., & Hansen, E. I. K. (2013). Understanding teenagers' motivation in participatory design. International Journal of Child-Computer Interaction, 1(3-4), 82-87.
[4] Popovych, I., Hrys, A., Hoian, I., Mamchur, I., Babenko, A., & Fedyk, O. (2022). Successfulness in teenagers' sporting activities: comparative analysis of individual and team sports. Journal of Physical Education and Sport, 22(11), 2886-2897.

Exploring the ESG impact of Macau gaming companies: A comparative analysis from the perspective of employees and customers

Yuxuan WANG, Xiaonan ZHAO, Jinkyung KIM, Jenny

Macau University of Science and Technology

Abstract

Environmental, Social, and Governance (ESG) practices have become an important part of business strategy and sustainable development. In the unique environment of Macau, the ESG practices of the gambling industry have a profound impact on the region's environment, social responsibility, and governance system. As a key pillar of Macau's economy, the gambling industry's investment and practices in ESG serve as a demonstration effect, guiding other industries to take a more active role in fulfilling social responsibilities. Therefore, studying the impact of ESG practices in Macau's gambling industry on employee satisfaction, customer trust, and the overall corporate image is of significant theoretical value and practical importance. This research approaches the topic from the dual perspectives of employees and customers, exploring whether the ESG practices of Macau's gambling industry can enhance corporate trust and image, further improving employee and customer satisfaction and encouraging more positive citizenship behaviors. This study uses a quantitative research method, collecting data through surveys of employees in gambling companies and customers visiting these businesses for tourism consumption. Structural Equation Modeling (SEM) is used to analyze the data. Preliminary results suggest that the gambling industry's practices in environmental protection, fulfilling social responsibilities, and optimizing governance structures have a positive impact on employee and customer satisfaction, and further influence their citizenship behaviors. The findings provide valuable guidance for the sustainable development of gambling enterprises and other service industries in the future.

Keywords: ESG Practices, Satisfaction, Citizenship Behavior

References

[1]Gillan, S. L., Koch, A., & Starks, L. T. (2021). Firms and social responsibility: A review of ESG and CSR research in corporate finance. *Journal of Corporate Finance, 66*, 101889. https://doi.org/10.1016/j.jcorpfin.2021.101889

[2]Kim, J., Park, Y., Kim, B., & Lee, C.-K. (2024). Impact of perceptions of ESG on organization-based self-esteem, commitment, and intention to stay. Journal of Travel & Tourism Marketing,41(1),106-127. https://doi.org/10.1080/10548408.2023.2293026

[3]Koh, H.-K., Burnasheva, R., & Suh, Y. G. (2022). Perceived ESG (Environmental, Social, Governance) and consumers' responses: The mediating role of brand credibility, brand image, and perceived quality. Sustainability, 14(8), 4515. https://doi.org/10.3390/su14084515

[4]Martínez, P., & del Bosque, I. R. (2013). CSR and customer loyalty: The roles of trust, customer identification with the company and satisfaction. International Journal of Hospitality Management, 35, 89-99. https://doi.org/10.1016/j.ijhm.2013.05.009

[5]Puriwat, W., & Suchart. (2022). Unveiling the power of ESG: How it shapes brand image and fuels purchase intentions – An empirical exploration. Humanities and Innovation Journal, 3(4), 430-440. https://doi.org/10.28991/HIJ-2022-03-04-07

[6]Tripopsakul, S., & Puriwat, W. (2022). Understanding the impact of ESG on brand trust and customer engagement. Journal of Human, Earth, and Future, 3(4), 430-440. https://doi.org/10.28991/HEF-2022-03-04-03

[7]Wang, X., & Tang, X. (2012). The current situation and social responsibility of Macao gaming enterprises. Science and Technology Entrepreneurship Monthly, 2012(9), 48-50. https://doi.org/10.3969/j.issn.1672-2272.2012.09.021

Grandparents' perceptions, attitudes, and behavioral intention regarding grandtravel

Tian HAI[1], Hyewon YOUN[12]

[1]The Hainan University-Arizona State University Joint International Tourism College, Hainan University, Haikou, Hainan, China

[2]School of Community Resources and Development, Arizona State University, 411 N. Central Avenue, Phoenix, AZ 85004, USA.

Abstract

The phenomenon of "grandtravel," which refers to trips taken by grandparents and their grandchildren without the children's parents (the middle generation), has emerged as a growing trend in the tourism market (Gram et al., 2019). According to the National Tour Association (2024), around 23 percent of grandparents travel alone with their grandchildren. However, the existing literature has not extensively explored this specific form of grandtravel, and the factors contributing to its popularity remain unclear.

Previous research has shown that personal values and beliefs significantly influence consumer behavior across various tourism and hospitality contexts (Youn et al., 2021). In addition, factors such as consumers' attitudes, social norms, and behavioral control are critical drivers of behavioral intentions (Ajzen, 1991). Therefore, this study aimed to investigate grandparents' personal values and perceived beliefs about the positive outcomes of grandtravel and explore how these factors influence their travel intentions. Specifically, the study sought to answer the following research questions:

1. What personal values promote grandtravel?
2. What perceived beliefs promote grandtravel?
3. How do personal values and perceived benefits influence grandparents' intentions to engage in grandtravel?

By integrating two theoretical frameworks—the value-belief-norm theory (Stern et al., 1999) and the theory of planned behavior (Ajzen, 1991)—this study proposed a model to examine the structural relationships among personal values, perceived beliefs, social norms, behavioral control, and travel intentions. Data were collected from 790 Chinese grandparents and analyzed using partial least squares structural equation modeling.

The results indicated that personal values related to well-being, seizing the day, and family orientation significantly influenced perceived beliefs about the positive outcomes of grandtravel, such as emotional solidarity, experiential learning for grandchildren, and escapism. These beliefs, in turn, led to a positive attitude toward grandtravel. Furthermore, personal attitudes, social norms, and behavioral control were found to significantly impact travel intentions. These findings offer valuable insights into developing effective marketing strategies to promote grandtravel.

Keywords: grandtravel, grandparent–grandchild travel, value-belief-norm theory, theory of planned behavior

What Makes Ethnic Restaurants Feel Authentic?

Yifan ZHENG[1*], Jong-Hyeong KIM[12*]

[1]The Hainan University-Arizona State University Joint International Tourism College, Hainan University, Haikou, Hainan, China

[2]School of Community Resources and Development, Arizona State University, 411 N. Central Avenue, Phoenix, AZ 85004, USA

Abstract

Customers crave authenticity, especially in ethnic restaurants (Song & Kim, 2022). In hospitality research, authenticity studies have mainly focused on food, service, and brand authenticity (Kim, 2021, Yang et al., 2022), often examining only a single dimension (Le et al., 2019). However, scholars argue that authenticity is multifaceted and cannot be treated as a singular dimension due to its complexity (Moulard et al., 2021). Recent studies highlight the multidimensionality of brand authenticity, identifying three key dimensions: true-to-ideal (TTI), true-to-fact (TTF), and true-to-self (TTS) authenticity (Moulard et al., 2021). However, little research has explored the antecedents and consequences of this framework (Kim & Song, 2024). To bridge this gap, this study applies an extended S-O-R theory (Mehrabian & Russell, 1974) to examine the impact of restaurant attributes on perceived authenticity and revisit intention. Specifically, it investigates how restaurant attributes— menu (high vs. low familiarity), location (ethnic vs. nonethnic enclave), and ownership type (chain vs. independent)—influence authenticity perceptions (TTI, TTF, and TTS), affective (positive emotions) and cognitive response (attitude), and ultimately revisit intention. Employing a $2 \times 2 \times 2$ between-subjects design, we conducted an experimental study with 296 Chinese customers (36-38 per experimental condition). The results showed that a family ethnic menu increased TTI, independent ownership type enhanced TTF and TTS, and restaurants located in Korean ethnic enclave location strengthened TTS. Additionally, all three types of authenticity dimensions positively influenced purchase intention through attitude and positive emotions. These findings underscore the importance of restaurant attributes in shaping authentic ethnic dining experiences and inform ethnic dining marketing strategies.

Keywords: Brand authenticity, ethnic restaurant, attitude, positive emotion, purchase intention

The effect of similarity between reviews and business profiles on travel review usefulness

Tong YANG[1] and Jie WU[2*]

[1]Postdoctoral Fellow, School of Hotel and Tourism Management, The Hong Kong Polytechnic University, Hong Kong SAR, China

[2]Assistant Professor, School of Business, Macau University of Science and Technology, Avenida Wai Long, Taipa, Macau SAR, China

*Corresponding Email: jiewu@must.edu.mo

Abstract

The development of Internet technology has changed tourists' consumption habits, making them increasingly accustomed to sharing their experiences through online platforms. This provides a new channel for tourists to learn about travel products, but the huge amount of data also creates challenges with them. The platform's usefulness voting mechanism is a means for tourists to evaluate whether online reviews are useful and valuable, and can help potential consumers find the information they need more quickly. When using the online platform, consumers can access two types of information: business profiles and online consumer reviews. Existing research has been productive in the area of online review usefulness, but few scholars have focused on the role played by business profiles. Drawing on information foraging theory, this study discusses the effect of similarity between online reviews and business profiles on the usefulness of online reviews. Tourists' online platform usage behavior is an information foraging process, reading the business profiles provided by a travel merchant and online reviews posted by other consumers after identifying a travel merchant (i.e., information patch), and making a usefulness vote (i.e., information diet) based on the value of the information as reflected by the similarity of the two types of information (i.e., information scent). With this logic, a conceptual model of relationship between business profiles & online reviews and usefulness is constructed. Crawling 424,437 hotel online reviews and their corresponding business profiles on Ctrip, which is the biggest OTA in China, the constructed conceptual model was examined. Form similarity was found to have a positive effect on review usefulness, while content similarity was found to have a negative effect on review usefulness. This is because online travel reviews with high form similarity reduce the search cost, and online travel reviews with high content similarity reduce the information value, thus the two have an opposite effect on the usefulness of the reviews. To further analyze this mechanism of influence, the moderating role of reviews and reviewer characteristics was revealed. Review length, the number of attributes mentioned in the review, and the reviewer's website engagement can dampen the negative effects of content similarity, while the time between hotel check-in and posting a review can exacerbate the negative effects of content similarity. Multi-perspective robustness analysis was also executed. This study expands the research perspective of review usefulness by constructing a conceptual model of review usefulness based on an information foraging theory; reveals

the impact of the relationship between business profiles and online reviews on review usefulness; and provides directions for tourism and hospitality research by introducing information foraging theory into the field of tourism. The findings of this study help tourists to find more useful travel reviews; hotels to identify more valuable online reviews and reviewers; and platforms to design review mechanisms that can increase the prestige of the platform.

Keywords: Review usefulness; Business profile; Information foraging theory; Travel reviews.

Interaction Experiences and Social Value in Pet Tourism: Impacts on Memorable Tourism Experiences and Revisit Intentions

Jiaojiao WANG[1*], Ruhong XUE[2]

[1] Ph.D Candidate, Faculty of Hospitality and Tourism Management, Macau University of Science & Technology, Avenida Wai Long, Taipa, Macau SAR

[2] Ph.D Candidate, Faculty of International Tourism and Management, City University of Macau, Taipa, People's Republic of China

*Corresponding Email: 815384567@qq.com

Abstract

With the increasing status of pets in people's lives (Carr, 2017), pet tourism has gradually become an emerging form of travel (Chan & Tung, 2023). Pet tourism is not only a travel experience shared between pet owners and their pets, but also a unique way to meet social needs. Furthermore, through pet tourism, pet owners can exchange pet-rearing experiences and share travel joys with other travelers, while pets can also establish social connections through interactions. However, the realm of pets within the tourism industry remains largely unexplored, and there is a relative scarcity of research on the relationships between the interactive experiences of different roles in pet tourism and their social value.

This study proposes a conceptual model to explore the dynamics of interactions in pet tourism and their implications for social value, memorable tourism experiences, and the intention to travel with pets again. The model examines three types of interactions: pet-to-pet, human-to-pet, and pet owner-to-strangers. It hypothesizes that these interactions contribute to perceived social value (H1), which is further linked to the creation of memorable tourism experiences (H3). Additionally, the model suggests that each type of interaction directly influences the creation of memorable experiences (H2), which in turn are hypothesized to enhance the intention to travel with pets again (H5). The social value is also posited to directly affect the intention to travel with pets again (H4), suggesting that the perceived social benefits of pet tourism play a crucial role in future travel decisions.

This study employs quantitative surveys as its research method, utilizing established scales that have been semantically adapted for the purposes of the questionnaires. Collect data from pet owners who have participated in pet tourism within the past year. The analysis aims to validate the proposed hypotheses and to understand the complex interplay between interaction types, social value, memorable experiences, and future travel intentions. The findings are expected to provide insights into the factors that make pet tourism experiences memorable and socially valuable, thereby influencing pet owners' decisions to engage in pet tourism in the future.

This research contributes to the literature by offering a comprehensive framework that links interaction types to key outcomes in pet tourism. It also has practical implications for the tourism industry, offering guidance on how to design and market pet-friendly

tourism products that enhance social interactions and create memorable experiences, ultimately fostering customer loyalty and repeat business.

Keywords: Pet tourism, Interaction, Social value, Memorable tourism experiences, Travel intention

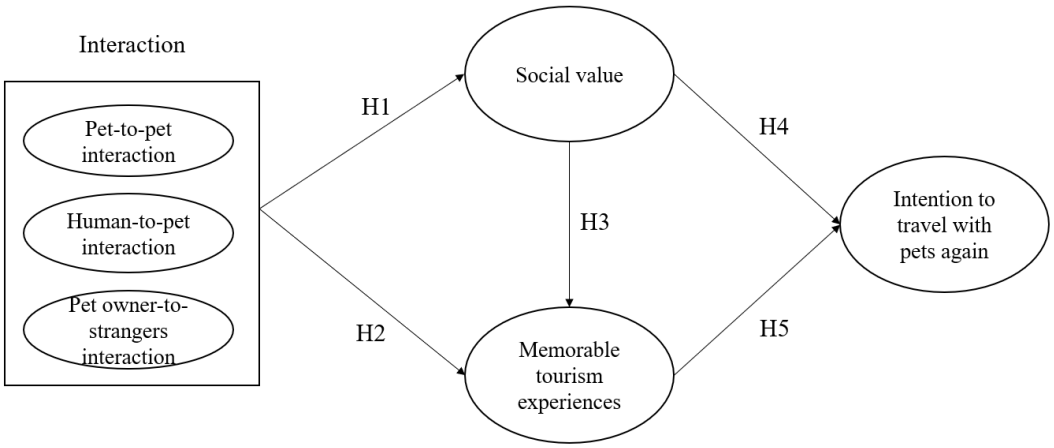


Fig. 1 Research poposed model.

References

[1]Carr, N. (2017). Recognising the position of the pet dog in tourism. *Annals of Tourism Research*, *62*, 112-113.

[2]Chan, V. H. T., & Tung, V. W. S. (2023). Traveling with pets: Investigating the urban, staycation tourism experience. *Journal of China Tourism Research*, *19*(4), 725-741.

The influence of food culture marketing on tourists' travel intention, moderated by travel expectation - A case study of Japanese

Haotian ZHU

Faculty of Hospitality and Tourism Management, Macau University of Science and Technology

Abstract

Based on the current food marketing and the popularity of Japanese food, this paper discusses the influence of food culture marketing on tourists' travel intention under the moderating effect of travel expectation. Some studies have pointed out that the current Japanese cuisine is huge in scale and generates huge income in China (Su Huiting et al 2023). At the same time, with the rapid development of The Times and economy, the current requirements of tourists and the rise in consumption level have led to a general trend of fusion of the food and catering industry (Wang Lian. (2024)). The SOR model of food culture marketing influencing travel intention was established with loyalty and satisfaction as the intermediary. The purpose is to divide food marketing into three dimensions: differentiated product, price discount, eWOM as external stimulus, satisfaction and loyalty as intermediary variables, which are also the manifestation of individual internal state, and travel intention as individual response. This study uses online questionnaires and SPSS to conduct reliability and validity tests, correlation tests and moderating effect tests, and finds that the moderating effect of tourism expectation is quite different under different themes, and also proves that food culture marketing has a significant impact on tourism intention. This paper complements the gap in the influence of food culture marketing on the tourism industry, puts forward suggestions for expanding food marketing in tourist destinations, and reveals a phenomenon that the marketing of exotic food culture can not only help local economic development, but also increase tourists' loyalty. Tourists have formed tourism expectations for the destination before they go to the destination. According to this study, it is known that tourism expectations have a significant regulating effect on travel intention. Therefore, tourist destinations can also try to expand their own cuisine as an influence to increase the number of potential touris

Keyword：Food culture marketing， Expectations of travel，Satisfaction，Loyalty ，Intention to travel

References

[1]苏荟婷, 李梦媛 & 窦硕华. (2023). 日料消费现状及在中国盛行的原因探析. *国际公关*, (12), 112-114. doi:10.16645/j.cnki.cn11-5281/c.2023.12.032

[2]王连. (2024). *基于AIDA模型的特色美食网络营销、网络口碑和旅游意向的结构研究* (硕士 学位论文, 河南大学). 硕士 https://link.cnki.net/doi/10.27114/d.cnki.ghnau.2024.000269 doi:10.27114/d.cnki.ghnau.2024.000269

The Mechanism of the Quality of User-Generated Content (UGC) on Tourists' Willingness to Visit Tourist Destinations: Taking Qingdao Online Marine Tourism as an Example

Yizhou CAI and Zihan LI*

Student, Faculty of Hospitality and Tourism Management, Macau University of Science and Technology, Avenida Wai Long, Taipa, Macau SAR

*Corresponding Email: 1220021029@student.must.edu.mo

Abstract

User-generated content (UGC) represents a novel paradigm in the creation and organization of information within the digital realm. In recent years, UGC has emerged as a pivotal channel through which travel consumers acquire information, make informed decisions, and share their travel experiences. Existing research has demonstrated that exposure to UGC can significantly influence tourists' propensity to visit a particular destination and has also explored the impact of UGC on tourists' hotel selection processes. Nevertheless, there remains a paucity of in-depth discussions regarding the inherent quality attributes of UGC itself and the intricate relationship between UGC quality and the construction of destination image.

This study focuses on elucidating the impact of UGC quality on the destination image. It employs the Technology Acceptance Model (TAM) to investigate how the destination image, comprising both cognitive and affective dimensions, exerts influence on consumers' attitudes and behavioral intentions towards the destination, mediated by perceived ease of use and perceived usefulness. Utilizing Xiaohongshu as the research platform, this study selectively samples UGC centered on Qingdao marine tourism. Approximately 320 participants were recruited to engage with the UGC materials, after which they completed a Likert five-point questionnaire. Subsequently, data analysis was conducted using AMOS.

The findings of this study indicate that UGC quality has a positive and significant impact on the destination image, perceived ease of use, perceived usefulness, and travelers' intention to visit the destination. By integrating prior research on the influence of UGC on travelers' behavioral intentions and introducing novel variables related to UGC quality, this study fills a notable gap in the understanding of how UGC characteristics shape tourism destinations. As such, it provides valuable directions for future research on the application of UGC in the tourism industry.

Furthermore, this study recommends that local Destination Marketing Organizations (DMOs) of tourist destinations should actively encourage local residents to generate UGC spontaneously and implement a rewarding mechanism for users who produce high-quality UGC content. Additionally, DMOs and relevant organizations can enhance their interaction with UGC audiences, thereby promoting a deeper understanding of the destination image among potential consumers.

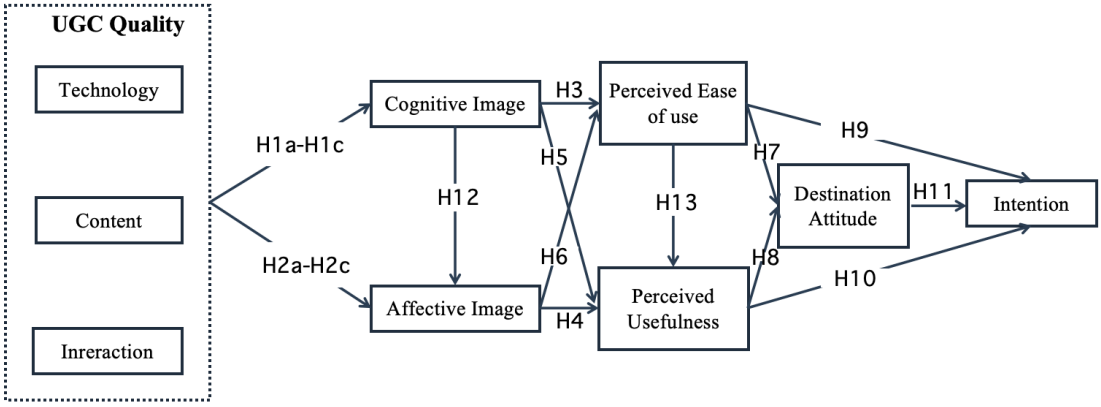


Figure 1. Research Conceptual Model

Key words: UGC Quality, Destination Image, Technology Acceptance Model (TAM), Marine Tourism

Camera Bullying: Power Dynamics and Digital Violence in Social Media and Reverse Gaze

Weilin WANG, Yiwen LI

Macau University of Science and Technology

Abstract

This qualitative study investigates, through the lens of "tourist gaze" (Urry, 1992) and "reverse gaze" (Gillespie, 2006), the emerging Power dynamic and Digital violence in the phenomenon of 'Camera Bullying'. The underlying subtle power relations between local residents and tourists are crucial to understanding their interactions (Zhang, Xu, & Xing, 2017). Many issues of power and control are often hidden in interpersonal interactions (Wilson, 1988). An example is the recent phenomenon of Camera Bullying on Chinese social media. With the further relaxation of visas, more and more Korean tourists are visiting Shanghai for short-term trips of two or three days. We have noticed some 'discordant' discussions on social media platforms. Chinese residents in Shanghai took photos of Korean tourists, shared these images on social media and there were some malicious discussions, localized boycotts further evolved into social media bullying, although these contents were stopped and criticized by some netizens, they still triggered heated discussions on social media, with a lot of negative impacts, and had the color of "digital Violence". We plan to collect data through in-depth interviews with 15 posters of bullying posts and 20 Korean tourists who were photographed while travelling in Shanghai, observations in tourist hotspots (e.g., the Bund, Nanjing Road), and critical discourse analysis of 200 social media posts (Weibo, Douban) , keywords are Korean tourists' confusing behavior. The study aims to reveal that 'reverse gaze' is not only manifested in the process of travelling, but due to the nature of the digital age, it is transferred to social media, resulting in 'Camera Bullying'. Camera Bullying". Social media platforms in the digital age are, to a certain extent, a reflection of traditional power dynamics. By analyzing the motivation, cultural tensions, bullying and performative behaviors embedded in this phenomenon, this study explores three core questions: (1) How the camera transforms from a media tool into a form of digital violence, generating "Camera Bullying". (2) How do social media platforms reshape the interactions between tourists and locals through visual and textual practices? (3) What are the socio-cultural conflicts of tourism behind these public shaming behaviors? Using this case as an example, this study will redefine the emergence of "Reverse gaze" in tourism behavior as "Camera Bullying". Its essence is a "digitally mediated power struggle" in which groups of different cultural backgrounds regain power through intra-group malignant discussion rather than dialogue, thus contributing to tourism and digital media scholarship. It critiques how social media has transformed tourism into a "performative identity" where both the photographer and the photographed become commodified spectacles. At the same time, the anonymity of the platforms' content makes it impossible for victims to trace the root causes, a phenomenon that exemplifies the complexity of online victimization. The study highlights the urgent need for

platform management to curb cyberbullying and cross-cultural education to reduce stereotyping.

References

[1]Gillespie, A. (2006). Tourist photography and the reverse gaze. Ethos, 34(3), 343-366.

[2]Urry, J. (1992). The tourist gaze “revisited”. American behavioral scientist, 36(2), 172-186.

[3]Wilson, P. J. (1988). The domestication of the human species. New Haven: Yale University Press.

[4]Zhang, J., Xu, H. G., & Xing, W. (2017). The host–guest interactions in ethnic tourism, Lijiang, China. Current Issues in Tourism, 20(7), 724–739.

[5]Zhang, J., & Xu, H. G. (2023). The power dynamics in local–tourist interactions. Annals of Tourism Research, 98, 103509.

Research on the influence mechanism of social media user generated content on tourist destination image construction --- Empirical analysis based on Xiaohongshu platform

Jingyuan FENG

Faculty of Hospitality and Tourism Management, Macau University of Science and Technology

Abstract

In recent years, driven by the digital wave, the search popularity of travel-related content in social media continues to rise, and tourism consumption behavior presents a paradigm shift from traditional information acquisition to social decision-making. There is no systematic research framework on the interaction mechanism between travel decision-making, user generated content (UGC) and social media platforms. Most of the literature focuses on the communication path and operation mechanism of UGC on Xiaohongshu platform, often separating the communication mechanism of UGC from the travel decision-making process, while ignoring the deep mechanism research on how the characteristics of UGC content affect users' travel decision-making behavior through social media platforms. This study will systematically explore the impact mechanism of user-generated content (UGC) on tourist destination image construction and electronic word of mouth (E-WOM), focusing on how the three UGC characteristics of information reliability, information enjoyment and accessibility of information play a role in destination image cognition and word-of-mouth communication through the intermediary transmission of perceived trust and expected performance. Based on Stimulus-Organism-Response (SOR) theoretical model, this paper takes Xiaohongshu platform as the research object, focuses on the core user group of Generation Z (born between 1995 and 2009), discusses users' perception results of three UGC features: information reliability, information enjoyment and accessibility of information. This paper focuses on the significant role of social media user generated content (UGC) in tourist destination image construction and destination word-of-mouth formation, and discusses the mediating role of users' perceived trust and expected performance in destination image construction influenced by social media UGC. The preliminary experiment was conducted in the form of online questionnaires, and a total of 52 questionnaires from generation Z users were collected. The reliability coefficient of the research data was 0.962, the coefficient result of KMO test was 0.772, and the chi-square value of Bartlett test was 1779.567 (Sig.=0.000<0.01). It indicates that the overall reliability and validity of the questionnaire is good, and a formal questionnaire will be released for further formal experiment. The formal experiment plans to expand the sample to 370. This study aims to provide theoretical basis and practical guidance for the online marketing promotion of tourist destinations on Xiaohongshu platform, and the expected results can provide new theoretical help for the cross-research of tourism communication and consumer behavior, help the digital transformation of the cultural tourism industry, and promote the better optimization and dissemination of destination images.

Keywords: Social media; User generated content; Perceived trust; Expected performance; Destination image; Electronic word of mouth

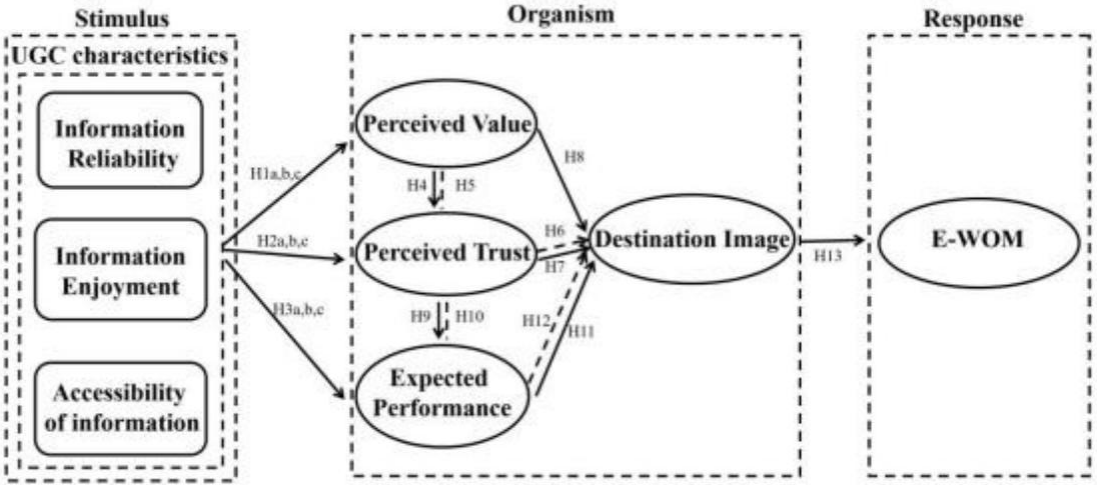


Figure 1. Conceptual Framework

The Uniqueness of Consumer Behavior in Girlfriends' Tourism: Investigating the Impact of "Appearance Economy" on Travel Destination Choice

Ziyu LUO[1], Lejia LI[2], Haoran CHEN[3*]

[1]Undergraduate Student, School of Liberal Arts, Macau University of Science and Technology, Macau, China

[2]Undergraduate Student, School of Business, Macau University of Science and Technology, Macau, China

[3]Ph.D Candidate, Faculty of Hospitality and Tourism Management, Macau University of Science and Technology, Macau, China

*Corresponding Email: 3220000081@student.must.edu.mo

Abstract

In the experience economy dominated by social media, the "appearance economy" reconstructs the logic of tourism decision-making through visual symbols (such as Internet celebrity attractions and aesthetic homestays).(Khoo-Lattimore, C., & Prayag, G. 2018)Although best friend tourism is an important scene for women's travel, its destination selection is highly visually oriented, but the existing research has not systematically revealed the mechanism of "appearance-driven", resulting in the disconnection between the destination marketing strategy and the real aesthetic needs of female tourists.(Wang, X., Lai, I. K. W., & Wang, X. 2022)At the same time, the traditional travel marketing model is difficult to reach Generation Z women who pursue real-time experience and visual sharing.(SÜRME, I. M. 2022)

In this context, the study employs a two-phase design: Study 1 identifies core perception attributes under the appearance economy through semi-structured interviews and social media content analysis (3,000 posts from Xiaohongshu and Douyin), establishing a measurement index system. Study 2 utilizes questionnaires and structural equation modeling to explore how aesthetic drivers influence impulsive travel intentions among female tourists, while verifying the moderating role of social media anxiety. Ultimately, this study aims to address the following research questions: (a)How the aesthetics economy of a girlfriends' trip can help them choose their destination? (b). Does the perceived aesthetic economy of girlfriends' trips significantly enhance emotional resonance and willingness to consume immediately? (c) Why Gen z women show higher sensitivity to "Packaging Aesthetics" compared to other age groups, and how social media anxiety exacerbates the influence of aesthetic factors on impulsive decision-making?

Theoretically, this study pioneers an integrated "Aesthetic Economy-Emotional Response-Consumption Behavior" model, expanding visual communication theory in female tourism contexts. Practically, it provides destination managers with aesthetic optimization guidelines (e.g., color management systems, immersive photo installations) to effectively capture female-centric market opportunities.

Keywords: Aesthetic economy, Girlfriends' tourism, Visual communication, Impulsive travel intention, Gen Z

References

[1]Khoo-Lattimore, C., Prayag, G., & Disegna, M. (2019). Me, my girls, and the ideal hotel: Segmenting motivations of the girlfriend getaway market using fuzzy C-medoids for fuzzy data. Journal of Travel Research, 58(5), 774-792.

[2]Khoo-Lattimore, C., & Prayag, G. (2018). Understanding Asian and Western women on girlfriend getaways: The relationship between motivation and accommodation performance. Journal of Hospitality Marketing & Management, 27(2), 239-259.

[3]Wang, X., Lai, I. K. W., & Wang, X. (2023). The influence of girlfriend getaway luxury travel experiences on women's subjective well-being through travel satisfaction: A case study in Macau. Journal of Hospitality and Tourism Management, 55, 91-100.

[4]Corbisiero, F., Monaco, S., & Ruspini, E. (2022). Millennials, Generation Z and the future of tourism (Vol. 7). Channel View Publications.

[5]Gibson, H. J., Berdychevsky, L., & Bell, H. L. (2012). Girlfriend getaways over the life course: Change and continuity. Annals of Leisure Research, 15(1), 38-54.

[6]Wang, X., Lai, I. K. W., & Wang, X. (2022). Investigating how girlfriend getaway travel experiences influence female travellers to come back. Asia Pacific Journal of Tourism Research, 27(11), 1179-1192.

[7]SÜRME, I. M. (2022). A research to determine the travel behaviors of women tourists. Sciences (JOSHAS JOURNAL), 8(49).

[8]Mirehie, M., Gibson, H. J., Khoo-Lattimore, C., & Prayag, G. (2018). An exploratory study of hospitality needs and preferences of US Girlfriend Getaways. Journal of Hospitality Marketing & Management, 27(7), 811-832.

The impact of smart tourism technology in restaurants on customer attitudes and word-of-mouth

Manrong GAN, Yingni LIU* and Jingru LIU

Faculty of Hospitality and Tourism Management, Macau University of science and Technology, Avenida Wai Long, Taipa, Macau SAR

Abstract

In the digital era, with the continuous development of smart systems, smart tourism technology also brings new opportunities to the catering industry in tourism destinations, and it is an important way to promote the digital development of catering industry in tourism destinations. Smart technology plays an important role in improving the attitude of customers and restaurant's smart technology's word-of-mouth. Shaping positive customers' attitudes and restaurant's smart technology's word-of-mouth has become an important issue today. Although smart technology is receiving increasing attention in tourism, research on the application of smart technology in restaurants in tourism destinations is still limited, as most previous studies have focused on smart tourism destinations. Few studies have investigated the influence of customers' attitudes towards the use of smart technology and word-of-mouth communication behavior in restaurants in tourism destinations. In addition, few researchers have attempted to explore psychological mechanisms to explain the relationship between customers' perceived safety, trust, usage attitude, and word-of-mouth towards smart technology. Therefore, this study is based on the trust theory and extended TAM theory. Three attributes of smart tourism technology (imformativeness, personalization, accessibility) are studied through the influence of perceived security and perceived trust on attitude toward using and WOM. Through questionnaire survey, about 400 valid samples were collected, and the structural equation model (SEM) of smart tourism technology attribute on customer attitude and WOM was constructed. Data and path analysis were carried out by SPSS26.0 and Smart PLS 4.0 tools. The study found that the three attributes of smart tourism technology, imformativeness, personalization and accessibility, significantly affect Perceived security and Perceived trust. Furthermore, Perceived security and Perceived trust of customers are positively correlated with Attitude toward using and WOM. This study discusses the smart technology of restaurants in the digital era, which has certain practical reference value for improving customer attitude and restaurant's smart technology's word-of-mouth, promoting sustainable development of restaurants in tourism destinations, and injecting economic vitality into restaurants in tourism destinations.

Keywords: Smart Tourism; Technology Attribute; Perceived security; Perceived trust; Attitude toward using; WOM

(This work was supported by the Macau science and Technology Development Fund (FDCT), Project Number 0011/2019/ASC.)

What makes Macao's cultural tourism special? Exploring Tourist' Motivation and Behavioral Intentions Based on the Push-Pull Theory

Zhenghao XIONG

Macau University of Science and Technology

Abstract

Macau, as a destination with profound historical and cultural heritage, has been gradually transforming towards cultural tourism in recent years. Although the gambling industry once dominated its tourism economy, with the implementation of the "tourism + culture" development strategy, the attractiveness of cultural tourism has been gradually increasing. In tourism research, the push - pull theory is widely used to analyze tourists' behavior motivation. This theory regards the push factors as the internal needs of tourists, while the pull factors point to the attractive factors of the destination. Based on the push - pull theory, this study explores tourists' motivation and their behavioral intentions, specifically analyzing how the push and pull factors influence tourists' decision - making in choosing Macau's cultural tourism. Through a questionnaire survey, 304 questionnaires were distributed, and methods such as correlation analysis, generalized linear model, and mediating effect analysis were used to reveal how the interaction between push and pull factors affects tourists' destination loyalty and cultural protection intentions. The study found that both the motivation for cultural experience and the pull of the destination have a significant positive impact on tourists' loyalty and cultural protection intentions. This indicates that tourists not only revisit Macau because of the unique charm of cultural tourism but also are more willing to support the protection of cultural heritage. This study provides theoretical support for the promotion and sustainable development of Macau's cultural tourism and provides an empirical basis for the formulation of relevant policies. By deeply analyzing tourists' motivation and behavioral intentions, this study provides important references for Macau's future development in the field of cultural tourism.

Keywords: Macau's cultural tourism, push - pull theory, tourists' motivation, behavioral intentions, destination loyalty, cultural protection intentions

Digital Innovation Process of Hotels: An Actor-Network Theory Perspective

Hongjuan TAN[1], Liutian LUO[1], Qi LIU[2*]

[1]PhD student, Faculty of Hospitality and Tourism Management, Macau University of Science and Technology, Avenida Wai Long, Taipa, Macau SAR

[2]PhD student, School of Business, Macau University of Science and Technology, Avenida Wai Long, Taipa, Macau SAR

*Corresponding Email: 3230003867@student.must.edu.mo

Abstract

The era of digital economy when digital innovation is much more significant for enterprises and the disruption of digital technology has affected many sectors, including the hospitality industry. Nevertheless, what is the process of the digital innovation of hospitality enterprises? How does the interaction between human activities and technology affect the outcome of digital innovation? How to manage the process of digital transformation? Previous studies have not fully explained and answered these questions. The actor-network theory (ANT) can serve as a useful theoretical lens to answer the above questions, especially where technology plays a critical role, and it is crucial to analyze the interactions between technology and human beings.

Therefore, this paper is distilled via a five-year-long field study in Nansha Grand Hotel, which applies the lens of actor-network perspective to analyze the composition of digital innovation actors and their network translation process in a typical traditional hospitality enterprise and to explore its digital innovation process. As such doing, the interpretative single case study method is used to look at systems and processes and then unveil the 'what' and 'how' of digital transformation in the hotel. The main findings are as follows:

(a) The coalition of interests of hotel digital innovation is composed of human actors such as hotel general managers, hotel investors, departmental managers, grassroots employees, internal research and development personnel, external research and development enterprises, and cooperative schools, as well as non-human actors such as management experience, digital technology, management data, and corporate culture, and hotel general manager is the core actor in cooperative innovation and enduring interests.

(b) As the core actors, the hotel general manager can quickly facilitate the formation of a cooperative network by successively setting up three obligatory passage points: digitization of management elements, interconnection of management data, and onlineisation of employee usage behaviors.

(c) As key non-human actors, management experiences and digital technology interact with human actors and facilitate or inhibit the formation of actor coalitions.

Finally, this study provides a theoretical basis for the digital transformation of hospitality, and open the black box of interaction among human and non-human actor in the digital transformation of hotels.

Keywords: Digital innovation process, Actor-network theory, Case study, Nansha Grand Hotel

Exploring Tourism Creative Destruction in Shanwei Traditional Village

Liutian LUO, Hongjuan TAN, Duanni ZHAO*

Ph.D. Candidate, Faculty of Hospitality and Tourism Management, Macau University of Science and Technology, Avenida Wai Long, Taipa, Macau SAR

*Corresponding Email: 3230001355@student.must.edu.mo

Abstract

Due to the rapid development of urbanization, some traditional villages have been damaged to varying degrees, and the development of tourism has a certain impact on the landscape change of traditional villages. The theory of creative destruction of tourism is an important theory of the evolution of tourist places and has made important contributions to the study of traditional villages. However, at present, domestic and foreign scholars focus on the study of creative destruction of tourism to test the applicability of the model and its impact on the quality of life of the residents, and the study of the motivation of the creative destruction of tourism in the landscape is dominated by qualitative research. Tourism development has a significant impact on the landscape change of Shanwei Luodong village, therefore, it is important to use the theory of tourism creative destruction to study the landscape change of Shanwei Luodong village.This paper utilizes the questionnaire survey method, in-depth interviews and other methods to study the creative destruction of Shanwei Luodong village landscape. Firstly, summarize the research related to creative destruction of tourism, life cycle of tourist sites and cultural landscape change, and summarize the influencing factors of cultural landscape change of traditional villages. The typical representative of Shanwei traditional villages---Shanwei Luodong village is chosen as the research object, and four dimensions of landscape change in Shanwei traditional villages are identified through literature review, which are natural landscape, architectural landscape, industrial landscape and humanistic and folklore landscape change; and the influencing factors of landscape change are categorized into four dimensions, namely, resources and investment, residents' support, tourism operation and management level, and policy guidance. This study hypothesizes that the four dimensions of resources and investment, residents' support, tourism management level and policy guidance have a significant impact on the natural landscape change, architectural landscape change, industrial landscape change and humanities and folklore landscape change. Using literature review, in-depth interviews, questionnaires and other methods to collect data of the landscape change, through a combination of qualitative and quantitative methods to classify the case of the landscape tourism creative destruction stage, and to test whether it is consistent with the model of creative destruction of tourism, this paper builds a scale can be interpreted on the degree of influence of the landscape of the different dimensions of the change can be based on the size of the influence of different dimensions of the factors guiding the Shanwei traditional village tourism development, more targeted. Therefore, the influence factors of landscape change constructed in this paper are complementary to the drivers of creative destruction of tourism, and more objectively illustrate the drivers of creative destruction of tourism in the landscape of Shanwei traditional villages from a quantitative point of view. This study is helpful to the healthy development of Shanwei traditional villages.

Keywords: Shanwei Luodong village; traditional village; creative destruction; landscape change

The Convenience and Humanization of AI in Tourism—Towards a Balanced Future

Zilan LI[1] , Weng Lam HO[2], Kenneth Shiu Pong NG[3*]

[1]Student, Faculty of Hospitality and Tourism Management, Macau University of Science and Technology, Macao SAR, China

[2]Student, Faculty of Business Administration, University of Macau, Taipa, Macau, China

[3]Assistant Professor, Faculty of Hospitality and Tourism Management, Macau University of Science and Technology, Macao SAR, China

*Corresponding Email: spng@must.edu.mo

Abstract

In recent years, Artificial intelligence (AI) has grown fast, providing convenience in different areas. With the application of Artificial intelligence (AI) in the hospitality and tourism industry, the convenience of AI has increased significantly, especially in enhancing efficiency, such as collecting and analyzing data and improving customer satisfaction. It can help to understand the customer preference. Additionally, by adopting AI, businesses like hotels can make data-driven decisions by analyzing the data to improve operating efficiency. Some key AI functions like Robotics, Virtual Reality, Augmented Reality or Chatbots have been adopted in the industry (Doborjeh et al., 2021). For example, robotics technology has been used in the hospitality sector for serval years, it is normally used for room service or even front desk service. This technology can simplify operations and provide consumers with a new experience. Although AI offers considerable advantages in enhancing efficiency and automation, it still encounters challenges in providing humanized services. Specifically, in the tourism industry, the implementation of AI may result in a lack of emotional engagement, which can negatively affect the core essence of service delivery (Wang, 2022). In terms of emotional interaction, research has shown that AI systems, particularly in customer service, struggle to recognize and respond to users' emotions, resulting in a perceived lack of emotional interaction between tourists and human staff (Davenport & Ronanki, 2018). For example, in the hotel industry, while robot receptionists and intelligent customer service systems can quickly address common queries, they often fail to meet tourists' emotional needs or provide comfort and care. Moreover, AI has limitations in providing deep personalized services, as it struggles to adapt to the dynamic changes in tourists' individual needs. As Doborjeh et al. (2021) noted, AI applications often focus on efficiency optimization but overlook the multi-layered, personalized emotional needs of tourists, which remains one of the major challenges AI faces in delivering humanized services.

In conclusion, AI brings significant advantages to the hospitality and tourismindustry, but some challenges may also occur in the future. While AI can streamline operations and improve personalized service. However, the reliance on AI raises concerns about the lack of human interaction or emotional connection between customers and service.

References

[1] Davenport, T. H., & Ronanki, R. (2018). Artificial intelligence for the real world. In Harvard business review (Vol. 2018). *Harvard Business Review*.

[2] Doborjeh, Z., Hemmington, N., Doborjeh, M., & Kasabov, N. (2021). Artificial intelligence: a systematic review of methods and applications in hospitality and tourism. *International Journal of Contemporary Hospitality Management*, *34*(3),
1154–1176. https://doi.org/10.1108/ijchm-06-2021-0767

[3] Du Jiangang, Zhao Huan, Su Jiuru, Zhang Yu. (2022). A review and prospects of customer behavior under ai service[J]. *Foreign Economics & Management*, 44(3): 19-35. DOI: 10.16538/j.cnki.fem.20211017.101.

Beyond Functional Outcomes: How Business Network Shape Emotional Solidarity in Tourism SMEs

Yangyan XU, Michael S. LIN

The Hong Kong Polytechnic University, SHTM

Abstract

Small and medium-sized enterprises (SMEs) serve as the vital backbone of the global tourism and hospitality industry (Erkkila, 2004). Constrained by limited resources, financial vulnerability, and workforce shortages, these enterprises frequently engage in networking for marketing, financial, and training purposes (Copp et al., 2001). Networking relationships—encompassing both strong ties (e.g., family, friends) and weak ties (e.g., acquaintances, colleagues, business partners)—have demonstrated significant impacts on tourism SMEs' venture growth (Su et al., 2023), resilience building (Coles et al., 2021), innovation (Novelli et al., 2006), and knowledge sharing (McLeod et al., 2024). While prior studies have extensively examined the structural and functional outcomes of such business networks, emotional consequences remain under-explored. Drawing on the affect theory of exchange, this study investigates how tourism SMEs' interactions through close social ties and weak ties shape emotional solidarity. It further examines how business events amplify or diminish these relational dynamics. The proposed manuscript includes two studies. In Study 1, we conduct a qualitative analysis to identify variables related to network types, behaviors, and positive or negative events. In Study 2, we integrate findings from Study 1 with existing literature to design an experiment aimed at exploring the causal relationships between the identified variables. The study provides four key contributions: First, it extends network theory by incorporating emotional dimensions into business relationship analysis. Second, it enriches social exchange theory through an affective lens. Third, it offers novel insights into emotional solidarity via supply-side network dynamics. Finally, it discusses business events as a moderating factor that affects network effectiveness, offering a dynamic view on SME cooperation systems.

References

[1] Brennecke, J. (2020). Dissonant ties in intraorganizational networks: Why individuals seek problem-solving assistance from difficult colleagues. Academy of Management Journal, 63(3), 743-778.

[2] Coles, T., Ritchie, B. W., & Wang, J. (2021). Building business resilience to external shocks: Conceptualising the role of social networks to small tourism & hospitality businesses. Journal of Hospitality and Tourism Management, 48, 210-219.

[3] Copp, C. B., & Ivy, R. L. (2001). Networking Trends of Small Tourism Businesses in Post-Socialist Slovakia. Journal of Small Business Management, 39(4), 345-353.

[4] Elfring, T., & Hulsink, W. (2003). Networks in entrepreneurship: The case of high-technology firms. Small Business Economics, 21, 409-422.

[5] Erkkila, D. (2004). Introduction to Section 1: SMEs in regional development. The future of small and medium-sized enterprises in tourism, 46, 23-34.

[6] McLeod, M., Vaughan, D. R., Edwards, J., & Moital, M. (2024). Knowledge sharing and innovation in open networks of tourism businesses. International Journal of Contemporary Hospitality Management, 36(2), 438-456.
[7] Novelli, M., Schmitz, B., & Spencer, T. (2006). Networks, clusters and innovation in tourism: A UK experience. Tourism Management, 27(6), 1141-1152.
[8] Su, H., Liang, Y., & Wen, T. (2023). Structural embeddedness, entrepreneurial behavior, and firm performance in the industry network of small tourism enterprises: The moderating role of relational embeddedness and leadership self-efficacy. Journal of Hospitality and Tourism Management, 56, 431-442.

Understanding Generation Z's Eco-Friendly Destination Selection: A Value-Belief-Norm Perspective

Duanni ZHAO*, Liutian LUO

Ph.D. Candidate, Faculty of Hospitality and Tourism Management, Macau University of Science and Technology, Avenida Wai Long, Taipa, Macau SAR

*Corresponding Email: 3230001355@student.must.edu.mo

Abstract

As sustainable tourism continues to gain significant scholarly attention given the pressing need to reduce tourism's environmental footprint, eco-friendly destinations have emerged as a critical component for promoting more responsible and ethical travel practices. However, within the growing literature on sustainable tourism, limited research has focused specifically on empirically examining and identifying the factors that may shape tourists' decision-making processes regarding the selection of eco-friendly destinations, particularly for the increasingly influential Generation Z cohort of young travelers who now represent the future of tourism demand. This timely and imperative study aims to address this important knowledge gap in the literature by developing and proposing an integrative conceptual framework, grounded in the robust Value-Belief-Norm theory, to uncover and illuminate the underlying motivations and psychological mechanisms driving Generation Z travelers' intentions and willingness to visit eco-friendly tourism destinations as opposed to conventional mainstream options. Quantitative analysis of survey data collected from Generation Z travelers will assess the impacts of personal norms, social norms, environmental values, and ecological worldviews on behavioral intentions to visit eco-friendly destinations. The findings from this study can meaningfully enrich theoretical perspectives in sustainable tourism research by revealing the complex interrelationships and interactions between critical contextual and psychological factors that shape eco-friendly decision-making tendencies within this notably understudied young demographic cohort, beyond just investigating their general pro-environmental attitudes. Additionally, for tourism policy and practice, the results can offer practical insights and strategies for diverse tourism stakeholders, including destination managers, marketers, planners, and the wider travel industry, seeking to more effectively encourage, promote, and activate personal and social norms as well as values that are conducive to facilitating and influencing greater adoption of eco-friendly destination selection among current and future generations of travelers.

Keywords: Sustainable Tourism; Eco-friendly Destinations; Generation Z Travelers; Value-Belief-Norm Theory； Behavioral Intentions

Research on the Impact of Artificial Intelligence Technology on Customer Loyalty in the Hotel Industry

Qilin WEI[1*], Dimin WANG[2]

[1]Undergraduate student, Faculty of Hospitality and Tourism Management, Macau University of Science and Technology

[2]Lecturer, Faculty of Hospitality and Tourism Management, Macau University of Science and Technology

*Corresponding Email: micw11@qq.com

Abstract

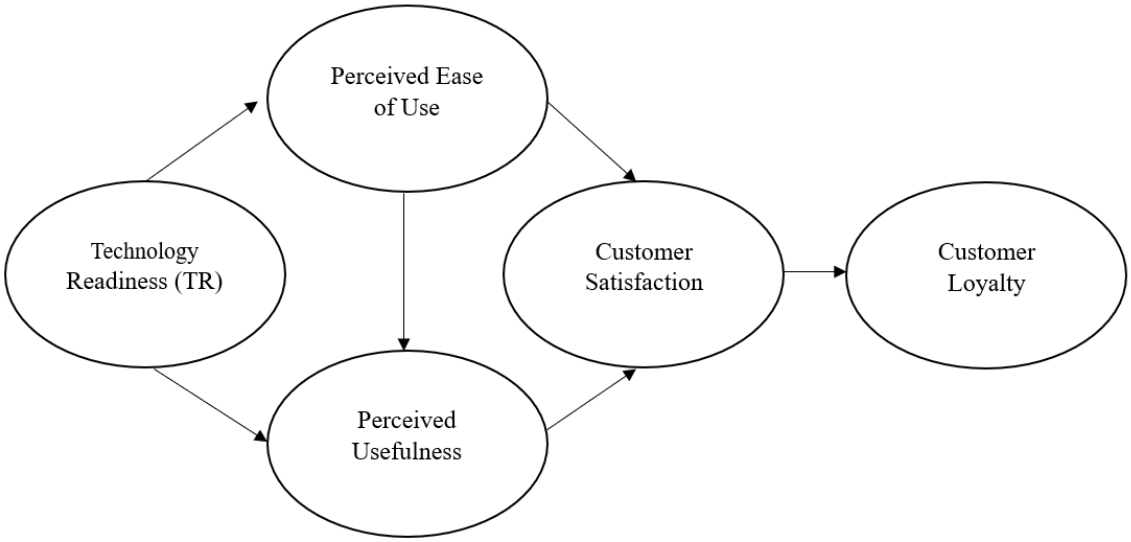
Artificial intelligence (AI) technology has become a significant component for companies to automate business transactions (Nam et al., 2021). AI technology has been widely used, leading to the intensified competition among hotels. For example, the FlyZoo Hotel in Hangzhou, China, is the world's first hotel to hand over all its services to AI by using facial recognition technology to self-check-in and adopting hotel room voice assistant to allow customers to voice-control lighting, air conditioning and other in-room equipment (Zhao, 2020). Moreover, robots equipped with navigation systems can also provide food delivery and even bartending to mix drinks (Zhao, 2020). Despite hotels equipped with AI technology having a relatively high level of customer satisfaction, some reviews suggest that there is still room for improvement in its human service attitude (Tai et al., 2021). As such, it is still unknown whether the emergence of AI technology in the hotel industry is widely adopted by hotel customers. Extant research has discovered that consumers who are alone prefer human connections through talking instead of using touch screen services, which can decrease service performance (Fan et al., 2016; Shiwen et al., 2021). This current study will mainly focus on whether such emerging AI technologies in the hotel industry can effectively improve customer experience, customer attitude, and satisfaction, thereby increasing customer loyalty. The research uses technology readiness (TR) and technology acceptance model (TAM) as the theoretical basis to unravel the proposed relationship.

Technology acceptance model (TAM) and technology readiness (TR) have been widely used by prior researchers to understand consumers' technology usage behaviors (Chiu & Cho, 2021; Yang et al., 2021). TAM explains users' acceptance and usage behavior of information technology via perceived usefulness and perceived ease of use (Davis, 1989). Perceived usefulness refers to the degree to which a person believes that using a particular system would enhance his or her job performance, while perceived ease of use refers to the degree to which a person believes that using a particular system would be free of effort (Davis, 1989). On the other hand, TR refers to an individual's tendency to integrate innovative technologies into daily routines for goal attainment across private and professional fields (Parasuraman, 2000). Evidence suggested that TR has an intricate relationship with TAM, as positive TR can enhance users' perceived ease of use and perceived usefulness (Jin, 2013; Oh et al., 2014; Kim & Chiu, 2019).

This study proposes a conceptual framework by employing technology acceptance model (TAM) and technology readiness (TR) to better understand hotel consumers' technology usage behaviors. Through the conceptual framework, this study will specifically focus on the following research questions: 1) how do consumers with different levels of technology readiness adopt AI technology; 2) and how can consumers improve their perceived usefulness and ease of use, thereby enhancing customer satisfaction and consequently increasing customer loyalty. For the hotels that make use of AI technology, this study will provide practical implications for the practitioners to improve the application of AI technology in the hotel industry and enhance the development of hotels in the new era.

Keywords: Artificial Intelligence (AI) Technology, Technology Acceptance Model (TAM), Technology Readiness (TR), Customer Loyalty, Customer Satisfaction

Figure 1. Conceptual Framework



References

[1] Chiu, W., & Cho, H. (2021). The role of technology readiness in individuals' intention to use health and fitness applications: a comparison between users and non-users. Asia Pacific Journal of Marketing and Logistics, 33(3), 807-825.

[2] Davis, F. D. (1989). Perceived usefulness, perceived ease of use, and user acceptance of information technology. MIS quarterly, 319-340.

[3] Fan, A., Wu, L., & Mattila, S. (2016). Does anthropomorphism influence customers' switching intentions in the self-service technology failure context? Journal of Services Marketing, 30(7), 713–723.

[4] Jin, C. (2013). The perspective of a revised TRAM on social capital building: The case of Facebook usage. Information & Management, 50(4), 162-168.

[5] Kim, T., & Chiu, W. (2019). Consumer acceptance of sports wearable technology: The role of technology readiness. I*nternational Journal of Sports Marketing and Sponsorship, 20*(1), 109-126.

[6] Nam, K., Dutt, C. S., Chathoth, P., Daghfous, A., & Khan, M. S. (2021). The adoption of artificial intelligence and robotics in the hotel industry: prospects and challenges. *Electronic Markets, 31*, 553-574.

[7] Oh, J. C., Yoon, S. J., & Chung, N. (2014). The role of technology readiness in consumers' adoption of mobile internet services between South Korea and China. *International Journal of Mobile Communications, 12*(3), 229-248.

[8] Parasuraman, A. (2000). Technology Readiness Index (TRI) a multiple-item scale to measure readiness to embrace new technologies. *Journal of service research, 2*(4), 307-320.

[9] Shiwen, L., Kwon, J., & Ahn, J. (2022). Self-service technology in the hospitality and tourism settings: A critical review of the literature. *Journal of Hospitality & Tourism Research, 46*(6), 1220-1236.

[10] Tai, Y. F., Wang, Y. C., & Luo, C. C. (2021). Technology-or human-related service innovation? Enhancing customer satisfaction, delight, and loyalty in the hospitality industry. *Service Business, 15*, 667-694.

[11] Zhao Jingxian. (2020). User Experience Design in Smart Hotel——Analysis And Innovative Design Of Fly Zoo. *Design*, (17),63-65. doi: CNKI: SUN:SJTY.0.2020-17-020.

Estimating tourists' continuous sentiment scores: A refined large language model

Tong YANG[1], Cathy H.C. HSU[2]

[1]Postdoctoral Fellow,School of Hotel and Tourism Management,The Hong Kong Polytechnic University,Hong Kong SAR, China

[2]Chair Professor,School of Hotel and Tourism Management,Research Center for Digital Transformation of Tourism,The Hong Kong Polytechnic University,Hong Kong SAR, China

Abstract

Tourism research has traditionally analyzed tourist sentiment through discrete categorical classifications (e.g., positive, neutral, negative) using either lexicon-based dictionaries or conventional machine learning approaches. The methodological convention fails to capture the nuanced and continuous nature of human sentiment as demonstrated by contemporary neuroscience and physiological studies. This oversimplification not only limits the academic understanding of tourist experiences but also restricts practical applications in the tourism industry. More granular understanding of sentiments could significantly enhance service customization, destination management strategies, and customer relationship management. Addressing this critical gap, the present study develops RoBERTa-CSS (RoBERTa-based Continuous Sentiment Scoring), an advanced analytical framework that transforms sentiment measurement from a categorical to a continuous paradigm. RoBERTa-CSS structurally enhancesthe pre-trained RoBERTa language model through the integration of a fully connected neural network layer specifically optimized for fine-grained sentiment quantification. The model's robustness is rigorously validated using an annotated hotel reviews dataset collected from multiple online travel platforms, with each sentence independently scored on a continuous sentiment scale by three annotators. Comparative analyses against both established open-source sentiment analysis tools (SnowNLP and Paddle) and cutting-edge generative AI systems (ChatGPT-4o and Gemini-Pro) demonstrate RoBERTa-CSS's superior performance across multiple evaluation metrics. The study also applies this novel framework to three transformative analytical dimensions: (1) individual-level sentiment fluctuation analysis, (2) group-level sentiment distribution analysis, and (3) group-level longitudinal analysis. These applications collectively highlight the limitations of traditional polarity-based approaches while showcasing RoBERTa CSS's capacity to detect subtle variations that are critical for understanding tourists'sentiments.

This study expands the analytical ability beyond simple categorization to facilitate assessment of the complexity and diversity of human sentiment. The value of this paper for tourism practitioners, destination management organizations and online travel platforms is also discussed.

Keywords: Tourist sentiment; Continuous sentiment score; Pre-trained language model; Big data analysis; RoBERTa-CSS

The Impact of Internet-Famous Landmarks on Local Communities: Negative Impacts and Tourism Development Support

Ce GUO[1], Haoran CHEN[1], Luebin SUN[2], Chen-Kuo PAI[3*]

[1]Ph.D. Candidate, Faculty of Hospitality and Tourism Management,
Macau University of Science and Technology, Avenida Wai Long, Taipa, Macau SAR

[2]Ph.D. student, Faculty of Hospitality and Tourism Management,
Macau University of Science and Technology, Avenida Wai Long, Taipa, Macau SAR

[3]Ph.D. Associate Professor, Faculty of Hospitality and Tourism Management,
Macau University of Science and Technology, Avenida Wai Long, Taipa, Macau SAR

*Corresponding Email: ckpai@must.edu.mo

Abstract

The rise of social media has spawned a new category of tourist locations that are different from traditional scenic spots, known as "Internet-famous landmark." Due to the wide spread of social media, Internet-famous landmark emerge in an endless stream, which not only significantly increases the tourist flow of tourist destinations, but also greatly improves the economic benefits. However, the phenomenon is not entirely positive. Although the Internet-famous landmark does bring considerable economic benefits to the local area, its impact on residents presents complex negative characteristics. Therefore, although the Internet-famous landmarks brings a lot of tourist flow and economic benefits to the destination, its negative impact on local residents still needs to be highly regarded.

However, existing studies lack a comprehensive and multidimensional framework to systematically assess the possible negative impacts of landmarks on local residents and the specific mechanisms of their negative emotions. In this context, the negative impact of Internet-famous landmarks may be mainly reflected in social, cultural, environmental and psychological dimensions. At the social level, the shortage of public resources (such as transportation) makes it difficult to fully meet the basic needs of local residents, thus exacerbating the sense of social inequality (Yrigoy et al., 2024). At the cultural level, the over-commercialization of tourism activities also leads to the homogenization of local culture, weakening the community's cultural identity and sense of belonging (Jover et al., 2023). In terms of environment, the rapid development of Internet-famous landmark and the large number of tourists have caused significant pressure on the local natural environment, not only destroying the local ecological balance, but also posing a threat to the health of residents (Rogowski et al., 2025). On the psychological level, local residents face constant interference from tourists, disrupting the rhythm of life and invading private space (Papadopoulou et al., 2023). In addition, tolerance can be regarded as a moderating variable to explore the relationship between residents' negative emotions and support for tourism development.

This study aims to address the following research questions: (a) What components and measurement items constitute the negative impact of Internet-famous landmark? (b)

How does the negative impact of Internet-famous landmark affect residents' negative emotions? (c) how does the negative sentiment of residents affect the support for tourism development? (d) What role does tolerance play in moderating negative emotions and supporting tourism development?

In order to systematically reveal the specific impact of under-tourism on tourist destinations, this study will consist of two parts: Study 1 will identify the attributes of the negative impact of Internet-famous landmark through semi-structured interviews, and develop a comprehensive set of measurement items. In study 2, the negative impact scale of Internet-famous landmark will be investigated by exploratory factor analysis, confirmatory factor analysis and structural equation modeling, and the impact on residents' negative emotions and policy support will be explored.

Therefore, this study will analyze and explore the negative impact of Internet-famous landmarks on local residents and their impact on negative emotions and support for tourism development through a mixed method. In terms of theoretical contributions, this study builds a multi-dimensional framework to assess negative impacts and fill in the existing research gaps. Secondly, "tolerance" is introduced as a regulating variable to reveal the complexity of residents' psychological response. At the same time, a comprehensive set of measurement tools was developed and validated to provide a methodological basis for subsequent research. In terms of management implications, sustainable destination management should give priority to community rights in urban planning decisions, rather than just meeting the needs of tourists. In addition, managers need to find a balance between tourism development and residents' quality of life to avoid resource strain and social inequality caused by overdevelopment. At the same time, managers can support and encourage the development of community cultural activities, enhance the community's cultural identity and sense of belonging, and reduce the psychological burden of residents.

Keywords: Internet-Famous Landmark, Negative Emotions, Tolerance, Support For Tourism Development

References

[1]Jover, J., & Díaz-Parra, I. (2023). Who is the city for? Overtourism, lifestyle migration and social sustainability. In *Migration, Tourism and Social Sustainability* (pp. 9-32). Routledge.

[2]Papadopoulou, N. M., Ribeiro, M. A., & Prayag, G. (2023). Psychological determinants of tourist satisfaction and destination loyalty: The influence of perceived overcrowding and overtourism. *Journal of Travel Research*, *62*(3), 644-662.

[3]Rogowski, M., Zawilińska, B., & Hibner, J. (2025). Managing tourism pressure: Exploring tourist traffic patterns and seasonality in mountain national parks to alleviate overtourism effects. *Journal of Environmental Management*, *373*, 123430.

[4]Yrigoy, I., Horrach, P., Escudero, L., & Mulet, C. (2024). Co-opting overtourism: Tourism stakeholders' use of the perceptions of overtourism in their power struggles. *Journal of Sustainable Tourism*, *32*(4), 818-834.

Research on the Impact of New Quality Productive Forces on Tourism Economic Resilience

Yi LIN, Lijuan WANG, Xin QI

School of Business Administration, Guangxi University Guangxi Nanning 530004, China

Abstract

Economic resilience is a critical focal point for China to address challenges from both internal and external environmental changes and advance toward high-quality economic development. China's economy has entered a new stage of high-quality development, requiring all economic and social development efforts to center around this core theme. As a strategic pillar industry, tourism must align with the era of high-quality development and shoulder historical responsibilities such as stimulating consumption growth, enhancing public well-being, and optimizing industrial structures.The tourism economic system exhibits a typical dependence on environmental conditions, making it susceptible to natural disasters, financial crises, policy shifts, and public health emergencies. Its sensitivity and vulnerability have become increasingly pronounced. New quality productive forces—a novel form of productivity driven by technological advancement, industrial integration, and innovation—are reshaping industries at an unprecedented pace. Encompassing cutting-edge technologies like information technology, artificial intelligence, big data, and the Internet of Things, as well as sustainable practices such as green, low-carbon, and circular economy principles, these forces inject new vitality and possibilities into tourism. They catalyze systemic transformations in tourism development models, aligning with the intrinsic requirements and overarching direction of high-quality tourism development in China's new era. This paradigm represents the essential pathway for enhancing the resilience of China's tourism economy today.

Through measuring the levels of new quality productive forces and tourism economic resilience in 30 provinces (autonomous regions, municipalities) across China from 2012 to 2022, this study empirically analyzes the impact effects of new quality productive forces on China's tourism economic resilience. The results indicate: Firstly, new quality productive forces exhibit significant positive driving effects on China's tourism economic resilience. This conclusion remains valid after robustness tests including endogeneity tests, addition of control variables, exclusion of special samples, and lagging explanatory variables by one period. Secondly, new quality productive forces influence tourism economic resilience through regional technological innovation, industrial structure upgrading, and human capital enhancement. Thirdly, the impact of new quality productive forces on tourism economic resilience demonstrates regional and structural heterogeneity, showing superior effects in eastern regions compared to central-western areas, with labor objects and production materials exhibiting more prominent promotional roles. Fourthly, new quality productive forces display strong spatial autocorrelation and generate positive spatial spillover effects on tourism economic resilience development in neighboring regions. Based on these findings, policy recommendations are proposed to promote tourism economic resilience through

new quality productive forces, including enriching application scenarios of new quality productive forces and strengthening tourism economic resilience driving mechanisms.

Key words: new quality productivity; tourism economic resilience; industrial structure; regional innovation; human capital

The relationship between human relationship skills and academic performance among international students

Jilian JIANG, Chengxun YANG, Jue WANG

Kyungsung University

Abstract

Human relationship skills may not be widely used in contemporary society, and few researchers have looked deeper at this skill, especially its link with academic performance. This skill goes through everyone's whole life, and we cannot overlook the contribution of this skill to academic performance. At present, many scholars are beginning to recognize its significance in university life, and this study aims to explore how these components affect students' academic performance with quantitative methods. We conducted the study using a sample of international students from the Republic of Korea universities, and we selected a questionnaire about the three components of human relationship skills: intrapersonal skills, interpersonal skills, and leadership skills. Next, we analyzed the data with m-plus and PLS software. The results show that all three factors have a certain impact on international students' academic performance, and the magnitude of the impact depends on the students' level.

Keywords: human relationship skills; quantitative research; international students; intrapersonal skills; interpersonal skills; leadership skills

On Track: An Ethnographic Study of Senior Tourists' Train Travel

Miaomiao SHEN[1], Paola Ossola[2], Yunhan GONG[1], Yan FENG[3]

[1]PhD. candidate, Faculty of Hospitality and Tourism Management,
Macau University of Science and Technology, Avenida Wai Long, Taipa, Macau SAR

[2]Ph.D. Associate Professor, César Ritz Colleges Switzerland, Brig, Switzerland

[3]Ph.D. Assistant Professor, Faculty of Hospitality and Tourism Management,
Macau University of Science and Technology, Avenida Wai Long, Taipa, Macau SAR

Abstract

Due to the aging population, senior tourism has become a growing market and a research focus. However, research studies on senior tourist train travel remain scarce. This research provides an ethnographic investigation of the experiences of elderly Chinese tourists engaged in a group train tour. Utilizing participant observation, field notes, and semi-structured interviews, the study investigates the motivations, barriers, and conspicuous behaviors of senior travelers throughout the travel experience.

The results indicate that the primary motivations for senior travelers include improving mental and physical well-being, escaping from daily routine, socializing, seeking knowledge, and self-rewarding for their hard work. These findings are consistent with previous research (Kim et al., 2015). It is important to note that senior travelers are motivated to choose train travel primarily because it allows them to walk, sit, or lie down while also enjoying the scenic views along the route. Moreover, senior travelers showed strong needs for physical comfort, safety, and group activities. Also, medical preparedness and comprehensive support are central to their sense of security. However, consistent with previous studies, senior travelers are constrained by their health and financial conditions, need for family approval, or caregiving responsibilities at home (Jang & Wu, 2006).

Notably, many participants engaged in conspicuous behavior during the trip, using travel as a means of self-presentation. This included dressing in distinctive attire, sharing photographs, narrating travel experiences that emphasized personal success and physical vitality, and showing off a healthy physical condition and harmonious relationships. Drawing on Goffman's (1959) dramaturgical theory, the conspicuous behaviors of senior travelers can be viewed as a performance focused on self-presentation. This performance serves to reinforce their identities as vibrant and successful individuals, challenging stereotypes about aging.

This research contributes to the literature by offering an understanding of the mobility of senior travelers in China. As China's aging population continues to grow, this study underscores the need for more inclusive tourism practices that address both the physical and psychosocial dimensions of aging.

Keywords: Senior tourism, train travel, ethnography, dramaturgical theory, conspicuous behaviors

Reference

[1] Goffman, E. (1959). The presentation of self in everyday life. Anchor Books.

[2] Jang, S. S., & Wu, C.-M. E. (2006). Seniors' travel motivation and the influential factors: An examination of Taiwanese seniors. Tourism management, 27(2), 306-316.

[3] Kim, H., Woo, E., & Uysal, M. (2015). Tourism experience and quality of life among elderly tourists. Tourism management, 46, 465-476.

Research on Heritage Protection Willingness from the Perspective of User-Generated Content (UGC): A Case Study of Guangxi Zhuang Ethnic Cultural Heritage

Siyu LONG[1], Dimin WANG[2*], Zhixian ZHONG[3]

[1]PhD Candidate, School of Social Science, Western Sydney University, 4/255 Elizabeth St, 2000, Sydney, NSW, Australia

[2]Lecturer, Faculty of Hospitality and Tourism Management, Macau University of Science and Technology, Avenida Wai Long, Taipa, Macau SAR, China

[3]Lecturer, Guangxi University for Nationalities, Xiangsihu College, No. 55 Youyi Road, Jiangnan District, Nanning, Guangxi, China

*Corresponding Email: wangdimin@must.edu.mo; 0000-0003-0339-807X

Abstract

Guangxi Zhuang Autonomous Region, a multi-ethnic region in southwestern China, boasts rich cultural heritage resources represented by the Zhuang ethnic group, including language, festivals, handicrafts, and other elements that form the core appeal of ethnic tourism (Zhang, 2019). The existing studies have predominantly focused on the impact of User-Generated Content (UGC) on destination image, with limited exploration of how UGC influences tourists' willingness to protect cultural heritage (Cox et al., 2009; Del Chiappa et al., 2015). However, this study will use the "Stimulus-Organism-Response" (SOR) as the theoretical framework to explore how UGC serves as an external stimulus impacting tourists' perceptions of a destination's image, satisfaction, and emotional attachment (Su et al., 2020; Yoon, & Seol-Min, 2015; Yuksel et al., 2010). More importantly, this current study delves into the mechanisms by which these factors influence tourists' willingness to protect cultural heritage and their overall loyalty to the destination. To address the void of current literature, the research is going to shed new light of how UGC can influence tourists' heritage protection by taking Guangxi Zhuang ethnic cultural heritage as a case study.

This study aims to: 1) examine whether User-Generated Content (UGC), as an external stimulus can influence tourists' perceptions of destination image, satisfaction, and emotional attachment; 2) investigate how destination image, emotional attachment, and satisfaction may not only directly strengthen the willingness to protect cultural heritage but also indirectly promote sustainable heritage management by reinforcing destination loyalty; 3) provide managerial implications for destinations to promote heritage tourism activities in Guangxi Zhuang Autonomous Region. The research will adopt a mixed-methods approach, combining questionnaire surveys and qualitative analysis, to achieve these objectives.

The study's contribution lies in bridging the theoretical gap in the relationship between UGC and heritage protection willingness, offering new perspectives for digital dissemination and sustainable practices of multi-ethnic cultural heritage. The results of the research would provide insights for heritage site managers and destination marketing organizations to optimize UGC content ecosystems and inspire emotional

resonance among tourists, thereby achieving synergistic coexistence between cultural heritage protection and tourism development.

Keywords: Cultural heritage protection willingness, User-Generated Content, Stimulus-Organism-Response (SOR), Sustainable heritage management

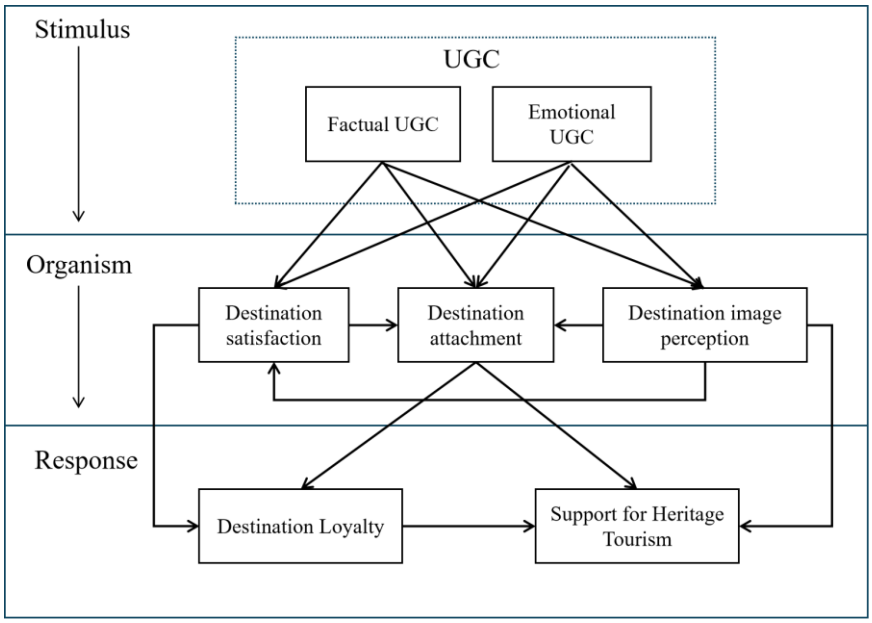


Figure 1. Conceptual Framework

References:

[1] Cox, C., Burgess, S., Sellitto, C., & Buultjens, J.. (2009). The role of user-generated content in tourists' travel planning behavior. Journal of Hospitality Marketing & Management, 18(8), 743-764.
[2] Del Chiappa, G., Lorenzo-Romero, C., & Alarcón-del-Amo, M. D. C. (2015). The influence of user-generated content on tourists' choices. Market-Tržište, 27(2), 221-236.
[3] Su, D. N., Nguyen, N. A. N., Nguyen, Q. N. T., & Tran, T. P. (2020). The link between travel motivation and satisfaction towards a heritage destination: The role of visitor engagement, visitor experience and heritage destination image. Tourism Management Perspectives, 34, 100634.
[4] Yoon, & Seol-Min. (2015). Response of tourist toward authenticity and support of preservation in cultural heritage tourism destination. Korean Journal of Hospitality & Tourism, 24(6), 61-77.
[5] Yuksel, A. , Yuksel, F. , & Bilim, Y. (2010). Destination attachment: effects on customer satisfaction and cognitive, affective and conative loyalty. Tourism Management, 31(2), 274-284.
[6] Zhang, M. L. (2019). Boundaries versus borders: Transforming ethnic cultural representation into place identity through tourism. Tourism Culture & Communication, 19(4), 243-251.

Construction of the Dietary Cultural Gene Pedigree and Tourism Revitalization Pathways for the Huai'an-Yangzhou Section of the Grand Canal

Weiye DING

PHD student, Macau University of Science and Technology

Abstract

1 Background and Significance

The Grand Canal, a UNESCO World Heritage Site, has long served as a vital corridor for cultural and economic exchange in China. The Huai'an-Yangzhou section, historically termed the Huaiyang Canal, is particularly renowned for its culinary heritage, epitomized by Huaiyang Cuisine—a tradition celebrated for its emphasis on seasonal ingredients, meticulous craftsmanship, and aesthetic refinement. Recent academic discourse has increasingly focused on the role of cultural genes in heritage preservation, with scholars such as Liu Peilin pioneering the application of biological gene theory to cultural landscapes, proposing frameworks like "landscape genes" to decode the structural and evolutionary patterns of traditional settlements. In the context of the Grand Canal, studies by Huo Yanhong have further extended this analogy, constructing a DNA-like hierarchical system to categorize canal-related cultural elements, where dietary practices are classified under "lifestyle subsystems." Despite these advances, research on the canal's culinary culture remains fragmented, often limited to historical narratives or technical analyses of cooking methods, while systematic explorations of its intrinsic cultural genes and their role in tourism activation are notably absent. This gap is exacerbated by contemporary challenges, including the erosion of intangible culinary skills, weak brand integration, and the tension between cultural authenticity and commercial exploitation. Addressing these issues, this study employs cultural gene theory as a novel lens to deconstruct the Huaiyang dietary tradition, aiming to establish a holistic gene pedigree and propose actionable strategies for sustainable tourism development.

2 Methodology

The cultural genealogy in this study applies the double helix structure of DNA to deconstruct the Grand Canal dietary culture into a "double chain", and analyzes the basic composition and connotation of cultural genes from the two dimensions of material carrier chain and non-material information chain.

First, LDA thematic model and co-word analysis are adopted to determine the gene recognition framework of the Grand Canal dietary culture. In terms of data sources, official texts released by the government and local historical texts recorded by official media are selected to show the comprehensive content of the history, geography, society and culture of the Grand Canal diet, including the dual characteristics of inheritance and development, so as to dig out the most authentic core of the Huaian-Yangzhou section dietary culture, which is conducive to the construction of cultural pedigree. Data sources include official historical records (e.g., *The Annals of Huaiyang*

Cuisine), intangible cultural heritage archives (745,328 Chinese characters), and user-generated content from social media platforms (31,526 reviews from Red Note and Dianping). Text preprocessing involves format standardization, stop-word filtering, and domain-specific lexicon optimization using Python's Jieba library.

Second, based on the 6W strategy, the tourism activation matrix is constructed to provide scientific guidance and strategies for the marketization behavior of food tourism. In other words, under the formula of activation matrix, the theoretical products of cultural gene pedigree can be transformed into consumable market products from the perspectives of market demand, time node, space carrier, key figures, etc., so as to stimulate the vitality of the tourism market and promote local economic development. This is a useful exploration of the real relationship between the culture and tourism of the Grand Canal.

3 Results and Discussions

Optimal topic numbers in LDA model are determined by minimizing perplexity (lowest at 13 topics) and maximizing coherence (highest at 5 topics), ultimately selecting 5 themes for interpretability. With the help of word cloud analysis, on the premise of clear theme classification standards and principles, this study mainly names each core cultural gene theme by artificial induction method, Based on the distribution of theme words and the significance of genes, five themes are initially designated as follows: basal food ingredient genes, inheritance skill genes, symbolic narrative genes, blending mixed genes, and adaptive variation genes. Among these, the basal food ingredient genes pertain to the material carrier chain, while the inheritance skill genes, symbolic narrative genes, blending mixed genes, and adaptive variation genes correspond to the non-material information chain. Subsequently, the preliminary topic designations are presented to three professors specializing in literature and tourism studies for evaluation, with the aim of validating the correlation between the topic designations and their corresponding lexical items.

According to the results of the LDA topic modeling, the topic keywords in the local text data are subjected to secondary classification. This process leads to the preliminary identification of basal food ingredient genes related to water products, crops, dried goods, and seasonal ingredients. Under the theme of inheritable skill genes, three categories are identified: knife skills, food processing techniques, and mentorship practices. Within the symbolic narrative gene theme, five categories are emerged, encompassing tableware, dining formulas, eating rituals, dining environments, and culinary legends. The blending mixed gene theme include food combinations, taste fusion, and spatial adaptation. Lastly, under the adaptive variation gene theme, two categories including commercial enhancement and environmentally sustainable development are recognized:

In order to ensure the rigor of the research, this study follows the steps of grounded theory and invites a researcher with coding experience and theoretical learning experience to encode all textual data. In the open coding stage, TF-IDF algorithm and ERNIE Bot AI model are used to extract the top 50 key co-words in local text and review text, combining the original data to conceptualize the text initially. Taking the

sub-dimension of gene recognition in topic mining as reference, the concepts of similar nature and content are initially integrated to form 17 categories. Secondly, spindle coding is carried out. Three experts who evaluated the LDA naming results in the topic mining stage are invited to identify each category, and then the categories summarized in the earlier stage are adjusted according to the corresponding results. By comparing and analyzing the potential logic between the 17 initial categories, the 20 categories are finally extracted based on the classification. Specifically, three categories have been added to the coding results, namely "seasoning", "art work" and "intelligent transformation". Finally, through the analysis of the correlation between the categories and the way of layer by layer induction, five theme concepts of basal food ingredient gene, inheritance skill gene, symbolic narrative gene, blending mixed gene and adaptive variation gene are finally extracted.

Through the two stages of topic mining and text coding, this study determines the optimal number of topics, sort out the key common words in the local texts and review texts, and finally successfully identify and extract the food cultural genes of the Huai'an-Yangzhou section of the Grand Canal, and construct a complete genealogy of the dietary cultural genes of the Huai'an-Yangzhou section of the Grand Canal.

4 Tourism Revitalization Pathways: The 6W Matrix Model

Building on the gene pedigree, the study proposes a 6W Revitalization Matrix, which contains what (Cultural Gene), why (Market Demand), when (Time Node), where (Spatial Carrier), who (Key Actor), and way (Strategy), a dynamic framework translating cultural genes into market-ready tourism products.

Market demand is the guiding mechanism and the core driving force of tourism revitalization. By identifying the core demands of different consumers for different genes, as well as the sensitivity of market behaviors such as price signals and competition mechanisms, the subsequent product development direction is determined. For example, for the genes of base food ingredients, the market demand includes: tourists' pursuit of origin certification experience, and parent-child families' desire for natural education.

The selection of time nodes needs to be in line with the timing characteristics of cultural genes, emphasizing timeliness and scene adaptation. The September-November harvest season and the anniversary of the world's gastronomic capital can be key time points for the basal ingredient genes.

The spatial carrier is the physical support and experience field of dietary culture genes, which needs to take into account the authenticity of genes and modern experience needs. For instance, canal farm research bases, such as Huai'an Baima Lake Farm, smart markets, such as Yangzhou Shita vegetable market, or community post stations can become excellent space carriers.

The synergy of key figures determines the landing effect of the revitalization strategy, which generally refers to the cooking skills master and performance team related to the food and beverage activities. As a living carrier of cultural gene inheritance and development, they play a vital role.

5 Conclusions and Implications

By harmonizing innovation with authenticity, this study establishes the first systematic gene pedigree for Huaiyang dietary culture, offering a theoretical framework for safeguarding linear cultural heritage. The 6W matrix bridges academic rigor with industry applicability, providing scalable strategies for global heritage destinations and advancing the dynamic inheritance of the Grand Canal's culinary legacy, serving as a paradigm for cultural-tourism integration worldwide. Future research should prioritize quantitative impact assessments—developing metrics like gene authenticity indices and tourist satisfaction scores—to evaluate commercialization risks. Additionally, spatiotemporal gene diffusion analyses using GIS and evolutionary biology models could map how culinary traditions propagate along the canal.

The drivers of the restaurant circular market system for packaging and food waste: A study of system stakeholders in New Zealand

Sara Naderi KOUPAEI[1*], Paul W. BALLANTINE[2], Lucie OZANNE[1]

[1]Department of Management, Marketing and Tourism, UC Business School, University of Canterbury, Private Bag 4800, Christchurch, New Zealand, 8041

[2]UC Business School, University of Canterbury, Private Bag 4800, Christchurch, New Zealand, 8041

*Corresponding Email: sara.naderikoupaei@canterbury.ac.nz

Abstract

Introduction

This study investigates the sustainable and circular economic (CE) practices in the restaurant and food services sector in New Zealand, an increasingly critical issue due to the rising environmental concerns associated with food production and consumption (Gössling & Hall, 2022). Restaurants are major contributors to food waste and broader environmental degradation, yielding up to 34% of global GHG emissions directly linked to food consumption (Crippa et al., 2021), while according to Restaurants.com (in Efrati, 2022) approximately 40% of food wasted globally each year comes from the sector. However, little current research is available for New Zealand.

In reducing its environmental impacts and contributing to 'green' growth, the restaurant sector faces significant challenges in transitioning from a linear economy, based on the concept of take-make-waste, to a circular economy, in which resource use and waste is minimised and value maximised (Ellen MacArthur Foundation, 2019). Although there is no agreed definition of a circular economy, Geissdoerfer et al. (2017, p.759) integrates several approaches when defining it as: 'a regenerative system in which resource input and waste, emission, and energy leakage are minimised by slowing, closing, and narrowing material and energy loops. This can be achieved through long-lasting design, maintenance, repair, reuse, remanufacturing, refurbishing, and recycling.' However, to be able to function, a circular economy requires a circular market in which market offerings and value are used to increase efficiency of use and, most importantly, close the loop to provide for recycling and reuse to generate value at each exchange (Geissdoerfer et al., 2018). Hopkinson et al. (2020, p.1) highlight the importance of different business models in value creation, yet also stress that there is a need to move from description to a more detailed understanding of 'how value is created and captured from circular economy in different contexts. Circular economy validation requires rapid growth in building a credible research evidence base of successful case examples'.

This study responds to Hopkinson et al's (2020) challenge by examining the drivers of the restaurant circular market system (RCMS) for packaging and food waste in New Zealand. A country with an ambitious commitment to achieve a low-emissions and low-waste society rooted in circular economy principles by 2050 (MFE, 2023).

Literature

The primary focus on waste reduction and the circular economy in the restaurant sector has been on food waste reduction (Gössling & Hall, 2022; Munir, 2022). Nevertheless, while packaging and plastic packaging in particular is often negatively framed in discussions of waste, plastic packaging is also extremely important for reducing food waste (Brennan et al., 2021). Thereby, also highlighting the trade-offs and tension between the developing food and plastics circular markets.

Although there is a growing literature on recycling and other forms of pro-environmental behaviour in a restaurant context, the majority of research is focused on the customer rather than on the business and associated networks in the RCMS (Higgins-Desbiolles et al., 2019). Most literature, even on green or sustainable restaurants, addresses more general environmental or sustainability attitudes rather than focusing on their connection to specific waste, recycling and circular economic and circular market practices (Legrand et al., 2022), even though they have a critical role in food storage and delivery.

The US Green Restaurant Association (2023) estimates that the average restaurant produces 100,000 pounds of garbage a year (over 45 tonnes), while The Food Waste Reduction Alliance (in Efrati, 2022) estimates that only 14.3% of leftover restaurant food is recycled and 1.4% donated, while the remainder (84.3%), is discarded. However, depending on the practices employed and regulatory requirements individual restaurants may vary substantially. For example, Berkeley in California has clear regulations with respect to waste for local food businesses, including mandatory composting, food donations, recycling, and waste disposal (City of Berkeley, 2022). The implications of such institutional pressures are illustrated in Sakaguchi et al's (2018) study of restaurants in the city which found that 84% of the restaurants surveyed composted edible food waste, 72% gave edible food waste to employees, and only 14% of restaurants dump food waste into landfill bins.

There appears to be very little study of the relationship between a restaurant's awareness of plastic pollution and its extent of plastic consumption and recycling and role in circular markets. Expansion in online food delivery platforms have highlighted plastic food packaging use (Li et al., 2021). But little is known of how much restaurant food is packaged this way and how much is recycled or goes to landfill, while growth in online food ordering is expected to continue (Ncube et al., 2021). However, Robinson (2022) in her interview-based thesis of how attitudes and self-directed learning affect the perceived barriers to reducing single-use plastics in Ontario restaurants, found that the most common barriers to improved waste management were cost, lack of time, suppliers and lack of access to resources. Nevertheless, there is little study of the embeddedness of restaurants in the wider food and waste management ecosystem which connects CE stakeholders.

Method

To address these gaps, a mixed-methods approach is adopted, incorporating 16 semi-structured interviews with RCMS actors including restaurant managers, suppliers,

waste managers, and government, and a content analysis of their online marketing materials. The sample for the semi-structured interviews was drawn from different actors that were working directly with restaurants and cafés. The sample was developed via a combination of purposive sampling (i.e. identifying key actors in circular markets) and snowball sampling (i.e., taking the opportunity of personal recommendations from participants to talk to actors in their supply chain and gain access that might not otherwise have been available). Although focussed on the Christchurch region national actors were also interviewed. The interviews were undertaken in December, 2024, and January, 2025, with interviews stopping once saturation was reached. Interviews occurred in respondent's restaurant/office or via zoom or phone call. The interview involved eighteen questions addressing various aspects of restaurant food waste and packaging circular markets and explored the diverse strategies and experiences related to the implementation of circular market and associated sustainability initiatives. The interviews were then subject to thematic analysis.

Results

Several significant perspectives and barriers were identified in the interviews as a result of thematic analysis. The main themes were *contestation, communication, local and regional drivers, knowledge/awareness,* and *values*. Each theme comprised several sub-themes which provide deeper understanding of their responses. For example, *role of government, tactics, incentives, cooperation, infrastructure, short supply-chain,* and *system* are some of the sub-themes that are raised.

The findings from the theme of contestation, revealed a range of opinions on the government's role. Strict regulations related to food safety and composting are recognized as a significant barrier to the implementation of sustainable practices. For example, "We can reduce food waste more just with changes in legislation and best before dates and expiry dates, it genuinely helps people, especially products that canned products, and if they're damaged as well, they might be damaged and so supermarket can't sell something that's damaged, but it's perfectly fine to eat" (Interviewee 3). While the food and waste system characteristics were raised as another problem. Interviewee 10 stated that "Having a system in place that allows for food waste to be collected or composted at a central location would definitely be a fantastic idea." He also emphasized that a good system requires interconnection, much like natural ecosystems. "There isn't just an input and an output with no other connection; everything is interconnected, and it's that diversity that creates a resilient system." This perspective underscores the desire of some actors to reimagine the restaurant market system.

The second theme is *communication* which plays a vital role in optimizing relationships and processes between and within businesses. Interviewee 11 claimed, "The key thing is like consistent and consistent and high quality communication with your producers. It enable us to understand what you need on a week by week basis, you can understand what's in season, when it's available, when it's of the greatest quality, understand what excesses producers have, how they can adjust their menus to suit". Interviewee 8 noted "We would be able to see circular things, like people buying their vegetables from someone collecting the waste, and that goes back to the same garden to be composted.

So, it becomes a nice circular economy". Therefore, strong cooperation and deep communication among local stakeholders were regarded as essential for building a RCMS, and potentially fostering a better food system.

The third theme focuses on the role of *local and regional* factors as drivers that either facilitate or complicate stakeholder operations. It described how regional characteristics, such as local policies, infrastructure, access to suppliers, and community and local government attitudes, significantly impact how stakeholders implement their practices and strategies. For example, Interviewee 9 claimed, "Once it becomes waste, what do you do with it?… The problem is that once you have waste, food waste particularly, what you can do with it depends on where you are in New Zealand and whether your region has those services or not". Unused food items are a significant waste issue. Interviewee 3 views the community as an essential "piece of the puzzle" that can significantly contribute to solving food waste issues by connecting restaurants with their community This perspective is reinforced by Interviewee 13: "Our businesses need to be involved in our wider community." She believed that engaging with the community allows businesses to better understand food needs, fostering a more responsive and sustainable food system. Interesting, some saw this as a function of geography. Interviewee 6 described New Zealanders as "lucky" for living in a "small country" which they regarded as not only facilitating easy access to fresh, locally-grown produce but also enhancing food system sustainability,

Values emerged from responses related to both personal and organizational perspectives, particularly concerning environmental sustainability. While cost is recognized as a barrier that leads some to prioritize financial profit over their values, it was widely believed that those who are genuinely committed to environmentally friendly practices consistently seek ways to benefit both the environment and their business. Interviewee 4 believed that "It's a very challenging task. It cannot be circular unless you put materials and energy to it, and putting that materials and energy, it has got a cost, so that's why recycled products are generally more expensive than virgin materials". As a result, businesses may hesitate to adopt circular practices due to financial constraints. Nevertheless, Interviewee 11 emphasized "There's not a lot of money in our business and I wouldn't be doing what I'm doing if it wasn't for kind of a passion for social and environmental kind of improved outcomes".

The final theme, *knowledge and awareness*, encompasses discussions on the strategies businesses employ in procurement, design, and processes related to waste. This theme highlights the importance of understanding and awareness in guiding effective practices and decision-making within and between organizations because lack of knowledge can lead to inefficient practices, missed opportunities, and poor implementation. According to Interviewee 7, "lots of people don't have any awareness of what happens to food waste once it goes in the bin." Interviewee 5 asserted, "I think the food waste hierarchy should be rewritten to place the word reconnect even before reuse. [Because by] understanding where our food comes from, we can prevent waste from being created in the first place. It's the only way that will create genuine transformation". This perspective emphasizes the importance of having a comprehensive understanding of the entire RCMS. This means, according to respondents, that a lack of awareness about

design, whether in menus or restaurant layout, can negatively affect both waste generation and business efficiency. As interviewee 16 observed, “If you don't have enough space to separate your food waste, or it hasn't been adequately designed, no matter what processes you put in place, it's not going to work… right from the outset”.

Discussion and Conclusion

This empirical study demonstrates that sustainability and the development of a circular economy cannot rest solely on the shoulders of the consumer; rather, it must be integrated across the entire value chain (Wee et al., 2021). As such, this study clearly reflects Hopkinson et al’s (2020, p.1) observation that ‘Circular value creation is… an inherently boundary spanning activity – requiring cross functional teams and new or enhanced forms of external collaboration and system configurations’. This research highlights that stakeholders in RCMS face significant challenges in implementing effective practices because of not only having different perspectives but also from their respective positions in the food and waste system. The transition from a linear economy to circular one is a complex process that requires strong support from government and stakeholders across multiple levels. Respondents highlighted the importance of clear and consistent strategies and regulations that promote circular practices, infrastructure provision, education, and financial incentives, as key mechanisms that enable businesses to better participate in circular initiatives.

Short distances between suppliers and businesses were found to increase local purchasing thereby reducing transportation emissions and supporting the local economy. Informants noted that in many cases, a single phone call suffices to connect with suppliers, especially in rural areas. Furthermore, limited reliance on imported products encourages restaurants to focus on utilizing local resources and minimizing waste. Nevertheless, physical closeness between stakeholders is insufficient as lack of awareness and weak communication among actors was also recognized as key challenges in implementing circular practices.

The role and support of government in terms of appropriate food safety and waste regulations, especially composting, was also regarded as critical for promoting sustainable practices as was infrastructure provision . Similarly, improved education and levels of knowledge regarding the benefits of sustainable practices and various waste strategies is seen as helping restaurants and other stakeholders understand the long-term financial and other advantages of waste reduction, resource conservation, and community engagement while empowering stakeholders to connect and take action. As such, from a practices approach, the research highlights the issues involved in shifting individuals and businesses in the RCMS from being aware of an issue (Wellton & Lainpelto, 2021), to being capable of making change (Hall, 2016).

Finally, the results highlight the multi-scaled and overlapping nature of circular market systems and the different ways in which they are framed by stakeholders (Gössling & Hall, 2022), a situation which clearly influences the interaction of different stakeholders and their value drivers and difficulties in developing RCMS.

Looking forward, these findings can guide further research in different contexts, enriching the understanding of pathways toward a truly sustainable culinary system.

This research highlights that in trying to improve restaurant sustainability there is a need to understand stakeholders and their interaction in the wider market, not just what restaurants or their customers do, as important as that is. Ultimately, such research will help foster a more resilient and environmentally responsible RCMS that benefits all stakeholders involved.

References

[1] Brennan, L., Langley, S., Verghese, K., Lockrey, S., Ryder, M., Francis, C., ... & Hill, A. (2021). The role of packaging in fighting food waste: A systematised review of consumer perceptions of packaging. *Journal of Cleaner Production*, *281*, 125276. https://doi.org/10.1016/j.jclepro.2020.125276

[2] City of Berkeley (2022). *Environmental regulations & resources for berkeley food businesses*, https://berkeleyca.gov/sites/default/files/2022-01/Food-Business-Environmental-Regulations.pdf

[3] Crippa, M., Solazzo, E., Guizzardi, D., Monforti-Ferrario, F., Tubiello, F.N., & Leip, A.J.N.F. (2021). Food systems are responsible for a third of global anthropogenic GHG emissions. *Nature Food*, *2*(3), 198-209. https://doi.org/10.1038/s43016-021-00225-9

[4] Efrati, O. (2022). An environmentally friendly strategy to reduce restaurant costs. *Modern Restaurant Management*, 10 June, https://modernrestaurantmanagement.com/an-environmentally-friendly-strategy-to-reduce-restaurant-costs/

[5] Ellen MacArthur Foundation. (2019). *Circular economy in cities.* Ellen MacArthur Foundation.

[6] Geissdoerfer, M., Savaget, P., Bocken, N.M., & Hultink, E.J. (2017). The Circular Economy–A new sustainability paradigm? *Journal of Cleaner Production*, *143*, 757-768. https://doi.org/10.1016/j.jclepro.2016.12.048

[7] Geissdoerfer, M., Morioka, S.N., de Carvalho, M.M., & Evans, S. (2018). Business models and supply chains for the circular economy. *Journal of Cleaner Production*, *190*, 712-721. https://doi.org/10.1016/j.jclepro.2018.04.159

[8] Gössling, S., & Hall, C.M. (2022). *The sustainable chef*. Routledge.

[9] Green Restaurant Association (2023). *Waste reduction & recycling. Key facts*. https://www.dinegreen.com/waste

[10] Hall, C.M. (2016). Intervening in academic interventions: framing social marketing's potential for successful sustainable tourism behavioural change. *Journal of Sustainable Tourism*, *24*(3), 350-375. https://doi.org/10.1080/09669582.2015.1088861

[11] Higgins-Desbiolles, F., Moskwa, E., & Wijesinghe, G. (2019). How sustainable is sustainable hospitality research? A review of sustainable restaurant literature from 1991 to 2015. *Current Issues in Tourism*, *22*(13), 1551-1580. https://doi.org/10.1080/13683500.2017.1383368

[12] Hopkinson, P., De Angelis, R., & Zils, M. (2020). Systemic building blocks for creating and capturing value from circular economy. *Resources, Conservation and Recycling*, *155*, 104672. https://doi.org/10.1016/j.resconrec.2019.104672

[13] Legrand, W., Chen, J.S., & Laeis, G.C. (2022). *Sustainability in the hospitality industry: Principles of sustainable operations*. Taylor & Francis.

[14] Li, K., Chen, Y., Liu, J., Zhang, L., & Mu, X. (2021). Online food delivery platforms and restaurants' interactions in the context of the ban on using single-use plastics. *IEEE Access*, *9*, 96210-96220. https://doi.org/10.1109/ACCESS.2021.3095296

[15] Ministry for the Environment (MFE). (2023). *Te rautaki para | Waste strategy*. MFE.

[16] Munir, K. (2022). Sustainable food waste management strategies by applying practice theory in hospitality and food services-a systematic literature review. *Journal of Cleaner Production*, *331*, 129991. https://doi.org/10.1016/j.jclepro.2021.129991

[17] Ncube, L.K., Ude, A.U., Ogunmuyiwa, E.N., Zulkifli, R., & Beas, I.N. (2021). An overview of plastic waste generation and management in food packaging industries. *Recycling*, *6*(1), 12. https://doi.org/10.3390/recycling6010012

[18] Robinson, E. (2022). *Identifying how Attitudes and Self-Directed Learning affect the Perceived Barriers to reducing Single-Use Plastics in the Back-of-House of Ontario Restaurants* (Doctoral dissertation, University of Guelph).

[19] Sakaguchi, L., Pak, N., & Potts, M.D. (2018). Tackling the issue of food waste in restaurants: Options for measurement method, reduction and behavioral change. *Journal of Cleaner Production, 180*, 430–436. https://doi.org/10.1016/j.jclepro.2017.12.136

[20] Wee, S.C., Choong, W.W., & Low, S.T. (2021). Can "nudging" play a role to promote pro-environmental behaviour? *Environmental Challenges*, *5*(5), 10-36. https://doi.org/10.1016/j.envc.2021.100364

[21] Wellton, L., & Lainpelto, J. (2021). The intertwinement of professional knowledge culture, leadership practices and sustainability in the restaurant industry. *Scandinavian Journal of Hospitality and Tourism*, *21*(5), 550-566. https://doi.org/10.1080/15022250.2021.1977177

Technology-empowered ICH Performances: A Study of Generational Differences in Tourists Experience and Cultura Identity -- A Case study on *Macau 2049*

Yue LI , Yingan HUO

Faculty of Hospitality and Tourism Management, Macau University of Science and Technology, Avenida Wai Long, Taipa, Macau SAR

Abstract

1.Introduction

Intangible Cultural Heritage (ICH) represents the shared cultural wealth of humanity, and its living protection and display are crucial aspects of contemporary cultural heritage management. With the rapid advancement of modern technology, the methods of ICH displaying have undergone significant changes, which directly influence the quality of tourists' experiences and their sense of cultural identity. By integrating the theory of flow experience with the Stimulus-Organism-Response (S-O-R) framework, this study compares traditional and Technology-empowered forms of ICH performances, using the show *Macau 2049*, directed by Zhang Yimou, as a case example. The findings of this study provide a scientific basis for designing more engaging ICH experience programs in tourism destinations and facilitate the deeper integration of ICH protection with the cultural tourism industry.

2. Research Background and Literature review

2.1 Current situation of protection and inheritance of ICH

As a precious gem of human civilization, ICH has garnered worldwide attention for its protection and transmission. However, some studies have shown that traditional channels for disseminating ICH performances are often limited in variety, with emotional resonance largely contingent upon the inherent appeal of the ICH itself. This approach faces significant challenges in engaging the younger generation, necessitating the exploration of innovative methods for heritage transmission. For example, Liu and Li (2022) demonstrate that 80% of young audiences perceive traditional formats as lacking interactivity, while Zhang and Liao's (2023) eye-tracking experiments reveal dramatically shorter attention spans (2.3 minutes) during non-digital performances.

In contemporary times, the application of technology in the cultural domain has expanded rapidly. Advanced technologies such as Virtual Reality (VR) and Augmented Reality (AR) have revolutionized traditional performance formats. By transcending temporal and spatial constraints, these technologies offer novel pathways for the innovative dissemination of ICH, therebyreinvigorating its appeal and reach. For example, Koukopoulos and Koukopoulos (2023) establish a theoretical framework for 'beyond-space' heritage exhibition through mixed reality, addressing the physical limitations of traditional displays; Yang et al. (2022) provide empirical evidence that VR-enabled interactive puppetry performances significantly improve comprehension among international audiences (from 18% to 73%), showcasing technology's role in bridging cultural gaps.

2.2 Changes in display methods

Previous research has explored the integration of technology and cultural expression. For instance, Wang et al. (2024) demonstrated that displaying paintings in Virtual Reality (VR) environments in museums significantly enhances tourists' flow experience compared to traditional photographic displays. Similarly, Fan et al. (2022) found that Technology-empowered ICH performances can deepen tourists' emotional resonance through multi-sensory stimulation.

Macau 2049 serves as a prime example of combining ICH with cutting-edge technology. This innovative show leverages advanced technologies such as remote-controlled robotic arms, AI image production, and bionic flying machines to present ICH elements like Northwest Hua'er, Inner Mongolian Huma, and ancient Miao songs. These technological enhancements not only provide an immersive experience for tourists but also foster a deeper cultural identity and strengthen Macau's appeal as an international cultural tourism destination.

However, whether performances that integrate technology and ICH are more appealing to modern audiences, and how this affects performers of different ages, remains an open question requiring further investigation.

2.3. Flow experience

Flow experiences describes a psychological state where an individual is completely immersed in an activity, experiencing a profound sense of pleasure and fulfillment (Csikszentmihalyi, 1990). In the context of tourism and cultural experiences, flow experience has emerged as a crucial factor in enhancing tourist satisfaction and loyalty (Novak et al., 2000). Empirical studies have consistently demonstrated its positive impact on behavioral intentions (DeMatos et al., 2021).

Flow experience also holds significant importance in cultural consumption. For instance, the interactivity inherent in Virtual Reality (VR) technology has been shown to significantly enhance flow experience (Han et al., 2020). In the realm of ICH performances, flow experience may similarly influence tourists' evaluations of the performance and their sense of cultural identity. By fostering a deeper level of engagement, flow experience can potentially strengthen tourists' connection to and appreciation of ICH.

2.4. Stimulus-organism-response (S-O-R) framework

The Stimulus-Organism-Response (S-O-R) framework, proposed by Mehrabian and Russell in 1974, is a psychological model that elucidates how external stimuli influence behavioral responses by shaping an individual's mental state. This framework has been extensively validatedin tourism behaviorresearch, demonstrating its applicability and robustness in this domain (Nie et al., 2022). Zhang and Xu (2020) effectively utilized the S-O-R framework to explore the concept of "esthetic experience" and its profound impact on tourist loyalty.

In the context of ICH performances, the Stimulus-Organism-Response (S-O-R) framework can be understood as a continuous and interconnected process. The stimulus fperformers, which primarily include the content of the performance, its expressive form, and the stage technology employed, act as external triggers that initiate the

experience. These elements directly influence the organism fperformers, which involve the tourists' cognitive and emotional responses. These internal mental states, in turn, mediate the impact of the external stimuli on the tourists. Finally, the response fperformers, reflected in the tourists' attitudes and behaviors towards the ICH performance, determine the success of the performance in engaging and influencing the audience. By applying the S-O-R framework, researchers and practitioners can gain a comprehensive understanding of how ICH performances can be optimized to enhance tourist engagement and foster a deeper connection with cultural heritage.Park and Kim's (2021) foundational comparison of AR versus physical performances established stimulus-type moderation effects, which Chen et al. (2023) later expanded by mapping granular cognitive pathways in virtual transmission scenarios through eye-tracking and EEG measurements.

3. Hypotheses Development

3.1. Relationship between Display Method and Flow Experience

Media Richness Theory (MRT) posits that various forms of communication can be evaluated based on their capacity to effectively convey understanding to others (M. Lee et al., 2020). Drawing on this theoretical foundation, this study asserts that different display methods can significantly influence tourism experiences. Prior research has consistently demonstrated that integrating traditional culture with technology can enhance tourists' immersive experiences. For instance, in theatrical performances, the use of advanced technologies such as holographic projection has been shown to immerse the audience more deeply, thereby significantly enriching their overall experience (Miller & Davis, 2020). Therefore, we present the following hypothesis:

H1: *Technology-empowered display methods provides tourists with a more authentic and immersive experience compared to original ICH display methods.*

3.2. Relationship between Display Method and Intention to Recommend

In the realm of tourism research, comprehending tourists' behavioral intentions is pivotal for the advancement of both tourism destinations and businesses. Specifically, tourists' intentions to recommend a destination—representing positive word-of-mouth communication—can profoundly influence the travel decisions of prospective tourists, thereby playing a crucial role in the sustainable development of tourism destinations (Rasoolimanesh et al., 2021).

Flow experience, characterized by deep engagement and emotional resonance, enables tourists to form unique and memorable experiences. These experiences often serve as powerful motivators for word-of-mouth communication. As highlighted by Li & Petrick (2023), in immersive folk cultural performances, tourists are fully engaged and deeply resonate with theperformance content. This profound experience compels them to share their stories with others, hoping to inspire similar beautiful experiences.

Therefore, this study posits that compared to traditional ICH display methods, the technology-empowered display method offers a richer sensory experience, thereby increasing tourists' intention to recommend. Thus, we state:

H2: *Technology-empowered display methods generates a stronger intention to recommend compared to original ICH displays.*

3.3. Relationship between Flow Experience and Intention to Recommend

Numerous scholars have investigated the impact of flow experience on the intention to recommend. For instance, in the context of performance tourism, flow experience has been shown to significantly enhance tourists' intention to recommend the performance (Zhang et al., 2021). Similarly, in the domain of mobile fitness apps, when users enter a flow state while using the app, they are more likely to recommend it to others (Ashrafi et al., 2024). These studies consistently demonstrate that flow experience has a significant positive direct effect on the intention to recommend.

Drawing on these findings, this study hypothesizes that in the context of ICH display methods, flow experience will positively influence tourists' appreciation of *Macau 2049*, thereby increasing their willingness to recommend it. Based on the previous analysis, we propose that:

H3: *Flow experience positively influences tourists'intention to recommend.*

3.4. Mediating effects of Flow Experience

In recent years, there has been a growing body of research demonstrating the mediating role of flow experience in tourist behavior. Kim and Hall (2019) argued that flow experience mediates the relationship between tourist perception, intention to continue using a service, and subjective well-being. Similarly, Wang et al. (2022) found that flow experience indirectly influences tourists' intentions to revisit and recommend a destination by enhancing their sense of engagement and immersion.

A review of the literature reveals that flow experience is frequently employed as a mediating variable to explain various aspects of tourist behavior. Given its established role in influencing tourists' willingness to visit and recommend, it is reasonable to hypothesize that flow experience can also explain the relationship between display methods and intention to recommend in the context of ICH performances. Therefore, the following hypothesis was proposed:

H4: *Flow experience mediates the relationship between display method and intention to recommend.*

3.5 Moderating effects of Performers'Age

The Technology Acceptance Model (TAM) identifies age as a pivotal factor influencing intentions to use technology (Venkatesh & Davis, 2000). The age of 35 is often regarded as acritical threshold in technology acceptance. Individuals aged 35 and below, particularly those between 18 and 35, are commonly referred to as "digital natives" or "millennials." Having grown up during a period of rapid Internet and technological advancement, they generally exhibit a higher degree of acceptance towards new technologies (Huang et al., 2023). In contrast, individuals aged above 35 are considered "digital immigrants," who may face certain barriers in accepting and using new technologies, this could, in turn, affect their receptiveness to ICH performances that incorporate technology (Leifer et al., 2021).

In the field of acting, scholars have also investigated the mechanisms by which age affects the presentation of high-tech elements. For example, Zettl (2020) explains why older performers experience more difficulties in virtual productions from the perspective of cognitive load.Czaja et al.'s (2019) study also suggests that cognitive and motivational fperformers play an important role in the adoption of technology by older adults. From this, it can be hypothesized that there are significant differences in the effectiveness of presenting high-tech elements by performers of different ages: performers under the age of 35 may be more familiar with the new technology, learn quickly, and naturally integrate into high-tech scenes (e.g., interacting with AI, using smart devices); in contrast, performers over the age of 35 may need more time to adapt to the new technology, are more inclined to use the high-tech as a narrative tool than as a presentation focus, and performances are more Emotional delivery. Based on the previous analysis, we propose that:

H5: *Performers' age moderates the relationship between ICH display methods and tourists' intention to recommend.*

H6: *Performers' age moderates the mediating effect of flow experience on the relationship between ICH display methods and intention to recommend.*

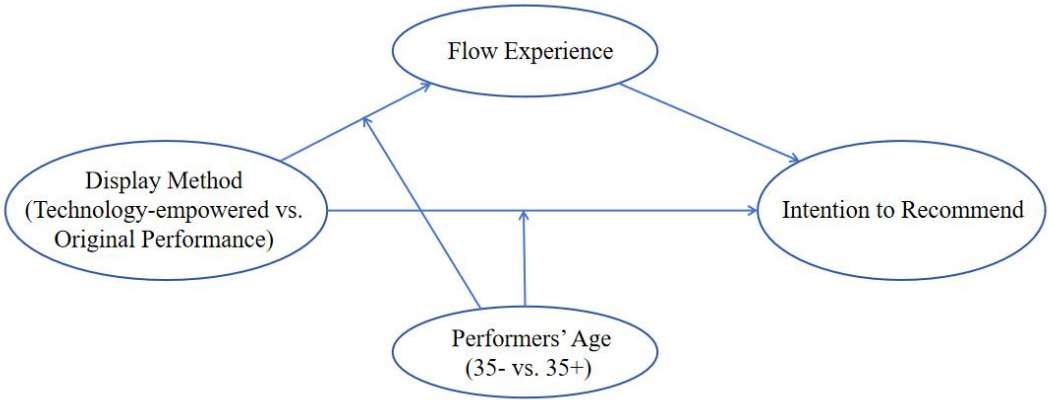


Figure 1. Conceptual model

4. Research Methods

This study will employ a 2 (display method: technology-empowered vs. original performance) × 2 (performers' age: 35- vs. 35+) between-groups experimental design to control for variables and test interaction effects. This study will be conducted by distributing the questionnaire through online channels and recruiting a wide range of participants with different demographic characteristics. This study will utilize an image-based experimental approach. In the beginningpart of the questionnaire, each participant will view several sets of control group experimental images, such as images of the Lion Dance with holographic projection from *Macau 2049* and compared them with images of traditional Lion Dance performances in ancient towns in southern China; as well as images of performers over and under the age of 35. The questionnaire results will be analyzed to assess the participants' flow experience and their intention to appreciate and recognize ICH.

5. Significance

This study seeks to uncover the mechanisms through which technology supports the inheritance of ICH and the potential value of integrating technology with ICH in tourism market segmentation. By examining the extent to which different age groups influence Technology-empowered ICH performances, this research offers strategic insights based on generational differences for the technological transformation of ICH performances. These insights will aid in developing more targeted and appealing cultural tourism products.

The findings of this study will provide decision-making support for relevant organizations to allocate resources more effectively. This, in turn, will promote the deep integration of ICH and tourism, contributing to the high-quality and sustainable development of the culture and tourism industry

References

[1] Ashrafi, D. M., Mone, F. H., Zabeen, M., Sarker, M. A. R., & Shahid, T. (2024). What drives users to recommend mobile fitness apps? A three-stage analysis using PLS-SEM, machine learning, and fsQCA. *International Journal of Human–Computer Interaction*.

[2] Chen, H., et al. (2023). From Live to Digital: Reconstructing S-O-R Pathways for Intangible Heritage Performance. *International Journal of Information Management, 68*, 102592.

[3] Choi, D., & Kim, J. (2004). Why people continue to play online games: In search of critical design fperformers to increase customer loyalty to online contents. *CyberPsychology & Behavior, 7*(1), 11-24.

[4] Csikszentmihalyi, M. (1990). *Flow: The psychology of optimal experience*. Harper and Row.

[5] Czaja, S. J., et al. (2019). Older adults and technology adoption: The role of cognitive and motivational fperformers. *Journals of Gerontology: Psychological Sciences, 74*(5), 815-823.

[6] DeMatos, N. M. D. S., Sá, E. S. D., & Duarte, P. A. D. O. (2021). A review and extension of the flow experience concept: Insights and directions for tourism research. *Tourism Management Perspectives, 38*, 100802.

[7] Fan, X., Jiang, X., & Deng, N. (2022). Immersive technology: A meta-analysis of augmented/virtual reality applications and their impact on tourism experience. *TourismManagement, 91*, 104534.

[8] Han, S. L., An, M., Han, J. J., & Lee, J. (2020). Telepresence, time distortion, and consumer traits of virtual reality shopping. *Journal of Business Research, 118*, 311–320.

[9] Huang, Y. C., Li, L. N., Lee, H. Y., Browning, M. H. E. M., & Yu, C. P. (2023). Surfing in virtual reality: An application of extended technology acceptance model with flow theory. *Computers in Human Behavior Reports, 9*, 100252.

[10] Kim, M. J., & Hall, C. M. (2019). A hedonic motivation model in virtual reality tourism: Comparing tourists and non-tourists. *International Journal of Information Management, 46*, 236–249.

[11] Koukopoulos, Z., & Koukopoulos, D. (2023). Mixed Reality for Intangible Heritage: A Framework for Beyond-Space Exhibition Design. *Digital Applications in Archaeology and Cultural Heritage, 29*, e00268.

[12] Leifer, E. S., Troendle, J. F., Kolecki, A., & Follmann, D. A. (2021). Joint test of overall and simple effects in a 2×2 factorial trial. *Clinical Trials, 18*(4), 345–354.

[13] Li, Y., & Petrick, J. F. (2023). Understanding the relationship between flow experience, satisfaction, and behavioral intentions in dark tourism. *Tourism Management Perspectives, 46*, 100978.

[14] Liu, Y., & Li, M. (2022). The Crisis of Intangible Cultural Heritage Transmission in the Digital Age: A Generational Perspective. *Sustainability*, *14*(3), 1356.

[15] Miller, R., & Davis, B. (2020). Immersive theatre and the induction of flow state in audience experience. *Studies in Theatre and Performance*, *40*(3), 277 - 290.

[16] Mehrabian, A., & Russell, J. A. (1974). *An approach to environmental psychology*. The MIT Press.

[17] Nie, Z., Xu, L., Zhang, H., Cao, Y., Zhang, C., Pan, J., & Zhang, J. (2022). Crowding and vaccination: Tourist's two sided perception on crowding and the moderating effect of vaccination status during COVID-19 pandemic. *Journal of Destination Marketing & Management, 24*, 100705.

[18] Novak, T. P., Hoffman, D. L., & Yung, Y. F. (2000). Measuring the customer experience in online environments: A structural modeling approach. *Marketing Science*, *19*(1), 22–42.

[19] Park, S., & Kim, J. (2021). Augmented Reality vs. Reality in ICH Experiences: A Comparative S-O-R Analysis. *Tourism Management, 86*, 104343.

[20] Rasoolimanesh, S. M., Khoo-Lattimore, C., Md Noor, S., Jaafar, M., & Konar, R. (2021). Tourist engagement and loyalty: Gender matters? *Current Issues in Tourism*, *24*(6), 871–885.

[21] Venkatesh, V., & Davis, F. D. (2000). A theoretical extension of the technology acceptance model: Four longitudinal field studies. *Management Science*, *46*(2), 186–204.

[22] Wang, C., Wu, G., Zhou, X., & Lv, Y. (2022). An empirical study of the fperformers influencing user behavior of fitness software in college students based on UTAUT. *Sustainability, 14*(15), 9720.

[23] Wang, J., Sun, Y., Zhang, L., Zhang, S., Feng, L., & Morrison, A. M. (2024). Effect of display methods on intentions to use virtual reality in museum tourism. *Journal of Travel Research, 63*(2), 314-334.

[24] Yang, X., et al. (2022). VR-Enabled Cross-Cultural Transmission of Chinese Shadow Puppetry. *Journal on Computing and Cultural Heritage*, *15*(3), 1-24.

[25] Zettl, H. (2020). Why older performers struggle with virtual production: A cognitive load perspective. *Journal of Film and Video, 72*(3), 45-60.

[26] Zhang, Q., & Xu, H. (2020). Understanding aesthetic experiences in nature-based tourism: The important role of tourists' literary associations. *Journal of Destination Marketing & Management*, *16*, 100429.

[27] Zhang, Q., Liu, X., Li, Z., & Tan, Z. (2021). Multi-experiences in the art performance tourism: Integrating experience economy model with flow theory. *Journal of Travel & Tourism Marketing, 38*(5), 491-510.

[28] Zhang, X., & Liao, J. (2023). Emotional Disconnection: Why Young Audiences Ignore Traditional Cultural Performances. *Journal of Cultural Heritage Management and Sustainable Development.* [Early Access]

The use of AI driven by customer personality traits and skills the perspective of Big Five personality

Aria Rui Han WANG[1], Songhong CHEN[2*]

[1]Faculty of Hospitality and Tourism Management, Macau University of Science and Technology, Taipa, Macau

2Assistant Professor, Faculty of Hospitality and Tourism Management, Macau University of Science and
Technology, Taipa, Macau

*Corresponding Email: shchen@must.edu.mo

Abstract

1. Introduction

With the rapid development of artificial intelligence (AI) in the tourism, medical, and education industries, customers are increasingly interacting with AI systems. Customer satisfaction and loyalty when using AI have become important indicators for evaluating the success of AI systems (Singh et al., 2024). In recent years, researchers have begun to pay attention to the impact of customer characteristics on human-computer interaction (Ameen et al., 2020). In addition, the skills that customers possess also play an important role in human-computer interaction. For example, customer problem-solving ability can improve the overall experience of solutions by affecting the customer's problem response during the use of AI (Jonassen, 2000). On the other hand, good communication skills can help customers express their needs clearly (Adler & Rodman, 2006). The interaction between these skills will have a significant impact on the customer's experience when using AI.

This study aims to explore how neuroticism affects customer satisfaction and customer loyalty by affecting the user's own problem-solving ability and communication skills. The study collected data through a questionnaire survey and analyzed it using the PLS-SEM analysis method. At the same time, the research also provides a theoretical basis and guidance for the industry to optimize artificial intelligence systems, design artificial intelligence that suits the user's characteristics, etc.

2. Literature review

2.1. The Big Five Personality Theory

The Big Five personality theory was proposed by American psychologists Paul Kosta and Robert Markley. After years of research and validation, the Big Five personality traits into five dimensions, namely Neuroticism, Extraversion, Openness, Agreeableness and Conscientiousness. Neuroticism is a broad dimension of normal personality characterized by confidence and poise at the high end and by a propensity to experience chronic negative emotions at the low end (dysphoria) (BURT's, 1998). Individuals high in neuroticism withdraw and inhibit behavior when faced with

stimulation (DeYoung et al., Citation 2007), tend to resist new changes and are less receptive to them (Barnett et al., Citation 2015). Neurotic patients show stronger preferences for human clinicians over AI diagnostics due to heightened distrust of automated systems (Longoni et al., 2019)

H1: Neurotic customers have a negative impact on their problem-solving abilities.

H2: Neurotic customers have a negative impact on their communication skills.

2.2. Problem-solving ability

Problem-solving ability are defined as a person's ability to effectively analyze, explore and solve problems when faced with difficult issues, dilemmas, or challenges. Effective problem-solving ability enhances the customer experience and has a direct impact on customer satisfaction (Kwortnik and Thompson, 2009) and loyalty. Emotionally stable customers are better at solving problems in negative situations, and a positive coping attitude can improve the efficiency of interaction with artificial intelligence; while neurotic users are more likely to take negative coping measures when dealing with problems.

2.3. Communication skills

Users' own communication skills have an impact on their interactions with AI. Research shows that customers with strong communication skills are more likely to express their questions clearly (Trainor et al., 2014), allowing AI systems to provide more accurate and relevant responses. A study by Gursoy et al. (2019) found that customers who can clearly express their preferences and concerns are also more likely to receive positive outcomes in service interactions.

2.4. Customer satisfaction

Customer satisfaction is defined as a feeling generated by the consumption or use of goods or services (Oliver, 1980). When scholars such as Mustafa (2012) believe that customers are satisfied with products or services that meet their requirements, needs or expectations and have an impact on the image of the organization, it is customer satisfaction. The five personality traits have different effects on customer satisfaction. For example, in the study of the hotel industry, extraversion, agreeableness, and neuroticism were found to significantly affect customer satisfaction (Jani & Han, 2014); agreeableness and openness are considered to have a positive impact on customer satisfaction, while extraversion may have a negative impact on satisfaction (Leon & Dixon, 2023).

H3: Customer problem-solving ability have a positive impact on customer satisfaction when using AI.

H4: Customers' communication skills have a positive impact on customer satisfaction when using AI.

2.5. Customer loyalty

Customer loyalty is often viewed as a direct result of customer satisfaction, reflecting a customer's commitment to repurchase or use a service or product based on a positive experience. Research has shown that some of the Big Five personality traits have a significant impact on customer loyalty. For example, extraversion, agreeableness, and openness were found to have a positive impact on customer loyalty. On Indonesian e-commerce platforms, these traits, along with customer trust, have been shown to

enhance customer loyalty (Azzahra et al., 2024). In addition, in research on the airline industry, openness and agreeableness were also found to have a positive impact on behavioral intention loyalty (Leon & Dixon, 2023). In research on the hotel industry, Jani et al. (2015) found that extraversion, openness, and agreeableness can mediate the impact of the hotel atmosphere on customer emotions and loyalty.

H5： Customer satisfaction has a positive impact on customer loyalty

3. Research Methods

3.1. Measures

Based on the above hypothesised relationships, this study uses structural equation modelling to examine the interrelationships between neuroticism, communication skills, problem-solving ability, customer satisfaction, and customer loyalty. The proposed research model is shown in Figure 1.

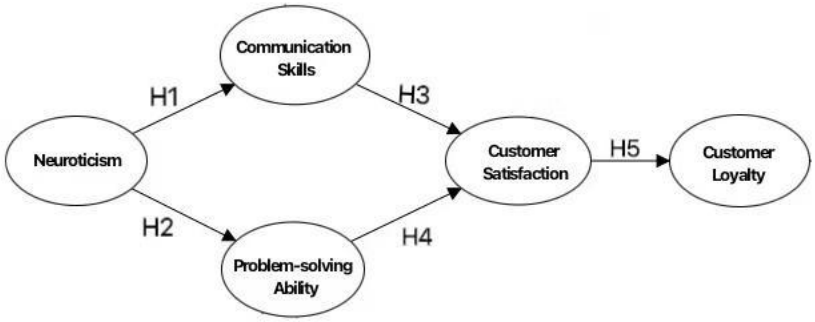


Fig 1. Research model

3.2. Sample and procedures

The data for this study were obtained from China. The questionnaire consists of three parts. The first part is a screening question that asks respondents how often they use Ctrip Ask AI. The second part consists of 18 questions covering the five constructs of the proposed research model. This section asks respondents about their level of agreement using a 5-point Likert scale (1 = strongly disagree; 5 = strongly agree). Section 3 presents background information about the respondents. The questionnaires were distributed to the respondents between January and March 2025, and 53 questionnaires were returned in China. A total of 53 questionnaires were returned in China. At the end, after excluding 27 incomplete samples or samples with the same answers to most of the questions, 229 valid questionnaires were left for further analysis. Table 1 shows the background of these 229 respondents.

Table 1. Background of respondents

		Frequency	Percent
Gender	Male	92	40.2
	Female	137	59.8
Age, years	18-25	63	27.5
	26-30	45	19.7
	31-40	36	15.7
	41-50	41	17.9
	46-50	10	4.4
	51-60	34	14.8
	>60	63	27.5
Education	High school or below	25	10.9
	Bachelor/Diploma	168	73.4
	Postgraduate or above	36	15.7
Income before tax, CNY	< 3000	177	54.3
	3001-5000	63	19.3
	5001-8000	40	12.3
	8001-10000	21	6.4
	10001-15000	15	4.6
	>15001	10	3.1
Occupation	Self-employed	30	13.1
	Enterprise staff	91	39.7
	Unit staff	25	10.9
	Retirement	25	10.9
Use of AI time, years	<1	35	15.3
	1-2	68	29.7
	2-3	74	32.3
	>3	52	22.7

4. Data analysis

SmartPLS (Ringle, Wende, & Becker, 2015) was used to evaluate measurement models and test hypotheses. It was chosen because PLS-SEM with bootstrapping has advantages when analysing small samples (Hair, Hult, Ringle, & Sarstedt, 2017).

4.1. Measurement model analysis

To evaluate construct reliability, Cronbach's alpha coefficient and composite reliability (CR) indices were utilized. Both metrics across all measurement constructs surpassed the widely accepted threshold of 0.7, indicating robust internal consistency. Furthermore, partial least squares (PLS) factor loadings for individual measurement items consistently exceeded 0.7. All constructs demonstrated adequate convergent validity, with average variance extracted (AVE) values above the 0.5 benchmark, aligning with established psychometric standards (Hair et al., 2010).

Table 2. Results of the reliability and validity using PLS-SEM.

	Cronbach's alpha	CR (rho_a)	CR (rho_c)	AVE
Neuroticism	0.874	0.892	0.907	0.662
Problem-solving ability	0.718	0.721	0.842	0.639
Communication skills	0.728	0.732	0.846	0.648
Customer satisfaction	0.71	0.714	0.838	0.633
Customer loyalty	0.765	0.767	0.85	0.586

Note: CR = composite reliability.

Table 3 outlines the discriminant validity evaluation outcomes. Observed correlations between latent constructs ranged in magnitude from 0.228 to 0.914. Critical validation was achieved as each construct's AVE square root systematically exceeded its inter-construct correlation coefficients, thereby confirming discriminant validity.

Table 3. Discriminant validity.

	Fornell-Larcker Criterion				
	CAT	LOY	CUSA	N	PSI
Communication skills (CAT)	0.805				
Customer loyalty (LOY)	0.614	0.766			
Customer satisfaction (CUSA)	0.681	0.741	0.796		
Neuroticism (N)	-0.289	-0.317	-0.347	0.814	
Problem-solving ability (PSI)	0.676	0.584	0.675	-0.228	0.8

Note: Italic front = square-root of AVE.

4.2. Hypothesis Testing

The hypothesized relationships were examined through partial least squares structural equation modeling (PLS-SEM). Key findings from Figure 2 reveal differential explanatory power across endogenous variables: communication skills (R^2=0.084) and problem-solving ability (R^2=0.052) showed moderate predictive capacity, whereas customer satisfaction and loyalty demonstrated substantial predictive power with identical R^2 values of 0.549. Path coefficient significance assessments revealed that neuroticism exerts significant negative effects on problem-solving ability (H1: β = -0.228, p = 0.001) and communication skills (H2: β = -0.289, $p < 0.001$), thereby supporting H1 and H2. Further analysis demonstrated that both problem-solving ability (H3: β = 0.395, $p < 0.001$) and communication skills (H4: β = 0.414, $p < 0.001$) significantly enhance customer satisfaction, validating H3 and H4. Additionally, customer satisfaction exhibited a substantial positive influence on customer loyalty (H5: $\beta = 0.741$, $p < 0.001$), confirming H5. The PLS-SEM results are visualized in Figure 2 and detailed in Table 4. All Variance Inflation Factors (VIF) are less than 2.208, indicating that the problem of multicollinearity is not serious and therefore the model is considered to be free from common method bias (Kock, 2015).

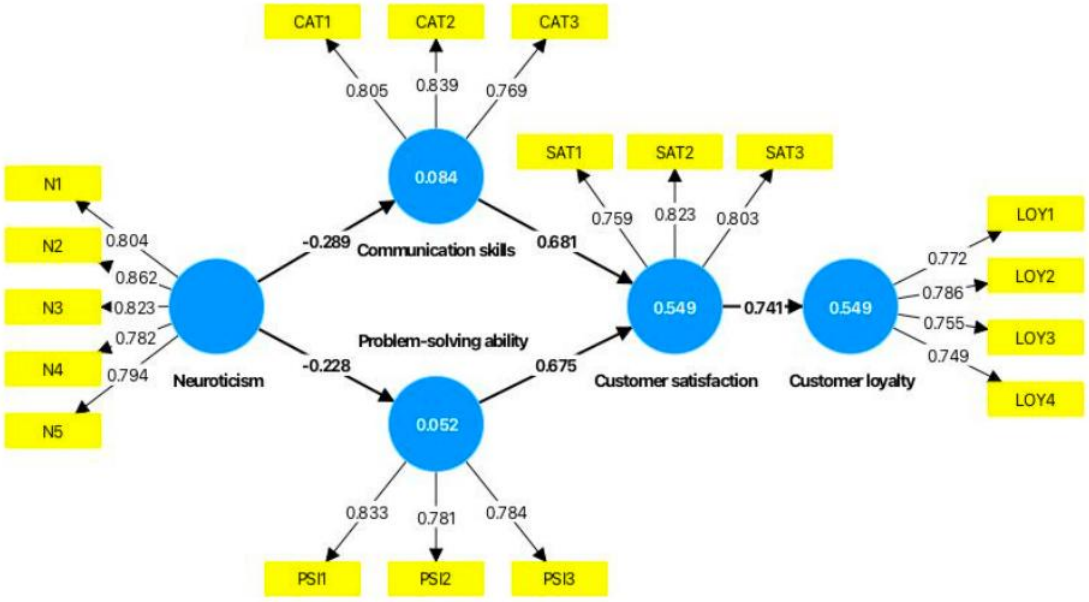


Fig 2. Results of PLS-SEM analysis.

Table 4. Results of the hypothesized model using PLS-SEM.

		coefficient	t-statistics	VIF	p-value	supported?
H1	Neuroticism -> Problem-solving ability	-0.228	1	3.325	0.001	yes
H2	Neuroticism -> Communication skills	-0.289	1	4.416	0	yes
H3	Problem-solving ability -> Customer satisfaction	0.395	1.84	6.428	0	yes
H4	Communication skills -> Customer satisfaction	0.414	1.84	6.372	0	yes
H5	Customer satisfaction -> Customer Loyalty	0.741	1	23.019	0	yes

Remark: VIF = Variance Inflation Factor

5. Discussion and conclusion

This study proves that users with high neuroticism have lower problem-solving ability and are less good at expressing their needs. Therefore, we believe that users with high neuroticism are more likely to reduce problem-solving efficiency and communication clarity due to emotional instability when using AI. Secondly, if users can effectively solve problems and clearly express their needs, they will significantly improve their satisfaction with the AI system. At the same time, the study found that improving user satisfaction is the key path to enhancing user loyalty to the AI system.

This study integrates the Big Five personality theory with human-computer interaction research, focusing on the dimension of "neuroticism" and reveals how personality traits indirectly affect users' attitudes (satisfaction and loyalty) toward AI systems through their skills (such as problem-solving ability and communication skills). This study has made a breakthrough by introducing psychological theories into the field of artificial intelligence, filling the theoretical gap in the cross-field of "personality-skill-technology interaction". At the same time, it also provides a reusable analytical framework for subsequent exploration of the role of other personality dimensions (such as extraversion and openness), promoting the integration and innovation of interdisciplinary theories.

6. Limitations and future research

While this study provides valuable insights, it also has some limitations. First, the sample size of the study was relatively small, only 229, and the data came from a single platform (Ctrip Ask AI) and a specific cultural context (China). Future research could expand the sample size while investigating participants from different cultural and demographic backgrounds to enhance the generalizability of the findings. Future research could also explore the impact of other traits in the Big Five personality traits on interactions with different types of AI platforms, such as those used in the exhibition, hospitality, or healthcare industries.

Keywords: Artificial Intelligence, Neuroticism, Problem-Solving Ability, Communication Skills, Customer Satisfaction, Customer Loyalty

Reference

[1] Adler, R. B., & Rodman, G. (2006). Understanding Human Communication. Oxford University Press.

[2] Ameen, N. , Tarhini, A. , Reppel, A. , & Anand, A. . (2020). Customer experiences in the age of artificial intelligence. *Computers in Human Behavior*, 114.

[3] Azzahra, Z., Andriany, D., & Shohib, M. (2024). Big Five Personality and Consumer Trust: The Impact on Consumer Loyalty. *KnE Social Sciences*. https://doi.org/10.18502/kss.v9i5.15197.

[4] Barnett, T., Pearson, A. W., Pearson, R., & Kellermanns, F. W. (2015). Five-factor model personality traits as predictors of perceived and actual usage of technology. *European Journal of Information Systems*, 24(4), 374-390.

[5] Bar-On, R. (2006). The Bar-On model of emotional-social intelligence (ESI). *Psicothema*, 18, 13-25.

[6] BURT'S, G. E. (1998). Emotional stability: Developmental perspectives from childhood to adulthood. *Parental descriptions of child personality: developmental antecedents of the big five*, 85.

[7] Chiara Longoni, Andrea Bonezzi, Carey K Morewedge, Resistance to Medical Artificial Intelligence, *Journal of Consumer Research*, Volume 46, Issue 4, December 2019, Pages 629–650.

[8] Costa, P. T., McCrae, R. R., & Revised, N. E. O. (1992). Personality Inventory and NEO Five-Factor Inventory: Professional Manual. *FL: Psychological Assessment Resources*.

[9] DeYoung, C. G., Quilty, L. C., & Peterson, J. B. (2007). Between facets and domains: 10 aspects of the Big Five. *Journal of Personality and Social Psychology*, 93(5), 880-896.

[10] Goldberg, L. R. (1992). The development of markers for the Big-Five factor structure. *Psychological assessment*, 4(1), 26.

[11] Gursoy, D., Chi, O. H., Lu, L., & Nunkoo, R. (2019). Consumers acceptance of artificially intelligent (AI) device use in service delivery. *International Journal of Information Management*, 49, 157–169. https://doi.org/10.1016/j.ijinfomgt.2019.03.008

[12] Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2010). Multivariate data analysis: A global perspective (7th ed.). *Upper Saddle River: Pearson Education*.

[13] Hair, J. F., Hult, G. T. M., Ringle, C. M., & Sarstedt, M. (2017). A primer on partial least squares structural equation modeling (PLS-SEM) (2nd ed.). *Thousand Oaks: Sage*.11

[14] Jani, D., & Han, H. (2014). Personality, satisfaction, image, ambience, and loyalty: Testing their relationships in the hotel industry. *International Journal of Hospitality Management*, 37, 11-20. https://doi.org/10.1016/J.IJHM.2013.10.007.

[15] Jani, D., & Han, H. (2015). Influence of environmental stimuli on hotel customer emotional loyalty response: Testing the moderating effect of the big five personality factors. *International Journal of Hospitality Management*, 44, 48-57. https://doi.org/10.1016/J.IJHM.2014.10.006.

[16] Jonassen, D. H. (2000). Toward a design theory of Problem-solving. *Educational Technology Research and Development*, 48(4), 63-85.

[17] Kock, N. (2015). Common method bias in PLS-SEM: A full collinearity assessment approach. *International Journal of E-Collaboration*, 11(4), 1-10.

[18] Kwortnik, R. J., & Thompson, G. M. (2009). Unifying service marketing and operations with service experience management. *Journal of Service Research*, 11(4), 389-406.

[19] Leon, S., & Dixon, S. (2023). Airline satisfaction and loyalty: Assessing the influence of personality, trust and service quality. *Journal of Air Transport Management*.

[20] McCrae, R. R., & Costa, P. T. (1997). Personality trait structure as a human universal. *American Psychologist*, 52(5), 509-516.

[21] Mount, M.K., & Barrick, M.R. (1995). The big five personality dimension: Implications for research and practice in human resources management. *Research in Personnel and Human Resources Management*, 13, 153-200.

[22] Park, J., & Woo, S. E. (2022). Who Likes Artificial Intelligence? Personality Predictors of Attitudes toward Artificial Intelligence. *The Journal of Psychology*, 156(1), 68-94.

[23] Ringle, C. M., Wende, S., & Becker, J. M. (2015). SmartPLS 3. Boenningstedt: SmartPLS GmbH.

[24] Sharan, N. N., & Romano, D. M. (2020). The effects of personality and locus of control on trust in humans versus artificial intelligence. Heliyon, 6(8).

[25] Singh, P., & Singh, V. (2024). The power of AI: enhancing customer loyalty through satisfaction and efficiency. *Cogent Business & Management*, 11(1), 2326107.

[26] Stănescu, D. F., & Romașcanu, M. C. (2024). The influence of AI Anxiety and Neuroticism in Attitudes toward Artificial Intelligence. *European Journal of Sustainable Development*, 13(4), 191-191.

[27] Trainor, K. J., Andzulis, J. M., Rapp, A., & Agnihotri, R. (2014). Social media technology usage and customer relationships. *Journal of Business Research*, 67(6), 1515-1521.

[28] Trainor, K. J., Andzulis, J., Rapp, A., & Agnihotri, R. (2014). Social media technology usage and customer relationship performance: A capabilities-based examination of social CRM. *Journal of Business Research*, 67(6), 1201–1208. https://doi.org/10.1016/j.jbusres.2013.05.002

A conceptual framework of reducing the food waste during the processing stage through the training of culinary art students

Pengjin WANG, Chiehyun YANG

Faculty of Hospitality and Tourism Management, Macau University of Science and Technology

Abstract

Research background

Food waste (FW) remains a pervasive issue in industrialized regions, including North America, Europe, and East Asia. Projection indicates that global municipal solid waste generation will reach approximately 3.4 billion tons annually by 2050, highlighting the urgent need to address waste management systems in conjunction with food security concerns (Varjani et al., 2022). Food waste constitutes a significant proportion of municipal solid waste, accounting for 22-54% of total waste generated (Moza et al., 2022). And this solid waste is equivalent to an estimated 25% of global food production being discarded (Kibler et al., 2018; Boruhan & Ozbiltekin-Pala, 2021). Regional discrepancy in food waste shows that high-income countries experience over 40% of losses at retail and household levels, while developing countries predominantly face post-harvest and processing-stage losses (Närvänen et al., 2019). China presents a notable case, where 40-60% of solid waste is food waste. And the food waste in China can go beyond 65% of solid waste during summer and autumn (Wang et al., 2016). Hence, it is forecasted that the production of food waste in China could increase from 61.4 million tons in 2020 to between 100.9 and 139.8 million tons by 2040 (Liu et al., 2022). Aligned with these challenges, the United Nations Sustainable Development Goals (SDGs) include targets to halve per capita global food waste at retail and consumer levels by 2030 (Department of Economic and Social Affairs Sustainable Development, United Nations, 2025).

Research regarding food waste

According to Beretta et al. (2013), they quantified food losses in Switzerland at the various stages of the food value chain and it shows that most of food losses occur at the household that accounts for almost 22% of total food waste followed by 21% of food waste occurred from processing, and then 18% occurred from food service industry.

Previous research has shown a substantial amount of research on food waste generated by households. Evidence indicates that each household in Danish 183 ± 10 kg food waste annually, which accounts for 42% of annual solid waste. With the amount of annual food waste, about 44% are unavoidable while 56% are avoidable (Edjabou et al., 2016). Despite studies indicating that the amount of household food waste is related to the number of family members, researchers also reveal that single-person households demonstrate disproportionately higher waste rates due to irregular consumption patterns and reduced food literacy (Aschemann-Witzel et al., 2015; Quested et al., 2013; Stancu et al., 2016).

Although quantifying household food waste can draw attention to the issue of food waste (Szabó-Bódi et al., 2018), it is also important to understand consumers' motivations and barriers (Graham-Rowe et al., 2014) and consumers' behaviors (Bernstad, 2014; Di Talia et al., 2019; Porpino, 2016) in order to reduce household food waste.

Echoing Beretta's et al. (2013) research, there was also a substantial amount of research

on food waste generated from the food service industry and interventions as a means to reduce the food waste from the customers' perspectives. In an empirical study by Kallbekken and Sælen (2013), he indicates placing slogans at the dining table and reducing the diameter of the pick-up tray by 3 centimeters succeeded in reducing food waste by 20%. In one semi-cafeteria university cafeteria, students were charged a $5 fine for having leftovers on their plates, which reduced food waste by 54% (Kuo & Shih, 2016). Furthermore, in an empirical study conducted at a resort hotel, the amount of food left on the buffet plates of families was measured. And a game and reward were provided to the family to enhance their sense of environmental awareness (Dolnicar et al., 2020).

Recent studies have started to pay attention to the food service industry waitstaff's interventions from over-ordering. In Yang et al. (2024), restaurant waitstaff's perceived behavioral control significantly influences their intentions to intervene in over-ordering than attitudes and subjective norms. With the antecedent of perceived behavioral control, providing training to restaurant employees plays a crucial role to boost the confidence of restaurant waitstaff in their ability to control the desirable behavior, specifically, discouraging customers from over-ordering to help reduce food waste. Moreover, restaurant waitstaff's moral nom, environmental concerns, green self-identity, and perceived job insecurity may impact the waitstaff's dissuading customers from over-ordering, which subsequently reduces the food waste (Peng & Chen, 2025).

Research framework

Despite the substantial amount of studies on household food waste and food waste generated from the food service industry, according to Beretta et al. (2013), the food waste generated from processing stage has ranked number 2 food waste. However, the research regarding the food processing remains unexplored. Hence, we will conduct an experimental study to test the culinary students' effectiveness of food processing waste through training and education conducted in culinary school. The experimental conditions of processing food waste will be measured for three different conditions; each condition will be grouped into one class and implemented for ten sessions of the culinary classes. The control group represented the current status; we will measure each student's processing waste after they trim off the food ingredients. Experimental group #1a will involve students receiving a training session regarding the current food waste situation and asking them to help the global reduce food waste by emphasizing pro-environmental ethics. Experimental group #1b involved students receiving a training session regarding the current food waste situation, asking them to help the global reduce food waste by emphasizing pro-environmental ethics and giving bonus points to them if students successfully reduce their trim off weightage. We will measure the trim off weightage from the three groups and apply violin plot test to visualize the weighing distribution.

The primary aim of this research is to provide proof of the principle of the effectiveness of the training and education conducted in culinary school. It is expected that the results of this study can provide immediate value to current culinary school students, and they can extend this principle to the future workplace.

Reference

[1] Aschemann-Witzel, J., De Hooge, I., Amani, P., Bech-Larsen, T., & Oostindjer, M. (2015).Consumer-related food waste: Causes and potential for action. Sustainability, 7(6), 6457-6477.

[2] Bernstad, A. (2014). Household food waste separation behavior and the importance of convenience.Waste management, 34(7), 1317-1323.

[3] Börühan, G., & Ozbiltekin-Pala, M. (2021). Food waste management: an example from universityrefectory. British Food Journal, 124(1), 293-313. Department of Economic and Social AffairsSustainable Development, United Nations, (2025), retrieved fromhttps://www.google.com/url?sa=t&source=web&rct=j&opi=89978449&url=https://sdgs.un.orggoals&ved=2ahUKEwjuv9SdgcuMAxX8ZfUHHSXWLxkQFnoECBUQAQ&usg=AOvVaw2OAoADkursLaeVqubOJGAq.
[4] Di Talia, E., Simeone, M., & Scarpato, D. (2019). Consumer behaviour types in household food waste.Journal of cleaner production, 214, 166-172.
[5] Dolnicar, S., Juvan, E., & Grün, B. (2020). Reducing the plate waste of families at hotel buffets–Aquasi-experimental field study. Tourism Management, 80, 104103.
[6] Engström, R., & Carlsson-Kanyama, A. (2004). Food losses in food service institutions Examples from Sweden. Food policy, 29(3), 203-213.
[7] Graham-Rowe, E., Jessop, D. C., & Sparks, P. (2014). Identifying motivations and barriers tominimising household food waste. Resources, conservation and recycling, 84, 15-23.
[8] Gustavsson, J., Cederberg, C., Sonesson, U., Van Otterdijk, R., & Meybeck, A. (2011). Global foodlosses and food waste. Food and Agriculture Organization of the United Nations (FAO).
[9] Kallbekken, S., & Sælen, H. (2013). 'Nudging'hotel guests to reduce food waste as a win–win environmental measure. Economics letters, 119(3), 325-327.
[10] Kibler, K. M., Reinhart, D., Hawkins, C., Motlagh, A. M., & Wright, J. (2018). Food waste and the food-energy-water nexus: A review of food waste management alternatives. Waste Management, 74,52-63.
[11] Kuo, C.-W., & Shih, Y.-H. (2016). Gender differences in the effects of education and coercion onreducing buffet plate waste. Journal of Foodservice Business Research, 19(3), 223-235.
[12] Moza, A., Ram, N. R., Srivastava, N. K., & Nikhil, G. N. (2022). Bioprocessing of low-value food waste to high value volatile fatty acids for applications in energy and materials: a review on process-flow.
Bioresource Technology Reports, 19, 101123.
[13] Närvänen, E., Mesiranta, N., Mattila, M., & Heikkinen, A. (2020). Introduction: A framework for managing food waste. Food waste management: Solving the wicked problem, 1-24.
[14] Ogunmoroti, A., Liu, M., Li, M., & Liu, W. (2022). Unraveling the environmental impact of current and future food waste and its management in Chinese provinces. Resources, Environment and Sustainability, 9, 100064.
[15] Peng, N., & Chen, A. (2025). Antecedents and consequences of service staff's advice-giving frequency on diners' overordering behavior. International Journal of Hospitality Management, 128, 104201.
[16] Porpino, G. (2016). Household food waste behavior: Avenues for future research. Journal of the Association for Consumer Research, 1(1), 41-51.
[17] Quested, T. E., Marsh, E., Stunell, D., & Parry, A. D. (2013). Spaghetti soup: The complex world of food waste behaviours. Resources, Conservation and Recycling, 79, 43-51.
[18] Silvennoinen, K., Heikkilä, L., Katajajuuri, J.-M., & Reinikainen, A. (2015). Food waste volume and origin: Case studies in the Finnish food service sector. Waste Management, 46, 140-145.
[19] Stancu, V., Haugaard, P., & Lähteenmäki, L. (2016). Determinants of consumer food waste behaviour: Two routes to food waste. Appetite, 96, 7-17.

[20] Szabó-Bódi, B., Kasza, G., & Szakos, D. (2018). Assessment of household food waste in Hungary. British Food Journal, 120(3), 625-638.
[21] Varjani, S., Shahbeig, H., Popat, K., Patel, Z., Vyas, S., Shah, A. V., ... & Tabatabaei, M. (2022). Sustainable management of municipal solid waste through waste-to-energy technologies. Bioresource technology, 355, 127247.
[22] Yang, C. Y., Yan, L., & Ji, P. (2024). Restaurant waiting staff's intention to dissuade customers from over-ordering: an extended theory of planned behaviour. British Food Journal, 126(9), 3317-3334.
[23] Zhang, L., Li, H., Yang, L., Du, X., Zhou, Y., Sun, G., & Liu, J. (2025). Carbon footprints of centralized and decentralized food waste utilization pathways. Renewable and Sustainable Energy Reviews, 208, 115040.

Transformation of Urban Tourism: Text-mining on Robotaxi Adoption

Boyu LIN[1], Rui YANG[2], Yifan FAN[3], Mingyang XU[1]

[1]City University of Macau

[2]Arizona State University

[3]Southeast University

Abstract

Introduction

Robotaxi is a driverless vehicle designed to operate as a taxi service, offering on-demand rides without a human driver. The recent launch of Apollo Go in Wuhan has led to an increase in online reviews pertaining to this cutting-edge robotaxi service, which may provide insights into users' authentic experiences and the emotional responses of potential adopters. There are apparent differences in research between autonomous vehicles and robotaxis. Specifically, the autonomous vehicle is designed for various purposes, such as personal transportation and logistics, but the robotaxi is to replace traditional taxi and ride-hailing services. Besides, autonomous vehicles can be classified into different levels of autonomy, but robotaxis are typically expected to operate at full autonomy. Lastly, research on autonomous vehicles emphasizes technological principles and applications, but studies about robotaxis should target travel service transformation and innovation. Cohen and Hopkins (2019) have called for research in urban tourism, especially from social-behavioral aspects. Thus, relevant research on robotaxis is scant.

The diffusion of innovation (DOI) theory provides a framework for understanding how new technologies are adopted and how individuals' attitudes toward them can vary (Rogers, 1995). According to this theory, individual perceptions and attitudes regarding the robotaxi service are complex and influenced by multiple interrelated factors, encompassing both benefits and concerns. Early adopters may appreciate the advantages offered by such innovations and show a willingness to engage with new services, while others might express reluctance due to various concerns. There remains a significant gap in the literature regarding a comprehensive analysis of the dynamics of the complex attitudes toward this new service and the factors that influence the robotaxi adoption.

Social contagion theory posits that an individual's behavior is likely to be shaped by the actions and attitudes of others within their geographic vicinity, emphasizing the key factor of geographic proximity (Janakiraman & Niraj, 2011). As this proximity often fosters interactions among individuals, their choices and perceptions can significantly impact one another, leading to a shared understanding and collective behavior regarding new technologies or services. Owing to this theory, individuals residing in the same geographic areas tend to share similar customs and mindsets, which can significantly shape their views regarding robotaxi services. This dynamic highlights the importance of considering social contagion effects when analyzing consumer adoption patterns in

localized contexts. The geospatial analysis can reveal how geographic proximity can lead to localized adoption patterns and identify variations across different regions, thereby facilitating the development of tailored strategies to effectively promote robotaxis in diverse geographic contexts. Therefore, the analysis of online geospatial data is essential, which has not been discussed in previous literature.

To address the aforementioned gaps, this paper employs a text-mining approach and aims to 1) unveil what are emotional expressions from online users concerning the robotaxi service via sentiment analysis; 2) explore what are the primary factors highlighted in the online reviews by using Latent Dirichlet Allocation (LDA) based topic modeling; 3) explore what are the differences in geographic proximity regarding willingness to use robotaxis and the prevalence of topics through geospatial analysis.

This is the first empirical study using a text-mining approach to identify a deeper understanding of online users' distinctive attitudes toward the robotaxi and examine the impacts on adoption. Additionally, this study extends the diffusion of innovation theory and social contagion theory by explaining complex users' perceptions and geographic effects on robotaxi adoption. Practically, this study makes important managerial implications for robotaxi companies, urban planners, and policymakers to improve high-quality robotaxi services to meet various demands from customers in certain areas, guiding the sustainable development goals of urban mobility, tourists' urban travel experience, and environmentally friendly strategies.

Method and Results

In this study, the online reviews were extracted 30 most popular short videos about "Apollo Go" from Douyin. Eventually, a total of 87,027 reviews were collected to analyze users' perceptions and emotions regarding the robotaxi service. The raw comments underwent an extensive preprocessing phase to ensure the clarity and relevance of the data for analysis.

Sentiment analysis

Sentiment analysis was conducted utilizing GLM-4-9B, an open-sourced large language model, to assess whether user comments reflected a preference for or against using "Apollo Go" for robotaxi service (GLM et al. 2024). The summary statistics presented in Table 1 reveal that the average willingness to use Apollo Go is slightly positive, with a mean of 0.0271. This indicates an overall tendency toward a neutral to positive attitude regarding the robotaxi service. However, the high standard deviation (0.7985) suggests significant variability in willingness. This dispersion in sentiment underscores the wide range of perspectives individuals possess concerning this innovative service. Such variability suggests that while some users exhibit enthusiasm or openness to adopting robotaxi technology, others may hesitate or have negative sentiments.

Table 1. Summary Statistics of Sentiment

Variable	# of Obs.	Mean	Std. Dev.	Min	Max
$Willingness\ to\ use_i$	87,027	0.0271	0.7985	-1	1

Topic modeling

Latent Dirichlet Allocation (LDA) was employed to perform topic modeling on our dataset, a technique widely used for categorizing text into coherent topics (Blei et al. 2003). A key component of the LDA algorithm is the predetermined number of topics. The results of our topic modeling analysis are derived from user comments about Apollo Go from Douyin. Using LDA, we identify ten distinct topics, each representing a unique theme articulated by users in relation to this innovative service. These topics have been labeled according to the primary keywords associated with each theme, as detailed in Table 2. The identified topics encompass a wide array of values and concerns, ranging from practical issues related to daily commuting to the broader economic and societal implications of introducing robotaxi services.

Table 2. Topic modeling results

Topic	Keywords	Interpreted Concepts	Proportion
Topic 1	Apollo Go, Drive, Fast, Need, Work, Back Home	Daily Commuting	0.0809
Topic 2	Taxi, Driver, Urban, E-commerce, Operation, Benefit	Service Operation	0.1357
Topic 3	Technology, Development, Country, Support, Society, Economy	Technological Advancement	0.0849
Topic 4	Substitution, Low-price, Share, Personal, Bikes, E-bikes	Alternative Transportation	0.0544
Topic 5	Impact, Earn, Price, Restaurants, Discount, Recommend	Economic Impact	0.0580
Topic 6	Change, Substitution, Defeat, Jobs, Disrupt, Income	Technological Displacement	0.0875
Topic 7	Money, Capital, Cheap, Didi, Business, Reap	Shared Robotaxi Service	0.1387
Topic 8	Police, Local, Death, Passenger, Steering Wheel, Situations	Safety Issue	0.0869

Topic 9	People, Industry, Tesla, Monopoly, Service, AI	Social Progress	0.1360
Topic 10	Consumption, Robots, Autonomous, Chance, Competition, Alcohol	User Preference	0.1369

Geospatial analysis

Geospatial analysis was conducted using the data to understand how geographic proximity influenced users' willingness toward Apollo Go. The geospatial analysis explores whether users' sentiments differ across various regions, potentially reflecting local attitudes or experiences related to the robotaxi service. The geospatial analysis results illustrate the varying levels of adoption of Apollo Go across different regions in mainland China, aligning with social contagion theory that emphasizes the role of geographic proximity. As depicted in Figure 1, provinces exhibiting higher average sentiment scores—indicative of more favorable user willingness—are shaded in deep red, while those with lower scores—representing more negative perceptions—are displayed in lighter red. Notably, Hubei Province registers the lowest willingness score among all provinces, where Apollo Go was first launched in Wuhan, the largest city in Hubei.

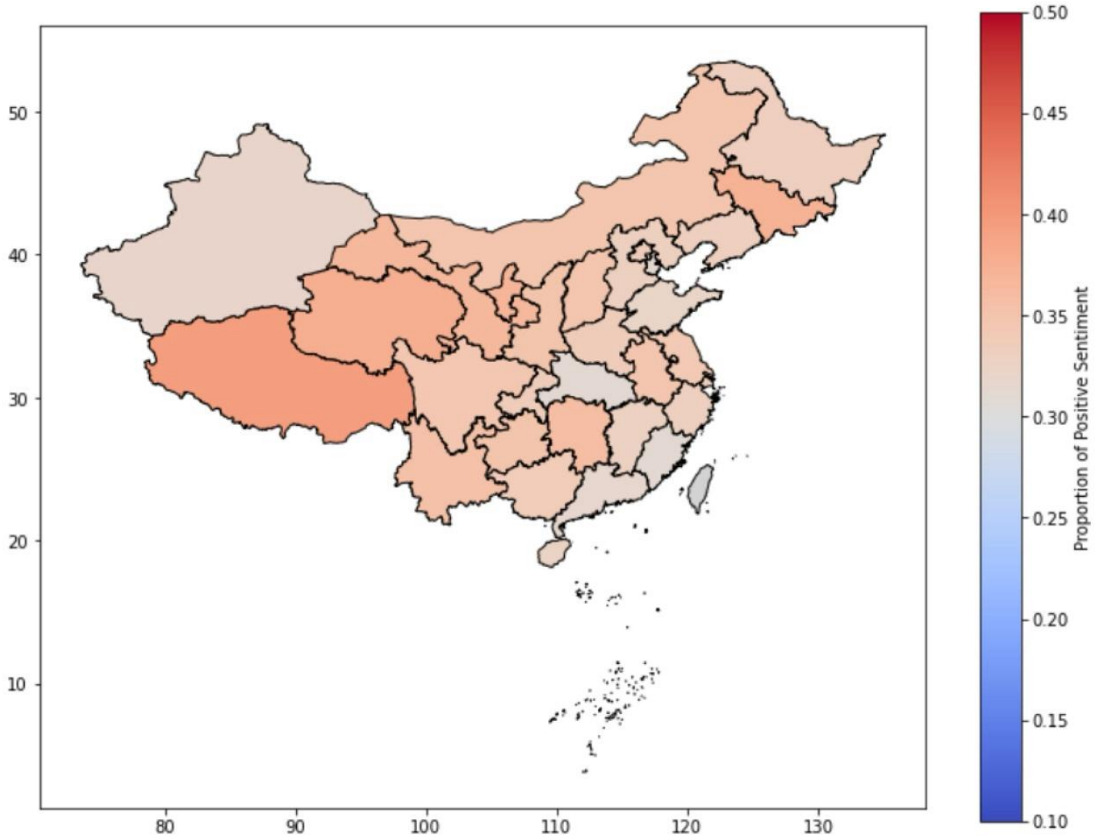


Figure 1. Geospatial willingness to use

The results present each popular topic, the primary topic discussed in each province, as shown in Figure 2. Each province is color-coded to represent the predominant topic of discussion, highlighting the diverse perspectives across the country. In Northwest China, provinces such as Qinghai, Gansu, and Guizhou are shaded in light green, indicating that topic 9 is the most prevalent.

In Northeast China, provinces like Heilongjiang, Jilin, and Liaoning are shaded in dark purple, signifying that topic 1 dominates the discussions. Additionally, in Southern China, including Guangxi, Hainan, and Tibet, where Apollo Go has yet to be introduced, topic 10 remains prominent. In the rest of China, including central and eastern provinces such as Anhui, Hunan, and Zhejiang, the map shows a light green shade representing topic 7 (shared robotaxi service).

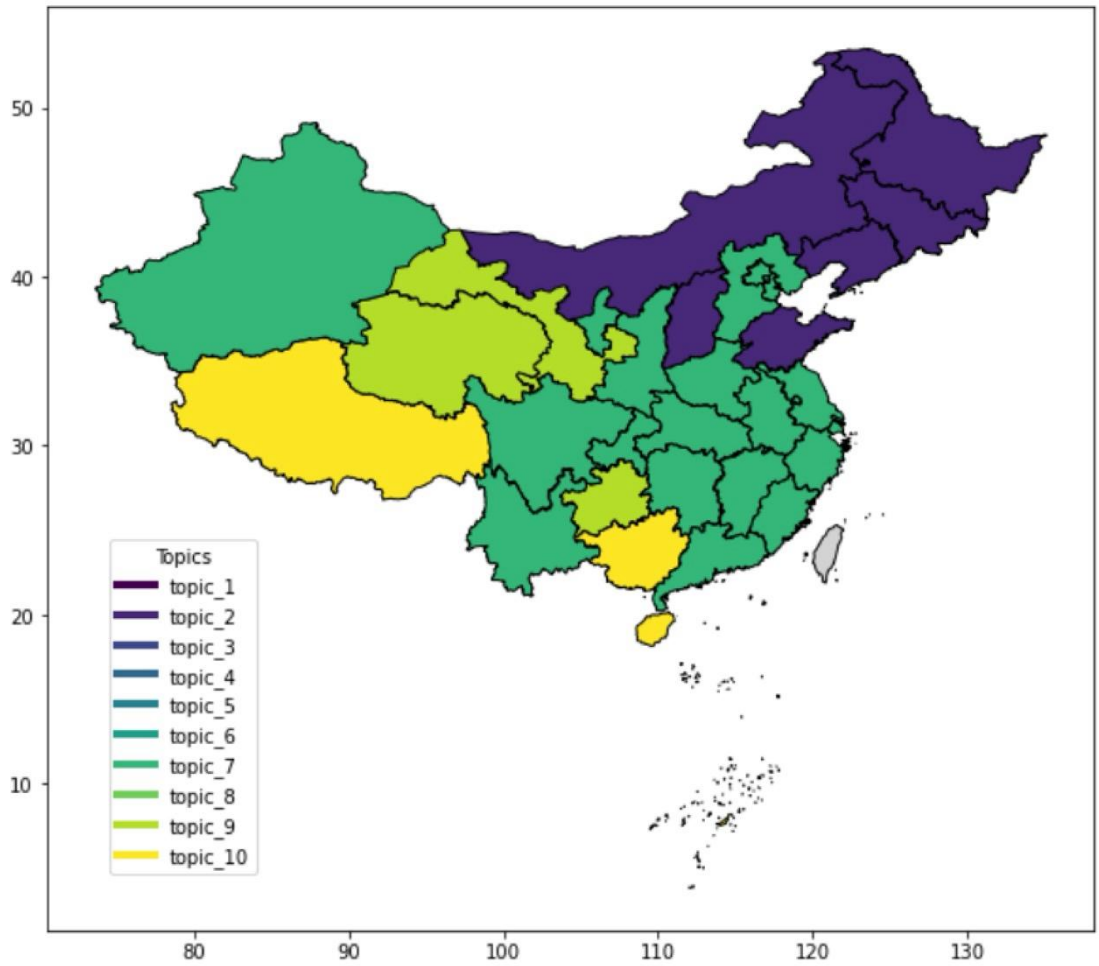


Figure 2. Geospatial popular topics

Therefore, these results are aligned with social contagion theory and underscore the importance of regional contexts in shaping user attitudes toward emerging technologies. This geographic context shapes the social dynamics of adoption, as localized social networks and cultural attitudes can either facilitate or hinder the spread of technology acceptance. Geographic vicinity emerges as a critical factor influencing the willingness to adopt robotaxis, reflecting the broader patterns of social influence that characterize

the diffusion of innovations. Thus, understanding these regional differences, along with the unique characteristics of each province, is crucial for Apollo Go to optimize its strategies, address specific local concerns, and enhance acceptance and adoption of robotaxi service across various regions of China.

Implications and limitations

Theoretically, this research employs a text-mining approach to examine online reviews of Apollo Go, a pioneering robotaxi service. Through a range of analytical techniques, the findings yield significant insights, contributing to the robotaxi adoption and urban tourism literature in several ways. Firstly, this study offers a comprehensive examination of robotaxis as the first study in urban tourism literature and responds to the call of Cohen and Hopkins (2019) by exploring online users' attitudes and perceptions of social-behavioral aspects of urban tourism. Moreover, this study confirms the diffusion of innovation theory and enriches its application to the recent emergence of robotaxi services in the urban travel context with empirical evidence. By addressing the nuanced dimensions, this research offers a more comprehensive understanding of the complex dynamics at play in the adoption of robotaxi services and highlights the multifaceted nature of innovation diffusion in the travel context. Finally, this study sheds light on the low willingness to adopt robotaxi services in Hubei, where Apollo Go was first introduced. Through geospatial analysis, the findings are interpreted through the lens of social contagion theory, which emphasizes the influence of regional proximity on individuals' attitudes and behaviors. By highlighting these regional elements, this study underscores the need to account for geographical differences in the implementation and development of robotaxi services, providing a framework to tailor strategies that address the distinct concerns and contexts of diverse regions within China.

Managerially, this study explores the complex sentiments of online reviews toward robotaxi. The results not only underscore the duality of public sentiment but also highlight the critical need for addressing concerns that may hinder widespread adoption in the stage of early diffusion of innovation. As autonomous transportation options like Apollo Go begin to penetrate the market, comprehending these sentiments is essential for stakeholders. For instance, service providers can invest in improving vehicle safety features such as advanced sensors, emergency braking systems, and real-time monitoring. The results from geospatial analysis serve to inform stakeholders about the geographic differences influencing public attention and adoption rates. These insights are essential for stakeholders, such as service providers, policymakers, DMOs, and local communities, as they work to address regional preferences and concerns. For example, if provinces like Hubei show lower adoption rates due to early exposure to robotaxi services and concerns about service reliability, Apollo Go can focus on enhancing the service quality in that region before expanding further.

The current study collects and analyzes the data from the Chinese perspective, so it leaves a limitation to the specific context in Asia. Future studies can extend the scope of data to investigate cultural differences in the perceptions and attitudes toward the robotaxi service all over the world. Moreover, this study does not separate the users

with or without direct experiences with robotaxis due to the limitations of social media data. Future studies can examine the distinctive factors influencing the robotaxi adoption among various groups.

Keywords: Robotaxi adoption, Tourism transformation, Diffusion of innovation, Social contagion theory, Geospatial analysis

References

[1] Blei, D. M., Ng, A. Y., & Jordan, M. I. (2003). Latent dirichlet allocation. *Journal of Machine Learning Research*, 3(Jan), 993-1022.

[2] Cohen, S. A., & Hopkins, D. (2019). Autonomous vehicles and the future of urban tourism. *Annals of Tourism Research*, 74, 33-42.

[3] GLM, T., Zeng, A., Xu, B., Wang, B., Zhang, C., Yin, D., ... & Wang, Z. (2024). ChatGLM: A Family of Large Language Models from GLM-130B to GLM-4 All Tools. *arXiv preprint arXiv*:2406.12793.

[4] Janakiraman, R., & Niraj, R. (2011). The impact of geographic proximity on what to buy, how to buy, and where to buy: Evidence from high-tech durable goods market. *Decision Sciences*, 42(4), 889-919.

[5] Rogers, E. M. (1995). Diffusion of innovations. Fourth edition. New York. Free Press.

Exploring Postmodern Authenticity in Hyper-Realistic Tourism: Emotional Engagement and Behavioral Impacts at The Venetian Macao

Ziqin LIANG[1*], Yuxuan WANG[1], Jiaojiao WANG[2]

[1]Bachelor's Degree Student, Faculty of Hospitality and Tourism Management, Macau University of Science and Technology, Taipa, Macau

[2]Doctor's Degree Student, Faculty of Hospitality and Tourism Management, Macau University of Science and Technology, Taipa, Macau

*Corresponding Email: 1220031121@student.must.edu.mo

Abstract

1.Introduction

Macao, often referred to as the "Las Vegas of the East" (Loi & Kim, 2010), has emerged as a global tourism hub where Eastern and Western cultures converge. Over the years, its tourism industry has evolved to offer a unique combination of historical authenticity and hyper-realistic, entertainment-driven experiences. The Venetian Macao, one of its most iconic attractions, exemplifies this trend by replicating Venetian landmarks such as canals and gondoliers, enhanced with immersive digital technologies to create a hyper-real environment (Lovell, 2019). This shift reflects a broader trend in modern tourism, where destinations increasingly prioritize imaginative and emotionally engaging experiences over traditional notions of historical or physical authenticity (Wang, 1999; Shepherd, 2015).

The concept of postmodern authenticity has gained prominence in tourism research as a way to understand these evolving tourist preferences (Rickly, 2022). Unlike traditional object-based authenticity, which emphasizes historical or physical originality, postmodern authenticity is rooted in subjective perceptions and emotional resonance, allowing tourists to define authenticity based on their personal experiences (Wang, 1999). Prior studies have shown that postmodern authenticity significantly influences tourist behaviors, such as electronic word-of-mouth (eWOM), emotional involvement, and nostalgia, which are crucial for destination branding and loyalty (Han & Bae, 2022; Munar & Jacobsen, 2014). However, while much of the existing research has focused on the direct effects of postmodern authenticity, less attention has been given to how its influence varies across different types of tourist experiences. For example, Yeh et al. (2025) demonstrated that tourists' perceptions of postmodern authenticity directly drive behavioral intentions, involvement, and nostalgia. Yet, their work primarily focused on general tourist behaviors, leaving a gap in understanding how specific contexts, such as hyper-realistic destinations like The Venetian Macao, might amplify or alter these effects.

To address this limitation, this study investigates the particular mechanisms through which postmodern authenticity impacts eWOM, involvement, and nostalgia within The Venetian Macao's context. Centered on this hyperrealistic destination, the research aims to explore how such settings uniquely shape tourist behaviors and emotional responses.

The findings are intended to enrich the theoretical understanding of postmodern authenticity and its role in tourism, while offering practical insights for destination operators. Specifically, this study explores how hyper-realistic experiences can intensify emotional engagement, reinforce destination branding, and achieve a balance between cultural heritage preservation and commercial development to enhance global competitiveness.

2. Literature review

Postmodern authenticity (PA) is a multifaceted concept in tourism studies that emphasizes the diversity and subjectivity of authenticity (Stepchenkova & Belyaeva, 2021). Unlike traditional object-based authenticity, which relies on historical or physical originality, postmodern authenticity accepts the coexistence of "staged authenticity" and "hyper-reality" as valid forms of experience (Wang, 1999; Zerva, 2015). It focuses on the emotional and personal connections that tourists establish with a destination, allowing them to define authenticity based on their own perceptions and expectations (Butler, 2013; Shepherd, 2015). The Venetian Macao exemplifies postmodern authenticity through its replication of Venice's iconic landmarks and cultural elements. This hyper-real environment does not diminish tourists' experiences but instead fulfills their romanticized imaginations of Venice, creating an immersive and emotionally engaging atmosphere (Sun, 2024).

Involvement (IV) and nostalgia (NT) are critical psychological outcomes of postmodern authenticity. Involvement reflects the emotional engagement and depth of interaction tourists experience during their visits (Mura, 2015). Studies suggest that higher involvement enhances perceptions of postmodern authenticity, leading to greater satisfaction and stronger behavioral intentions (Gao et al., 2020). At the Venetian Macao, activities like gondola rides, photography, and cultural performances deepen tourists' involvement, fostering emotional connections with the destination (Sun, 2024). nostalgia, encompassing personal and historical nostalgia, also play a pivotal role in postmodern authenticity. Personal nostalgia refers to longing for one's past experiences, while historical nostalgia involves imagining a collective past (Marchegiani & Phau, 2013). The Venetian Macao evokes both types of nostalgia by recreating iconic Venetian landmarks, enabling tourists to reminisce about personal memories or envision a romanticized historical past (Han & Bae, 2022).

Postmodern authenticity is closely linked to tourists' travel experience sharing on social media. Tourists often share their experiences online to document their journeys, express their identities, and connect with others (Kang & Schuett, 2013; Munar & Jacobsen, 2014). Research shows that postmodern authenticity, by fostering emotional connections and nostalgia, significantly enhances tourists' willingness to share their experiences (Han & Bae, 2022). For example, the Venetian Macao's visually appealing and hyper-realistic environment inspires tourists to share photos and stories on platforms like Instagram and Facebook. This not only amplifies the destination's brand visibility but also encourages potential tourists to visit by showcasing authentic yet imaginative experiences.

Specifically, this research proposes the following hypotheses:

H1: Postmodern authenticity has a positive impact on eWOM.
H2: Postmodern authenticity has a positive impact on involvement.
H3: Postmodern authenticity has a positive impact on nostalgia.

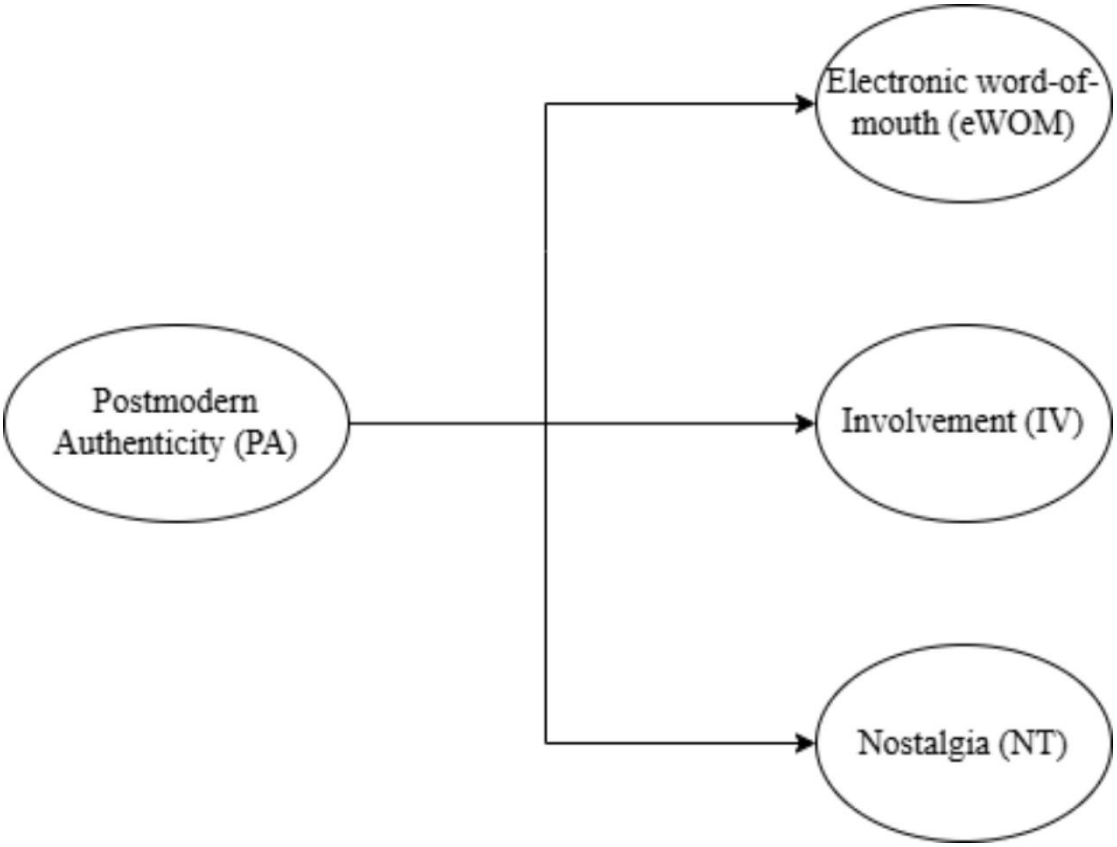


Figure 1. Theoretical framework of study.

3. Research methodology and anticipated results

The target sample consists of tourists visiting The Venetian Macao, with an aim to collect 400 valid questionnaires over a two-week period. Data will be collected through convenience sampling, combining on - site paper - based distribution and online links (QR codes), covering both weekdays and weekends to ensure sample diversity. Variable measurements are adapted from established scales (Yeh et al., 2025; Yi et al., 2018), employing a 7-point Likert scale (1 = "strongly disagree," 7 = "strongly agree"). The study will use SPSS for descriptive statistics and validity tests (Cronbach's $\alpha > 0.7$, AVE > 0.5), while AMOS will be utilized to construct a structural equation model (SEM) to test the hypotheses. The research focuses on the direct effects of PA and potential mediating pathways, providing empirical evidence for the design of postmodern tourism experiences.

Based on the literature and theoretical framework, PA is expected to significantly and positively influence eWOM, IV, and NT, validating its role as a core independent variable. Furthermore, eWOM is anticipated to demonstrate a stronger impact, highlighting how digital media in postmodern environments complements and shapes authentic experiences. Although PA originates from a "non-original" context, its

interaction with eWOM and co-created content by tourists will reconstruct the destination's critical authenticity, challenging the traditional binary opposition paradigm.

4. Conclusion

This study highlights the critical role of postmodern authenticity in shaping tourist behaviors and emotional responses, particularly in hyper-realistic destinations like The Venetian Macao. This aligns with the broader trend in tourism where imaginative and emotionally resonant experiences are prioritized over traditional notions of historical or physical authenticity (Wang, 1999; Shepherd, 2015). For destination operators and luxury hotel's designers, the Venetian Macao's case results offer actionable strategies to design simulacra-based destinations. They can positions postmodern authenticity as a strategic asset, enabling destinations and luxury hotel to meet the changeable demands of experience-driven tourism while preserving cultural relevance. For example, designing immersive hyperreal experiences, integrating technology-enhanced environments. Meanwhile, Encourage tourists to co-create and spread experience on social media, transforming them into active agents of destination branding. Postmodern authenticity can be leveraged to strengthen destination branding and global competitiveness, after that amplifying the destination's visibility and appeal (Munar & Jacobsen, 2014; Han & Bae, 2022).

However, this study is not without its limitations. First, the exclusive focus on a single hyper-realistic destination, The Venetian Macao, may constrain the generalizability of the findings. Second, the study adopts a cross-sectional design, which provides a snapshot of tourist behaviors and perceptions but does not capture the dynamic and evolving nature of postmodern authenticity over time. Third, while the study examines direct relationships between postmodern authenticity, involvement, nostalgia, and eWOM, it does not explore potential mediating or moderating variables, such as cultural background, prior travel experience, or technological familiarity, which could further influence these relationships.

Future research could address these limitations by conducting comparative studies across multiple hyper-realistic destinations in different cultural and geographical contexts. Longitudinal studies could also provide deeper insights into how tourists' perceptions of postmodern authenticity evolve over time and how these changes impact their behaviors and emotional responses. Additionally, future studies could explore the mediating and moderating roles of factors such as cultural differences, digital literacy, and the influence of emerging technologies like augmented reality (AR) and virtual reality (VR) in shaping postmodern tourism experiences. By addressing these areas, researchers can further advance the theoretical understanding of postmodern authenticity and provide more nuanced practical recommendations for destination operators.

Keywords: Postmodern authenticity, eWOM, involvement, nostalgia

References

[1] Butler, C. (2013). Postmodernism. Foreign Language Teaching and Research Press.

[2] Chen, R., Zhou, Z., Zhan, G., & Zhou, N. (2020). The impact of destination brand authenticity on tourist loyalty. Journal of Destination Marketing & Management.

[3] Gao, J., Lin, S. S., & Zhang, C. (2020). Authenticity, involvement, and nostalgia: Understanding visitor satisfaction. Journal of Destination Marketing & Management.

[4] Han, J. H., & Bae, S. Y. (2022). Roles of authenticity and nostalgia in cultural heritage tourists' travel experience sharing behavior on social media. Asia Pacific Journal of Tourism Research, 27(4), 364–379. https://doi.org/10.1080/10941665.2022.2030938

[5] Lovell, J. (2019). Fairytale authenticity: Historic city tourism, Harry Potter, medievalism and the magical gaze. Journal of Heritage Tourism, 14(5–6), 448–465. https://doi.org/10.1080/1743873X.2019.1566499

[6] Munar, A. M., & Jacobsen, J. K. S. (2014). Motivations for sharing tourism experiences through social media. Tourism Management, 43, 46–54. https://doi.org/10.1016/j.tourman.2014.01.012

[7] Shepherd, R. (2015). Authenticity in tourism. Tourism Recreation Research, 40(1), 128–132. https://doi.org/10.1080/02508281.2015.1008857

[8] Sun, Z. (2024). Producing the post-postmodern flâneur: An assemblage analysis of Macau's Cotai Strip. Asia Pacific Viewpoint, 65(2), 156-170. https://doi.org/10.1111/apv.12406

[9] Wang, N. (1999). Rethinking authenticity in tourism experience. Annals of Tourism Research, 26(2), 349–370. https://doi.org/10.1016/S0160-7383(98)00103-0

[10] Yeh, S.-S., Leong, A. M. W., Hung, C.-W., & Huan, X. (2025). Destination authenticity influence on tourists' behavioral intentions, involvement, and nostalgia. Tourism Review, 80(2), 456–471. https://doi.org/10.1108/TR-06-2022-0256

[11] Yi, X., Fu, X., Yu, L., & Jiang, L. (2018). Authenticity and loyalty at heritage sites: The moderation effect of postmodern authenticity. Tourism Management, 67, 411–424. https://doi.org/10.1016/j.tourman.2018.01.013

[12] Loi, K.-I., & Kim, W. G. (2010). Macao's casino industry: reinventing Las Vegas in Asia. Cornell Hospitality Quarterly, 51(2), 268-283.

[13] Rickly, J. M. (2022). A review of authenticity research in tourism: Launching the Annals of Tourism Research Curated Collection on authenticity. Annals of Tourism Research, 92, 103349.

[14] Stepchenkova, S., & Belyaeva, V. (2021). The effect of authenticity orientation on existential authenticity and postvisitation intended behavior. Journal of Travel Research, 60(2), 401-416.

Key Stakeholders' Perspectives of Coastal Ecotourism Development

Yuyan DENG

Faculty of Hospitality and Tourism Management, Macau University of Science and Technology

Corresponding Email: 2220011069@student.must.edu.mo

Abstract

Since the 1990s, ecotourism has become a buzzword among tourism practitioners and those in academia (Wardle, Buckley, Shakeela, & Castley, 2021)(Wardle, 2021 #227). As an essential part of ecotourism, coastal ecotourism has received widespread attention as a new and vital form of tourism that embodies public education, community benefits, contributions to ecological conservation, economic development, and sociocultural conservation (Ardhita & Ferdiansyah, 2024; Picard, 2015; Ressurreição et al., 2022). For sustainable ecotourism to be workable, partnerships among tourism industry practitioners, public authorities, communities, and other institutions and individuals with divergent interests, goals, philosophies, and values need to be contacted for the long-term management of (coastal) destinations (Diamantis, 2018; Wondirad, Tolkach, & King, 2020). Various stakeholders arguably increase the complexity of the process of coastal ecotourism development (Wesley & Pforr, 2010). Although earlier studies have shown that stakeholder engagement is a condition for both ecotourism and coastal tourism planning and development, studies from stakeholders' perspective at the destination level remain scant (Dimitrovski, Lemmetyinen, Nieminen, & Pohjola, 2021; Simpson, Brown, Peterson, & Johnstone, 2016). Therefore, taking the Dapeng Peninsula in Shenzhen as a case study, this paper employs a stakeholder analysis approach to examine key stakeholders' roles within the destination.

To achieve the principal aim, four specific objectives guide this study:

1. To identify the destination stakeholders that are key for coastal ecotourism development;
2. To understand the attributes of key stakeholders that might influence the destination;
3. To reveal the interpretation of coastal ecotourism by diverse destination stakeholders.

The study was conducted in three stages. The initial stages used a qualitative approach that involves a content analysis of a preliminary document review to collect data on 'seed' destination stakeholders. A snowball sampling technique was used in the following stage to compile a complete stakeholder list. The sample of destination stakeholders in this study includes 18 categories: the municipal government and destination management organisation (DMO) of Shenzhen, the local government and

DMO of Dapeng New District, travel agencies in Shenzhen, B&B operators in Dapeng New District, hotel entities in Dapeng New District, catering companies in Dapeng New District, water sports clubs in Dapeng New District, passenger transportation operators in Dapeng New District, shopping facilities in Dapeng New District, tourism attractions in Dapeng New District, volunteer organisations in Dapeng New District, trade associations in Shenzhen, trade associations in Dapeng New District, mass media in Shenzhen, nontourism companies in Shenzhen, nontourism companies in Dapeng New District, local residents, and nonlocal visitors. Finally, a structured questionnaire survey was used to collect comparable data in the quantitative stage. A descriptive statistical analysis and t tests were applied to examine the data on stakeholder attributes in terms of stakeholder salience as well as differences in the means of two stakeholder groups. To examine stakeholders' views on the multidimensional goals of coastal ecotourism development, one-way analysis of variance (or one-way ANOVA) was employed to compare whether the means of stakeholders' perceptions significantly differ.

Data analysis is conducted on the basis of survey instruments, which have generated the following results:

1) In terms of power, the municipal government and DMO of Shenzhen as well as the local government and DMO of Dapeng New District are far more powerful than other stakeholder groups are, followed by the mass media in Shenzhen. The remaining stakeholder groups, however, have much less power. Although there are differences in the mean values of the power of the municipal government and DMO of Shenzhen, the local government and DMO of Dapeng New District, travel agencies in Shenzhen, and mass media in Shenzhen, there are significant (95% confidence interval) or very significant (99% confidence interval) differences with regard to the power of these stakeholders compared with the rest;

2) In terms of cooperativeness, the local government and DMO of Dapeng New District and the municipal government and DMO of Shenzhen have the strongest cooperativeness. They cooperate with other stakeholder groups to the greatest extent in terms of participating in local coastal ecotourism policymaking. Although there are differences in the mean values of the cooperativeness among the local government and DMO of Dapeng New District, the municipal government and DMO of Shenzhen, and the shopping facilities at Dapeng New District, there are significant (95% confidence interval) or very significant (99% confidence interval) differences in the cooperativeness of these stakeholders compared with the rest;

3) In terms of urgency, the municipal government and DMO of Shenzhen and the local government and DMO of Dapeng New District have the highest urgency of demand. The urgency of demand for the interests of local nontourism companies in Dapeng New District and those in Shenzhen is the lowest, and the remaining stakeholders have greater urgency than the nontourism companies do. Among them, only tourism attractions in Dapeng New District and mass media in Shenzhen share the same level of urgency as the mean value, and they have not passed the 95% confidence interval test. There is no significant difference between the two stakeholder groups above;

4) Governments and DMOs are highly involved in policy composition, enabling them to assert government control over policymaking. In contrast, local residents and nonlocal visitors, in addition to some volunteer organisations and trade associations, are considered the least salient stakeholders;

Overall, core, strategic, and peripheral stakeholders are uncovered accordingly by means of the three dimensions of power, cooperativeness, and urgency. Our findings suggest that although different stakeholders can play vital roles in developing ecotourism at the destination level, governments and DMOs are anticipated to take dominance in this policy domain (Lee & Choi, 2017)(Lee, 2017 #237).

An analysis is then conducted on the degree of influence on the destination development goals of coastal ecotourism regarding protection of the natural environment, community participation, conservation education and training, economic development, and sociocultural prosperity. Analysis of variance is used to examine the differences between stakeholders' views on the five dimensions of coastal ecotourism development. There is variance in their recognition of the goals of nature conservation, community participation, conservation education and training, economic development, and sociocultural prosperity. This is one of the typical difficulties for destination development because it is challenging to achieve collective policymaking. This is certainly indicative of a general lack of interactions or formal discourse among the stakeholder groups. Divergent stakeholder groups tend to interpret coastal ecotourism in terms of their own interests. If concerns regarding economic factors dominate destination development, which is focused on providing experiences to tourists, then other dimensions of ecotourism might be neglected.

Consequently, more frequent contacts must be set up among these stakeholder groups. In addition, educating stakeholders and enhancing their awareness of multiple dimensions of (coastal) ecotourism would be crucial for destination development, reflecting the value of a wider range of stakeholders. Stakeholders are urged to be organised and collaborative in the tourism planning process aimed at continuously improving the quality of (eco)tourism products as well as incentivising (eco)tourism marketing campaigns. To bring a holistic destination image and ethical responsibility to an ecotourism destination is to use a participatory approach, where "government cannot be expected to solve our public problem in isolation" (Orr, 2014, p. 205).

This study not only expands related research on the stakeholder approach and coastal ecotourism theory but also provides a direction for improving the tourism development of the Dapeng Peninsula in Shenzhen, which has certain theoretical and practical significance. Despite the valuable and interesting findings of this study, the antecedents of stakeholder attributes and perceptions have yet to be examined. We recommend that further studies incorporate qualitative methods to supplement the quantitative results; qualitative findings may reveal and justify additional stakeholder characteristics. For example, open-ended questions may facilitate a more in-depth interpretation of the characteristics of stakeholder groups, especially prominent ones. More research is urged to investigate which one(s) can provide support to diverse ecotourism stakeholder groups. Another point of interest in future studies concerns the need for an "ecotourism policy network mechanism" (Xu, Mingzhu, Bu, & Pan, 2017) that coordinates multiple stakeholders with different goals and varied degrees of power, cooperativeness, and urgency in ecotourism development in coastal destinations.

Keywords: Coastal tourism, Dapeng Peninsula, Ecotourism, Shenzhen, Stakeholder analysis

References

[1] Ardhita, Z., & Ferdiansyah, S. (2024). Community participation in marine ecotourism development: a qualitative systematic review. *Local Environment*, 1-13. doi:10.1080/13549839.2024.2436031

[2] Diamantis, D. (2018). Stakeholder ecotourism management: exchanges, coordination's and adaptations. *Journal of Ecotourism, 17*(3), 203-205. doi:10.1080/14724049.2018.1502122

[3] Lee, J.-h., & Choi, H. O. (2017). Stakeholders' views on reducing financial support in government-led ecotourism areas. *Ocean & Coastal Management, 144*, 7-15. doi:https://doi.org/10.1016/j.ocecoaman.2017.03.033

[4] Orr, S. K. (2014). *Environmental policymaking and stakeholder collaboration: theory and practice* (1st ed.). Boca Raton, USA: CRC Press.

[5] Picard, D. (2015). Making ecotourism sustainable: refocusing on economic viability. Lessons learnt from the "Regional strategic action plan for coastal ecotourism development in the South Western Indian Ocean". *Journal of sustainable tourism, 23*(6), 819-837. doi:10.1080/09669582.2015.1019512

[6] Ressurreição, A., Cardigos, F., Giacomello, E., Leite, N., Oliveira, F., Kaiser, M. J., . . . Serrão Santos, R. (2022). The value of marine ecotourism for an European outermost region. *Ocean & Coastal Management, 222*, 106129. doi:https://doi.org/10.1016/j.ocecoaman.2022.106129

[7] Wardle, C., Buckley, R., Shakeela, A., & Castley, J. G. (2021). Ecotourism's contributions to conservation: analysing patterns in published studies. *Journal of Ecotourism, 20*(2), 99-129. doi:10.1080/14724049.2018.1424173

[8] Wondirad, A., Tolkach, D., & King, B. (2020). Stakeholder collaboration as a major factor for sustainable ecotourism development in developing countries. *Tourism Management, 78*, 104024. doi:https://doi.org/10.1016/j.tourman.2019.104024

[9] Xu, S., Mingzhu, L., Bu, N., & Pan, S. (2017). Regulatory frameworks for ecotourism: An application of Total Relationship Flow Management Theorems. *Tourism Management, 61*, 321-330. doi:https://doi.org/10.1016/j.tourman.2017.02.012

Senior Travelers' Intention to Use Trains: An Extended Theory of Planned Behavior Approach Integrating Service Quality, Accessibility, and Facility Convenience

Chang LU[1], Wenjie TANG[2*]

[1]Assistant Professor, Faculty of Tourism and Culinary Arts
Zhejiang Agricultural Business College, Shaoxing, Zhejiang

[2]PhD Student, Faculty of Hospitality and Tourism Management
Macau University of Science and Technology, Macau, China

*Corresponding Email: 382502637@qq.com

Abstract

Introduction

At present, China is accelerating into the stage of a moderately aging society. According to data from the National Health Commission, it is expected that by the end of 2024, the country's elderly population aged 60 and above will exceed 310 million (accounting for 22% of the total population), of which the group aged 65 and above will reach 220 million (accounting for 15.6%). With an average annual net increase of over 10 million elderly people, the size of China's elderly population is expected to exceed the 400 million marks in 2035. This demographic transition has given rise to a huge silver-hair economy market, in which the senior tourism market has attracted much attention due to its high consumption frequency and rapid growth in unit price (Fleischer & Pizam, 2002). In terms of transportation choices, Zhu & Wang (2016) reveals the typical behavioral characteristics of elderly tourists: firstly, they tend to choose mass and stable public transportation with stable passenger loads, and secondly, they pay attention to the comfort and spaciousness of the ride space, while showing a significant preference for sight-seeing features. This composite demand makes train travel the optimal solution. Train travel punctuality rate of 98% of the operational reliability to meet the basic travel needs, compared with the traditional train has a wider seat spacing can guarantee the comfort experience of elderly tourists, and the panoramic window design and along the route of the landscape zone of the synergistic planning to create a unique mobile viewing experience, these advantages together to promote train to become the preferred choice of the elderly group of medium- and long-distance travel.

In February 2025, the Chinese government released documents which called for a significant increase in the number of travel trains and services for seniors by 2027, including the renovation of older trains, on-board medical staff, and the development of specialty train routes. The goal is to make traveling safer and more comfortable for seniors while boosting consumption. China's railroads plan to launch more than 2,500 special trains for the elderly within three years, and scenic spots will also offer discounts. Policies will also be issued to boost the "silver economy" through financial support and cross-sectoral collaboration. With the advancement of the policy, senior trains will be chosen by more senior travelers. We focus on two questions by investigating the actual

feelings of senior travelers about the train facilities, train services and other improvements:

1. Does the senior train really attract seniors?

2. What service improvements can best enhance their willingness to ride repeatedly?

The research objectives of this study are as follows:

1. To investigate whether senior trains are significantly attractive to the senior traveler group in terms of dimensions such as service design, comfort, safety, and emotional value compared to ordinary trains, and to quantify the core drivers of the differences in their attractiveness.

2. To explore the direct and interactive effects of the three key variables of accessibility, perceived service quality and perceived convenience of the facility suitability on the willingness to re-select when senior travelers choose senior trains as a mode of travel.

Theoretical background

Theory of planned behavior

The theoretical foundation of this study was based on the Extended Theory of Planned Behavior (TPB), which offers a comprehensive framework for understanding the behavioral intentions of senior travelers regarding train travel. The TPB originally posited that behavioral intention, a key predictor of actual behavior, was influenced by three factors: attitudes toward the behavior, subjective norms, and perceived behavioral control (Ajzen, 1991). In the context of senior travelers, perceived service quality, perceived accessibility, available facility and revisit intention emerged as critical additions to the TPB framework. Existing research suggested that the senior tourism market was gaining academic attention as a large and under-explored segment (Meiners & Seeberger, 2010). The tourism consumption potential of this group stemmed mainly from its distinctive characteristics that differentiate it from previous generations of seniors: contemporary senior travelers generally had stronger financial strength, better physical fitness, more active lifestyles, and more ample leisure time (Kim, Wei, & Ruys, 2003). Secondly, compared to younger age groups, they exhibited greater consumer initiative, as evidenced by flexible time-planning capabilities, extended vacation preferences, and a higher share of leisure spending (Nimrod & Rotem, 2012).

Perceived service quality

Perceived service quality was defined as the extent to which a service met the needs or expectations of customers (Wisniewski, 1996). According to the findings of Parasuraman, Berry, and Zeithaml (1991), there were two levels of customer service expectations: desired and adequate. Desired service expectations were the level of service that the customer wanted to receive, while adequate service expectations were the level of service that was “acceptable” to the customer. Bitner (1990) suggested that satisfaction from individual transactions led to a more general structure, namely service quality, which in turn led to customer loyalty. Empirical studies had confirmed this argument. Heung, Mok, and Kwan (1996) in their study of the extent of hotel brand

loyalty in the Hong Kong hotel industry in the market of free-traveling travelers, their results showed that the quality of hotel services was critical to hotel brand loyalty. This meant that the quality of service must exceed expectations in order to satisfy customers because the higher the quality of service, the higher the repurchase behavior and customer loyalty (Brodie, Whittome, & Brush, 2009).

Perceived accessibility

Perceived accessibility was a new concept. Traditionally, accessibility had been defined as "the potential for interaction opportunities" because accessibility reflected the opportunity an individual had to participate in a particular activity or set of activities (e.g., work, shopping, and socializing) at a particular location (Hansen, 1959). Geurs and van Wee (2004) also conceptualized accessibility from four perspectives: transportation, land use, and time and personal factors. The traditional definition of accessibility focused heavily on the land use, transportation, time, and personal dimensions that affect individual accessibility. However, personal dimensions were often underestimated in empirical assessments of accessibility (Jamei, Chan, Chau, Gaisie, & Lättman, 2022). Therefore, for perceived accessibility, researchers had argued that existing theories of accessibility can be supplemented by increasing the subjective experience and awareness of travelers (van Wee, 2016). Based on this theory, scholars had defined perceived accessibility as how individuals understood and experienced their own accessibility, including feelings about public transportation safety and service quality (Jamei et al., 2022).

Available train facilities

One of the main directions of research on train available facilities was its relationship with passenger satisfaction. Anwer et al. (2024) stated that passengers' satisfaction with station and train facilities, customer service, and perception of information and communication technology had a great impact on their frequency of traveling. For train facilities, researchers had found that the most important factors affecting passenger satisfaction were the cleanliness of restrooms, the cleanliness of the interior of the car, and the effectiveness of the air conditioning system in the train (Esakkiammal & Thangaraja, 2022). Certain amenities of trains had been identified as critical to passenger satisfaction. For example, adequate seating, cleanliness and safety measures were important factors that contribute to a positive perception of passengers. When trains were overcrowded and the associated amenities were inadequate, this could lead to passenger dissatisfaction (Amin, Husny, Ijaz, Shahbaz, & Rasool, 2023). In conjunction with the research context of this study, this study defined train available facilities as available space for baggage, seating arrangements in trains, medical equipment, hygienic conditions in trains and information alert services.

Revisit intention

Revisit intention had been the focus of research in the field of tourism and hospitality. Research had shown that perceived service quality and perceived value were key predictors of tourist attitudes and future revisit intentions (Hasan, Kamariah, Faridul,

& and Neela, 2020). In addition, satisfaction with various aspects of the destination, including attractiveness, quality, and value, had been identified as a significant influence on revisit intention (Quintal & Polczynski, 2010). Nursyamsiah and Setiawan (2023) found that place attachment had a positive and significant effect on revisit intention. Revisit intention was defined in this study as the likelihood that a passenger would be willing to revisit a destination or repeat an activity, and the willingness of tourists to recommend a destination to others (Ren, Su, Zhou, Hou, & Wen, 2022).

Technology familiarity

Age significantly affected technological familiarity, and research had shown that older adults often face challenges in adopting and utilizing digital technologies (Nerice Heng Wen et al., 2022). Due to the life experiences of older adults, age-related digital disparities were exacerbated by functional limitations and social isolation (Chee, 2024). In this study, technology familiarity was defined as the ability to use relevant technology in a train-riding environment. **Fig.1** presents an overview of the relationships within the study framework. In summary, we proposed the following hypotheses:

H1: Senior travelers perceive higher service quality when traveling on senior trains compared to traditional trains.

H2: Senior travelers perceive higher accessibility when traveling on senior trains compared to traditional trains.

H3: Senior travelers perceive higher available train facilities when traveling on senior trains compared to traditional trains.

H4: Senior travelers' perceived service quality positively influences their revisit intention.

H5: Senior travelers' perceived accessibility positively influences their revisit intention.

H6: Senior travelers' perceived available train facilities positively influence their revisit intention.

H7a: Technology familiarity positively moderates the relationship between travel options and perceived service quality.

H7b: Technology familiarity positively moderates the relationship between travel options and perceived accessibility.

H7c: Technology familiarity positively moderates the relationship between travel options and perceived available train facilities.

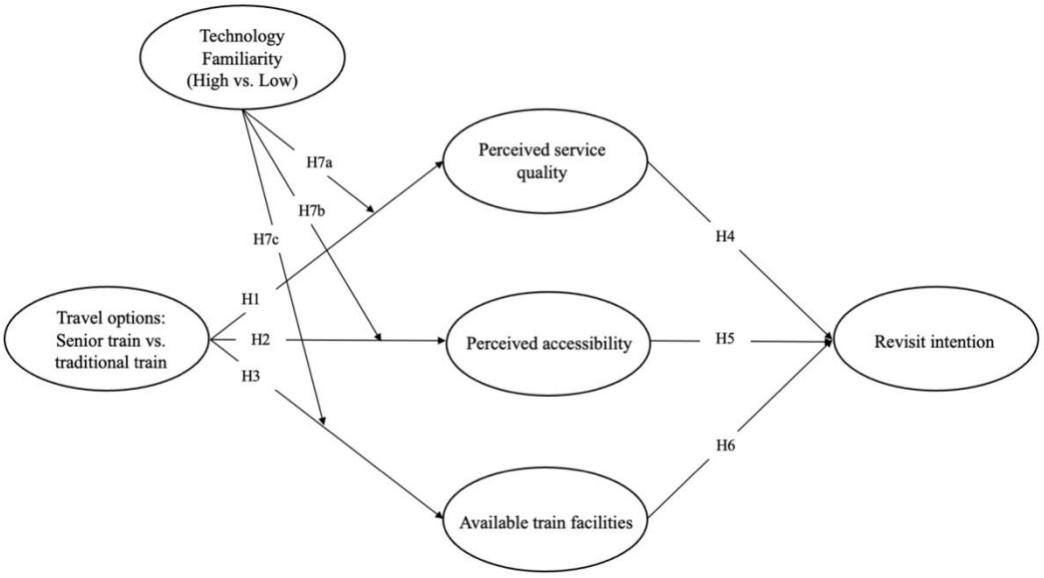


Fig. 1. The research model.

Methodology

Senior train travel is gaining popularity as it addresses the specific needs of elderly travelers. Senior travelers seek more convenient, accessible facilities and higher service quality on trains. Given that elderly travelers have higher expectations for service quality and facility usability, understanding their core needs is crucial for tourism bureaus and travel agencies to develop appropriate travel plans. Therefore, this study employs a mixed-methods approach, utilizing both qualitative and quantitative data, to examine how senior trains impact elderly travelers' perceived service quality, accessibility, and convenience of facilities. Mixed methods research is particularly well suited to tourism studies given the complexity, dynamism, and context-specific nature of tourism phenomena (Truong et al., 2020).

Phase 1: qualitative exploration

Study design and procedures

We first conducted an exploratory qualitative study among elderly customers who had traveled on senior trains in the past year. A total of 20 elderly Chinese participants were expected to be recruited with the assistance of volunteers at train stations. Participants aged 60 and above had traveled by train in the past year. They were asked to respond to a series of open-ended questions. Aligned with the main objectives of this study, the interview questions were designed to explore the motivations and influencing factors behind senior train travel and how these motivations shape the travel experiences of elderly passengers. At the start of each interview, participants were shown images of senior trains and asked to recall their past train travel experiences. The memory elicitation technique was employed to assist participants in retrieving and highlighting specific memories (Labrecque, 2014). First, participants were asked about their overall views on senior trains compared to regular trains (e.g., "Generally speaking, what do

you think of senior trains versus regular trains for the general public?"). Next, participants were shown images of senior trains and asked to discuss how such trains influenced their perceptions of tourism bureaus and the tourism industry (e.g., "Some trains have words like 'senior trains' written on them. What message do you think these trains convey to senior travelers?"). Finally, participants were asked about their willingness to take a senior train (e.g., "When travel agencies or OTA platforms offer senior train trips, are you willing to try one? Please explain why." "Are you familiar with the process of ordering train tickets? Please briefly describe the ordering process."). This exploratory qualitative study aims to provide preliminary evidence for the senior train effect which posits that senior train enhances perceived service quality, accessibility, and convenience of the facility, thereby increasing revisit intention. To gain a deeper understanding of the senior train experience, Study 2 employed a quantitative approach with two main objectives: (i) to provide empirical evidence for the senior train effect, and (ii) to examine the impact of senior train on elderly travel patterns using quantitative data. More specifically, we investigated how elderly travelers' familiarity with technology moderates the impact of senior trains on their travel behavior.

Phase 2: quantitative research through experimental design

Study design and participants

The quantitative study used a travel mode (senior train vs. traditional train) × technology familiarity (high vs. low) experimental design. Travel mode was the manipulated factor, while technology familiarity was measured as an individual factor. The participants were expected to be aged 60 years or older.

We prospectively recruited 200 participants from Rednote and randomly assigned them to a 2 (senior train vs. traditional train) × 2 technology familiarity (high vs. low) between-subjects design. First, participants were told that they would complete two unrelated studies. They were first asked to imagine a day of participating in a train journey and their familiarity with the process of ordering a train ticket, and then write down their feelings and thoughts in detail.

Results

Manipulation check. We compared the travel modes between the two conditions by conducting an ANOVA on the scores of the senior train and the conventional train. The results were expected to show that participants in the senior train travel condition rated the senior train as a better travel experience than the conventional train.



Fig. 1. Train travel option in the experiment. (Senior train vs. traditional train)

Keywords: senior travelers, train travel, perceived service quality

References

[1] Amin, S., Husny, Z. J. Mohammad, Ijaz, Z., Shahbaz, A., & Rasool, S. (2023). Service quality assessment of orange line metro train, Lahore, Pakistan. IOP Conference Series. *Earth and Environmental Science, 1274*(1), 012023. doi: https://doi.org/10.1088/1755-1315/1274/1/012023

[2] Anwer, Izza, Javid, Muhammad Ashraf, Yousuf, Muhammad Irfan, Farooq, Muhammad, Ali, Nazam, Suparp, Suniti, & Hussain, Qudeer. (2024). Travelers' Propensity to Use Intercity Railway Services in Emerging Economies: Significance of Passengers' Satisfaction and Communication Technologies. *Sustainability, 16*(20), 8921. doi:10.3390/su16208921
[3] Bitner, Mary Jo. (1990). Evaluating Service Encounters: The Effects of Physical Surrounding and Employee Responses. *Journal of Marketing, 54*(2), 69.
[4] Brodie, Roderick J., Whittome, James R. M., & Brush, Gregory J. (2009). Investigating the service brand: A customer value perspective. *Journal of Business Research, 62*(3), 345-355. doi:10.1016/j.jbusres.2008.06.008
[5] Fleischer, Aliza, & Pizam, Abraham. (2002). Tourism constraints among Israeli seniors. *Annals of Tourism Research, 29*(1), 106-123. doi:10.1016/S0160-7383(01)00026-3
[6] Geurs, Karst T., & van Wee, Bert. (2004). Accessibility evaluation of land-use and transport strategies: review and research directions. *Journal of Transport Geography, 12*(2), 127-140. doi:10.1016/j.jtrangeo.2003.10.005
[7] Hansen, Walter G. (1959). How Accessibility Shapes Land Use. *Journal of the American Institute of Planners, 25*(2), 73-76. doi:10.1080/01944365908978307
[8] Hasan, Kamrul, Kamariah, Abdullah Shamsul, Faridul, Islam, & and Neela, Nayeema Maswood. (2020). An Integrated Model for Examining Tourists' Revisit Intention to Beach Tourism Destinations. *Journal of quality assurance in hospitality & tourism, 21*(6), 716-737. doi:10.1080/1528008X.2020.1740134
[9] Heung, Vincent CS, Mok, Connie, & Kwan, Anthea. (1996). Brand loyalty in hotels: an exploratory study of overseas visitors to Hong Kong. Australian Journal of Hospitality Management, 3(1), 1-11.
[10] Kim, Jaesoo, Wei, Sherrie, & Ruys, Hein. (2003). Segmenting the market of West Australian senior tourists using an artificial neural network. *Tourism Management, 24*(1), 25-34. doi:10.1016/S0261-5177(02)00050-X
[11] Labrecque, L. I. (2014). Fostering Consumer–Brand Relationships in Social Media Environments: The Role of Parasocial Interaction. *Journal of Interactive Marketing, 28*(2), 134–148. https://doi.org/10.1016/j.intmar.2013.12.003
[12] Meiners, Norbert H., & Seeberger, Bernd. (2010). Marketing to senior citizens: Challenges and opportunities. *The Journal of social, political, and economic studies, 35*(3), 293-328.
[13] Nimrod, Galit, & Rotem, Arie. (2012). An exploration of the Innovation Theory of Successful Ageing among older tourists. *Ageing and society, 32*(3), 379-404. doi:10.1017/S0144686X1100033X
[14] Nursyamsiah, Rahmi Aghnia, & Setiawan, Rulli Pratiwi. (2023). Does place attachment act as a mediating variable that affects revisit intention toward a revitalized park? *Alexandria Engineering Journal, 64*, 999-1013. doi:10.1016/j.aej.2022.08.030
[15] Parasuraman, A., Berry, Leonard L., & Zeithaml, Valarie A. (1991). Understanding Customer Expectations of Service. *MIT Sloan management review, 32*(3), 39.
[16] Quintal, Vanessa A., & Polczynski, Aleksandra. (2010). Factors influencing tourists' revisit intentions. *Asia Pacific journal of marketing and logistics, 22*(4), 554-578. doi:10.1108/13555851011090565
[17] Truong, D., Xiaoming Liu, R., & Yu, J. (Jasper). (2020). Mixed methods research in tourism and hospitality journals. International *Journal of Contemporary Hospitality Management, 32*(4), 1563–1579. https://doi.org/10.1108/IJCHM-03-2019-0286

[18] Zhu, Yudong, & Wang, Qingqing. (2016). Psychological Behavior of Elderly Tourism Consumption and Market Research. *Rural Economy and Technology, 10*, 54-55.
[19] Zhao, W., Xu, L., Dong, Z. S., Qi, B., Qin, L., & BinRan. (2018). Improving transfer feasibility for older travelers inside high-speed train station. *Transportation Research Part A: Policy and Practice, 113*, 302–317. https://doi.org/10.1016/j.tra.2018.04.021

Investigating the Factors in Creating Destination Intellectual Property: A Study of Successful Business Case Replication

Yuxian WANG[1], Ziqin LIANG[1*], Su-Ying PAN[2]

[1]Bachelor's Degree Student, Faculty of Hospitality and Tourism Management, Macau University of Science and Technology, Taipa, Macau

[2]Associate Professor, Faculty of Hospitality and Tourism Management, Macau University of Science and Technology, Taipa, Macau

*Corresponding Email: 1220031121@student.must.edu.mo

Abstract

In the 1960s, due to the rapid economic development of Western countries, there was a serious problem of homogenization of market commodities, and the competition among enterprises became increasingly fierce. In order to find new competitive advantages to attract consumers' attention and build brand loyalty, David Ogilvy (1963) put forward the creative concept of "brand image". He believed that the brand image was not inherent in the product but the overall perception of the brand by consumers. As a spatial extension of brand theory in the local context, the brand building of a tourist destination usually triggers a series of quality expectations or impressions of the destination among people. Individuals usually have these expectations before consumption (Metelka, 1981). Therefore, it is very important to focus on establishing a brand positioning that meets the psychological expectations of potential tourists and leaves a good destination brand image in people's minds.

However, with the intensification of competition in the global tourism market, whether the brand image building of a tourist destination is differentiated or innovative has also become a key issue in attracting tourists and enhancing competitiveness. The brand image is largely shaped by the marketing stimuli provided by formal marketing communication tools and development of a specific destination (Manhas, Manrai, & Manrai, 2016). At the same time, it is also influenced by informal promotion tools and the consumers' own feelings about the destination after they visit and experience various services provided by stakeholders (Berry & Seltman, 2007). These influences will form a picture or perception of the destination's brand image in the minds of tourists, establish an emotional connection with the brand image of the tourist destination, and thus stimulate tourists to uniquely shape and spread the brand image of the tourist destination.However, similar to the development process of commodity brands, the problem of homogenization in the building of traditional destination brand images is becoming increasingly prominent nowadays. The communication mode that tends to be one-way and lacks interactivity makes it difficult to stimulate tourists' active participation, resulting in the brand image remaining at a superficial cognitive level (Mei & Wang, 2017), and innovative strategies are urgently needed.

From an interdisciplinary academic perspective, this study believes that as a benchmark of new consumer brands, the success of the intellectual Property (IP) strategy of Missa Ice City has paradigmatic significance for the industry. Although the IP-based branding of new consumer brands has achieved remarkable results, there is relatively little research on its application transfer in the destination brand image. Through the dual growth system of "high quality and low price + IP", Missa Ice City has opened more

than 46,000 stores globally and achieved 9.7 billion exposures with a marketing expense of 0.9% (The Beijing News, 2025). The systematic operation of its IP (animation, peripheral products, theme stores) forms a "brand element combination", and the anthropomorphic image of "down-to-earth and approachable" establishes an emotional connection with consumers, enabling the brand to transcend its functional attributes and become a cultural symbol that is youthful and adapted to the Internet culture. This is consistent with the structure of brand image building of tourist destinations through a series of element combinations. It is different from the traditional communication mode, which pays more attention to functional attributes and ignores the emotional resonance with tourists. Subsequently, from the stimulating marketing methods of its IP brand building to the emotional connection after stimulation, four theoretical dimensions are extracted: symbolic interaction (Blumer, 1969), narrative development (Polkinghorne, 1988), experiential resonance (McDonell, Bail, & Tavory, 2017), and brand co-creation (Prahalad & Ramaswamy, 2004), and their transfer and application in the brand image of tourist destinations are explored.

First is the theory of symbolic interaction (Blumer, 1969). The visual symbols (red robe, scepter) and auditory symbols (catchy theme song) of Snow King form a strongly stimulating identification system. By awakening childhood memories through the image of the "snowman", it realizes the symbolic construction of brand recognition and forms a differentiated brand identity. Second is the narrative development (Polkinghorne, 1988). The animation "Snow King Arrives" conveys the brand's own values through the narrative story of "struggle", shapes the brand personality of a "striver", and constructs an emotional resonance field through serialized stories and topics, further strengthening the brand's uniqueness. Third is the experiential resonance (McDonell, Bail, & Tavory, 2017). By tying in with social issues (such as the high-temperature marketing of the "blackened Snow King"), it upgrades product consumption to an emotional experience, which is in line with the consumption trend of "emotional value" among young people. Fourth is the brand co-creation (Prahalad & Ramaswamy, 2004). 97% of the communication volume comes from users' secondary creations, and the sense of participation is activated through UGC on Bilibili and co-branding activities.

Regarding the transfer of the case of Missa Ice City to the tourism industry, this study has also found factors of inadaptability, mainly considering three aspects. In terms of cost differences, the rigid costs of the tourism industry (transportation, accommodation) restrict the replication of the low-price strategy, and the low-price model of the "3-yuan ice cream" cannot be directly applied. In terms of stakeholder collaboration, destination management involves a game among the government, residents, and enterprises, and it is necessary to avoid interest conflicts and the simplification of the image caused by the dominance of a single IP. In terms of the boundary of cultural adaptation, the transfer of the brand IP to the brand image of a tourist destination needs to be compatible with the local culture, and the symbol system needs to be localized based on the Placeality theory (Li, Guo, Jiang, Xu, & Han, 2011) (Zou, Zhao, Chang, & Han, 2010).

Based on the above analysis, this study puts forward the core proposition: Since there are still deficiencies in the research of the theory of symbolic interaction (Blumer, 1969), narrative development (Polkinghorne, 1988), experiential resonance (McDonell, Bail, & Tavory, 2017), and brand co-creation (Prahalad & Ramaswamy, 2004) in the brands of tourist destinations, this study will deeply explore by incorporating these factors extracted from the IP strategy of Missa Ice City, namely the theory of symbolic interaction (Blumer, 1969), narrative development (Polkinghorne, 1988), experiential

resonance (McDonell, Bail, & Tavory, 2017), and brand co-creation (Prahalad & Ramaswamy, 2004), into the influencing factors of the brand image of tourist destinations, and thus four hypotheses are proposed:

H1: There is a positive relationship between symbolic interaction and tourism destination brand image.

H2: There is a positive relationship between narrative development and tourism destination brand image.

H3: There is a positive relationship between experience resonance and tourism destination brand image.

H4: There is a positive relationship between brand co-creation and tourism destination brand image.

Destination Brand Image, as a comprehensive reflection of tourists' cognition and perception of a destination, is a critical antecedent influencing tourist experiences. Existing research has mainly focused on the compositional dimensions of brand image (such as functional and emotional dimensions) and its direct effects on tourist satisfaction, while less attention has been paid to how brand image influences Memorable Tourism Experience (MTE) through mediating mechanisms. MTE, a hot topic in recent tourism research, emphasizes the profound memories and emotional resonance formed by tourists during their travel. Kim et al. (2012) proposed that MTE consists of seven core dimensions: emotion, cognition, engagement, uniqueness, novelty, locality, and social interaction. These dimensions indicate that MTE is not only affected by the products and services provided by the destination but also closely related to tourists' psychological perceptions and emotional connections. However, research on MTE has primarily centered on dimensional construction and measurement (Hosany et al., 2022), with insufficient exploration of how destination brand image influences MTE through mechanisms such as emotional resonance and symbolic interaction.

MTE is regarded as a key factor affecting tourists' revisit intention. Chandralal and Valenzuela (2015) pointed out that tourists' deep memories and emotional experiences of a destination can enhance their loyalty to the destination, thereby increasing revisit intention. However, current studies mostly focus on the direct effect of MTE on revisit intention, ignoring the potential indirect role of destination brand image in this process. Few studies have explored how DBI enhances the emotional dimension of MTE to improve revisit intention, and the mediating effects in this chain have not been fully validated. Overall, although existing research has focused on the interrelationships among brand image, MTE, and revisit intention (Zhang, Wu, & Buhalis, 2018), the research on the dynamic relational chain among these three is still significantly insufficient. Especially within the frameworks of symbolic interactionism, experience resonance theory, and narrative resonance theory, the mechanisms through which brand image influences the emotional, cognitive, and engagement dimensions of MTE and ultimately indirectly affects revisit intention have not been systematically revealed. Based on this, the chain mediating effect hypothesis H5 is proposed, and the following model is designed (Figure 1):

H5: Tourism destination brand image will mediate the relationship between symbolic interaction, experience resonance, narrative development, and brand co-creation and revisit intention.

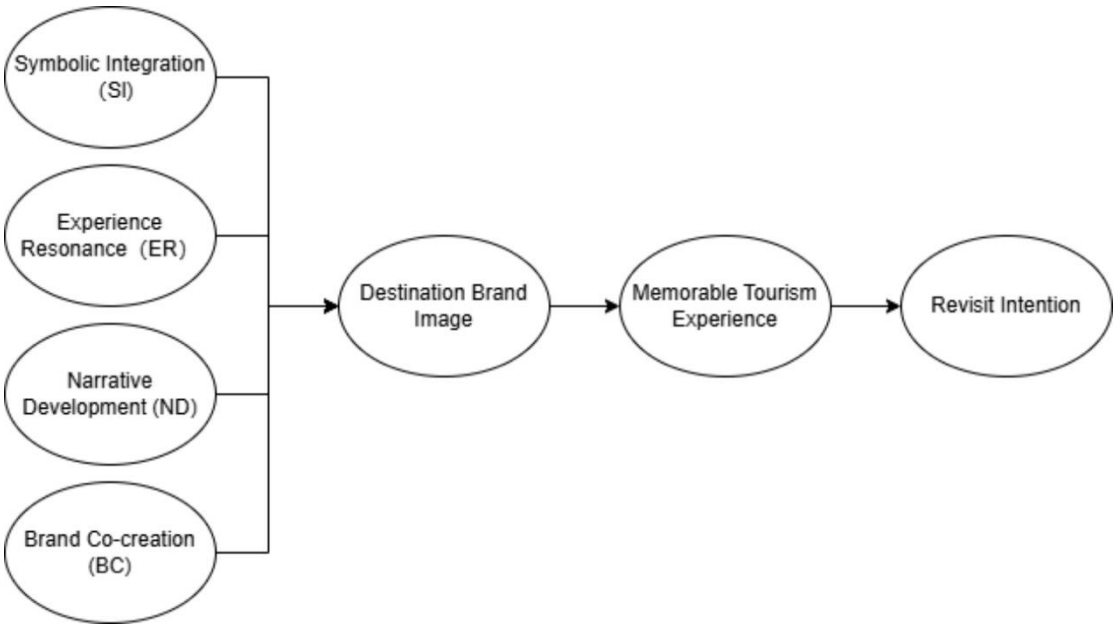


Figure1. Research model.

This study aims to validate the effects of Symbolic Integration (SI), Experience Resonance (ER), Narrative Development (ND), and Brand Co-creation (BC) on Destination Brand Image (DBI) as shown in the model, and to explore how destination brand image affects tourists' revisit intention through Memorable Tourism Experience (MTE). A mixed-method approach combining quantitative and qualitative methods is adopted, which is divided into three stages: theoretical model validation, mediating and moderating effect analysis, and in-depth interviews.

Data collection includes two methods: questionnaire surveys and in-depth interviews. The questionnaire survey targets tourists who have visited a specific tourist destination within the past year, using a combination of online and offline methods to collect samples. The target sample size is 500 valid questionnaires to ensure the statistical power for structural equation modeling (SEM) analysis. At the same time, semi-structured in-depth interviews are conducted with representative tourist groups to explore the deep-seated impacts of symbolic interaction, narrative resonance, and brand co-creation on tourist experiences. In the sample design, tourists are grouped according to their cultural backgrounds (domestic vs. international tourists) to explore the moderating role of cultural fit. Variable measurement is based on existing literature, and scales for variables such as symbolic integration, experience resonance, narrative development, brand co-creation, destination brand image, memorable tourism experience, and revisit intention are designed. All indicators use a 7-point Likert scale (1 = strongly disagree, 7 = strongly agree).

Data analysis is divided into quantitative and qualitative analysis. In quantitative analysis, descriptive statistics are first conducted using SPSS or R to analyze the basic characteristics of the sample, and the reliability and validity of the scale are tested through Cronbach's Alpha and Composite Reliability (CR). Second, structural equation modeling (SEM) using AMOS or SmartPLS is employed to validate the model paths and hypotheses. The Bootstrap method is used to test the mediating effect of destination brand image between SI, ER, ND, BC, and MTE, and multi-group analysis (MGA) is used to explore the moderating role of cultural fit. To more comprehensively validate the research model, Partial Least Squares Structural Equation Modeling (PLS-SEM) can be adopted. PLS-SEM has higher flexibility and robustness in handling complex

path relationships and prediction-oriented problems. Through PLS-SEM, Destination Brand Image (DBI) can be decomposed into three dimensions: functional, emotional, and symbolic, and path relationships can be established with variables such as Symbolic Integration (SI) and Experience Resonance (ER). In qualitative analysis, thematic analysis is conducted on interview data to identify the deep mechanisms of symbolic interaction, narrative resonance, and brand co-creation in tourist experiences, and qualitative results are combined with quantitative analysis to supplement the model's explanatory power.

The theoretical contributions of this study lie in introducing symbolic interactionism, experience resonance theory, narrative resonance theory, and brand co-creation theory into destination branding research, expanding the theoretical framework for brand image and memorable tourism experience. It also validates the mediating role of destination brand image between MTE and revisit intention, providing a theoretical basis for branding strategies. In terms of practical significance, this study provides specific guidance for destination brand building, emphasizes the importance of symbolic systems, narrative development, and tourist co-creation, and offers suggestions for brand communication strategies from the perspective of cultural fit to facilitate the global promotion of destination brands. Through theoretical adaptation and case analysis, this study verifies the feasibility of transferring consumer brand IP strategies to the tourism industry. Future research can further deepen the emotional value quantification model and explore IP co-creation models in metaverse scenarios to provide more forward-looking solutions for destination branding.

References

[1] Berry, L. L., & Seltman, K. D. (2007). Building a strong services brand: Lessons from Mayo Clinic. *Business Horizons, 50*(3), 199-209.

[2] Blumer, H. (1969). *Symbolic interactionism: Perspective and method.* University of California Press.

[3] Chandralal, L., & Valenzuela, F. R. (2015). Memorable tourism experiences: Scale development. *Contemporary Management Research, 11*(3), 291–310. https://doi.org/10.7903/cmr.13822

[4] Hosany, S., Prayag, G., & Van Der Veen, R. (2022). Understanding memorable tourism experiences: A systematic review and research agenda. *Journal of Travel Research, 61*(5), 1081–1097. https://doi.org/10.1177/00472875211040584

[5] Kim, J. H., Ritchie, J. B., & McCormick, B. (2012). Development of a scale to measure memorable tourism experiences. *Journal of Travel Research, 51*(1), 12–25. https://doi.org/10.1177/0047287510385467

[6] Li, X., Guo, F., Jiang, W., Xu, J., & Han, Y. (2011, June). *Placeality and image positioning: A case on Lianyun Old Quarter*. In 2011 International Conference on Computer Science and Service System (CSSS) (pp. 2404-2407). IEEE.

[7] Manhas, P. S., Manrai, L. A., & Manrai, A. K. (2016). Role of tourist destination development in building its brand image: A conceptual model. *Journal of Economics, Finance and Administrative Science, 21*(40), 25 - 29. https://doi.org/10.1016/j.jefas.2016.01.001

[8] Marzuki, A. (2012). Local residents' perceptions towards economic impacts of tourism development in Phuket. *Tourism: An International Interdisciplinary Journal, 60*(2), 199-212.

[9] McDonnell, T. E., Bail, C. A., & Tavory, I. (2017). A theory of resonance. *Sociological theory, 35*(1), 1-14.

[10] Mei, W. H., & Wang, L. Q. (2017). Research on the brand communication of tourist destinations in the era of social media. *Today's Mass Media, 25*(3), 14 - 15.

[11] Ogilvy, D. (1963). Confessions of an advertising man. Atheneum.

[12] Ogilvy, D. (1983). Ogilvy on advertising. Vintage.

13[] Polkinghorne, D. (1988). *Narrative knowing and the human sciences.* State University of New York Press.

[14] Prahalad, C. K., & Ramaswamy, V. (2004). Co-creation experiences: The next practice in value creation. *Journal of interactive marketing, 18*(3), 5-14.

[15] Xinjingbao. (2025, March 27). *Mixue Group: 2024 revenue reaches 24.83-billion-yuan, store count exceeds 46,000*. Xinjingbao. https://baijiahao.baidu.com/s?id=1827710860752362641

[16] Zhang, H. M., Wu, Y., & Buhalis, D. (2018). A model of perceived image, memorable tourism experiences and revisit intention. *Journal of Destination Marketing & Management,* 8, 326–336. https://doi.org/10.1016/j.jdmm.2017.06.004
[17] Zou, T. Q., Zhao Y. Y., Chang M. Q, & Han, Q. (2021). The Origins, Nature, and Measurements of Destination Placeality. *Tourism and Hospitality Prospects*, *5*(1): 1-22. DOI:10.12054/lydk.bisu.160

Engagement Wars in the Hotel Ballroom: Are Personalized Virtual Influencers Stealing the Spotlight from Humans?

Chon In (Alston) HO[1], Henrique Fátima Boyol NGAN[2]

[1]Student, Faculty of Creative Tourism and Intelligent Technologies, Macao University of Tourism, Colina de Mong-Há, Macau, China

[2]Director of Center for Education Quality Management, Faculty of Creative Tourism and Intelligent Technologies, Macao University of Tourism, Colina de Mong-Há, Macau, China

Abstract

INTRODUCTION

In recent years, VIs have ended the dominant role for HIs in hospitality marketing. And one signature of hospitality VIs is Sena Zora, an AI influencer in the hospitality sector that constructed by Cenizaro Hotels (Marti-Ochoa et al., 2025), currently partnering with several resorts brand such as The Residence Maldives and Hotel Orderberger Berlin. VIs have been proven to be effective in stimulating online bookings Dao (2023), and their credibility can foster people to follow their recommendations (Vinoi et al., 2025).

Despite several studies have pointed out their marketing effectiveness in the hospitality sector (Dao, 2023; Vinoi et al., 2025), study about how they foster people's social media engagement is still limited. Besides, some studies pointed out the excellent customization capabilities of VIs, but the impact of customization content on online engagement is still underexplore. As a result, this study replies to the call by Mouritzen et al. (2024), to investigate how customers react and form relationship differently to the tailored VIs and real-life influencers and grounded by Self-Referencing Effect to construct a comprehensive framework. More specifically, this study aims to solve the following research questions:

RQ1. Does perception of personalization affect people's online engagement and does attitude towards influencer mediate this relationship?

RQ2. Does the personalization effect on online engagement stronger in the case of VIs than HIs?

LITERATURE REVIEW

Rise of Virtual Influencers and Its Customize Capability

In recent decades, hotel groups have begun to adopt influencer marketing as their social media marketing strategy (Yetimoğlu & Uğurlu., 2020). Influencer marketing is an effective strategy in brand promotions and gain attention from the targeted customers in the hospitality industry (Lee et al., 2021). With the advancement of artificial intelligence, a new form of influencer – virtual influencers (VIs) – is affecting customers' engagement and decision making (Lou et al., 2023). They outperform HIs in some ways, but one of the most obvious advantages is its capability to be customized. Stated by Shil (n.d.), VIs can offer tailored response according to consumer immediate feedback and create intimacy connections. Likewise, Sookkaew & Saephoo (2021) claimed that the VIs' physical appearance, gestures and all the contents presented can be customized. Besides, companies can customize VIs to fit their corporate core values

(Xin et al., 2024). Last but not least, brand managers can customize VIs based on the market trends and customers' expectations (Agnihotri et al., 2024; Mouritzen et al., 2024).

THEORETICAL BACKGROUND

Self-Referencing Effect

The Self-Referencing Effect (SRE) was first proposed by Rogers et al. (1977), suggesting that people tend to pay more attention to information that is relevant to themselves compared to information that is irrelevant. Self-reference and content relevance are closely tied to the concept of personalization (Lei et al., 2022), and well-applied in study like examining how personalization affect people behavioral intention on social media platform (Chu et al., 2024). According to Debevec & Iyer (1988), people who was exposed to a stimulus advertisement with high levels of self-referencing are more likely to develop positive attitudes and stronger cognitive responses, which can be implied that individuals who exhibited to the personalized content would evoke more positive attitude and enhance their behavioral intention. Furthermore, contents that are personalized based on customer preferences can diminish time for decision making and customer fatigue (Chandra et al., 2022). Therefore, we proposed that people will pay more attention (online engagement) on personalized content (VIs and HIs) because it is more relevant to them. This personalization may foster people's positive attitude and eventually enhance online engagement.

HYPOTHESIS DEVELOPMENT

Personalization and Online Engagement

Personalization is referred to the action of manufacturing and designing in ways that align to customer preferences (Chandra et al., 2022). Online engagement is defined as the action of like, comments and shares on social media platforms (Pletikosa Cvijiki & Michahelles, 2013). Previous study suggested that personalized online advertising will enhance online engagement (Noor et al., 2024). Since influencers are considered one of the major components in ads, and VIs owns a higher customized capability, it can be assumed that people's perception of personalization towards both VIs and HIs may leads to enhance online engagement. With this evidence, the following hypothesis is proposed:

H1: The impact of personalization for VIs (vs. HIs) on online engagement is stronger.

Personalization and Attitude towards Influencer

By adopting the definition from Mitchell & Olson (1981), attitude towards influencer is referred to individual evaluation of the influencer. In the context of mobile advertising, personalization has been proven to have a significant impact on people attitudes (Xu, 2006). It can be anticipated that a tailored influencers may foster people to generate positive attitude. Along with the VIs' flexibility to tailor the contents, the subsequent hypothesis is posited:

H2: The impact of personalization for VIs (vs. HIs) on attitude towards influencer is stronger.

Attitude towards Influencer and Online Engagement

According to the findings by Wulandari et al. (2023), when people have a positive attitude towards influencers, it helps to stimulate a higher social media engagement. Besides, we also assumed that the impact is stronger in the case of VIs due to their scalability, they can interact with people 24/7. With this evidence, the following hypothesis is suggested:

H3: The impact of attitude towards VIs (vs. HIs) on online engagement is stronger.

The Mediation Role of Attitude towards Influencer

Additionally, both Magano et al. (2022) and Immanuel & HS (2021) indicated that attitude acts as a significant role in mediation. Therefore, we plan to further confirm the mediation role of attitude towards influencer and the subsequent hypothesis is formulated:

H4: The mediation effect of attitude towards VIs (vs. HIs) for the relationship between personalization and online engagement is stronger.

RESEARCH MODEL

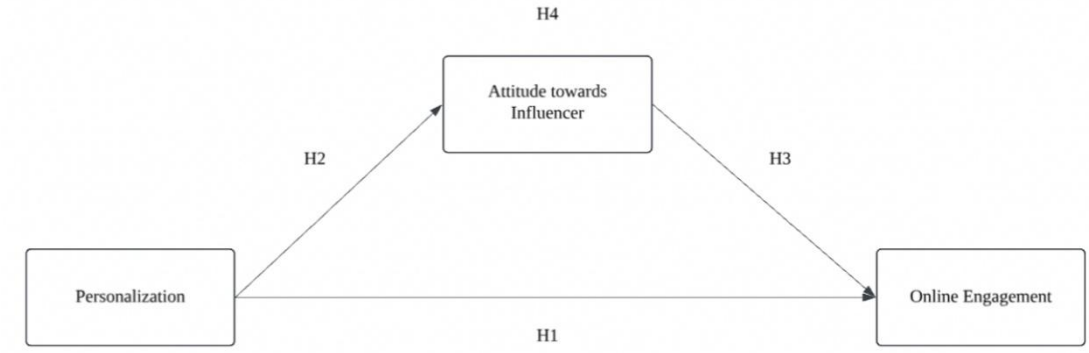


FIGURE 1. Research Model

METHODOLOGY

In this study, a quantitative research method is used with a comparable experimental design. An online survey is distributed among participants for data collection. In total, 15 items were involved in the questionnaire based on prior literature and adjusted the content to fit the context of influencers. All the listed items were measured with a 5-point Likert scale ranging from 1 = Strongly Disagree to 5 = Strongly Agree. Example of items are presented in TABLE 1. A pre-test is conducted for ensure the validity and reliability. Purposive convenience sampling is used with data from 311 participants was collected. Two stimulus per influencer type are provided to maximize the real online environment. Participants will randomly assign to face one of the influencer types stimulus. To begin the experiment, a consent form and manipulation check is required. After exposure to the stimulus, a questionnaire is required to fill.

Personalization (P)	1. This endorser would be able to make recommendation that match my needs.	(Srinivasan et al., 2002)
	2. I think that this endorser would enable me to order products that are tailor-made for me.	
	3. Overall, this endorser would post content tailored to my needs.	
	4. This endorser would make me feel that I am a unique follower.	
	5. I believe that this endorser's content would be customized to my preferences.	
Attitude towards Influencer (ATI)	1. I believe that this endorser presents interesting content.	(Kok Wei & Li, 2013; Spears & Singh, 2004)
	2. The brand-endorser collaboration is favorable.	
	3. The brand-endorser collaboration makes me feel good.	
	4. The brand-endorser collaboration makes me feel pleasant.	
	5. The brand-endorser collaboration is logical.	
Online Engagement (OE)	1. I will like the brand posts endorsed by this endorser.	(Men & Tsai, 2013; Pereira et al., 2014)
	2. I will comment on the brand posts endorsed by this endorser.	
	3. I will share brand posts endorsed by this endorser.	
	4. I will participate in the posts endorsed by this endorser.	
	5. I will read/watch brand posts endorsed by this endorser regularly.	

RESULTS

Hypothesis Testing

Referring to the FIGURE 3, the measurement model showed no multicollinearity (VIF < 3) and strong reliability and validity (loadings > 0.70, AVE > 0.50, HTMT < 0.90). The Fornell–Larcker matrix confirmed discriminant validity. Results of the multigroup analysis using boostrapping in SmartPLS to compare the structural relationships of the core variables between HIs and VIs. AVI to OE showed a significant difference between HIs and VIs, $\Delta\beta = 0.235$, $p = .009$, therefore H3 is supported. The same goes

for the path from P to OE, $\Delta\beta = 0.99$, $p = .021$, which means H1 is supported. Whereas P to AVI did not differ significantly between HIs and VIs, $\Delta\beta = 0.016$, $p = .747$, as H2 is rejected. Specifically, the specific indirect effect through AVI (P → AVI → OE) was significant, $\Delta\beta = 0.183$, $p = .01$ (2-tailed), so H4 is supported. Based on the results of the current study, personalization has a stronger effect on online engagement through attitude towards the VI compared to HI The direct influence of personalization on engagement is significantly greater for VI.

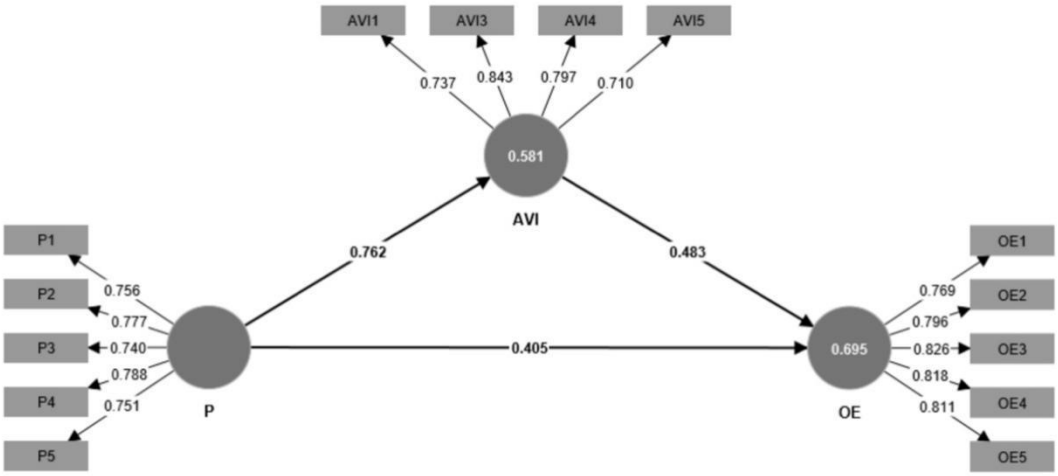


FIGURE 2 PLS-SEM results

DISCUSSION

Theoretical Contributions and Managerial Implications

This study applies Self-Referencing Effect to study the phenomena of VIs marketing and have a comparison between VIs and HIs. Besides, it has been confirmed that personalization positively affects online engagement, which align to the findings of Noor et al. (2024), and the effect is stronger in the case of VIs. This can be explained as they got data-driven customization (Agnihotri et al., 2024; Mouritzen et al., 2024), which can be programmed to adapt their content more effectively than human influencers. Besides, it can be also explained as they have a high flexibility and scalability, since they can offer interaction 24/7 and provide immediate responses that outperform human influencer (Yap & Ismail, 2022). Moreover, we further confirmed the mediation effect of attitude towards influencers, which collide to the findings by (Magano et al., 2022; Immanuel & HS, 2021). These findings provide solid theoretical background for future research.

The findings indicate that by leveraging personalization on VIs, companies can enhance more online engagement than HIs. Therefore, it is suggested that companies should prioritize investment to collaborate with VIs, integrate their unique ability to deliver tailored content, to create a meaningful connection with their audience.

CONCLUSION

This study has extended the use of Self Referencing Effect in the context of VI & HI marketing. To best of our knowledge, we are among the first to conduct a study to

compare the marketing effectiveness between VIs and HIs on online engagement in the hospitality sector. The results proved that the personalization effect on online engagement is stronger in VIs than HIs. Notably, attitude mediates the relationship between personalization and online engagement, and the mediation effect is stronger in the case of VIs. Therefore, it is suggested the important of attitude in fostering a good feeling to influencer type, which lead to higher online engagement. In sum, with the excellent capability of customization in VIs, it is suggested to leverage personalization strategy on VIs to capture higher online engagement.

Keywords： Virtual Influencer, Personalization, Attitude Towards Influencer, Online Engagement, Self-Referencing Effect

Reference

[1] Agnihotri, D., Chaturvedi, P., & Tripathi, V. (2024). "Virtual bonds and actual transactions": investigating the impact of virtual influencers' credibility on buying behavior through virtual engagement. *Journal of Communication Management*.

[2] Chandra, S., Verma, S., Lim, W. M., Kumar, S., & Donthu, N. (2022). Personalization in personalized marketing: Trends and ways forward. *Psychology & Marketing, 39*(8), 1529-1562.

[3] Chu, S. C., Deng, T., & Mundel, J. (2024). The impact of personalization on viral behavior intentions on TikTok: The role of perceived creativity, authenticity, and need for uniqueness. *Journal of Marketing Communications, 30*(1), 1-20.

[4] Dao, P. N. (2023). *Are you a real human? Factors of virtual influencers that predict to Generation Z consumers' brand attitude and booking intention* (Master's thesis, University of Twente).

[5] Debevec, K., & Iyer, E. (1988). Self-referencing as a mediator of the effectiveness of sex-role portrayals in advertising. *Psychology & Marketing, 5*(1), 71-84.

[6] Immanuel, D. M., & HS, A. B. (2021). The impact of using influencer on consumer purchase intention with attitude towards influencer and brand attitude as mediator. *Jurnal aplikasi manajemen, 19*(4), 766-781.

[7] Kok Wei, K., & Li, W. Y. (2013). Measuring the impact of celebrity endorsement on consumer behavioral intentions: A study of Malaysian consumers. *International Journal of Sports Marketing and Sponsorship, 14*(3), 2-22.

[8] Lee, P. Y., Koseoglu, M. A., Qi, L., Liu, E. C., & King, B. (2021). The sway of influencer marketing: Evidence from a restaurant group. *International Journal of Hospitality Management, 98*, 103022.

[9] Lei, S. S. I., Chan, I. C. C., Tang, J., & Ye, S. (2022). Will tourists take mobile travel advice? Examining the personalization-privacy paradox. *Journal of Hospitality and Tourism Management, 50*, 288-297.

[10] Lou, C., Kiew, S. T. J., Chen, T., Lee, T. Y. M., Ong, J. E. C., & Phua, Z. (2023). Authentically fake? How consumers respond to the influence of virtual influencers. *Journal of Advertising, 52*(4), 540-557.

[11] Magano, J., Au-Yong-Oliveira, M., Walter, C. E., & Leite, Â. (2022). Attitudes toward fashion influencers as a mediator of purchase intention. *Information, 13*(6), 297.

[12] Marti-Ochoa, J., Martin-Fuentes, E., & Ferrer-Rosell, B. (2025). AI-driven virtual travel influencers and ethical consumerism: analysing engagement with Sena Zaro's Instagram content. *Young Consumers*.

[13] Men, L. R., & Tsai, W. H. S. (2013). Beyond liking or following: Understanding public engagement on social networking sites in China. *Public Relations Review*, *39*(1), 13-22.

[14] Mitchell, A. A., & Olson, J. C. (1981). Are product attribute beliefs the only mediator of advertising effects on brand attitude?. *Journal of marketing research*, 18(3), 318-332.

[15] Mouritzen, S. L. T., Penttinen, V., & Pedersen, S. (2024). Virtual influencer marketing: the good, the bad and the unreal. *European Journal of Marketing*, *58*(2), 410-440.

[16] Noor, U., Mansoor, M., & Shamim, A. (2024). Customers create customers!–Assessing the role of perceived personalization, online advertising engagement and online users' modes in generating positive e-WOM. *Asia-Pacific Journal of Business Administration*, *16*(2), 392-409.

[17] Pereira, H. G., de Fátima Salgueiro, M., & Mateus, I. (2014). Say yes to Facebook and get your customers involved! Relationships in a world of social networks. *Business Horizons*, *57*(6), 695-702.

[18] Pletikosa Cvijikj, I., & Michahelles, F. (2013). Online engagement factors on Facebook brand pages. *Social network analysis and mining*, 3, 843-861.

[19] Rogers, T. B., Kuiper, N. A., & Kirker, W. S. (1977). Self-reference and the encoding of personal information. *Journal of personality and social psychology*, *35*(9), 677.

[20] Shil, A. AI Influencer Marketing: Building Adaptive Parasocial Customer Relationships.

[21] Sookkaew, J., & Saephoo, P. (2021). "Digital influencer": development and coexistence with digital social groups. *International Journal of Advanced Computer Science and Applications*, *12*(12).

[22] Spears, N., & Singh, S. N. (2004). Measuring attitude toward the brand and purchase intentions. *Journal of current issues & research in advertising*, *26*(2), 53-66.

[23] Srinivasan, S. S., Anderson, R., & Ponnavolu, K. (2002). Customer loyalty in e-commerce: an exploration of its antecedents and consequences. *Journal of retailing*, *78*(1), 41-50.

[24] Vinoi, N., Shankar, A., Abdullah Alzeiby, E., Gupta, P., & Agarwal, V. (2025). Unveiling customer intentions: exploring factors driving engagement with hospitality virtual influencers. *Journal of Hospitality Marketing & Management*, 1-30.

[25] Wulandari, M. Y., Munggaran, D. G., & Rijqia, R. (2023, August). Attitude Toward the Influencer Towards Purchase Intention Through Social Media Engagement. *In Proceedings of the International Conference on Economics, Management, and Accounting (ICEMAC 2022)* (Vol. 252, p. 416). Springer Nature.

[26] Xin, B., Hao, Y., & Xie, L. (2024). Virtual influencers and corporate reputation: from marketing game to empirical analysis. *Journal of Research in Interactive Marketing*, *18*(5), 759-786.

[27] Xu, D. J. (2006). The influence of personalization in affecting consumer attitudes toward mobile advertising in China. *Journal of computer information systems*, *47*(2), 9-19.

[28] Yap, Y. R., & Ismail, N. (2022). Factors of virtual influencer marketing influencing Generation Y consumers' purchase intention in Malaysia. *International Journal of Internet Marketing and Advertising*, *17*(3-4), 437-458.

[29] Yetimoğlu, S., & Uğurlu, K. (2020). Influencer marketing for tourism and hospitality. In The Emerald handbook of ICT in tourism and hospitality (pp. 131-148). Emerald Publishing Limited.Yetimoğlu, S., & Uğurlu, K. (2020). Influencer marketing for tourism and hospitality. In *The Emerald handbook of ICT in tourism and hospitality* (pp. 131-148). Emerald Publishing Limited.

Exploring the impacts of service spirit on college students' efficient learning and employability skills in sport and tourism industry

Chang QU [1*], Yangpeng LIN [12]

[1]College of Physical Education and Health, Guangdong Polytechnic of Science and Technology, Zhuhai, China.

[2]Faculty of Hospitality and Tourism Management, Macau University of Science and Technology, Taipa, Macau.

*Corresponding Email: 14786059@qq.com

Abstract

The importance of service quality management is well documented in the sport and tourism industry literature (Mok et al., 2013; PJ et al., 2023). Service spirit, characterized by empathy, client-centricity, and proactive problem-solving, is increasingly recognized as a critical competency in the service-driven sport and tourism industries (FadhiL et al., 2021; Svanko, 2025). Sports and tourism are basically service industries, and the key to success lies in providing unforgettable experiences rather than tangible products (Ahrholdt et al., 2017). In the tourism industry, service quality directly affects traveler satisfaction, loyalty, and destination reputation (Akroush et al., 2016). Similarly, in the sport industry, the quality of fan engagement, athlete support, and event management determines organizational success (Yoshida et al., 2014). Thus, the emphasis on empathy, proactive problem solving, and customer-focused service ethos is prevalent in both fields.

Concurrent tourism and sports programs often intersect in courses dealing with event management, hospitality, and sustainability (Cavallin Toscani et al., 2024). There are a lot of studies in the research community that talk about these two industries together (Bazzanella et al., 2023; Hu et al., 2024). At the same time, although some studies have separately explored the service quality of tourism and sports (Darko et al., 2023), little research has been conducted on their common teaching needs. The integration of service spirit education (SSE) into the two majors promotes interdisciplinary flexibility and makes up for this gap.

The sport and tourism industries are both service industries that rely heavily on value-added services encountered through a range of emotional skills (Buswell et al., 2016; Meeprom & Fakfare, 2024). It has been argued that the importance of service quality in related industries is actually increasing due to the intensified competition among service providers and the tendency to prefer "real service" connections (Briggs et al., 2007). Given the above factors, the "friendly welcome" provided by the server must be more than just meeting or exceeding customer expectations (Sun et al., 2022). And the waiter must impress the customer with his service. In fact, they absolutely treat their customers with the quality of their service (Cai, 2024). To achieve this goal of superior service quality, there is no doubt that many individual businesses are already trying (Ali et al., 2021). However, its role in fostering academic efficiency and employability readiness of college students has not been fully explored (Chigbu & Nekhwevha, 2022).

This study addresses this gap by examining how the integration of SSE into the curriculum can improve the learning outcomes and career readiness of Chinese sports and tourism students.

课题项目：2023 年广东省高职教育教学改革研究与实践项目，“立德树人”视域下广东高职社会体育专业群游泳救生课程思政的探索与实践（项目编号：2023JG342）。

This study is guided by service learning theory (Giles Jr & Eyler, 1994), explore service spirit (the individual spirit, the mindfulness spirit, the energy spirit, the communication spirit, and the orientation spirit)(Buissink-Smith & McLntosh, 2001) and student satisfaction (Aguiar-Castillo et al., 2021) and engagement (Abou-Shouk & Soliman, 2021) in the relationship between learning efficiency (Li & Liang, 2020) and employability skills (Yang et al., 2016). In this study, we applied partial least squares structural equation modeling to college students majoring in sport and tourism. Overall, the results fill a gap in related research and provide broad insights into the sports and tourism industry and vocational education literature.

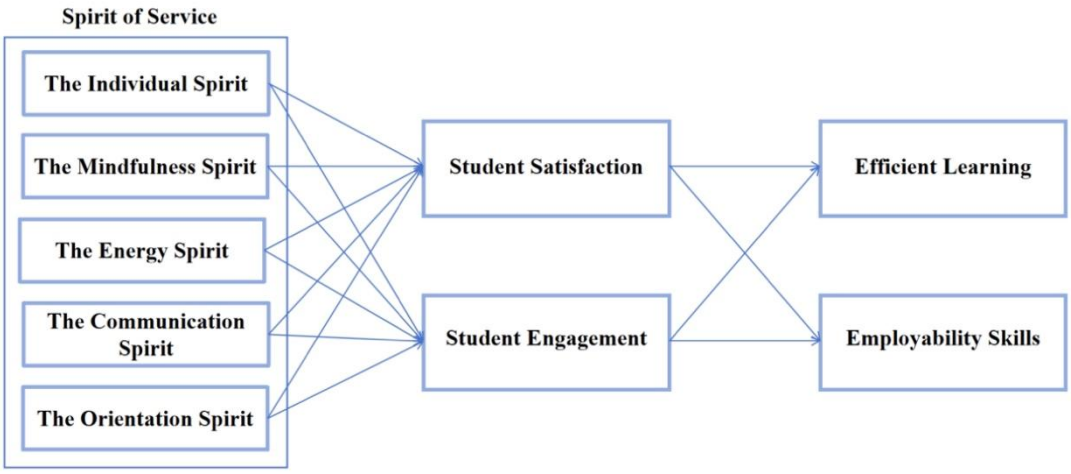


Figure 1 Hypotheses Model

Keywords: Service spirit, efficient learning, employability skills, sport industry, tourism industry, service learning theory

Reference

[1] Abou-Shouk, M., & Soliman, M. (2021). The impact of gamification adoption intention on brand awareness and loyalty in tourism: The mediating effect of customer engagement. *Journal of Destination Marketing & Management*, *20*, 100559.

[2] Aguiar-Castillo, L., Clavijo-Rodriguez, A., Hernández-López, L., De Saa-Pérez, P., & Pérez-Jiménez, R. (2021). Gamification and deep learning approaches in higher education. *Journal of Hospitality, Leisure, Sport & Tourism Education*, *29*, 100290.

[3] Ahrholdt, D. C., Gudergan, S. P., & Ringle, C. M. (2017). Enhancing service loyalty: The roles of delight, satisfaction, and service quality. *Journal of travel research*, *56*(4), 436-450.

[4] Akroush, M. N., Jraisat, L. E., Kurdieh, D. J., AL-Faouri, R. N., & Qatu, L. T. (2016). Tourism service quality and destination loyalty–the mediating role of destination image from international tourists' perspectives. *Tourism review*, *71*(1), 18-44.
[5] Ali, B. J., Gardi, B., Othman, B. J., Ahmed, S. A., Ismael, N. B., Hamza, P. A., Aziz, H. M., Sabir, B. Y., Sorguli, S., & Anwar, G. (2021). Hotel service quality: The impact of service quality on customer satisfaction in hospitality. *International Journal of Engineering, Business and Management*, *5*(3), 14-28.
[6] Bazzanella, F., Schnitzer, M., Peters, M., & Bichler, B. F. (2023). The role of sports events in developing tourism destinations: a systematized review and future research agenda. *Journal of Sport & Tourism*, *27*(2), 77-109.
[7] Briggs, S., Sutherland, J., & Drummond, S. (2007). Are hotels serving quality? An exploratory study of service quality in the Scottish hotel sector. *Tourism management*, *28*(4), 1006-1019.
[8] Buissink-Smith, N., & McLntosh, A. J. (2001). Conceptualizing the 'spirit of service'in tourism education and training: A case study from New Zealand. *Journal of teaching in travel & tourism*, *1*(1), 79-96.
[9] Buswell, J., Williams, C., Donne, K., & Sutton, C. (2016). *Service quality in leisure, events, tourism and sport*. CABI.
[10] Cai, L. (2024). *Selling in Customer Service: Integrating and Coordinating Service and Selling*. CRC Press.
[11] Cavallin Toscani, A., Vendraminelli, L., & Vinelli, A. (2024). Environmental sustainability in the event industry: a systematic review and a research agenda. *Journal of Sustainable Tourism*, *32*(12), 2663-2697.
[12] Chigbu, B. I., & Nekhwevha, F. H. (2022). Academic-faculty environment and graduate employability: variation of work-readiness perceptions. *Heliyon*, *8*(3).
[13] Darko, A. P., Liang, D., Zhang, Y., & Kobina, A. (2023). Service quality in football tourism: an evaluation model based on online reviews and data envelopment analysis with linguistic distribution assessments. *Annals of Operations Research*, *325*(1), 185-218.
[14] FadhiL, A. H., Al-Sammari, A. A. A., AL-Hakeem, L. M. H., & Qandeel, A. M. A. (2021). The role of leaders' moral intelligence to enhance strategic leadership. *Journal of Management and Accounting Studies*, *9*(1), 65-78.
[15] Giles Jr, D. E., & Eyler, J. (1994). The theoretical roots of service-learning in John Dewey: Toward a theory of service-learning. *Michigan Journal of Community Service Learning*, *1*(1), 7.
[16] Hu, T., Wang, X., He, Q., & Bei, J. (2024). Coupling development of sports industry and tourism industry based on internet of things. *PLoS One*, *19*(4), e0299080.
[17] Li, P., & Liang, H. (2020). Factors influencing learning effectiveness of educational travel: A case study in China. *Journal of Hospitality and Tourism Management*, *42*, 141-152.
[18] Meeprom, S., & Fakfare, P. (2024). Blended learning: Examining must-have, hybrid, and value-added quality attributes of hospitality and tourism education. *Journal of Hospitality & Tourism Education*, *36*(4), 281-295.
[19] Mok, C., Sparks, B., & Kadampully, J. (2013). *Service quality management in hospitality, tourism, and leisure*. Routledge.
[20] PJ, S., Singh, K., Kokkranikal, J., Bharadwaj, R., Rai, S., & Antony, J. (2023). Service quality and customer satisfaction in hospitality, leisure, sport and tourism: An assessment of research in web of science. *Journal of Quality Assurance in Hospitality & Tourism*, *24*(1), 24-50.

[21] Sun, L.-H., Huang, G.-H., Sann, R., Lee, Y.-C., Peng, Y.-T., & Chiu, Y.-M. (2022). Too much service? The conceptualization and measurement for restaurant over-service behavior. *Journal of Hospitality and Tourism Management*, *53*, 81-90.
[22] Svanko, C. (2025). Developing Persistent Team and Service Spirit in Education and Healthcare. *Journal of Current Research in Business and Economics*, *4*(1), 359-364.
[23] Yang, H., Cheung, C., & Song, H. (2016). Enhancing the learning and employability of hospitality graduates in China. *Journal of Hospitality, Leisure, Sport & Tourism Education*, *19*, 85-96.
[24] Yoshida, M., Gordon, B., Nakazawa, M., & Biscaia, R. (2014). Conceptualization and measurement of fan engagement: Empirical evidence from a professional sport context. *Journal of Sport Management*, *28*(4), 399-417.

The Impact of Interaction, Affordance, and Presence on Visit Intentions in Metaverse Tourism: Integrating the Use and Gratification Theory and the Theory of Planned Behavior

Qiaoyan ZHANG, Juanye WANG, Jiachen YAN, KIM Jinok, Susanna

Faculty of Hospitality and Tourism Management, Macau University of Science and Technology, Macao

Abstract

The rapid advancement of modern technology has ushered in an era where the metaverse is increasingly permeating various facets of human life, and the tourism sector is no exception. Metaverse technology, characterized by its immersive, interactive, and social nature, presents a transformative potential for reshaping the entire travel experience, particularly during the crucial pre-trip planning stage. Tourists can now engage with destinations in unprecedented ways before physically embarking on their journeys. For instance, metaverse AI chatbots can offer personalized travel suggestions and detailed daily itineraries based on individual preferences and real-time information. Furthermore, technologies like Augmented Reality (AR) and Virtual Reality (VR) enable prospective travelers to virtually experience destinations, explore accommodations, and even participate in simulated activities, all from the comfort of their homes. This immersive pre-trip engagement can extend beyond mere visualization, encompassing activities such as virtual museum tours, attending virtual events at a destination, or even interacting with virtual representations of local guides and other potential tourists. The influence of metaverse technology is not limited to the pre-trip phase; it can also enhance the on-trip experience through AR overlays providing contextual information about landmarks or VR experiences offering deeper dives into historical sites. Even post-trip, metaverse platforms can facilitate the sharing of experiences, the creation of virtual souvenirs, and the fostering of a sense of community among travelers.

While the metaverse has garnered significant attention across diverse disciplines, including gaming, education, and retail, empirical investigation into its specific impact on tourists' behavior within the tourism domain remains relatively nascent. Existing scholarly work in this area tends to lean towards conceptual frameworks, technological explorations, or case studies of specific metaverse applications in tourism, rather than rigorously examining its quantifiable effects on tourists' behavioral shifts, and most importantly, their intentions to visit a real-world destination. This gap in the literature necessitates a deeper understanding of how the unique characteristics of metaverse technology translate into tangible changes in tourist behavior, particularly the crucial decision of whether or not to undertake a physical trip.

Therefore, this paper aims to address this research by empirically investigating the influence of three key dimensions of metaverse technology: interaction, affordance, and presence on tourists' visit intentions. Drawing upon the robust theoretical foundations of the theory of planned behavior (TPB) and the use and gratification theory (UGT), this research seeks to unravel the mechanisms through which engaging with metaverse

tourism experiences shapes tourists' attitudes, and subjective norms, and ultimately, the inclination to visit a destination in the physical world.

The theory of planned behavior (Ajzen, 1991) posits that behavioral intentions are the most proximal predictor of actual behavior. These intentions are shaped by three key constructs: attitude towards the behavior (the degree to which a person has a favorable or unfavorable evaluation or appraisal of the behavior in question), subjective norm (the perceived social pressure exerted upon an individual to perform or not to perform the behavior), and perceived behavioral control (the perceived ease or difficulty of performing the behavior). Under the background of metaverse tourism, experiencing a destination virtually could positively influence a tourist's attitude towards visiting the actual place by providing a positive and engaging preview. Interacting with virtual environments and perhaps even other virtual tourists could shape their subjective norms by creating a sense of anticipation and shared experience. Furthermore, the ease of navigating a virtual destination or accessing information through a metaverse platform might enhance their perceived behavioral control regarding planning and undertaking the actual trip.

Complementing TPB, the UGT (Katz et al., 1973) offers insights into why individuals actively seek out and utilize specific media to satisfy their needs and desires. In the realm of metaverse tourism, tourists may be motivated to engage with virtual experiences to fulfill various gratifications, such as information seeking (gathering details about a destination), entertainment (enjoying an immersive and engaging experience), social interaction (connecting with other potential travelers or virtual locals), and escapism (experiencing a different reality). And the gratifications would be concluded in maily three crucial phrases in this research: utilitarian gratification, social gratification and hedonic gratification. The gratifications obtained from these metaverse experiences can, in turn, influence their attitudes, perceptions, and ultimately, their intentions to visit the physical destination. For instance, a tourist who successfully gathers comprehensive information and enjoys a highly immersive virtual experience (high gratification) is more likely to develop a positive attitude towards the destination and form a stronger intention to visit.

To ensure accessibility for a geographically diverse population across China, the formal questionnaire was distributed online via Wenjuanxing, a widely used survey platform. Random sampling was employed to recruit participants. Data collection took place between October 5th and November 15th, 2024, with questionnaires collected individually. Throughout the data collection period, respondents could contact the researcher via WeChat for clarification on any questions, aiming to maximize data quality. And as for the language, recognizing the diverse language preferences within China, the questionnaire was presented in both Traditional and Simplified Chinese. A total of 471 questionnaires were returned eventually. After careful review, 18 questionnaires were deemed invalid, resulting in a final sample of 453 valid responses and a high effective response rate of 96.17%. Questionnaires were considered invalid if they met any of the following criteria: First, respondents answered "No" to the initial screening question regarding prior experience with metaverse tourism or travel incorporating metaverse technology; Second, questionnaires exhibited incomplete

responses, including partially completed sections or missing visual elements; Third, responses were judged to be random, meaningless, or patterned (e.g., all answers identical or sequential).

Following data collection, the resulting responses were analyzed using a combination of statistical softwares. SPSS 26.0, Smart PLS 4.0, Excel were utilized to process the questionnaire data. The analysis involved several key steps, including descriptive statistics to summarize the data, reliability and validity tests to assess the quality of the measurement instrument, factor analysis to explore underlying constructs, and path analysis to examine the relationships between the variables under investigation. These analyses provided insights into the interconnections between the studied variables, leading to the final research findings.

This paper explores metaverse tourism under the framework of UGT and TPB. And the study draws on 11 variables: interaction, affordance, presence, authenticity of conversation, convenience, utilitarian gratification, hedonic gratification, social gratification, attitude, subjective norm, and behavioral intention. After analyzing the available data, all of the 10 hypothesis are supported among the hypotheses proposed in this study.

The findings of this research revealed a significant positive impact of interaction, affordance, and presence of metaverse technology on tourists' visit intentions. Higher levels of interaction within the metaverse environment, greater perceived affordances, and a stronger sense of presence were found to positively influence tourists' attitudes towards the destination, their perceptions of social norms surrounding travel to that destination, and their confidence in their ability to plan and undertake the trip. Furthermore, the study demonstrated that the gratifications sought and obtained by tourists through their engagement with metaverse tourism experiences played a crucial role in shaping these TPB constructs and ultimately driving their visit intentions. For example, tourists who found the metaverse experience highly interactive and informative were more likely to develop a positive attitude and a stronger intention to visit the actual destination.

This research makes several important theoretical and practical contributions. Theoretically, it extends the application of both TPB and UGT to the novel context of metaverse tourism, providing empirical evidence for their combined explanatory power in understanding tourist behavior in the digital age. By examining the specific roles of interaction, affordance, and presence, the study offers a more nuanced understanding of how different aspects of metaverse technology influence tourist decision-making. Furthermore, this research contributes to the growing body of knowledge on smart tourism destinations (STD) by highlighting the potential of metaverse technology as a key component of a smart tourism ecosystem, capable of enhancing the pre-trip experience and driving real-world tourism.

Practically, the findings of this study offer valuable insights for managers and stakeholders in the hospitality and tourism industry. By understanding the positive impact of interaction, affordance, and presence in metaverse tourism, service providers can strategically design and implement virtual experiences that effectively engage

potential tourists and motivate them to visit their destinations. This includes developing highly interactive virtual tours, providing rich and readily accessible information about destinations and services within the metaverse, and creating immersive experiences that foster a strong sense of presence. The research also underscores the importance of understanding the gratifications that tourists seek from metaverse experiences and tailoring virtual offerings to meet these needs. For instance, destinations could develop virtual events or social platforms within their metaverse presence to cater to tourists seeking social interaction and a sense of community. Ultimately, by leveraging the power of metaverse technology in a strategic and informed manner, the tourism industry can enhance the overall tourist journey, from initial exploration to actual visitation, benefiting both tourists as consumers and service providers.

In conclusion, this research provides compelling evidence for the positive influence of interaction, affordance, and presence in metaverse technology on tourists' visit intentions, as mediated by the constructs of the TPB and the gratifications sought through the UGT. These findings highlight the transformative potential of metaverse technology in shaping tourist behavior and offer valuable guidance for the tourism industry in harnessing this emerging technology to enhance engagement and drive real-world visitation. And for research fields, further research could explore the long-term impacts of metaverse experiences on tourist behavior, the role of different metaverse platforms and technologies, and the cross-cultural variations in the adoption and impact of metaverse tourism.

Keywords: Metaverse technology, Theory of planned behavior (TPB), Smart tourism destination (STD), Use and gratification theory (UGT), interaction, affordance, presence

Reference

[1] Ajzen, I. (1991). The theory of planned behavior. *Organizational Behavior and Human Decision Processes, 50*(2), 179-211.

[2] Katz, E., Blumler, J. G., & Gurevitch, M. (1973). Uses and gratifications research. The Public Opinion Quarterly, 37(4), 509-523.

Loyalty Customers Illustration,A Study of Luxury Hotel Brand Loyalty Customers Based on the Strategic, Experience Module and Q Methodology - A Case Study of Four Seasons Hotel in China

Shuai BIAN, Xinling SHAO, KIM Jinok, Susanna

Macau University of Science and Technology

Abstract

1. Introduction

1.1 Background

The "experience economy" has emerged as a pivotal component of China's innovative cultural tourism sector (China Daily, 2024, August 19). As living standards rise and consumer preferences evolve, modern consumers seek more than product functionality—they prioritize the brand experiences encountered during consumption. This encompasses every touchpoint, from initial brand engagement to post-purchase interactions, and hinges on emotional resonance, personalized needs fulfillment, and holistic value perception. To differentiate in competitive markets, brands must prioritize crafting immersive, interactive, and scenographic experiences that align with evolving consumer expectations (China Daily, 2024, September 19).

In competitive global markets, fostering long-term loyalty with high-value customers is critical for sustainable success (Gee et al., 2008). Loyalty-driven revenue stems from repeat purchases, with loyal customers demonstrating extended brand advocacy compared to costly new customer acquisition (Pfeifer, 2005; Chaudhuri & Holbrook, 2001). Data from Bond Brand Loyalty's 2018 report highlights that loyalty program participants spend 37% more on preferred brands. Through social media engagement and word-of-mouth sharing, loyal customers amplify brand visibility (Reichheld, 1996; González-Rodríguez et al., 2018).

Despite the significance of loyal customer groups, existing studies predominantly rely on generalized loyalty metrics, overlooking their distinct characteristics and behaviors (So et al., 2024). Current literature lacks focused investigations into these groups' traits and behavioral patterns, limiting actionable insights for targeted marketing strategies (Rahayu & Harsono, 2023). This study addresses this gap by prioritizing loyal customer segments.

This study uses Q-methodology to identify luxury hotel brand experience content from loyal customers' perspectives, analyze how brand experience affects loyalty behaviors and attitudes while categorizing customers based on brand experience perceptions, and examine how customer intimacy moderates the brand experience-loyalty relationship.

2. Literature review

2.1 Strategic Experience Module and Brand Experience

Strategic Experience Modules (SEMs) were proposed by Bernd H. Schmitt (2000) in Experiential Marketing as a framework using five dimensions (sense, emotion, thinking, action, relevance) to create memorable consumer experiences and enhance marketing effectiveness. Brakus et al. (2009) later refined this concept into brand experience, focusing on sensation, emotion, intelligence, and behavior to prioritize brand-driven

experiences over product attributes. Recent expansions under the experience economy include aesthetics (Lemon & Verhoef, 2016), hybrid marketing (Martin et al., 2015), and epidemic disease management (Purohit et al., 2023), enriching the brand experience framework. This study is based on the concept proposed by Brakus et al., (2009) to identify the content of luxury hotel brand experience.

2.2 Loyalty

Scholarly discourse on loyalty reflects divergent definitions and measurements. Oliver (1999) conceptualized loyalty as cognitive, emotional, symbiotic, and action-driven, while Bass (1974) emphasized repeat purchase and switching rates. Aaker (1991) expanded this to include brand preference, price premiums, and switching costs. Recent studies distinguish attitudinal vs. behavioral loyalty across industries (Rodr
guez-Rad et al., 2023; Ju & Jang, 2023; Watson, 2015), or isolate single dimensions (El-Adly, 2019).

In the experience economy, research on brand experience's impact on loyalty has advanced. Gao & Shen (2024) identified mediating mechanisms (brand attitude, self-brand connection) in sensory experience's influence on loyalty. Hwang et al. (2021) linked four-dimensional brand experiences to loyalty via satisfaction and attachment, contrasting human vs. robot service contexts. Sahin et al. (2011) underscore brand experience as foundational to enduring loyalty, motivating this study's focus on loyal customers' experiential perceptions.

2.3 Customer Intimacy

Customer intimacy is defined as the degree to which customers and service providers know each other (Tabrani et al., 2018), is critical in service industries like hospitality. It reflects connection depth (Ponder et al., 2016) and fosters long-term loyalty by strengthening trust and commitment (Stern, 1997; Liu et al., 2011). However, its effects are nuanced: Park et al. (2023) found that customer intimacy moderates service failure impacts, though only in minor scenarios. Conversely, Xiong et al. (2022) revealed that overly personalized service reduces loyalty among socially anxious customers. These findings highlight intimacy's dual role, motivating this study to examine its moderating effect on brand experience-loyalty dynamics.

3. Methodology

This study plans to adopt Q methodology to conduct qualitative and quantitative research respectively. In the qualitative research stage, study plan to use interviews and netnographys to identify the brand experience content of target brands based on the concept of brand experience, and summarize Q-Popularity and Q-Sample. Quantitative research stage: First, invite target brand loyalty customers to conduct Q-Sorting and complete the loyalty and intimacy questionnaire; Second, the Q-Sorting results are coded, graded and analyzed to obtain different categories of loyal customers; Third, regression analysis studies the moderating effect of intimacy (Figure 1 Roadmap of research).

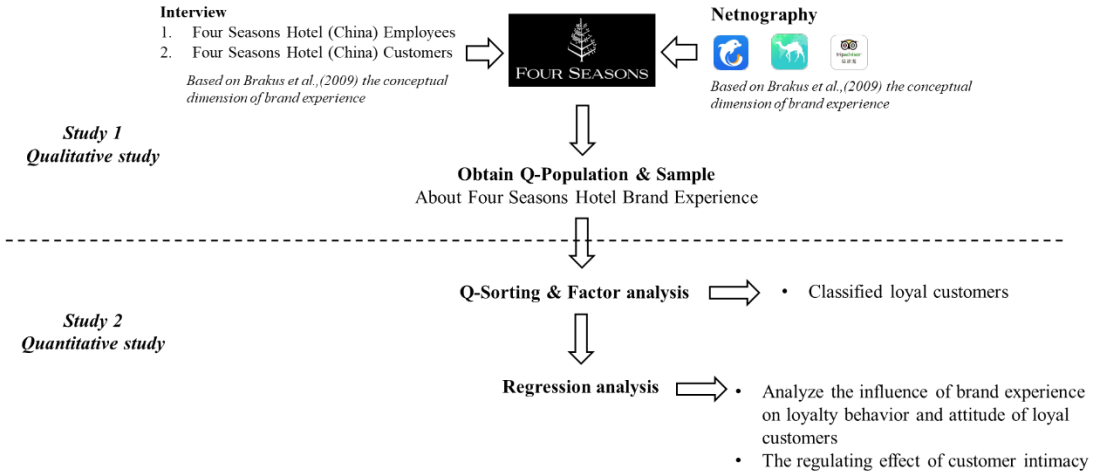


Figure 1 Roadmap of research

3.1 Context of study

Established in 1961, Four Seasons Hotels and Resorts renowned globally for its "treat others like you" service philosophy and personalized hospitality. This brand was selected for two key reasons: its industry-leading focus on service quality/customer experience and its unique absence of formal loyalty programs (Four Seasons Hotels and Resorts., n.d.). Many scholars explained the influence path of brand experience on brand loyalty, and analyzed the mediating role of different factors (Gao & Shen, 2024; Hwang et al.,2021). This setting well highlights the direct effect of brand experience on brand loyalty and provides a good sample.

4. Qualitative study

A Q-population is a comprehensive collection of opinions and ideas shared within a culture and collected for use in Q research (Stephenson, 1978). The Q-population of this study is the opinions on the brand experience of Four Seasons Hotel in China. The Q-population of the study was obtained through weblog and interview.

4.1 Employee interview

Plans include 30 semi-structured interviews with Four Seasons China employee via stratified sampling. Frontline employees, directly involved in service delivery and brand experiences, offer intuitive insights into brand experience dimensions. Back-office staff, engaged in brand training and marketing, provide strategic perspectives on these same dimensions. Interview guides align with Brakus et al.'s (2009) four-brand experience framework (Table 1 Employee interview Guide).

Characteristics of the respondents
1. Department
2. Gender (M/F)
3. Which Four Seasons Hotel do you stay? (HK/MC/GZ/BJ/SZ/TJ/HZ)
4. How long have you worked in the hotel?
Interview Questions
5. **(Sensory)** In the daily operation of Four Seasons Hotel, what specific reactions and feedbacks have you observed from the guests regarding the sensory elements such as vision, hearing, smell, and touch? How does it help your work?
6. **(Affective)** The hotel provides diverse information and innovations in many aspects. How do you think these information and innovations inspire guests' thinking and influence their perception or decision-making about the hotel?
7. **(Behavioral)** What kind of help, influence, or thoughts did the various information and marketing provided by the hotel bring to you during your stay?
8. **(Intellectual)** Based on your daily work observations, what factors do you think drive the guests to purchase services or products, use various facilities, and participate in hotel activities in Four Seasons Hotel?

Table 1 Employee interview Guide

4.2 Customer interview

Study plan to conduct about 50 semi-structured interviews with customers of Four Seasons hotels in China who are familiar with the Four Seasons brand. Utilization of stratified sampling. The team summarized the number of rooms in the 11 Four Seasons hotels in China. According to the proportion of the number of rooms, the number of interviews was determined (Table 2 Customer interview sampling design). The customer interview Guide is designed according to the four dimensions of brand experience (Table 3 Customer interview Guide).

Table 2 Customer interview sampling design

Hotel	Room capacity	Proportion	Sampling Quantity	Note	Source
Four Seasons Hotel Dalian	304			Less than one year after opening	
Four Seasons Hotel Hangzhou at Hangzhou Centre	214			Less than one year after opening	
Four Seaons Hotel Shenzhen	199			Less than one year after opening	
The Garnd Suites at Four Seasons	289			No public reservation platform	
Four Seasons Hotel Hongkong	399	19.76%	10		Four Seasons. (n.d.). Find a Hotel or Resort. Retrieved from https://www.fourseasons.com/zh/find_a_hotel_or_resort/?_s_icmp=home_hero_icon_menu
Four Seasons Hotel Macao	360	17.83%	9		
Four Seasons Hotel Guangzhou	344	17.04%	8		
Four Seasons Hotel Beijing	313	15.50%	7		
Four Seaons Hotel Shenzhen	266	13.17%	6		
Four Seasons Hotel Tianjin	259	12.83%	6		
Four Seasons Hotel Hangzhou at West Lake	78	3.86%	2		
Totel	2019	100%	48		

Table 3 Customer interview Guide

Characteristics of the respondents

1. Please state your age: (20–30/30–40/40–50/50–60/60+)
2. Gender (M/F)
3. Which Four Seasons Hotel do you stay at most frequently? (HK/MC/GZ/BJ/SZ/TJ/HZ)
4. How many nights have you stayed at Four Seasons Hotel in the last year?

Interview Questions

5. **(Sensory)** During your stay at Four Seasons Hotel, how was your overall sensory experience? Was there anything that impressed you deeply?
6. **(Affective)** Looking back on your stay at Four Seasons Hotel, what was the most prominent emotion you had? Were there any events that caused significant emotional fluctuations for you?
7. **(Behavioral)** What kind of help, influence, or thoughts did the various information and marketing provided by the hotel bring to you during your stay?
8. **(Intellectual)** Would you like to stay at Four Seasons Hotel again? Would you recommend Four Seasons Hotel? What are the reasons?

4.3 Netnography

Ctrip, Qunar and Tripadvisor, well-known travel websites related to Four Seasons Hotel, were selected as the target websites for data collection.

Using "octopus" as a crawler tool. The study plans to collect the content of customer reviews of the above seven hotels between July 1, 2023 and July 1, 2024.

4.4 Q-Sample Confirm

Collected text data undergoes rigorous cleaning to eliminate duplicates, invalid characters, and advertising content. Subsequent text preprocessing—including word

segmentation, stem extraction, and stop word removal—transforms the data into an analysis-ready format, finalizing preparations for Q-Sample confirmation.

NVivo11 is adopted to encode the text content obtained from interviews and netnography around the four dimensions of brand experience (feeling, emotion, intelligence and behavior), and form 36 Q-Sample statements of luxury hotel brand experience.

The research plan invites a panel of three scholars to review the Q-Sample mentioned above. Focus is placed on the criteria of relevance and redundancy to ensure the suitability of Q-Sample and alignment with the focus and objectives of the study. After confirming the completion, make Q-Card.

5. Quantitative study

5.1 Select P-population

The P-population of this study is loyal customers of Four Seasons Hotel in China. Since Four Seasons Hotel has no external loyalty program, this study summarizes and refers to the customer loyalty programs (Table 4 Loyalty Programs of Selected International Hotel Management Groups Notes) of five international hote lmanagement groups. Most hotels require 10 nights/per year for the lowest level of loyalty. Therefore, the P sample of this study selects customers who stay at Four Seasons Hotel in China for 10 nights or more in one year as loyal customers.

Table 4 Loyalty Programs of Selected International Hotel Management Groups Notes

Brand	Level	Upgrade or retain level standards (stay)	Source
IHG ***(One Rewards)***	Club	Stay 0 nights/yr (No benefits)	InterContinental Hotels Group. (n.d.). OneRewards Offers. Retrieved from https://www.ihg.com/onerewards/content/us/en/offers/onerewards?scmisc=WEB-_-6C-_-GLO-_-ZH-_-LOY-_-LoyaltyEvolution22-_-IHGRHome-_-ProgramUpdates
	Silver Elite	Stay 10 nights/yr	
	Gold Elite	Stay 20 nights/yr	
	Platinum Elite	Stay 40 nights/yr	
	Diamond Elite	Stay 70 nights/yr	
Marriott ***(Bonvoy)***	Silver Elite	Stay 10 nights/yr	Marriott Bonvoy. (n.d.). Membership Levels & Benefits | Earn & Redeem Points. Retrieved from https://www.marriott.com/loyalty/member-benefits.mi.
	Gold Elite	Stay 25 nights/yr	
	Platinum Elite	Stay 50 nights/yr	
	Titanium Elite	Stay 75 nights/yr	
	Ambassador Elite	Stay 100 nights/yr	
Hyatt ***(World of Hyatt)***	Member	Stay 0 nights/yr (No benefits)	World of Hyatt. (n.d.).Program Overview. Retrieved from https://world.hyatt.com/content/gp/en/program-overview.html
	Discoverist	Stay 10 nights/yr	
	Explorist	Stay 30 nights/yr	
	Globalist	Stay 60 nights/yr	
	Lifetime Globalist	1,000,000 Lifetime Base Points	
Hilton ***(Honors Terms)***	Silver Elite	4 stays or 10 nights/yr	Hilton Honors. (n.d.). Hilton Honors Membership Tiers. Retrieved from https://www.hilton.com/en/hilton-honors/terms/#hilton-honors-membership-tiers
	Gold Elite	20 stays or 40 nights/yr	
	Diamond Elite	30 stays or 60 nights/yr	
	Lifetime Diamond	Diamond Status for at least 10 years	
Accor ***(Live Limitless)***	Classic	Stay 0 nights/yr (No benefits)	Accor Live Limitless. (n.d.). AccorHotels. Retrieved from https://all.accor.com/loyalty-program/cards-status-benefits-details/index.zh.shtml.
	Silver	Stay 10 nights/yr	
	Glod	Stay 30 nights/yr	
	Platinum	Stay 60 nights/yr	
	Diamond	26000 points	

Given Q methodology's suitability for small-scale studies, stratified sampling was employed to ensure representation across Four Seasons hotels in China. Sampling proportional to room capacity across seven properties (Table 5 P-population Sampling design) balances coverage while capturing demographic and behavioral diversity to enhance data generalizability.

Table 5 P-population Sampling design

Hotel	Room capacity	Proportion	Sampling quantity	Note	Source
Four Seasons Hotel Dalian	304			Less than one year after opening	
Four Seasons Hotel Hangzhou at Hangzhou Centre	214			Less than one year after opening	
Four Seaons Hotel Shenzhen	199			Less than one year after opening	
The Garnd Suites at Four Seasons	289			No public reservation platform	
Four Seasons Hotel Hongkong	399	19.76%	20		Four Seasons. (n.d.). Find a Hotel or Resort. Retrieved from https://www.fourseasons.com/zh/find_a_hotel_or_resort/?_s_icmp=home_hero_icon_menu
Four Seasons Hotel Macao	360	17.83%	18		
Four Seasons Hotel Guangzhou	344	17.04%	17		
Four Seasons Hotel Beijing	313	15.50%	15		
Four Seaons Hotel Shenzhen	266	13.17%	13		
Four Seasons Hotel Tianjin	259	12.83%	13		
Four Seasons Hotel Hangzhou at West Lake	78	3.86%	4		
Totel	2019	100%	100		

5.2 Scale and questionnaire design

The scale developed by Zeithaml et al. (1996) was used to measure the behavioral loyalty and attitudinal loyalty of loyal customers in Four Seasons hotels. Apply Likert 9-point scoring

Table 6 Scale of behavioral loyalty and attitudinal loyalty

Sub-dimension	Scale	Source
Behavioral loyalty (BL)	I am a loyal customer of this company. I intend to remain a customer of this company. This company is my first choice when I travel between cities.	Zeithaml, V. A., Berry, L. L., & Parasuraman, A. (1996). The Behavioral Consequences of Service Quality. *Journal of Marketing, 60*(2), 31-.
Attitudinal loyalty (AL)	I am likely to say positive things about this company. I will recommend this company to my family members and friends. I will recommend this company if asked by others.	

The scale developed by Yim et al., (2008) was used in this study to measure the closeness of loyal customers of Four Seasons hotels to the brand. Apply Likert 9-point scoring.

Table 7 Scale of customer intimacy

Dimension	Scale	Source
Intimacy	The hotel staff cared about me	Chi Kin (Bennett) Yim, Tse, D. K., & Chan, K. W. (2008). Strengthening Customer Loyalty through Intimacy and Passion: Roles of Customer—Firm Affection and Customer—Staff Relationships in Services. *Journal of Marketing Research, 45*(6), 741–756.
	I like to communicate with the hotel employee	
	I feel intimacy toward the hotel employee	

In the questionnaire section, the study also designed a basic information survey in order to analyze the different segments of the clientele and to screen the sample.

5.3 Q-sorting and questionnaire distribution

5.3.1 Participant selection and training

Loyal customers from the identified P-population are invited to participate in Q-sorting. Before the study, brief them on its purpose, process, and their role via email, phone, or in-person communication during hotel check-ins to ensure understanding and cooperation. For participants unfamiliar with Q-sorting, offer simplified training or guidance materials explaining its principles, operational steps, and instructions for categorizing Q-Card statements based on personal feelings (as shown in Figure 2 Participant Response Grid (Q-Grid)).

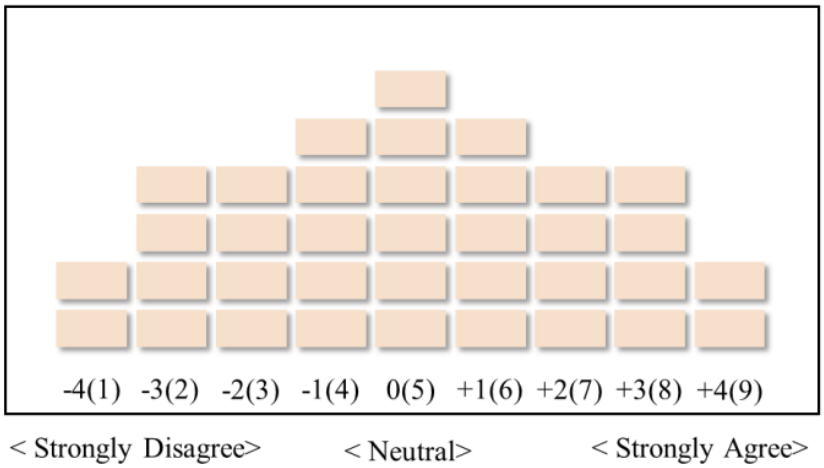


Figure 2 Participant Response Grid (Q-Grid)

5.3.2 Implementation of classification process

Participants completed Q-sorting in a quiet, distraction-free environment to ensure focus. Each received randomized Q-Cards and sorted them into Figure 2. Participants' Q-sorting results were meticulously recorded, noting each Q-Card's position and corresponding agreement scores. Data accuracy and completeness were rigorously verified. Where discrepancies arose, participants provided brief clarifications to

contextualize their decisions, enriching subsequent analysis with supplementary qualitative insights.

5.4 Data analysis and design.

5.4.1 Q-sorting data analysis

Initial Data Input: Q-sorting results were scored on a 9-point Likert scale and analyzed using Ken-Q Analysis Desktop Edition (KADE), a specialized tool for Q-methodology (Banasick, 2019).

Factor Analysis: Principal Component Analysis (PCA) aggregated participants with aligned perspectives, adhering to eigenvalues >1 and ≥2 Q-classifications demonstrating high factor loadings (McKeown, 2013).

Theme Analysis: Respondent clusters were taxonomized based on research objectives and factor outputs, with thematic coding summarizing each loyal customer segment's brand experience perceptions.

5.4.2 Hierarchical regression

Data integration: Export the above factor analysis data in KADE (CSV format). The intimacy scale data of corresponding samples were integrated, checked, and imported into SPSS.

Reliability and validity analysis: Cronbach's α coefficient was used to evaluate the internal consistency of loyalty and intimacy. Generally, $\alpha > 0.7$ is considered to have good reliability. When AVE > 0.5 and Factor loading > 0.7, the convergence validity is good.

Regression analysis:

Layer 1 (Control Variables): Customer loyalty is regressed against control variables (gender, age, occupation, stay frequency, consumption level) to establish baseline effects.

Layer 2 (Brand Experience): KADE-derived brand experience factors are added to assess their main effect and incremental explanatory power on loyalty.

Layer 3 (Moderating Variables): Interpersonal intimacy/closeness is introduced to isolate its independent impact on loyalty.

Layer 4 (Interaction Terms): Interaction terms between brand experience and intimacy are tested to determine moderating effects.

Model fit is evaluated via R^2, adjusted R^2, and ΔR^2 (explanatory power increments). F-tests validate model significance, while standardized coefficients (β) quantify variable impact direction/strength.

6. Discussion

6.1 Potential theoretical contribution

This study enriches brand experience research and refine the theoretical framework by conducting in-depth analysis of luxury hotel brand experience in hospitality industry. While prior loyalty studies focused on measurement, this research shifts focus to loyal customer groups, exploring brand experience's impact on loyalty through the Four Seasons case to provide new empirical evidence. Additionally, it investigates customer intimacy's regulating effect on the brand experience-loyalty relationship, revealing its

double-edged sword mechanism to advance CRM theory and clarify complex hotel-customer interactions.

6.2 Potential practical implications

Identifying luxury hotel brand experience components allows managers to tailor services/products to meet customer needs across brand experience, enhancing satisfaction. Second, segmenting loyal customers via Q-methodology reveals distinct profiles, enabling tailored strategies to enhance loyalty and lifetime value. Integrating findings on brand experience and customer intimacy's moderating role empowers data-driven strategies, optimizing resource allocation, campaign efficacy, and customer retention for market leadership.

Keywords: Brand experience, Customer loyalty, Q methodology, Strategic experience module, Four Seasons Hotels

References

[1] Aaker, D. A. (2009). *Managing brand equity: Capitalizing on the value of a brand name.* simon and schuster.

[2] Accor Live Limitless. (n.d.). *AccorHotels.* Retrieved from https://all.accor.com/loyalty-program/cards-status-benefits-details/index.zh.shtml.

[3] Banasick, S. (2019). KADE: A desktop application for Q methodology. *Journal of Open Source Software*, *4*(36), 1360-. https://doi.org/10.21105/joss.01360

[4] Bass, F. M. (1974). The Theory of Stochastic Preference and Brand Switching. *Journal of Marketing Research*, *11*(1), 1-.

[5] Brakus, J. J., Schmitt, B. H., & Zarantonello, L. (2009). Brand Experience: What Is It? How Is It Measured? Does It Affect Loyalty? *Journal of Marketing*, *73*(3), 52–68.

[6] Chaudhuri, A., & Holbrook, M. B. (2001). The Chain of Effects from Brand Trust and Brand Affect to Brand Performance: The Role of Brand Loyalty. *Journal of Marketing*, *65*(2), 81–93.

[7] Chi Kin (Bennett) Yim, Tse, D. K., & Chan, K. W. (2008). Strengthening Customer Loyalty through Intimacy and Passion: Roles of Customer—Firm Affection and Customer—Staff Relationships in Services. *Journal of Marketing Research, 45*(6), 741–756.

[8] China Daily. (2024, August 19). 'Tiyan jingji' tuxian zhongguo xiaofei huoli [The 'Experience Economy' highlights China's consumer dynamism]. Retrieved from https://cn.chinadaily.com.cn/a/202408/19/WS66c30353a310b35299d376bb.html.

[9] China Daily. (2024, September 19). Fazhan 'Tiyan jingji' cujin wenlv xiaofei [Developing the 'experience economy' to promote cultural tourism consum ption]. Retrieved from https://fashion.chinadaily.com.cn/a/202409/19/WS66eb 9693a310a792b3abcccd.html.

[10] El-Adly, M. I. (2019). Modelling the relationship between hotel perceived value, customer satisfaction, and customer loyalty. *Journal of Retailing and Consumer Services*, *50*, 322–332.

[11] Four Seasons Hotels and Resorts. (n.d.). *About Four Seasons | Four SeasonsLuxury Hotels & Resorts.* Retrieved from https://www.fourseasons.com/about _four_seasons/.

[12] Gao, F., & Shen, Z. (2024). Sensory brand experience and brand loyalty: Mediators and gender differences. *Acta Psychologica*, *244*, 104191–104191.

[13] Gee, R., Coates, G., & Nicholson, M. (2008). Understanding and profitably managing customer loyalty. *Marketing Intelligence & Planning*, *26*(4), 359–374.

[14] González-Rodríguez, M. R., Jiménez-Caballero, J. L., Martín-Samper, R. C., Köseoglu, M. A., & Okumus, F. (2018). Revisiting the link between business strategy and performance: Evidence from hotels. *International Journal of Hospitality Management, 72*, 21-31.

[15] Hilton Honors. (n.d.). *Hilton Honors Membership Tiers.* Retrieved from https:// www.hilton.com/en/hilton-honors/terms/#hilton-honors-membership-tiers

[16] Hwang, J., Choe, J. Y. (Jacey), Kim, H. M., & Kim, J. J. (2021). Human baristas and robot baristas: How does brand experience affect brand satisfaction, brand attitude, brand attachment, and brand loyalty? *International Journal of Hospitality*
Management, 99, 103050-.

[17] InterContinental Hotels Group. (n.d.). *OneRewards Offers.* Retrieved from https:/ /www.ihg.com/onerewards/content/us/en/offers/onerewards?scmisc=WEB-_-6C- _-GLO-_-ZH-_-LOY-_-LoyaltyEvolution22-_-IHGRHome-_-ProgramUpdates.

[18] Ju, Y., & Jang, S. (Shawn). (2023). The Effect of COVID-19 on hotel booking intentions: Investigating the roles of message appeal type and brand loyalty. *International Journal of Hospitality Management, 108*, 103357–103357.

[19] Lemon, K. N., & Verhoef, P. C. (2016). Understanding Customer Experience Throughout the Customer Journey. *Journal of Marketing*, *80*(6), 69–96.

[20] Liu, C.-T., Guo, Y. M., & Lee, C.-H. (2011). The effects of relationship quality and switching barriers on customer loyalty. *International Journal of Information Management*, *31*(1), 71–79.

[21] Marriott Bonvoy. (n.d.). *Membership Levels & Benefits | Earn & Redeem Points.*Retrieved from https://www.marriott.com/loyalty/member-benefits.mi. Martin, [22] J., Mortimer, G., & Andrews, L. (2015). Re-examining online customer experience to include purchase frequency and perceived risk. *Journal of Retailing and Consumer Services, 25*, 81–95.

[23] McKeown, B., & Thomas, D. B. (2013). *Q methodology (Vol. 66)*. Sage publications.

[24] Oliver, R.L. (1999). Whence consumer loyally. *J. Market., 63* (1) (1999), pp. 33-44.

[25] Park, J., Yoo, J. W., Cho, Y., & Park, H. (2023). Examining the impact of service robot communication styles on customer intimacy following service failure. *Journal of Retailing and Consumer Services, 75*, 103511-.

[26] Pfeifer, P. E. (2005). The optimal ratio of acquisition and retention costs. Journal of Targeting, *Measurement and Analysis for Marketing*, *13*(2), 179-.

[27] Ponder, N., Bugg Holloway, B., & Hansen, J. D. (2016). The mediating effects of customers' intimacy perceptions on the trust-commitment relationship. *The Journal of Services Marketing*, *30*(1), 75–87.

[28] Purohit, S., Hollebeek, L. D., Das, M., & Sigurdsson, V. (2023). The effect of customers' brand experience on brand evangelism: The case of luxury hotels. *Tourism Management Perspectives, 46*, 101092-.

[29] Rahayu, S.E., & Harsono, M. (2023). Loyalitas Konsumen-Konseptualisasi, Anteseden dan Konsekuensi. *Jesya, 6*(2):1581-1594.

[30] Reichheld, F. F., & Teal, T. (1996). The loyalty effect: the hidden force behind growth, profits, andlasting value / Frederick F. Reichheld with Thomas Teal. *Harvard Business School Press.*

[31] Rodríguez-Rad, C., & Sánchez del Rio-Vázquez, M.-E. (2023). The relevance of participation Behavior, organizational Commitment, and attitudinal loyalty to the management of professional associations. *Journal of Business Research, 154*, 113324-.

[32] Sahin, A., Zehir, C., & Kitapçı, H. (2011). The Effects of Brand Experiences, Trust and Satisfaction on Building Brand Loyalty; An Empirical Research On Global Brands. *Procedia, Social and Behavioral Sciences, 24*, 1288–1301.

[33] Schmitt, B. H. (2000). EXPERIENTIAL MARKETING. *Catalog Age*, *17*(1), 2-. [34] So, K. K. F., Yang, Y., & Li, X. (Robert). (2024). *Fifteen Years of Research on Customer Loyalty Formation: A Meta-Analytic Structural Equation Model.* Cornell Hospitality Quarterly.

[35] Stephenson, W. (1978). Concourse theory of communication. *Communication, 3*(1), 21–40.

[36] Stern, B. B. (1997). Advertising Intimacy: Relationship Marketing and the Services Consumer. *Journal of Advertising*, *26*(4), 7–19.

[37] Watson, G. F., Beck, J. T., Henderson, C. M., & Palmatier, R. W. (2015). Building, measuring, and profiting from customer loyalty. *Journal of the Academy of Marketing Science*, *43*(6), 790–825.

[38] World of Hyatt. (n.d.). *Program Overview.* Retrieved from https://world.hyatt.com/content/gp/en/program-overview.html

[39] Xiong, W., Huang, M., Okumus, B., Leung, X. Y., & Cai, X. (2022). When social phobia meets excessive service: Effects on customer delight and loyalty. *Tourism Management Perspectives*, *44*, 101031-.

[40] Zeithaml, V. A., Berry, L. L., & Parasuraman, A. (1996). The Behavioral Consequences of Service Quality. *Journal of Marketing*, *60*(2), 31-.

Spatial Reconstruction of cultural Tourism driven by “Her Need”: A Study on the Construction of female-friendly Tourism Destinations -- A Case Study of Chengdu

Sunny Mingxuan FAN, Emma Junru XU, KIM Jinok, Susanna

Macau University of Science and Technology

Abstract

Emotional trigger to drive consumer demand has become a hot trend in today's market economy, whether it is for the cute high appearance level IP pay, or emotional connection driven flow experience, the word "experience" has become a popular term in marketing, which reflects consumers want to express themselves, the pursuit of personality consumer demand. The market trend extends to the cultural tourism industry, and the pursuit of experience is more focused on the emotional expression and value feeling of tourists, and has also become an important indicator for tourists to measure their own travel satisfaction, which is particularly prominent in female consumer groups. With the increase of women's economic independence and spending power, the "she economy" has become an important driving force for the global tourism industry. According to statistics, women account for more than 60% of Chinese tourists and have significantly higher decision-making power than men. However, the security risks and risk perception problems faced by women in the process of travel have long been ignored, such as sexual harassment, night travel safety, privacy protection and so on. These factors not only affect women's travel experience, but also may inhibit their willingness to travel, thereby restricting the economic development of the destination.

With the rise of "she economy", women have become the core group of tourism consumption. According to the "She Tourism" : A Research Report on Female Tourism Consumption Demand and Behavior Characteristics in the New Era released by the China Tourism Association, among the key factors contributing to women's pleasant travel experience, cultural experience is regarded as the satisfaction point of travel by 86.8% of women. Female interviewees shared that the natural scenery and friendly local people brought joy and unforgettable memories to their trip. In addition, 71.3% of women highlighted the positive role of tourism infrastructure (including transportation, public health facilities, water and electricity supply, etc.) and detailed tourism services in improving travel convenience, comfort and mood, which together contributed to their travel satisfaction. However, it is worth noting that the differentiated needs of gender consumption are often ignored in the traditional cultural tourism spatial planning. The absence of gender perspective in cultural tourism planning leads to problems such as "safety blind spot" and "service homogenization".

Chengdu, as the benchmark of cultural tourism in China's new first-tier cities, has attracted a large number of female tourists with cultural inclusiveness (such as Hanfu culture, LGBTQ+ friendliness) and the "Internet celebrity economy", but it has also exposed gender blind areas in facilities (such as insufficient maternity and infant rooms), and the absence of management of night economic zones. For example, Jiuyanqiao Bar

Street is listed as a "high-risk area" by female tourists due to its high safety complaint rate at night. Most of the existing studies focus on the description of female consumption behavior, and lack a systematic evaluation and design framework for "female-friendly destinations". In this context, how to build female-friendly tourist destinations, reduce women's risk perception, improve their sense of security and travel satisfaction has become an urgent problem for academics and the industry. Meanwhile, how to build female-friendly tourist destinations from spatial design, service supply, digital marketing and other dimensions has also become the core of discussion.

The contemporary female tourism consumption has shown remarkable characteristics of "self-pleasing consumption" and "social currency". In the dimension of "self-pleasing consumption", female tourists are more inclined to regard travel as an important way of self-reward and emotional healing. According to the study by *Li and Wang (2021)*, about 73% of female respondents said that they would choose travel as a way to relax after work stress, which is significantly higher than that of men (52%). This consumption behavior pattern reflects women's pursuit of self-worth realization, which is manifested as personalized experience preference, emotional consumption drive and enhanced decision-making autonomy.*Valentine's (1989)* feminist geography theory provides an important framework for the interpretation of gender power relations in tourism space. This theory criticizes the male dominance in traditional public space design and points out three key problems: gender blindness in spatial planning: the existing urban space is mostly designed based on male activity patterns, such as the lack of nursing rooms and the imbalance of toilets (only 11% of the scenic spots meet the ideal ratio of male and female toilets 1:2.5); Gender differences in security monitoring: security risks such as insufficient lighting at night and monitoring dead corners make women's activity space invisible compression, forming a "space-time restriction" phenomenon; Spatial expression of symbolic power: The female images in the publicity materials of scenic spots are mostly in the passive viewing position (accounting for 63%), which strengthens the traditional gender role cognition.The theory particularly emphasizes the need for the construction of a "safe space" :Physical level: improve lighting and add emergency help devices ； Institutional level: Establishing gender-sensitive management practices ； Cultural dimension: The elimination of gender stereotypes in the use of space.The Kuanzhai Alley in Chengdu demonstrated the application value of this theory by setting up women-only rest areas (equipped with makeup mirrors and charging stations) and 24-hour security patrols, which increased the rate of female revisits by 22%.The place attachment theory of *Williams et al. (1992)* has shown its unique explanatory power in the study of female tourism. The study found that women's emotional connection to tourist destinations presents three-dimensional characteristics: functional attachment: They value the practical value provided by the destinations. For example, Chengdu Taikoo Li is highly recognized by young mothers because of its perfect maternal and infant facilities (the coverage rate of lactation room is 100%); Emotional attachment: Establishing emotional bonds through ritualized activities, such as "time-travel photos" taken by Hanfu lovers in Wuhou Temple increased their recommendation intention by 37%;

Cultural identity: 78% of female respondents said they would choose a destination that aligns with their personal values (such as an LGBTQ+ friendly city).

This study adopted a mixed research method. In the quantitative analysis, Python was used to climb the notes related to Chengdu tourism in 2020-2023 in Little Red Book, and LDA subject model was used to extract women's core demands (such as "safety" and "convenient taking photos"), and emotion analysis was combined to quantify the distribution of negative evaluations. In terms of qualitative research, through in-depth interviews with 20 female tourists, supplemented by field investigations (Taikoo Li, Jiuyanqiao, etc.), Nvivo coding was used to analyze spatial experience pain points. Meanwhile, the "5F female friendliness evaluation model" (Facility friendliness; Feeling friendly; Freedom is safe and friendly; Fashion aesthetic friendly; Flexibility and friendly service), and the weights were determined by AHP. At the theoretical level, this study validates the applicability of feminist geography in tourism research and reveals the gender power imbalance in the "Internet celebrity space". At the practical level, the government promulgated the "female-friendly" rating into the A-level scenic spot, and set up relevant safety facilities; Local business representatives develop "she label" products; The platform promotes the "Safe Travel Map for women" on behalf of the Little Red Book.

The purpose of this study is to build a "female-friendly destination" evaluation system, reveal how Chengdu's cultural tourism space responds to women's needs, and provide theoretical reference and practical paradigm for other cities. In theory, the "5F model" is created to fill the gap in the destination evaluation system from the perspective of gender. The research method integrates social media big data and qualitative interviews to break through the limitations of traditional research. The social value is reflected in providing practical cases of the cultural and tourism industry for the United Nations SDG5 (Gender Equality), and promoting the transformation of planning from "gender unconscious" to "gender sensitive".

Keywords: her economy; Women-friendly tourism; Spatial planning and reconstruction; Risk perception; Social media analysis; Chengdu City.

References

[1] Su Hongxia, Li Na. An Empirical study on female tourism Consumption Behavior from the perspective of "Her Economy" : A case study of female tourists in Xi 'an [J]. Modern Business,2017(32):16-18. (in Chinese) DOI:10.3969/j.issn.1673-5889.2017.32.007.

[2] Bowlby S, Lewis J, McDowell L, et al.1989.The geography of gender [M]// Peet R, Thrift N. New models in geography. London, UK: Unwin and Hyman: 157-175.

[3] Anderson K.2014.Mind over matter? On decentring the human in human geography [J]. Cultural Geographies, 21(1): 3-18.https://doi.org/10.1177/1474474013513409

[4] Williams, D. R., Patterson, M. E., Roggenbuck, J. W., & Watson, A. E. (1992). Beyond the commodity metaphor: Examining emotional and symbolic attachment to place. Leisure Sciences, 43, 29-46.

[5] Luo Shufang, Yao Xiaoyun, Luo Yan. Study on Consumption Behavior Characteristics of Female tourists in Zhangjiajie under "Her economy" [J]. Tourism Overview,2022(16):187-190. (in Chinese) DOI:10.3969/j.issn.1004-3292.2022.16.057.

[6] Analysis on female tourism consumption motivation [J]. Journal of Hubei University of Economics (Humanities and Social Sciences Edition). 2015,(5).DOI:10.3969/j.issn.1671-0975.2015.05.018.
[7] Research on young women's tourism consumption behavior -- a case study of Xianyang City [J]. China Commerce and Trade.2012,(8).DOI:10.3969/j.issn.1005-5800.2012.08.096.
[8] Xie Jianghong. Exploration of female tourism market in China [J]. Areal Research and Development.2006,(2).DOI:10.3969/j.issn.1003-2363.2006.02.013.
https://news.qq.com/rain/a/20250304A08HQK00
https://www.urbanlight.cn/newsdetail/136b3b63-ca64-d3dd-deb7-c37aacaf414e

Festival Technologisation Leads to Festival Attachment

Rongxuan ZHANG[1], Wenlong WANG[1], Yalin YANG[1], Chen-Kuo PAI[2]

[1]Master Student, Faculty of Hospitality and Tourism Management,
Macau University of Science & Technology, Avenida Wai Long, Taipa, Macau SAR

[2]Ph.D. Associate Professor, Faculty of Hospitality and Tourism Management,
Macau University of Science & Technology, Avenida Wai Long, Taipa, Macau SAR

Abstract

In the era of technology and traditional art, drone performance, with its unique artistry and innovation, has become an important part of reshaping the festival experience. However, previous studies on festival activities mostly focused on technical feasibility or single aesthetic effect, lacking a systematic discussion on the multidimensional perceptual attributes of Festival Technologisation. Among them, few researchers have explored how to use technology to promote visitors' attachment to activities, and the lack of feedback on this issue also makes it difficult for event planners to balance technical input and emotional resonance, so theoretical framework and practical guidance are urgently needed.

This study addresses this research gap by examining drone light shows as a case of Festival Technologization. It explores the multidimensional perceptual attributes of Festival Technologisation and the mechanisms underlying participants' emotional attachment to festival destinations. Furthermore, it investigates the chain pathway of "Festival Technologization → Immediate Perceptual Responses (Positive Surprise/Perceived WOW) → Festival Attachment" to uncover latent relationships among these variables. This study raises three core questions: First, what are the attributes of the core perception dimension of the Festival Technologization? Second, how do the technological attributes of drone performance (such as technical reliability, creative expression) affect participants' WOW experience and Positive Surprise? Third, do and how do these immediate reactions translate into a long-term emotional attachment to the festival site? In order to solve the above problems, the research adopts the mixed research method to advance in stages:

Qualitative Research Phase：

In-depth interviews were conducted with 15 participants aged 18–55 to explore their perceptions of drone performances in Festival Technologization. Semi-structured interviews were employed to extract key descriptors of perceptual dimensions. Grounded theory methodology guided a three-stage coding process (open, axial, and selective coding) to refine preliminary dimensions, with theoretical consistency of dimension labels validated through literature comparison.

Scale Development and Validation：

Based on coding results, initial test items were developed and validated through two rounds of surveys (500 responses each). The first round employed Exploratory Factor Analysis (EFA) using SPSS to refine item pools, while the second round applied

Confirmatory Factor Analysis (CFA) via Amos to assess the scale's reliability, validity, and model fit indices.

Quantitative Research Phase：

Data were collected via questionnaires to examine target variables. Prior to the formal survey, a pre-test involving 150 tourists was conducted to assess question comprehension and refine the instrument. Eligible participants were then recruited from first-tier cities (e.g., Shanghai, Beijing, Guangzhou) who had attended New Year's Eve drone light shows within the past 12 months, yielding 500 valid responses. Partial Least Squares Structural Equation Modeling (PLS-SEM) was applied to analyze variable relationships, focusing on the hypothesized pathways within the conceptual framework. The theoretical significance of this study is to measure and define the perceptual dimension of Festival Technologization, emphasizing that scientific and technological attributes can only be stimulated by cultural translation (such as combining drone formation with traditional festival culture). And how Positive Surprise/Perceived WOW can be transformed into long-term Festival Attachment, which provides a future analysis framework for the research of Festival Technologization. The practical significance is to provide reference for event destinations to cope with the trend of intelligent activities, help event planners understand the role of Positive Surprise/Perceived WOW, and achieve a win-win situation between short-term traffic and long-term value.

Keywords: Festival Technologization, Drone Light Shows, Festival Attachment, Immediate Perceptual Responses, Mixed-Methods Research

The Impact of Cultural Narrative Quality on Travel Intentions of Online Game Players

Shaoqiang SONG[1], Tianqi CHEN[2], Zhiqian LONG[2], Chen-Kuo PAI[3]

[1]Master Student, Faculty of Hospitality and Tourism Management, Macau University of Science & Technology, Avenida Wai Long, Taipa, Macau SAR

[2]Ph.D. Candidate, Faculty of Hospitality and Tourism Management, Macau University of Science and Technology, Avenida Wai Long, Taipa, Macau SAR

[3]Ph.D. Associate Professor, Faculty of Hospitality and Tourism Management, Macau University of Science & Technology, Avenida Wai Long, Taipa, Macau SAR

Abstract

Introduction

With the exponential growth of the global online gaming industry, digital games have emerged as a transformative medium for tourism destination marketing. As of 2023, China's online gaming user base has reached 550 million, representing 51% of he nation's internet users (CINIC, 2023). The integration of cultural narratives—encompassing historical settings, folklore, and regional aesthetics—into game design has enabled players to virtually explore destinations, fostering subconscious interest in real-world travel (Zhang et al., 2021; Yin et al., 2024). Notable examples include Black Myth: Wukong, which drove a 56% surge in visitors to Lingyan Temple post-launch (Shandong Business Daily, 2024), and Genshin Impact, whose digital rendition of Zhangjiajie enhanced offline tourism engagement through collaborative events (Dubois et al., 2021).

Despite these successes, the mechanisms through which cultural narrative quality in games influences travel intentions remain underexplored. Prior research on media-induced tourism has focused on films and television (Connell, 2005; Hudson & Ritchie, 2006), while studies on gaming contexts are limited to superficial metrics like brand recall (Van Berlo et al., 2023) or technical features (Ghosh & Dwivedi, 2022). Critical gaps persist in understanding how narrative environment quality, character authenticity, and cultural realism (Khan & Webster, 2017) synergistically shape players' emotional engagement and destination attitudes. Furthermore, the moderating role of cultural distance—rooted in Hofstede's dimensions of power distance and individualism-collectivism—in attenuating or amplifying narrative effects remains unaddressed (Hofstede, 1980).

This study addresses these gaps by proposing a theoretical framework grounded in the Stimulus-Organism-Response (SOR) model (Mehrabian & Russell, 1974), integrating Narrative Transportation Theory (Green & Brock, 2000) and Emotional Contagion Theory (Kim et al., 1998). The SOR framework posits that cultural narratives in games act as stimuli (S), influencing players' psychological states (organism, O), which in turn drive behavioral responses (R) such as travel intentions.

Hypotheses

H1: Cultural narrative quality (environment, character, realism) positively influences cognitive absorption (H1a) and emotional engagement (H1b).
H2: Cognitive absorption (H2a) and emotional engagement (H2b) positively affect travel intentions.
H3: Cultural distance negatively moderates the relationship between cultural narrative quality and cognitive absorption (H3a)/emotional engagement (H3b).

Method

This study will adopt a quantitative approach to explore the impact of cultural narratives in online games on players' travel intentions. The research design aligns with the SOR model, positioning cultural narrative quality as the stimulus, game experience (cognitive absorption and emotional engagement) as the organism, and travel intentions as the response. This framework extends prior gamified tourism studies (Dubois et al., 2021; Yin et al., 2024) by emphasizing psychological mediation. The following steps will be involved in data collection and analysis:

Participants and Sampling

A structured questionnaire will be administered to 200 Chinese online gamers who have engaged with culturally embedded games (such as Black Myth: Wukong, Genshin Impact) within the past 12 months. Participants will be recruited through purposive sampling, targeting gaming forums and social media communities. This approach is chosen to ensure that the participants are familiar with narrative - driven games featuring tourism destinations (Zhang et al., 2021).

Measures

All constructs will be measured using validated scales from the literature, with a 7 - point Likert scale (1 = "Strongly Disagree" to 7 = "Strongly Agree"):

Cultural Narrative Quality： Adapted from Khan and Webster (2017), 12 items will be used to assess three dimensions:

1. Narrative Environment Quality (e.g., "The game's settings authentically reflect real - world cultural landmarks").
2. Narrative Character Quality (e.g.,"Characters'behaviors align with the cultural context of the destination").
3. Narrative Realism Quality (e.g., "Historical events in the game are portrayed accurately").

Game Experience: Adapted from Busselle and Bilandzic (2009), 8 items will be employed to measure cognitive absorption (e.g., "I will feel immersed in the game world") and emotional engagement (e.g., "The story will make me curious about the destinations").

Travel Intentions: Adapted from Dubois and Gibbs (2018), 5 items will be used to assess behavioral outcomes (e.g., " I plan to visit destinations featured in the game").

Cultural Distance: Hofstede ' s (1980) dimensions (power distance, individualism - collectivism) will be operationalized through 6 items (e.g., "The game's cultural values differ from my own").

Data Collection

Data were collected through an online survey targeting 200 active players of culturally embedded online games (e.g., Black Myth: Wukong, Genshin Impact) across China. Participants were recruited via gaming forums, social media communities, and collaboration with game developers, ensuring engagement with narrative-driven titles featuring tourism destinations (Zhang et al., 2021; Yin et al., 2024). Eligibility criteria included:

1. Age ≥ 18 years.
2. Minimum 10 hours of gameplay in culturally themed titles within the past 6 months.
3. No prior employment in tourism/gaming industries to mitigate bias.

Data Analysis

Structural Equation Modeling (SEM) with AMOS 28.0 will be used to test the hypothesized relationships. The measurement models will be validated by confirmatory factor analysis (CFA), aiming to ensure construct reliability(Cronbach' s $\alpha > 0.85$) and discriminant validity (Fornell & Larcker, 1981).

Path analysis will test:

1. The S → O → R pathways (cultural narrative quality
→ cognitive absorption/emotional engagement → travel intentions).
2. The moderating role of cultural distance on S→O relationships.
3. The mediation role of game experience (using bootstrapping with 200 resamples).
4. The moderation effect of cultural distance.

Expected Findings

The anticipated results are projected to validate significant pathways within the hypothesized framework. Cultural narrative quality—encompassing Narrative Environment Quality, Narrative Character Quality, and Narrative Realism Quality—is expected to exert strong positive effects on game experience dimensions, specifically cognitive absorption (e.g., immersion in game worlds) and emotional engagement (e.g., curiosity about destinations) (Busselle & Bilandzic, 2009; Khan & Webster, 2017). These game experience factors are hypothesized to subsequently drive heightened travel intentions toward featured destinations, as observed in cases like Black Myth: Wukong and Genshin Impact (Zhang et al., 2021; Dubois et al., 2021).

Mediation analysis is anticipated to reveal dual mechanisms:

Cognitive absorption may partially mediate the relationship between narrative environment quality and travel intentions, reflecting players' mental mapping of virtual landmarks to real-world sites (Yin et al., 2024).

Emotional engagement is expected to demonstrate stronger mediation for narrative character authenticity, aligning with findings that empathetic connections with culturally grounded characters amplify destination appeal (Khan & Webster, 2017; Dubois & Gibbs, 2018).

Moderation effects of cultural distance (Hofstede, 1980) are projected to show asymmetrical impacts:

Low cultural distance (e.g., Chinese players engaging with narratives rooted in Confucian aesthetics) may strengthen the relationship between historical realism and emotional engagement, due to familiarity with cultural symbols (Yin et al., 2024).
High cultural distance (e.g., Western players exposed to narratives emphasizing collectivist values) could attenuate the effect of character authenticity on cognitive absorption, as cultural incongruities hinder narrative transportation (Connell, 2005; Zhang et al., 2021).

Implications or Conclusion

Theoretical Contributions

This study advances the SOR model in interactive media contexts by demonstrating how cultural narratives (S) trigger cognitive and affective states (O) that drive tourism behaviors (R). The SOR framework captures the role of emotional resonance and immersion in game-induced travel intentions, offering a novel framework to understand how interactive gaming narratives influence travel behavior. Unlike passive media (e.g., films), it highlights the unique role of player agency and immersion in fostering destination interest.
By operationalizing narrative quality into three distinct dimensions (environment, character, and realism), the research advances our understanding of how specific design elements drive cognitive absorption and emotional engagement. This enriches the limited literature on game-induced tourism compared to film/TV studies.

Practical Implications

Game Developers: Design narrative environments (S) that enhance cognitive absorption (O), such as accurate cultural landmarks.Develop characters (S) that evoke emotional engagement (O) through culturally authentic behaviors.
Tourism Marketers: Collaborate with game studios to co-design narratives that integrate real-world destinations (e.g., Genshin Impact's partnership with Zhangjiajie). Use in-game events or quests to drive offline visitation.Segment international audiences based on cultural distance metrics (e.g., power distance, individualism) to tailor narratives and reduce perceptual gaps. For example, Western audiences may require additional contextualization for collectivist themes.
Policy and Industry Collaboration: Governments and tourism boards can incentivize game developers to embed cultural heritage into games, leveraging China's 550 million gamers to promote domestic tourism.Standardize metrics for evaluating cultural narrative quality in games to facilitate partnerships between the tourism and gaming sectors.

References

[1] Busselle, R., & Bilandzic, H. (2009). Measuring narrative engagement. Media Psychology, 12(4), 321–347.
[2] CINIC. (2023). Statistical Report on China's Internet Development. China Internet Network Information Center.
[3] Connell, J. (2005). Toddlers, tourism and Tobermory: Destination marketing issues and television-induced tourism. Tourism Management, 26(5), 763–776.

[4] Dubois, L.-E., & Gibbs, C. (2018). Video game–induced tourism: A new frontier for destination marketers. Tourism Review, 73(2), 186–198.

[5] Dubois, L.-E., Griffin, T., Gibbs, C., & Guttentag, D. (2021). The impact of video games on destination image. Current Issues in Tourism, 24(4), 554–566.

[6] Fornell, C., & Larcker, D. F. (1981). Evaluating structural equation models with unobservable variables and measurement error. Journal of Marketing Research, 18(1), 39–50.

[7] Ghosh, T., & Dwivedi, Y. K. (2022). Brands in a game or a game for brands?Comparing the persuasive effectiveness of in-game advertising and advergames. Psychology & Marketing, 39(12), 2328–2348.

[8] Green, M. C., & Brock, T. C. (2000). The role of transportation in the persuasiveness of public narratives. Journal of Personality and Social Psychology, 79(5), 701–721.

[9] Hofstede, G. (1980). Culture's Consequences: International Differences in Work-Related Values. Sage Publications.

[10] Hudson, S., & Ritchie, J. R. B. (2006). Promoting destinations via film tourism: An empirical identification of supporting marketing initiatives. Journal of Travel Research, 44(4), 387–396.

[11] Khan, A., & Webster, J. (2017). Digital game narrative quality: Developing a measure. In ICIS Proceedings.

[12] Kim, J., Lim, J. S., & Bhargava, M. (1998). The role of affect in attitude formation: A classical conditioning approach. Journal of the Academy of Marketing Science, 26(2), 143–152.

[13] Mehrabian, A., & Russell, J. A. (1974). An approach to environmental psychology. MIT Press.

[14] Van Berlo, Z. M. C., Van Reijmersdal, E. A., & Waiguny, M. K. J. (2023). Twenty years of research on gamified advertising: A systematic overview of theories and variables. International Journal of Advertising, 42(1), 171–180.

[15] Yin, S., et al. (2024). Gamification in tourism: A framework for cultural narrative integration. Journal of Resources and Ecology, 15(2), 474–483.

[16] Zhang, Y., et al. (2021). Genshin Impact and destination marketing. Documentation, Information & Knowledge, 38(5), 107–118.

Work or Play? Exploring the Dual Impact of Work –Nonwork Interface on Leisure Travelers' Emotional Well-being.

Junbin LI, Jing LIU, Wenjie TANG

Faculty of Hospitality and Tourism Management, Macau University of Science and Technology

Abstract

In the digital age, the proliferation of remote technologies and flexible work arrangements has blurred the line between professional obligations and personal life(Miao et al., 2024). Nowhere is this shift more pronounced than in the domain of leisure travel, where tourists often engage in work-related activities such as answering emails, attending virtual meetings, or responding to urgent tasks. This phenomenon, referred to as the work-nonwork interface during leisure travel, represents a radical departure from the traditional understanding of tourism as a time for psychological detachment, rest, and renewal (Pearce, 2005). Traditionally, tourism has been conceptualized as a psychological escape that fosters well-being by removing individuals from the routines and pressures of everyday work life (Mannell & Iso-Ahola, 1987). However, with the emergence of mobile technologies and the intensification of workplace expectations, travelers are increasingly compelled to maintain professional responsiveness even while on holiday(Miao et al., 2024). While such integration may promote perceived flexibility and productivity (Chen & Petrick, 2013), it often comes at the cost of diminished relaxation, fragmented experiences, and lower satisfaction (Fenwick & Tausig, 2001). This study is grounded in boundary management theory(Ashforth et al., 2000), which posits that individuals construct mental, physical, and temporal boundaries to separate different life domains. Work-nonwork boundaries are particularly vulnerable to disruption in tourism settings due to spatial mobility and the expectation of continuous digital accessibility. Work-Home Resources Theory further asserts that the permeability of these boundaries affects an individual's ability to recover from stress and replenish psychological resources (Ten Brummelhuis & Bakker, 2012). A spatial-temporal-liminal theoretical framework for flexwork–flextravel is proposed to elucidate the increasingly indistinct boundaries between work and travel. This framework represents a significant departure from conventional work–travel hybrid models by emphasizing the integration of the work and tourism domains, as opposed to merely blending them(Miao et al., 2024). It posits a continuous flow that embodies a dynamic state of being, highlighting the complex interplay between time and space. This perspective moves beyond a mechanical amalgamation of work and tourism activities to underscore a more nuanced and interwoven relationality within contemporary socio-economic contexts. Moreover, the concept of eudaimonic well-being—defined as the pursuit of meaning, self-realization, and personal growth (Ryan & Deci, 2001; Waterman, 1993)—adds a deeper psychological lens to understand how work during travel can impair or, in some cases, enrich the tourist experience. Eudaimonic outcomes differ from hedonic enjoyment, as they are rooted in fulfilling intrinsic psychological needs such as autonomy, competence, and relatedness (Ryan &

Deci, 2001). Prior studies have highlighted the benefits of vacation for psychological detachment and stress recovery. For instance, De Bloom et al. (2013) found that even short breaks from work lead to increased well-being and job satisfaction. However, these benefits may be compromised when work interruptions occur during travel (Eby et al., 2010; Kühnel & Sonnentag, 2011). Research indicates that digital work extensions during leisure time are associated with negative mood states and reduced relaxation(Derks & Bakker, 2014; Fritz et al., 2010). On the other hand, leisure tourism has the potential to foster meaningful experiences and enhance eudaimonic well-being through personal growth, authentic encounters, and novel challenges (Patterson et al., 2010; Pearce & Packer, 2013). Meaningful travel experiences—those that align with one's values and facilitate self-discovery—have been shown to increase life satisfaction and promote flourishing (Bagheri et al., 2024; Kim et al., 2015). However, such benefits are jeopardized when work-related demands intrude upon the leisure context. Given this dualistic nature of work engagement during travel, this study investigates how work-nonwork interfaces influence emotional outcomes such as burnout and thriving, and whether these effects are moderated by individual boundary management strategies. Specifically, it addresses the following research questions:

1. How do work and non-work interfaces during leisure travel impact travelers' overall travel experience?
2. How do these interfaces influence travelers' eudaimonic well-being, including personal growth and vitality?
3. What role does boundary management play in mitigating the negative effects—or enhancing the positive outcomes—of work-nonwork interfaces?

This research adopts a sequential mixed-methods design. In the qualitative phase, in-depth interviews with 20 leisure travelers explored the nature of work interface during leisure tourism and their emotional consequences. A thematic analysis revealed two key constructs: Travel-Work Conflict (TWC) and Travel-Work Enrichment (TWE). TWC refers to involuntary work engagement that disrupts leisure activities and provokes stress. In contrast, TWE captures instances where work engagement during travel fosters a sense of achievement, mental stimulation, or relevance. Building on these insights, the quantitative phase utilized a structured questionnaire completed by 628 respondents. The survey measured constructs such as burnout (Maslach & Jackson, 1981), thriving(Spreitzer et al., 2005), eudaimonic well-being(Ryan & Deci, 2001), and boundary management preferences(Kossek et al., 2012). Structural equation modeling (SEM) was used to test the proposed relationships and moderation effects. The analysis confirmed that TWC is positively associated with burnout and negatively associated with eudaimonic well-being. Respondents who reported frequent involuntary work interruptions during travel also expressed higher levels of frustration, emotional exhaustion, and reduced satisfaction with their trips. These findings align with stress recovery theory, which posits that work demands during recovery periods inhibit emotional restoration (Sonnentag & Fritz, 2007). Conversely, TWE was found to positively predict thriving and contribute to eudaimonic well-being. When work engagement was voluntary, self-directed, and aligned with personal values, respondents reported increased vitality, meaning, and a sense of growth. These results echo the

findings of Spreitzer et al. (2005) and Steger et al. (2008), who argue that cognitive engagement in meaningful tasks enhances psychological resilience and self-efficacy. Critically, boundary management emerged as a strong moderator in both pathways. Individuals with higher segmentation preferences—those who deliberately separate work and leisure—reported significantly less burnout when facing TWC. Meanwhile, those with integration tendencies were more likely to benefit from TWE, especially when they perceived their work as meaningful or engaging (Chen & Petrick, 2013; Kossek et al., 2012). This study offers a comprehensive examination of how work-nonwork interfaces during leisure travel influence travelers' emotional outcomes and eudaimonic well-being. Drawing on boundary theory (Ashforth et al., 2000), and work-life balance theory(Guest, 2002), the research distinguishes two distinct constructs: travel-work conflict (TWC) and travel-work enrichment (TWE). The empirical findings reveal that TWC is positively associated with burnout and negatively associated with eudaimonic well-being. Respondents who frequently experienced involuntary work intrusions during travel reported heightened frustration, emotional exhaustion, and decreased satisfaction with their overall travel experience. These disruptions, particularly when unexpected or externally imposed, hindered psychological detachment and undermined the restorative potential of leisure travel. In contrast, TWE was found to positively predict thriving and contribute to travelers' eudaimonic well-being. When work was self-initiated, flexible, and aligned with one's personal values or goals, it generated a sense of vitality, meaning, and personal growth. These findings are consistent with prior literature suggesting that cognitive engagement in personally meaningful tasks can foster resilience and psychological strength (Spreitzer et al., 2005; Steger et al., 2008). Importantly, this study identifies boundary management as a key moderating factor. Individuals who prefer clear segmentation between work and leisure were significantly less affected by the negative consequences of TWC, while those with integrative tendencies were more likely to benefit from TWE. This supports the argument that boundary preferences shape the emotional outcomes of hybrid travel-work experiences (Chen & Petrick, 2013; Kossek et al., 2012).

Theoretically, this study enriches the tourism and organizational behavior literature by extending boundary management theory into the domain of leisure tourism—a context increasingly complicated by the ubiquity of digital connectivity. The research presents a dual-path framework that distinguishes between detrimental and beneficial work intrusions, offering a nuanced perspective on how work-life integration is experienced beyond the workplace. Moreover, by framing leisure travel as a space where both burnout and thriving can occur depending on contextual and personal variables, the study contributes to ongoing conversations around hybrid identity management and emotional labor in modern life. Practically, the findings carry implications for multiple stakeholders. For organizations, the results highlight the need to support employees' psychological detachment during vacations through clearer leave policies, cultural norms that discourage work intrusions, and technologies that enable disconnection. For tourism service providers, there is an opportunity to design travel experiences that accommodate light work engagement without compromising leisure quality—for example, by offering co-working spaces in natural or culturally immersive settings. For

travelers themselves, the findings emphasize the importance of developing personal boundary strategies. Intentional decisions about when, where, and how to engage in work while traveling can help preserve the psychological benefits of tourism while allowing for flexible work practices.

Nonetheless, several limitations must be acknowledged. First of all, the cross-sectional design restricts causal inferences, and future longitudinal studies are needed to capture the dynamic evolution of work-leisure boundaries over time. Future research should also examine contextual factors such as organizational support, job autonomy, and the nature of the work tasks during travel. Secondly, while the sample was diverse in demographic background, it was geographically concentrated, and future studies should explore cross-cultural differences in boundary preferences and perceptions of work intrusion. Additionally, qualitative investigations could further unpack the internal meaning-making processes travelers undergo when navigating work-leisure intersections. Lastly, this study primarily measured self-reported emotional outcomes; further research could integrate physiological or behavioral data (e.g., heart rate variability or app usage logs) to validate recovery and well-being outcomes. For future research, the impact of group travel (e.g., family or business trips) on work-nonwork boundary dynamics presents a promising direction for future inquiry. In conclusion, this study underscores that work-nonwork interfaces during leisure travel are not inherently negative or positive; rather, their effects depend on the voluntariness of the work engagement, its alignment with personal values, and the individual's capacity for effective boundary management. As leisure and labor become increasingly intertwined in the post-digital age, understanding how to preserve tourism's potential for psychological restoration and personal fulfillment is more vital than ever. Tourism's value, therefore, lies not only in physical escape but also in the traveler's ability to navigate—and in some cases, transform—the emotional boundaries between work and life.

Keywords: Work and non-work interface, Thriving, Burnout, Eudaimonic well-being

References

[1] Ashforth, B. E., Kroner, G. E., & Fugate, M. (2000). *ALL IN A DAY'S WORK: BOUNDARIES AND MICRO ROLE TRANSITIONS*.

[2] Bagheri, F., Guerreiro, M., Pinto, P., & Ghaderi, Z. (2024). From Tourist Experience to Satisfaction and Loyalty: Exploring the Role of a Sense of Well-Being. *Journal of Travel Research*, *63*(8), 1989–2004. https://doi.org/10.1177/00472875231201509

[3] Chen, C.-C., & Petrick, J. F. (2013). Health and Wellness Benefits of Travel Experiences: A Literature Review. *Journal of Travel Research*, *52*(6), 709–719. https://doi.org/10.1177/0047287513496477

[4] De Bloom, J., Geurts, S. A. E., & Kompier, M. A. J. (2013). Vacation (after-) effects on employee health and well-being, and the role of vacation activities, experiences and sleep. *Journal of Happiness Studies*, *14*(2), 613–633. https://doi.org/10.1007/s10902-012-9345-3

[5] Derks, D., & Bakker, A. B. (2014). Smartphone Use, Work-Home Interference, and Burnout: A Diary Study on the Role of Recovery: Smartphone Use and Daily Recovery. *Applied Psychology*, *63*(3), 411–440. https://doi.org/10.1111/j.1464- 0597.2012.00530.x

[6] Eby, L. T., Maher, C. P., & Butts, M. M. (2010). The Intersection of Work and Family Life: The Role of Affect. *Annual Review of Psychology*, *61*(1), 599–622. https://doi.org/10.1146/annurev.psych.093008.100422

[7] Fenwick, R., & Tausig, M. (2001). Scheduling Stress: Family and Health Outcomes of Shift Work and Schedule Control. *American Behavioral Scientist*, *44*(7), 1179– 1198. https://doi.org/10.1177/00027640121956719

[8] Fritz, C., Sonnentag, S., Spector, P. E., & McInroe, J. A. (2010). The weekend matters: Relationships between stress recovery and affective experiences. *Journal of Organizational Behavior*, *31*(8), 1137–1162. https://doi.org/10.1002/job.672

[9] Guest, D. E. (2002). Perspectives on the Study of Work-life Balance. *Social Science Information*, *41*(2), 255–279. https://doi.org/10.1177/0539018402041002005

[10] Kim, K.-H., Kabir, E., & Kabir, S. (2015). A review on the human health impact of airborne particulate matter. *Environment International*, *74*, 136–143. https://doi.org/10.1016/j.envint.2014.10.005

[11] Kossek, E. E., Ruderman, M. N., Braddy, P. W., & Hannum, K. M. (2012). Work– nonwork boundary management profiles: A person-centered approach. *Journal of Vocational Behavior*, *81*(1), 112–128. https://doi.org/10.1016/j.jvb.2012.04.003

[12] Kühnel, J., & Sonnentag, S. (2011). How long do you benefit from vacation? A closer look at the fade-out of vacation effects. *Journal of Organizational Behavior*, *32*(1), 125–143. https://doi.org/10.1002/job.699

[13] Mannell, R. C., & Iso-Ahola, S. E. (1987). Psychological nature of leisure and tourism experience. *Annals of Tourism Research*, *14*(3), 314–331. https://doi.org/10.1016/0160-7383(87)90105-8

[14] Maslach, C., & Jackson, S. E. (1981). The measurement of experienced burnout. *Journal of Organizational Behavior*, *2*(2), 99–113. https://doi.org/10.1002/job.4030020205

[15] Miao, L., Yang, F. X., Im, J., & Zhang, Q. (2024). Flexwork and flextravel. *Annals of Tourism Research*, *106*, 103763. https://doi.org/10.1016/j.annals.2024.103763

[16] Patterson, G. R., Forgatch, M. S., & DeGarmo, D. S. (2010). Cascading effects following intervention. *Development and Psychopathology*, *22*(4), 949–970. https://doi.org/10.1017/S0954579410000568

[17] Pearce, P. L. (2005). *Tourist behaviour: Themes and conceptual schemes*. Channel View Publications.

[18] Pearce, P. L., & Packer, J. (2013). Minds On The Move: New Links From Psychology To Tourism. *Annals of Tourism Research*, *40*, 386–411. https://doi.org/10.1016/j.annals.2012.10.002

[19] Ryan, R. M., & Deci, E. L. (2001). On Happiness and Human Potentials: A Review of Research on Hedonic and Eudaimonic Well-Being. *Annual Review of Psychology*, *52*(1), 141–166. https://doi.org/10.1146/annurev.psych.52.1.141

[20] Sonnentag, S., & Fritz, C. (2007). The Recovery Experience Questionnaire: Development and validation of a measure for assessing recuperation and unwinding from work. *Journal of Occupational Health Psychology*, *12*(3), 204– 221. https://doi.org/10.1037/1076-8998.12.3.204

[21] Spreitzer, G., Sutcliffe, K., Dutton, J., Sonenshein, S., & Grant, A. M. (2005). A Socially Embedded Model of Thriving at Work. *Organization Science*, *16*(5), 537–549. https://doi.org/10.1287/orsc.1050.0153

[22] Steger, M. F., Kashdan, T. B., Sullivan, B. A., & Lorentz, D. (2008). Understanding the Search for Meaning in Life: Personality, Cognitive Style, and the Dynamic Between Seeking and Experiencing Meaning. *Journal of Personality*, *76*(2), 199– 228. https://doi.org/10.1111/j.1467-6494.2007.00484.x

[23] Ten Brummelhuis, L. L., & Bakker, A. B. (2012). A resource perspective on the work– home interface: The work–home resources model. *American Psychologist*, *67*(7), 545–556. https://doi.org/10.1037/a0027974

[24] Waterman, A. S. (1993). Two Conceptions of Happiness: Contrasts of Personal Expressiveness (Eudaimonia) and Hedonic Enjoyment. *Journal of Personality and Social Psychology*, *64*(4), 678–691.

Green Awakening after Realizing Ecological Paralysis: Cognitive-Affect-Conation Mechanisms of Tourists' Environmental Transformation in Macau

Felix Elvis OTOO[1], Ziheng JI[2], Qian YAO[2], Yu LIU[2]

[1]Assistant professor, Faculty of Hospitality and Tourism Management, Macau University of Science and Technology, Avenida Wai Long, Taipa, Macau SAR

[2]Student, Faculty of Hospitality and Tourism Management, Macau University of Science and Technology, Avenida Wai Long, Taipa, Macau SAR

Abstract

Introduction

The Cognitive-Affect-Conation (C-A-C) model is a suitable framework for understanding tourist behavior, particularly in the context of sustainable tourism. In this model， tourists' environmental behaviors and intentions are shaped by three interconnected components: cognition, affect, and conation. Cognition refers to tourists' perceptions and beliefs about environmental issues, such as their awareness of ecological paralysis and self-identity. Affect involves the emotional responses triggered by these perceptions, including positive emotions like well-being and negative emotions like guilt. Conation reflects the intentions and actual behaviors that result from these cognitive and emotional processes.

Research has demonstrated that the interplay between these components significantly influences tourists' environmental transformation. For instance, cognitive perceptions of a destination's image can drive affective responses, which in turn shape behavioral intentions (Agapito et al.,2013). also, in the article entitled "Ecotourism Behavior of Nature-Based Tourists: An Integrative Framework." multiple theoretical frameworks to show how cognitive factors like environmental attitude and perceived behavioral control, along with affective elements such as biospheric values, collectively influence ecotourism behavior (Lee&Jan,2017). Similarly, Wang further examined how cognitive and affective attitudes respectively influence tourists' pro-environmental behavioral intentions and the sequence of this influence. (Wang et al., 2019).

Research problem

According to the article "The Cognitive-Affective-Conative Model of Destination Image: A Confirmatory Analysis",on the concept of cognition,The article mentions that tourists' "pre-formed image" of a destination has a significant impact on their expectations and loyalty. This image is cognitive because it is based on the tourist's existing information and knowledge of the destination.Additionally, on the concept of affect, The article points out that tourists' expectations and emotions have a significant impact on satisfaction. Emotion here is the direct reflection of the tourists' subjective feeling and experience of the destination.What's more, on the concept of conation, satisfaction has a significant effect on tourists' behavioral intention. Behavioral intention belongs to the level of intention, as it reflects the actions that visitors are likely to take after the experience .For example, tourists might visit the destination again or

recommend to others (Agapito et al.,2013). The defect of this paper is that although the influence of cognition and emotion on tourists' satisfaction is discussed, it does not deeply analyze how these psychological variables affect tourists' behavioral intention over time. This static analysis may ignore the psychological changes of tourists at different stages.Research models can provide a dynamic framework to show how cognition, emotion, and intention interact at different stages of the visitor experience, leading to a more comprehensive understanding of the changing processes of visitor behavior.

According to the paper "A comparative study of relative roles and sequences of cognitive and affective attitudes on tourists' pro-environmental behavioral intention",on the part of cognition,Cognitive attitudes are defined as an individual's general assessment of the outcome of an action, such as the benefit, function, or consequence of the action. It implicitly assumes that an individual's behavioral intentions are based on an accurate calculation of costs and benefits.Additionally, on the part of affect, affective attitude is defined as an individual's emotional feelings about related behaviors. Research shows that environmental protection is not only based on rational cost-benefit analysis, emotional feelings also play an important role. What's more, on the part of conation, Affective attitude has a significant effect on pro-environmental behavioral intention (PEBI), while cognitive attitude has a small or negative effect (Wang et al., 2019).The weakness of this paper is that it focuses primarily on the relative role of cognitive and affective attitudes to pro-environmental behavioral intentions, but lacks an analysis of how these attitudes evolve over time. Such studies that lack a dynamic perspective may fail to capture the complexity of the changing psychology of tourists.Research models can provide deeper insights by introducing a temporal dimension that shows how cognitive and emotional attitudes affect behavioral intentions at different points in time.

Research objectives

The objectives of this study are as follows: (1) To examine the dual influence of ecological paralysis and green self-identity on tourists' cognitive evaluations, specifically analyzing how these cognitive factors shape emotional responses (e.g., guilt or well-being) and subsequent environmental behaviors. (2)To test the mediating role of affective states (positive and negative emotions) in linking cognitive perceptions (eco-paralysis/self-identity) to conative outcomes, including pro-environmental behaviors and sustainable travel intentions (e.g., revisiting green destinations). (3) To explore the differential impacts of positive versus negative emotions triggered by ecological paralysis and self-identity on tourists' environmental transformation, identifying which emotional pathways (e.g., guilt-driven actions vs. well-being-driven commitments) are more effective in fostering long-term sustainable behaviors.Based on these findings, this research aims to provide actionable insights for policymakers and tourism stakeholders in the Greater Bay Area, such as designing targeted campaigns to mitigate ecological paralysis or strengthen green self-identity, thereby advancing Macau's vision of becoming a "world-class green tourism city."

Theoretical perspective

This study is based on the cognitive-affective-conative (CAC) system theory, which divides psychological processes into three sequential stages: cognition (psychological understanding), affect (emotional response), and conation (behavioral intention). In addition, the study integrates the concepts of eco-paralysis (indifference to environmental degradation) and self-identity (alignment with green values) to explain tourists' environmental transformation. The CAC model provides a clear, stage-based structure to analyze how cognitive evaluations trigger emotional responses, such as how eco-paralysis or self-identity triggers guilt or happiness, which in turn drive behavioral intentions and actions. It emphasizes the dynamic interaction between cognitive, affective, and conative dimensions, making it suitable for studying complex behavioral changes such as environmental transformation. The subdivision of the model allows for measurable variables in each stage (e.g., Likert scale surveys of cognitive perceptions), facilitating quantitative analysis.

The authors believe that the CAC framework demonstrates a high fit with the objectives of this study. At the cognitive level, it investigates how tourists' perceptions of eco-paralysis (negative cognition) and green self-identity (positive cognition) shape their environmental attitudes. At the affect level, we explore how these cognitive evaluations evoke emotions (e.g., guilt from eco-paralysis or happiness from self-identity). At the conative level, we study how emotions are transformed into behavioral outcomes (e.g., adopting environmental practices or intending to support sustainable tourism). By mapping these stages, this study reveals the mechanisms behind the "green awakening" of Macau tourists. By studying how cognitive factors (eco-paralysis/self-identity) directly affect affective states. Affective states mediate the relationship between cognition and conative. Positive emotions (e.g., happiness) and negative emotions (e.g., guilt) drive behavioral outcomes in different ways. This framework captures the continuity and interactivity of tourists' environmental transformation, providing a roadmap for analyzing policy impacts and promoting Macau's vision of a "world-class green tourism city". The following is the research framework.

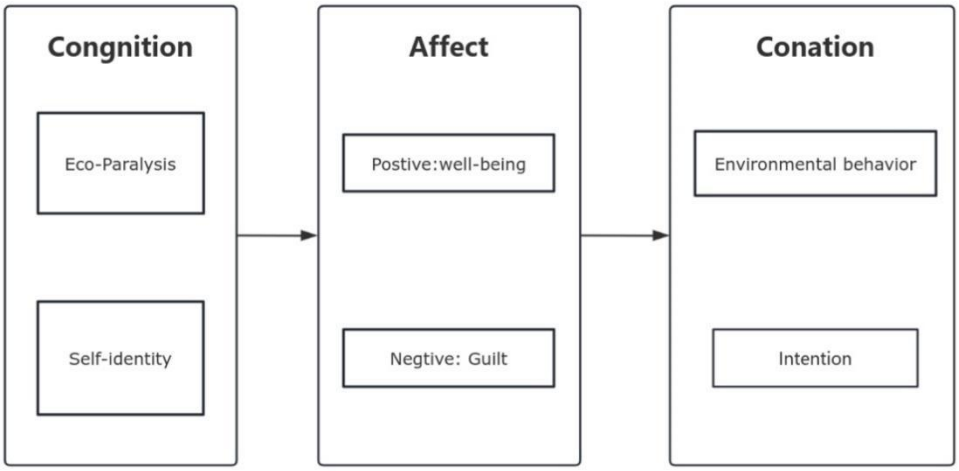


Figure 1. Framework for this research

Method

This study further testes the tourists' cognition, including eco-paralysis and self-awareness have a positive influence or negative influence during their travel process. These two influences have different ways of presenting tourists' environmental behaviors and intentions on tourists' conation. This study adopts quantitative analysis method to support the research. Based on a visitor survey of (number) tourists who used to travel to The Greater Bay Area in the past three years, a structural equation model was designed to determine the hypothetical relationships between the constructs. The empirical analysis of the data produced several salient findings and implications: Eco-paralysis and self-identity affect on tourists' environmental behavior and intention during their travel process. As postulated by the Cognition-Affect-Conation model, Tourists' Cognition have a positive or negative influences on Tourists' Conation during their travel process.

Findings

The study finds that eco-paralysis and weak green self-identity led to tourists' indifference to environmental issues and reduced motivation for sustainable behavior. In contrast, eco-paralysis and strong green self-identity significantly increased visitors' environmental awareness. Positive influences, such as well-being from sustainable travel, strongly promote sustained environmental behavior, while negative emotions, such as guilt, may trigger some behavioral changes, but the effects can be erratic. Also, the study shows that positive influences are strongly associated with current and future sustainable behaviors, such as supporting green products and reducing the ecological footprint. From the perspective of the tourists themselves, Their own education can alleviate ecological paralysis and change tourist attitudes. These results provide guidance for travel companies and policy makers to use marketing strategies to promote green services and attract eco-tourism tourists. The study also provides specific recommendations for the Greater Bay Area to position itself to achieve sustainable goals and enhance its core competitiveness in the whole country even the global tourism market.

References:

[1] Agapito, D., Oom do Valle, P., & da Costa Mendes, J. (2013). The Cognitive-Affective-Conative Model of Destination Image: A Confirmatory Analysis. *Journal of Travel & Tourism Marketing*, *30*(5), 471–481. https://doi-org.libezproxy.must.edu.mo/10.1080/10548408.2013.803393

[2] Lee, T. H., & Jan, F.-H. (2017). Ecotourism Behavior of Nature-Based Tourists: An Integrative Framework. *Journal of Travel Research*, *57*(6), 792-810.
https://doi-org.libezproxy.must.edu.mo/10.1177/0047287517717350 (Original work published 2018)

[3] Wang, X., Qin, X., & Zhou, Y. (2019). A comparative study of relative roles and sequences of cognitive and affective attitudes on tourists' pro-environmental behavioral intention. *Journal of Sustainable Tourism*, *28*(5), 727–746.
https://doi-org.libezproxy.must.edu.mo/10.1080/09669582.2019.1704297

An Empirical Study on Residents' and Tourists' Awareness of Abnormal Behaviors and Tolerance for Service Failures

Felix Elvis OTOO[1], Qunqin LIANG[2], Yueyue CHEN[2], Mier DENG[2]

[1]Assistant professor, Faculty of Hospitality and Tourism Management,Macau University of Science and Technology, Avenida Wai Long, Taipa, Macau SAR

[2]Student, Faculty of Hospitality and Tourism Management,Macau University of Science and Technology,Avenida Wai Long, Taipa, Macau SAR

Abstract

Introduction

According to the UNWTO, Chinese overseas travel expenditure reached $US196.5 billion in 2023, surpassing the United States (US$150 billion), Germany (US$112 billion), and the United Kingdom (US$110 billion) (UNWTO, 2024). On the domestic front, the WTTC projected that China's tourism industry would contribute circa ¥7 trillion (circa US$953 million) to China's economy in 2024 (WTTC, 2024). Thus, the Chinese tourism market is undoubtedly one of the largest suppliers of both domestic and international tourism revenue.

Beyond the economic indices, however, the tourism sector and service quality of tourist destinations depend not only on infrastructure, service standards, receipts, and expenditures but are also closely linked to tourists' behaviors (Pearce, Wu, & Osmond, 2013). With the growth of the tourism segment are the associated reports and concerns of unusual behaviors of Chinese tourists both domestic and international. A cursory search reveals several articles about the unusual behaviors of Chinese tourists with titles such as "Why Are Chinese Tourists So "Unruly?", "Issues with the Manners of Chinese Tourists Visiting Japan", "Why are the tourist so rude?", and "Rude awakening: Chinese tourists have the money, but not the manners". Therefore, it is not surprising that some destinations are actively taking measures to address the outliers of tourist behaviors and attitudes (Su, Lin, & Liu, 2012). In a world of evolving geopolitical conflicts and resolutions, addressing this seemingly 'elephant in the room' is an integral step to understanding and mitigating the challenges of tourists' unusual behaviors.

Research gaps

A review of literature points to some areas of interest in the investigation of unusual tourists behaviors. First, existing research tends to focus on the responsibilities of service providers and reactions of residents with little exploration of tourists' perceptions of these unusual behaviors and their effect on their (or others') experience evaluations. For example, Chen, Hsu, and Li (2018) investigated Hong Kong residents' attitudes towards Mainland Chinese tourists. Tse and Tung (2022) also conducted a multi-national analysis of residents' attitudes towards tourists from Singapore, Malaysia and Thailand. Li, Chen, Huang, Wanichwasin, and Cui (2021) and Gong, Detchkhajornjaroensri, and Knight (2019) likewise investigated residents' perceptions of Chinese tourists in Thailand. Thus, there is little effort among researchers to understand the dynamics of tourists' attitudes and behaviors from a tourists' viewpoint.

Secondly, despite the constantly evolving psycho-demographics of tourists, there is limited recent effort to understand the nuances of Chinese tourists' behaviors within the literature. Many existing studies were conducted at least three years ago with little update on prevailing social, psychological, and demographic dynamics. Yet, several studies, including Otoo and Kim (2020), have noted that tourist cohorts possess different traits requiring constant research appraisal. Taking cue from these limitations, the current study uses the Guangdong-Hong Kong-Macao Greater Bay Area as a point of interest and analyzes survey data from both residents and tourists to provide practical support for designing behavior guidance strategies. In addressing the effect of unusual tourist behaviors, we further pose the question 'Do the tolerance levels of residents and tourists toward unusual behavior and service failures affect their willingness to recommend the destination?'

Research objectives

The specific objectives of this study are to: (1)investigate the cognitive differences in unusual behaviors by finding out the differences in how residents and tourists perceive unusual behaviors in various tourism situations, such as uncivilized behavior in scenic areas or bad hotel services; (2) explore the tolerance behaviors of residents and tourists during unusual behavior encounters; (3) to investigate the effect of perceived unusual behaviors on tourists intentions to recommend the destination; and (4) explore the relationship between tolerance and recommendation intentions. Through quantitative analysis and case studies, this research aims to help tourism service providers improve visitor behavior management, thereby enhancing the destination's reputation and sustainable appeal. The findings will offer a theoretical basis and practical methods for behavior intervention strategies.

Theoretical considerations

A number of theoretical lenses were considered for this study. First， The theory of tourism experience focuses on the comprehensive psychological feelings obtained by tourists through multiple dimensions such as senses, emotions, and cognition during the travel process. It emphasizes that the quality of experience is influenced by behavioral norms, environmental interaction, and individual perception. Abnormal behaviors have a negative impact on the experience. For example, behaviors like tourists littering and making loud noises in scenic areas will disrupt the sense of immersion of other tourists and reduce the overall quality of the experience. For instance, the core of the hiking tourism experience is the "embodied generative practice", that is, to achieve individual growth through the deep integration of the body and the environment. However, abnormal behaviors (such as cutting in line) may interrupt this sense of immersion, leading to a negative experience of the separation of the body and mind. Tolerance plays a moderating role in this. The tolerance of local residents or tourists towards service issues (such as delays in restaurant queues) directly affects their evaluation of the destination's image. Physical perception and situational interaction are the basis for the formation of experience. If the tolerance is low, the physical perception of tourists (such as feelings of anxiety) will magnify the negative experience, which in turn affects their willingness to recommend. (XIE Yan-jun, FAN

You-meng, 2017). Secondly， the Tourism Sociology Theory focuses on social structures, group interactions, and power relations within tourism activities, emphasizing the social constructiveness of tourism phenomena. When the relationship between local residents and tourists is harmonious (for example, residents tolerate tourists' unconventional behaviors), even if there are service flaws, tourists may still give positive evaluations and recommend the destination.（Wang N. 1999）

Method

This study aims to explore how tourists' awareness of their own abnormal behaviors affects their tolerance and willingness to recommend a destination. We distributed questionnaires to 400 tourists who had traveled to the Greater Bay Area or are local residents, investigating their perceptions of destination positioning and management. A 7-point Likert scale was used to assess respondents' cognitions or feelings in the following three areas, constructing a structural equation model to determine the hypothetical relationships between constructs:1.Awareness of Abnormal Behavior（Yan, C., Zhang, C., Lu, Z., Wang, Z., Liu, Y., & Liu, B. 2022）：Assessing respondents' awareness of potential abnormal behaviors in tourism scenarios, such as: "I have cut in line at a scenic spot."

"I speak loudly in public places."

2.Tolerance（Yun, S., Shu,Q., & Tyson, A. 2021): Measuring respondents' acceptance of service failures through scenario simulation questions, such as: "If a restaurant delays serving food by 15 minutes due to high traffic, what is your level of acceptance?"

3.Willingness to Recommend（Jia, G., Fan, D. X. F., Xu, J., & Shend, J. H. 2023): Evaluating the likelihood of respondents recommending the destination to others, such as: "Would you recommend this destination to friends or family?" Data analysis involved correlation analysis and multiple linear regression models, controlling for covariates such as age, gender, and travel frequency.

The main hypotheses tested were:1.Whether awareness of abnormal behavior positively correlates with tolerance.(Marlina, E., Sukmawati, A. M. A., & Wahyuhana, R. T. 2024).2.Whether awareness of abnormal behavior negatively correlates with willingness to recommend.3.The mediating role of tolerance between awareness of abnormal behavior and willingness to recommend.(Xu, W., Oei, T. P., Liu, X., Wang, X., & Ding, C. 2016)

Expected findings

1.Positive Correlation between Awareness of Abnormal Behavior and Service Failure Tolerance: Tourists with lower awareness of their uncivil behaviors exhibited lower tolerance for service failures.

2.Negative Association between Awareness of Abnormal Behavior and Willingness to Recommend: Tourists with higher awareness of their abnormal behaviors showed significantly stronger willingness to recommend.

3.Mediating Role of Tolerance: Awareness of abnormal behavior is positively correlated with tolerance, and tolerance is also positively correlated with willingness to recommend. It is inferred that awareness of abnormal behavior influences willingness to recommend through its effect on tolerance.

These findings provide important insights into understanding tourist behavior and suggest that tourism managers consider the relationship between tourists' self-awareness and tolerance when formulating policies.

Reference

[1] Chen, N., Hsu, C. H., & Li, X. R. (2018). Feeling superior or deprived? Attitudes and underlying mentalities of residents towards Mainland Chinese tourists. *Tourism Management*, *66*, 94-107.

[2] Gong, J., Detchkhajornjaroensri, P., & Knight, D. W. (2019). Responsible tourism in Bangkok, Thailand: Resident perceptions of Chinese tourist behaviour. International Journal of Tourism Research, 21(2), 221-233.

[3] Li, Z., Chen, H., Huang, S., Wanichwasin, P., & Cui, R. (2021). Resident perceptions of Chinese tourists in Thailand. *Tourism Review*, *76*(5), 1154-1163.

[4] Otoo, F. E., & Kim, S. (2020). Analysis of studies on the travel motivations of senior tourists from 1980 to 2017: Progress and future directions. *Current Issues in Tourism*, *23*(4), 393-417.

[5] Pearce, P. L., Wu, M. Y., & Osmond, A. (2013). Puzzles in understanding Chinese tourist behaviour: Towards a triple-C gaze. *Tourism Recreation Research*, *38*(2), 145-157.

[6] Siu, G., Lee, L. Y., & Leung, D. (2013). Residents' perceptions toward the "Chinese tourists' wave" in Hong Kong: An exploratory study. *Asia Pacific Journal of Tourism Research*, *18*(5), 446-463.

[7] Su, Y. W., Lin, H. L., & Liu, L. M. (2012). Chinese tourists in Taiwan: Crowding out effects, opening policy and its implications. *Tourism Management Perspectives*, *4*, 45-55.

[8] Tse, S., & Tung, V. W. S. (2022). Understanding residents' attitudes towards tourists: Connecting stereotypes, emotions and behaviours. *Tourism Management*, *89*, 104435.

[9] UNWTO (June, 2024). China recovers its position as top spender in 2023 as Asia and the Pacific reopens to tourism. Retrieved from: https://www.unwto.org/news/china-recovers-its-position-as-top-spender-in-2023-as-asia-and-the-pacific-reopens-to-tourism

[10] XIE Yan-jun, FAN You-meng. TOURIST EXPERIENCE ON A BODY PERSPECTIVE: GROUNDED THEORY ANALYSIS ON TREKKING WRITINGS AND INTERVIEWS[J]. Human Geography, 2017, 32(4): 129-137

[11] Wang N. Rethinking Authenticity in Tourism Experience[J]. Annals of Tourism Research，1999，26(2)：349 - 370.

[12] WTTC (June, 2024). Travel & Tourism in China set to surpass pre-pandemic levels this year. Retrieved from: https://wttc.org/news-article/travel-and-tourism-in-china-set-to-surpass-pre-pandemic-levels-this-year

[13] Likert, R., (1932). The method of constructing an attitude scale. Archives of Psychology, 140, 44-53. ABSTRACT: The praxis of public relations seems to be under threat, owing to a bad reputation among other things.

[14] Yan, C., Zhang, C., Lu, Z., Wang, Z., Liu, Y., & Liu, B. (2022). Blockchain abnormal behavior awareness methods: a survey. *Cybersecurity*, 5(1), 5.

[15] Yun, S., Shu,Q., & Tyson, A. (2021).The Role of Customer Perceived Ethicality in Explaining the Impact of Incivility Among Employees on Customer Unethical Behavior and Customer Citizenship Behavior.*Journal of Business Ethics*,178,519-535.

[16] Jia, G., Fan, D. X. F., Xu, J., & Shend, J. H. (2023). Tourist prosocial behavior: scale development and its role between tourist destination social exclusion and wellbeing. Journal of Sustainable Tourism. form：https://doi.org/10.1080/09669582.2023.2289357

[17] Marlina, E., Sukmawati, A. M. A., & Wahyuhana, R. T. (2024). The correlation between cultural tourism motivation and tourism tolerance. Tourism and Hospitality, 5(4), 1236-1259.
[18] Nadiri, H., & Hussain, K. (2005). Diagnosing the zone of tolerance for hotel services. Managing Service Quality: An International Journal, 15(3), 259-277.
[19] Xu, W., Oei, T. P., Liu, X., Wang, X., & Ding, C. (2016). The moderating and mediating roles of self-acceptance and tolerance to others in the relationship between mindfulness and subjective well-being. Journal of health psychology, 21(7), 1446-1456.

Hindrance or Challenge: Supervisors Unraveled by Employee Nostalgia

Qiaoyan FENG[1], Liangliang ZHU[2], Feijing WU[2]

[1]Macau University of Science and Technology, Building O, O325, Faculty of Hospitality and Tourism Management, Avenida Wai Long, Taipa, Macau

[2]Macau University of Science and Technology, Building O, O328, Faculty of Hospitality and Tourism Management, Avenida Wai Long, Taipa, Macau

Abstract

In the hospitality industry, changing customer expectations and a fast-moving environment often led to staff turnover and organizational shifts (Dogru et al., 2023; Han, 2022). As a result, employees often find themselves navigating a landscape of uncertainty (Grobelna, 2015), which arises from changes that create discontinuities typically perceived as a loss (Conroy & O'Leary-Kelly, 2014). In this context, workers may view ongoing restructures, policy shifts, or leadership transitions as threats to their established routines and sense of stability (Fugate et al., 2008). Consequently, they could develop organizational nostalgia—a sentimental longing for a time when structures and practices seemed more predictable (Wildschut et al., 2006). This nostalgic sentiment serves as a coping mechanism to manage the perceived threat stemming from frequent and sometimes unsettling transformations (Leunissen et al., 2018; van Dijke et al., 2025).

Existing research on organizational nostalgia has primarily focused on its effects on employees themselves, exploring how nostalgic sentiments influence their own attitudes and behaviors within organization (Tatar et al., 2024; van Dijke et al., 2025). However, little attention has been paid to how employees' nostalgia affects others, particularly supervisors—an area that remains underexplored, especially in the context of employees influencing leadership behavior. Previous research has demonstrated that employees' nostalgic sentiments can lead to resistance against new management practices. For instance, a study in an amusement park found that employees who nostalgically recalled past successes expressed dissatisfaction with current management and resisted new initiatives (Milligan, 2003). However, these studies have not explored how such resistance influences supervisors' reactions. This study addresses this gap by employing a dual-path framework to examine how employee nostalgia, through its impact on resistance, shapes supervisors' stress appraisals and potential abusive tendencies via challenge and hindrance stress pathways, thereby providing a more detailed analysis of leader–subordinate dynamics.

Abusive supervision refers to subordinates' perceptions of sustained hostile verbal and nonverbal behaviors from their supervisors, such as belittling, yelling, or undermining, excluding physical contact (Tepper, 2000, 2007). Existing research indicates that supervisors may engage in abusive behavior in response to a variety of workplace stressors, including difficult goals (Mawritz et al., 2014), relational conflicts (Harris et

al., 2011), and poor team performance (Fan et al., 2020). Building on these findings, we argue that employees' nostalgia can likewise be construed as a stressor for supervisors. In other words, if employees' nostalgic reflections are perceived as undermining managerial authority or signaling resistance, supervisors may experience heightened stress and resort to hostile actions in an attempt to reassert control.

To address this question, we draw upon the challenge–hindrance stress framework and cognitive appraisal theory (Lazarus, 1984; Podsakoff et al., 2007). Specifically, we contend that supervisors can interpret employees' nostalgic reflections through two distinct appraisal pathways: as a challenge stressor that signals constructive potential or as a hindrance stressor that threatens organizational progress. Challenge stress refers to the psychological perception that fosters growth, triggers positive emotions, and motivates proactive coping strategies (Webster et al., 2011). In contrast, hindrance stress is marked by perceived barriers and threats to personal interests, often giving rise to maladaptive responses (Zhang et al., 2018). When supervisors perceive nostalgia as a constructive force—potentially enhancing organizational citizenship behaviors and commitment (Akgün et al., 2023; van Dijke et al., 2025) —they experience challenge stress, which fosters proactive coping and reduces the likelihood of abusive supervision. Conversely, if supervisors view nostalgia as a tool for employees to resist change or undermine progress (Bednar et al., 2020; Milligan, 2003), they experience hindrance stress, marked by perceived threats to their authority, which increases the likelihood of abusive supervision. This abusive behavior may arise because hindrance stress overwhelms supervisors' coping abilities, making them to resort to hostile actions as a misguided attempt to reassert control over resistant employees.

Our study makes two key contributions. First, whereas previous scholarship has predominantly explored how employees' nostalgia affects their own attitudes and behaviors, we shift the focus to supervisors, highlighting a lesser-known pathway by which employee nostalgia influences managerial actions. Second, we introduce a dual-path mechanism—hindrance stress and challenge stress—that clarifies how supervisors' appraisals of employees' nostalgic sentiments can lead to different leadership outcomes. This work broadens current understanding of leader–subordinate dynamics and provides a more nuanced view of how organizational nostalgia both informs and is influenced by the social context in which it emerges.

To mitigate potential common method bias, we employ a multi-wave, matched questionnaire design (Kock et al., 2021). In detail, supervisors will evaluate their subordinates' organizational nostalgia, as well as their own hindrance and challenge perceived nostalgia. We will determine whether employees' nostalgia perceptions can be reliably aggregated by computing interrater agreement indices (e.g., rwg) and intraclass correlations (ICC), thus ensuring that nostalgia is indeed a shared team-level construct. A higher level of abstraction analysis allows us more accurately measure how collective nostalgia influences supervisors' challenge or hindrance stress appraisals—and, consequently, their propensity to engage in abusive supervision. In doing so, this approach enriches our understanding of the social dynamics underpinning leadership processes and underscores the importance of considering emergent team-level phenomena in organizational research.

Taken together, the present study contributes to both theory and practice through illuminating the dual nature of organizational nostalgia—serving as either a challenge or a threat—and examining its impact on abusive supervision. Adopting cognitive appraisal theory and the challenge–hindrance stress framework, our work highlights nostalgia's capacity to trigger divergent supervisory responses, ranging from minimizing the impetus for abuse to increasing its likelihood. Methodologically, the multi-wave, matched questionnaire approach, combined with team-level aggregation, strengthens the robustness of our findings. These insights broaden our understanding of how employees' emotional connections to the organizational past can shape leader–subordinate interactions and, ultimately, organizational outcomes. In addition, our study offers practical implications via underscoring the need for leaders to recognize and manage collective nostalgic sentiments in ways that foster openness to change and mitigate conflict. When organizations proactively addressing perceived threats and leveraging the constructive potential embedded in nostalgia, they can cultivate more adaptive, resilient, and relationally cohesive work environments.

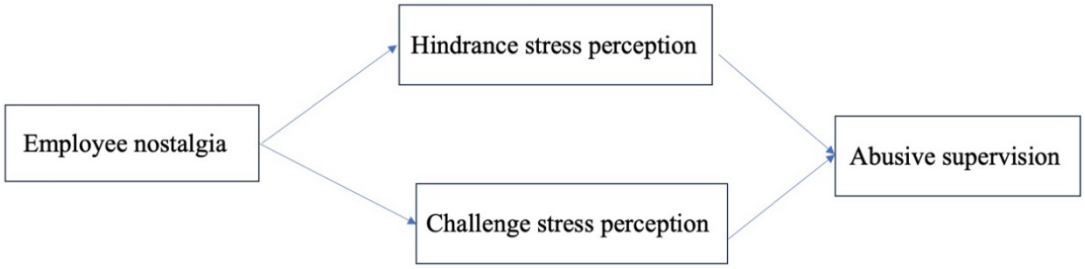


Figure 1. Conceptual model

Keywords: Employee nostalgia, Hindrance stress perception, Challenge stress perception, abusive supervision, cognitive appraisal theory

Reference

[1] Akgün, A. E., Tatar, B., Erdil, O., Keskin, H., & Müceldili, B. (2023). Development and validation of the organizational nostalgia scale and its relationship with affective commitment and organizational discontinuity. *Current psychology (New Brunswick, N.J.)*, *42*(32), 28060-28085. https://doi.org/10.1007/s12144-022-03898-y

[2] Bednar, J. S., Galvin, B. M., Ashforth, B. E., & Hafermalz, E. (2020). Putting identification in motion: A dynamic view of organizational identification. *Organization science (Providence, R.I.)*, *31*(1), 200-222. https://doi.org/10.1287/orsc.2018.1276

[3] Conroy, S. A., & O'Leary-Kelly, A. M. (2014). Letting go and moving on: Work-related identity loss and recovery. *The Academy of Management Review*, *39*(1), 67-87. https://doi.org/10.5465/amr.2011.0396

[4] Dogru, T., McGinley, S., Sharma, A., Isık, C., & Hanks, L. (2023). Employee turnover dynamics in the hospitality industry vs. The overall economy. *Tourism Management*, *99*, 104783. https://doi.org/10.1016/j.tourman.2023.104783

[5] Fan, X. L., Wang, Q. Q., Liu, J., Liu, C., & Cai, T. (2020). Why do supervisors abuse subordinates? Effects of team performance, regulatory focus, and emotional exhaustion. *Journal of Occupational and Organizational Psychology*, *93*(3), 605-628. https://doi.org/10.1111/joop.12307

[6] Fugate, M. E. L., Kinicki, A. J., & Prussia, G. E. (2008). Employee coping with organizational change: An examination of alternative theoretical perspectives and models. *Personnel Psychology*, *61*(1), 1-36. https://doi.org/10.1111/j.1744-6570.2008.00104.x

[7] Grobelna, A. (2015). Role ambiguity: A problem or a challenge facing contemporary hospitality industry. The critical role of employees' creativity. *International Journal of Contemporary Management*(14(3)), 77. https://doi.org/10.4467/24498939IJCM.15.005.4307

[8] Han, J. W. (2022). A review of antecedents of employee turnover in the hospitality industry on individual, team and organizational levels. *International Hospitality Review*, *36*(1), 156-173. https://doi.org/10.1108/IHR-09-2020-0050

[9] Harris, K. J., Harvey, P., & Kacmar, K. M. (2011). Abusive supervisory reactions to coworker relationship conflict. *The Leadership Quarterly*, *22*(5), 1010-1023. https://doi.org/10.1016/j.leaqua.2011.07.020

[10] Kock, F., Berbekova, A., & Assaf, A. G. (2021). Understanding and managing the threat of common method bias: Detection, prevention and control. *Tourism Management*, *86*, 104330. https://doi.org/10.1016/j.tourman.2021.104330

[11] Lazarus, R. S. (1984). *Stress, appraisal, and coping* (Vol. 464). Springer.

[12] Leunissen, J. M., Sedikides, C., Wildschut, T., & Cohen, T. R. (2018). Organizational nostalgia lowers turnover intentions by increasing work meaning: The moderating role of burnout. *Journal of Occupational Health Psychology*, *23*(1), 44-57. https://doi.org/10.1037/ocp0000059

[13] Mawritz, M. B., Folger, R., & Latham, G. P. (2014). Supervisors' exceedingly difficult goals and abusive supervision: The mediating effects of hindrance stress, anger, and anxiety. *Journal of Organizational Behavior*, *35*(3), 358-372. https://doi.org/10.1002/job.1879

[14] Milligan, M. J. (2003). Displacement and identity discontinuity: The role of nostalgia in establishing new identity categories. *Symbolic interaction*, *26*(3), 381-403. https://doi.org/10.1525/si.2003.26.3.381

[15] Podsakoff, N. P., LePine, J. A., & LePine, M. A. (2007). Differential challenge stressor-hindrance stressor relationships with job attitudes, turnover intentions, turnover, and withdrawal behavior: A meta-analysis. *Journal of Applied Psychology*, *92*(2), 438-454. https://doi.org/10.1037/0021-9010.92.2.438

[16] Tatar, B., Müceldili, B., & Erdil, O. (2024). How do employees maintain their well-being during loneliness? The power of organizational nostalgia. *Management research review*, *47*(4), 622-642. https://doi.org/10.1108/MRR-12-2022-0842

[17] Tepper, B. J. (2000). Consequences of abusive supervision. *Academy of Management Journal*, *43*(2), 178-190. https://doi.org/10.5465/1556375

[18] Tepper, B. J. (2007). Abusive supervision in work organizations: Review, synthesis, and research agenda. *Journal of Management*, *33*(3), 261-289. https://doi.org/10.1177/0149206307300812

[19] van Dijke, M., Guo, Y., Wildschut, T., & Sedikides, C. (2025). Perceived organizational change strengthens organizational commitment and organizational citizenship behavior via increased organizational nostalgia. *Journal of Applied Psychology*, *110*(1), 89-106. https://doi.org/10.1037/apl0001221

[20] Webster, J. R., Beehr, T. A., & Love, K. (2011). Extending the challenge-hindrance model of occupational stress: The role of appraisal. *Journal of Vocational Behavior*, *79*(2), 505-516. https://doi.org/10.1016/j.jvb.2011.02.001

[21] Wildschut, T., Sedikides, C., Arndt, J., & Routledge, C. (2006). Nostalgia: Content, triggers, functions. *Journal of Personality and Social Psychology*, *91*(5), 975-993. https://doi.org/10.1037/0022-3514.91.5.975

[22] Zhang, C., Mayer, D. M., & Hwang, E. (2018). More is less: Learning but not relaxing buffers deviance under job stressors. *Journal of Applied Psychology*, *103*(2), 123-136. https://doi.org/10.1037/apl0000264

Symbiosis or Substitution? A study of the impact of human-robot collaboration on job insecurity and job sustainability of frontline employees in high star hotels under self-determination theory

Zishu YU, Jing ZHONG, Yuxin YANG

Macau University of Science and Technology

Abstract

1. Introduction

The proliferation of AI-powered service robots in high-star hotels, while enhancing operational efficiency and guest satisfaction, has created a paradox: technological progress increasingly jeopardizes frontline employees'occupational stability. With 67% of Chinese hotels escalating technology investments in 2024 (Shiji Group, 2024) and the global service robotics market projected to hit $146.79 billion by 2029 (Verified Market Research, 2022), roles like front desk personnel (95% automation risk) and chefs (96%) face unprecedented replacement threats (Frey & Osborne, 2017). Concurrently, human-robot collaboration imposes new demands for adaptive problem-solving and creative labor practices (Liang et al., 2022), eroding employees' job security and organizational belonging (Smids et al., 2020). This tension underscores a critical knowledge gap regarding how human-robot interaction redefines sustainable employability in hospitality.

This study addresses two interrelated questions: (1) How do autonomy dynamics and perceived competence asymmetries in human-robot teams exacerbate job insecurity? (2) To what extent does self-efficacy mitigate the negative impact of such insecurity on career sustainability? Grounded in self-determination theory, the research employs empirical methods to decode the mechanisms linking collaborative autonomy, competence perceptions, and occupational instability, while quantifying self-efficacy's protective role. The findings aim to inform actionable frameworks for harmonizing human-robot synergies and cultivating future-ready workforce competencies in luxury hospitality settings.

2. Literature review

2.1 Self-determination theory

Self-Determination Theory (SDT) (Deci & Ryan, 1985) posits autonomy, competence, and relatedness as core psychological needs shaping human motivation. In high-star hotels, frontline employees' job insecurity-rooted in AI-driven labor substitution (Balsmeier & Woerter, 2019)-intersects with SDT's framework. Human-robot collaboration autonomy, involving control over work methods and scheduling (Sen et al., 2022), may alleviate insecurity by enhancing employees' agency and resource utilization (Li et al., 2024). Perceived competence reveals a dual dynamic: employees' self-evaluated proficiency (Fiske et al., 2007) and their perception of robots' capabilities (Liao et al., 2023). While robotic competence heightens substitution anxieties, employees' confidence in their skills may offset insecurity, reflecting human-machine capability tensions in collaborative contexts (Wu & Zhang, 2024). SDT thus provides

a lens to examine how psychological needs influence sustainable employability during AI integration.

2.2 Career sustainability

Career sustainability, conceptualized by De Vos et al. (2020) as multidimensional experiences spanning health, well-being, and productivity, reflects individuals' capacity to navigate evolving work environments through personal agency. In AI-driven contexts, studies highlight its dual-edged nature: collaborative AI systems can enhance occupational sustainability by optimizing task efficiency and skill development (Dileep et al., 2023), yet qualitative job insecurity --- stemming from technological displacement --- undermines these outcomes by eroding psychological and professional stability (Van der Heijden et al., 2024). Recent research further emphasizes age as a moderating factor, suggesting that younger employees may experience heightened vulnerability to insecurity's detrimental effects. This interplay underscores the need to balance AI's productivity gains with interventions addressing workforce anxieties to foster sustainable career trajectories.

2.3 Self-efficacy theory

Self-efficacy, defined as an individual's belief in their capacity to execute behaviors and exert control over outcomes (Bandura, 1986), has been extensively applied across disciplines, including education (Yin et al., 2022) and healthcare (Magon et al., 2021; Cho & Hwang, 2024). In organizational research, it increasingly serves as a moderating variable to explain employee adaptability in dynamic work environments. For instance, self-efficacy buffers the negative impact of job insecurity on psychological well-being in AI-driven workplaces (Kim et al., 2024) and strengthens the link between teamwork and career sustainability among professionals (Adegbite & Hoole, 2024). Emerging evidence suggests that higher self-efficacy may attenuate the adverse effects of job insecurity on career resilience, positioning it as a critical psychological resource for sustaining employee adaptability amid technological disruption.

3. Scale and Questionnaire

3.1 Scale design

3.1.1 Autonomy, Perceived competence, and Job insecurity in human-robot collaboration

This study used validated scales to measure human-robot collaboration variables: Breaugh's (1985) scale for work method autonomy and work scheduling autonomy (3 items each); Cuddy et al.'s (2008) scale for perceived robot competence and self-competence (3 items each); and Vander Elst et al.'s (2014) scale for job insecurity (4 items). Detailed item distribution is shown in Table 1.

Table 1 Scale for Autonomy, Perceived competence, and Job insecurity in human-robot collaboration

Variant	Item	Source
Work method autonomy	I have the authority to determine how to complete my work when working together with service robots.	Breaugh, 1985
	I am able to choose the way to go about my job when working together with service robots.	
	I am free to choose the method(s) to use in carrying out my work when working together with service robots.	
Work scheduling autonomy	I can arrange my work plan on my own when working together with service robots.	
	I have some control over the sequencing of my work activities when working together with service robots.	
	My job is such that l can decide when to do particular work activities when working together with service robots.	
Perceived robot competence	I consider the robots I collaborate with to be competent.	Cuddy et al., 2008
	I consider the robot I work with to be reliable.	
	I consider the robot I work with to be an experienced professional.	
Perceived employee competence	I consider myself competent at work.	
	I consider myself reliable in my work.	
	I consider myself to be an experienced professional at work.	
Job insecurity	I am very likely to become unemployed quickly when working together with service robots.	Vander Elst et al., 2014
	I am sure I can keep my job when working together with service robots.	
	I feel insecure about the future of my job when working together with service robots.	
	I think I might lose my job in the near future when working together with service robots.	

3.1.2 Scale of Sustainable Career and Self-Efficacy of Employees

The Sustainable Careers comprises three dimensions: Hackman et al.'s (1975) scale measures job satisfaction; Ware and Sherbourne's (1992) scale assesses employees' self-rated health; Henderson's (2012) scale evaluates self-perceived employ ability (8 items). Additionally, Turja's (2019) scale (adapted to human-computer collaboration contexts, 6 items) was employed to measure employee self-efficacy, as detailed in Table 2.

Table 2 Sustainable Career and Self-Efficacy of Employees scale and source

Variant		Item	Source
Sustainable careers	Job Satisfaction	All in all, I'm happy with my current job.	Hackman et al., 1975
		Overall, I like working here.	
		I am generally satisfied with the type of work I do in this job.	
	General Health	I consider my general health to be good.	Ware & Sherbourne, 1992
	Employ ability	I can find another job if I want to.	Henderson, 2012
		If I lose this job, I can easily find another one.	
		I could easily switch to another hotel if I wanted to.	
		I am confident that I can find a similar job soon.	
Self-efficacy		In general, I consider myself technically competent.	Turja, 2019
		I am confident in my ability to learn how to use service robots if they become part of my unit.	
		I believe that learning how to use service robots will be easy for me in the future.	
		I am confident in my ability to learn how to program a service robot in a simple way if I get the necessary training.	
		I am confident in learning how to use the care robot to instruct others to do the same.	
		I am confident that teaching new employees how to use the service robot will not be difficult for me.	

3.2 Questionnaire Design

First part of this questionnaire is 9-item demographic section (gender, age, education, marital status) including 3 screening questions for service robot experience.

Second, 16-item assessment of human-robot collaboration autonomy, perceived competence, and job insecurity using 5-point Likert scales.

Third, 14-item evaluation of sustainable career development and self-efficacy through 5-point Likert scales.

Fourth, concluding open-ended question soliciting participant insights. The complete instrument is available in Appendix 1.

3.3 Sample Selection

3.3.1 Target Hotels

This research project chooses Shanghai, a global hub for economy, finance, and tourism with advanced technological integration (Kaiyan, 2024), as the research locus. Three prominent hotels employing service AI robots were selected for their brand recognition and technological representativeness:

InterContinental Sheshan Shimao, IHG's landmark luxury property renowned for innovative design and Baidu AI-integrated (voice-controlled amenities, smart services) (TTG China, 2020).



Figure 1 InterContinental Sheshan Shimao Shanghai

Oriental Melody Hotel Shanghai, the CBD-based luxury property under Huazhu Group, combines international high-end service quality with local cultural integration (TTG China, 2021), and it has AI self- check-in, voice-controlled amenities, robotic concierge (SOHU, 2024)



Figure 2 Oriental Melody Hotel Shanghai

Atour S Hotel Hongqiao Center, Atour Group's flagship smart community concept hotel, pioneers O2O intelligence integration with themed rooms (Jiemian News, 2020), offers facial recognition check-in, Tencent Cloud voice control, delivery robots.



Figure 3 Atour S Hotel Shanghai Hongqiao Center

3.3.2 Target population

The target population for this project is frontline employees who have at least 6 months of work experience in their current hotel and who work collaboratively with service AI.

3.4 Data collection

The research targets 150-300 valid respondents (minimum 50 frontline employees per hotel with departmental balance) to ensure statistical validity. Through coordinated HR department at three hotels, electronic surveys will be distributed from April 15th to 31st, 2025. Along with the research explanation and follow-up reminders of the participants. The questionnaire set up screening questions to remove the following responses that did not meet the survey requirements: non-frontline positions, non-service AI robot users, short human-robot collaboration duration (<3 months), and completion time of the survey less than 3 minutes.

4.Data Analysis Plan

This study employs a structured data analysis plan to explore the relationships between human-machine collaboration dynamics and employees' career sustainability. First, descriptive statistics will summarize participants' demographic characteristics (e.g., gender, age) and key variables (e.g., job insecurity, human-machine autonomy), including means, standard deviations, and normality tests. Pearson's correlation analysis will preliminarily examine variable associations. Next, reliability (Cronbach's $\alpha > 0.7$) and validity assessments (convergent validity: AVE > 0.5, factor loadings >0.7 (Hair et al., 2010); discriminant validity: AVE vs. squared correlations) will ensure measurement robustness (Fornell & Larcker, 1981). Confirmatory Factor Analysis (CFA) in AMOS 24.0 will validate structural models using fit indices ($\chi^2/df < 3$, CFI/TLI > 0.90, RMSEA/SRMR < 0.08). Finally, hierarchical regression analysis (SPSS 23.0) will test hypotheses stepwise.

5 Potential Contribution

5.1 Potential theoretical contributions

This study extends self-determination theory to human-robot collaboration and examines job insecurity in the service domain, focusing on psychological uncertainty rather than physical threats. Additionally, it introduces self-efficacy as a moderator between job insecurity and career sustainability, emphasizing its role in high-star hotel employees' adaptation to AI integration.

5.2 Practical Implications

The study provides insights into managing AI-induced job insecurity in high-star hotels, fostering a balanced human-robot work environment. It underscores the importance of employee autonomy for career sustainability and offers strategies for training and career development. Furthermore, it aligns with AI-driven service optimization, enhancing customization and efficiency in high-star hotels

References

[1] Adegbite, W. M., & Hoole, C. (2024). Modelling female nurses' career sustainability towards career competency development and teamwork using self-efficacy as a mediator. *Social Sciences & Humanities Open, 10*, 100908-.

[2] Bagozzi, R. P. (1981). Evaluating Structural Equation Models with Unobservable Variables and Measurement Error: A Comment. *Journal of Marketing Research*, *18*(3), 375-. https://doi.org/10.2307/3150979.

[3] Balsmeier, B., & Woerter, M. (2019). Is this time different? How digitalization influences job creation and destruction. *Research Policy*, *48*(8). Scopus.

[4] Bandura, A. (1986). *Social foundations of thought and action : a social cognitive theory* / Albert Bandura. Prentice Hall.

[5] Breaugh, J. A. (1985). The Measurement of Work Autonomy. *Human Relations, 38*(6), 551-570.

[6] Cho, M.-E., & Hwang, S.-K. (2024). Self-efficacy-based Interventions for Patients With Obstructive Sleep Apnea: A Systematic Review. *Asian Nursing Research, 18*(4), 420—433.

[7] Cuddy, A. J. C., Fiske, S. T., Glick, P., & Zanna, M. P. (2008). Warmth and Competence as Universal Dimensions of Social Perception: The Stereotype Content Model and the BIAS Map. *In Advances in Experimental Social Psychology* (Vol. 40, pp. 61—149). Elsevier Science & Technology.

[8] De Vos, A., Van der Heijden, B. I. J. M., & Akkermans, J. (2020). Sustainable careers: Towards a dynamic model of career development. *Journal of Vocational Behavior*, 117, 103196.

[9] Deci, E.L., & Ryan, R.M. (1975). Intrinsic Motivation and Self-Determination in Human Behavior. *Perspectives in Social Psychology*.

[10] Dileep, P., Rao, K. N., Bodapati, P., & Van Pham, H. (2023). An automatic heart disease prediction using cluster-based bi-directional LSTM (C-BiLSTM) algorithm. *Neural Computing and Applications, 35*(10), 7253—7266.

[11] Fiske, S. T., Cuddy, A. J. C., & Glick, P. (2007). Universal dimensions of social cognition: warmth and competence. *Trends in Cognitive Sciences, 11*(2), 77—83.

[12] Frey, C. B., & Osborne, M. A. (2017). The future of employment: How susceptible are jobs to computerisation? *Technological Forecasting & Social Change, 114*(January), 254—280.

[13] Hackman, J. R., Oldham, G. R., & Feishman, E. A. (1975). Development of the Job Diagnostic Survey. *Journal of Applied Psychology, 60*(2), 159—70.

[14] Hair, J. F. (2010). *Multivariate data analysis / Joseph F. Hair, Jr. ... [et al.].* (7th ed.). Prentice Hall.

[15] HENDERSON, D. (2012). Employment Contracts, Psychological Contracts and Employee Well-Being - An International Study - Edited by David E. Guest, Kerstin Isaksson and Hans de Witte [Review of Employment Contracts, Psychological Contracts and Employee Well-Being - An International Study - Edited by David E. Guest, Kerstin Isaksson and Hans de Witte]. *British Journal of Industrial Relations, 50*(2), 376—378.

[16] Jiemian News. (2020, August 17). *Shanghai aiqinhai yaduo Sjiudian × danxiang kongjian, shuizai shudianli shizhong shenm ganjue* [Shanghai Aegean Sea Yaddo S Hotel ×One-way space, what's it like to sleep in a bookstore?]. Retrieved from https://www.jiemian.com/article/4837720.html.

[17] Kaiyan S. (2024). *Shanghai jingji fazhan baogao 2024* [Shanghai Economic Development Report]. Beijing: Shehui kexue wenxian chubanshe.

[18] Kim, B.-J., & Kim, M.-J. (2024). How artificial intelligence-induced job insecurity shapes knowledge dynamics: The mitigating role of artificial intelligence self-efficacy. *Journal of Innovation & Knowledge, 9*(4), 100590.

[19] Li, J.-M., Zhang, R.-X., Wu, T.-J., & Mao, M. (2024). How does work autonomy in human-robot collaboration affect hotel employees' work and health outcomes? Role of job insecurity and person-job fit. *International Journal of Hospitality Management, 117*, 103654-.

[20] Liang, X., Guo, G., Shu, L., Gong, Q., & Luo, P. (2022). Investigating the double-edged sword effect of AI awareness on employee's service innovative behavior. *Tourism Management (1982), 92*, 104564-.

[21] Liao, S., Lin, L., & Chen, Q. (2023). Research on the acceptance of collaborative robots for the industry 5.0 era -- The mediating effect of perceived competence and the moderating effect of robot use self-efficacy. *International Journal of Industrial Ergonomics, 95*, 103455-.

[22] Magon, A., Arrigoni, C., Fava, A., Pittella, F., Villa, G., Dellafiore, F., Conte, G., & Caruso, R. (2021). Nursing self-efficacy for oral anticoagulant therapy management: Development and initial validation of a theory-grounded scale. *Applied Nursing Research, 59*, 151428—151428.

[23] Rydzik, A., & Kissoon, C. S. (2022). Decent work and tourism workers in the age of intelligent automation and digital surveillance. *Journal of Sustainable Tourism, 30*(12), 2860—2877.

[24] Sen, W., Hong, Z., & Xiaomei, Z. (2022). Effects of human—machine interaction on employee's learning: A contingent perspective. *Frontiers in Psychology, 13*, 876933—876933.

[25] Smids, J., Nyholm, S., & Berkers, H. (2020). Robots in the Workplace: a Threat to—or Opportunity for—Meaningful Work? *Philosophy & Technology, 33*(3), 503—522.

[26] SOHU. (2024, October 6). *Huawei xinghe AI gaopinzhi jiudian wangluo dianliang meilunmeihuan 'Shanghai Tang'* [Huawei's Star River AI High Quality Hotel Network Lights Up the Beautiful Shanghai Tang]. Retrieved from https://www.sohu.com/a/814181695_211762.

[27] TTG China. (2020, February 10). *Zhineng fuwu shu qianzhan juece Touzi gengzhong changqi shouyi* [Intelligent services are forward-looking decisions Investments are more about long-term returns]. Retrieved from https://ttgchina.com/2020/02/10.

[28] TTG China. (2021, December 2). *Huazhu qixia MAXX BY STEIGENBERGER jiang jinzhu Shanghai waitan CBD* [MAXX BY STEIGENBERGER, a subsidiary of Huazhu, to move into Shanghai's Bund CBD]. Retrieved from https://ttgchina.com/2021/12/02.

[29] Turja, T., Rantanen, T., & Oksanen, A. (2019). Robot use self-efficacy in healthcare work (RUSH): development and validation of a new measure. *AI & Society, 34*(1), 137—143.

[30] Van der Heijden, B., Hofer, A., & Semeijn, J. (2024). Don't you worry 'bout a thing' —the moderating role of age in the relationship between qualitative job insecurity and career sustainability. *Career Development International, 29*(5), 527—543.

[31] Vander Elst, T., De Witte, H., & De Cuyper, N. (2014). The Job Insecurity Scale: A psychometric evaluation across five European countries. *European Journal of Work and Organizational Psychology, 23*(3), 364—380.

[32] Ware, J. E., & Sherbourne, C. D. (1992). The MOS 36-Item Short-Form Health Survey (SF-36): I. Conceptual Framework and Item Selection. *Medical Care, 30*(6), 473—483.

[33] Wu, T.-J., & Zhang, R.-X. (2024). Exploring the impacts of intention towards human—robot collaboration on frontline hotel employees' positive behavior: An integrative model. *International Journal of Hospitality Management, 123*, 103912-.

[34] Yin, H., Tam, W. W. Y., & Lau, E. (2022). Examining the relationships between teachers' affective states, self-efficacy, and teacher-child relationships in kindergartens: An integration of social cognitive theory and positive psychology. *Studies in Educational Evaluation, 74*, 101188-.

A Study on ESG Awareness and Implementation Among Hotel Industry Employees in Taiwan

Tingting CHANG[1], Yiting NIEH[2]

[1]Assistant Professor of Degree Program of Hotel Management, Taipei City University of Science and Technology

[2]Bachelor student of Degree Program of Hotel Management, Taipei City University of Science and Technology

Abstract

1. Introduction

With the dual challenges of the COVID-19 pandemic and climate change, the global focus on Environmental, Social, and Governance (ESG) issues has grown rapidly. ESG has become a critical indicator for assessing corporate sustainability and long-term development. In Taiwan, the hotel industry is increasingly recognizing the importance of ESG in addressing environmental risks, social responsibilities, and governance structures. However, the post-pandemic era has altered operational models in the hotel sector. Operators now face low wages, labor shortages, inflation, and sustainable operation challenges, all of which hinder the practical implementation of ESG. Despite the increased ESG discourse in Taiwan's hospitality sector, there is still a lack of research that systematically examines how ESG principles are being implemented and perceived by frontline hotel staff. This study aims to investigate the current state of ESG practices in the Taiwanese hotel industry, focusing on how well employees understand and engage with these initiatives. By doing so, it seeks to provide evidence-based recommendations to industry stakeholders for improving ESG strategies and execution.

Three research questions guide this study:

1)What is the current status of ESG implementation in Taiwan’s hotel industry?

2)What is the level of ESG awareness among employees in Taiwan’s hotel industry?

3)Are there significant differences in ESG awareness among hotel employees with different demographic or professional backgrounds in Taiwan?

2. Literature Review

ESG refers to the three core dimensions of corporate sustainability: Environmental, Social, and Governance. It is increasingly regarded as a standard for evaluating a company’s ethical impact and long-term viability. The environmental component addresses how a company manages energy, resources, emissions, and its impact on climate change. The social dimension examines labor rights, diversity, and the company’s relationship with stakeholders such as employees, customers, and the community. Governance focuses on corporate leadership, internal controls, transparency, and ethical behavior.

For the hotel industry, ESG adoption is particularly critical due to the sector’s intensive resource consumption and environmental footprint. Effective energy and water

management, waste reduction, and carbon emissions control directly influence a hotel's operational efficiency and brand image. Globally, more hotel chains are integrating ESG as a competitive strategy, responding to increasing consumer awareness of corporate social responsibility.

In Taiwan, hotel chains—especially publicly listed ones—have begun disclosing ESG initiatives in response to regulatory and stakeholder pressures. According to Quickseek ESG data (2023), hotels such as Cathay Hospitality have partnered with Xpark to promote marine conservation, Fleur de Chine has emphasized carbon reduction, and Regent Taipei has actively supported public welfare projects. Nonetheless, challenges remain, including high costs for facility upgrades and difficulties in conducting precise carbon audits.

Internationally, certification systems such as ISO 14001, LEED, and EarthCheck help hotels standardize ESG practices and enhance their market credibility. In addition, organizational behavior research emphasizes the role of cognitive factors in policy implementation. Cognitive discrepancy between decision-makers and employees can hinder policy execution (Fiske & Taylor, 1991). According to cognitive consistency theory (Abrahamson & Baumard, 2008), individuals seek alignment between beliefs and actions, which underscores the importance of ESG training and cultural integration to enhance awareness and performance.

In summary, ESG adoption in Taiwan's hotel industry is progressing but still faces structural and cost-related hurdles. Strengthening internal education and leveraging organizational culture are essential for promoting sustainability.

3. Research Methodology

This study adopts a mixed-method approach to assess the current ESG awareness and implementation in the Taiwanese hotel industry, targeting full-time hotel employees with at least one year of work experience to ensure adequate exposure to ESG-related activities. Data collection involved three stages: a literature review, thematic analysis, and a quantitative survey. The literature review included a systematic examination of ESG reports, corporate documents, and academic sources, focusing on ESG disclosures from six major hotel group from 2021 to 2023. Thematic analysis was conducted using axial coding to classify ESG actions into Environmental (E), Social (S), and Governance (G) dimensions—for instance, "energy-efficient lighting replacement" (E), "employee health checks" (S), and "data privacy policies" (G). These categories informed the development of a 39-item Likert-scale questionnaire, which was validated through expert review and pilot testing. For data analysis, qualitative comparisons of ESG execution among the six hotels identified common themes, while quantitative methods—including descriptive statistics and independent samples t-tests—were employed to analyze demographic patterns and evaluate awareness differences based on job level and ESG training experience.

4. Results and Analysis

A total of 197 employees completed the survey. Employee awareness of environmental initiatives was generally high. The highest-rated items were "use of energy-efficient products" (M=4.45), "green building certification efforts" (M=4.44), and "replacement

of traditional lighting" (M=4.43). Lower awareness was observed in "implementation of ISO 50001" (M=4.23), "climate-related financial disclosures" (M=4.29), and "temperature control systems" (M=4.31).

Social-related items received high recognition, particularly "employee health checks" (M=4.50), "food safety education" (M=4.48), and "gender equality in executive roles" (M=4.47). The lowest-rated were "Earth Hour participation" (M=4.39), "supplier diversity" (M=4.40), and "human rights protection" (M=4.41).

Governance awareness was led by practical items such as "cybersecurity training"(M=4.46), "business ethics" (M=4.45), and "socially responsible supply chains" (M=4.44). Lower awareness was observed in "board diversity" (M=4.25), "board training programs" (M=4.28), and "intelligent technology integration" (M=4.30). Governance items showed greater variance than other items (0.70–0.83), reflecting differing awareness levels possibly linked to job roles and access to strategic information.

T-tests revealed that managers had significantly higher awareness of environmental items (M=4.49) than frontline employees (M=4.30, p=0.02). However, differences in social and governance dimensions were not statistically significant. Additionally, employees who received ESG training demonstrated significantly higher awareness in the environmental (p=0.03) and governance (p=0.04) dimensions compared to those without training, indicating the impact of targeted education programs.

5. Conclusion and Recommendations

This study reveals that ESG practices in Taiwan's hotel industry have shown significant development, particularly in areas where operational measures are tangible and clearly defined, such as the use of energy-saving products and green building certification. However, lower awareness of abstract or management-level issues like ISO 50001 implementation and board diversity suggests that staff have limited exposure to highlevel strategic planning. The findings also highlight that managerial staff exhibit significantly greater awareness of environmental topics compared to frontline employees. Moreover, employees who received ESG training scored higher on both environmental and governance awareness, confirming that targeted education enhances ESG understanding.

To further enhance ESG implementation, the hotel industry should continue to reinforce existing operational measures and expand employee education on more abstract and governance-related topics. Differentiated training programs tailored to job levels can help bridge the cognitive gap between frontline staff and managers. Moreover, greater emphasis should be placed on promoting awareness of strategic governance issues, such as board-level decisions and technology integration, through internal workshops, cross-departmental communication, and transparent policy dissemination.

In addition, hotels are encouraged to implement a long-term evaluation mechanism for ESG awareness and training outcomes. Regular assessments and feedback loops can ensure that ESG initiatives evolve with industry trends, while fostering a strong internal culture of sustainability. This approach not only supports employee engagement but

also strengthens the hotel's overall brand and competitive positioning in a market that increasingly values ethical and sustainable business practices.

Keywords: ESG, hotel industry, employee awareness, sustainability

References

[1] Abrahamson, E., & Baumard, P. (2008). What Lies Behind Organizational Facades? A Grounded Theory of Organizational Image Management. Academy of Management Journal, 51(4), 633-658.

[2] Fiske, S. T., & Taylor, S. E. (1991). Social Cognition. McGraw-Hill.

[3] Quick seek, 2023.10.20, https://www.quickseek.com.tw/public_industry/521

Privacy Concerns of Generative AI

Xinyu MA[1], Henrique Fátima Boyol NGAN[2]

[1]PhD Student, Faculty of Creative Tourism and Intelligent Technologies, Macao University of Tourism, Colina de Mong-Há, Macau, China

[2]Director of Center for Education Quality Management, Faculty of Creative Tourism and Intelligent Technologies, Macao University of Tourism, Colina de Mong-Há, Macau, China

Abstract

Introduction

With the advent of ChatGPT, generative AI shocked the world. Generative artificial intelligence (AI) tools are based on large language models (LLMS), which use billions of parameters to extensively analyze large data sets and extract key information such as context, specific details, identifying information, and then automatically generate new content such as text, images, audio, video, etc. Generative AI models are often trained on large datasets – which means, data that is at the heart of all AI agent functionality - and these datasets also include sensitive data about users (Elish & Boyd, 2018). The reason why users are concerned about generative AI is that the data based on users' personal information used by generative AI will be shared and disclosed with the utility and convenience of artificial intelligence devices (Feretzakis et al., 2024). Leakage of personal data is a serious matter because generative AI requires users to enter their personal information, and some users also upload their banking information (such as credit card numbers) to generative AI, which can lead to identity theft or financial loss (Sebastian, 2023). Therefore, we believe that although generative AI brings great convenience to our life, but its moral, privacy and other issues cannot be ignored. To that end, in this study, we examine the factors influencing privacy concerns related to generative AI and their impact on user adoption intentions.

Literature Review

In 2018, OpenAI introduced the initial version of GPT, which was a generative pre-training converter (Radford et al., 2018) and also was a large, high-performance language model that can be processed in natural language. The original GPT has demonstrated strong and superior performance, far exceeding that of its competitors (Wu et al., 2024).ChatGPT has attracted millions of users because of its extremely smooth and rapid response. Regardless of the content, ChatGPT always provides engaging, natural, accurate and effective answers (Wu et al., 2024). As a result, it has surpassed Google's Bard (which is a language model developed by Google AI that can answer open-ended questions), Microsoft Bing Chat (a new feature on Microsoft Edge that allows users to chat with Bing and not only get answers to questions, which can also create content, etc.) (Iorliam & Ingio, 2024), has become a mainstream search engine (Wu et al., 2024). As ChatGPT adoption grows exponentially (Fui-Hoon Nah et al., 2023), so does the security threat it presents.

Privacy concerns have been identified as a constraint to the adoption of new technologies, especially recent ones that capitalizes on user data. ChatGPT training was process-based and requires large data sets. This process collected data from a variety of sources, such as websites, posts, books, articles, etc., which will certainly contain personal data, even personal sensitive data (Wu et al., 2024). ChatGPT's data set was already up to 570 GB (Ullah al., 2024).Comments or blog posts posted by individuals may be collected for ChatGPT training without the proper consent of the data author, raising serious privacy concerns and possibly violated privacy laws such as GDPR and CCPA (Wu et al., 2024).Not only that, but OpenAI's management of user data also raised serious privacy concerns for users (Wu et al., 2024).Users often chose ChatGPT because they had read the privacy policy, but they may not be aware of the true extent of their personal data exposure, the lack of transparency and the extent of unrealized information leakage, heightening users' concerns about their privacy (Wu et al., 2024). Existing research on Internet user attitudes showed that users were highly concerned about their privacy and the collection and use of their personal information (ETH Zürich et al., 2013). Some studies have also found that when users paid more attention to the privacy of online use, users' trust and satisfaction would be lower, which may lead to the decrease of users' willingness to continue using (Wang et al., 2006). This shows that privacy issues can have a certain negative impact on online users (Albashrawi & Motiwalla, 2019). To this end, in this study, we want to examine the relationship between privacy concerns and users' intention to adopt generative AI.

Protection Motivation Theory

Rogers (1975) proposed the Protective motivation Theory (PMT), which was revised in 1983 (Rogers, 1983). PMT is used to explain the effect of persuasive communication on behavior, and it focuses on cognitive mechanisms that emphasize the rationale for following or not following recommended behavior. PMT was one of the first theories to focus on and explain the psychological conditions that people have towards self-preservation (Marikyan, 2023).

Perceived susceptibility, Perceived Vulnerability and Privacy Concerns

Some studies have defined perceived vulnerability as the impact that individuals subjectively believe malicious technologies may have on their devices and systems (Carpenter et al., 2019). This perception influences an individual's perception of the level of threat, which may encourage people to avoid malicious technologies (Carpenter et al., 2019). Perceived vulnerability has long been proven to be a predictor of privacy protecting behavior (Aguirre et al., 2015). Dinev and Hart (2006) found that perceived vulnerability was highly related to privacy concerns.

H1a. Perceived susceptibility positively influences privacy concerns.

H1b. Perceived Vulnerability negatively influences privacy concerns.

Self-Efficacy, Response Efficacy and Privacy Concerns

Self-efficacy refers to an individual's belief that he or she is capable of performing a particular behavior (Mamonov & Benbunan-Fich, 2018). Bandura (1977) pointed out

that self-efficacy is one of the key personal attributes affecting human activities in different fields. Domain-specific self-efficacy is often a better predictor of individual behavior (Mamonov & Benbunan-Fich, 2018). For example, in the computer domain, self-efficacy is one of the important factors in predicting anxiety related to computer use and system use intent (Compeau & Higgins, 1995). Studies have shown that in the field of privacy, self-efficacy is positively correlated with self-reported protective behavior (Milne Labrecque, & Cromer, 2009).Yang & Delgado (2025) pointed out response efficacy was the belief that certain behaviors could lead to desired outcomes. Studies have also showed that, positive reactive efficacy information can increase confidence in recommended behavior as a solution to risk (Bigsby & Albarracín, 2022). And also, response efficacy had a more positive effect on intent and behavior when they effectively reduce threat (Bigsby & Albarracín, 2022).

H1c. Self-efficacy negatively influences privacy concerns.

H1d. Response efficacy negatively influences privacy concerns.

Privacy Concerns

Some scholars defined privacy concerns as an individual's perception of the risks and potential negative consequences of their sharing information (Cho et al., 2010). As more and more people began to have privacy concerns about using AI, privacy concerns resulting from the use of AI have emerged as a critical factor that cannot be overlooked. These concerns can also diminish the perceived usefulness of the technology (Alzebda & Matar, 2025). Therefore:

H2. Privacy Concerns negatively influence Intentions to use AI.

Methodology

Sample & Sampling

We conducted a survey of 219 participants at a college in mainland China. The participants of our survey comprised tourism and hospitality students who frequently use Generative AI tools. After pre-processing the collected data, we identified 219 valid participant responses. Table 1 provides a comprehensive overview of the demographic details of these participants. The study provided participants with comprehensive information about the purpose of the survey. Sampling techniques are generally classified as probability sampling and non-probability sampling(Taherdoost, 2016). These 219 participants all used generative AI within a month, which meant that we chose a convenient sampling method in non-probabilistic sampling.

Table 1 Demographic profile (n=219)

Demographics	Description	Number	Percentage
Gender	Male	95	43.4%
	Female	124	56.6%
Age	Under 18	4	1.8%
	18–25	205	93.6%
	26–30	4	1.8%
	31-40	5	2.3%
	51-60	1	0.5%
Highest Education	High school	9	4.1%
	Diploma	153	69.9%
	Bachelor	7	3.2%
	Master	6	2.7%
	PhD	5	2.3%
	Others	38	17.4%
Income (per month) (RMB)	1000 and less	146	66.7%
	1001-3000	29	13.2%
	3001-5000	23	10.5%
	5001-10000	11	5.0%
	10001-20000	1	0.5%
	20001 and above	9	4.1%
How many times do you use generative AI per month?	1-3 times	91	41.6%
	4-6 times	60	27.4%
	7-9 times	25	11.4%
	10 times or more	43	19.6%

We distributed our survey online through our professional online platform (https://www.wjx.cn). The majority of respondents were male (56.6 percent), and most of them (93.6 percent) were in the age group of 18 to 25 years and had a diploma degree (69.9 percent).

Instrumentation

Participants that agreed to take part in the current research were subjected to the questionnaire with the following parts. Screening questions were asked in the first part to confirm participants eligibility (that they have experience with Generative AI tools). To ensure that participants fully understood the concept of Generative AI tools, a detailed definition was provided in the first part of the survey, explaining their features and characteristics. A consent form was presented to participants, describing the nature of the study, along with all the required information as conventionally outlined in the APA standard.

Second, participants had to evaluate their perceptions of susceptibility and perceptions of severity of privacy risks associated with the use of Generative AI tools, along with

the response efficacy and self-efficacy measures adapted from previous studies (Adhikari & Panda, 2018). In addition, participants indicated their privacy concerns and adoption intention of generative AI tools according to the scales adapted from (Lai et al., 2023; Mousavi et al., 2020). All answers were provided in different response format as a mean to address CMB as recommended by (Baumgartner & Weijters 2021).

Finally, participants provided their background information on AI usage, and personal information.

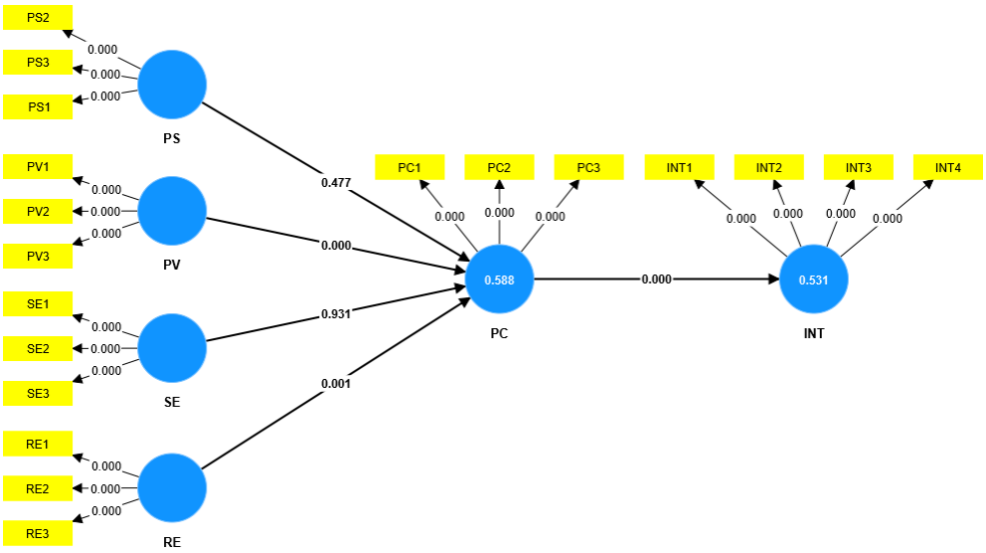
Results

Model assessment

To ensure that the results are valid, prior assessment of the validity and reliability of the measures of the model is necessary. Specifically, the measures' values of Cronbach Alpha and Composite Reliability were all above the recommended threshold of .70, confirming internal consistency. Factor loadings were also within the desirable range, exceeding .70 for all items. To establish convergent validity, Average Variance Extracted (AVE) values were examined. None constructs exhibited values below the satisfactory level of .50. Finally, discriminant validity was established with the Heterotrait-Monotrait (HTMT) Ratios that were all within the suggested threshold of .90.

Main Analyses

Perceived vulnerability (PV) negatively influences privacy concerns (PC) ($\beta = -0.429$, $p < 0.001$), (accept H1b). Similarly, response efficacy (RE) also negatively affects privacy concerns (PC) ($\beta = -0.377$, $p = 0.001$), supporting H1d. In contrast, perceived susceptibility (PS) ($\beta = -0.063$, $p = 0.477$) and self-efficacy (SE) ($\beta = -0.011$, $p = 0.931$) do not significantly influence privacy concerns (PC), failing to support H1a and H1c, respectively. Privacy concerns (PC) have a strong negative effect on intentions to use AI (INT) ($\beta = -0.728$, $p < 0.001$), supporting H2.



Discussion & Conclusion

The findings of the present study show that the ways perceived vulnerability and response efficacy affect privacy concerns are consistent with previous studies (Carpenter 等, 2019; Bigsby & Albarracín, 2022). While Perceived susceptibility and self-efficacy negatively affect privacy concerns. In particular, In particular, when examining privacy concerns, it is clear from the results that it reduces users' intention to use generative AI, which is consistent with previous research findings (Alzebda & Matar, 2025). This ultimately shapes how people think about generative AI tools. While there has been concerns regarding privacy raised previously (Wu et al., 2024; Farhi et al., 2023), empirical evidence was lacking. To that end, the current study emerged to fill this gap. In practical terms, generative AI developers should prioritize privacy concerns that are often overlooked.

Keywords: generative artificial intelligence; privacy concerns; protective motivation theory

Reference

[1] Adhikari, K., & Panda, R. K. (2018). Users' Information Privacy Concerns and Privacy Protection Behaviors in Social Networks. *Journal of Global Marketing*, *31*(2), 96–110. https://doi.org/10.1080/08911762.2017.1412552

[2] Aguirre, E., Mahr, D., Grewal, D., De Ruyter, K., & Wetzels, M. (2015). Unraveling the Personalization Paradox: The Effect of Information Collection and Trust-Building Strategies on Online Advertisement Effectiveness. *Journal of Retailing*, *91*(1), 34–49. https://doi.org/10.1016/j.jretai.2014.09.005

[3] Albashrawi, M., & Motiwalla, L. (2019). Privacy and Personalization in Continued Usage Intention of Mobile Banking: An Integrative Perspective. *Information Systems Frontiers*, *21*(5), 1031–1043. https://doi.org/10.1007/s10796-017-9814-7

[4] Alzebda, S., & Matar, M. A. I. (2025). *Factors affecting citizen intention toward AI acceptance and adoption: The moderating role of government regulations*.

[5] Bandura, A. (1997). Self-efficacy: The exercise of control. Macmillan

[6] Baumgartner, H., & Weijters, B. (2021). Dealing with common method variance in international marketing research. *Journal of International Marketing, 29*(3), 7-22

[7] Bigsby, E., & Albarracín, D. (2022). Self- and Response Efficacy Information in Fear Appeals: A Meta-Analysis. *Journal of Communication*, *72*(2), 241–263. https://doi.org/10.1093/joc/jqab048

[8] Carpenter, D., Young, D. K., Barrett, P., & McLeod, A. J. (2019). Refining Technology Threat Avoidance Theory. *Communications of the Association for Information Systems*, 380– 407. https://doi.org/10.17705/1CAIS.04422

[9] Compeau, D. R., & Higgins, C. A. (1995). Computer self-efficacy: Development of a measure and initial test. *MIS quarterly*, 189-211

[10] Dinev, T., & Hart, P. (2006). An Extended Privacy Calculus Model for E-Commerce Transactions. *Information Systems Research*, *17*(1), 61–80. https://doi.org/10.1287/isre.1060.0080

[11] Elish, M. C., & Boyd, D. (2018). Situating methods in the magic of Big Data and AI. *Communication Monographs*, *85*(1), 57–80. https://doi.org/10.1080/03637751.2017.1375130

[12] ETH Zürich, Sutanto, J., Palme, E., Newscron Ltd., Tan, C.-H., City University of Hong Kong, Phang, C. W., & Fudan University. (2013). Addressing the Personalization-Privacy Paradox: An

Empirical Assessment from a Field Experiment on Smartphone Users. *MIS Quarterly*, *37*(4), 1141–1164. https://doi.org/10.25300/MISQ/2013/37.4.07

[13] Farhi, F., Jeljeli, R., Aburezeq, I., Dweikat, F. F., Al-shami, S. A., & Slamene, R. (2023). Analyzing the students' views, concerns, and perceived ethics about chat GPT usage. *Computers and Education: Artificial Intelligence*, *5*, 100180. https://doi.org/10.1016/j.caeai.2023.100180

[14] Feretzakis, G., Papaspyridis, K., Gkoulalas-Divanis, A., & Verykios, V. S. (2024). Privacy-Preserving Techniques in Generative AI and Large Language Models: A Narrative Review. *Information*, *15*(11), 697. https://doi.org/10.3390/info15110697

[15] Fui-Hoon Nah, F., Zheng, R., Cai, J., Siau, K., & Chen, L. (2023). Generative AI and ChatGPT: Applications, challenges, and AI-human collaboration. *Journal of Information Technology Case and Application Research*, *25*(3), 277–304. https://doi.org/10.1080/15228053.2023.2233814

[16] Iorliam, A., & Ingio, J. A. (2024). *A Comparative Analysis of Generative Artificial Intelligence Tools for Natural Language Processing*.

[17] Lai, C. Y., Cheung, K. Y., & Chan, C. S. (2023). Exploring the role of intrinsic motivation in ChatGPT adoption to support active learning: An extension of the technology acceptance model. *Computers and Education*.

[18] Mamonov, S., & Benbunan-Fich, R. (2018). The impact of information security threat awareness on privacy-protective behaviors. *Computers in Human Behavior*, *83*, 32–44. https://doi.org/10.1016/j.chb.2018.01.028

[19] Marikyan, D. (2023). *Protection Motivation Theory*.

[20] Milne, G. R., Labrecque, L. I., & Cromer, C. (2009). *Toward an Understanding of the Online Consumer's Risky Behavior and Protection Practices*.

[21] Mousavi, R., Chen, R., Kim, D. J., & Chen, K. (2020). Effectiveness of privacy assurance mechanisms in users' privacy protection on social networking sites from the perspective of protection motivation theory. *Decision Support Systems*, *135*, 113323. https://doi.org/10.1016/j.dss.2020.113323

[22] Radford, A., Narasimhan, K., Salimans, T., & Sutskever, I. (2018). *Improving Language Understanding by Generative Pre-Training*.

[23] Rogers, R. W. (1975). A protection motivation theory of fear appeals and attitude change1. *The journal of psychology*, *91*(1), 93-114

[24] Rogers, R. W. (1983). Cognitive and physiological processes in fear appeals and attitude change: A revised theory of protection motivation. *Social psychology: A source book*, 153-176

[25] Sebastian, G. (2023). Privacy and Data Protection in ChatGPT and Other AI Chatbots: Strategies for Securing User Information. *International Journal of Security and Privacy in Pervasive Computing*, *15*(1), 1–14. https://doi.org/10.4018/IJSPPC.325475

[26] Taherdoost, H. (2016). Sampling Methods in Research Methodology; How to Choose a Sampling Technique for Research. *SSRN Electronic Journal*. https://doi.org/10.2139/ssrn.3205035

[27] Ullah, I., Hassan, N., Gill, S. S., Suleiman, B., Ahanger, T. A., Shah, Z., Qadir, J., & Kanhere, S. S. (2024). Privacy preserving large language models: ChatGPT case study based vision and framework. *IET Blockchain*, *4*(S1), 706–724. https://doi.org/10.1049/blc2.12091

[28] Wang, Y., Lin, H., & Luarn, P. (2006). Predicting consumer intention to use mobile service. *Information Systems Journal*, *16*(2), 157–179. https://doi.org/10.1111/j.1365- 2575.2006.00213.x

[29] Wu, X., Duan, R., & Ni, J. (2024). Unveiling security, privacy, and ethical concerns of ChatGPT. *Journal of Information and Intelligence*, *2*(2), 102–115. https://doi.org/10.1016/j.jiixd.2023.10.007

[30] Yang, Y.-Y., & Delgado, M. R. (2025). The integration of self-efficacy and response-efficacy in decision making. *Scientific Reports*, *15*(1), 1789. https://doi.org/10.1038/s41598-025- 85577-z

Effects of DMO-Generated and Tourist-Generated Social Media Content on Heritage Protection Attitudes

Shizheng WEN, Junrong LI

Macau University of Science and Technology

Abstract

In the contemporary landscape of cultural heritage conservation, social media has emerged as a powerful force, significantly influencing public attitudes towards heritage protection. However, previous research has predominantly concentrated on the impact of either official or user-generated social media content in isolation. This has left a void in our understanding of how Destination Management Organization (DMO)-generated content and Tourist-generated content differentially shape public attitudes towards heritage conservation, thereby limiting the development of comprehensive heritage protection strategies.

To address this gap, this study developed a theoretical framework informed by communication and tourism theories. It employed Structural Equation Modeling (SEM) to analyze the complex relationships between these two types of social media content and heritage protection attitudes, taking into account multiple mediating variables such as perceived image, perceived value, and perceived authenticity. Data was collected via a questionnaire survey, and the reliability and validity of the measurements were rigorously tested.

The SEM analysis results indicated that both DMO-generated and Tourist-generated content had significant impacts on tourists' cognitive evaluations of cultural heritage. Notably, Tourist-generated content had a marginally stronger effect in enhancing public awareness, likely due to its authenticity and interactivity. Among the mediating variables, cultural identity emerged as a particularly crucial factor in driving the willingness to protect heritage, highlighting the importance of emotional connection and belonging in conservation efforts.

This research contributes to a more in-depth understanding of the intricate relationships among various factors in heritage protection. It provides practical implications for DMOs to optimize their communication strategies, encourages tourists to actively participate in heritage promotion, and offers a foundation for formulating more targeted heritage conservation strategies. Future research could further explore the dynamic interactions between these variables in diverse cultural and social contexts and investigate methods to maximize the positive influence of social media on heritage protection.

The research collected data through questionnaires. After reliability and validity analyses, the sample data was of good quality. The SEM analysis results show that both types of content significantly influence the public's cognitive evaluation of cultural heritage, with tourist-generated content having a slightly stronger effect in enhancing public awareness. Additionally, perceived image, perceived value, cultural identity, and perceived authenticity play important mediating roles between social media content and heritage protection attitudes, among which cultural identity has the most prominent

driving effect on the willingness to protect. This study provides a basis for a deeper understanding of the relationships among various factors in heritage protection and offers references for DMOs, tourists, the formulation of heritage protection strategies, and subsequent research. Future research can further explore the dynamic relationships among variables in different cultural and social contexts and optimize the influence of social media content on heritage protection attitudes.

Visual spaces and eWOM in hotel YouTube videos: A deep learning analysis grounded in media richness theory

Juhwan LIM[1*], Hyun Cheol LEE[2]

[1]Visiting professor, Global College, Kyungsung University, Busan, South Korea

[2]Professor, School of Business, Korea Aerospace University, Goyang, South Korea

*Corresponding Email: limjuhwan3411@gmail.com

Abstract

1. Introduction

YouTube has emerged as a dominant marketing channel across various industries, surpassing traditional media, such as newspapers and TV commercials (Aquino & Cabalquinto, 2025). Nearly 500 hours of videos are uploaded per minute on YouTube, while approximately one billion hours of video content are consumed daily (GMI Research Team, 2025). Although visual marketing materials, including photographs, effectively capture consumers' attention, video content is recognized as the most powerful marketing tool due to its ability to convey vivid, rich, and continuous streams of information (Canavan, 2024). Moreover, advancements in information technology enable video streaming platforms (e.g., YouTube), to provide consumers real-time streaming services without spatial constraints.

The effectiveness of YouTube video marketing deserves greater attention in the hospitality industry, where most offerings are inherently intangible and experiential (Aquino et al., 2025). As the importance of video marketing grows in this context, understanding what is shown (i.e., displayed content) in videos and how it influences consumer responses, such as eWOM, becomes increasingly crucial. In response, several hospitality studies have analyzed YouTube content, covering visual, audio, and textual elements (Aquino et al., 2025; Canavan, 2024; Pan et a., 2011; Tussyadiah & Fesenmaier, 2009). However, most prior studies employed qualitative approaches or manual content analysis, which may lead to limitations in objectivity and coverage due to human cognitive constraints (Canavan, 2024). Furthermore, the time-consuming nature of manual content analysis restricts the number of videos reviewed, limiting the generalization of the findings (Pan et al., 2011). More critically, only a few studies quantify information from videos, which hinders empirical examinations of statistical relationships with consumer outcomes, eWOM.

Thus, to address these limitations, this study employs computational approaches, particularly deep learning algorithms, to analyze hotel brands' YouTube videos. Such advanced computational algorithms enable highly accurate and large-scale analysis, resulting in more reliable and generalizable findings. By quantifying specific visual information from videos, this study facilitates empirical analysis of the relationship between visual content and consumer responses (i.e., eWOM). Thus, by adopting these benefits of computational approaches, the current study aims to (1) develop a

customized image classification model utilizing deep learning algorithms and (2) examine the effects of visual information on eWOM, measured by the number of likes and comments on YouTube videos. Specifically, the deep learning model is designed to identify various spaces within hotel brands' YouTube videos and quantitatively measure their frequency and duration. This analytical framework is grounded in media richness theory, which implies that spatial elements within videos significantly enhance media richness by providing contextual and sensory cues that deepen consumer understanding and responses (Daft & Lengel 1986).

2. Media richness theory and YouTube videos

Media richness theory (MRT) explains how communication media differ in their capacity to convey rich information (Daft & Lengel, 1986) Richness is determined by factors such as feedback speed, cue variety, language, and personalization. According to MRT, richer media are more effective for communicating ambiguous or complex information (Trevino et al., 1987). Later studies extended the theory to digital and interactive media. These works emphasized symbolic meanings and user choices of media channels (Dennis & Kinney, 1998). More recent research shows that media richness also affects consumer behavior. It influences how people search for information, engage with content, and make decisions (Maity et al., 2018; Zhao et al., 2023). These findings confirm that MRT remains a useful framework for explaining how different types of media, especially video platforms such as YouTube, influence user perceptions, behaviors, and engagement.

Several studies in hospitality and tourism have highlighted the influential role of visual media, mainly YouTube videos, in shaping customers' perceptions and experiences. An early study analyzed 120 YouTube videos of activities in New York city and their content analysis categorized video content into four themes: site-centric, activity-centric, self-centric, and other-centric (Tussyadiah & Fesenmaier, 2009). Similarly, Pan et al. (2011) examined destination images on two YouTube videos regarding New Zealand tourism TV commercials and manually identified eight destination image attributes, including natural resources and social environment. A more recent study, using 20 foreign travel YouTube videos, examined how foreigners record their travel experiences in the Philippines and found four main themes of exoticising, assimilating, sanitising, and monetizing by manually coding visual scene and objects (Aquino & Cabalquinto, 2025).

3. Methods

First, a preliminary study was conducted to examine what types of spaces customers identify from hotel brand's YouTube videos. On Prolific.com, five participants were asked to watch 15 YouTube videos of three hotel brands: Marriot international, Hilton, and Accor, and name any space (i.e., spatial elements) that they recognized. In total, 31 spaces were identified (described in Table 1). Second, as a training dataset for developing image classification model, 303,716 images for 31 spaces (on average, 9,797 each) were collected using Flickr API. Third, the 303,716 images for 31 spaces were used as inputs to train image classification model based on deep learning algorithm, following the procedures described in 3.1. part. In specific, this study

adopted fine-tuning training as one of the transfer learning approaches using a pre-trained deep learning architecture called MobileNetV3-Large. Fourth, our customized image classification model was applied to 5,040 YouTube videos of eleven hotel brands (e.g., Accor and Hyatt) to measure frequency and duration of 31 classes and collect YouTube metadata. Finally, a panel regression was conducted where frequency and duration of 31 classes were independent variables and the number of likes and comments were dependent variables (i.e., eWOM) with metadata as control variables. The entire process was conducted on Python. The methodological framework of this study is illustrated in Figure 1.

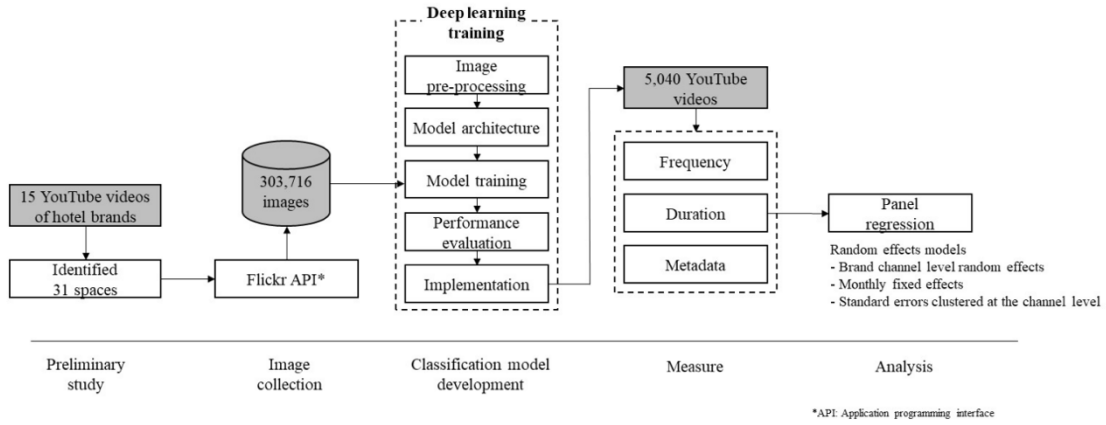


Figure 1. Methodological framework

3.1. Developing image classification model using deep learning

3.1.1. Image pre-processing

In the fine-tuning training, some of the existing layers from the pre-trained model are unfrozen (i.e., changed) and trained on the new dataset, in addition to adding new layers, to better learn patterns specific to this study. Layers in deep learning perform like stages where the model learns patterns. Early layers detect simple patterns (e.g., lines or colors) and deeper layers gradually integrate this information to recognize complex structures (e.g., objects).

The collected images were randomly split into training and validation subsets at a 70:30 ratio. In the input (i.e., first) layer, all images were resized to optimize computational efficiency (224×224×3-pixel RGB = 150,528 input units per image). A shuffle buffer of 500 was applied to randomize the image order in each epoch (i.e., one complete training), to avoid overfitting.

3.1.2. Model architecture (Visual pattern learning using CNN)

For a transfer learning approach, this study adopted MobileNetV3-Large, a deep convolutional neural network (CNN) architecture, developed by Google (Howard et al., 2019). MobileNetV3-Large was pre-trained on the ImageNet dataset, a large-scale image database containing over 1.2 million training images for 1,000 object categories (e.g., animals).

In addition to the pre-trained layers (Figure 2), new five layers specific to this study's dataset were added: (1) a global average pooling layer which summarizes spatial features across the entire image, (2) a fully connected dense layer with 256 units (i.e., nodes or neurons) which captures higher-level representations, (3) two dropout layers with a rate of 5% applied to the dense layer to mitigate the risk of overfitting, and (4) a final dense output layer with 31 units, using a softmax activation function. A softmax activation function generates probability distributions across all classes, indicating how likely each image belongs to each class.

After adding these five new layers, the last 15 layers of the pre-trained layers were unfrozen to enable partial re-training, allowing the model to better adapt to the characteristics of the target dataset.

3.1.3. Model training procedure (Model training & optimization)

The model was compiled to define the optimizer and loss function. As the optimizer, Stochastic Gradient Descent with Nesterov momentum (0.9) was used (Liu et al., 2020). The learning rate, a hyperparameter that controls how much the model updates its weights, was initially set to 0.001 for the optimizer. The loss function used was categorical cross-entropy with label smoothing (0.05) to improve generalization. The loss function quantifies the difference between the predicted outputs and true labels to minimize this error. Categorical cross-entropy is a loss function used for multi-class classification tasks. Training was conducted over 15 epochs, while the images were loaded using the batch size of 32.

3.1.4. Performance evaluation

Model performance was evaluated using classification accuracy (i.e., how many) and categorical cross-entropy loss (i.e., how well) on both training and validation datasets to measure its accuracy in classifying classes.

3.1.5. Implementation

The trained model was applied for real-time video analysis on 5,040 YouTube videos from 11 global hotel brands. Frames were sampled at regular intervals (every 30 frames), corresponding to one frame per second for standard 30 FPS videos. For each detected class, both frequency and duration (in second) were measured. In addition, metadata, such as upload date, views, and likes, were retrieved.

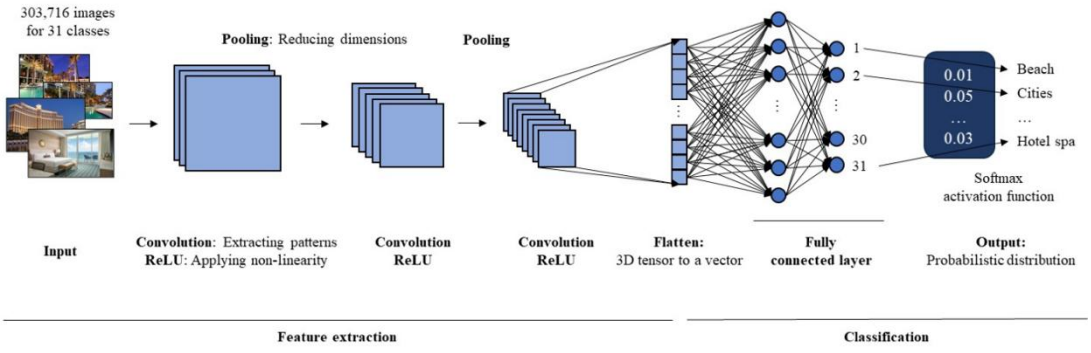


Figure 2. Concept of convolutional neural network architecture

4. Results

4.1. Deep learning training

After the fine-tuning training using 303,716 images of 31 classes (i.e., space), the model's classification performance on each space (in the order of class) and global performance are summarized in Table 1. Overall, based on the metrics, the models' classification performance was acceptable.

Table 1. Classification model performance.

Class	F1-score	Support	Class	F1-score	Support
1. Beach	0.79	2909	17. Hotel suite rooms	0.81	2239
2. Cities	0.67	3051	18. Houses	0.75	2980
3. Club	0.72	2945	19. Lake	0.8	3048
4. Conference room	0.85	3070	20. Living room	0.74	2980
5. Downtown	0.64	3042	21. Mountains	0.77	3007
6. Elevator	0.8	2978	22. Ocean	0.78	2977
7. Forest	0.79	3052	23. Office rooms	0.9	3023
8. Hills	0.71	2934	24. Restaurants	0.76	2991
9. Hot spring	0.81	2995	25. Sky	0.85	2993
10. Hotel bathroom	0.76	2908	26. Streets	0.73	2967
11. Hotel bedroom	0.74	2916	27. Swimming pool	0.84	3032
12. Hotel buildings	0.68	3039	28. Vineyards	0.79	3010
13. Hotel hallways	0.9	2274	29. Vintage buildings	0.73	3017
14. Hotel lobby	0.73	2963	30. Woods	0.73	2936
15 .Hotel reception	0.76	2982	31. Hotel spa	0.61	3031
16. Hotel rooftop	0.75	2825			
Validity accuracy	0.796		**Prediction accuracy**	0.806	
Validity loss	1.059		**Prediction loss**	1.027	

4.2. Panel regression

A natural logarithmic transformation was applied to the dependent variables to address the issue of right-skewed distribution and reduce heteroskedasticity. Independent variables regarding classes 2, 5, 6, 8, 9, 18, 20, 22, 25, and 30 were excluded due to a full column rank issue (FCR in Table 2). For each model, several independent variables were also excluded due to multicollinearity (VIF in Table 2)

Heteroscedasticity and autocorrelation issues are natural in panel data. To reduce these issues, this study first employed the Breusch– Pagan Lagrangian Multiplier test to choose between pooled OLS and random effect models. The result showed that random effect models have better fit (x^2= 748.123, 789.201, 510.751, and 500.849, respectively, $p < .01$). We then ran the Hausman test to determine between fixed effect and random effect models. Based on the result (x^2= -330.711, -205.679, -51.914, and -10.838, respectively, $p = 1$), random effect models were preferred. To avoid overfitting issue, monthly time fixed effects were included instead of daily or weekly

ones. Finally, cluster standard errors at the brand level were used to address potential heteroscedasticity and autocorrelation (Greene, 2010).

Table 2. Results of panel regression.

DV	**Number of likes**		**Number of comments**	
IV	**Frequency**	**Duration**	**Frequency**	**Duration**
Constant	.370	-.758	1.489	1.193
Space 1	**.354***	**.243****	.059	.019
Space 2	FCR	FCR	FCR	FCR
Space 3	**-1.748****	.002	**-1.321****	.001
Space 4	VIF	.002	VIF	.001
Space 5	FCR	FCR	FCR	FCR
Space 6	FCR	FCR	FCR	FCR
Space 7	.007	.001	.001	.000
Space 8	FCR	FCR	FCR	FCR
Space 9	FCR	FCR	FCR	FCR
Space 10	**.189****	.000	**.129****	.002
Space 11	**-.093****	-.000	-.056	.000
Space 12	-.031	.004	.037	**.051****
Space 13	VIF	VIF	VIF	VIF
Space 14	.003	**.003***	.004	.002
Space 15	VIF	.001	VIF	.003
Space 16	**.006***	**.002****	.001	**.001***
Space 17	VIF	**-.001***	VIF	-.001
Space 18	FCR	FCR	FCR	FCR
Space 19	VIF	VIF	VIF	VIF
Space 20	FCR	FCR	FCR	FCR
Space 21	**.015****	VIF	**.008****	VIF
Space 22	FCR	FCR	FCR	FCR
Space 23	-.009	-.005	-.005	-.002
Space 24	-.006	.000	.006	**.0003***
Space 25	FCR	FCR	FCR	FCR
Space 26	VIF	-.003	VIF	**-.004****
Space 27	.009	-.002	-.001	-.001
Space 28	**2.506****	.005	**2.802****	**.007****
Space 29	**.023****	VIF	.007	VIF
Space 30	FCR	FCR	FCR	FCR
Space 31	VIF	-.001	VIF	-.000
Views	0	0	0	0
Subscribers	.000	0.000	0.000	0.000
Total duration	-.001	0.001	-0.000	0.001
Days since upload	.000	0.000	-0.000	-0.000
Month dummy	Incldued	Incldued	Incldued	Incldued
Observations	5,040			

Clusters	11			
F-statistic	8.022**	7.536**	7.125**	6.877**

Notes: * = $p < .05$, ** = $p < .01$, FCR = Excluded due to full column rank issue (no entry), and VIF = Excluded due to multicollinearity

Table 2 shows the coefficients of independent and control variables. Four panel regressions were employed considering the combinations of two types of dependent and independent variables. In the order of space, both frequency ($\beta = .354$, $p < .05$) and duration ($\beta = .243$, $p < .01$) of space 1 had positive effects on the number of likes. The frequency of space 3 was negatively associated with both the number of likes ($\beta = -1.748$, $p < .01$) and comments ($\beta = -1.321$, $p < .01$). Similarly, the frequency of space 10 had positive effects on the number of likes ($\beta = .189$, $p < .01$) and comments ($\beta = .129$, $p < .01$). While the frequency of space 11 were negatively related to the number of likes ($\beta = -.093$, $p < .01$), the duration of space 12 was positively associated with the number of comments ($\beta = .051$, $p < .01$). The duration of space 14 was also positively associated with the number of likes ($\beta = .003$, $p < .05$). Regarding space 16, except for the frequency and comments relationship, all relationships were positively significant ($\beta = .006$, $p < .05$; $\beta = .002$, $p < .01$; $\beta = .001$, $p < .05$). The duration of space 17 was solely negatively related to the number of likes ($\beta = -.001$, $p < .05$). The frequency of space 21 had positive effects on both number of likes ($\beta = .015$, $p < .01$) and comments ($\beta = .008$, $p < .01$). While the duration of space 24 was positively related to the number of comments ($\beta = .0003$, $p < .05$), the duration of space 26 was negatively related to the number of comments ($\beta = -.004$, $p < .01$). For space 28, except for the duration and likes relationship, other relationships were positively significant ($\beta = 2.506$; $\beta = 2.802$; $\beta = .007$, respectively, $p < .01$). Finally, the frequency of space 29 had a positive effect on the number of likes ($\beta = .023$, $p < .01$).

5. Conclusion

Based on the results, this study provides several implications. First, this study extends media richness theory (MRT) by empirically investigating how specific spatial elements in YouTube videos enhance richness level and influence eWOM in the hospitality context. Prior studies highlighted that a greater variety of sensory and contextual cues, such as diverse settings or environments, enhance perceived media richness level by offering more interpretive resources to audiences and increase their engagement level (Dennis & Kinney, 1998; Maity et al., 2018; Zhao et al., 2023). Consistent with their implications, this study found that not only hotel-related spatial elements (e.g., bedroom, lobby, and rooftop) but also various spatial scenes (e.g., beach, mountains, and vineyards) significantly increase consumers' eWOM behaviors. This result may imply that, despite the hotel YouTube context, multiple spatial cues elevate the richness level in YouTube and engagement level, thus stimulating eWOM behaviors. Second, the current study contributes to the literature analyzing videos by advancing how YouTube video content is conceptualized and examined using deep learning algorithms. Prior studies predominantly relied on manual coding, limiting generalizability and objectivity of research (Aquino & Cabalquinto, 2025; Canavan,

2024; Pan et al., 2011). Their findings tend to yield interpretive themes and attributes of videos (e.g., assimilating or exclusive experience) that are conceptually rich but often lack operational clarity, making them difficult quantify or generalize. In contrast, the present study proposes more systematic and empirical lens through which visual representations, specifically spatial elements perceived by consumers, can be identified, organized, and interpreted. This approach enables richer theoretical elaboration by translating complex visual elements into analyzable constructs aligned with consumer engagement outcomes, eWOM.

Practically, this study offers evidence-based insights for enhancing video marketing strategies in the hospitality industry. By identifying spatial elements that drive consumers' engagement, it provides actionable guidance for featuring impactful scenes, such as guest rooftops or mountains, to encourage eWOM. This highlights the need to evaluate hospitality videos not in isolation, but relative to broader media expectations. Additionally, the integration of deep learning-based image analysis allows practitioners to assess video content more objectively and efficiently. Such tools can support data-informed creative decisions and ongoing optimization of digital campaigns, reducing reliance on intuition or subjective evaluation.

References

[1] Aquino, R. S., & Cabalquinto, E. C. B. (2025). Travel vlogging as an integrated practice: Foreign travel vloggers' practices in the Philippines. *Annals of Tourism Research, 111*, 103897.

[2] Canavan, B. (2024). Tourist film souvenirs and post-postmodern authentication. *Journal of Travel Research*, Advance online publication.

[3] Daft, R. L., & Lengel, R. H. (1986). Organizational information requirements, media richness and structural design. *Management Science, 32*(5), 554–571.

[4] Dennis, A. R., & Kinney, S. T. (1998). Testing media richness theory in the new media: The effects of cues, feedback, and task equivocality. *Information Systems Research, 9*(3), 256-274.

[5] Howard, A., Sandler, M., Chu, G., Chen, L. C., Chen, B., Tan, M., ... & Adam, H. (2019). Searching for mobilenetv3. In *Proceedings of the IEEE/CVF international conference on computer vision* (pp. 1314-1324).

[6] Liu, Y., Gao, Y., & Yin, W. (2020). An improved analysis of stochastic gradient descent with momentum. *Advances in Neural Information Processing Systems, 33*, 18261-18271.

[7] Maity, M., Dass, M., & Kumar, P. (2018). The impact of media richness on consumer information search and choice. *Journal of Business Research, 87*, 36-45.

[8] Pan, S., Tsai, H., & Lee, J. (2011). Framing New Zealand: Understanding tourism TV commercials. *Tourism Management, 32*(3), 596-603.

[9] Trevino, L. K., Lengel, R. K., & Daft, R. L. (1987). Media symbolism, media richness and media choice in organizations. *Communication Research, 14*(5), 553–574.

[10] Tussyadiah, I. P., & Fesenmaier, D. R. (2009). Mediating tourist experiences: Access to places via shared videos. *Annals of Tourism Research, 36*(1), 24-40.

[11] Zhao, L., Zhang, M., Ming, Y., Niu, T., & Wang, Y. (2023). The effect of image richness on customer engagement: Evidence from Sina Weibo. *Journal of Business Research, 154*, 113307.

[12] GMI Research Team. (Apr 3, 2025). YouTube statistics 2025 (Demographics, users by country & more). Retrieved from https://www.globalmediainsight.com/blog/youtube-users-statistics

Greene, H. W. (2010), *Econometric analysis*, Prentice Hall

Exploring Postpartum Mother Satisfaction in Postpartum Wellness Hotels

Chuanyang HE, Tuanyi WANG

City University of Macau

Abstract

Research Background

"Doing the month" culture, also known as postpartum care, has been practiced in China since ancient times. In recent decades, commercialized Postpartum Wellness Hotels (PWHs) have emerged as innovative service providers, combining hospitality infrastructure with specialized care for postpartum mothers. Despite their growing popularity, inconsistencies in service quality remain a significant challenge in this niche market, potentially influencing postpartum mothers' satisfaction and then their subsequent psychological and behavioral outcomes. PWH attributes—such as nurse professionalism, room quality, medical services, foodservice, sociopsychological environment, educational accessibility, and cost and value—play an imperative role in shaping postpartum mother satisfaction. However,few studies have been focused on postpartum care within the hospitality context (Lin & Mattila, 2022; Zhao & Heo, 2024), and none have specifically examined postpartum mothers'satisfaction.

Research Purposes

To address these gaps, this study aims to: (1) investigate the impact of PWHs attributes (nurse professionalism, room quality, medical services, foodservice, sociopsychological environment, educational accessibility, and cost and value) on postpartum mother satisfaction and (2) examine how postpartum mother satisfaction influences their word of mouth (WOM), return intention, and maternal well-being. Stimulus-Organism-Response (S-O-R) framework will serve as the theoretical foundation for this study (Mehrabian & Russell, 1974).

Methodology

A quantitative research method will be employed. A non-probability sampling technique, specifically self-selective sampling, will be utilized. The target population will be postpartum mothers in China who have stayed in a PWH within the past year. Approximately 300 participants will be surveyed.

Data will be analyzed using Structural Equations Modeling (SEM) by following a two-step approach introduced by Anderson and Gerbing (1988). First, confirmatory factor analysis (CFA) will be executed to assess the construct reliability and validity in the measurement model. Second, the testing of the structural model will be performed to evaluate the proposed hypotheses via Amos 28.

Potential Implications

This study is expected to offer both theoretical and practical implications. Theoretically, this study contributes to the limited body of literature on postpartum wellness hotels within the hospitality field, particularly by exploring how hospitality service attributes

shape postpartum care experiences. Practically, the findings of this study are expected to provide insightful suggestions for PHW practitioners aiming to enhance service quality and improve postpartum mother satisfactions and related behavioral and psychological outcomes.

Keywords: Postpartum wellness hotels, PWHs attributes, Postpartum mother satisfaction, Word-of mouth, Return intention, Maternal well-being

References

[1] Anderson, J. C., & Gerbing, D. W. (1988). Structural equation modeling in practice: A review and recommended two-step approach. *Psychological Bulletin*, *103*(3), 411-423.

[2] Lin, I. Y., & Mattila, A. (2022). Choreograph postpartum care experiencescapes in a resort setting. *International Journal of Contemporary Hospitality Management, 34*(8), 2953-2970.

[3] Mehrabian, A., & Russell, J. A. (1974). *An approach to environmental psychology.* MIT Press.

[4] Zhao, J., & He, M. (2024). Understanding the motivation behind new mothers' choice of postpartum wellness hotels: Scale development and validation. *International Journal of Hospitality Management, 121*, 103795.

Utilising LLM Models and SnowNLP to Analyse Negative Tourism Experiences in Macau: Social Media Sentiment Analysis and Service Quality Improvement Strategies

Zijie LIAO[1], Hio Nam IO[1], Henrique Fátima BOYOL NGAN[2]

[1]Faculty of Creative Tourism and Intelligent Technologies, Macao University of Tourism, Macau, China

[2]Centre for Education Quality Management, Macao University of Tourism, Macau, China

Abstract

1.Introduction

Macau's economy is highly dependent on tourism, with approximately 35 million visitors in 2024 and tourism revenue accounting for 72% of the local GDP. However, in the face of global competition, many negative experiences, if spread through social media, can easily impact the overall image of the destination. Negative reviews often contain strong emotional language and specific service scenarios. If this textual information can be effectively analyzed, it can accurately identify the experience gaps in various aspects of service quality.

Previous studies have mostly focused on determining emotional polarity and main complaint themes, but have insufficiently explored deeper reasons such as service attitude, process reliability, and information transparency. The SERVQUAL model proposes five dimensions—Tangibility, Reliability, Responsiveness, Assurance, and Empathy—that can systematically measure service quality. This study, based on tourists' real negative feedback on social media, uses SnowNLP to determine emotional polarity and filter out significantly negative posts. Meanwhile, it employs the large language model DeepSeek-V3 to automatically identify the SERVQUAL dimensions and responsible parties involved in the posts, thereby extracting areas in Macau's tourism services that urgently need improvement, helping relevant departments and enterprises to make targeted enhancements.

2. Theoretical Framework

2.1 Service Quality and the SERVQUAL Model

Service quality is a key success factor in the tourism and hospitality industry. Parasuraman et al. (1985) proposed the SERVQUAL model, which includes five dimensions: Tangibility, Reliability, Responsiveness, Assurance, and Empathy. This model is widely applied in service scenarios such as tourism and hospitality (Parasuraman, Zeithaml, & Berry, 1985). In recent years, researchers have combined text mining techniques to map online tourist reviews onto the five dimensions of SERVQUAL, identifying and quantifying service deficiencies. For example, Filieri et al. (2022) suggested that by combining machine learning and semantic analysis methods, it is possible to extract service quality dimensions from online reviews more precisely, effectively enhancing the quantification of perceived differences by customers. Zaman et al. (2024) also pointed out that large-scale online reviews, as "user

feedback in a natural state", more authentically reflect tourists' perception gaps across various service aspects.

2.2 Negative Electronic Word-of-Mouth and Sentiment Analysis

Negative tourism word-of-mouth, compared to positive reviews, is more likely to trigger a diffusion effect on social platforms, significantly impacting the destination's image. Mostafa (2019) found that negative reviews on social media often have stronger emotions, are frequently accompanied by admonitory expressions, and have a significant advantage in attracting attention and secondary dissemination. However, traditional sentiment analysis methods have limited effectiveness in handling complex emotional expressions such as sarcasm and irony in Chinese. Chen and Xie (2020) pointed out that metaphor and sarcasm recognition remain technical bottlenecks in current sentiment analysis systems. In response, Baniya et al. (2021) employed LDA topic modeling and multi-class sentiment algorithms in tourism review research, categorizing tourist review content into complaint topics and sentiment categories, providing a new path for in-depth analysis of negative electronic word-of-mouth.

2.3 Application of Large Language Models in Tourism Text Mining

Large language models possess deep semantic understanding capabilities, capable of mining subtle emotions and implicit needs in online reviews. This study uses the DeepSeek-V3 model, leveraging LLM to conduct multi-level retrieval on text based on existing SnowNLP sentiment scores, including sarcasm/metaphor recognition, responsibility attribution, sentiment categories (anger, disappointment, anxiety, etc.), and final appeals (such as hoping relevant departments rectify issues or warning other tourists). This approach echoes the idea of Ali et al. (2022), combining topic modeling with sentiment analysis, not only identifying "what is wrong" but also understanding "why it is wrong", thereby providing more targeted improvement suggestions for destination management departments.

3. Research Design and Methods

3.1 Data Collection and Screening

This study primarily collected data from the well-known Chinese social media platform Xiaohongshu (Rednote) between 2019 and 2025, encompassing posts containing keywords such as "Macau Tourism," "Macau Complaints," and "Macau Avoid Pitfalls," totaling 2,576 posts (including 13,101 comments). These comments were also included in the LDA clustering analysis. After excluding advertisements or posts unrelated to tourism, 984 strongly negative and clearly articulated posts (along with 6,382 related comments) were selected for in-depth analysis. Each post contains negative evaluations of Macau’s tourism services or facilities.

3.2 Analysis Framework

SnowNLP Sentiment Analysis:

SnowNLP is a dictionary-based Chinese sentiment analysis tool that determines emotional tendencies by calculating the weights of positive and negative words. The smaller the value, the stronger the negative emotion. Its ability to efficiently process large-scale texts lays the foundation for the in-depth analysis of subsequent LLM

models. Compared to manual annotation, SnowNLP can quickly process large amounts of text based on dictionary rules. Although it has limited sensitivity to complex expressions such as metaphors and sarcasm, it can provide an initial quantitative reference for subsequent mining.

In-depth Exploration of Large Language Models (LLM):

To identify rhetoric and nuanced emotions hidden in the text, this study introduces the LLM model (DeepSeek-V3) to further classify and annotate the content of posts, including: responsible parties (such as management, service staff, system failures, etc.), types of emotions (anger, disappointment, helplessness, anxiety, etc., coexisting), specific demands (warning others to avoid pitfalls, seeking help, venting dissatisfaction, etc.). Since LLM can understand contextual associations, it can provide a more accurate extreme negative judgment for sarcastic rhetoric like "this place is practically daylight robbery".

Topic Model (LDA):

After extracting emotional information, Latent Dirichlet Allocation is used to categorize these negative reviews into themes, aggregating common complaint types and keywords. Each theme is named and explained based on the top 15 keywords.

SERVQUAL Dimension Mapping:

Based on the text content, the service quality dimensions it points to are determined, which may include multiple overlapping dimensions. For example, the complaint "The room is dirty" corresponds to a tangibility issue, "The driver deliberately took a detour" can be attributed to assurance and reliability issues, and "The hotel front desk staff is indifferent" corresponds to empathy. Each post or comment is tagged against the five SERVQUAL dimensions, and the proportion of each dimension in negative reviews is calculated to identify the areas which are critical to improve.

4. Research Results and Analysis

4.1 SERVQUAL Dimension Mapping Results

After annotating 984 negative posts with the five SERVQUAL dimensions (see Table 1), it was found that about half of the complaints focused on Reliability and Responsiveness, such as unfulfilled service promises and untimely problem resolution. This is followed by Empathy (e.g., indifferent attitude, lack of empathy), Assurance (e.g., poor attitude, lack of professionalism), and Tangibility (e.g., outdated rooms, inadequate facilities). These results indicate that the work attitude, professional standards of service staff, and hardware conditions play a crucial role in the overall evaluation by tourists.

It should be noted that a single negative post may map to multiple SERVQUAL dimension annotations.

Table 1: SERVQUAL Dimension Mapping Results

Dimension	NegativeCount	Percentage
reliability	341	29.22%
responsiveness	241	20.65%
empathy	218	18.68%
assurance	195	16.71%
tangibility	172	14.74%

To make the correspondence of each dimension more intuitive, the following examples are all taken from the translated original posts, explaining their correspondence with the SERVQUAL dimensions:

4.1.1 Empathy
"The front desk staff had a very poor attitude, impatient with every question, making us feel like we owed them money."
(Note: The lack of care and empathy from staff is categorized as insufficient empathy.)

4.1.2 Assurance
"The driver deliberately took a longer route and overcharged us by dozens of dollars. I feel cheated."
(Note: This violates integrity and professionalism, and is considered an assurance issue.)

4.1.3 Tangibility
"The room has a strange smell, and the air conditioner is leaking. It's completely not worth the price."
(Note: Aging facilities and inadequate cleanliness correspond to tangibility defects.)

4.1.4 Reliability
"Booked an airport transfer, but waited for a long time without any car showing up, ended up having to take a taxi myself."
(Note: The promise did not match the actual service, reflecting a lack of reliability.)

4.1.5 Responsiveness
"After reporting the issue, customer service said they would handle it promptly, but there was no update even after a day, and no one responded when I followed up."
(Note: Delayed handling and lack of effective response reflect poor responsiveness.)
By systematically mapping these comments, not only can the specific service defects targeted by each negative review be clarified, but the proportion of each dimension in the negative feedback can also be quantified, providing empirical evidence for the formulation of subsequent optimization strategies and improvement priorities.

4.2 LDA Topic Model Findings

To summarize the main categories of complaints, this study conducted LDA topic modeling on these negative social media texts after completing sentiment and dimension labeling. The themes represented by these keywords were named, resulting in the following five major themes (see Table 2).

Table 2: Topics and Top 15 Keywords Derived from LDA Topic Model Clustering

Theme	Proportion	Top 15 Keywords
Theme 1: Travel Services and Driver Issues	25.39%	Driver attitude, detours, intentional, report to police, driver, taxi driver, cab driver, hailing a taxi, taking a cab, license plate, trunk, cash, RMB, getting off, police.
Theme 2: Hotel Accommodation and Service Issues	23.61%	Room, sleepless, soundproofing, frightening, noise, cleaning, toilet, corridor, public relations, front desk, room card, points, real-name check-in, breakfast, mirror
Theme 3: Dining and Food Reviews	20.76%	Unpalatable, disappointed, not as good as, somewhat, texture, taste, average, affordable, personally think, locals, feel, flavor, restaurant, shop owner, boss
Theme 4: Comprehensive Service Complaints	17.77%	[OTA platform name], refund, report, rights protection, coercion, encounter, rights, evidence, contract, legal, outcome, consultation, return, record, coercion
Theme 5: Platform Booking and Refund issues	12.47%	Customer service, refund, cancellation, complaint, unfair terms, refusal to refund, non-cancellable, third party, agent, surcharge, temporary, flight, cancellation, email, contact

The topic model results indicate that negative feedback is primarily concentrated in five areas: travel services and driver issues, hotel accommodation and service issues, dining and food reviews, comprehensive service complaints, and platform booking and refund issues. Their respective proportions in all negative feedback are 25.39%, 23.61%, 20.76%, 17.77%, and 12.47%. The main characteristics of each topic are further explained below:

Theme 1: Travel Services and Driver Issues

Focuses on reflecting the service attitude, detours, and overcharging issues of taxis or other transportation. This is directly related to the "Assurance" and "Reliability" dimensions in SERVQUAL, and a large number of negative comments express emotions of anger or feeling deceived.

Theme 2: Hotel Accommodation and Service Issues

Mainly involves room hygiene, insufficient hardware facilities, and untimely staff response, often reflecting "Tangibility", "Empathy", and "Responsiveness". If the hotel front desk has a cold attitude, it further deepens negative evaluations.

Theme 3: Dining and Food Reviews
Negative feedback is concentrated on poor taste, unreasonable pricing, or lack of merchant attitude. Some comments mention "stores recommended by locals are not as good as advertised", and also involve some "Assurance" (such as being charged hidden fees).
Theme 4: Comprehensive Service Complaints
Covers a wider range, including issues with online shopping platforms or OTA platforms, ticket refund issues, and tourism contract traps, often requiring intervention by third parties or official agencies. Such complaints present emotions of "helplessness in unresolved issues" or "resorting to rights protection".
Theme 5: Platform Booking and Refund issues
The typical scenario here is "customer service not handling issues, unfair terms, refusal to refund", often labeled as "even going to court is useless". This corresponds to the lack of "reliability" and "responsiveness" in SERVQUAL, and also involves questioning the transparency and fairness of transactions.

4.3 Characteristics of Negative Emotions and Dissemination
After being assessed by SnowNLP and analyzed by LLM, strong negative emotions are primarily "disappointment" and "anger", with some "helplessness" and "anxiety". LLM, after reading these posts, further identifies rhetorical techniques hidden in negative statements (such as "no different from robbery") and notes that their emotional intensity is generally higher than ordinary complaints. Additionally, many posts (about 78%) have a clear intention to "warn others", indicating that the posters are not just venting emotions but also hoping other tourists avoid similar risks.



Figure 1: Leading negative emotions in negative posts (left) and Top 5 posting motivations in negative posts (right).

The correlation analysis with interaction metrics (likes, favorites, shares, and comments) shows that extremely negative posts often trigger more comments and discussions (or resonate with complaints), indicating that negative emotions have considerable dissemination and mobilization effects on social media. If the relevant management departments or businesses do not address these issues promptly, such public opinion may continue to ferment, threatening Macau's reputation as a tourist destination.

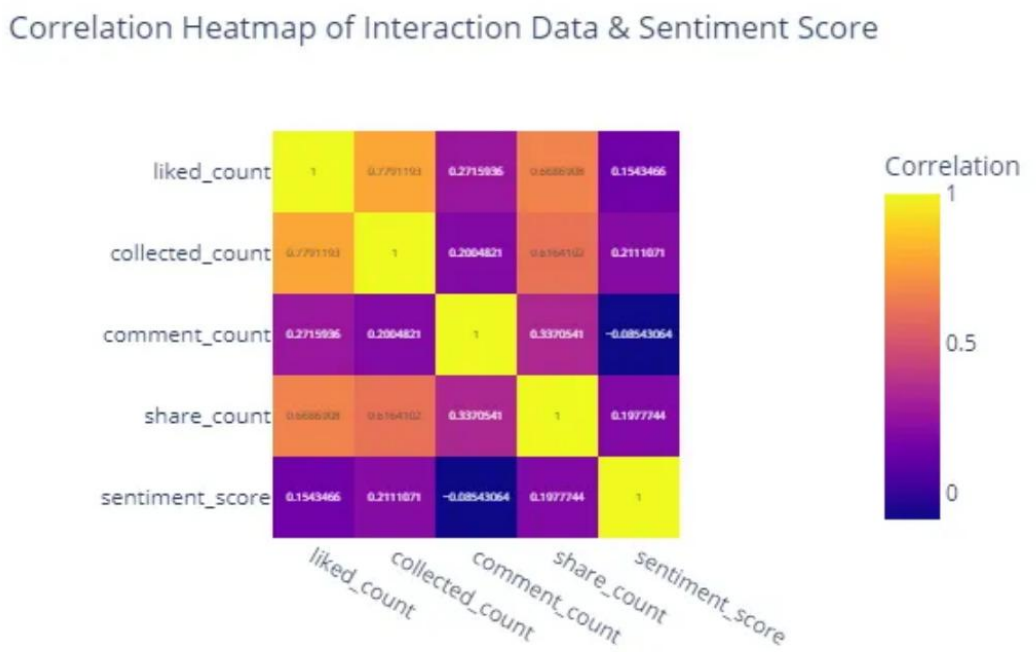


Figure 2: Heatmap of the correlation between post sentiment scores and interaction data.

It is noteworthy that the sentiment score shows a slight negative correlation with the number of comments (around -0.085). While the absolute value of the correlation is small, the direction suggests that more negative posts tend to receive more comments. Complaint posts often spark discussions, as users may share similar experiences or offer support, increasing the comment count. In contrast, positive posts, which simply showcase happiness, might attract likes but fewer comments. This aligns with the idea that negative news prompts more user interaction. It also indicates that negative word-of-mouth spreads quickly, as complaint posts resonate with many users, gaining more comments and expanding their reach.

5.Discussion and Suggestions

Based on the SERVQUAL dimensions and findings from the LDA thematic analysis, this study identifies several critical areas for holistic improvement in Macau's tourism services.

Firstly, the study identifies Reliability and Responsiveness as the primary weaknesses, particularly in online booking, refund processes, and handling complaints on platforms. For instance, many negative reviews highlight delayed responses to customer inquiries and refund issues, underscoring the need for streamlined, transparent, and responsive customer service channels, ideally operational 24/7. Clear contractual obligations and prompt issue resolution procedures should be established to address these critical dimensions effectively.

In terms of Assurance and Empathy, tourists frequently reported dissatisfaction with frontline personnel attitudes, including taxi drivers overcharging or hotel staff demonstrating indifference. Such complaints align closely with identified themes on travel services, driver behaviours, and hotel accommodations. Thus, systematic training

programmes focusing on professional ethics, customer empathy, and accountability should be developed. Stricter regulatory oversight on unethical practices, coupled with visible service guarantees, would help rebuild tourists' trust and assurance in Macau's tourism offerings.

Lastly, the Tangibility dimension emerged from negative feedback on outdated infrastructure and inadequate facilities in accommodation and dining services. Significant improvements in physical environments, such as upgrading hotel amenities, enhancing transportation comfort, and maintaining restaurant hygiene, are essential. Strategic investments in these areas can significantly elevate tourists' physical comfort and overall satisfaction, positively reshaping Macau's destination image.

By aligning improvement strategies directly with specific SERVQUAL dimensions identified through LLM-based semantic analysis and SnowNLP sentiment quantification, Macau can effectively target its most pressing tourism service shortcomings, ensuring sustainable competitive advantage in a globally competitive tourism market.

6. Conclusion

This study quantifies the intensity of negative emotions using SnowNLP and employs large language models to uncover implicit complaint focuses and emotion types. It systematically analyzes negative experiences in Macau tourism through the LDA topic model and the SERVQUAL perspective. The results show that dissatisfaction mainly centers on travel services and driver issues, hotel accommodation and service defects, dining reputation not meeting expectations, and platform refund issues. Many negative posts criticize indifferent service attitudes or commercial fraud, reflecting significant shortcomings in "empathy" and "assurance". If not addressed, these issues will further damage Macau's image.

To reverse this unfavorable situation, it requires joint efforts from relevant departments and industry players: strengthening industry regulation, improving hardware facilities, perfecting complaint channels, enhancing information transparency, and reshaping the city's image through genuine positive feedback. In the long run, Macau should adopt a dual approach of technology and management to implement real-time reputation monitoring and rapid response, dynamically managing social media public opinion. By using negative evaluations as an opportunity for continuous service improvement, the ultimate goal is to achieve sustainable development in the tourism industry and enhance tourist satisfaction.

Keywords: Negative tourism experience, electronic word-of-mouth (e-WOM), SnowNLP, large language model, sentiment analysis, service quality

References

[1] Parasuraman, A., Zeithaml, V. A., & Berry, L. L. (1985). A conceptual model of service quality and its implications for future research. Journal of Marketing, 49(4), 41–50. https://doi.org/10.1177/002224298504900403

[2] DeepSeek-AI. (2024). DeepSeek-V3 technical report (arXiv:2412.19437 [cs.CL]). arXiv. https://arxiv.org/abs/2412.19437

[3] Filieri, R., Lin, Z., Li, Y., & Lu, X. (2022). Customer emotions in service robot encounters: A hybrid machine-human intelligence approach. Journal of Service Research, 25(4), 567–589. https://doi.org/10.1177/10946705221103937

[4] Zaman, M., Tan, C. C., Islam, M. S., & Selem, K. M. (2024). Hospitality customer intentions to write fake online reviews: A cross-cultural approach. International Journal of Hospitality Management. https://doi.org/10.1016/j.ijhm.2024.103775

[5] Mostafa, M. M. (2019). Clustering halal food consumers: A Twitter sentiment analysis. International Journal of Market Research, 61(5), 480–500. https://doi.org/10.1177/1470785318771451

[6] Chen, X., & Xie, H. (2020). A structural topic modeling-based bibliometric study of sentiment analysis literature. Cognitive Computation, 12, 1580–1599. https://doi.org/10.1007/s12559-020-09745-1

[7] Baniya, R., Dogru-Dastan, H., & Thapa, B. (2021). Visitors' experience at Angkor Wat, Cambodia: Evidence from sentiment and topic analysis. Journal of Heritage Tourism, 17(2), 111–129. https://doi.org/10.1080/1743873X.2020.1833892

[8] Ali, K., Kanesan, T., & Zhang, B. S. (2022). A model of extended technology acceptance for behavioral intention toward EVs with gender as a moderator. Frontiers in Psychology, 13, 1080414. https://doi.org/10.3389/fpsyg.2022.1080414

[9] Government of Macao Special Administrative Region. (n.d.). News release. Retrieved from https://www.gov.mo/en/news/1119516/

A conceptual framework of restaurant wait staff's intention to dissuade customers from over-ordering: an integrative framework of the TPB and NAM

Ruiqi JIA, ChiehYun YANG

Faculty of Hospitality and Tourism Management, Macau University of Science and Technology

Abstract

Research background

Food loss and waste present substantial social, economic, and environmental challenges globally, endangering food security and impeding sustainable development (Yilmaz et al., 2025). According to statistics, the annual food waste worldwide has reached 1.16 billion tons which were generated from household, retail and food service industry in 2022 (Food Waste Index Report, Food and Agriculture Organization of the United Nations FAO, 2024). Furthermore, with the amount of food wasted, the waste generated from household accounts for 60% of total food waste. The waste generated from retail and food service industry account for 40% of total food waste in 2024 while it accounted for 60% in 2019. As disposable income continues to rise, the frequency of dining out has also increased (Filimonau & De Coteau, 2019). In China, 17 and 18 million tons of food was wasted annually in food service sector which is equivalent to 30 to 50 million people's annual meals. Previous research has indicated that food waste in the food service industry is getting more and more attention, and reducing food waste has become a major challenge in the global sustainable development process (Arbulu et al., 2017).

Moreover, recent studies have attempted to address the limitations by expanding the TPB framework and have proved that in pro-environmental behavior research, the integrated model of TPB and NAM demonstrates stronger explanation power compared to test TPB and NAM model individually (Chen et al., 2024; Zhang et al., 2023). Hence, in this study, we aim to explore the intentions of restaurant wait staff to discourage customers from over-ordering, applying the integrated TPB and NAM.

Research regarding food waste interventions

Previous research has shown that interventions can significantly reduce food waste. Empirical studies have indicated that educating university students to raise awareness of plate waste has successfully reduced food waste in student canteen (Kim & Freedman, 2010; Pinto et al., 2018). Moreover, reducing the portion size (Freedman & Brochado, 2010), imposing penalties for plate waste (Kuo & Shih, 2016), and giving bonuses (Windrum, 2014) in university and employee canteens plays crucial roles in intervening the waste of food. Except the empirical studies on non-commercial food and beverage establishments, precious studies also found that interventions have significant impact on reducing food waste in commercial food and beverage establishments. By reducing plate sizes and offering social cues in a buffer restaurant, it has successfully reduced food waste by approximately 20% (Kallbekken & Sælen, 2013). In Yu et al. (2021),

customers perceived that they order too much food when the waiter intervenes. Moreover, study also suggests that when restaurants engage customers in sustainable development practices such as reducing food waste behaviors, both customer loyalty toward the restaurant and the effectiveness of the restaurant's waste reduction efforts improved (Kim & Hall, 2020).

Despite there being substantial amounts of studies that have proved how interventions adopted by food service have significantly reduced food waste, the surveys were done from customers' perspectives. However, in the process of placing orders, the wait staff who directly interact with the customers can intervene from over-ordering seem to be overlooked in past studies. Recent studies start to pay attention on the intervention role of wait staff to dissuade customers from over-ordering behaviors (Yang et al., 2024) and investigate the factors that lead to the frequency of advice-giving by restaurant wait staff and how this influences the overordering behavior of diners (Peng & Chen, 2025). This demonstrates that studying restaurant employees' behavioral intentions to discourage customers from over-ordering not only facilitates responsible production in restaurants but also fosters responsible consumption awareness among customers, achieving the dual realization of responsible production and consumption within dining establishments.

Theoretical framework

The Theory of Planned Behavior (TPB), proposed by Ajzen (2011), is serves as a model to forecast individual intentions and actions. TPB provides a conceptual framework for explaining individual behavioral intentions, with its core constructs—attitudes, subjective norms, and perceived behavioral control—having been successfully applied to various behavior research (Ajzen, 2011; Vermeir & Verbeke, 2008). This theory also serves as a decision-making mechanism which is underlying human behavior and has been effectively utilized across diverse domains of behavioral research (Yang et al., 2024). However, the TPB model does not always reliably predict behaviors. This may stem from its theoretical framework's reliance on rational logic centered on self-interested motives (Chen, et al., 2024), which neglects the influence of personal norms on behavioral intentions (Raghu & Rodrigues, 2020) and fails to adequately account for altruistic motives (e.g., moral obligations) in pro-environmental behaviors that conflict with self-interest (Chen et al., 2024). Additionally, the model offers limited clarity in explaining the antecedents of attitudes (Huang et al., 2014).

Furthermore, recent studies have attempted to address the limitations by expanding the TPB framework. Yang et al. (2024) implicitly incorporated extended TPB and altruistic motives into the research construct by introducing environmental concern as an antecedent of attitudes when examining food waste prevention behaviors intention among restaurant wait staff (Yang et al., 2024). The construct of environmental concern, in essence, can be defined as the cognitive foundation of moral obligations which aligned with the Norm Activation Model (NAM) and further explained how pro-environmental altruistic motivations influence restaurant wait staff's behavioral intention to discourage customers from over-ordering. NAM, a prosocial (pro-environmental) behavioral theory applicable to studying food waste behaviors (Kim et

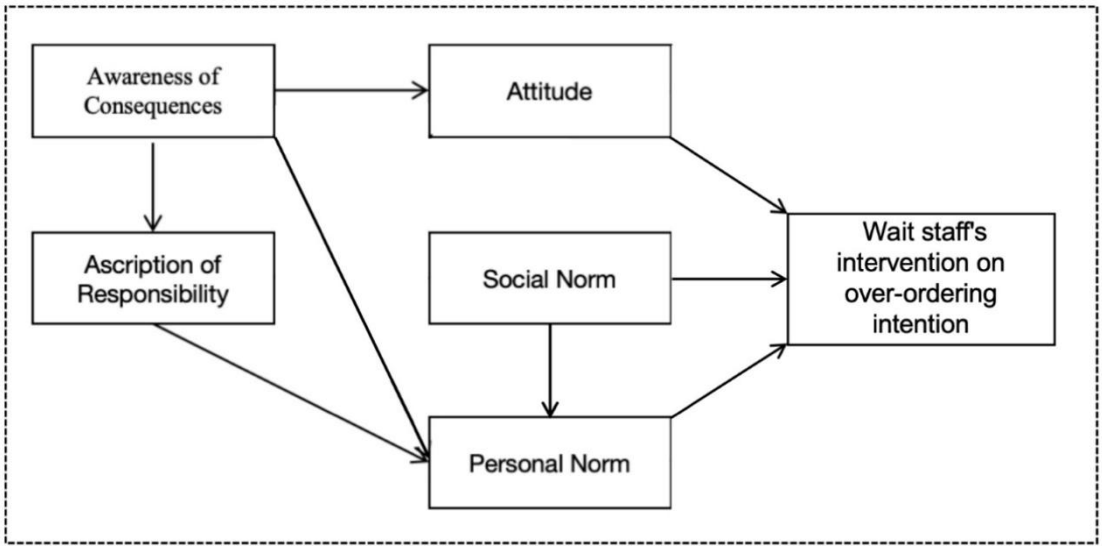
al., 2022; Nurisusilawati et al., 2024), explains the impact of individual altruism and moral values on behaviors through three factors: awareness of consequences (AOC), ascription of responsibility (AR), and personal norms (PN) (Schwartz, Citation1977; Michael et al., 2024).

Conceptual model

Previous studies have proved that in pro-environmental behavior research, the integrated model of TPB and NAM demonstrates stronger explanation power compared to test TPB and NAM model individually (Chen et al., 2024; Zhang et al., 2023). In a study on public participation in river and lake governance behaviors, the integrated model explained significantly higher variance in behavioral intention (R^2=60.7%) than standalone TPB (R^2=60.0%) or NAM (R^2=50.0%) models (Zhang et al., 2023). In research studying consumer's over-ordering behavior at restaurant which incorporates wait staff's interventions from over-ordering, it compared the investigation of single TPB model and the integrated TPB and NAM, the results demonstrated that the integrated model was more adept in predicting the intentions of Chinese consumers to overorder when hosting someone at a restaurant. A possible explanation for this finding is that overordering by Chinese consumers in a hospitality context is driven more by "egoism" rather than "altruism". The motivations of "egoism" and "altruism" in this context tend to be mutually exclusive: altruistic motives could lead consumers to order carefully to reduce food waste and minimize negative environmental impacts, contrasting with egoistic motivations (Yu et al., 2021).

Based om Zhang's et al. (2023) research concept, this research integrated TPB and NAM into one model. In Li et al. (2025), the conceptual framework of NAM was merged with TPB as the research framework to understand the psychological mechanisms behind the adoption of pro-social behavior among outdoor event attendees. The finding shows that awareness of consequences has a positive effect on attitude toward outdoor event attendees' social distancing behavior. Moreover, in TPB, subjective norms represent the impact of social influences on an individual. This concept particularly refers to the influence exerted by significant others—such as partners, relatives, friends, colleagues, and supervisors—on the individual's choice to engage in specific behaviors (Ajzen et al., 2018). Essentially, subjective norms are normative social influences that mold an individual's perceptions of what behaviors they are expected to perform or avoid (Fornara et al., 2011). In Chen et al. (2024), it also showed significant effects in studies on pro-social behaviors in green pest control by family farms (Chen et al., 2024). When organizational advocacy or group pressure conveys the responsibility signal of "discouraging waste," individuals construct it as moral obligation, forming behavioral commitment that transcends utilitarian considerations. Hence, in the pro-environmental context with food waste mechanism, we propose that restaurant wait staff's social norm can better shape their intention to discourage customers from over-ordering. Based on the previous literature, we propose the research conceptual framework in figure 1.

Frigure 1: Conceptual structure



Source(s): Author's work

Reference

[1] Abrahamse, W., Steg, L., Gifford, R., & Vlek, C. (2009). Factors influencing car use for commuting and the intention to reduce it: A question of self-interest or morality?. *Transportation Research Part F: Traffic Psychology and Behaviour*, *12*(4), 317-324.

[2] Ajzen, I. (2011), "Behavioral interventions: design and evaluation guided by the theory of planned behavior", in Mark, M.M., Donaldson, S.I. and Campbell, B. (Eds), Social Psychology and Evaluation, The Guilford Press, New York, NY, pp. 72-101.

[3] Arbulu, I., Lozano, J., & Rey-Maquieira, J. (2017). Waste generation flows and tourism growth: a STIRPAT model for Mallorca. Journal of industrial ecology, 21(2), 272-281.

[4] Chen, T., Wu, C., Lu, X., & Xiao, H. (2024). Analysis of factors influencing family farms' adoption of green prevention and control techniques on an integrative framework of the TPB and NAM. *Acta Psychologica*, *247*, 104314.

[5] Filimonau, V. and De Coteau, D.A. (2019), "Food waste management in hospitality operations: a critical review", Tourism Management, Vol. 71, pp. 234-245, doi: 10.1016/j.tourman.2018.10.009.

[6] Food Waste Index Report (2024), Food and Agriculture Organization of the United Nations FAO, retrieved from https://wedocs.unep.org/handle/20.500.11822/45230

[7] Freedman, M. R., & Brochado, C. (2010). Reducing portion size reduces food intake and plate waste. Obesity, 18(9), 1864-1866.

[8] Huang, L. F., Chiang, C. C., & Chen, H. C. (2014). Willingness to pay of visitors for the nature-based public park: An extension of theory of planning behavior (TPB). Journal of Information and Optimization Sciences, 35(5-6), 405-429.

[9] Kallbekken, S., & Sælen, H. (2013). 'Nudging'hotel guests to reduce food waste as a win–win environmental measure. *Economics letters*, *119*(3), 325-327.

[10] Kim, M. J., & Hall, C. M. (2020). Can sustainable restaurant practices enhance customer loyalty? The roles of value theory and environmental concerns. Journal of Hospitality and Tourism Management, 43, 127-138.

[11] Kim, T., & Freedman, M. R. (2010). Students reduce plate waste through education and trayless dining in an all-you-can-eat college dining facility. *Journal of the American Dietetic Association*, *110*(9), A68.

[12] Kim, W., Che, C., & Jeong, C. (2022). Food waste reduction from customers' plates: Applying the norm activation model in south korean context. Land, 11(1), 109.

[13] Kuo, C., & Shih, Y. (2016). Gender differences in the effects of education and coercion on reducing buffet plate waste. Journal of foodservice business research, 19(3), 223-235.

[14] Li, J., Kim, S., Han, H., & Davari, D. (2025, January). Analyzing outdoor event attendees' pro-social attitudes and intentions to adopt social distancing practices. In *Journal of Convention & Event Tourism*, 26(1), 1-28.

[15] Liu, X., Wang, Z., Li, W., Li, G., & Zhang, Y. (2019). Mechanisms of public education influencing waste classification willingness of urban residents. Resources, Conservation and Recycling, 149, 381-390.

[16] Michael, L. K., Hungund, S. S., & KV, S. (2024). Factors influencing the behavior in recycling of e-waste using integrated TPB and NAM model. Cogent Business & Management, 11(1), 2295605.

[17] Nurisusilawati, I., Qornaeni, L., & Jannah, A. N. (2024, September). Modified norm activation model (NAM) to see the effect of technology on food waste management behaviour. In *IOP Conference Series: Earth and Environmental Science* (Vol. 1388, No. 1, p. 012004). IOP Publishing.

[18] Peng, N., & Chen, A. (2025). Antecedents and consequences of service staff's advice-giving frequency on diners' overordering behavior. *International Journal of Hospitality Management*, *128*, 104201.

[19] Pinto, R. S., dos Santos Pinto, R. M., Melo, F. F. S., Campos, S. S., & Cordovil, C. M. D. S. (2018). A simple awareness campaign to promote food waste reduction in a University canteen. *Waste management*, *76*, 28-38.

[20] Raghu, S. J., & Rodrigues, L. L. (2020). Behavioral aspects of solid waste management: A systematic review. Journal of the Air & Waste Management Association, 70(12), 1268-1302. Scialabba, N. (2011, September). Food availability and natural resource use. In Natural Resources Management and Environment Department, FAO. FAO/OECD Expert Meeting on Greening the Economy with Agriculture Paris (pp. 5-7).

[21] Schwartz, S. H. (1977). Normative influences on altruism. In Advances in experimental social psychology (Vol. 10, pp. 221-279). Academic Press.

[22] Standing Committee of the National People's Congress. (2020). Research Report on Cherishing Food and Combating Waste Situations. National People's Congress of China.

[23] Vermeir, I. and Verbeke, W. (2008), "Sustainable food consumption among young adults in Belgium: theory of planned behaviour and the role of confidence and values", Ecological Economics, Vol. 64 No. 3, pp. 542-553, doi: 10.1016/j.ecolecon.2007.03.007.

[24] Wang, J., Wang, S., Wang, Y., Li, J., & Zhao, D. (2018). Extending the theory of planned behavior to understand consumers' intentions to visit green hotels in the Chinese context. International Journal of Contemporary Hospitality Management, 30(8), 2810- 2825.

[25] Windrum, E. (2014). Intercon cuts food waste among employees with new campaign. Available at: https://dohanews.co/qatar-organizations-responding-countrys-high-food-waste. (Accessed 10 April, 2025).

[26] Yılmaz, S., Günal, A. M., Köse, G., & Baş, M. (2025). The Environmental and Economic Dynamics of Food Waste and Greenhouse Gas Emissions: A Causal Time Series Analysis from 2000 to 2022. *Sustainability*, *17*(2), 775.

[27] Yang, C. Y., Yan, L., & Ji, P. (2024). Restaurant waiting staff's intention to dissuade customers from over-ordering: an extended theory of planned behaviour. British Food Journal, 126(9), 3317-3334.

[28] Yu, Z., Ju, X., Bai, L., & Gong, S. (2021). Consumer's over-ordering behavior at restaurant: Understanding the important roles of interventions from waiter and ordering habits. Appetite, 160, 105092.

[29] Zhang, D., Wang, P., & Lou, S. (2025). Stop Using Disposable Cutlery: What Affects Disposable Cutlery Behavior?: Combination of TPB and NAM. DOI: https://doi.org/10.21203/rs.3.rs-5629400/v1

[30] Zhang, X., Li, L., Su, Z., Li, H., & Luo, X. (2023). Study on Factors Influencing Public Participation in River and Lake Governance in the Context of the River Chief System—Based on the Integrated Model of TPB-NAM. *Water*, *15*(2), 275.

Reconstructing a war frontier into a tourist destination: a study on the image representation of border city in Guangxi Province under Implementation of the Belt and Road Initiative

Xiao WANG

Department of Foreign Languages, Guangxi Minzu Normal University, Chongzuo City, Guangxi Province, People's Republic of China

*Corresponding Email: 742328368@qq.com

Abstract

1.Introduction

As important windows and channels for a country's foreign exchanges, border cities have their unique characteristics in terms of geographical location and political function. Border cities are usually located at the physical boundaries between nations, making them natural hubs for cross-border interactions. They act as gateways for trade, travel, and cultural exchange between countries, like Dandong (China-North Korea), Chongzuo (China-Vietnam), and Ruili (China-Myanmar). Their geographical positioning often makes them strategic points for transportation and logistics, facilitating the movement of goods, people, and ideas across borders. In the context of globalization, the status and influence of border cities are increasingly rising, and media presentation is a crucial means for shaping the image of border cities to outside world. For many people around the world, media is the primary source of information about border cities. How these cities are portrayed in the media shapes global perceptions and attitudes toward them. Media can either reinforce stereotypes or challenge them. Positive media representation can highlight a border city's unique cultural, economic, and strategic value, while negative portrayals can perpetuate misunderstandings or biases.

Border cities, defined as urban areas located at or near international boundaries, often find themselves at the intersection of diverse cultures, economies, and political tensions (Foucher, 1986; Bernard, 2007).

Despite their unique position, border cities in China frequently suffer from negative public perceptions that label them as remote, disputed, and underdeveloped. These perceptions can hinder economic development, tourism, and social cohesion within these cities. Some border cities in China, its image communication has long faced the problem of stigma and public stereotypes, like Chongzuo city in Guangxi Zhuang Autonomous Region.

Chongzuo city, is a prefecture-level city in the south of Guangxi Zhuang Autonomous Region near the Sino-Vietnamese border. It is home to one of China's largest Zhuang population. Chongzuo City is praised as the South Gate of China. Chongzuo faces significant challenges related to stigma and public stereotypes, often characterized as remote, disputed, and underdeveloped. This perception is not unique to Chongzuo but is a common narrative surrounding many border cities globally. The historical context of Chongzuo, particularly its role during the China-Vietnam War, has contributed to its

image as a troubled area. The stigma associated with such cities often stems from their geopolitical significance and the socio-economic challenges they face, which can lead to negative public perceptions and stereotypes (Qian & Tang, 2018; Su & Miao, 2022). Of course, the city image is constructed through various factors, including historical events, socio-economic conditions, and cultural attributes. In the case of Chongzuo, its image has been marred by its past as a frontline during the China-Vietnam War, leading to perceptions of instability and underdevelopment (Jiang et al., 2023).

Furthermore, Dahan's discussion of "double consciousness" underscores the internal struggle faced by residents of these cities, as they constantly navigate the tension between their lived realities and external stereotypes. This phenomenon can lead to a strong desire among local populations to challenge and change the narratives surrounding their cities (Dahan, 2019). The efforts to reshape the image of Chongzuo and similar border cities involve promoting their unique cultural and economic potential, which is often overlooked in broader discussions (Chen & Stone, 2017).

The stigma and stereotypes associated with Chongzuo and similar border cities are deeply rooted in historical, economic, and social contexts. Eliminating these perceptions requires a multifaceted approach that includes promoting economic development, enhancing cultural exchanges, and actively challenging negative narratives. By doing so, border cities can begin to reshape their identities and foster a more positive image both domestically and internationally. More recently, this liminal border zone has witnessed deepening economic ties between sovereign states, evidenced for example by China's investments in South-east Asian countries and the promotion of development there (High, 2010; Nyı´ri, 2012; Nyı´ri and Tan, 2016).

The Chinese central government views Guangxi as a strategic gateway for enhancing regional economic integration and fostering stronger ties with neighboring countries in the ASEAN region. This focus aligns with China's broader "Belt and Road Initiative" (BRI), which aims to improve trade and infrastructure development across Asia and the rest of world. Chongzuo city, has also regarded as the bridgehead linking China and Vietnam as well as connecting South-east Asia through transnational infrastructure networks, trade and outgoing investment.

Understanding the complexities of how Chinese border cities are depicted in English newspapers is crucial for comprehending cross-border communication in the region. Balanced media coverage is essential to combat these stereotypes and provide a fuller picture of life in these cities. Since 2014, the Chinese government has put forward to Belt and Road Initiative. China's border city (Chongzuo) grasps the chance to strengthen the cooperation between China and Vietnam . The economic integration of border cities is crucial for their development. As Gan et al. suggest, establishing tourism economic cooperation among border cities can enhance their economic linkages and promote sustainable development (Gan et al., 2024). This is particularly relevant for Chongzuo, where tourism could serve as a catalyst for economic revitalization. By leveraging its geographical position and cultural heritage, Chongzuo can work towards transforming its image from one of stigma to one of opportunity and growth (Sui et al., 2022). The branding of this border city under China's mainstream English newspapers can be a signal for foreign investors and tourists. Therefore, it is necessary to further

examine how China's mainstream English newspapers rebrand this China border city outside the world.

Against this background, this paper aims to identify the discursive strategies used in mainstream English newspapers in China when describe this border city, to uncover the image representation of this border city. The paper is going to address two following questions:

1. What image representations of border city are constructed in the China's mainstream English newspapers?
2. What are discursive strategies used to portray of brand of Chongzuo city from China's mainstream English newspapers?

Given the geopolitical significance of Vietnam and China's growing attention in the region, the findings can inform policymakers and stakeholders about the soft power and public diplomacy efforts needed to shape favorable perceptions. This study helps in understanding the promotion strategies used in border cities by China's government, especially for constructing tourist destination image. The study provides a detailed analysis assisted with corpus. With corpus tool, it will short search process and eliminate subjective analysis, which is also conducive to critical discourse analysis.

2.City image

The concept of "city image" was first introduced by Kevin Lynch in his book *Image of the City* in 1960, referring to the perceptual impression held by the majority of urban residents about the city's form. The image of a city refers to "the set of beliefs, ideas and impressions people hold" regarding a city (Kotler, 1997), which is subjective. City image is also regarded as a process of mental representation which is a network of meanings stored in an individual's memory in a particular form along with affective, motivational and sensory aspects. (Ger & Askegaard, 1997).

As Castillo-Villar (2018) noted that the media can bridge the objective and subjective aspects of a city through the function of social representations, portraying a structure of social knowledge about it. Xu et al (2021) suggest that as a means of communication, city branding can influence public opinion and change the general public perceived image of a city. However, most studies examine the image construction of metropolitan cities like Shenzhen, Shanghai, and New York from discourse analysis, and few studies investigate the image of border cities between China and Southeast-Asian Countries from the perspective of discourse analysis. Nguyen (2021, 23) finds that the perception of the Vietnamese public about China's national image is more negative than positive on social media by analyzing the Vietnam's social media through a case study of VnExpress Online News. While her study collects news at a short period, the data is too short, the framework analysis is too subjective and general.

Media portrayal often focuses on negative economic conditions in border cities. Soi & Nugent (2017, 535) describe border towns in Africa as being characterized by acute poverty and desperation, which are often highlighted in media narratives. While strategically important for regional trade, these towns are frequently depicted as sites of despair, overshadowing their potential for economic development. Similarly, Côté-Boucher et al. (2014, 196-197) argue that the securitization of borders has focused on

enforcement rather than development, further entrenching the negative perceptions of border areas as dangerous and unstable.

Many border cities like Chongzuo in Guangxi are rapidly developing, but outdated perceptions and prejudice about these border cities persist. The way border cities are portrayed in the media can reinforce stereotypes. Reports focusing primarily on smuggling or economic struggles can overshadow positive stories about development, culture, and community resilience. Moreover, examining how crisis communication is portrayed in traditional media can offer insights into framing sensitive issues such as border cities (Schultz et al., 2011). Anastasia G. Stamou & Stephanos Paraskevopoulos (2018) examines how to construct the image of the natural environment in the tourism brochure of border cities from the perspective of an ecological symbolic landscape. Carlos J. Gonzalez Macias, Maria T. Martinez and Santos A. Morales (2017) analyze the image management process of Ciudad Juareztan, a border tourist city between Mexico and the United States using a grounded theory approach combined with Atlas-ti software. These studies are helpful for the image of border cities. Still, unfortunately, they fail to interpret the image of border cities in the news discourse from the context of the grand strategy implemented by the country.

From methodological aspects, the role of cultural heritage and historical narratives in shaping city image is another critical aspect of discourse analysis. Research by Szubert et al. indicates that cities perceived as historical tend to have more attractive images than those associated primarily with industrial functions (Szubert et al., 2021). This suggests that the narratives surrounding a city's cultural heritage can significantly influence its attractiveness and residents' emotional attachment towards it. The study by Gazo attaches the importance of language and discourse in constructing urban realities, suggesting that the way city officials communicate can shape public perceptions and the overall identity of the city (Gazo, 2011). However, these studies have generally relied on qualitative methods, considering social, political, historical contexts. Despite employing discourse analysis from a critical perspective, the analysis remains subjective, often centering on theoretical concepts such as power, ideology, and domination. Therefore, this study will investigate the image representation of a border city from critical discourse analysis assisted with corpus linguistics. Critical discourse analysis and corpus linguistics are combined to a methodological synergy, corpus linguistics are conduct the big data to eliminate the subjective analysis to some extents.

3.Urban imaginary and city branding

An important concept derived from social imaginary and particularly useful for our study is “urban imaginary” (Zukin et al. 1998; Greenberg 2000, 2003). According to this concept, a city is essentially a space of cultural production and consumption, and ideal city brands are realized through the deliberate manipulation of the symbolic and emotional values (Zukin, 1996; Aiello and Thurlow, 2006). City promoters construct different urban imaginaries through the material commodification of by commodifying fashion, food, music, and architectural designs (Zukin et al. 1998). They seek to forge emotional linkages between commodified cities and potential consumers (e.g.,

investors, corporate partners, tourists, and so on) in a way that "the name of the city alone will conjure up a whole series of images and emotions and with them an impression of value" (Greenberg 2000, 230). For example, Paris, being traditionally renowned for its fashion industry, is represented as a symbolic ideal for leisure consumption of pleasure (Rabbiosi 2015); Las Vegas, through offering the promise of adventurous and spectacular, is symbolically viewed as a space full entire of the fantastic (Zukin et al. 1998); Dubai, through using the rhetoric of super-eliteness, has become the marked space of luxury and prestige (Thurlow & Jaworski, 2017). Chongzuo has rebranded as a tourist destination by offering cross-broad scenery and cultural resources.

Like product branding, the "cultural turn" in urban studies has directed urban sociologists' attention to the concept of "symbolic economy" (Zukin 1996), which points to the material commodification of cultural meanings that are attached to specific places. That is to say, the city landscape is not only produced in a material or geopolitical manner, but also through exploiting the cultural meaning potentials, where symbolic processes have become increasingly important crucial for the urban experience (Hall, 2003). According to Zukin et al. (1998, 629), "the synthesis of symbolic and materialist analysis" is rooted in the "social imaginary", which refers to "a mythologized, bot but internalized, set of cultural meanings".

In the context of China, city branding practice has transformed from functional material productions to symbolic cultural productions during the past few decades. Traditionally, the public could only learn about a city through advertisements made by local governments on television, magazines and other mass media platforms. Rothschild, Alon, and Fetscherin (2012, 97) noted that at this stage, city promoters centered on cities' functional attributes (such as economic development, public services and infrastructure, and natural environment) rather than their emotional or symbolic values. Since the 2000s, with the digital transformation of the global economy, a chain of tourism websites and review microblogs (e.g., Honeycomb, Fliggy, and Trip.com Group Ltd.) have been established by commercial organizations or corporations to "create bottom-up social systems interested in sharing experiences, ideas and resources of different cities" (Dickinson et al. 2017, 163). In this business-sector-led phase, city elements whose "functions were considered as instrumental (use value) are being valorized through aesthetic concerns (sign value)" (Lloyd and Clark 2001, 371). In more recent years, with intensified competition among cities for tourists and investment, city governments have emphasized the central role of cultural resources in their economies and resorted to social media to present new brand images (Wang, 2017). In a way, social media have become the game-changer in the urban landscape and allowed some second-tier or third-tier cities to construct their digitalized urban imaginaries. Some cities have been particularly successful in mobilizing their cultural capitals and have become celerity cities in the media.

4.Critical discourse analysis

In the present study, critical discourse analysis (CDA) is used to analyze the image representation of border cities in China's mainstream English newspapers to uncover

the discursive sources of power and examine how power relations are situated, maintained, reproduced, and transmitted in specific political, historical and social background.

Critical Discourse Analysis (CDA) is distinctively different from other analytic methods since it explicitly focuses on the relationships between discourse and power (Huckin, 2002; Chu 2015), especially on discourse's role in power production and reproduction (van Dijk, 1993). To complement Fairclough's (1995, 2003) approach, other CDA scholars have developed a 'methodological toolbox' with a wide range of discursive strategies for textual analysis, for example referential and predicational strategies (Wodak, 2015), aggregation strategies (van Leeuwen, 2008) and the use of metaphor (Charteris-Black 2004). A referential strategy, also known as a 'strategy of nomination,' is employed to identify and classify social actors. In contrast, a predicational strategy assigns characteristics, evaluations, and descriptive attributes to these actors. Meanwhile, an aggregation strategy represents social actors collectively through statistical data rather than as distinct individuals. By examining these strategies, CDA is useful in uncovering the language patterns that shape media representations of border cities.

As Koller (2004) and Sunderland (2004) note, CDA can assist analysts in uncovering the gendered discourses underlying media representations by analysing the discursive strategies and linguistic patterns that feature the activities, attributes and roles typically associated with the target social group. Critical Discourse Analysis (CDA) emphasizes the contextual creation and interpretation of meaning, enabling an examination of how media representations reinforce social roles and propagate specific ideologies, thereby shaping and perpetuating images about border cities. Accordingly, this paper not only examines lexico-syntactic features (e.g., lexical choices, verb processes, and nominalization) and semantic-pragmatic strategies (e.g., identity construction, categorization, framing, insinuation, and presupposition) but also considers broader contextual variables, including Chinese cultural perspectives and the target readership of the analyzed news articles.

5.Methodology

5.1Data collection

To develop a comprehensive understanding of the media construction of Chongzuo, the online database Factiva was used to collect the data, this database includes content from over 33,000 sources, such as newspapers, journals, magazines, television, and radio, covering nearly 200 countries and regions worldwide in 28 languages (Xu & Zhang, 2022). Three mainstream Chinese state-run newspapers include *China Daily*, *Xinhua News Agency*, and *People's Daily* are chosen from Factiva. China Daily is an English-language daily newspaper owned by the Central Propaganda Department of the Chinese Communist Party (Hartig, 2017; Chen, 2017). China Daily has the widest print circulation of any English-language newspaper in China (Hartig, 2017). Xinhua News Agency, People's Daily is one of largest news regulatory agency in China governed by the Chinese government, also a world-wide modern news agency, which represent the most authoritative media in China, so three newspapers were chosen as the database.

All pieces of news about chongzuo city at three China's English newspapers including China Daily, Xinhua News Agency, as well as People's Daily were selected manually to achieve a manageable corpus data. The search keyword is "Chongzuo city" as well as six counties including "Pingxiang", "Fushou", "Daxing", "Tiandeng", "Ningming" as well as "Longzhou" were used as search keyword to search all piece of news about this border city. The reason is that these six counties belong to and are under govern of Chongzuo city. The search date is from January 2003 to December 2023, because the former is the founding year of this border city--Chongzuo City, the latter is the searching end of our research. Only the newspaper's online version was used, with blogs, commentaries and column articles omitted. This selection is because English-language news serves as a key indicator of China's international communication efforts. Publishing news in English allows the Chinese government to project its narratives, policies, and regional developments to an international audience. This helps shape global perceptions and enhance China's soft power. As China strengthens economic ties with ASEAN and other international partners, cities like Chongzuo—strategically located near the Vietnam border—become focal points for cross-border cooperation. English news highlights these developments to attract foreign investment, trade, and tourism. Finally, the total number of articles from the China's English news media is 184.

5.2 Analytical framework

Critical Discourse Analysis was employed as the theoretical framework to investigate this border city image represented. Fairclough's (1995) three-dimensional framework is one of many approaches that can be used to examine how texts represent the city and rebrand the city image in a social hierarchy. Fairclough writes his framework as following:

"[Brings] together three analytical traditions, each of which is indispensable for discourse analysis. These are the tradition of close textual and linguistic analysis within linguistics, the macro sociological tradition of analysing social practice in relation to social structures, and the interpretivist or micro sociological tradition of seeing social practice as something which people actively produce and make sense of on the basis of shared commonsense procedures. (1995: 72)"

As Figure 1 shows that Fairclough's framework comprises three main parts that are highly interrelated: text, discursive practice and social practice (1995: 73). Fairclough regards discursive practice as involving processes of text production, distribution and consumption (Yoong et al., 2013).

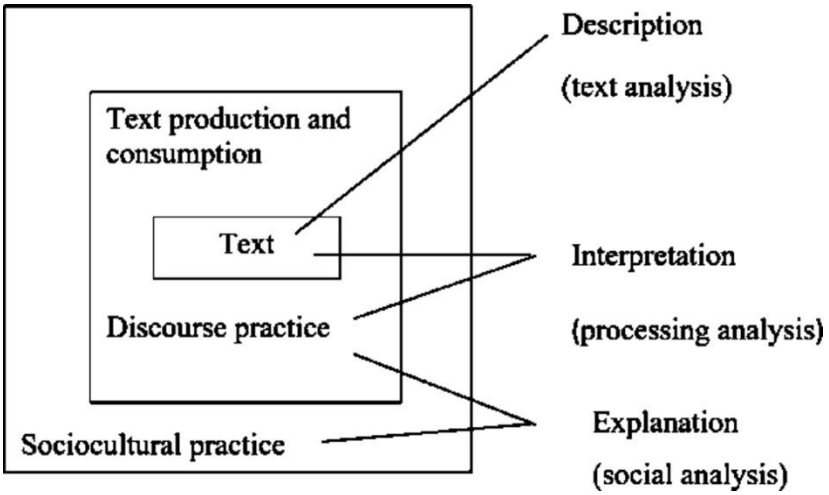


Figure 1: Fairclough's 3D model of critical discourse analysis. (1st dimension = Inner layer, 2nd dimension = middle layer, 3rd dimension = outer layer).

This study focuses on text production, particularly 'the combination of diverse genres and discourses' (that is 'interdiscursivity') and intertextuality (Fairclough, 1995: 134). Discourse here refers to 'ways of signifying experiences' (e.g. medical discourse, political discourse, journalism discourse), while genre refers to 'the use of language associated with a particular social activity' (e.g. news reports, oral narrative) (p. 135). However, in practice, Fairclough notes that genre and discourse in discursive practice overlap frequently and that it is difficult to see them in isolation (cf. p. 132). This study examines discursive practice through the lens of public relation as a form of discourse used to sustain the border city brand. This brand is portrayed in China mainstream English newspapers through journalistic news reports that appear objective. In this context, journalism is a discursive practice that delivers truthful and impartial reporting. As for intertextuality, Fairclough writes that it is the process of combining other texts to form a new text (p. 84). In this sense, journalists are then powerful individuals who are able to include or exclude whatever other texts or quotes they like in building their journalistic articles.

As for textual analysis, Fairclough (1992: 75–78) writes that it can be examined from four angles: 'vocabulary'(words), 'grammar' (words combined into clauses and sentences), 'cohesion' (the ways clauses and sentences are linked) and 'text structure' (large-scale organisational properties of text). Fairclough outlines two approaches to investigating vocabulary: one involves examining "alternative wordings and their political and ideological significance," particularly in terms of how domains of experience may be "reworded" as part of social and political struggles. The other focuses on "how the meanings of words come into contention within broader struggles." Grammar can be analyzed through the examination of sentence transitivities, agencies, and speech acts. For cohesion, one can analyze grammatical elements such as conjunctions, argumentation, and other logical linkage strategies. Lastly, an analysis of "text structure" would explore the "architecture" of the text itself. For this article, our analysis of 'text structure' is combined with vocabulary (words), especially the collocation of the keyword "Chongzuo".

To offset these weaknesses in text analysis, a corpus tool like Wmatrix 5 was employed in this study to reveal the lexical choices and semantic domain of Chong Zuo city in all pieces of news. Wmatrix 5 is a free software corpus analysis toolkit for concordance and text analysis. The primary function of Wmatrix 5 is retrieval, analysts can obtain the number of cities and types of keywords in the corpus and observe the frequency of concordances in the corpus; at the same time, analysts can obtain a fixed number of contextual words on the line of the searched terms to help identify concordance and semantic domain of keyword in corpus. Compared with another analysis toolkit of corpus linguistics, Wmatrix 5 can generate a semantic mapping cloud and show the semantic relationship from big data.

6.Textual analysis

6.1Collocation of keyword "chongzuo"

Collocation is "the occurrence of two or more words within a short distance of each other in the text" (Sinclair J, 1991: 170). The collocation generated by the co-occurrence of a node word and its collocates typically reflects the text's meaning selection and the speaker's attitude. Repeated co-occurrence of collocation in a text contributes to forming particular discourses or imagery and is linked to underlying discourse motivations, making it a core focus of researchers (Hu et al., 2018: 237).

The primary function of co-occurrence frequency is to reveal the frequency with which a particular node word appears with other words in a corpus, thus reflecting the degree of their association. However, relying solely on co-occurrence frequency while providing insights into how often words co-occur does not fully reflect the overall usage of the word in the corpus. For example, it does not reveal whether these co-occurrences exhibit specific patterns or trends. Mutual Information (MI) value is a method used to measure the strength of collocation between words and node words, effectively identifying the meaning construction of node words in large-scale texts. In collocation studies, MI value and co-occurrence frequency are commonly used to research methods that can effectively determine the construction of word meanings in extensive texts (Qian, 2019).

This study comprehensively analyses co-occurrence frequency and MI value, using "Chongzuo" as the node word with a left and right collocation span set to 4 characters each. The MI value is set to ≥3 for meaningful words (such as verbs, nouns, adjectives, adverbs, etc.). The study ultimately identifies the top 18 meaningful words with high co-occurrence frequency with "Chongzuo" (see Table 1). By using concord function of Wmatrix 5, we found that the main dominant concordance of "chongzuo" in the Chinese mainstream English media is "GUANGXI", "CITY", "ZHUANG", "AUTONOMOUS", "REGION", "QINZHOU", "FENGCHENGGANG", "NAINING", "BORDER", "BEIHAI", "AREA", "BAISE", "CITIES", "YULIN", "Hechi", "Bureau", "Mo", "Wuzhou".

Table 1. Collocation words of "Chongzuo" in China's English news

No.	Collocation	co-occurrence frequency	MI value

1	GUANGXI	64	2
2	CITY	45	3.2
3	ZHUANG	32	2.4
4	AUTONOMOUS	28	2.3
5	REGION	24	1.4
6	QINZHOU	21	3.6
7	FENGCHENGGANG	19	3.8
8	NAINING	19	1.9
9	BORDER	16	1.6
10	BEIHAI	14	3.6
11	AREA	14	2.0
12	BAISE	14	4.4
13	CITIES	13	2.0
14	YULIN	13	4.4
15	HECHI	13	3.7
16	Bureau	9	4.0
17	Mo	7	4.3
18	Wuzhou	6	4.0

Based on the concordance analysis based on the corpus, we found that among the top 18 significant collocation words of "Chongzuo," the report on Chongzuo focused on three categories: first, the geographical location information of the city, followed by the city's public safety problems and characteristic industries; and third, place names. These three dimensions highlight the culture and economy of this border city.

The first kind is geographical information about Chongzuo. A total of eight such words were retrieved, namely "Guangxi", "CITY", "ZHUANG", "AUTONOMOUS", "REGION", "BORDER", "AREA" and "CITIES", all of which are neutral words. According to the collocation search, the frequency of "Guangxi" co-occurs with "Chongzuo" is 64 times, "city" and "Chongzuo" are 45 times, and "ZHUANG" and "CHONGZUO" are 32 times. Through the analysis of collocation words, it can be found that Chongzuo began to show the city image positioning of "magnificent border, southern border" in the discourse of Chinese mainstream media. For example, in the list of notable collocations, "Guangxi", "city" and "area" are put together most closely with "chongzuo", which further confirms Chongzuo's prominent geographical features. By checking the index lines of other collocation words, we find that "ZHANG" is combined with "autonomous region" and "Chongzuo City", which indicates that the representation of Chongzuo city is closely related to its population type in mainstream English reports in China. Chongzuo is a Zhuang nationality city. Among the 55 ethnic minorities in China, Zhuang people have the largest population, and Zhuang people account for 89% of the population in Chongzuo city (Zhao, 2019); In addition to the above collocation, the term "border" frequently co-occurs with "Chongzuo" 16 times, along with these expressions such as "a border city", "border area", "border police", "bordering Vietnam", "border trade", "border business", suggests that the image of

Chongzuo is specially constructed as a border city between China and Vietnam and a Southgate of China toward Southeast Asian in China's mainstream English media.

The second category is industry and cultural tourism development of this border city. There are 3 collocation words in Table 1 including "bureau", "mo" and "county". First, when we look at the related concordance line for "bureau", we can find out the dominant collocation group words like "public security bureau", "police bureau" and "Officer of Cross-border Cooperation Bureau" going together with "chongzuo". From those concordance line, you can find mainstream English-language media reporting that Chongzuo's border police Bureau and the city's Public Security Bureau are cracking down on border crimes such as smuggling, drug trafficking, and smuggling.

Observed at the relevant collocation line of "Mo", it can be found that "Mo" is actually a person's name, and Mo Jiang is his full name. Further analysis of the text content, which turns out that Mo Jiang is vice president of Chongzuo Xianggui Sugar Co Ltd (Chongzuo Xianggui Sugar Co LTD) vice manager, China Daily often quoted Mo manager's words, Mo manager's words are mostly positive. It shows that the media is full of confidence in the future of Chongzuo's sugar industry. According to the concollation, Chongzuo City is China's largest sugar production base, the annual output of sugar accounts for one-fifth of the country, with the reputation of "China's sugar capital", is a veritable "China's sugar pot". Therefore, it can be found that the mainstream English media focuses on the promotion of Chongzuo's sugar industry.

The "county" is often combined with the characteristic prefecture-level cities of Chongzuo, such as "Detian County", "Tiandeng County", "Fusui County", "Zuojiang Huashan Rock Art Cultural Landscape in Ningming county", "Detian Waterfall Scenic Area in Daxin county" and "Chongzuo county". Among them, "Zuojiang Huashan Rock Art Cultural Landscape in Ningming county" is UNESCO World Heritage, which is located in Ningming County, Longzhou County, Jiangzhou District and Fusui County, Chongzuo City, Guangxi Zhuang Autonomous Region. "Detian Waterfall Scenic Area in Daxin county" refers to "a nature waterfall bordering between Chongzuo city and Vietnam", The Detian Waterfalls in Daxin County, Chongzuo City is the largest transnational waterfall in Asia. Daxin County is honored as "famous tourism county with Guangxi characteristics", "hometown of Chinese Nongdong Culture", and "hometown of Chinese hereditary headmen culture".

These expressions like "a landmark in cross-border tourism cooperation", "joint development", "an important example of cross-border economic cooperation and "cultural exchanges between China and Vietnam", and "the joint construction of the Belt and Road Initiative" and "building a community with a shared future for mankind" successfully personify Detian Waterfall Scenic Area in Chongzuo as a pioneer on international cooperation about tourism on China's mainstream English newspapers. Such personification enables Chongzuo to speak to its audience in a conversational style as if it were a world pioneer and celerity and perform all kinds of promotional activities, for example owning unique tourism experiences, sharing development and chances with Vietnam.

These trend expressions like "picturesque karst landscape" and "rich ethnic culture" are used to promote the unique cultural tourism resources in Huashan rock painting in

Chongzuo city. Chongzuo has a World Heritage Site in the form of the Zuojiang Huashan Rock Art Cultural Landscape, the only rock art entity among China's 55 World Heritage Sites. It is observed that when "Chongzuo" is collocated with these expressions such as "mountains", "sugar cane" and "langur", China's Mainstream English media actively promote clear waters and beautiful scenery of Chongzuo, the unique Karst of Guangxi, and Chongzuo' s sugarcane fields. Additionally, this focus on Chongzuo' s ecological tourism resources significantly enhance the city's visibility and prominence in the media, portraying Chongzuo as a livable city and further solidifying and reinforcing its image as an "ecological ethnic city". By frequently using this term, Chongzuo is commodified as a city of an entrepreneurial pioneer of cross-border tourism, for whom identities are always defined around "green lifestyles" (Greenberg 2000, 231). The collocation words show us the image of Chongzuo city was consolidated as a border place with abundant tourism resources, vigorous development of sugar industry, and living white-headed langur. As the global tourist industry expands to become an increasingly important part of international trade, Chongzuo is competing in the international market place to attract tourists by using these cultural tourism resources.

The third category is international and domestic place names, the names of place are prefecture-level cities in Guangxi autonomous region. There are six high-frequency cities that co-occur with "Chongzuo" including Qinzhou (21 times), Nanning (19 times), Fangchenggang (19 times), Hechi (13 times), Beihai (14 times), and Yulin (13 times). These 6 cities in Guangxi are all prefecture-level cities with Chongzuo, as a brother city, often appears together with these cities in the mainstream English media reports on the construction of Beibu Gulf city clusters, indicating that Chongzuo has close exchanges with these prefecture-level cities. Chongzuo as one of the cities in Guangxi Beibu Gulf Economic Zone. At the same time, the close geographical location and historical and cultural origin of Nanning and Chongzuo also lead to their closer exchange with each other. Secondly, "Vietnam" is also closely matched with "Chongzuo" from international community, mainly because Chongzuo borders Vietnam geographically, of which four counties are adjacent to Vietnam. Therefore, Chongzuo and Vietnam is getting closer and wider cooperation in economy, culture and other aspects.

6.3. Discursive practices in City image construction

News simultaneously functions as a commodity, a creative endeavor, and a public service. However, its perceived nature shifts depending on the viewer's perspective and the role it plays in their current pursuits. The way news is defined often aligns with the interests of those engaging with it, whether as producers or consumers. For someone seeking tourist destination, news primarily serves as a form of tourist destination representation.

Discursive practices refer to the ways in which language is used to construct and convey meaning within media discourse, particularly in relation to the representation of Chongzuo city in China's mainstream English newspapers. As the textual analysis shows, these strategies include repeating geographical information of the city,

highlighting the culture and economy of this border city, incorporating the voices of individuals and experts that further enhance the city's image, and presenting these textual strategies as news reports. The following sections examine two strategies: intertextuality and interdiscursivity.

Intertextuality, one key aspect of discursive practice, refers to the way texts draw upon, reference, or reshape other texts. By examining how different voices and discourses are interwoven, we can better understand how the city's image is constructed and reinforced in English-language media of China. As the creators of the text, journalists or newspaper representatives have the authority to selectively include or exclude certain information. Therefore, we shall concentrate on the 'voices', that is, who said what. There are four common voices which have been selected for the news reports: political and historical figures like Ho Chi Minh, City's governments representatives, Repetition of Economic Narratives and Use of Official Discourse and Expert Opinions.

Example 1. The references of Political and Historical Figures

> Ho Chi Minh spent 12 years in China engaged in revolutionary activities, leaving his footsteps all over the country and forging a special bond of camaraderie and brotherhood with leaders of the CPC, including Mao Zedong and Zhou Enlai. He once compared the close Vietnam-China relationship to that of "hand and foot, mortar and pestle, root and stem, and older brother and younger brother". The Ho Chi Minh Exhibition Hall in Chongzuo, a city in South China's Guangxi Zhuang autonomous region, which borders Vietnam, is dedicated to documenting the days the late leader and other Vietnamese revolutionaries spent in China. More than 700 photos and over 60 other exhibits on display showcase their deep friendship with the Chinese people. (China Daily, 2023: Xi pays tribute to late leader Ho Chi Minh)

This news gives a reference that Ho Chi Minh advocates past China-Vietnam ties and position Chongzuo as a historically significant location. Quotes from Ho Chi Minh about the China-Vietnam relationship reinforce continuity in diplomatic relations. Such references serve multiple purposes. Firstly, they reinforce diplomatic continuity, portraying Chongzuo as a historically important location for China-Vietnam relations. Secondly, they provide legitimacy and historical depth to the contemporary political and economic ties between the two nations. By quoting figures like Ho Chi Minh, news media construct a narrative that emphasizes historical camaraderie while subtly reinforcing the stability and long-term cooperation between China and Vietnam.

Example 2: Linking Local News to Broader National and International Agendas

Another strategy involves framing Chongzuo within the larger context of China's national and international policies, particularly economic initiatives like the Belt and Road Initiative (BRI) and the Regional Comprehensive Economic Partnership (RCEP). By embedding local economic developments within these broader frameworks, the

media legitimizes and amplifies Chongzuo's role as a strategic trade hub, which can be seen from this news.

> The Chongzuo area is home to Youyiguan Port, one of China's busiest land ports for the trade of fruit. In the first half of this year, a total of 381,000 tonnes of ASEAN fruits were imported into China through the land port, up 130 percent year on year. Youyiguan Port has in recent years pushed ahead reforms in customs clearance and other operations to raise passage efficiency. Taking advantage of its proximity to Vietnam, the Pingxiang Industrial Park in Chongzuo focuses on processing farm products imported from ASEAN countries, as well as industries covering new materials, electronic information and small household appliances. (Xinhua New's Agency, 2023: Guangxi pilot FTZ at forefront of China-ASEAN cooperation)

This news is about Chongzuo's trade and tourism cooperation with ASEAN ties into China's larger Belt and Road Initiative (BRI) and RCEP (Regional Comprehensive Economic Partnership). Reports on Chongzuo's FTZ and tourism projects often include data from land port and quotes from local policymakers or university researchers, adding data credibility.

Example 3: Repetition of Economic Narratives

> A batch of 18.24 metric tons of fresh Vietnamese durians arrived in Youyiguan Port in South China's Guangxi Zhuang autonomous region in late September. The shipment made Vietnam the second country in the Association of Southeast Asian Nations, after Thailand, to gain access to the Chinese market for its fresh durians after the trade agreement went into force in January. And shipments of other kinds of fruit are also increasing. "This is the first shipment of Vietnamese durians through Youyiguan Port. It only took two hours to transport this batch of durians from Vietnam to Youyiguan checkpoint. So, the freshness and taste of durians can be better preserved," said Qin Jun, vice-president of YH Global, the importer of the batch. Qin said the unique business environment in the Chongzuo area of the China (Guangxi) Pilot Free Trade Zone and the implementation of the RCEP would bring more opportunities to local enterprises. (China's Daily, 2022: Nose for success on durians)

News on agricultural trade (e.g., durians, sugarcane, and tropical fruit imports) consistently presents Chongzuo as a gateway for ASEAN-China economic collaboration. Similar phrases and vocabularies appear across different articles,

reinforcing a coherent economic development message.

Examples 4: Use of Official Discourse and Expert Opinions

> We hope to take the experience of Guangxi to Southeast Asia, and as far as Africa and Central and South America, said Niels Knudsen, assistant country director of UNDP China. (Xinhua News Agency, 2016: China sugarcane region increases efficient water use)

This news quoting Niels Knudsen, an assistant country director at UNDP China, the article aligns Chongzuo's agricultural practices with international recognition and development goals. News frequently cites government officials and experts to legitimize claims about Chongzuo' s role in trade, economic development and regional cooperation. The statement assigns positive attributes to Chongzuo's sugarcane industry, portraying it as successful, efficient, and internationally applicable.

Interdiscursivity is another important aspect of discursive practices, which refers to the way different discourses mix, overlap, and interact within a single text or communicative event. It highlights how texts do not exist in isolation but draw upon multiple discursive fields, genres, and styles to shape meaning. Fairclough (1992, 2003) defines interdiscursivity as the interaction between different discourses within a text, where elements from one discourse type (e.g., economic, political, cultural) are incorporated into another.

In China's mainstream English newspapers, economic discussions about Chongzuo are often interwoven with political discourse and culture discourse. Economic discourse (tourist growth, tourist trade) is embedded within political discourse like China's global strategy, regional leadership, which can be justified from this example.

> Example 1: In 2015, the Chinese and Vietnamese governments signed an agreement on protecting and utilizing tourism resources surrounding the waterfall. The Guangxi side conducted its own planning, but closely communicated with the Vietnam side in formulating the conceptual plan for the core area of the tourism zone, said Yu Fuhua, a senior researcher at the Guangxi culture and tourism department. In February 2018, a fence enclosing the designated tourism cooperation area was completed. In December 2019, construction of the tourist inspection point, distribution center, and certification department were completed. In December last year, the transportation hub for the cooperation area underwent major upgrades. Hu Chao, a professor at Guangxi Minzu University's School of Economics, told China News Service that construction of the Detian-Ban Gioc Waterfall area was a landmark in cross-border tourism cooperation (China Daily, Tourism cooperation flows from falls; 2023-12-13).

Interdiscursivity is evident in how multiple discourses are woven together to present the significance of the Detian-Ban Gioc Waterfall as a site of cross-border tourism cooperation. The news references the 2015 agreement between China and Vietnam on the joint protection and utilization of tourism resources. This reflects diplomacy and cross-border governance in tourism cooperation. The news highlights how the waterfall attracts tourists from both China and Vietnam, detailing the logistics of cross-border visits, tour group regulations, and infrastructure developments. What's more, Environmental sustainability is often framed within an economic development narrative. Environmental discourse is not independent but is used to justify economic expansion. By integrating these discourses, the article constructs a narrative where tourism serves not only as leisure but also as a tool for international cooperation, economic growth, and cultural exchange. This demonstrates interdiscursivity by blending different perspectives to shape a comprehensive understanding of the waterfall's significance beyond just tourism.

Example 1: The latest measures to preserve and promote Zhuang brocade are making inroads at home and abroad, in turn giving local weavers such as Li the confidence to contribute to the development of their communities. "Our project uses community skills workshops to bring together the preservation and productivity of this traditional art, providing residents with meaningful employment by giving them opportunities to promote their ethnic brocade fabric and other products," says He Ka, head of Guangxi Jinzhuangjin Culture and Art Co. Her group's decadelong Zhuang brocade work in Banchi helped train Li, who in turn now trains nearly one-third of the more than 170 village households (Ethnic artisans weaving a bright future, China Daily, 2021-10-08)

Cultural and Economic Discourse is also merged into this following news. Cultural heritage like Zhuang brocade is often framed as an asset for economic growth, which gave the weaver girls and local households for economic benefits. The preservation of this traditional craft is not only a cultural endeavor but also a means to stimulate economic development. By integrating heritage into market-driven initiatives—such as skills workshops, employment opportunities, and tourism—the discourse around culture shifts toward economic utility.

This alignment reflects broader state-driven policies where cultural industries are leveraged for economic growth, particularly in rural and ethnic minority regions. local weavers gaining confidence and contributing to their communities underscores the dual role of heritage preservation and economic empowerment.

The discursive construction of the border city image formulated by the English-language news media is inextricably intertwined with wider China journalists and sociocultural practices.

Social practices: nationalism, socialism with Chinese characteristics, ethnic unity, environmentalism, and globalism

Lthusser's ideology and Gramsci's hegemony have played a role in helping Fairclough formulate his conception of social practice (1995: 86). Broadly speaking, ideology can be viewed as having five components: '(i) a set of values that is (ii) a property of an organisation (iii) designed to influence the acts of others regarding (iv) the goals of the organisation and (v) the appropriate means for pursuing those goals' (Mayer, 1982: 14). Hegemony, on the other hand, can be viewed as constructing alliances and integrating subordinate classes to win consent (Fairclough, 1992: 92).

In a sense then, the social practice level requires an understanding of social theories. These state-run news media including China Daily, Xin Hua New Agency and People's Daily are the mouth of the Chinese government, they act as a tool to some propagation or make profits by encouraging tourists to come to this place. They enhance its soft powers in numerous ways, such as illustrating this place which have become tourist destination, and by illustrating in social event work to show that they are popular and unique for these readers outsider.

The ideology surrounding news coverage in Chongzuo, particularly in the context of China's mainstream English newspapers, is deeply intertwined with the values and principles of the Chinese government. The portrayal of Chongzuo's development and its role as a border city is not merely a matter of reporting facts; it is part of a broader ideological framework that aligns with the Chinese government priorities, including nationalism, socialism, and the consolidation of national unity, socialism with Chinese characteristics, ethnic unity, environmentalism, and globalism. This ideological approach ensures that news coverage aligns with the Chinese governement vision of a unified, modern, and prosperous China, both internally and in its relationships with the world.

Nationalism is a kind of social identity and related sent, scholars have defined national identity as a socially constructed sameness resulting from nationalism (Kunovich 2009). Chongzuo, being a border city, is often depicted as a symbol of China's territorial integrity and control. The city is strategically located on the border with Vietnam, and the news often emphasizes China's strength in protecting its borders and maintaining peace and security in this region. This narrative promotes the idea that China, under the leadership of the CCP, is a stable, strong, and unified nation that is committed to safeguarding its sovereignty and territorial interests. Ideologically, this reflects the CCP's focus on patriotism and national pride. News coverage will often highlight cross-border trade, security initiatives, and diplomatic relations, framing these efforts as successes of Chinese governance and a testament to the country's growing global influence.

The guiding ideology of the China Communist Party (CCP) is "Socialism with Chinese characteristics," which emphasizes a unique model of socialist governance adapted to China's specific historical, cultural, and economic conditions. In the context of

Chongzuo, this ideology is reflected in the portrayal of the city's economic development, urbanization, and infrastructure projects. News stories may focus on the implementation of socialist policies aimed at improving the welfare of the population, reducing poverty, and enhancing the quality of life in rural areas.

Poverty alleviation has been a major topic since the campaign started in 2012. It is expected to attract more attention this year as officials have reiterated their determination to reach the zero-poverty goal on time, despite the epidemic. As part of nationwide efforts to empower the rural poor and end the cycle of poverty, authorities have worked to slash dropout rates in rural primary and middle schools. Huang Huachun, a deputy to the National People's Congress, is campaigning for more central government funding for high schools in the poorer western provinces, where authorities are struggling to keep up with rising education costs. At present, the operating costs of high schools not including funding for dormitories or tuition are paid by local governments. In light of central government requirements for less-developed regions, Guangxi has stepped up funding for high schools over the three years to 2022, with annual investment per student rising from 600 yuan to 1,000 yuan (Vocational schools set to aid poverty alleviation, China Daily 2020-05-25).

In this news, it highlights the rural revitalization programs from education perspective, poverty alleviation efforts, and the role of state-owned rural school in helping rural students. The ideological underpinnings emphasize how these policies are tailored to the unique needs of regions like Chongzuo, ensuring that development is not only economically beneficial but also aligned with socialist principles. This also ties into the CCP's efforts to promote its version of governance, which is positioned as the key to China's success and stability.

Articles often highlight the ways in which local governance reflects the broader principles of socialism, such as promoting equality, community well-being, and collective progress. As a multi-ethnic region, Chongzuo is often presented as a model for the CCP's policies of ethnic unity and harmony. The city is home to various ethnic groups, including the Zhuang, Yao, and Han Chinese, and the CCP's narrative often emphasizes the peaceful coexistence and integration of these diverse communities under the leadership of the Communist Party.

The ideology of ethnic unity and social harmony is a key part of Chinese governance, and news coverage often portrays the government's efforts to maintain stability in ethnically diverse areas. These efforts may include promoting policies that support ethnic cultures, celebrating traditional festivals, and fostering inter-ethnic cooperation. The CCP promotes the idea that the integration of ethnic minorities into the broader Chinese national identity strengthens the unity of the Chinese people as a whole, which is a central tenet of its political ideology. Furthermore, the media may portray the development of Chongzuo's tourism industry as a tool for fostering ethnic pride and preserving local culture, while at the same time promoting a cohesive national identity. This reflects the CCP's approach of balancing the preservation of ethnic diversity with the overarching goal of creating a unified, harmonious nation.

Another ideological element reflected in news of Chongzuo is the emphasis on environmental protection and sustainable development. This aligns with the China

governement's broader narrative of ecological civilization, which is the idea that China's economic growth must be balanced with environmental conservation. Chongzuo, with its scenic landscapes and natural resources, is often portrayed as a model for sustainable tourism and eco-friendly development. The government's policies on green development are framed ideologically as part of the effort to build a "beautiful China," where economic growth does not come at the expense of the environment.

As part of China's broader global aspirations, the city of Chongzuo is frequently included in the narrative of the Belt and Road Initiative (BRI). The CCP promotes the BRI as a means of expanding China's economic influence and fostering international cooperation. The ideological underpinning of the BRI is centered on the idea that China, as a rising global power, is committed to fostering win-win cooperation and promoting development in neighboring countries. Chongzuo's role as a border city takes on a global dimension. News coverage often emphasizes the city's position in fostering cross-border trade and economic exchanges with Southeast Asia, especially Vietnam. This serves as an ideological tool to promote China's vision of a multipolar world where it plays a central, leadership role in economic development and regional stability. The concept of "Clear waters and green mountains are as good as mountains of gold and silver" reflects China's emphasis on ecological civilization, where economic development is balanced with environmental protection. In Chongzuo, this principle is integrated into the tourism industry through various social practices that promote green culture. Chongzuo has positioned itself as an eco-tourism destination, integrating environmental protection with tourism growth. The Detian-Ban Gioc Waterfall cooperation zone serves as a model for cross-border eco-tourism, where controlled tourist flows and environmental regulations help minimize ecological damage. Authorities limit visitor numbers, enforce tour group regulations, and implement eco-friendly infrastructure to protect the natural landscape.

Discussion and Result

Based on the detailed analysis of these news, we identified a clear set of attributes that Chongzuo uses to construct its urban imaginaries. The border city image is created through using discourse strategies, which are propelled by the global attention economy (Marwick 2013). The city is personified as an entrepreneur who uses news to create a set of popular imaginaries, including South China Border Gatekeeper, Tourist Destination Wonderland and Fruit hometown for China-ASEAN. These imaginaries allow Chongzuo to rebrand its exotic charm and tourist attraction, so as to create a landscape of mass entertainment, promote tourism and spur investment.

In what follows, we will provide a detailed analysis of how these images are discursively constructed in the official news.

Chongzuo as Tourist Destination Wonderland

First, a large number of news portray chongzuo city as tourist destination and wonderland border China and Vitenam that create a exotic charm that as seen in examples 1–3.

Example1: The 400-km-long highway, which opened earlier this week, connects Chongzuo city in Guangxi Zhuang autonomous region and the Vietnamese city of Ha

Long, shortening bus travel time between the two locations to 7.5 hours. Chongzuo attracts a great number of tourists with its beautiful transnational waterfalls and charming ethnic culture, while Ha Long is adjacent to Ha Long Bay, a famous tourist destination in Vietnam (Xinhua News Agency, Transnational highway to boost China-Vietnam tourism, 2013-08-10).

Example 2: A Vietnamese woman sells local specialities to Chinese travelers at a Vietnam market in the city of Chongzuo, Guangxi Zhuang autonomous region, on the border between the two countries. (Xinhua, 2016-06-20 Chinese travelers spurring Vietnam's economy).

Example 3: Zuojiang Huashan Rock Art Cultural Landscape in Ningming county, Chongzuo city, Guangxi Zhuang autonomous region. As the only remains of the Luoyue people living in the region about 2,000 years ago, it was added to the UNESCO World Heritage Site List in 2016. That would be an apt description for the murals in Zuojiang Huashan that stand out red and bright even after thousands of years (China Daily, Cliffs that sport mystical tattoos, 2022-06-03)

The tourist destination city image is constructed by representing Chongzuo as a border link connecting between China and Vietnam from Example 1, very convenient bus travel, waterfall border China and Vietnam which includes exploiting the cultural symbols of the border trade and enjoy beautiful scenery and culture heritage. By creating a series of trade-oriented activities, rich tourist resources, the idealized urban imaginary of "tourist destination" is combined with socialist visions of China-Vietnam trade based on a community with a shared future for mankind from example 2 and example 3.

Chongzuo as a South China Gatekeeper

In some Chinese English language news, Chongzuo is represented as South China gatekeeper. This portrayal highlights its strategic geographical location in Guangxi Zhuang Autonomous Region, bordering Vietnam. The term emphasizes Chongzuo's role in border security, trade, and cross-border exchanges between China and Southeast Asia, which is seen from example 4 and example 5.

In Example 4 and Example 5, taken from Xinhua News Agency and China Daily respectively, the image representation of Chongzuo city is described as gateway in Guangxi to connect Southeast Asia.

Example 4: "A large number of cross-border e-commerce cargoes will go to the ASEAN market through the freight channel after the completion of customs clearance in Nanning. This trend is expected to go on," said Wang Yiyun, Officer of Cross-border Cooperation Bureau of Chongzuo at Guangxi Pilot Free Trade Zone. Pingxiang city is known as China's South Gate as it borders Vietnam. It has been an important trade center since ancient times. And the freight channel at Pingxiang's Youyiguan Port is busy with cargo transportation. "Data shows that over 280,000 vehicles passing the freight channel since January. The total trade volume has gone up ten percent than the same period of last year," Wang added. (Xinhua News Agency, 2013-08-21; Economic zone to boost China-ASEAN ties)

Example 5: As one of the country's southern gateways to ASEAN, Guangxi is banking on the growth of its financial services industry to facilitate more trade with ASEAN

members, said Zhang Xiaoqin, vice chairman of Guangxi Zhuang autonomous region." More convenient financial services, wil facilitate trade," he said (China Daily, The 12th China-ASEAN Expo concluded, 2015-09-22)

These expressions like "gateway", "South Gate", and "freight channel" metaphorically frame Pingxiang in Chongzuo as crucial trade hubs rather than just geographic locations. This reinforces economic and strategic importance of Chongzuo city in China-ASEAN trade. These lexical choices "cross-border e-commerce," "cargo transportation," "customs clearance," "trade volume" and "financial services industry," "facilitate trade" highlight the economic functions of these cities rather than cultural or historical aspects. The statistics such as "over 280,000 vehicles passing the freight channel", "total trade volume has gone up ten percent", which aligns with business discourse, where numerical evidence is used to establish legitimacy and reliability. All in all, the discourse portrays Chongzuo city as actively building infrastructure and trade routes to support ASEAN trade, which Chongzuo city as a proactive economic partner for ASEAN.

Chongzuo as a Fruit hometown for China-ASEAN

In Example 6, taken from China Daily, the image of chongzuo city is described as Fruit hometown for China-ASEAN. The expression "the largest city for import and export of fruit" highlights Chongzuo's dominance in China's fruit trade, particularly with ASEAN countries.

Example 6: According to statistics, in 2004, China imported $300 million in ASEAN fruits. In 2001, China imported $15.22 billion of dried and fresh fruits and nuts, of which five ASEAN member states: Thailand, Vietnam, the Philippines, Cambodia and Malaysia accounted for more than 60 percent. Thanks to the vigorous development of economic and trade relations between China and ASEAN, Chongzuo in Guangxi, on the border of China and Vietnam, has become the largest city for import and export of fruit in China and its imported tropical fruit accounts for more than half of the whole country (China Daily, Booming fruit trade enhances China-ASEAN cooperation, 2022-09-28)

The use of these statistic expressions "imported $15.22 billion of dried and fresh fruits and nuts", "60 percent" and "more than half of the whole country" can be analysed as a referential strategy (Wodak, 2015) that ascribes specific identities and characteristics to Chongzuo city. The statistics reinforce the growing trade volume, illustrating how ASEAN fruits contribute significantly to China's import market. The reference to ASEAN trade partnerships emphasizes Chongzuo's role in fostering China-ASEAN economic relations under frameworks like the Belt and Road Initiative (BRI) and the Regional Comprehensive Economic Partnership (RCEP). By branding Chongzuo as a "Fruit Hometown for China-ASEAN," the discourse integrates local identity with national economic goals, presenting cultural and geographic attributes as assets for economic development.

The framing of "Chongzuo city as fruit homeland for China-ASEAN cooperation is also apparent in their construction as 'chongzuo as tourist wonderland' and as "Chongzuo as South China gatekeeper" , in which tourists who are surprised by its exotic charm and scenery and local residents are getting happy lives. The news articles

challenge negative stereotypes of border cities in Guangxi Province and highlights the city's evolving identities in regional and international contexts.

Conclusion

Studies on the image representation of border city is crucial for enhancing their international competitiveness and promoting regional cooperation and development. News media plays a significant role in disseminating city images, and the media's choices and usage of discourse impact the construction of these images. Analysis of Chinese mainstream English language news shows that the media primarily focuses on Chongzuo's ecological and cultural tourism resources, with some reporting on public safety issues. All in all, the image representation of Chongzuo city was constructed from the China's mainstream English news as "an honest and brave border gatekeeper", "the fruit city of China-ASEAN Cooperation" and "tourist destination wonderland", these discursive strategies construct Chongzuo' s brand as a dynamic, strategic, and sustainable city with a strong regional identity.

As a young city with rich historical and cultural resources, Chongzuo's involvement in international activities, hosting of international conferences and events, and the features of Zhang nationalities are not prominently featured in reports by Chinese mainstream English media. In the future, Chongzuo should strive to enhance its image as a modern gateway city in the southern frontier through improved promotional and narrative construction. By continuously innovating its communication strategies, Chongzuo should work to rebrand a more concrete tourist destination city image with Zhang nationalities features like Zhang brocades and Zhang Tianqin art. This includes showcasing its positive aspects while rationally addressing negative reports, actively listening to media feedback, and adopting these suggestions to reshape and enhance its city image, thereby increasing its visibility and recognition in the international community.

The disadvantage of our study is limited in research data, only investigate the linguistic news from three English newspapers in China. The pictures in news are neglected in the analysis, maybe the visual elements in pictures news should be carefully analyzed in the future study. Although this study is a case study, it can also be applied to the research of other border cities in China, and future research can explore the discourse construction of border city images on social media such as Douyin and Facebook through multimodal discourse analysis.

Notes

Factiva is available at https://professional.dowjones.com/factiva/

Funding

This research received specific grant from Guangxi Minzu Normal University

Keywords: China's border city, Critical discourse analysis, Corpus tool, China's mainstream English newspapers, image representation

References

[1] Aiello, Giorgia, and Crispin Thurlow. 2006. “Symbolic capitals: Visual discourse and intercultural exchange in the European Capital of Culture scheme.” Language and intercultural communication 6 (2): 148–162. doi: 10.2167/laic234.0.

[2] Bangalore, M., Smith, A., & Veldkamp, T. (2018). Exposure to floods, climate change, and poverty in Vietnam. Economics of Disasters and Climate Change, 3(1), 79-99. https://doi.org/10.1007/s41885-018-0035-4

[3] Bernard Reitel. Are Cross-Border Urban Spaces European Integration Patterns at Local Level? Analysis of the Management of Urban Areas astride the “French Border”. Borders of the European Union: Strategies of Crossing and Resistance, 2007. ffhalshs-01170478

[4] Castañeda, H. and Chiappetta, C. (2020). Border residents’ perceptions of crime and security in El Paso, Texas. Social Sciences, 9(3), 24. https://doi.org/10.3390/socsci9030024.

[5] Charteris-Black, Jonathan (2004). Corpus Approaches to Critical Metaphor Analysis. Basingstoke: Palgrave Macmillan. https://doi.org/10.1057/9780230000612

[6] Chen, Lily (2013). “Who speaks and how? Studies of voicing in the China Daily following a decade of change”. Chinese Journal of Communication. 6 (3): 325–349. doi:10.1080/17544750.2013.789421.

[7] Chen, X. and Stone, C. (2017). Rethinking border cities: in-between spaces, unequal actors and stretched mobilities across the China–southeast Asia borderland., 478-501. https://doi.org/10.4135/9781526402059.n26

[8] Cheng, W., & Lam, P. W. (2013). Western perceptions of Hong Kong ten years on: A corpus-driven critical discourse study. Applied Linguistics, 34(2), 173-190.

[9] Chu, Y. (2015). The power of knowledge: a critical analysis of the depiction of ethnic minorities in China’s elementary textbooks. *Race Ethnicity and Education*, *18*(4), 469–487. https://doi.org/10.1080/13613324.2015.1013460

[10] Crompton, J. L. (1979), An assessment of the image of Mexico as a vacation destination and the influence of geographical location upon that image, Journal of Travel Research, 17(4), 18±23.

[11] Côté-Boucher, K., Infantino, F., & Salter, M. M. (2014). Border security as practice: an agenda for research. Security Dialogue, 45(3), 195-208. https://doi.org/10.1177/0967010614533243.

[12] Chunyan Yi. (2024) Parental Language Ideologies in English and Affecting Familial Factors in Chongzuo City of Guangxi Border Areas. Journal of Humanities, Arts and Social Science, 8(3), 747-754.

[13] Dahan, T. (2019). “I live both lives”: exploring double consciousness in resident-students at an engaged institution. Michigan Journal of Community Service Learning, 25(2). https://doi.org/10.3998/mjcsloa.3239521.0025.201

[14] Dickinson, Janet E., Viachaslau Filimonau, Julia F. Hibbert, Tom Cherrett, Nigel Davies, Sarah Norgate, Chris Speed, and Chris Winstanley. 2017. “Tourism communities and social ties: The role of online and offline tourist social networks in building social capital and sustainable practice.” Journal of Sustainable Tourism 25 (2): 163–180. doi: 10.1080/09669582.2016.1182538.

[15] Fairclough N (1995) Critical Discourse Analysis: Critical Study of Language. New York: Longman.

[16] Fairclough, N. Language and Power[M]. London: Longman,1989.

[17] Fairclough, N. Discourse and Social Change[M]. Cambridge: Polity Press,1992.

[18] Fowler, R.et al. Language and Control[M]. London: Routledge and Kegan Paul,1979.

[19] Foucher M., 1986, Fronts et frontières, un tour du monde géopolitique, Paris: Fayard...

[20] Gazo, D. (2011). City councillors and the mission of public libraries. New Library World, 112(1/2), 52-66. https://doi.org/10.1108/03074801111100454

[21] Gan, J., Zhang, D., Guo, F., & Dong, E. (2024). Intensity of tourism economic linkages in Chinese land border cities and network characterization. Sustainability, 16(5), 1843. https://doi.org/10.3390/su16051843

[22] Ger, G., & Askegaard, S. (1997). Product-country images as stereotypes: a comparative study (Working paper no. 45). Center for Markedsovervagning. https://pure.au. dk/ws/files/32299402/wp45.pdf.

[23] Greenberg, Miriam. 2000. "Branding Cities: A Social History of the Urban Lifestyle Magazine." Urban Affairs Review 36 (2): 228–63. doi: 10.1177/10780870022184840.

[24] Greenberg, Miriam. 2003. "The limits of branding: the World Trade Center, fiscal crisis and the marketing of recovery." International Journal of Urban and Regional Research 27 (2): 386–416. doi: 10.1111/1468-2427.t01-1-00454.

[25] González Macías, C. J., Martinez, M. T., & Morales, S. A. (2017). Image management in a touristic destination: A qualitative approach analysis of the border city of Ciudad Juárez, México. European Scientific Journal, 13(23), 65-85.

[26] Gorman, T. (2013). Moral economy and the upper peasant: the dynamics of land privatization in the Mekong delta. Journal of Agrarian Change, 14(4), 501-521. https://doi.org/10.1111/joac.12047

[27] Hall, Stuart. 2003. "In but not of Europe: Europe and its myths." In Figures d'Europe: Images and myths of Europe, edited by Luisa Passerini, 35–46. Brussels: Peter lang.

[28] Hartig, Falk (27 November 2017). "China Daily - Beijing's Global Voice?". In Thussu, Daya Kishan; De Burgh, Hugo; Shi, Anbin (eds.). China's Media Go Global. Routledge. doi:10.4324/9781315619668.

[29] High H (2010) Laos: Crisis and resource contestation. Southeast Asian Affairs: 153–161.

[30] Huckin, T. 2002. "Critical Discourse Analysis and the Discourse of Condescension." In Discourse Studies in Composition, edited by E. Barton and G. Stygall, 155–176. New York: Hampton Press.

[31] Hung, N. and Vietnam, E. (2021). National image in international relations: the perception of China's national image on Vietnamese social media: a case study of the VNExpress of 2019. International Journal of Social Science and Human Research, 04(09). https://doi.org/10.47191/ijsshr/v4-i9-05

[32] Jiang, K., Li, K., Cong, N., Wu, S., & Peng, F. (2023). Spatial-temporal variation characteristics and obstacle factors of resilience in border cities of northeast China. Land, 12(5), 958. https://doi.org/10.3390/land12050958

[33] Kunovich, R. M. (2009). The sources and consequences of national identification. *American Sociological Review, 74* (4), 573–593.

[34] Lan, Z. (2024). Obstetric service demand is the main health need of the Vietnamese population in Guangxi, China: a cross-sectional study. Medicine, 103(6), e37234. https://doi.org/10.1097/md.0000000000037234

[35] Lawson, F., and Baud-Bovy, M. (1977), Tourism and Recreational Development. London: Architectural Press.

[36] Li Chengming., Ma Ying. (2023). A study of Chongqing's international image based on NOW corpus. Today Mass Media, 31(9), 125-130.

[37] Lloyd, Richard, and Terry Nichols Clark. 2001. "The City as an Entertainment Machine." Critical perspectives on urban redevelopment 6 (3): 357–378. doi: 10.1016/S1047-0042(01)80014-3.

[38] Lynch, K. (1964). The image of the city. MIT press.

[39] Martinez, R. and Stowell, J. I. (2012). Extending immigration and crime studies. The ANNALS of the American Academy of Political and Social Science, 641(1), 174-191. https://doi.org/10.1177/0002716212437363

[40] Nyı´ri P (2012) Enclaves of improvement: Sovereignty and developmentalism in the special zones of the China–Lao borderlands. Comparative Studies in History and Society 54(3): 533–562.

[41] Nyı´ri P and Tan D (eds) (2016) Chinese Encounters in Southeast Asia: How People, Money, and Ideas from China are Changing a Region. Seattle, WA: University of Washington Press.

[42] Qian, J. and Tang, X. (2018). Theorising small city as ordinary city: rethinking development and urbanism from China's south-west frontier. Urban Studies, 56(6), 1215-1233. https://doi.org/10.1177/0042098018762925

[43] Rabbiosi, Chiara. 2015. "Renewing a historical legacy: Tourism, leisure shopping and urban branding in Paris." Cities 42 (PB): 195–203. doi: 10.1016/j.cities.2014.07.001.

[44] Schultz, F., Utz, S., & Göritz, A. (2011). Is the medium the message? perceptions of and reactions to crisis communication via twitter, blogs and traditional media. Public Relations Review, 37(1), 20-27. https://doi.org/10.1016/j.pubrev.2010.12.001.

[45] Scott, M. Problems in investigating keyness, or clearing the undergrowth and marking out trails[A]. In Bondi, M.& M. Scott.(eds.). Keyness in Texts[C]. Philadelphia: John Benjamins Publishing Company, 2010.

[46] Scollon R (2004) Intertextuality across communities of practice. In: Moder CL and Martinovic-Zic A (eds) Discourse Across Languages and Cultures. Amsterdam: John Benjamins, pp. 149–176.

[47] Su, X. and Miao, Y. (2022). Border control: the territorial politics of policy experimentation in Chinese border cities. International Journal of Urban and Regional Research, 46(4), 522-541. https://doi.org/10.1111/1468-2427.13079

[48] Sui, L., Peng, F., & Wu, S. (2022). Spatio-temporal evolution of the resilience of Chinese border cities. Frontiers in Public Health, 10. https://doi.org/10.3389/fpubh.2022.1101799

[49] Soi, I. and Nugent, P. (2017). Peripheral urbanism in Africa: border towns and twin towns in Africa. Journal of Borderlands Studies, 32(4), 535-556. https://doi.org/10.1080/08865655.2016.1196601

[50] Sinclair, J. M. Reading Concordances: An Introduction[M]. Harlow: Longman,2003.

[51] Stamou, A. G., & Paraskevopoulos, S. (2004). Images of nature by tourism and environmentalist discourses in visitor's books: A critical discourse analysis of ecotourism. Discourse & Society, 15(1), 105-129.

[52] Szubert, M., Warcholik, W., & Żemła, M. (2021). The influence of elements of cultural heritage on the image of destinations, using four polish cities as an example. Land, 10(7), 671. https://doi.org/10.3390/land10070671

[53] van Dijk, T. A. 2001. "Critical Discourse Analysis." In Handbook of Discourse Analysis, edited by D. Tannen, D. Schiffrin, and H. Hamilton, 352–371. Oxford: Blackwell.

[54] van Dijk，T．A．News as Discourse[M].Hillsdale: Lawrence Erlbaum Associates，1987．

[55] van Dijk，T．A．Principles of critical discourse analysis［J］.Discourse ＆ Society，1993(2) ．

[56] van Leeuwen, Theo (2008) Discourse and Practice: New Tools for Critical Discourse Analysis. Oxford: Oxford University Press. https://doi.org/10.1093/acprof:oso/9780195323306.001.0001

[57] Van Hout T (2007) Analysing journalistic discourse practices (and winking at CDA). In: Pelsmaekers K and Rollo C (eds) Economically Speaking: Essays in Honour of Chris Braecke. Antwerp: Garant, pp. 325–338.

[58] Wang, Yang. 2017. “Re-imagining Guangzhou on Sina Weibo: Geo-identity and Chinese social media.” In Chinese Social Media: Social, Culture, and political Implication, edited by Mike Kent, Katie Ellis, and Jian Xu, 209–220. Milton: Taylor & Francis Group.

[59] Wang, Y., & Feng, D. (William). (2021). History, modernity, and city branding in China: a multimodal critical discourse analysis of Xi’an’s promotional videos on social media. Social Semiotics, 33(2), 402–425. https://doi.org/10.1080/10350330.2020.1870405

[60] Wodak, Ruth (2015) Critical discourse analysis, discourse-historical approach. In Karen Tracy (ed) The International Encyclopedia of Language and Social Interaction 275–288. Hoboken, NJ: John Wiley & Sons.

[61] Widdowson，H. G. Text，Context，Pretext: Critical Issues in Discourse Analysis［M］. Oxford: Blackwell Publishers, 2004.

[62] Thurlow, Crispin, and Adam Jaworski. 2017. “The discursive production and maintenance of class privilege: Permeable geographies, slippery rhetorics.” Discourse & Society 28 (5): 535–558. doi: 10.1177/0957926517713778.

[63] Xiao, R. Collocation［A］. In Biber，D. & R. Reppen(eds.). The Cambridge Handbook of English Corpus Linguistics［C］. Cambridge: Cambridge University Press，2015.

[64] Xu, D., Shen, J., & Xu, J. (2021). Branding a city through journalism in China: the example of Shenzhen. Journalism, 24(1), 193-210. https://doi.org/10.1177/14648849211004022

[65] Yoong, D., Koon, T. H., & Min, N. C. (2013). ‘This is not gambling but gaming’: Methods of promoting a lottery gaming company in a Malaysian daily. Discourse & Society, 24(2), 229–247. https://doi.org/10.1177/0957926512469433

[66] Zhou, B. and Zhong, Y. (2022). Instability in the cross-border labor market: a study on the high job turnover of migrant workers from rural Vietnam to rural China. Sustainability, 14(12), 7447. https://doi.org/10.3390/su14127447

[67] Zukin, Sharon. 1996. The Cultures of Cities. Malden, MA: Blackwell Publishing.

[68] Zukin, Sharon, Robert Baskerville, Miriam Greenberg, Courtney Guthreau, Jean Halley, Mark Halling, Kristin Lawler et al. 1998. “From Coney Island to Las Vegas in the Urban Imaginary: Discursive Practices of Growth and Decline.” Urban Affairs Review 33 (5): 627–54. doi:10.1177/107808749803300502.

Embracing or Resisting AI: Managerial Challenges in Adopting Artificial Intelligence in Vietnam's Hospitality Industry

Nuno F. RIBEIRO, Agnis STIBE, An Tran Ngoc PHUC

RMIT University Vietnam

Abstract

Introduction and Literature Review

Artificial Intelligence (AI), defined as computer systems capable of performing tasks requiring human-like cognition, has the potential to revolutionize the hospitality industry by streamlining operations, enhancing service consistency, and delivering personalized guest experiences (Bulchand-Gidumal, 2022; García-Madurga & Grilló-Méndez, 2023; Ribeiro, 2024a). While a growing body of research has documented AI applications in tourism and hospitality (Doborjeh et al., 2022; Knani et al., 2022; Law et al., 2024; Limna, 2023; Lv et al., 2022; Samara et al., 2020), scholarly attention to managerial resistance to AI adoption in the sector remains scarce (Kim et al., 2022; Rasheed et al., 2023), especially in the Southeast Asia cultural context.

Vietnam's hospitality industry contributes 6.4% to national GDP and supports 3 million jobs (WTTC, 2024). The sector expanded by nearly 30% year-on-year in 2024, driven by a record 127.5 million tourists, including 17.5 million international arrivals and robust domestic demand (VNAT, 2024). Despite this momentum, challenges persist, such as inconsistent service quality and a 12% international tourist revisit rate, much lower than neighboring countries such as Thailand and Malaysia (Ribeiro, 2024). These challenges highlight opportunities for AI integration in Vietnam's hospitality industry (Doborjeh et al., 2022; Limna, 2023).

While Vietnamese enterprises have rapidly embraced AI-based technologies across various sectors, AI adoption within the hospitality industry remains notably limited, especially among small- and medium-sized enterprises (SMEs), which constitute approximately 85% of the sector (Trung & Kumar, 2005; VNAT, 2023). Managerial resistance to AI adoption in Vietnam's hospitality sector emerges from a complex interplay of hierarchical decision-making traditions, cultural hesitancy, resource scarcity, and limited managerial understanding of AI's practical benefits (Bao, 2025; Rasheed et al., 2023, 2024), which is poorly understood. Van Huy et al. (2024) noted structural and financial constraints faced by Vietnamese SMEs when adopting disruptive technologies such as blockchain, a scenario closely paralleling AI adoption barriers. Additionally, Le et al. (2024) emphasize cultural resistance toward AI-driven communication tools, noting significant tensions between automation and Vietnam's embedded traditions of personalized human interactions.

Nguyen and Nguyen's (2025) survey of 372 Vietnamese tourism firms found that although AI-driven dynamic pricing significantly improved customer satisfaction and financial outcomes, these benefits heavily depended on managerial trust in AI systems rather than perceptions of algorithmic fairness. Similarly, Nguyen et al. (2022) identified incompatible IT infrastructure, underdeveloped vendor ecosystems, and significant skills gaps as major barriers impeding AI adoption among hospitality SMEs

in Vietnam. Cao et al. (2024) showed that 68% of medium-sized Vietnamese hotels experienced implementation paralysis, despite recognizing the value of AI in recruitment processes, primarily due to budget limitations and leadership reluctance to shift resources away from traditional practices.

Managerial challenges to AI adoption in Vietnam's hospitality sector are closely linked to managerial dynamics and the need for cultural adaptation, a connection that has been well-documented in research from other countries and cultural contexts. For example, Chen et al. (2022) demonstrated that hotels with proactive AI leadership achieved significantly faster implementation cycles, underscoring the critical role of leadership engagement in successful AI integration. Additionally, Ersoy and Ehtiyar's (2023) meta-analysis revealed that employee technostress (i.e., the stress experienced by employees due to the rapid implementation of new technologies) can significantly hinder the success of AI adoption in organizations. They found that technostress reduces AI adoption success by approximately 19% unless mitigated through effective change management strategies, supportive leadership, and targeted interventions to help employees adapt to technological changes. These global insights contextualize Vietnam's unique situation within El Hajal and Yeoman's (2024) concept of "augmented hospitality," which emphasizes the necessity of reimagining leadership models to balance AI-driven automation with the culturally valued human-centric service ethos prevalent in Vietnam.

Existing research has not thoroughly examined how managerial resistance manifests in Vietnam’s unique cultural, organizational, and resource contexts. This study fills that gap by exploring managerial perceptions, challenges, and opportunities related to AI adoption in Vietnam’s hospitality sector. It seeks to uncover insights into managerial resistance and develop culturally sensitive strategies that integrate technological innovation with Vietnam’s traditional hospitality values. The following research questions guide our study:

- What are the perceived benefits and challenges of adopting AI technologies in hotel operations within Vietnam’s hospitality industry?
    - How do organizational, cultural, and resource-related factors contribute to resistance toward AI adoption in Vietnamese hospitality organizations, particularly across SMEs versus larger enterprises?

Methodology

This study adopts a qualitative research design, utilizing semi-structured interviews to deeply explore managerial perceptions, experiences, and challenges related to adopting AI technologies within Vietnam's hospitality industry (Essien & Chukwukelu, 2022). Qualitative methods are particularly suited to capturing the nuanced interplay of personal attitudes, organizational practices, and cultural values that influence managerial resistance or acceptance of technological innovations (Hedman & Gimpel, 2010).

Data collection involves conducting in-depth interviews with 30–40 hotel managers across Vietnam, ensuring the identification of common barriers, unique organizational challenges, and varying managerial viewpoints regarding AI adoption (Ruël & Njoku, 2020). Interview data will be analyzed using thematic analysis,

following Braun and Clarke's (2021) updated guidelines for rigorous qualitative research. The analysis process involves multiple iterative phases: familiarization with the data through repeated readings, initial coding to identify relevant patterns, generating preliminary themes, reviewing and refining themes, defining and naming themes, and producing a coherent analytical narrative.

To ensure credibility and trustworthiness, the study has adopted several verification strategies consistent with best practices in qualitative research (Nowell et al., 2017). First, member-checking techniques are used, allowing participants to review interview transcripts and preliminary findings to confirm accuracy and resonance with their experiences. Second, researcher triangulation is employed, involving multiple researchers independently analyzing subsets of data to ensure consistency and reduce potential biases. Finally, the research team maintains detailed audit trails documenting all methodological decisions, coding processes, and analytical reflections, ensuring transparency and facilitating replicability of the study.

Preliminary Findings

Ongoing interviews with hospitality managers in Vietnam revealed key themes highlighting the challenges and opportunities associated with AI adoption in Vietnam's hospitality industry (Table 1). The findings reveal persistent challenges to AI adoption (cultural resistance, resource constraints, knowledge gaps, and authenticity concerns), as well as emerging opportunities (young tech-savvy workforce and personalized service potential).

Table 1 – Challenges and Opportunities of AI Adoption in the Hospitality Sector in Vietnam

Challenges:	Opportunities:
Cultural Resistance: Many managers, particularly among older generations, perceive AI as impersonal and potentially disruptive to these core values. *("The hospitality industry in Vietnam thrives on human touch and personalized service, making some stakeholders hesitant about replacing human interactions with AI-driven solutions."*)	**Young, Tech-Savvy Workforce:** Vietnam's younger demographic is generally familiar with technology and receptive to innovation (Chao et al., 2021; Hoang et al., 2023), creating a significant opportunity for AI integration. This younger generation can be a key driver in adopting and adapting AI solutions within the hospitality sector. (*"Vietnam is a very tech savvy country so introducing AI into hotel operations will be easier than in most countries."*)
Resource Constraints: SMEs often lack the financial and technological	**Personalized Guest Experiences:** The growing demand for tailored services

resources required for AI implementation (Wang & Qualls, 2006). Managers noted that limited access to skilled personnel exacerbates these challenges, hindering the adoption and long-term sustainability of AI solutions. *("Hotels are still struggling with key tech components of their ecosystem like PMS, Channel Managers [...] this is one more thing to consider."*)

Knowledge Gaps: Many managers remain uncertain about how AI can be integrated into existing operations without causing disruption (Wang & Qualls, 2006). This uncertainty may be fueled by a lack of readily available information and training resources tailored to the Vietnamese hospitality context. *("The challenge isn't applying AI, but understanding it. [...] Resistance comes from human factors like understanding, interest, and ability to implement."*)

Authenticity Concerns: Managers raised questions about how AI can be implemented without compromising the genuine human interactions and cultural nuances valued by visitors. (*"The key to successful adoption will be balancing automation with human-centric service while ensuring proper change management."*)

aligns with AI's potential to deliver personalized recommendations and enhance guest communication (Al-Hyari et al., 2023). This presents an opportunity for Vietnamese hotels to leverage AI to cater to individual guest preferences and improve overall satisfaction. (*"If a hotel has high digitalization across touchpoints, AI adds value with [...] chatbots for reservations and guest communication."*)

Discussion, Conclusion, and Directions for Future Research

This study builds upon existing research emphasizing the critical importance of understanding human factors in the successful integration of AI in hospitality (Al-Hyari et al., 2023). Preliminary findings underscore the necessity of adopting a nuanced, culturally sensitive approach to integrating AI technologies within Vietnam's hospitality sector (Huang & Rust, 2018). Our ongoing research seeks to deepen the understanding of managerial perceptions and barriers to AI adoption, aiming to develop actionable strategies tailored specifically to Vietnamese hospitality managers' unique

needs and concerns. Achieving successful AI integration will require organizational learning, targeted training programs, employee upskilling (), and clear demonstrations of AI's practical benefits aligned with Vietnam's distinct cultural norms and service expectations (Han et al., 2023Nguyen & Tran, 2020 Zhang et al., 2022).

Collaboration between technology providers and hospitality stakeholders is critical to ensure AI solutions are not only technically viable but also culturally appropriate and practically implementable (Ivanov & Webster, 2019; Lu et al., 2024). Incorporating local expertise and frontline staff perspectives can significantly enhance AI acceptance and relevance (Tussyadiah, 2020). To facilitate successful AI adoption, structured methodologies such as the Transformation Design Framework (TDF) provide a science-driven approach to integrating AI into organizational transformation while addressing behavioral barriers (Stibe, 2024).

Our ongoing findings offer practical recommendations for key stakeholders—policymakers, business leaders, and technology providers—in Vietnam's hospitality industry. Tung (2024) emphasizes the importance of tailored policy frameworks to overcome digitalization barriers faced by Vietnamese small- and medium-sized hotels, aligning closely with this study's emphasis on bridging technological potential with practical implementation. Similarly, Van et al. (2020) stress the critical balance needed between technological advancement and cultural preservation in post-pandemic tourism recovery, a perspective echoed in our research findings.

As AI adoption accelerates in Vietnam's hospitality industry, collaboration among academia, industry, and government will be pivotal in aligning AI innovations with Vietnam’s strategic goals. For instance, Nee (2022) advocates multi-stakeholder collaboration within ASEAN's digital transformation initiatives, noting that Vietnam's National Administration of Tourism has prioritized AI and smart tourism to enhance the country's competitive position.

By providing comprehensive insights into managerial perspectives and context-specific factors influencing AI adoption, this research contributes significantly to the broader discourse on technology integration in emerging markets, particularly Vietnam (Kumar, 2014; Vu et al., 2022). Future research should explore the specific roles played by government support, industry associations, educational institutions, and other factors (Stibe & Dinh, 2024) in facilitating AI adoption. Investigations could identify which AI applications are most suitable and beneficial within Vietnam's unique hospitality and cultural context(s). Further studies could explore how AI-driven transformation frameworks enable managers to navigate digitalization challenges and foster sustainable AI adoption.

Finally, this study highlights the urgent need for longitudinal research to track AI's operational impacts across Vietnam's hospitality ecosystem over time. For industry practitioners, our findings underscore the importance of developing clear long term AI implementation roadmaps that balance innovation with the preservation of Vietnam's hospitality ethos, meeting evolving technological expectations from both domestic and international travelers.

Keywords: artificial intelligence (AI), culture, hospitality, managerial resistance, Vietnam

References

[1] Al-Hyari, H., Al-Smadi, H., & Weshah, S. (2023). The impact of artificial intelligence (AI) on guest satisfaction in hotel management: An empirical study of luxury hotels. *GeoJournal of Tourism and Geosites, 48*(special issue), 810–819. https://doi.org/10.30892/gtg.482spl15-1081

[2] Nee, A. Y. H. (2022). Digital transformation and the ASEAN influences, issues, and challenges. In S. Ivanov & C. Webster (Eds.), *Digital transformation in aviation, tourism, and hospitality in Southeast Asia* (pp. 45–62). Routledge. https://doi.org/10.4324/9781003315179-4

[3] Bao, G. (2025, February). AI has the potential to fundamentally change Vietnam's hospitality industry. *Vietnam Economic Times* [online version]. Available online at https://en.vneconomy.vn/ai-co-tiem-nang-thay-doi-can-ban-nganh-khach-san-cua-viet-nam.htm

[4] Braun, V., & Clarke, V. (2021). *Thematic analysis: A practical guide*. SAGE Publications.

[5] Bulchand-Gidumal, J. (2022). Impact of artificial intelligence in travel, tourism, and hospitality. In *Handbook of e-Tourism* (pp. 1943-1962). Cham: Springer International Publishing. https://accedacris.ulpgc.es/bitstream/10553/106011/2/impact_artificial_intelligence.pdf

[6] Chao, P.-J., Hsu, T.-H., Liu, T.-P., & Cheng, Y.-H. (2021). Knowledge of and competence in artificial intelligence: Perspectives of Vietnamese digital-native students. *IEEE Access, 9*, 9435409. https://doi.org/10.1109/ACCESS.2021.3081749

[7] Doborjeh, Z., Hemmington, N., Doborjeh, M., & Kasabov, N. (2022). Artificial intelligence: a systematic review of methods and applications in hospitality and tourism. *International Journal of Contemporary Hospitality Management, 34*(3), 1154-1176. https://doi.org/10.1108/IJCHM-06-2021-0767

[8] Essien, A., & Chukwukelu, G. (2022). Deep learning in hospitality and tourism. *International Journal of Contemporary Hospitality Management*, *34*(1), 45-67. https://doi.org/10.1108/IJCHM-09-2021-1176

[9] García-Madurga, M.-Á., & Grilló-Méndez, A.-J. (2023). Artificial intelligence in the tourism industry: An overview of reviews. *Administrative Sciences, 13*(8), 1–22. https://doi.org/10.3390/admsci13080172

[10] Han, J. W., Nguyen, T. T. M., Hua, S. M., & Nguyen, T. T. (2023). Organizational learning through training effectiveness: Evidence from the hospitality industry in Vietnam. *The Learning Organization, 30*(4), 505–523. https://doi.org/10.1108/TLO-03-2022-0036

[11] Hedman, J., & Gimpel, G. (2010). The adoption of hyped technologies: A qualitative study. *Information Technology and Management, 11*, 161-175. https://doi.org/10.1007/s10799-010-0075-0

[12] Hoang, D. T. N., Phung, H., & Tran, N. (2023). Profiling digital nativeness of pre-service teachers: Validity evidence for the Vietnamese Digital Natives Assessment Scale (V-DNAS). *Interactive Learning Environments, 31*(8), 1-15. https://doi.org/10.1080/10494820.2022.2053167

[13] Huang, M. H., & Rust, R. T. (2018). Artificial intelligence in service. *Journal of Service Research, 21*(2), 155–172. https://doi.org/10.1177/1094670517752459

[14] Ivanov, S., & Webster, C. (Eds.). (2019). *Robots, artificial intelligence, and service automation in travel, tourism and hospitality*. Emerald Publishing. http://doi.org/10.1108/978-1-78756-687-3

[15] Kim, J., Hardin, A., & Lee, S. (2023). Factors influencing resistance to hospitality information system change. *Journal of Hospitality and Tourism Insights, 6*(5), 1926-1945. http://doi.org/10.1108/JHTI-04-2022-0129

[16] Knani, M., Echchakoui, S., & Ladhari, R. (2022). Artificial intelligence in tourism and hospitality: Bibliometric analysis and research agenda. *International Journal of Hospitality Management, 107*, 103317. https://doi.org/10.1016/j.ijhm.2022.103317

[17] Kumar, R. R. (2014). Exploring the role of technology, tourism and financial development: an empirical study of Vietnam. *Quality & Quantity, 48*(5), 2881-2898. http://doi.org/10.1007/s11135-013-9930-5

[18] Law, R., Lin, K. J., Ye, H., & Fong, D. K. C. (2024). Artificial intelligence research in hospitality: a state-of-the-art review and future directions. *International Journal of Contemporary Hospitality Management, 36*(6), 2049-2068. http://doi.org/10.1108/ijchm-02-2023-0189

[19] Le, M. T. H., Tran, C. M., Pham, T. T. M., & Nguyen, T. T. (2024). AI chatbot: Increasing emotional efficacy in tourism through anthropomorphic theory of acceptance model. *International Journal of Tourism Anthropology, 13*(1), 45–64. https://doi.org/10.1504/IJTA.2024.143397

[20] Limna, P. (2023). Artificial Intelligence (AI) in the hospitality industry: A review article. *International Journal of Computing Sciences Research, 7*, 1306-1317. https://doi.org/10.25147/ijcsr.2017.001.1.103

[21] Lv, H., Shi, S., & Gursoy, D. (2022). A look back and a leap forward: a review and synthesis of big data and artificial intelligence literature in hospitality and tourism. *Journal of Hospitality Marketing & Management, 31*(2), 145-175. https://doi.org/10.1080/19368623.2021.1937434

[22] Lu, L., Hua, M., Sun, X., Zou, R., & Lin, B. (2024). AI robots over sommeliers? Exploring the service provider effect on diners' wine ordering decisions at restaurants. *International Journal of Hospitality Management, 115*, 103601. https://doi.org/10.1016/j.ijhm.2024.103879

[23] Nguyen, T.-M., & Malik, A. (2021). Impact of knowledge sharing on employees' service quality: The moderating role of artificial intelligence. *International Marketing Review, 39*(3), 482–508. https://doi.org/10.1108/IMR-02-2021-0078

[24] Nowell, L. S., Norris, J. M., White, D. E., & Moules, N. J. (2017). Thematic analysis: Striving to meet the trustworthiness criteria. *International Journal of Qualitative Methods, 16*(1), 1–13. https://doi.org/10.1177/1609406917733847

[25] Rasheed, H. M. W., He, Y., Khizar, H. M. U., & Abbas, H. S. M. (2023). Exploring Consumer-Robot interaction in the hospitality sector: Unpacking the reasons for adoption (or resistance) to artificial intelligence. *Technological Forecasting and Social Change, 192*, 122555. https://doi.org/10.1016/j.techfore.2023.122555

[26] Rasheed, H. M. W., Yuanqiong, H., Khizar, H. M. U., & Khalid, J. (2024). What drives the adoption of artificial intelligence among consumers in the hospitality sector: a systematic literature review and future agenda. *Journal of Hospitality and Tourism Technology, 15*(2), 211-231. https://doi.org/10.1108/JHTT-02-2022-0045

[27] Ribeiro, N. F. (2024, October). Case study: Tourism in Vietnam. In *Capturing high quality tourism for Southeast Asia*. Oxford, UK: Oxford Economics/Asia Pacific International Spirits and Wines Alliance (APISWA). https://apiswa.org/wp-content/uploads/2025/01/APISWA_Final-OE-Tourism-Report.pdf

[28] Ribeiro, N. F. (2024a, September). AI can be a game changer for Vietnam tourism. *The Investor*. https://theinvestor.vn/ai-can-be-a-game-changer-for-vietnam-tourism-d12187.html

[29] Ruel, H., & Njoku, E. (2021). AI redefining the hospitality industry. *Journal of Tourism Futures, 7*(1), 53–66. https://doi.org/10.1108/JTF-03-2020-0032

[30] Samara, D., Magnisalis, I., & Peristeras, V. (2020). Artificial intelligence and big data in tourism: a systematic literature review. *Journal of Hospitality and Tourism Technology, 11*(2), 343-367. https://doi.org/10.1108/jhtt-12-2018-0118

[31] Stibe, A. (2024). Transformation Design Framework for AI-Driven Hyper-performance. In *International Conference on Mobile Web and Intelligent Information Systems* (pp. 220-236). Cham: Springer Nature Switzerland. https://doi.org/10.1007/978-3-031-68005-2_16

[32] Stibe, A. & Dinh, T. H. (2024). Exploring human artificial intelligence using the knowledge behavior gap model. In *International Conference on Mobile Web and Intelligent Information Systems* (pp. 189–203). Cham: Springer Nature Switzerland. https://doi.org/10.1007/978-3-031-68005-2_14

[33] Trung, D. N., & Kumar, S. (2018). Resource use and waste management in Vietnam hotel industry. *International Journal of Contemporary Hospitality Management, 30*(11), 2785–2804. https://doi.org/10.1108/IJCHM-04-2017-0220

[34] Tung, P. T. (2024). Assess the barrier of small and medium-sized hotel digitalization: A combination of AHP and DEMATEL analysis. *Journal of Environmental Management & Tourism, 15*(2), 112–130. https://doi.org/10.14505/jemt.v15.3(75).10

[35] Tussyadiah, I. (2020). A review of research into automation in tourism: Launching the Annals of Tourism Research Curated Collection on Artificial Intelligence and Robotics in Tourism. *Annals of Tourism Research, 81*, 102883. https://doi.org/10.1016/j.annals.2020.102883

[36] Van, N. T. T., Vrana, V., Duy, N. T., Minh, D. X. H., Dzung, P. T., Nguyen, N. P., & Nguyen, T. T. (2020). The role of human–machine interactive devices for post-COVID-19 innovative sustainable tourism in Ho Chi Minh City, Vietnam. *Sustainability, 12*(22), 9523. https://doi.org/10.3390/su12229523

[37] Van Huy, L., Truong, H. T. H., Vo-Thanh, T., Nguyen, T. T. H., Nguyen, N. T., & Pham, H. T. (2024). Determinants of blockchain technology adoption in small and medium hospitality and tourism enterprises. *Journal of Hospitality & Tourism Research*. https://doi.org/10.1080/19368623.2024.2335931

[38] VietnamPlus. (2024, December 25). *Boosting the application of AI in Vietnamese enterprises.* Vietnam Plus [online version]. https://en.vietnamplus.vn/boosting-the-application-of-ai-in-vietnamese-enterprises-post307351.vnp

[39] Vietnam National Administration of Tourism (VNAT) (2025) *Tourism statistics* [online] https://vietnamtourism.gov.vn/en/statistic/international (accessed 14 March 2025).

[40] Vietnam National Administration of Tourism (VNAT) (2023) *Vietnam's yearly tourism report 2019* [online] https://vietnamtourism.gov.vn (accessed 14 March 2025).

[41] Vu, N. H., Bui, T. A., Hoang, T. B., & Pham, H. M. (2022). Information technology adoption and integration into global value chains: Evidence from small-and medium-sized enterprises in Vietnam. *Journal of International Development, 34*(2), 259-286. https://doi.org/10.1002/jid.3591

[42] Wang, Y., & Qualls, W. J. (2016). Towards a theoretical model of technology adoption in hospitality organizations. *International Journal of Hospitality Management, 53*, 108–117. https://doi.org/10.1016/j.ijhm.2015.12.001

[43] World Travel & Tourism Council (WTTC) (2024, June). Vietnam's travel & tourism set for a record 2024. [online] https://wttc.org/news-article/vietnams-travel-and-tourism-set-for-a-record-2024 (accessed 14 March 2025).

Grandparent vacations with grandchildren: Perceived benefits and challenges

Shufan LV[1], Jong-Hyeong KIM[12]

[1]The Hainan University-Arizona State University Joint International Tourism College, Hainan University, Haikou, Hainan, China

[2]School of Community Resources and Development, Arizona State University, 411 N. Central Avenue, Phoenix, AZ 85004, USA

Abstract

Introduction

The population of senior adults (i.e., those aged 60 and older) is growing worldwide and has become an important market segment (Pan et al., 2020). The World Tourism Organization predicted that by 2050, more than 2 billion international travelers would be aged 60 years and over (Pestana et al., 2020). The importance of senior tourists is evident in China, where the elderly population is expected to exceed 500 million people by 2035 (Yue, 2022). Tourism is a common leisure behavior among older Chinese people with an average frequency of four trips per year (Otoo & Kim, 2020). Thus, senior tourism has become an important part of future tourism and affects all sectors of the tourism and hospitality industry (Otoo & Kim, 2020). Given the significance of this market, researchers have endeavored to better understand senior tourists' motivations (Pestana et al., 2020), destination choice (Pan et al., 2021), constraints (Huber et al., 2018), and desired benefits, including psychological well-being (Yue, 2022) and life satisfaction (Pan et al., 2020). The findings from these studies can support destination managers in better serving senior tourists.

However, a significant gap in the extant tourism literature is the lack of information on a popular form of tourism involving senior tourists, i.e., grandparent-grandchild travel. Gram et al. (2019) coined the term grandtravel, which refers to a trip taken by grandparents and their grandchildren together with or without the middle generation (i.e., the parents of the grandchildren). This type of travel has become popular in the market. As reported by the National Tour Association (2024), approximately 35% of leisure travelers who are grandparents traveled with their grandchildren in the previous year. This trend is reflected in the family tourism literature, in which the research focus has shifted from the nuclear family to the extended family (Yi et al., 2023). Table 1 presents prior research on the travel of grandparents and grandchildren. Previous studies have improved our understanding of the experiential factors that constitute the travel of grandparents and grandchildren (de Guzman et al., 2024; Gram et al., 2019; Zhang et al., 2023). However, a problem in the extant literature is a lack of information on the factors that promote or inhibit grandparent–grandchild travel. Thus, this paper presents an exploratory qualitative study to identify grandparents' perceived benefits and challenges related to their travel with grandchildren.

Methodology

We conducted interviews with 80 grandparents who had participated in travel with their grandchildren in the previous year. To ensure the representativeness of our study sample, we employed a quota sampling method (*n*= 20) to collect data from four different city levels in China (i.e., Tier 1 to Tier 4, Huang & Wei, 2017). Using screening questions (i.e., "Do you have a grandchild?" and "Have you traveled with (a) grandchild(ren) without parents in the last twelve months?"), a Chinese panel data company (i.e., Weidiaocha (www.weidiaocha.com)) identified qualified participants. An equal number of grandfathers (*n*= 40) and grandmothers (*n*= 40) participated in the interviews. The interviewees were between the ages of 59 and 78; 70% were married, 60% were high school graduates or below, 75% were retired, 55% earned a monthly income between CHY5,000 and CHY9,999 (USD689-1,378), and 62% reported that they did not live with their grandchild.

Table 1. Prior research on intergenerational travel.

Study	Data source	Context	Key findings
Liu et al.	Survey of 622 family tourists (344 parents and 278 adult children)	China	This study found that daily intergenerational solidarity significantly influences travel motivation, satisfaction, and subjective well-being; whereas daily intergenerational conflict affects travel motivation only.
de Guzman et al. (2023)	Interviews with 15 grandchildren aged 15 to 18	Philippines	Grandparent-grandchild travel provides three different types of emotional experiences (i.e., relational, informational, and inspirational affordance) to grandchildren.
Wang et al. (2023)	Interviews with 20 elderly parents of adult children	China	This study identified various interactions between elderly tourist and adult children based on their travel experiences. This study further identified the impact of intergenerational interaction during the trip on elderly tourists' well-being.
Zhang et al. (2023)	Interviews with 30 adult grandchildren	China	Filial piety plays an important role in motivating grandchildren to travel with their grandparents. As such, overall satisfaction with the travel is dependent on the satisfaction of grandparents during the trip.
Gram et al. (2019)	Interviews with grandparents (*n*= 23) and grandchildren (*n*= 17)	Denmark & New Zealand	Three kinds of time are involved in grandparent-grandchild travel: fun time, finite time, and legacy time. Emotional experiences associated with each time were found to enhance the hedonic and eudaimonic wellbeing of participants.
Shavanddasht (2018)	Survey of 516 grandparents who traveled with (*n*=258) and without grandchildren (*n*=258)	Iran	Different motivations for a travel with and without grandchildren were identified. For example, motivations for travel without grandchildren included escapism, relaxation, novelty seeking, enjoyment, appreciating historical/natural attractions, and gaining knowledge. Motivations for traveling with grandchildren included family relationships and quality experiences.
Hebblethwaite (2016)	Interviews with 30 grandparents of adult grandchildren	Canada	Two important purposes of intergenerational travel were identified: developing family ties and transmitting family values.

Two Chinese scholars with expertise in family tourism and extensive qualitative research experience conducted semistructured interviews from March 2024 to April 2023. All interviews took place on the phone and lasted between 25 and 45 minutes (average 35 minutes). The participants were asked to recall their most recent travel with their grandchild and answer a series of open-ended questions (e.g., "What is the main reason (motivation) for you to travel with your grandchildren?", "What are the benefits for you to travel with your grandchild?", "How important is it to you as a family to travel with your grandchild?", "Why is it important?", and "What challenges or difficulties did you encounter during this trip?"). All interviews were recorded and transcribed verbatim. We employed grounded theory approach to analyze the data. Specifically, content analysis with systematic coding and categorization was used to

examine large amounts of textual data, allowing for the identification of trends, patterns, relationships, and communication structures (Grbich, 2007).

Results

Benefits of grandparent–grandchild travel

Prior research emphasized emotional experiences as the core value of grandparent-grandchild travel (de Guzman et al., 2024). Furthermore, research on family travel has documented different types of benefits sought by different family members (e.g., experiential learning for children and escapism and relaxation for adults; Lehto et al., 2017; Li et al., 2024). Consistent with previous findings, this study identified the following five benefits: emotional closeness, sympathetic understanding, feeling welcomed, escapism and relaxation, and experiential learning for grandchildren.

Emotional closeness

"Traveling with my grandson enhances the intimacy between us and strengthens our relationship."
(Participant 01)

"Traveling gave me the opportunity to communicate with my grandchild and strengthened our mutual affection."
(Participant 14)

Sympathetic understanding

"During the trip, I share feelings and experiences with my granddaughter, and we listen to each other's thoughts and feelings. This allows us to understand each other's thoughts and feelings more deeply."
(Participant 02)

"When I travel, I have the opportunity to have real and in-depth communication with my grandchildren. We can share ideas, interests and experiences with each other. This can help bridge the generation gap and increase mutual understanding and respect."
(Participant 24)

Feeling welcomed

"My grandchild enjoys traveling with me so much that he always wants to make holiday plans with me. I am sure he will continue to be my travel partner."
(Participant 62)

"This special travel experience makes me feel appreciated by my granddaughter and the connection between her and me. I can see how much my granddaughter cares about me and our selfless love for each other as a family."
(Participant 73)

Shared memory

"In the trip, we had a lot of memories that were unique to us."
(Participant 13)

"Traveling can make our mood very happy but can also create permanent memories and more common experiences. These good memories affect our attitude for a long time, making us more optimistic and positive."
(Participant 05)

Escapism & relaxation

"Traveling with my grandson makes me feel younger at heart, and I feel completely relaxed physically."
(Participant 03)

"Living in a city means a busy life every day. Traveling to the quiet of Maoshan with my grandchild made me feel the quietness of nature and filled my life with energy and peace."
(Participant 13)

Experiential learning for a grandchild

"Traveling with my grandson can increase the opportunities for me to communicate with my grandson, understand his inner thoughts, help him analyze and solve problems, and give him the correct value orientation, which is conducive to the next step of my grandson's growth."
(Participant 38)

"My trips with my granddaughter can help her broaden her horizons, grow her knowledge, and develop her independence and self-confidence. At the same time, traveling is an educational way for my granddaughter to learn about different cultures, history and geography."
(Participant 80)

Challenges involved in grandparent–grandchild travel

To date, only a few studies have investigated the challenges associated with family travel; most earlier studies on this subject examined only its benefits (Lehto et al., 2017; Li et al., 2024; Wang & Li, 2021). To address this gap, we asked about the challenges and difficulties that grandparents experienced and/or worried about during travel with their grandchildren. Six different types of challenges were identified in the qualitative data.

Financial

"Things were more expensive than our hometown because it was a big city. Thus, we did not do a lot of shopping and mainly did sightseeing."
(Participant 36)

"The attractions my granddaughter wanted to visit were very crowded, especially during our holidays. We had to spend more money and wait longer in the line."
(Participant 76)

Physical health

"The main challenge I encountered during this trip was physical discomfort. I have some minor conditions in winter, such as weak bones, irregular heart rate, coughing, and sometimes higher blood pressure. I felt bad that I could not participate in all the activities.that my grandchild wanted."
(Participant 68)

"Due to aging, my physical strength is not as good as it was when I was younger. When I was hiking, I sometimes felt a little labored and had to take a rest. This made me realize that I need to plan travel with more rest and adjustment to keep my body healthy and safe."
(Participant 72)

Overseeing kids' safety

"The biggest difficulty was keeping the children safe. The child is too small to go to a strange place. I must pick up the child to avoid losing them, which is my greatest concern."
(Participant 4)

"My grandchildren are very small. I was very worried that they may get into trouble or have an accident, so I had to pay attention to the safety of the children during the whole trip."
(Participant 12)

Performance of tourism products

"We booked a hotel online this time based on the pictures listed on the website. When we arrived, it looked different from the pictures, and the location was very inconvenient."
(Participant 64)

"The attractions are very crowded, especially during holidays or peak travel seasons. When visiting the attractions, the crowds and queues took a long time."
(Participant 79)

Computer illiteracy

"During our trip, most of the entrance tickets and the hotels had to be booked in advance. However, because I am older and not proficient in using the applications, I encountered difficulties in booking hotels and tickets online."
(Participant 61)

"I am not familiar with smartphones or digital technology, so I had to queue up for a long time whenever I had to buy tickets, and it delayed our schedule many times"
(Participant 64)

Different lifestyles for grandparents and grandchildren

"I used to get up at night to go to the toilet. I was afraid that going to the toilet all the time would disturb my granddaughter's sleep, so I deliberately made myself drink less water."
(Participant 45)

"Travel involves eating local cuisine, but my grandson does not like to eat unfamiliar food. So we had to find a place that sold routine food like eggs and buns."
(Participant 46)

Discussion and conclusion

Grandparent-grandchild travel has become popular. However, research on this niche family tourism market is limited (Gram et al., 2019). To rectify this problem, this study conducted qualitative research to identify the benefits and challenges involved in grandparent-grandchild travel. In support of previous research findings in family tourism, this study identified multiple benefits, including emotional closeness, sympathetic understanding, feeling welcomed, shared memory, escapism & relaxation, and experiential learning. Another important finding of this study is the identification of six types of challenges perceived by grandparents: financial, physical health, overseeing children's safety, the performance of tourism products, computer illiteracy, and different lifestyles for grandparents and grandchildren. These findings contribute to the tourism literature by enhancing our understanding of grandparents' perceptions that affect grandparent–grandchild travel. Empirically, this study provides important practical implications for destination managers and marketers in accommodating this important market.

Keywords: grandparents, grandparent–grandchild travel, benefits, challenges

References

[1] de Guzman, A. B., Antonio, A. S. G., Gatbonton, M. A., Romasanta, K. M. F., & Tolentino, P. D.D. (2023). Grand travel as a new spring of informal intergenerational learning (IGL): Filipino grandchildren's emotional experiences during family leisure. *Leisure Studies*, 1-14.

[2] Gram, M., O'Donohoe, S., Schänzel, H., Marchant, C., & Kastarinen, A. (2019). Fun time, finitetime: Temporal and emotional dimensions of grandtravel experiences. *Annals of Tourism Research*, *79*, 102769.

[3] Grbich, C. (2007). *Qualitative Data Analysis: An Introduction*. London: SAGE.

Hebblethwaite, S. (2016). Grandparents' Reflections on Family Leisure: " It keeps a Family Together". *Journal of Leisure Research*, *48*(1), 69-82.

[4] Lehto, X. Y., Fu, X., Li, H., & Zhou, L. (2017). Vacation benefits and activities: Understanding Chinese family travelers. *Journal of Hospitality & Tourism Research*, *41*(3), 301-328.

[5] Li, Z. Z., Yang, Y., & Zhang, X. (2024). Family travel as an educational experience: Revealing multi-level Parents' perceived value through a family systems approach. *Tourism Management Perspectives*, *53*, 101301.

[6] National Tour Association (2024). Family and multi-generational travel outlook. Available at: https://ntaonline.com/education/travel-market-guides/family/

[7] Otoo, F. E., & Kim, S. (2020). Analysis of studies on the travel motivations of senior tourists from 1980 to 2017: Progress and future directions. *Current Issues in Tourism*, *23*(4), 393-417.

[8] Pan, Y., Fu, X., & Wang, Y. (2020). How does travel link to life satisfaction for senior tourists? *Journal of Hospitality and Tourism Management*, *45*, 234-244.

[9] Pan, Y., Wang, X., & Ryan, C. (2021). Chinese seniors holidaying, elderly care, rural tourism and rural poverty alleviation programmes. *Journal of Hospitality and Tourism Management*, *46*, 134-143.

[10] Pestana, M. H., Parreira, A., & Moutinho, L. (2020). Motivations, emotions and satisfaction: The keys to a tourism destination choice. *Journal of Destination Marketing & Management*, *16*, 100332.

[11] Shavanddasht, M. (2018). Grandparent's segmentation by the tourism motivation: Travellingwith or without grandchildren. *Young Consumers*, *19*(2), 141-158.

[12] Yue, L. (2022). Senior Tourism: Challenges and Opportunities in the Context of Aging, Social Change, and the Well-Being of the Chinese Elderly. *Tobacco Regulatory Science (TRS)*, 623-637.

[13] Zhang, G., Jian, X., Yu, Y., & Tao, Y. (2023). Blood is Thicker Than Water: Filial Piety andGrandtravel Experiences of Generation Z. *Journal of China Tourism Research*, *19*(4), 926-949.

Cultural Co-Creation in Travel Photography: A Case Study of Consumer Engagement and Destination Marketing in Lijiang

Peng LIU[1], Yifei LI[1*], Chunlong CAI[2], Mengmeng ZHANG[2]

[1]Nolan School of Hotel Administration Cornell University

[2]School of Business and Tourism Management Yunnan University

*Corresponding Email: yl3824@cornell.edu

Chunlong CAI and Mengmeng ZHANG contributed equally and are listed as co-third authors.

Abstract

Introduction

With the rise of the experience economy and visual social media, travel has evolved into a lifestyle ritual that blends self-expression, emotional immersion, and cultural engagement. Travel photography—particularly immersive "trip shoots"—embodies this trend, transforming tourists into active co-creators of personalized visual experiences.

Chalfen (1979) initially defined tourist photography as images captured by tourists and those produced collaboratively with host communities. Contemporary scholarship recognizes it as a socially embedded practice through which individuals construct identity, engage in symbolic consumption, and co-shape destination narratives (Urry& Larsen, 2011; Stylianou-Lambert, 2012). Personal photographs are now widely shared across platforms, influencing others' travel motivations and forming a broader narrative economy (Lo & McKercher, 2015; Tussyadiah, 2020).

Building on this evolution, scene theory (Pine & Gilmore, 1998; Wang & Zhu, 2018) conceptualizes tourist destinations as performative stages rather than passive spaces. It underscores the role of spatial aesthetics, cultural context, and service design in shaping immersive experience environments. Mirror theory (Lacan, 2006) offers a complementary psychological dimension, illustrating how identity is imagined, rehearsed, and affirmed through the visual process of self-performance. When individuals view others' travel imagery, they begin to envision their ideal travel selves, which later become embodied through experience co-creation.

Lijiang, a culturally rich city in Yunnan Province, is an ideal context for examining this process. With over 2,000 photography studios and 600 registered providers, Lijiang's vibrant travel photography ecosystem addresses the growing tourist demand for personalized and culturally embedded experiences. Against this backdrop, this study explores how travel photography enables tourists to engage in identity construction, visual storytelling, and symbolic co-creation through interaction with studios and local environments.

Guided by scene and mirror theories, this study investigates how destination-based photography practices foster cultural co-creation. Specifically, we examine:

• how environmental factors influence consumers' decisions to engage in travel photography,

• how these factors shape social sharing behaviors

• how co-creation among tourists, photography studios, and destinations affects overall satisfaction.

To structure our analysis, we propose the following hypotheses:

H1: Service quality (e.g., makeup, styling) and physical accessibility influence tourists' choice of photography studio.

H2: Cultural symbols and scenic aesthetics influence tourists' willingness to share photos on social media.

H3: Co-creation involving tourists, studios, and destinations positively impacts satisfaction with the experience.

Methodology

This study adopts a mixed-methods case study design, integrating quantitative and qualitative data to examine travel photography behavior in Lijiang. Drawing on the AISAS model (Attention–Interest–Search–Action–Share), scene theory, and mirror theory, the framework aims to capture how tourists move from initial inspiration to identity affirmation through photographic engagement.

Data Collection

The research began with several rounds of preliminary site visits and informal interviews with photographers and customers in Lijiang's Old Town. Based on this groundwork, the team identified a typical "service flow" that was subsequently experienced through immersive participant observation. Researchers followed the entire customer journey: selecting a photoshoot theme, choosing costumes and makeup, participating in on-site photography, reviewing image proofs, and observing post-production editing. This process yielded first-hand insights into decision-making dynamics, emotional responses, and sensory touchpoints not easily accessed through surveys alone.

A structured survey was administered in person (at photography studios and local inns) and online (via platforms frequented by tourists who had recently visited Lijiang). Out of 230 distributed surveys, 218 valid responses were collected. The sample was predominantly female (76%), with over 80% aged between 14 and 34. Motivations for engaging in travel photography were primarily leisure-oriented (82%), followed by cultural curiosity (14%). The questionnaire included items related to studio selection criteria, participation in creative decisions, social sharing behavior, and a satisfaction index.

A content analysis was conducted on user-generated posts from platforms analogous to Reddit to complement the survey findings. By examining captions, hashtags, and comments, the team explored how travelers frame their photoshoots, what aspects they highlight, and how these reflect their expectations or perceived cultural immersion. These insights were cross-validated with survey data to identify recurring themes related to value perception and symbolic expression.

Theoretical Framing and Hypotheses

The combined application of scene theory and mirror theory serves as the theoretical backbone for this study. Scene theory contextualizes how spatial design, cultural cues, and service environments influence tourist perception and interaction (Jorgensen, 2011; Wang & Zhu, 2018). Mirror theory illuminates the psychological transformation whereby individuals evolve from spectators of others' imagery into performers within co-created cultural scripts (Lacan, 2006; Lü & Li, 2024).

Grounded in this dual framework, we propose three hypotheses:

H1: Service quality (e.g., personalized styling, attentive guidance) and spatial accessibility influence tourists' choice of photography studio.

H2: Cultural features and aesthetic composition positively influence tourists' willingness to share photos on social media.

H3: Co-creation involving tourists, studios, and the destination enhances overall satisfaction with the photography experience.

Results

H1: Service Quality Over Convenience

Survey results partially supported H1. Tourists emphasized makeup and styling quality as a significant reason for choosing a studio ($p = 0.002$). In contrast, physical convenience, such as proximity to photo locations, was not statistically significant ($p = 0.503$). This suggests a shift from prioritizing logistical ease to valuing immersive and personalized service experiences.

H2: Cultural Symbolism Drives Sharing

Analysis of survey and social media data supported H2. Photos featuring cultural symbols—like traditional ethnic attire or heritage architecture—increased tourists' willingness to share online ($p = 0.023$). Pure landscape beauty alone had a weaker impact ($p = 0.281$). Users preferred photos that integrated "people + culture + scenery," which allowed them to tell personal stories with cultural resonance.

H3: Triadic Co-Creation Enhances Satisfaction

Interview data and observational insights confirmed H3. Tourists actively participated in selecting themes, poses, and aesthetics, acting as co-designers rather than passive subjects. Studios provided technical support and emotional and narrative guidance— destinations contributed by offering unique cultural environments that served as expressive backdrops.

Studio Case Illustrations

The four studios—labeled Studio A to D—were selected from an initial pool of 12 surveyed studios. They represent diverse approaches to co-creation within Lijiang's travel photography industry, varying in service models, branding strategies, and degrees of cultural integration.

A strong emphasis on authenticity and cultural depth characterized Studio A. Rejecting standardized packages, it tailored each photoshoot to the tourist's background and expectations, often incorporating ethnic symbols and local storytelling. Studio B prioritized transparency and customer involvement by integrating structured feedback systems and offering flexible customization options. This allowed clients to participate more actively in service design and post-production decisions. Studio C maintained

consistency and quality control through independent operations and a clearly defined aesthetic signature. Unlike chain studios, it emphasized coherence over volume, fostering trust through a stable style identity. Studio D, by contrast, relied heavily on community-based reputation and long-term relationships, building loyalty through word-of-mouth marketing and a locally grounded brand narrative.

Despite these differences, all four studios demonstrated a commitment to aligning aesthetic production with cultural expression and client participation. They produced images and collaborative experiences that reflected personal narratives and local identity.

Discussion

The findings of this study reveal a coherent behavioral trajectory in how tourists engage with immersive photography experiences in Lijiang. Tourists begin by perceiving visually compelling content—often online—which captures their attention and triggers interest in personalized, culturally resonant photo experiences. Their choice of studio is influenced less by physical convenience and more by the promise of stylistic quality and symbolic depth. Once engaged, tourists not only co-create images but also construct and project versions of self that are mediated by cultural settings. When shared on social platforms, these personalized visuals generate validation, inspire others, and reinforce satisfaction with the experience. Through this cycle, destination image, individual identity, and social connection are all co-produced.

From a destination management perspective, these insights underscore the importance of designing tourism environments that integrate cultural storytelling with service delivery. Rather than treating cultural heritage as a background, destinations can amplify their appeal by embedding it into interactive visitor experiences. Elements like architectural authenticity, live performances, and costume availability allow travelers to participate more deeply and creatively, resulting in richer narratives and more distinctive outputs. When such infrastructure is in place, destinations evolve from static backdrops into dynamic stages for identity performance.

The implication for photography studios is clear: travelers increasingly seek more than technical competence. Studios that act as creative collaborators—guiding tourists in posing and developing a meaningful visual narrative—are better positioned to generate satisfaction and a long-term reputation. Facilitating emotional expression, flexible thematic options, and fostering dialogue throughout the creative process distinguish co-creative studios from merely transactional ones.

Social media plays a catalytic role in this dynamic. Tourists are not just documenting memories but authoring stories. Destinations and service providers that treat online platforms as spaces for collaboration rather than advertising can tap into tourists' desire for authenticity and self-expression. When tourists are encouraged to share their narratives—especially those rooted in culture and emotion—they extend the co-creation process beyond the trip and contribute to a user-generated archive of destination meaning.

Theoretically, this study contributes to a more integrated understanding of co-creation in tourism. By combining scene theory and mirror theory, we show how material

environments, symbolic structures, and psychological processes intersect in constructing tourist identity. Co-creation is not simply a marketing strategy or service trend but a layered process through which tourists reinterpret themselves in unfamiliar cultural settings. This study also highlights a shift in tourist values: while convenience was once a primary driver of decision-making, today's travelers prioritize emotional resonance, aesthetic quality, and opportunities for personal transformation. These findings enrich tourism literature by reframing co-creation as both externally collaborative and internally reflective.

Conclusion

This study conceptualizes immersive travel photography as a co-creative process shaped by the collaboration of tourists, photography studios, and destination environments. Drawing on the case of Lijiang, we examined how scene design, cultural embedding, and service personalization influence travelers' decisions, social sharing behaviors, and overall satisfaction. The findings affirm that tourists today are not merely consuming visual experiences; they are participating in their creation, often intending to express a version of self shaped by cultural context. When that creative process is guided by studios with cultural sensitivity and enabled by destinations that offer symbolic richness, the result is more than just a set of photos— it is a narrative of identity, place, and emotion.

The shift from transactional service delivery to collaborative meaning-making is at the heart of this process. Studios that provide personalized guidance and emotional support can transform photography from a routine product into a profoundly memorable experience. Destinations that offer immersive, culturally resonant settings become co-authors in the tourist's journey. As a result, satisfaction is driven not only by quality or aesthetics but also by the traveler's sense of participating in something meaningful and self-defining.

While this study offers a grounded framework for understanding cultural co-creation in travel photography, several limitations remain. The sample primarily reflects young, digitally engaged tourists within a Chinese media environment; findings may not generalize across age groups or platforms like Instagram and TikTok. Additionally, our study focused on a heritage-oriented destination—co-creation dynamics may differ in urban, adventure, or luxury settings. Future research could explore how role-play intensity, cultural identification, or algorithmic content exposure shape co-creative behaviors across diverse tourist profiles and digital environments.

Despite these boundaries, this study contributes to ongoing conversations about co-creation, identity, and tourism by demonstrating how visual practices reflect and construct cultural meaning. Travel photography in places like Lijiang is more than a service; it is a medium through which travelers become performers, storytellers, and co-creators. Recognizing this opens space for new forms of engagement—where authenticity is not staged but collaboratively written, one photo at a time

References

[1] Albers, P. C., & James, R. (n.d.). A methodological approach. [Reference details incomplete in source]

[2] Bedard, S. A., & Tolmie, C. R. (2018). Millennials' green consumption behavior: Exploring the role of social media. Journal of Social Marketing, 8(3), 289–305.
[3] Bitner, M. J. (1992). Servicescapes: The impact of physical surroundings on customers and employees. Journal of Marketing, 56(2), 57–71.
[4] Binkhorst, E., & Den Dekker, T. (2009). Agenda for co-creation tourism experience research. Journal of Hospitality Marketing & Management, 18(2-3), 311–327.
[5] Campos, A. C., Mendes, J., Valle, P. O., & Scott, N. (2018). Co-creation of tourist experiences: A literature review. Current Issues in Tourism, 21(4), 369–400.
[6] Chalfen, R. M. (1979). Photograph's role in tourism: Some unexplored relationships. Annals of Tourism Research, 6(4), 435–447.
[7] Jorgensen, A. (2011). Beyond the view: Future directions in landscape aesthetics research. Landscape and Urban Planning, 100(4), 353–355.
[8] Lacan, J. (2006). Écrits: The first complete edition in English (B. Fink, Trans.). W.W. Norton & Company. (Original work published 1949)
[9] Li, N., Meng, F., & Martin, D. (2023). The influence of travel photo editing on tourists' experiences. Tourism Management, 98, 104762.
[10] Lo, I. S., & McKercher, B. (2015). Ideal image in process: Online tourist photography and impression management. Annals of Tourism Research, 52, 104–116.
[11] Pine, B. J., & Gilmore, J. H. (1998). Welcome to the experience economy. Harvard Business Review, 76(4), 97–105.
[12] Schwarz, K. C. (2021). "Gazing" and "performing": Travel photography and online self-presentation. Tourist Studies, 21(2), 260–277.
[13] Stoffelen, A. (2019). Disentangling the tourism sector's fragmentation: A hands-on coding/post-coding guide for interview and policy document analysis in tourism.
Current Issues in Tourism, 22(18), 2197–2210. https://doi.org/10.1080/13683500.2018.1441268
[14] Stylianou-Lambert, T. (2012). Tourists with cameras: Reproducing or producing? Annals of Tourism Research, 39(4), 1817–1838.
[15] Tussyadiah, I. P. (2020). A review of research into automation in tourism. Annals of Tourism Research, 81, 102883.
[16] Urry, J., & Larsen, J. (2011). The tourist gaze 3.0. Sage Publications.
[17] Wang, N., & Zhu, Y. (2018). Scene theory and cultural tourism. Journal of China Tourism Research, 14(2), 150–168.
[18] Zhao, S., Kong, Y., Yang, Y., & Li, J. (2024). The influencing mechanism of scenic spot online attention and tourists' purchase behavior: An AISAS model-based investigation. Frontiers in Psychology, 15, 1386350.
[19] Zhao, Y., & Agyeiwaah, E. (2024). How do tourism stakeholders co-create destination images with photos on social media? Journal of Travel Research. Advance online publication. https://doi.org/10.1177/00472875241253006

Ethnic Diversity and its implications for resident behavior and host-guest interaction

Mingming TONG[1], Wai Tsz Serene TSE[2]

[1]Post-graduate Student, Ningbo University - University of Angers Joint Institute

[2]Associate Professor, Ningbo University - University of Angers Joint Institute

Abstract

Introduction

With the increasing globalization and human mobility, social problems such as discrimination and prejudice, language communication barriers, cultural conflicts, and social exclusion among different ethnic groups, have led to hostile intergroup relations and intergroup conflict violence which challenge the call from the United Nation towards an inclusive society (Gautam, 2023). Within the context, an indication in heterogeneity and diversity were connected towards intergroup contact through intergroup behavioral exchanges that affect intergroup behavior. (Wallrich et al., 2022). Often, diversity in ethnic attract more attention as it associates with the collision and integration between different racial and cultural background which challenges cohesion, stability, and inclusiveness (Rullo et al. 2022; Tropp et al. 2022).

Tourism is considered as the entry of tourists with different cultural and racial backgrounds into the space of residents, and residents are the main group that tourists encounter and come into contact with at the destination. Therefore, the authors recognize the limitation as an opportunity to integrate community development into tourism context to understand the formation of resident behaviors towards tourists beyond non-psychological states. The examination in ethnic diversity, intergroup contact and resident behavior have been widely noted with an aim to understanding how diversity in ethnicity may exert influences onto intergroup exchanges that are crucial for intergroup relations and social development. Prior studies often situated in two theories, namely, Intergroup Threat Theory (ITT) and Intergroup Contact Theory (ICT) for investigation (Riikonen et al., 2024). Intergroup Contact Theory (ICT) suggested that ethnic diversity would resulting in positive contacts between social groups, thus fostering positive interactions and intergroup relations (Paolini et al., 2021); Intergroup Threat Theory (ITT) states that competitions are induced as per growing diversity within the society, thus leading to anti-outgroup members attitude which challenges intergroup relations (Nese, 2023).

The present study seeks to address the above-mentioned gap by investigating the interrelationships amongst ethnic diversity, intergroup contacts and residents' behaviors. The purpose of this study is to integrate concepts from community studies, socio-psychology of intergroup phenomena and tourism research to evaluate the formation of resident's facilitation and harmful behaviors based on their residential development. Drawing from sociology and intergroup studies, community development is correlated with intergroup interactions in terms of frequency and quality of contacts that have an impact onto intergroup behaviors (Allport et Atkinson, 1954; Berg, 2024;

Merrilees et al., 2023). Some studies have demonstrated social diversity would induce intergroup contacts that foster approaching behaviors between social groups while reduce harmful behaviors of distancing and rejection that are crucial in establishing inclusive community and social cohesion for sustainable development. Many other studies have further supported the mediating effect of intergroup contact on facilitating or harmful behavioral responses (Borinca et al., 2024). In tourism destination, tourist group is more obvious social, racial and cultural differences in regard to resident. And residents-tourists interaction between tourists and residents is inevitable during tourism, which is regarded as a form of social communication that occurs in the tourism context (Stylidis, 2022). These encounters and interactions which occurs are not limited to the quantity of exchange, measured through frequent of contacts, but also the quality aspects of positive and negative of action performed (Berg, 2024). Resident behavior is gradually becoming a way of achieving competitive advantage of destinations in the era of the increasingly competitive global tourism industry (Dwyer, 2022;Tse & Tung, 2022; Zhao et al., 2022). Therefore, the reaction of resident group plays an essential role during the process of interaction. Resident-tourist interaction is depending on resident behavior which is referring to the actions performed by a resident onto other individual which could be another residents or non-residents (Hamann et al., 2024). Recent tourism scholars have also suggested that residents' behaviors should be integrated into the destination marketing process (Amani & Chao, 2023; Xu et al., 2023) as their behaviors exerted towards tourists are important for the sustainable tourism development in the context of community diversity.

This study uncovers the relationships between (1) residents perceived ethnic diversity, (2) residents' contacts with other social groups, and (3) facilitation and harmful behavior performed by residents toward tourists. For instance, would resident who perceived ethnic diverse be more willingly to interact with other social groups, and be more socializing and accommodating towards the tourists? Or, having diversity in ethnic would result in group exclusivity and more likely to perform harmful behaviors toward tourist?

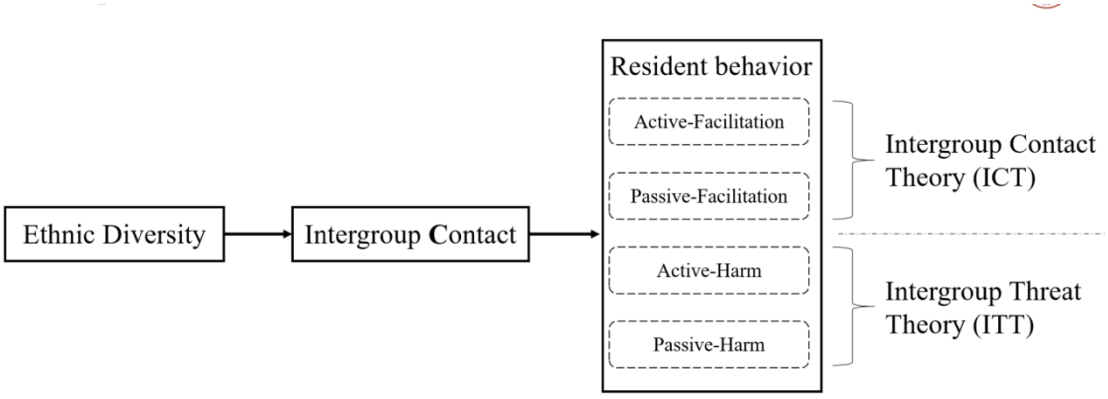


Figure 1 - Conceptual model of this study

Methods

A self-administrated questionnaire with four sections was distributed to the United State residents. The first and second sections measured ethnic diversity and intergroup

contact respectively whereby ethnic diversity was evaluated with five measured items adopted from Kauff et al. (2019) while measured items for intergroup contact was drawn from Schäfer et al., (2021). All items were measured on a 7-point likert scale (1 = strongly disagree to 7 = strongly agree). The third section measured resident behaviors towards tourists by adopting four dimensions of active-facilitation, passive-facilitation, active-harm and passive-harm with three behavioral items respectively (Tse & Tung, 2022). They were measured on a 7-point frequency scale, ranging from 1 = never to 7 often (see Table 1.). The fourth section collect respondents demographic of gender, age, martial status, and monthly income.

Table 1 - Measured items used in this study

Variable	Item	References
Ethnic Diversity	There is good ethnic diversity in my neighborhood. (ED1)	
	There is good ethnic diversity in my workplace. (ED2)	
	I feel comfortable with ethnic diversity. (ED3)	Kauff et al. (2019)
	I accept ethnic diversity. (ED4)	
	I support ethnic diversity. (ED5)	
Intergroup Contact	I have many friends from mainland China. (IC1)	Schäfer et al. (2021)
	I have good friends from mainland China. (IC2)	
Resident Behavior		
Active-Facilitation	Start a conversation with mainland Chinese tourist. (AF1)	
	Interact with mainland Chinese tourist. (AF2)	
	Socialize with mainland Chinese tourist. (AF3)	
Active-Harm	Mocking at mainland Chinese tourist. (AH1)	
	Threatening manner to mainland Chinese tourist. (AH2)	
	Unfriendly to mainland Chinese tourist. (AH3)	
Passive-Harm	Refrain from helping mainland Chinese tourist. (PH1)	Tse & Tung. (2022)
	Reluctant to help mainland Chinese tourist. (PH2)	
	Resist helping mainland Chinese tourist. (PH3)	
Passive-Facilitation	Accept the behaviors of mainland Chinese tourist. (PF1)	
	Endure the behaviors of mainland Chinese tourist. (PF2)	
	Tolerate the behaviors of mainland Chinese tourist. (PF3)	

Findings

Using Partial Lleast Ssquares-Sstructural Eequation Mmodeling (PLS-SEM), As shown in Table 2, the values of Cronbach's alpha of the measured dimensions and constructs were ranged between 0.870 to 0.932, exceeding the threshold value of 0.70; As shown in Figure 2, ethnic diversity exerted significant positive influence onto intergroup contacts ($\beta = 0.283$, $p < 0.001$) while insignificant relationship towards resident behavior ($\beta = -0.057$, $p = 7114$). Additionally, significant positive relationships were noted between intergroup contacts and resident behaviors ($\beta = 0.449$, $p < 0.001$).

Table 2 - Measurement model test

Variable	Item	Standardized factor loading	Composite Reliability	Average Variance Extracted
Ethnic Diversity	There is good ethnic diversity in my neighborhood. (ED1)	0.818	0.894	0.698
	There is good ethnic diversity in my workplace. (ED2)	0.780		
	I feel comfortable with ethnic diversity. (ED3)	0.871		
	I accept ethnic diversity. (ED4)	0.845		
	I support ethnic diversity. (ED5)	0.858		
Intergroup Contact	I have many friends from mainland China. (IC1)	0.964	0.914	0.921
	I have good friends from mainland China. (IC2)	0.955		
Resident Behavior				
Active-Facilitation	Start a conversation with mainland Chinese tourist. (AF1)	0.940		
	Interact with mainland Chinese tourist. (AF2)	0.936	0.882	0.882
	Socialize with mainland Chinese tourist. (AF3)	0.942		
Active-Harm	Mocking at mainland Chinese tourist. (AH1)	0.940		
	Threatening manner to mainland Chinese tourist. (AH2)	0.945	0.932	0.880
	Unfriendly to mainland Chinese tourist. (AH3)	0.929		
Passive-Harm	Refrain from helping mainland Chinese tourist. (PH1)	0.933		
	Reluctant to help mainland Chinese tourist. (PH2)	0.936	0.912	0.850
	Resist helping mainland Chinese tourist. (PH3)	0.896		
Passive-Facilitation	Accept the behaviors of mainland Chinese tourist. (PF1)	0.902		
	Endure the behaviors of mainland Chinese tourist. (PF2)	0.876	0.870	0.794
	Tolerate the behaviors of mainland Chinese tourist. (PF3)	0.894		

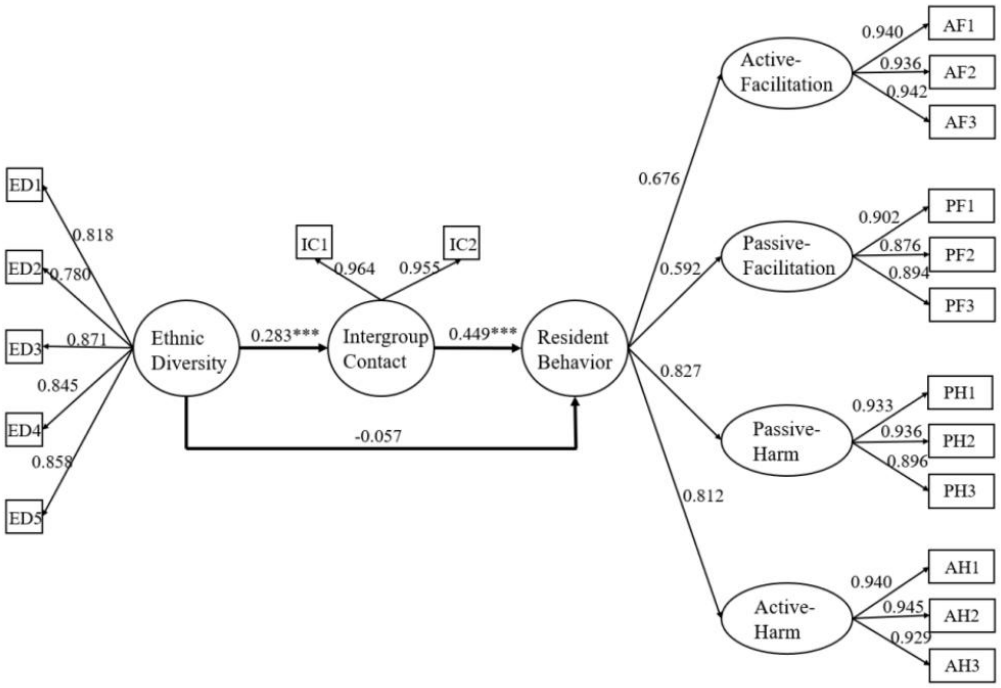


Figure 2 - Results of path analysis

For mediation analysis, SPSS PROCESS v3.5, model number 4 with 10,000 bootstrapping samples, and 95% confident interval was applied (Hayes, 2013). The findings reveal that intergroup contact plays a role of negative mediation in the relationship between ethnic diversity and harmful resident's behaviors (abactive = -0.099, 95%CI [-0.143, -0.059] and abpassive = -0.114, 95%CI [-0.161, -0.072]). On the other hand, intergroup contact mediates positively in the relationship between ethnic

diversity and resident's facilitation behaviors (abactive = 0.126, 95%CI [0.078, 0.178] and abpassive = 0.073, 95%CI [0.041, 0.112]).

Table 3 - Mediation analysis

Dependent	Relationship	Coefficient	Error	LLCI	ULCI
AF	Ethnic Diversity→Intergroup Contact→AF	0.126	0.026	0.078	0.178
	Ethnic Diversity→Intergroup Contact	0.365	0.062	0.243	0.487
	Ethnic Diversity→AF	0.187	0.054	0.081	0.292
	Intergroup Contact→AF	0.345	0.04	0.266	0.425
PF	Ethnic Diversity→Intergroup Contact→PF	0.073	0.018	0.041	0.112
	Ethnic Diversity→Intergroup Contact	0.365	0.062	0.243	0.487
	Ethnic Diversity→PF	0.328	0.051	0.227	0.429
	Intergroup Contact→PF	0.199	0.039	0.123	0.275
AH	Ethnic Diversity→Intergroup Contact→AH	-0.099	0.021	-0.143	-0.059
	Ethnic Diversity→Intergroup Contact	0.365	0.062	0.243	0.487
	Ethnic Diversity→AH	0.271	0.055	0.163	0.379
	Intergroup Contact →AH	-0.27	0.041	-0.351	-0.189
PH	Ethnic Diversity→Intergroup Contact→PH	-0.114	0.023	-0.161	-0.072
	Ethnic Diversity→Intergroup Contact	0.365	0.062	0.243	0.487
	Ethnic Diversity→PH	0.299	0.053	0.196	0.403
	Intergroup Contact→PH	-0.312	0.039	-0.39	-0.235

The results revealed the influences of intergroup contact as significant mediator in the relationship between ethnic diversity and resident behaviors. Furthermore, for facilitation behavior, stronger mediation effects were noted in active resident behaviors whereby intergroup contact would enhance residents' facilitation behaviors; and resident intergroup contact would lower resident's resist, refrain and reluctant to offer assistance to tourists.

Most of prior research have state that ethnic diversity has negative impact on intergroup contact that fostering harmful behaviors (e.g. mock, threaten, refrain towards other group members). However, nowadays this idea has gradually changed as ethnic diversity create an unique environment to interact and contact among different group members that decreasing stereotype or discrimination that promoting facilitation behaviors (e.g. help, socialize, endure towards other group members). In the tourism context, tourists enter residents' circle to learn local culture, language and participate in particular festivals, these encounters between tourists and residents shorten the distances and residents are willing to express their friendly and welcoming emotions and exert facilitation behaviors towards tourists that thus contributing to make destinations sustainable and inclusive.

Theoretical implication

First, this study incorporates community development into the tourism context from a sociological perspective to understand the intergroup factors that trigger residents' behavior towards tourists and reveal the complexity of residents' behaviors. Secondly, social development also influences residents' behavior towards tourists, particularly with the increasing emergence of ethnic diversity. Therefore, this study explores residents' behavior towards tourists through the lens of ethnic diversity. Lastly, the interaction between residents and tourists in terms of both quantity (e.g., whether local residents have many friends from the tourist group) and quality (e.g., whether residents have close relationships with friends from the tourist group) is essential. Thus, this study applies Intergroup Contact Theory and Intergroup Threat Theory from the field of sociology to construct a conceptual model of ethnic diversity, intergroup contact, and resident behavior, providing a theoretical contribution to the study of tourism host-guest relationships.

Practical implication

Additionally, this study offers practical implications for tourism destination managers. Specifically, destination management organizations (DMOs) can utilize residents for self-promotion. With the development of the social media, local residents can actively participate in promoting the destination, and this unofficial marketing may be more persuasive than official destination marketing communications. Secondly, DMOs should increase opportunities for face-to-face contact between residents and tourists to bridge the gap between them, thus promoting positive interactions and fostering mutual connections. Finally, destination managers can build a bridge for interaction between residents and tourists by organizing promotional activities, educational programs, and community engagement events to emphasize the importance of hospitality, respect, and understanding. By cultivating an inclusive culture, destination managers create a more positive and sustainable tourism environment that benefits both residents and tourists.

Keywords: Intergroup interaction, Host-guest exchange, community diversity, sustainable development

References

[1] Allport, F. H. (1954). The structuring of events: outline of a general theory with applications to psychology. Psychological Review, 61(5), 281. https://doi.org/10.1037/h0062678

[2] Amani, D., & Chao, E. (2023). How does destination governance build local residents' behavioural support towards destination branding: An empirical study of the tourism sector in Tanzania. Cogent Social Sciences, 9(1), 2192441.
https: //doi.org/10.1080/23311886.2023.2192441

[3] Berg, J. A. (2024). Assessing the effects of intergroup contact on immigration attitudes. The Social Science Journal, 61(1), 239-255. https://doi.org/10.1080/03623319.2020.1814982

[4] Borinca, I., McAuliffe, A., & Nightingale, A. (2024). Improving intergroup relation through humanization: The moderating role of negative direct contact and the mediating role of intergroup affect. Asian Journal of Social Psychology, 27(1), 16-26. https://doi.org/10.1111/ajsp.12578

[5] Dwyer, L. (2022). Destination competitiveness and resident well-being. Tourism Management Perspectives, 43, 100996. https://doi.org/10.1016/j.tmp.2022.100996

[6] Gautam, V. (2023). Why local residents support sustainable tourism development?. Journal of Sustainable Tourism, 31(3), 877-893.

[7] Hamann, K. R., Wullenkord, M. C., Reese, G., & van Zomeren, M. (2024). Believing that we can change our world for the better: A Triple-A (Agent-Action-Aim) Framework of self-efficacy beliefs in the context of collective social and ecological aims. Personality and Social Psychology Review, 28(1), 11-53. https://doi.org/10.1177/10888683231178056

[8] Hayes, J. R. (2013). The complete problem solver. Routledge.

[9] Kauff, M., Stegmann, S., van Dick, R., Beierlein, C., & Christ, O. (2019). Measuring beliefs in the instrumentality of ethnic diversity: Development and validation of the Pro-Diversity Beliefs Scale (PDBS). Group Processes & Intergroup Relations, 22(4), 494-510. https://doi.org/10.1177/1368430218767025

[10] Merrilees, C. E., Taylor, L. K., Klotz, M., Goeke-Morey, M. C., Shirlow, P., & Cummings, E. M. (2023). Timing is everything: Developmental changes in the associations between intergroup contact and bias. International Journal of Behavioral Development, 47(3), 243-252. https://doi.org/10.1177/01650254221146409

[11] Nese, A. (2023). Migrations in Italy and perceptions of ethnic threat. Journal of International Migration and Integration, 24(3), 939-968. https://doi.org/10.1007/s12134-022-00985-8

[12] Paolini, S., White, F. A., Tropp, L. R., Turner, R. N., Page-Gould, E., Barlow, F. K., & Gómez, Á. (2021). Intergroup contact research in the 21st century: Lessons learned and forward progress if we remain open. Journal of Social Issues, 77(1), 11-37. https://doi.org/10.1111/josi.12427

[13] Riikonen, R., Finell, E., Seppälä, T., & Stevenson, C. (2024). The more diverse the better: Identifying with a diverse neighbourhood mother community predicts greater intergroup contact. Journal of Community & Applied Social Psychology, 34(1), e2764. https://doi.org/10.1002/casp.2764

[14] Rullo, M., Visintin, E. P., Milani, S., Romano, A., & Fabbri, L. (2022). Stay humble and enjoy diversity: The interplay between intergroup contact and cultural humility on prejudice. International Journal of Intercultural Relations, 87, 169-182. https://doi.org/10.1016/j.ijintrel.2022.02.003

[15] Schäfer, S. J., Kauff, M., Prati, F., Kros, M., Lang, T., & Christ, O. (2021). Does negative contact undermine attempts to improve intergroup relations? Deepening the understanding of negative contact and its consequences for intergroup contact research and interventions. Journal of Social Issues, 77(1), 197-216. https://doi.org/10.1111/josi.12422

[16] Stylidis, D. (2022). Exploring resident–tourist interaction and its impact on tourists' destination image. Journal of Travel Research, 61(1), 186-201. https://doi.org/10.1177/0047287520969861

[17] Tropp, L. R., White, F., Rucinski, C. L., & Tredoux, C. (2022). Intergroup contact and prejudice reduction: Prospects and challenges in changing youth attitudes. Review of General Psychology, 26(3), 342-360. https://doi.org/10.1177/10892680211046517

[18] Tse, S., & Tung, V. W. S. (2022). Measuring the valence and intensity of residents' behaviors in host–tourist interactions: Implications for destination image and destination competitiveness. Journal of Travel Research, 61(3), 565-580. https://doi.org/10.1177/0047287521997576

[19] Wallrich, L., West, K., & Rutland, A. (2022). Valuing diversity: An undervalued mediator of intergroup contact. European Journal of Social Psychology, 52(1), 160-173. https://doi.org/10.1002/ejsp.2822

[20] Xu, J., Pratt, S., & Yan, L. (2023). Residents' engagement in developing destination mascots: a cognitive appraisal theory-based perspective. Journal of Travel & Tourism Marketing, 40(2), 151-168. https://doi.org/10.1080/10548408.2023.2227858

[21] Zhao, Y., Cui, X., & Guo, Y. (2022). Residents' engagement behavior in destination branding. Sustainability, 14(10), 5852. https://doi.org/10.3390/su14105852

What Is Restaurant Yanhuo Chi? A Descriptive Study from Multi-stakeholder Value Co-creation Perspective

Regan LI, Michael S. LIN

School of Hotel and Tourism Management, Hong Kong Polytechnic University

Abstract

Background and literature

In the contemporary era, where attention economy and experience economy prevail, gastronomy tourism has been regarded as an important driving force for regional economic development and social and cultural renaissance, playing a key role in the sustainable development of tourism (Che et al., 2022; Josphine, 2021; Yong et al., 2022). Although gastronomy tourism is an emerging niche field in academia, the idea of using food as a unique attraction for tourist destinations has gained increasing attention, especially in practice. There are many lesser-known cities that have rapidly gained significant tourist attention due to a single local dish and have emerged as viral destinations on social media. For example, because of Zibo Barbecue, Zibo City (a city in Shandong Province, China) received more than 4.8 million tourists in March 2023 alone, an increase of 134% over the same period last year, and tourism income increased by 60% (Fu Ruihan, 2023).In exploring the reasons for this phenomenon, Yanhuo Chi, a well-known Chinese word with a history of nearly a thousand years, has been widely referred to and interpreted by media, think tanks and scholars as the key driver behind this phenomenon (Fu Ruihan, 2023; Gansu Daily, 2024; Jiang et al., 2024).

Despite the importance of Yanhuo Chi, research on Yanhuo Chi is very scarce and is still in its infancy. Even its conceptual definition had received little scholarly attention until Hu et al. (2024) carried out the conceptualization of the city Yanhuo Chi. Notably, their research provided a clearer understanding of Yanhuo Chi from the perspective of tourism aesthetics and the city level but cannot be directly applied to the gastronomy tourism context, whose core lies in food and restaurants. This paper therefore introduces the concept of restaurant Yanhuo Chi, aiming to explore and conceptualize it within the context of gastronomy tourism.

Restaurants are not merely places for serving food. They but also function as social hubs that facilitate social interaction, cultural exchange, tracing history, and aesthetic experience (Cohen & Avieli, 2004; Richards, 2021; Song & Kim, 2019; Symons, 2013). As social relations of production continue to evolve, value creation in the restaurant context is no longer limited to the interaction between restaurants and customers (Ramaswamy, 2011; Saxena et al., 2024; Vargo and Lusch, 2004). According to value co-creation theory, values are jointly created through the collaboration and interactive participation of both supply-side providers and demand-side stakeholders (Leong et al., 2024; Prahalad & Ramaswamy, 2004). However, most existing studies focus on the demand side, centering on customer experiences and perspectives, overlooking the active role of supply-side actors, such as restaurants, communities, employees, local

residents and governments, in the co-creation process (Chen et al., 2022; Saxena et al., 2024).

Furthermore, there are several concepts connected to Yanhuo Chi in the field of restaurant research, but these concepts, such as restaurant atmospherics, authenticity, restaurant experience value, restaurant service, high quality, human touch, et cetera (De Albuquerque Meneguel et al., 2019; Jensen & Hansen, 2007), cannot adequately capture the essence of restaurant Yanhuo Chi. For example, restaurant atmospherics is mainly applied to high-end restaurants and often excluded "human variables" such as customer characteristics, employee expertise, and social interaction to isolate the effects of service (Heung & Gu, 2012; Kotler, 1973; Ryu & Jang, 2008). By contrast, we argue that restaurant Yanhuo Chi emphasizes precisely these human and relational dimensions. Based on social observation and experience, we propose that restaurant yanhuo chi is a unique equity possessed by small restaurants, which usually lack of resources but play a key role in catering industry (Chen & Elston, 2013). Unlike brand equity associated with large enterprises, Yanhuo Chi can be seen as a distinctive and place-based asset, rooted in community participation, cultural resonance and everyday social life (Chen & Lin, 2015; Soltani et al., 2021).

Recognizing these gaps, this research responds to the calls for more stakeholder-oriented approaches in gastronomic tourism studies (Josephine, 2021). Notably, restaurant Yanhuo Chi also represents the harmony and unity between enterprise and community, cultural preservation and economic development. In this sense, it serves as a meaningful practice contributing to the United Nations Sustainable Development Goals, particularly Good Health and Well-Being (SDG 3), Decent Work and Economic Growth (SDG 8); Reduced Inequalities (SDG 10), Sustainable Cities and Communities (SDG 11), Responsible Consumption and Production (SDG 12).

Building upon the above theoretical foundations of value co-creation, gastronomic tourism, and restaurant studies, this research aims to explore the essence of Yanhuo Chi as a multi-stakeholder co-creation. To this end, we adopt a descriptive phenomenological method (Giorgi, 2009) to investigate this underexplored but socially significant phenomenon. The primary objectives of this study are to:

(1)Describe the concept, characteristics, and value attributes of restaurant Yanhuo Chi from a phenomenological perspective

(2)Identify the interactions among multiple stakeholders in the value co-creation process of restaurant Yanhuo Chi.

Accordingly, the study seeks to answer the following research questions:

(1)What is the restaurant Yanhuo Chi?

(2)How do multiple stakeholders co-create the restaurant Yanhuo Chi?

Methods

This research is carried out under the guidance of phenomenology, a philosophical thought and research method. The descriptive phenomenological approach of Giorgi

(2009) is adopted in this study to guide the process of data collection and analysis, which is suitable for exploring the essence of specific experiential phenomena, such as Yanhuo Chi (Hu et al., 2024; Giorgi, 2009). In terms of data collection, this study adopts a combination of purposive sampling and snowball sampling. First, a list of restaurants known for serving Yanhuo Chi will be obtained through recommendations. Based on this list, semi-structured interviews (each lasting over 30 minutes) will be conducted with the referrers, restaurant owners and managers, and other relevant stakeholders. We aim to collect 30 valid interviews across approximately 10 different restaurant groups, though the final number will depend on data saturation. The final sample size will be determined based on data saturation (Giorgi, 2009). As for data analysis methods, this study aims to understand multi-stakeholders' knowledge and understanding of restaurant Yanhuo Chi and its formation (Giorgi, 2012), which is carried out with the help of qualitative data analysis software Nvivo.

Significance

This study has important contributions in both theory and practice. In theory, this study extends the research on Yanhuo Chi into the field of gastronomy tourism and restaurant contexts, further expanding the boundaries of value co-creation theory and enriching literature on small and medium-sized enterprise entrepreneurship by revealing what restaurant Yanhuo Chi is and how multiple stakeholders co-create it. In addition, this study reinforces the application of Service-Dominant Logic in the catering industry.

In practice, this study provides managerial implications for small restaurant entrepreneurs, local community and policymakers. Entrepreneurs could obtain new thinking and inspiration from a grassroots-oriented business model to enhance market competitiveness and customer loyalty while emphasizing multi-stakeholder collaboration. Local communities can utilize the concept of restaurant Yanhuo Chi as a bottom-up framework to support harmonious community development and sustainable tourism, which contributes to advancing several Sustainable Development Goals (e.g., SDG 3, SDG 8, SDG 10, SDG 11 & SDG 12). Policymakers might adopt Yanhuo Chi as a potential indicator for assessing the business environment and developmental trends within the catering industry, thereby improving policy decision-making and implementation effectiveness.

Keywords: Restaurant Yanhuo Chi, value co-creation, multi-stakeholder, restaurant, gastronomy tourism

Reference

[1] Che, W., Yang, M., & Li, J. (2022). The impact of internet celebrity economy on sustainable city design: From the perspectives of economics and carbon emissions. *Sustainable Cities and Society, 78,* 103631.

[2] Chen, S. C., & Elston, J. A. (2013). Entrepreneurial motives and characteristics: An analysis of small restaurant owners. *International Journal of Hospitality Management, 35,* 294-305

[3] Chen, S. C., & Lin, C. P. (2015). The impact of customer experience and perceived value on sustainable social relationship in blogs: An empirical study. *Technological forecasting and social change, 96,* 40-50.

[4] Cohen, E., & Avieli, N. (2004). Food in tourism: Attraction and impediment. *Annals of tourism Research, 31(4),* 755-778.

[5] De Albuquerque Meneguel, C. R., Mundet, L., & Aulet, S. (2019). The role of a high-quality restaurant in stimulating the creation and development of gastronomy tourism. *International Journal of Hospitality Management, 83,* 220-228.

[6] Fu, R. (2023, April 18). *The mutual journey between people and the city behind Zibo barbecue. Science and Technology Daily.* Retrieved from https://digitalpaper.stdaily.com/http_www.kjrb.com/kjrb/html/2023-04/18/content_552171.htm

[7] Gansu Daily. (March 2024). *"Mala Tang" drives Tianshui tourism revenue to exceed 2 billion yuan. Gansu Provincial Department of Commerce.* Retrieved from http://swt.gansu.gov.cn/swt/c114136/202403/173883704.shtml

[8] Giorgi, A. (2009). *The descriptive phenomenological method in psychology: A modified Husserlian approach.* Duquesne university press.

[9] Giorgi, A. (2012). The descriptive phenomenological psychological method. *Journal of Phenomenological Psychology, 43,* 3-12.

[10] Heung, V. C., & Gu, T. (2012). Influence of restaurant atmospherics on patron satisfaction and behavioral intentions. *International Journal of Hospitality Management, 31(4),* 1167-1177.

[11] Hu, J., Miao, L., Jiang, T., & Chen, C. (2024). 'Yanhuo Chi': An everyday aesthetic tourism experience. *Annals of Tourism Research, 109,* 103850.

[12] Jensen, Ø., & Hansen, K. V. (2007). Consumer values among restaurant customers. *International Journal of Hospitality Management, 26(3),* 603-622.

[13] Jiang, T., Miao, L., & Li, C. (2024). The essence lies in the mundane: An exploratory study on the tourist experience of urban Yanhuo Chi. *Tourism Tribune,*

[14] Josphine, J. (2021). A critical review of gastronomic tourism development in Kenya. *Journal of Hospitality and Tourism Management, 4(1),* 27-39.

[15] Josphine, J. (2021). A critical review of gastronomic tourism development in Kenya. *Journal of Hospitality and Tourism Management, 4(1),* 27-39.

[16] Kotler, P., 1973. Atmospherics as a marketing tool. *Journal of Retailing 49 (4),* 48–64.

[17] Prahalad, C. K., & Ramaswamy, V. (2004). Co-creation experiences: The next practice in value creation. *Journal of interactive marketing, 18(3),* 5-14.

[18] Ramaswamy, V. (2011). It's about human experiences… and beyond, to co-creation. *Industrial marketing management, 40(2),* 195-196.

[19] Richards, G. (2021). Evolving research perspectives on food and gastronomic experiences in tourism. *International Journal of Contemporary Hospitality Management, 33(3),* 1037-1058.

[20] Ryu, K., Jang, S., 2007. The effect of environmental perceptions on behavioral intentions through emotions: the case of upscale restaurants. *Journal of Hospitality & Tourism Research 31 (1),* 56–72

[21] Saxena, S., Mishra, S. C., & Mukerji, B. (2024). A multi-method bibliometric review of value co-creation research. *Management Research Review, 47(2),* 183-203.

[22] Soltani, M., Soltani Nejad, N., Taheri Azad, F., Taheri, B., & Gannon, M. J. (2021). Food consumption experiences: a framework for understanding food tourists' behavioral intentions. *International Journal of Contemporary Hospitality Management, 33(1),* 75-100.

[23] Song, H., & Kim, J. H. (2022). Effects of history, location and size of ethnic enclaves and ethnic restaurants on authentic cultural gastronomic experiences. *International Journal of Contemporary Hospitality Management, 34(9),* 3332-3352.

[24] Symons, M. (2013). The rise of the restaurant and the fate of hospitality. *International Journal of Contemporary Hospitality Management, 25(2),* 247-263.

[25] Vargo, S. L., & Lusch, R. F. (2004). Evolving to a new dominant logic for marketing. *Journal of marketing, 68(1),* 1-17.

[26] Yong, R. Y. M., Chua, B. L., Han, H., & Kim, B. (2022). Taste your way across the globe: a systematic review of gastronomy tourism literature (2000-2021). *Journal of Travel & Tourism Marketing, 39(7-9),* 623-650.

Feminist Entrepreneurship and Trust in Female-Only B&Bs: A Signaling Theory Perspective

Canxi (Vicky) WU, Michael S. LIN

School of Hotel and Tourism Management, The Hong Kong Polytechnic University

Abstract

1. Introduction

Gender equality, identified as Goal 5 of the United Nations Sustainable Development Goals (SDGs), is a core indicator of sustainable development (Freund & Hernandez-Maskivker, 2021). Feminist entrepreneurship explores how gender influences entrepreneurial practices and tries to challenge traditional social norms in business (Jones et al., 2025). It plays an important role in advancing gender equality (Wu et al., 2019). However, despite its significance, feminist entrepreneurship has received limited scholarly attention within tourism research (Figueroa-Domecq et al., 2020).

In recent years, female-only B&Bs have emerged in China as a form of feminist entrepreneurship, catering to the growing female travel market and addressing the specific needs and concerns of female tourists. These female-oriented accommodations aim to create safer and more exclusive spaces, thereby attracting increasing attention and preference from female tourists. Despite the growing trend of this phenomenon, the dynamics between female hosts and guests remain largely underexplored, particularly from a gendered perspective.

Previous studies have often adopted a simplified approach by mechanically linking feminism with entrepreneurship, or by treating female entrepreneurs merely as representatives of the category without further engaging with feminist paradigm, theory or practice (Figueroa-Domecq et al., 2020). However, this study differs in several ways: (1) the feminist entrepreneurial process examined in this study not only reflects feminist thinking and values but also actively contributes to feminist practice, forming a cyclical relationship in which feminist thinking informs entrepreneurial practice, which in turn reinforces feminist practice. This perspective links entrepreneurial action with feminist consciousness, grounded in real-world practice and ultimately capable of shaping and supporting further feminist-oriented action. (2) The entrepreneurs involved demonstrate a strong sense of self-awareness and gender consciousness. Unlike subsistence entrepreneurs (Toledo-López et al., 2012), they have a clear feminist orientation and are explicitly driven by the broader goals of gender equality and social change. Studying this group is thus particularly important, not only because this type of female-oriented entrepreneurship is gradually expanding in scale and market presence, but also because it holds potential for ideological leadership and social transformation (Calás et al., 2009).

The interaction between hosts and guests is quite direct in B&Bs (Tao et al., 2024). As the model of female-only B&Bs is still in its early stages, the cost of building trust remains relatively high, which adds practical significance to the exploration of this issue. Establishing mutual relationships and reducing information asymmetry between female hosts and guests is essential for building trust. Drawing on signaling theory as the

explanatory framework, female hosts (signalers) can convey key values, intentions, and credibility (signals) to potential female guests (receivers), thereby facilitating the development of trust and supportive relationships. A healthy and sustainable trust relationship, in turn, plays a key role in gaining female consumers' support for both the market and the entrepreneurial model, thereby contributing to the long-term viability of this form of entrepreneurship.

2. Literature review and hypotheses

2.1 Signaling theory in entrepreneurship

Signaling theory has been demonstrated to be an effective solution to the primary problem encountered in the field of entrepreneurship, namely the reduction of information asymmetries for potential receivers, including investors, customers and other stakeholders (Bafera & Kleinert, 2023). Information asymmetry refers to the situation that different parties possess various degrees of information awareness, which leads to an information gap and uncertainty (Clarkson et al., 2007). Signalers often possess an information advantage, while receivers have comparatively less information (Bafera & Kleinert, 2023). Thus, the signaling theory (Spence, 2002), empathizes with the issue of the information gap and provides an effective solution to the information gap in markets.

According to the signaling theory, signaler, signal, receiver and environment are the main four elements (Bafera & Kleinert, 2023). Signalers have more information about the unobservable quality, especially for those in new-ventures (Colombo, 2021). For example, an entrepreneur's credibility and the overall quality of a project (Huang et al., 2022). Signalers provide the information to the receivers through signals. For instance, a strong social media presence (Mumi et al., 2019) and the entrepreneur's educational background (Backes-Gellner & Werner, 2007) are common signals that can enhance credibility. Through these signals, the signaler attempts to bridge the information asymmetry with the receiver, thereby fostering trust within the relationship. For example, a hotel's privacy management acts as a signal; when communicated to consumers, it helps build greater trust (Moon et al., 2022)

Signaling theory provides a valuable framework for understanding the dynamics of feminist entrepreneurship, which, like entrepreneurship in general, is characterized by high levels of uncertainty and information asymmetry (Bylund & McCaffrey, 2017). Additionally, given the distinctive trust issues females face in tourism and accommodation (Anderson & Littrell, 1995), such as unique needs and concerns (Brown & Osman, 2017), as well as loyalty to tourism destinations and services (Rasoolimanesh et al., 2021). Therefore, it is essential to explore how feminist entrepreneurship, exemplified by female-only B&Bs, can foster a more trustful and sustainable business model through the characteristics of signals and the signaling process.

2.2 Host identity signal and host-guest interaction signal

Identity is a well-discussed concept in many social science disciplines (Kalin & Sambanis, 2018). The concept of identity is often referred to as the membership in a community or a group based on some characteristics (Chandra, 2006). A group is some

people with similar social identities (Hogg et al., 2004). Host identity refers to the host's personal traits, values, behavior patterns and beliefs. Identity is not a single characteristic, such as one's geographical origin (Fong et al., 2023) or self-perception and identification with gender (Eger et al., 2022), but rather encompasses various characteristics of the host of the female-only accommodation. Host–guest interaction signal refers to the relational dynamics between female hosts and guests in the context of female-only accommodations. The interaction between hosts and guests has been playing a vital role in the hospitality industry, as it significantly influences guests' emotional connection with the accommodation and shapes their overall satisfaction (Ariffin, 2013). When consumers identify frequent host responses or observe a positive reputation in past reviews, their expectations for the accommodation tend to rise accordingly (Lan et al., 2021).

Signals are the catalysts for building trust (Chen et al., 2010). Effective signal sending and transmission can reduce the information gap between the sender and the receiver. Lee et al. (2005) found that providing more information about a product, guarantees and certifications, which serve as market signals, can help build market trust and reduce the perceived gap between consumer expectations and actual product quality. In the context of female-only accommodations, as this form of lodging is still in its early stages of development, there is currently no dedicated labeling or categorization on mainstream OTA platforms. Moreover, female tourists often have a heightened need and concern for trust in the market (Brown & Osman, 2017). As a result, information asymmetry is particularly evident. Increasing the availability of information related to the host's identity and host–guest interactions may help reduce the information gap and foster a sense of trust in the current market environment. Therefore, we propose the following hypotheses:

H1. *Female tourists exposed to a high level of host identity signaling will report a higher level of trust than those exposed to a low level.*

H2. *Female tourists exposed to a high level of host-guest interaction signaling will report a higher level of trust than those exposed to a low level.*

2.3 Signal complementarity

Signal complementarity refers to the interaction among multiple signals. These interactions can have either positive or negative effects. When signals are complementary, they reinforce and enhance each other, and can produce a positive synergistic effect, amplifying their ability to reduce information asymmetry. However, if the signals are redundant or overlapping, they may lead to negative outcomes, such as diminished effectiveness (Chen et al., 2018). Given the information-asymmetric nature of the female-only accommodation market, host identity signals and host–guest interaction signals may complement each other and interact positively. This positive complementarity can more effectively bridge the information gap, thereby enhancing consumers' trust in this type of accommodation. Thus, we propose the following hypothesis:

H3. *The interaction between high levels of host identity signaling and host-guest interaction signaling will generate a high level of trust among female tourists.*

2.4 Support for feminist business

Support for feminist business refers to consumers' support for feminist business. This concept draws upon the broader literature on consumer support for sustainable business (Peterson et al., 2021), which suggests that consumers' perceptions of business practices and their relationships with businesses influence their support for businesses that pursue sustainable goals. Given that gender equality and the advancement of female rights are essential components of sustainable development. Although prior studies have not directly examined support for feminist business, we adapt and extend existing insights from the sustainable business framework to conceptualize it. In the case of female-only accommodations as a form of feminist enterprise, the trust consumers build toward this business model can lead to greater support for feminist business. Thus, we propose the following hypothesis:

H4. *A high level of trust will generate higher support for feminist businesses among female tourists.*

2.5 The mediating role of trust

According to signaling theory, the transmission of signals helps minimize the information asymmetry between the signaler and the receiver (Bylund & McCaffrey, 2017). In the context of female-only accommodation, signals between the host and the guest decrease the information asymmetry, thereby fostering trust. Trust is a vital element in building and maintaining various types of relationships. It has attracted increasing attention from researchers in the fields of hospitality and tourism (Wang et al., 2014). Compared to large enterprises, small businesses are more embedded in consumer markets and benefit from closer connections with customers. Therefore, trust is considered a key factor in establishing business-consumer relationships in small businesses (Altinay et al., 2014).

Female-only accommodations, as the small business operating within the hospitality sector, rely heavily on the trust established between hosts and guests, which in turn influences the quality of the relationship and consumers' willingness to support the business. Thus, trust functions as a mediator, shaped by the effectiveness of signaling and subsequently influencing consumer support for the business. Therefore, we propose the following hypothesis:

H5. *The interaction between high levels of host identity signaling and host-guest interaction signaling will generate higher female tourists' support for feminist businesses through the mediation of trust.*

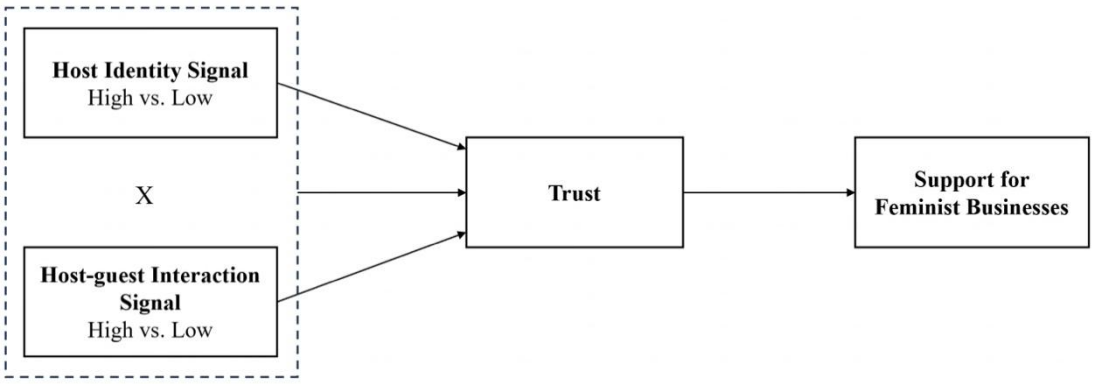


Fig. 1. Conceptual model of the study

3. Methods

This study will adopt a mixed-method design. A qualitative analysis was conducted by interviewing female only B&B entrepreneurs. A thematic analysis was conducted to better understand host identify and host-guest interaction and their impact on tourist's support and behaviors. After the qualitative analysis, a 2 (host identity signal: high vs. low) x 2 (host-guest interaction signal: high vs. low) between-subjects experimental design will be conducted to examine H1 to H5. About 200 Participants will be required to be female and have relative experience with female only B&Bs. All measures will use 7-point Likert scales (1 = *strongly disagree*, 7 = *strongly agree*).Trust will be measured using nine items adapted and revised from Yu and Chen (2018). Support for feminist business will be measured using five items adapted and revised from Peterson et al. (2021) . A PROCESS model will be used for data analysis. The current research method is proposed; the study will also consider incorporating qualitative interviews to further refine and adjust the research framework model and content.

Keywords: feminist entrepreneurship, signaling theory, trust, female-only B&Bs

References

[1] Altinay, L., Saunders, M. N. K., & Wang, C. L. (2014). The Influence of Culture on Trust Judgments in Customer Relationship Development by Ethnic Minority Small Businesses**. *Journal of Small Business Management*, *52*(1), 59–78. https://doi.org/10.1111/jsbm.12033
[2] Anderson, L. F., & Littrell, M. A. (1995). Souvenir-purchase behavior of women tourists. *Annals of Tourism Research*, *22*(2), 328–348. https://doi.org/10.1016/0160-7383(94)00080-8
[3] Ariffin, A. A. M. (2013). Generic dimensionality of hospitality in the hotel industry: A host–guest relationship perspective. *International Journal of Hospitality Management*, *35*, 171–179. https://doi.org/10.1016/j.ijhm.2013.06.002
[4] Backes-Gellner, U., & Werner, A. (2007). Entrepreneurial Signaling via Education: A Success Factor in Innovative Start-Ups. *Small Business Economics*, *29*(1), 173–190. https://doi.org/10.1007/s11187-006-0016-9
[5] Bafera, J., & Kleinert, S. (2023). Signaling Theory in Entrepreneurship Research: A Systematic Review and Research Agenda. *Entrepreneurship Theory and Practice*, *47*(6), 2419–2464. https://doi.org/10.1177/10422587221138489
[6] Brown, L., & Osman, H. (2017). The female tourist experience in Egypt as an Islamic destination. *Annals of Tourism Research*, *63*, 12–22. https://doi.org/10.1016/j.annals.2016.12.005
[7] Bylund, P. L., & McCaffrey, M. (2017). A theory of entrepreneurship and institutional uncertainty. *Journal of Business Venturing*, *32*(5), 461–475. https://doi.org/10.1016/j.jbusvent.2017.05.006
[8] Calás, M. B., Smircich, L., & Bourne, K. A. (2009). Extending the Boundaries: Reframing "Entrepreneurship as Social Change" Through Feminist Perspectives. *Academy of Management Review*, *34*(3), 552–569. https://doi.org/10.5465/amr.2009.40633597
[9] Chandra, K. (2006). WHAT IS ETHNIC IDENTITY AND DOES IT MATTER? *Annual Review of Political Science*, *9*(Volume 9, 2006), 397–424. https://doi.org/10.1146/annurev.polisci.9.062404.170715
[10] Chen, J., Heng, C. S., Tan, B. C. Y., & Lin, Z. (2018). The distinct signaling effects of R&D subsidy and non-R&D subsidy on IPO performance of IT entrepreneurial firms in China. *Research Policy*, *47*(1), 108–120. https://doi.org/10.1016/j.respol.2017.10.004
[11] Chen, Y.-H., Chien, S.-H., Wu, J.-J., & Tsai, P.-Y. (2010). Impact of Signals and Experience on Trust and Trusting Behavior. *Cyberpsychology, Behavior, and Social Networking*, *13*(5), 539–546. https://doi.org/10.1089/cyber.2009.0188
[12] Clarkson, G., Jacobsen, T. E., & Batcheller, A. L. (2007). Information asymmetry and information sharing. *Government Information Quarterly*, *24*(4), 827–839. https://doi.org/10.1016/j.giq.2007.08.001
[13] Colombo, O. (2021). The Use of Signals in New-Venture Financing: A Review and Research Agenda. *Journal of Management*, *47*(1), 237–259. https://doi.org/10.1177/0149206320911090

[14] Eger, C., Munar ,Ana Maria, & and Hsu, C. (2022). Gender and tourism sustainability. *Journal of Sustainable Tourism*, *30*(7), 1459–1475. https://doi.org/10.1080/09669582.2021.1963975
[15] Figueroa-Domecq, C., de Jong, A., & Williams, A. M. (2020). Gender, tourism & entrepreneurship: A critical review. *Annals of Tourism Research*, *84*, 102980. https://doi.org/10.1016/j.annals.2020.102980
[16] Fong, L. H. N., Zhang, C. X., & Wang, Z. (2023). Tourist–Host Identity Risk: Scale Development and Consequences. *Journal of Travel Research*, *62*(7), 1588–1604. https://doi.org/10.1177/00472875221127680
[17] Freund, D., & Hernandez-Maskivker, G. (2021). Women managers in tourism: Associations for building a sustainable world. *Tourism Management Perspectives*, *38*, 100820. https://doi.org/10.1016/j.tmp.2021.100820
[18] Hogg, M. A., Abrams, D., Otten, S., & Hinkle, S. (2004). The Social Identity Perspective: Intergroup Relations, Self-Conception, and Small Groups. *Small Group Research*, *35*(3), 246–276. https://doi.org/10.1177/1046496404263424
[19] Huang, S., Pickernell, D., Battisti, M., & Nguyen, T. (2022). Signalling entrepreneurs' credibility and project quality for crowdfunding success: Cases from the Kickstarter and Indiegogo environments. *Small Business Economics*, *58*(4), 1801–1821. https://doi.org/10.1007/s11187-021-00477-6
[20] Jones, S., Al-Dajani, H., Ekinsmyth, C., & Treanor, L. (2025). Guest editorial: Expanding horizons: feminist perspectives and approaches in contemporary gender and entrepreneurship research. *International Journal of Gender and Entrepreneurship*, *17*(1), 1–18. https://doi.org/10.1108/IJGE-03-2025-313
[21] Kalin, M., & Sambanis, N. (2018). How to Think About Social Identity. *Annual Review of Political Science*, *21*(Volume 21, 2018), 239–257. https://doi.org/10.1146/annurev-polisci-042016-024408
[22] Lan, T., Feng, X., & Zeng, Z. (2021). Effect of B&B host responses to online reviews on subsequent reviews: The moderating effects of class level. *Tourism Review*, *77*(4), 1097–1115. https://doi.org/10.1108/TR-10-2020-0474
[23] Lee, B.-C., Ang, L., & Dubelaar, C. (2005). Lemons on the Web: A signalling approach to the problem of trust in Internet commerce. *Journal of Economic Psychology*, *26*(5), 607–623. https://doi.org/10.1016/j.joep.2005.01.001
[24] Moon, H., Yu, J., Chua, B.-L., & Han, H. (2022). Hotel privacy management and guest trust building: A relational signaling perspective☆. *International Journal of Hospitality Management*, *102*, 103171. https://doi.org/10.1016/j.ijhm.2022.103171
[25] Mumi, A., Obal, M., & Yang, Y. (2019). Investigating social media as a firm's signaling strategy through an IPO. *Small Business Economics*, *53*(3), 631–645. https://doi.org/10.1007/s11187-018-0066-9
[26] Peterson, M., Minton, E. A., Liu, R. L., & Bartholomew, D. E. (2021). Sustainable Marketing and Consumer Support for Sustainable Businsses. *Sustainable Production and Consumption*, *27*, 157–168. https://doi.org/10.1016/j.spc.2020.10.018
[27] Rasoolimanesh, S. M., Khoo-Lattimore, C., Md Noor, S., Jaafar, M., & Konar, R. (2021). Tourist engagement and loyalty: Gender matters? *Current Issues in Tourism*, *24*(6), 871–885. https://doi.org/10.1080/13683500.2020.1765321
[28] Spence, M. (2002). Signaling in Retrospect and the Informational Structure of Markets. *American Economic Review*, *92*(3), 434–459. https://doi.org/10.1257/00028280260136200
[29] Tao, C. (Bruce), Deng, B., & Sun, J. (2024). Memorable interactive experiences between hosts and guests in B&Bs and their generation process: The host perspective. *Tourism Management*, *102*, 104861. https://doi.org/10.1016/j.tourman.2023.104861
[30] Toledo-López, A., Díaz-Pichardo, R., Jiménez-Castañeda, J. C., & Sánchez-Medina, P. S. (2012). Defining success in subsistence businesses. *Journal of Business Research*, *65*(12), 1658–1664. https://doi.org/10.1016/j.jbusres.2012.02.006
[31] Wang, L., Law, R., Hung, K., & Guillet, B. D. (2014). Consumer trust in tourism and hospitality: A review of the literature. *Journal of Hospitality and Tourism Management*, *21*, 1–9. https://doi.org/10.1016/j.jhtm.2014.01.001
[32] Wu, J., Li, Y., & Zhang, D. (2019). Identifying women's entrepreneurial barriers and empowering female entrepreneurship worldwide: A fuzzy-set QCA approach. *International Entrepreneurship and Management Journal*, *15*(3), 905–928. https://doi.org/10.1007/s11365-019-00570-z
[33] Yu, T.-W., & Chen, T.-J. (2018). Online travel insurance purchase intention: A transaction cost perspective. *Journal of Travel & Tourism Marketing*, *35*(9), 1175–1186. https://doi.org/10.1080/10548408.2018.1486781

The Formation of Entrepreneurial Cognition of Female Tourism Entrepreneurs

Xing CHEN[1], Michael S. LIN[1], Xinrui WANG[2*]

[1]School of Hotel and Tourism Management, The Hong Kong Polytechnic University

[2]School of Tourism Management, Sun Yat-sen University

*Corresponding Email: wangxr35@mail.sysu.edu.cn

Abstract

Background and literature

Female entrepreneurship constitutes a vital engine for self-employment and socio-economic advancement (Brush & Cooper, 2012). This transformative potential stems from three distinctive strengths. First, the multidimensional perspectives derived from females' diverse social identities significantly enrich entrepreneurial models. Second, their acute environmental sensitivity (Agarwal, 1992; Leach, 2007) and localized tacit knowledge (Bhattarai et al., 2015) uniquely position them to drive sustainable social change. Third, digital technologies in the Internet era have catalyzed female productivity liberation, elevating female entrepreneurial participation rates and establishing this sector as among the economy's fastest-growing domains (Ahl & Nelson, 2015).

Despite these advancements, persistent barriers constrain female entrepreneurial success. Structural obstacles embedded in both workplace and household systematically generate group-level disparities throughout entrepreneurial journeys (Knight, 2016). Paradoxically, certain fields like social entrepreneurship demonstrate reversed dynamics, with females exhibiting higher success likelihoods (Lortie et al., 2017), while study has yet to thoroughly investigate the underlying social drivers behind this phenomenon. This contradiction underscores the critical role of contextual factors: socio-cultural norms and institutional frameworks that actively reshape entrepreneurial outcomes, causing internal differentiation within female entrepreneurial cohorts (Aparicio et al., 2022). Furthermore, internal differentiation has emerged within female entrepreneurial groups under diverse socio-cultural and institutional conditions (Aparicio et al., 2022). Yet mainstream female entrepreneurship research continues to homogenize females as a disadvantaged group in entrepreneurship-a stance that glaringly contradicts empirical realities and fails to meet the needs of developmental guidance. Ultimately, contemporary female entrepreneurs navigate hybrid landscapes where traditional expectations collide with modern possibilities-a complex reality demanding deeper investigation into their adaptive agency.

Although existing scholarship has extensively explored female entrepreneurship, a predominant focus persists on analyzing gender differences through the lens of socially constructed role expectations. This conventional approach, however, is being challenged by recent theoretical advancements. Crucially, scholars now demonstrate that entrepreneurship is fundamentally shaped by gender roles rather than biological sex (Fernhaber & Zou, 2022). The former is socially constructed, while the latter is

structured. Gender roles function as informal institutions that guide and constrain role performers. For instance, females are often expected to assume greater family care responsibilities (Welter et al., 2006), while entrepreneurship is socially constructed as a masculine endeavor (Marlow, 2002). These gendered norms systematically restrict females' access to resources and opportunities. Consequently, studying female entrepreneurial activities necessitates examining two critical dimensions: The complex social systems governing gender identity formation; How these systems embed structural factors into resource allocation processes related to entrepreneurship.

Entrepreneurial activities are inherently contextualized interactions between entrepreneurs and their environments. As Bruyat and Julien (2001) and Low and MacMillan (1988) emphasize, the core mission of entrepreneurship research lies in investigating entrepreneurial processes within specific socio-situational contexts. Building on this theoretical foundation, empirical studies confirm that gender roles exert significant influence across multiple dimensions—they constrain entrepreneurs' cognitive resources (Jennings & Brush, 2013) and reshape their cognitive capacities for strategic decision-making. Moving beyond static informational advantages, extant research highlights the pivotal role of cognitive mechanisms in opportunity creation (Haynie et al., 2012). Specifically, these mechanisms operate through two interconnected processes: (1) entrepreneurs' dynamic interactions with their environments, and (2) the exercise of entrepreneurial agency. A critical insight emerges here: environmental factors only impact business decisions when consciously perceived by the entrepreneur. Through this perceptual filter, agents actively construct their operational realities while simultaneously altering external conditions. Ultimately, the entrepreneurial cognitive perspective achieves three interlinked objectives: it illuminates female entrepreneurs' subjective agency, maps their internal heterogeneity, and deciphers the value-generation processes they uniquely initiate.

The tourism industry serves as a dual platform for entrepreneurial activities and female empowerment. As evidenced by Haugen and Vik (2008), it not only fosters entrepreneurial initiatives but also disproportionately benefits female entrepreneurs. This industry’s unique capacity to generate diverse economic and social roles actively subverts traditional gender norms (Vizcaino Suárez, 2018). Current entrepreneurship studies in tourism predominantly treat tourism as a contextual element. This approach overlooks two critical aspects of tourism entrepreneurship: its uniqueness and inherent agency. For instance, homestay entrepreneurship exemplifies distinctive characteristics. It actively interacts with destination environments and local cultural contexts. Such interactions create spaces that amplify and accommodate female entrepreneurs' individualized traits. A paradigm case emerges from China’s rural revitalization context: the booming homestay industry. Government-backed policies and shifting consumer preferences have catalyzed its growth, transforming homestays into strategic venues where female entrepreneurs reconcile income objectives with self-actualization. This context makes homestays an ideal research site. By analyzing the thoughts of female entrepreneurs in the homestay industry during the entrepreneurial process, we can effectively reveal the mechanism by which the entrepreneurial situation shapes individual female entrepreneurs. Meanwhile, we can analyze the dynamic process

through which female entrepreneurs transform their ideas into differentiated entrepreneurial outcomes through their subjective practice.

In conclusion, Existing research on female entrepreneurship predominantly adopts a gender-comparative lens to analyze gender disparities and their mechanisms in entrepreneurial domains (Coleman & Robb, 2009). However, such studies fundamentally position females as disadvantaged actors in entrepreneurship, overlooking their agency, individual initiative, and the complex diversity within female entrepreneurial processes (Byrne et al., 2019). This theoretical stance consequently limits in-depth exploration of the positive societal impacts generated by female entrepreneurship. Simultaneously, the research on entrepreneurial cognition has not yet focused on conducting systematic studies on the female group, and the interactive relationship between the environment and individuals related to cognition is still at the stage of theoretical proposition. Based on the above-mentioned points, this study investigates the formation mechanisms of entrepreneurial cognition among females in tourism contexts. It aims to achieve the following objectives by examining how female tourism entrepreneurs think during the entrepreneurial process and the underlying deep-seated factors:

(1) By synthesizing societal and individual dimensions, we analyze female entrepreneurs' behavioral patterns in tourism ventures. This approach demystifies how contextual specificities reshape cognitive frameworks. It unlocks the "black box" of the formation mechanism of entrepreneurial cognition, lays a theoretical foundation for studying the antecedents of entrepreneurs' psychology and entrepreneurial behavior. Concurrently, it offers fresh perspectives for opportunity creation through cognitive mechanism mapping.

(2) The study focuses on the complex social systems involved in the formation process of gender identity being embedded in social processes such as resource allocation. It explores the process and results of the interaction between tourism, entrepreneurship, and other external elements and the personal conditions of female entrepreneurs. It is hoped that through this study, we can better understand the current situation and problems of female tourism entrepreneurs, further prove that there is no direct relationship between the entrepreneurial outcomes of female and their biological gender, and increase the attention and guidance for the female entrepreneurial group.

(3) Through systematic examination of female tourism entrepreneurs' practices, we identify group-level regularities and intra-group differentiations. The core contribution lies in revealing coupling mechanisms between entrepreneurial agency and industry-specific traits, particularly the value-creation potential of gendered attributes in tourism economies. Furthermore, demonstration effects from industry pioneers will be leveraged to reconstruct gender cognition frameworks within the sector.

Methodology

This study employed a mixed-methods approach integrating interviews, non-participant observation, and secondary data collection. Grounded theory and content analysis guided data processing and interpretation.

The data collection process consisted of three stages. First, detailed secondary data were obtained by collecting literature materials, media reports, official website information,

tourism app product details, social media accounts, and tourist comments. Through this process, Moganshan was selected as the case study location, and its basic circumstances were understood. To ensure research feasibility, local homestay association staff were contacted in advance to refine field research content and plans, resulting in the development of interview outlines and observation forms.

Second, offline field research was conducted using non-participatory observation and semi-structured in-depth interviews to collect data. This phase examined the entrepreneurial environment, characteristics of the entrepreneurial group, and their cognitive and behavioral patterns in the case study area. To ensure sample diversity, interviews were conducted through referrals from the homestay association, recommendations from interviewees, and random visits. To comprehensively understand the local entrepreneurial environment, additional interviews were conducted with other homestay-related personnel, including association staff, government department employees, other homestay entrepreneurs, and homestay workers.

Finally, the collected data were organized, including transcribing interview recordings, sorting research notes and observation records. After preliminary analysis, a secondary data collection plan was formulated to supplement relevant policy documents on Moganshan homestays, online news materials about the targets, and other background information. Ultimately, a total of 1,571 minutes of audio recordings were collected, transcribed into 230,000 Chinese characters of interview texts, along with 13,000 Chinese characters of research notes and 140,000 Chinese characters of news materials.

According to the research objectives and content, case selection followed these criteria: 1) Based on the conceptual definition of female homestay entrepreneurs, respondents were required to be key members in establishing and operating the homestay, possessing decision-making power and ownership rights. 2)Cases should follow the diversity principle, covering various demographic characteristics, particularly marital and parental status. 3) Case profiles must align with the overall characteristics of Moganshan homestay entrepreneurs, including approximately 70%-80% local entrepreneurs and diversity in homestay grades and locations. Regarding the basic information of the main research subjects: 75% of the sample were aged 30-50 years old, 58% were married, 75% had children, 50% held bachelor's degrees or higher, and 75% were local entrepreneurs.

Data processing and analysis proceeded through the following steps: First, cleaning and filtering textual materials: correcting inaccurate sentences, removing invalid and repetitive content unrelated to entrepreneurship. Then, analyzing materials using the three-level coding method of grounded theory (open coding, axial coding, selective coding). Finally, applying content analysis to construct the cognitive formation mechanisms of female tourism entrepreneurs by combining the theoretical framework derived from coding and the narrative logic developed through story analysis.

The research process adhered to theoretical sampling principles. To ensure analytical rigor and result accuracy, after obtaining initial findings, first-hand data and additional secondary data were recollected through observations and interviews for theoretical

saturation testing. No new categories or relationships emerged, indicating that theoretical saturation had been achieved.

Findings and discussions

Female tourism entrepreneurship constitutes a vital force for self-actualization, regional development, and socio-cultural transformation. The cognitive formation process of female tourism entrepreneurs during entrepreneurship vividly demonstrates the interactive dynamics between environmental factors and female entrepreneurial agents. The formation of entrepreneurial cognition among female tourism entrepreneurs involves three sequential stages: collection and filtering of entrepreneurial knowledge from the environment, perception and reflection on this knowledge, and eventual selection and manifestation of cognitive outcomes. This process primarily encompasses two dimensions: the accessibility of knowledge acquisition and the perceptual/selective tendencies toward acquired knowledge. Furthermore, this cognitive formation process interacts with external environmental factors, ultimately constructing a dynamic, cyclical, and iteratively evolving mechanism of entrepreneurial cognition.

The analysis further reveals that female tourism entrepreneurs' cognitive frameworks exhibit both structural patterns and individualized differentiation. These variations stem from distinct personal thinking styles, with individualized differences being fundamentally shaped by the socio-cultural environments and personal life trajectories in which entrepreneurs are embedded. Notably, social gender norms and familial roles exert direct impacts and indirect moderating effects on this differentiation process.

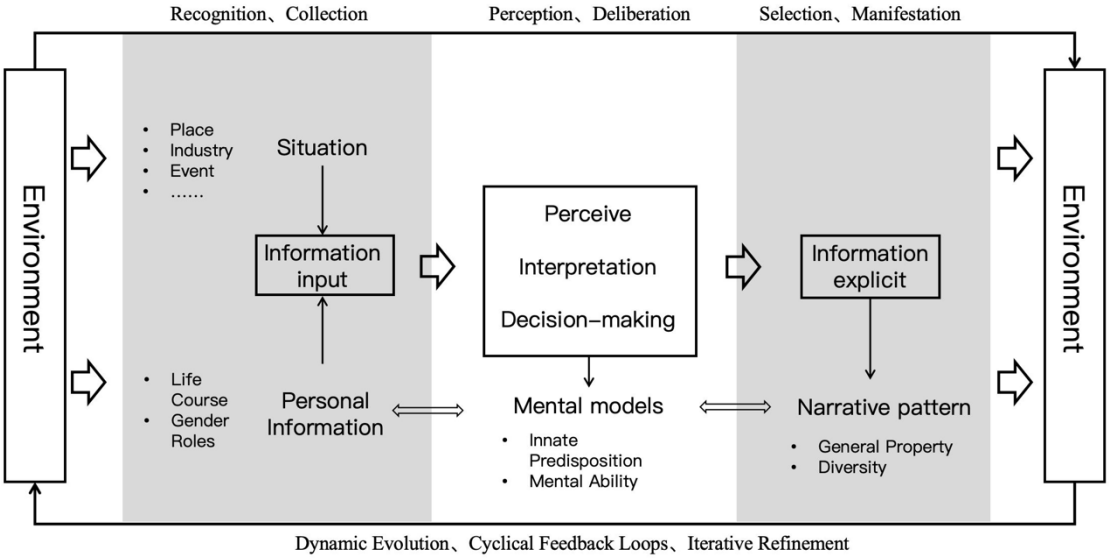


Figure 1 The Formation of Entrepreneurial Cognition of Female Tourism Entrepreneurs

This study systematically investigates entrepreneurial cognition formation mechanisms within a dedicated research framework. Existing studies on cognitive mechanisms and their antecedents often focus narrowly on specific entrepreneurial behaviors (Riar et al., 2021), neglecting the interplay between entrepreneurial agents and contextual backgrounds. In contrast, our study integrates female tourism entrepreneurs' cognition with entrepreneurial contexts as an inseparable whole, achieving dual contributions:

advancing systematic investigations of entrepreneurial cognition and establishing a feminist theoretical paradigm for female entrepreneurship studies.

By transcending the pitfalls of self-justification dogma and hollow slogan-driven nihilism, this study objectively recognizes female entrepreneurs' agency and capabilities while acknowledging the societal constraints shaping their activities. It advocates for cultivating creative thinking among females and supports the expansion of feminized traits from domestic spheres to societal domains.

Additionally, this study empirically validates tourism's potential as a domain where females can harmonize self-worth with social value. Encouraging female participation in tourism entrepreneurship not only alleviates gender development disparities and social tensions but also accelerates progress toward sustainable societal construction.

Keywords: entrepreneurial cognition, female entrepreneurship, tourism entrepreneurship, gender identity

References

[1] Agarwal, B. (1992). The Gender and Environment Debate: Lessons from India. Feminist Studies, 18(1), 119. https://doi.org/10.2307/3178217

[2] Ahl, H., & Nelson, T. (2015). How policy positions women entrepreneurs: A comparative analysis of state discourse in Sweden and the United States. Journal of Business Venturing, 30(2), 273–291. https://doi.org/10.1016/j.jbusvent.2014.08.002

[3] Aparicio, S., Audretsch, D., Noguera, M., & Urbano, D. (2022). Can female entrepreneurs boost social mobility in developing countries? An institutional analysis. Technological Forecasting and Social Change, 175, 121401. https://doi.org/10.1016/j.techfore.2021.121401

[4] Bhattarai, B., Beilin, R., & Ford, R. (2015). Gender, Agrobiodiversity, and Climate Change: A Study of Adaptation Practices in the Nepal Himalayas. World Development, 70, 122–132. https://doi.org/10.1016/j.worlddev.2015.01.003

[5] Brush, C. G., & Cooper, S. Y. (2012).Female entrepreneurship and economic development: An international perspective. Entrepreneurship & Regional Development, 24(1-2), 1-6. https://doi.org/10.1080/08985626.2012.637340

[6] Bruyat, C., & Julien, P.-A. (2001). Defining the field of research in entrepreneurship. Journal of Business Venturing, 16(2), 165–180. https://doi.org/10.1016/S0883-9026(99)00043-9

[7] Byrne, J., Fattoum, S., & Diaz Garcia, M. C. (2019). Role Models and Women Entrepreneurs: Entrepreneurial Superwoman Has Her Say. Journal of Small Business Management, 57(1), 154–184. https://doi.org/10.1111/jsbm.12426

[8] Coleman, S., & Robb, A. (2009). A comparison of new firm financing by gender: Evidence from the Kauffman Firm Survey data. Small Business Economics, 33(4), 397–411. https://doi.org/10.1007/s11187-009-9205-7

[9] Fernhaber, S. A., & Zou, H. (2022). Advancing societal grand challenge research at the interface of entrepreneurship and international business: A review and 94research agenda. Journal of Business Venturing, 37(5), 106233. https://doi.org/10.1016/j.jbusvent.2022.106233

[10] Haugen, M. S., & Vik, J. (2008). Farmers as entrepreneurs: The case of farm-based tourism. 11International Journal of Entrepreneurship and Small Business, 6(3), 321–336. https://doi.org/10.1504/IJESB.2008.01913

[11] Haynie, J. M., Shepherd, D. A., & Patzelt, H. (2012). Cognitive adaptability and an entrepreneurial task: The role of metacognition and feedback. Entrepreneurship Theory and Practice, 36(2), 237-265. https://doi.org/10.1111/j.1540-6520.2010.00410.x

[12] Jennings, J. E., & Brush, C. G. (2013). Research on Women Entrepreneurs: Challenges to (and from) the Broader Entrepreneurship Literature? Academy of Management Annals, 7(1), 663–715. https://doi.org/10.5465/19416520.2013.782190

[13] Knight, M. (2016). Race-ing, Classing and Gendering Racialized Women's Participation in Entrepreneurship. Gender, Work & Organization, 23(3), 310–327. https://doi.org/10.1111/gwao.12060

[14] Marlow, S. (2002). Women and self-employment: a part of or apart from theoretical construct?, International Journal of Entrepreneurship & Innovation, Vol. 3 No. 2, pp. 83-91.

[15] Leach, M. (2007). Earth Mother Myths and Other Ecofeminist Fables: How a Strategic Notion Rose and Fell. Development and Change, 38(1), 67–85. https://doi.org/10.1111/j.1467-7660.2007.00403.x

[16] Lortie, J., Castrogiovanni, G. J., & Cox, K. C. (2017). Gender, social salience, and social performance: How women pursue and perform in social ventures. ENTREPRENEURSHIP AND REGIONAL DEVELOPMENT, 29(1–2), 155–173. https://doi.org/10.1080/08985626.2016.1255433

[17] Low, M. B., & MacMillan, I. C. (1988). Entrepreneurship: Past Research and Future Challenges. Journal of Management, 14(2), 139–161. https://doi.org/10.1177/014920638801400202

[18] Riar, F. J., Bican, P. M., & Fischer, J. (2021). It wasn t me: Entrepreneurial failure attribution and learning from failure. International Journal of Entrepreneurial Venturing, 13(2), 113–136. https://doi.org/10.1504/IJEV.2021.114385

[19] Vizcaino Suárez, P. (2018). Tourism as empowerment: Women artisan's experiences in central Mexico. Gender Equality and Tourism: Beyond Empowerment, 46–56. 12https://doi.org/10.1079/9781786394422.0046

[20] Welter, F., Smallbone, D., Mirzakhalikova, D., Schakirova, N. and Maksudova, C. (2006), Women entrepreneurs between tradition and modernity – the case of Uzbekistan, in Welter, F., Smallbone, D. and Isakova, N. (Eds), Enterprising Women in Transition Economies, Ashgate, Aldershot, pp. 45-66.

The relationship between residents' perception and sustainable participation in overtourism: The mediating role of tourists' influx emotions

Haoxuan FENG[1], Heewon KIM[2], Jaehee GIM[3]

[1]Undergraduate Student, Faculty of Hospitality and Tourism Management, Macau University of Science and Technology, Avenida Wai Long, Taipa, Macau SAR

[2]Assistant Professor, Faculty of Hospitality and Tourism Management, Macau University of Science and Technology, Avenida Wai Long, Taipa, Macau SAR

[3]Assistant Professor, School of Hotel and Tourism Management,The Hong Kong Polytechnic University, 17 Science Museum Road, Tsim Sha Tsui East, Kowloon, Hong Kong SAR

Abstract

Research Background

The global tourism industry has experienced unprecedented growth in recent decades, contributing significantly to economic development and cultural exchange. However, this rapid expansion has also given rise to the increasingly critical issue of overtourism, which has garnered substantial attention from both academic researchers and industry practitioners (Butler & Dodds, 2022). Overtourism can be defined as a situation in which the number of tourists visiting a particular destination, especially popular cities and scenic spots, far exceeds its environmental, social, and economic carrying capacity. This excessive influx of visitors not only places immense strain on the ecological environment of the tourist destination, leading to resource depletion, pollution, and habitat degradation, but also significantly undermines the quality of life, emotional state, and overall attitude of local residents towards the tourism industry (Cheung & Li, 2019; Hristov et al., 2021). Residents often experience issues such as overcrowding, increased noise pollution, traffic congestion, and pressure on local services and amenities. These negative impacts can erode their sense of place, diminish their satisfaction with their living environment, and foster resentment towards tourism activities. Recognizing the urgency of addressing this challenge in the contemporary tourism landscape, this paper aims to delve into the intricate relationship between local residents and sustainable tourism development within the context of overtourism. Specifically, it attempts to explore the mechanisms through which local residents, based on their subjective perception of critical aspects such as the condition of infrastructure, the intensity and fairness of policy management related to tourism, and the perceived economic fairness of tourism benefits distribution, influence their willingness to actively participate in sustainable tourism development initiatives. Furthermore, acknowledging the potential psychological impacts of mass tourism, this paper will also rigorously verify the mediating role played by residents' emotions, specifically those elicited by the overwhelming influx of a large number of tourists, in the complex interplay between their perceptions and their engagement in sustainable tourism practices. Understanding this mediating effect is crucial for developing effective strategies to foster positive

resident attitudes and encourage their active involvement in ensuring the long-term sustainability of tourism in their communities.

Theoretical Framework

The overarching research framework underpinning this paper is constructed upon a robust theoretical foundation, drawing primarily from the principles of social exchange theory and the tenets of the emotional response model. Obviously, social exchange theory posits that individuals engage in social interactions based on a rational evaluation of the perceived costs and benefits associated with those interactions (Cropanzano et al., 2017). In the context of overtourism, local residents continuously assess the exchange relationship between themselves and the tourism industry. Their perceptions of the benefits they receive (e.g., economic opportunities) relative to the costs they bear (e.g., environmental degradation, social disruption) will significantly shape their attitudes towards tourism and their willingness to support and participate in sustainable tourism initiatives. When residents perceive an equitable exchange where the benefits outweigh the costs and are fairly distributed, they are more likely to develop positive attitudes and engage in pro-tourism behaviors, including supporting sustainability efforts. Conversely, if they perceive an imbalance where the negative impacts of overtourism outweigh the benefits or these benefits are not perceived as fairly distributed, their support for tourism, including sustainable practices, is likely to diminish. Complementing social exchange theory, the emotional response model suggests that external stimuli, such as the overwhelming presence of tourists, can trigger a range of emotional responses in individuals (Wang et al., 2023). These emotions, in turn, can significantly influence their attitudes, perceptions, and behavioral intentions. In the context of overtourism, the constant influx of tourists may evoke negative emotions among residents, such as frustration, annoyance, anxiety, or even anger, due to overcrowding, noise, and disruption to their daily lives (Godovykh et al., 2023). These negative emotions are hypothesized to mediate the relationship between residents' perceptions of overtourism impacts and their willingness to participate in sustainable tourism. For instance, even if residents perceive potential economic benefits from tourism, the negative emotions triggered by the sheer volume of tourists might reduce their willingness to engage in sustainable practices if they associate tourism with negative experiences. Therefore, by integrating these two theoretical perspectives, this research aims to provide a more comprehensive understanding of the factors influencing residents' sustainable participation in overtourism destinations, with a particular focus on the mediating role of emotions arising from the tourist influx. This understanding is essential for developing effective management strategies that not only address the tangible impacts of overtourism but also consider the crucial role of residents' perceptions and emotional well-being in fostering sustainable tourism development and ensuring the long-term well-being of both the destination and its local communities (Wijesekara, 2024).

Research Question and Hypotheses

Based on the integration of social exchange theory and the emotional response model, this study proposes the following research questions and hypotheses:

RQ1: How do residents' perceptions of infrastructure carrying capacity, policy intensity, and economic fairness influence their willingness to participate in sustainable tourism development?

RQ2: How do residents' negative emotions (anxiety, anger, apathy) triggered by tourist influx play a role in the relationship between residents' perceptions and their sustainable participation intention?

H1a: Local residents' negative perceptions on infrastructure carrying capacity will increase their level of anxiety.

H1b: Local residents' negative perceptions on infrastructure carrying capacity will increase their level of anger.

H1c: Local residents' negative perceptions on infrastructure carrying capacity will increase their level of apathy.

H2a: Local residents' negative perceptions on policy strength will increase their level of anxiety.

H2b: Local residents' negative perceptions on policy strength will increase their level of anger.

H2c: Local residents' negative perceptions on policy strength will increase their level of apathy.

H3a: Local residents' negative perceptions on economic fairness will increase their level of anxiety.

H3b: Local residents' negative perceptions on economic fairness will increase their level of anger.

H3c: Local residents' negative perceptions on economic fairness will increase their level of apathy.

H4: Local residents' anxiousness will negatively influence their willingness to participate in sustainable tourism development.

H5: Local residents' anger will negatively influence their willingness to participate in sustainable tourism development.

H6: Local residents' apathy will negatively influence their willingness to participate in sustainable tourism development.

Research Variable

In terms of variable setting, residents' perception as an independent variable includes three dimensions: infrastructure carrying capacity perception, policy intensity perception, and economic fairness perception. The dependent variable is the residents' willingness to participate in sustainable tourism development. The mediating variables are the anxiety, anger, and apathy of residents towards the influx of tourists.

The independent variables are residents' perceptions, which consist of three parts. First is infrastructure carrying capacity, which refers to how residents evaluate the public services and infrastructure of the current destination, and whether the transportation, sanitation, and environmental protection of the tourist destination are sufficient to support the number of tourists. Second is policy strength, which refers to the satisfaction of local residents with the government in managing local tourist behavior, controlling

tourist density and formulating tourist regulations. Third is economic fairness, which refers to whether residents believe that the economic benefits brought by tourism are fairly distributed in the local community and whether residents feel the actual benefits. The dependent variable is the residents' willingness to participate in sustainable tourism development. The willingness here refers to whether residents of the tourist destination are willing to participate in local environmental protection actions, whether they are willing to support local tourism policies, participate in community tours, and most importantly, whether local residents are willing to promote responsible tourism, etc.
As for the mediating variables, the residents' emotional response to the influx of tourists are proposed in this research. When a large number of tourists flock to a tourist destination, it will more or less have a certain impact on the lives of local residents. Faced with these impacts, residents could have anxiety, anger or apathy, which reflects their psychological adaptation to the current tourism status (Doxey, 1975).

Research Methods

In terms of research methods, this paper adopts a quantitative research method, combining survey questionnaire and partial least-square structural equation model analysis (PLS-SEM). Taking Lijiang, China as a field case, choose the local permanent residents will be selected as the survey subjects. Each variable will be measured using the Likert five-point scale to analyze the emotional response of residents under different perception dimensions and their impact path on sustainable participation behavior.

Expected Research Findings

There are two main expected findings of this research. Firstly, the residents' perception of infrastructure carrying capacity, policy intensity and economic fairness, positively influences their willingness to participate in sustainable tourism. That is, the negative perception of residents in overtourism will lead to a decrease in residents' willingness to participate in local sustainable tourism. Secondly, the negative emotions aroused by the influx of tourists are expected to play a significant mediating role between the above perceptions and willingness to participate. That is, when the negative emotions aroused by the influx of tourists are greater, the negative perception of local residents will have a more significant impact on the residents' willingness to participate in local sustainable tourism.

Research Significance

There is no doubt that the research in this paper has many theoretical and practical values. From the theoretical perspective, this study enriches the research on the behavioral mechanism of residents in the context of overtourism and fills the gap in the existing literature on the mediating variable of "emotion" of local residents. In fact, in past studies, many scholars only focused on the attitudes and perceptions of residents, and often ignored how the emotional reactions formed by residents in the long-term high-pressure tourism environment further affect their behavioral tendencies (Wijesekara, 2024). This study focuses on the emotional psychological perspective of local residents and provides a new perspective for understanding the participation behavior of residents in tourist destinations in sustainable tourism.

From the practical point of view, the conclusions of this study can provide targeted suggestions for tourism policy makers and local governments. Strengthening the construction and maintenance of infrastructure in tourist destinations, improving the efficiency of public resource allocation, and alleviating the impact of peak tourism on residents' daily lives are the most important things that managers of tourist destinations need to pay attention to. Most importantly, managers of tourist destinations need to identify and intervene in the emotions of local residents. Common methods include regular resident communication meetings and providing community psychological support. When necessary, the public can be invited to participate in tourism planning, which can alleviate the psychological pressure caused by the influx of too many tourists, in the hope of enhancing residents' willingness and support for tourism participation and ultimately promoting the development of tourist destinations in a more sustainable direction.

The main model constructed in this paper is "resident perception-emotional response-sustainable participation behavior", which proposes an innovative and adaptive analytical framework in the study of overtourism. In future research, this model can be further expanded to different cultural backgrounds and tourism types for comparison. Study the differences in the responses of residents in tourist destinations in different contexts such as rural tourism, ecotourism and urban short-distance tourism, so as to provide more extensive theoretical support and empirical reference for the sustainable governance of global tourist destinations.

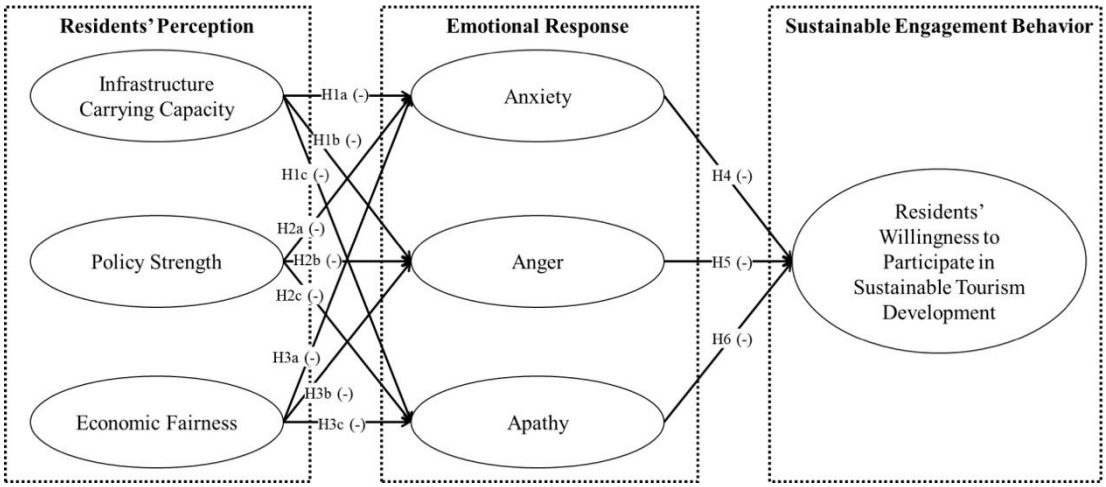


Figure 1. Conceptual Model

Key Words: Overtourism, Residents' perception, Sustainable tourism participation

Reference

[1] Butler, R. W., & Dodds, R. (2022). Overcoming overtourism: a review of failure. Tourism Review, 77(1), 35-53. https://doi.org/10.1108/TR-04-2021-0215

[2] Cheung, K. S., & Li, L. H. (2019). Understanding visitor–resident relations in overtourism: Developing resilience for sustainable tourism. Journal of Sustainable Tourism, 27(8), 1197-1216. https://doi.org/10.1080/09669582.2019.1606815

[3] Cropanzano, R., Anthony, E. L., Daniels, S. R., & Hall, A. V. (2017). Social exchange theory: A critical review with theoretical remedies. Academy of management annals, 11(1), 479-516. https://doi.org/10.5465/annals.2015.0099

[4] Doxey, G. V. (1975). A causation theory of visitor-resident irritants: Methodology and research inferences. In Proceedings of the Sixth Annual Conference of the Travel Research Association (pp. 195–198). Travel Research Association.

[5] Godovykh, M., Ridderstaat, J., & Fyall, A. (2023). The well-being impacts of tourism: Long-term and short-term effects of tourism development on residents' happiness. Tourism Economics, 29(1), 137-156. https://doi.org/10.1177/1354816621104122

[6] Hristov, M., Hristić, N. D., & Stefanović, N. (2021). Impact of overtourism on urban life. Spatium, 59-66. https://doi.org/10.2298/SPAT2145059H

[7] Wang, J., Shahzad, F., & Ashraf, S. F. (2023). Elements of information ecosystems stimulating the online consumer behavior: A mediating role of cognitive and affective trust. Telematics and Informatics, 80, 101970. https://doi.org/10.1016/j.tele.2023.101970

[8] Wijesekara, Y. M. (2024). Investigating Associations between Residents' Engagement, Perceived Tourism Negative Environmental Impacts and Support for Marine and Coastal Tourism. urn:nbn:se:lnu:diva-133423

All the World's a Stage: Fandom ProSumption and its (Dis-)Attachment to Places

Xiaoxue MA, KaihanYANG, Khan

Faculty of Hospitality and Tourism Management, Macau University of Science and Technology

Abstract

This study focuses on the analysis of fan group behavior, particularly in the context of fan tourism, exploring the interplay between fans' cognitive levels, behavioral involvement, and place attachment. Fan culture has gradually shifted from a niche subculture to a global cultural phenomenon, especially with the influence of social media and digital platforms, which have rapidly expanded the influence of fan groups. Jenkins (2006) points out that fans are not merely passive cultural consumers; they are also cultural producers and disseminators, becoming part of the "prosumers." Therefore, the understanding of fan behavior should not be limited to traditional consumption behavior analysis but should also focus on their active participation in cultural creation, digital interaction, and community building.

Fans, through participating in idol-related activities or visiting idol-specific locations (such as concert venues, film shooting locations, etc.), not only satisfy their emotional attachment to their idols but also form a specific place attachment. Hills (2003) emphasizes that fan culture is not just an emotional expression, but also has a strong spatial component. Fans establish emotional connections with idol-related locations, deepening their attachment and identification with these places. This viewpoint provides a theoretical foundation for the core framework of this study, suggesting that fan behavior is not only an emotional projection onto idols but also deep participation in the geographical spaces, cultural symbols, and community identities associated with idols.

Existing literature mostly views fan behavior as a social or emotional phenomenon, yet few studies systematically analyze the relationship between fans' behavior, cognitive levels, and place attachment. According to Sandvoss (2005), fan culture exhibits a multidimensional structure, where its core is not just a single emotional attachment, but also involves fans' participation behaviors on digital platforms, community interactions, and emotional exchanges. Therefore, exploring how fans' cognitive levels, behavioral involvement, and how such involvement influences their attachment to idol-related destinations is crucial for a comprehensive understanding of fan behavior. This study aims to establish a theoretical framework for fan behavior,

examining the relationship between fan behavior and place attachment by incorporating the three behavioral dimensions of digital capital, digital territory, and digital rewards. This framework not only provides new perspectives on understanding fan behavior motivations but also offers theoretical support for cultural tourism research.

With the global development of fan culture, fans' place attachment is no longer limited to traditional physical spaces but also includes virtual spaces related to idol culture and community. Beeton (2006) points out that movie and television idol landmarks have become part of fan culture, and through repeated visits to these landmarks, fans not

only strengthen their emotional connection with idols but also deepen their cultural identification with these places. This study draws on this idea, proposing that in the context of fan tourism, fans' place attachment is not only an emotional attachment to physical locations but also a projection of cultural symbols, community belonging, and identity.

Based on this, the core questions proposed in this study are: 1) How does fans' cognitive level influence their behavioral involvement? 2) How does fans' attachment to idol-related destinations form during the tourism process? 3) What is the mediating role of fans' behavioral involvement between cognitive levels and attachment? To address these questions, this study combines two research methods. The first research method used a qualitative approach, specifically autoethnography, to explore fan behavior from within the fan community. Autoethnography collects data by making the researcher part of the research object, which is particularly suited for indepth studies of cultural or social groups(Chang, 2008; Ellis, 2004). In this qualitative research, the researcher, as a member of the K-pop fan community, explored fan behavior, emotions, and cognitive patterns in the context of fan tourism.Autoethnography provided an internal perspective, enhancing the cultural sensitivity and authenticity of the data(Ellis et al., 2011). Through participant observation and journaling, the study collected rich qualitative data to explore how fans go beyond surface-level consumption behaviors, delving into the complexities of cultural practices, emotional investment, and digital labor. Through these methods, the study revealed core concepts such as "digital capital," "digital territory," and "digital rewards," which formed the theoretical framework for the subsequent quantitative study.

The second research method employed a quantitative approach, building a structural equation model (SEM) based on the results of the first study to explore the relationship between fans' cognitive levels, digital prosumption behavior, and place attachment to idol-related destinations. The study used 683 valid survey responses collected through snowball sampling from fan communities. The goal of the quantitative research was to verify the three major dimensions of fan digital behavior proposed in the qualitative study and to explore the adaptability of the destination attachment scale proposed by Lee et al. (2020) within the context of fan groups, testing whether the scale can effectively capture attachment characteristics in the fan tourism context. Additionally, the study examined the causal relationships between fans' cognitive levels, digital behavioral involvement, and place attachment. The analysis using structural equation modeling (SEM) validated the threedimensional model of "digital prosumption behavior" proposed in the qualitative research, contributing to the interdisciplinary development of cultural tourism and fan research while providing new theoretical perspectives and empirical support. However, the measurement model for the "destination attachment" scale proposed by Lee et al. (2020) did not pass the SEM validation, specifically in terms of the fit indices and the insufficient reflection of measurement variables on latent variables. By combining qualitative and quantitative research, this study enriches the theoretical framework of tourism behavior research. Traditional tourism research often focuses on macro variables such as motivations and satisfaction but pays less attention to the micro behavioral mechanisms of specific

communities like fan groups. By introducing fans' participation in social media culture, emotional labor, and fan creation, this study bridges the gap between tourism research and fan culture research, opening up new interpretative paths in the sociology of tourism. Furthermore, fan behavior has long been regarded as "irrational" or even "pathological." However, by combining autoethnography and structured surveys, this study reveals the rational logic and creative output behind fan behavior. The results indicate that fans are not only consumers of culture but also creators and disseminators of culture. Fans are "prosumers" in the digital age, which reconstructs the subjectivity and legitimacy of fan behavior, challenging traditional negative labels.

Nevertheless, this study has some limitations. First, the snowball sampling method used in this study results in a sample population concentrated in young female K-pop fans, which makes the sample structure relatively homogeneous and may not fully represent the broader fan community. Therefore, future research can expand the sample range to include fan groups from diverse cultural backgrounds and regions. Second, the study found that fans' attachment differs significantly from that of traditional tourists, which means existing scales fail to capture the "person-placeculture" triadic structure of fan behavior. Future research should further revise and rebuild measurement dimensions to better accommodate the special context of fan tourism.

Lastly, although this study proposes a "cognitive-behavioral-attachment" theoretical pathway, it remains somewhat static and does not fully reflect the dynamic and complex nature of fan behavior. Future research could incorporate more dynamic model designs to capture the cyclical changes in fan identity across cognitive, emotional, and behavioral dimensions, exploring the evolution of fan behavior over time and in different contexts.

Based on the findings of this study, future research can further explore multiple directions. On one hand, cross-cultural studies of fan tourism behavior could be conducted by introducing samples from diverse cultural backgrounds and regions. On the other hand, by integrating multi-source data, tracking fan behavior trajectories, and utilizing emotional data, social media data, and geographic information, deeper analysis could be conducted to examine the formation mechanism of fans' emotional attachment to destinations. Furthermore, developing more appropriate measurement tools for fan behavior, particularly focusing on dimensions such as symbolic space identity, community attachment, and emotional projection, will help better understand fans' emotional attachment and tourism behavior. Overall, this study provides a structured theoretical framework for fan tourism phenomena and offers theoretical support and methodological guidance for future research. It is of significant importance in promoting the interdisciplinary integration of fan culture and tourism behavior research(Lee et al., 2020) (Stanfill & Condis, 2014; Zhang & Negus, 2020).

Keywords:fan tourism, fandom, digital labor, digital capital, place attachment, autoethnography, structural equation modeling

Reference

[1] Beeton, S. (2006). Understanding film-induced tourism. Tourism analysis, 11(3), 181- 188.

[2] Chang, H. (2008). Autoethnography as method. Walnut Creek.
[3] Ellis, C. (2004). The ethnographic I: A methodological novel about autoethnography. Rowman Altamira.
[4] Ellis, C., Adams, T. E., & Bochner, A. P. (2011). Autoethnography: an overview. Historical social research/Historische sozialforschung, 273-290.
[5] Hills, M. (2003). Fan cultures. Routledge.
[6] Jenkins, H. (2006). Fans, bloggers, and gamers: Media consumers in a digital age. Nova Iorque: New York University Press, 16-24.
[7] Lee, S., Joo, D., Lee, C.-K., & Woosnam, K. M. (2020). Korean DMZ tourists' perceived similarity and shared beliefs in predicting place attachment and support for tourism development. Journal of Destination Marketing & Management, 18, 100467.
[8] Sandvoss, C. (2005). Fans: The mirror of consumption. Polity.
[9] Stanfill, M., & Condis, M. (2014). Fandom and/as labor. Transformative Works and Cultures, 15. https://doi.org/10.3983/twc.2014.0593
[10] Zhang, Q., & Negus, K. (2020). East Asian pop music idol production and the emergence of data fandom in China. International Journal of Cultural Studies, 23(4), 493-511

From Virtual Games to Travel Intentions: An Application Study of the Destination Image Theory

Yiwen LONG*, Miaoqing TIAN, Xi WANG

School of Culture and Creativity, Beijing Normal-Hong Kong Baptist University

*Corresponding Email: s230013024@mail.uic.edu.cn

Abstract

Introduction

With the rapid development of digital technology, video games have gradually transcended their entertainment attributes and systematically incorporated authentic tourism destination elements into game design (Lian et al., 2024). Game developers can not only recreate real-world scenarios, but also seamlessly integrate cultural and historical elements to provide players with an immersive gaming experience. (McArthur, 2024). For instance, the game *Black Myth: Wukong* has utilized digital technology to realistically reproduce historical architectures like the Yungang Grottoes in Shanxi Province. According to Li (2024), many players have developed a strong desire to explore these locations firsthand and have chosen to visit Shanxi for cultural tourism.

Despite existing studies demonstrating the significant impact of cross-media narratives on the shaping of tourism destination images (Basaraba et al., 2019) and the growing academic interest in emerging fields like sports tourism (Bazzanella et al., 2023), investigation on the relationship between video games and tourism intentions remains in its infancy. Current research focuses on the application of games in tourism education (Chung-Shing et al., 2020); The link between gaming and travel (Dubois & Gibbs, 2018); Gamification of tourism (Xu et al., 2017). There is a paucity of systematic studies examining the direct impact of video games on tourism intentions. Based on the theoretical framework of destination image, this study aims to systematically explore the formation process of tourism intentions from virtual gaming experiences to real-world tourism aspirations.

Literature Review

Destination Image Theory

The origin of destination image theory can be traced back to the 1970s. Proposed by Hunt in 1971, the concept of "tourist destination image" emphasizes the influence of tourists' subjective cognition and emotional evaluation of non-residential places on their travel decisions. In 1999, Baloglu and McCleary proposed a three-dimensional model of tourism destination image, ‘cognitive-emotional-total’, which further clarifies the composition of destination image, where cognitive image involves the evaluation of objective attributes of the destination, and affective image reflects tourists' emotional responses. The cognitive image involves the evaluation of the objective attributes of the destination, while the affective image reflects the tourists' emotional responses.

On this basis, Fakeye and Crompton (1991) proposed the dynamic formation process of image, from the initial "original image" to the "inductive image" after information processing, and finally formed a "complex image" based on actual experience. This paper adopts this theory and explores how game characteristics affect travel intention by shaping cognitive and emotional images by considering games as a new type of destination image shaping medium. It aims to provide theoretical basis and practical guidance for the integrated development of "game + cultural tourism".

Connection among video game characteristics and destination image

Games with traditional content, such as *Black Myth: Wukong* and *Assassin's Creed: Unity*, enhance the image of the destination through realistic depictions and cultural narratives (Jiao, 2024; Mochocki, 2021). In *Black Myth: Wukong*, accurate depictions of traditional Chinese landscapes, architecture, and cultural practices create an authentic game environment（Jiao, 2024). This realism immerses players in the game world, deepening their emotional connection to the destination and stimulating their curiosity to travel (Li， 2025). Research has shown that heritage-based games can effectively enhance destination authenticity and positively influence destination image formation (Alcindor et al., 2022).

The integration of Chinese cultural heritage in games like *Black Myth: Wukong* and genshin impact is remarkable. These games highlight profound cultural motifs, such as Confucianism, Buddhism, and Daoism (Jiao, 2024; Wardaya & Smith, 2024). *Black Myth: Wukong* weaves these cultural elements into its storylines, character designs, and game environments . The cultural richness in the game serves as a medium for cultural preservation and, at the same time, drives the curiosity of international audiences, making them more interested in visiting real-world destinations related to these cultures. It has been found that cultural richness in games is a powerful factor in stimulating interest in Chinese tourism (Hou, 2024; Li, 2025).

Player interactions with non-player characters (NPCs) and the game environment play a crucial role in constructing an image of the perceived destination and creating emotional solidarity, which helps to foster willingness to travel (Sharma et al., 2023； Yin et al., 2024). In *Black Myth: Wukong*, the open world mechanic allows players to freely explore, interact with NPCs, and interact with the environment. These interactions enhance the cognitive and emotional image of the destination in the player's mind (Sharma et al., 2023). The game's interactive and participation features, according to Jernsand et al. (2015), enable a deeper engagement with the cultural content, which could strengthen the emotional bond and boost desire to experience the culture being depicted.

Correlation between destination image and intention to visit

The impact of destination image on visit intention has been established by numerous early studies. These studies have shown that tourists' perceptions of the destination have an impact on their emotional image and visit intention and that a positive perception of the destination encourages stronger visit intention (Yin et al., 2024). In addition, Loureiro and Jesus (2019) proved that the perception of a destination has an impact on travelers' attitudes, feelings, and satisfaction.

Destination image in video games can influence players' visit intention and attract more and more tourists to travel destinations in the real world (Sharma et al., 2023). In this case, the characteristics of the game are an effective way to increase tourists' interest and travel intention. Therefore, according to the stimulus-organism response (SOR), this study establishes the following research model based on game characteristics.

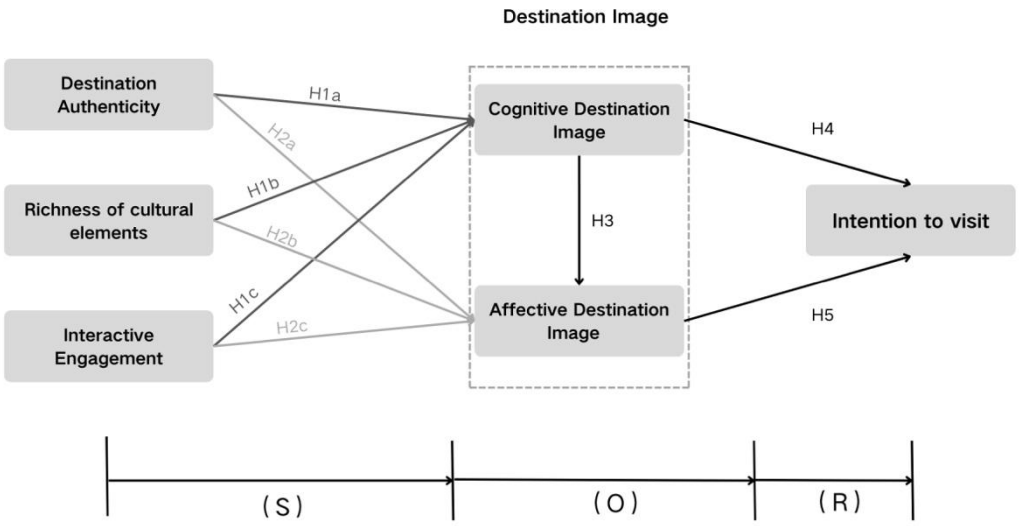


Figure 1. Proposed Research Framework

Methodology

This study uses a questionnaire survey method to collect data on potential tourists' perception of Shanxi's cultural tourism. The questionnaire is designed based on a five-point Likert scale (1=strongly disagree, 5=strongly agree), covering all variable measurement items. The research subjects are potential tourists who have played *Black Myth: Wukong* and are interested in Shanxi's cultural tourism. 200-300 valid questionnaires will be collected through online platforms. The paper will use SmartPLS 3 software developed by Ringle et al. (2015) for partial least squares structural equation modeling (PLS-SEM) analysis.

Implications

On the theoretical level, this study breaks through the limitation of traditional research focusing on on-site experience. Using *Black Myth: Wukong* as an empirical carrier, this study reveals the dynamic process of game media reconstructing cognitive-emotional destination image through three dimensions: authenticity, cultural richness, and interactivity. It proposes a tourism decision-making explanatory framework for virtual and real interaction, and injects digital era connotations into destination image theory.

On the practical level, this study provides an operational path for the integration of culture and tourism in the digital era. Cultural and tourism areas can cooperate with game manufacturers to develop virtual-real linkage products (such as VR ancient city roaming or AR cultural exploration based on popular game IPs), build a "game achievement-on-site discount" conversion mechanism, and seamlessly connect virtual experience to on-site tourism. At the same time, relying on game IP to create a

multimedia matrix of cultural symbols, the destination brand image is strengthened through short videos, live broadcasts, etc. In addition, cultural and tourism areas need to simultaneously strengthen cultural heritage protection and tourism supporting facilities construction to cope with the growth of on-site tourism demand stimulated by virtual experience, and achieve traffic acceptance and sustainable development.

Future research can be deepened in multiple directions, such as longitudinally tracking the long-term impact of virtual experience on tourism behavior; comparing the differences in the effects of different digital media such as short videos and metaverses; and combining emerging technologies (such as XR technology) to deeply analyze the unique role of immersive experience in emotional connection. Ultimately, a cross-media, multi-cycle cultural travel prediction model is constructed to provide a theoretical paradigm and practical template for the digital transformation of global cultural tourism.

Key words： cultural marketing, game-induced tourism, Destination Image Theory, travel intention, digital cultural promotion

References

[1] Alcindor, M., Jackson, D., & Alcindor-Huelva, P. (2022). Heritage places as the settings for virtual playgrounds: perceived realism in videogames, as a tool for the re-localisation of physical places. International Journal of Heritage Studies, 28(7), 1–19.

[2] Baloglu, S., & McCleary, K. W. (1999). A model of destination image formation. Annals of Tourism Research, 26(4), 868–897.

[3] Basaraba, N., Conlan, O., Edmond, J., & Arnds, P. (2019). Transmedia Storytelling and Cultural Heritage Tourism. Editorial EAFIT EBooks, 11–26.

[4] Bazzanella, F., Schnitzer, M., Peters, M., & Bichler, B. F. (2023). The Role of Sports Events in Developing Tourism destinations: a Systematized Review and Future Research Agenda. Journal of Sport & Tourism, 27(2), 1–33.

[5] Chen, C.-F., & Tsai, D. (2007). How Destination Image and Evaluative Factors Affect Behavioral intentions? Tourism Management, 28(4), 1115–1122.

[6] Chung-Shing, C., Yat-hang, C., & Tsz Heung Agnes, F. (2020). The effectiveness of online scenario game for ecotourism education from knowledge-attitude-usability dimensions. Journal of Hospitality, Leisure, Sport & Tourism Education, 27, 100264.

[7] Dubois, L.-E., & Gibbs, C. (2018). Video game–induced tourism: a new frontier for destination marketers. Tourism Review, 73(2), 186–198.

[8] Fakeye, P. C., & Crompton, J. L. (1991). Image Differences between Prospective, First-Time, and Repeat Visitors to the Lower Rio Grande Valley. Journal of Travel Research, 30(2), 10–16.

[9] Gunn, C. A. (1972). Vacationscape . University of Texas Press.

[10] Hou, Y. (2024). From Virtual Journeys to Real Travels: Exploring the Impact of Chinese-Themed Digital Games on International Players' Tourism Intentions. Modern Economics & Management Forum, 5(5), 910.

[11] Hunt, J. M. (1971). Image as a factor in tourism development. Journal of Travel Research, 10(2), 12-18.

[12] Jernsand, E. M., Kraff, H., & Mossberg, L. (2015). Tourism Experience Innovation Through Design. Scandinavian Journal of Hospitality and Tourism, 15(sup1), 98–119.

[13] Jiao, J. (2024). Film-Game Integration: Confucianism, Buddhism, Daoism Imagery and Gamified Visual Aesthetics in “Black Myth: Wukong.” Interdisciplinary Humanities and Communication Studies, 1(10), 1–6.

[14] Li, H. (2025). Traditional Cultural Elements and Their Modern Adaption in Black Myth: Wukong. Communications in Humanities Research, 64(1), 87–92.

[15] Li, K. (2024). Using games as a medium to help local cultural tourism go viral - China Tourism News Network. Ctnews.com.cn. https://www.ctnews.com.cn/wenhua/content/2024-09/10/content_164683.html

[16] Li, R. (2024). Cross-Cultural Game Communication: The Impact of Chinglish on International Players’ Perception of Chinese Culture——A Case Study of Black Myth: Wukong. Interdisciplinary Humanities and Communication Studies, 1(10).

[17] Lian, T., Chen, M., Yu, C., & Xu, J. (2024). Research on the influence of tourism destination embedding in online games on players’ travel intentions. Journal of Management Analytics, 11(4), 1–30.

[18] Loureiro, S. M. C., & Jesus, S. (2019). How perceived risk and animosity towards a destination may influence destination image and intention to revisit: the case of Rio de Janeiro. Anatolia, 30(4), 1–16.

[19] Maccannell, D. (1976). The tourist: A new theory of the leisure class . University of California.

[20] McArthur, T. (2024, March 13). From Pixels to Reality: The Evolution of Graphics in Video Games. The Cryption. https://thecryption.com/gaming/from-pixels-to-reality-the-evolution-of-graphics-in-video-games/

[21] Mochocki, M. (2021). Heritage Sites and Video Games: Questions of Authenticity and Immersion. Games and Culture, 16(8), 155541202110053.

[22] Neuhofer, B., Buhalis, D., & Ladkin, A. (2013). A Typology of Technology-Enhanced Tourism Experiences. International Journal of Tourism Research, 16(4), 340–350.

[23] Sharma, S., Stylidis, D., & Woosnam, K. M. (2022). From virtual to actual destinations: do interactions with others, emotional solidarity, and destination image in online games influence willingness to travel? Current Issues in Tourism, 26(9), 1–19.

[24] Wang, N. (1999). Rethinking authenticity in tourism experience. Annals of Tourism Research, 26(2), 349–370.

[25] Wardaya, M., Elizabeth, G., Wijaya, F. F., Lovjoyla Belinda Lennial, & Willyam, S. C. (2024). Genshin Impact’s Role in Preserving Chinese Cultural Heritage. ULTIMART Jurnal Komunikasi Visual, 17(2), 205–215.

[26] Xu, F., Buhalis, D., & Weber, J. (2017). Serious games and the gamification of tourism. Tourism Management, 60, 244–256.

[27] Yin Shuhua, Cai Tianyi, & Tang Chengcai. (2024). The Impact of Tourism Destination Factors in Video Games on Players’ Intention to Visit. Journal of Resources and Ecology, 15(2).

The Psychology of Wine e-Commerce: Personality, Sensory Preferences, and Digital Consumer Behavior

Xi WANG[1*], Jie ZHENG[2]

[1] School of Culture and Creativity, Beijing Normal-Hong Kong Baptist University

[2] College of Human Sciences, Iowa State University

*Corresponding Email: xiwang@uic.edu.cn

Abstract

Introduction

The global wine industry has witnessed substantial growth in recent years, driven by increasing consumer demand and the expansion of e-commerce platforms. Online wine retailers play a critical role in shaping consumer purchasing behavior by offering a diverse range of products, personalized recommendations, and user-generated content in the form of reviews and ratings (Castellini & Samoggia, 2018). Among various factors influencing wine consumption, alcohol content is a crucial determinant in consumer choice, affecting not only taste perception but also health considerations and social preferences (Deroover et al., 2021). Despite the increasing reliance on big data analytics in e-commerce, limited research has explored the psychological traits underlying consumer preferences for different alcohol content levels in wine. And the Big Five Personality Traits framework provides a well-established model for understanding individual differences in consumer behavior.

This study aims to investigate the relationship between consumer personality traits and the alcohol content of wines they purchase. Specifically, it seeks to address the following research question: How do the Big Five Personality Traits influence consumer preferences for wine alcohol content? To achieve the research objectives, this study adopts a big data-driven approach, combining natural language processing (NLP) and statistical modeling. A Beta regression model is employed to analyze the relationship between personality traits (independent variables) and wine alcohol content (dependent variable).

This research makes three key contributions to the fields of consumer behavior, e-commerce analytics, and AI-driven marketing. Theoretically, this study extends existing consumer personality research by linking Big Five personality traits to wine alcohol content preferences, an underexplored area in wine marketing, which provides new empirical evidence on how personality-driven factors influence product choice beyond traditional demographic and economic considerations. Methodologically, it introduces BERT-based NLP analysis as a novel approach for extracting personality traits from consumer-generated text, advancing the use of machine learning in consumer research. Practically, it provides actionable insights for online wine retailers to develop personality-based recommendation algorithms, optimizing personalized marketing strategies.

Literature review

Wine E-Commerce and Digital Consumer Behavior

The digital transformation of retail has significantly reshaped the wine industry, giving rise to the rapid development of wine e-commerce. While traditional wine purchasing relied heavily on in-store tastings and expert recommendations (Thach & Olsen, 2006), online platforms now provide consumers with broader product assortments, transparent pricing, and algorithm-driven personalization (Rocchi & Stefani, 2006). The COVID-19 pandemic further accelerated this transition by altering consumer routines and increasing reliance on digital shopping channels (Compés et al., 2022).

A central theme in wine e-commerce research concerns trust and perceived risk. Due to the intangible nature of online wine purchasing, consumer confidence can be undermined by concerns over product authenticity, transaction security, and delivery reliability (Quinton & Harridge-March, 2008). Retailers mitigate these barriers by implementing secure payment systems, offering detailed product descriptions, and maintaining transparent return policies (Dhaoui, 2019).

Online reviews and ratings serve as critical proxies for the sensory experiences traditionally associated with wine selection. Both expert and peer-generated evaluations influence consumer decision-making, providing essential information in the absence of direct tasting (Brunner & Siegrist, 2011). Recent studies have also used sentiment analysis to extract preference patterns from user reviews, enabling platforms to fine-tune product recommendations (Wang et al., 2024a). Personalization technologies have become integral to digital wine marketing. E-commerce platforms increasingly apply machine learning to tailor suggestions based on user behavior, taste preferences, and psychographic traits (Tasci & Back, 2023). These systems enhance user satisfaction and support brand loyalty by reducing cognitive overload (Wang et al., 2024b).

Sensory Preferences and Wine Consumption

Wine consumption is driven by a complex interplay of sensory, economic, psychological, and contextual factors, with sensory preferences playing a particularly influential role in shaping consumer choices. Key sensory attributes—namely alcohol content, wine type, flavor, and style—serve as primary determinants of perceived quality, satisfaction, and overall consumption experience (Yang & Lee, 2020).

Among these, alcohol content is one of the most defining characteristics, as it directly impacts the wine's taste intensity, mouthfeel, and perceived strength. Wines with higher alcohol levels (e.g., above 15% ABV) are typically described as full-bodied, with enhanced viscosity and greater aromatic complexity due to higher concentrations of alcohol-soluble compounds (Bruwer et al., 2014). These wines often appeal to sensation-seeking consumers who favor bold, expressive sensory profiles. In contrast, wines with lower alcohol content (e.g., below 10% ABV) are associated with freshness, lightness, and easy drinkability, making them preferable for casual occasions or warmer climates (Oliver & Colicchio, 2011).

Beyond alcohol level, wine type (e.g., red, white, rosé, sparkling) and flavor profile (e.g., acidity, sweetness, tannin, fruit-forwardness) significantly influence consumer behavior. Recent shifts in the market show increasing consumer preference for white wines, largely due to their lighter alcohol content and food compatibility (Teague,

2025). Additionally, wine style, shaped by production methods such as oak aging and fermentation techniques, further differentiates products. The rising popularity of natural wines, emphasizing minimal intervention and organic practices, reflects a broader consumer trend toward authenticity, sustainability, and transparency (Toulaki et al., 2023).

Trait Theory of Personality and Consumer Behavior

The Trait Theory of Personality offers a foundational psychological framework that explains how individuals exhibit stable and measurable traits, which influence behaviors across a variety of contexts, including consumer decision-making (Swargiary, 2024). The most widely accepted model within this framework is the Five-Factor Model (FFM)—commonly referred to as the Big Five Personality Traits—which classifies personality into five core dimensions: Openness, Conscientiousness, Extraversion, Agreeableness, and Neuroticism (McCrae & Costa, 1997). These traits have been extensively applied in consumer research to predict individual differences in product preferences, brand engagement, and marketing responsiveness (Wang et al., 2024a).

Trait Theory assumes that personality traits are relatively stable over time, making them particularly useful for predicting long-term consumer behavior (Steenkamp & Maydeu-Olivares, 2015). It also helps explain behavioral heterogeneity, particularly why some individuals exhibit risk-seeking tendencies—such as trying novel products or adopting niche brands—while others prefer familiarity and reliability (Alam et al., 2024). For example, Extraverts are typically more responsive to social and experiential marketing, whereas Conscientious individuals favor structured information and well-established brands (Ul Islam et al., 2017).

In the context of wine consumption, Trait Theory provides a lens for interpreting consistent preferences for specific product attributes, such as alcohol strength, flavor complexity, and novelty. For instance, consumers high in Openness are more likely to explore rare and imported wines with unique sensory profiles (Maguire & Lim, 2015), while those high in Conscientiousness prefer traditional labels with informative descriptions (Louis & Lombart, 2010). Extraverts are more engaged in wine-related social events and tastings, whereas Neurotic consumers may use wine for emotional regulation (Wang et al., 2024b).

Method

Data Collection

This study utilized a large-scale dataset obtained from Total Wine & More (https://www.totalwine.com/), a leading online wine retailer, to analyze the relationship between consumers' Big Five personality traits and their preferences for wine alcohol content. The dataset was collected in December 2024 through web scraping techniques. In addition to structured product data, consumer reviews and ratings associated with specific wines were collected. Each review provides valuable textual feedback, enabling an analysis of consumer personality traits through BERT-based NLP models. The dataset spans user-generated content from 2015 to 2024, ensuring a longitudinal perspective on wine preferences. An extensive data cleaning process was performed to enhance data quality and eliminate inconsistencies. After preprocessing, a final dataset

of 34,288 entries was retained for analysis. This dataset includes structured product attributes and unstructured consumer reviews, forming the basis for the study's machine learning and regression analysis.

Training Data

To investigate the relationship between linguistic behavior and personality traits, a regression-based predictive framework was constructed, grounded in large-scale, user-generated textual data. The dataset used for model training and evaluation was sourced from the publicly available myPersonality project, retrieved from Kaggle. The myPersonality project dataset comprises over 9,900 Facebook status updates, each associated with a unique anonymized user identifier, a timestamp, and psychometrically validated scores on the Big Five personality dimensions: Openness, Conscientiousness, Extraversion, Agreeableness, and Neuroticism (Tang et al., 2022).

Results

The trained BERT model was applied to a domain-specific dataset of user-generated wine reviews, comprising 9,917 entries enriched with textual content, product metadata, and reviewer information. Table 1 summarizes the results for each trait using four standard regression metrics: MSE, Mean Absolute Error (MAE), Pearson correlation coefficient (r), and the coefficient of determination (R^2). All traits exhibited high predictive accuracy, with Pearson r values above 0.88 and R^2 exceeding 0.76. The results indicate robust predictive reliability and demonstrate the model's capacity to capture complex psychological signals from text.

Table 1. Five Personality Traits Detected in BERT model

Trait	Mean	Std Dev	MSE	MAE	Pearson_r	R^2
Openness	4.498	0.261	0.081	0.151	0.892	0.763
Conscientiousness	3.380	0.329	0.127	0.181	0.887	0.767
Extraversion	3.317	0.450	0.166	0.209	0.891	0.776
Agreeableness	3.776	0.308	0.1012	0.168	0.894	0.781
Neuroticism	2.456	0.428	0.126	0.175	0.893	0.781

To complement the numerical evaluation, the relationship between predicted and actual scores was visualized using scatter plots (Figure 1). Each plot includes a red diagonal reference line representing the identity function y=x. The clustering of points around this line further confirms the high alignment between predictions and ground-truth labels across all five personality dimensions.

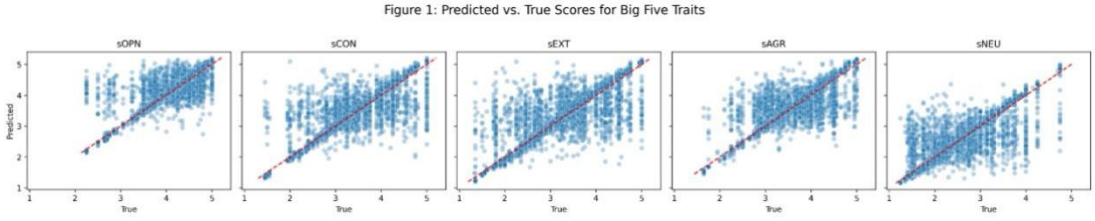


Figure 1. Predicted vs. True Values of Five Personality Traits

The beta regression analysis revealed significant associations between the personality trait variables and the ABV preferred by consumers (referring to Table 2). The precision parameter (phi) was estimated at 2347.83 (SE = 18.42, $p < 0.001$), suggesting minimal dispersion in the model. The maximum likelihood estimator yielded a log-likelihood of 115300 with 13 df, and the pseudo R-squared value of 0.630 indicated substantial explanatory power.

For the Big Five personality traits, extraversion ($\beta = -0.008$, $p < 0.001$) and neuroticism ($\beta = -0.007$, $p < 0.001$) were negatively associated with the ABV, while agreeableness ($\beta = 0.006$, $p < 0.001$) and openness ($\beta = 0.008$, $p < 0.001$) demonstrated positive effects. conscientiousness did not reach statistical significance ($\beta = -0.001$, $p = 0.625$). And all control variables statistically exhibited significant effects on the dependent variable.

Table 2. Beta Regression Results

Coefficients	Estimate	Std. Error	z value	Pr(>|z|)	
(Intercept)	-1.721	0.010	-176.458	0.000	***
Control Variable					
Price	0.001	0.000	27.946	0.000	***
Wine type	-0.066	0.001	-116.423	0.000	***
Wine body type	-0.046	0.001	-78.535	0.000	***
Wine flavor	-0.001	0.000	-4.029	0.000	***
Customer rating	-0.001	0.000	-3.828	0.000	***
Like number	0.001	0.000	27.946	0.000	***
Big five personality					
Extraversion	-0.008	0.001	-9.111	0.000	***
Neuroticism	-0.007	0.001	-7.001	0.000	***
Agreeableness	0.006	0.001	4.533	0.000	***
Conscientiousness	-0.001	0.001	-0.488	0.625	
Openness	0.008	0.001	5.686	0.000	***

***p<0.001

Discussion

Findings provide empirical support for the application of Trait Theory in understanding wine consumption behavior and highlight the nuanced psychological mechanisms underpinning alcohol content preferences.

Among the Big Five traits, Openness to Experience exhibited a positive and statistically significant association with preferred alcohol content ($\beta = 0.008$, $p < 0.001$). This result aligns with existing literature indicating that individuals high in Openness are more inclined toward novelty, complexity, and multisensory engagement (Gocłowska et al., 2019). Higher-alcohol wines, often characterized by fuller body, increased viscosity, and greater flavor intensity, offer enhanced sensory richness (Varela et al., 2015), making them especially appealing to high-Openness consumers.

Agreeableness also showed a positive relationship with alcohol content preference ($\beta = 0.006$, $p < 0.001$). While Agreeableness is typically associated with prosocial

tendencies and norm adherence (Lee et al., 2009), in the context of wine consumption, it may reflect conformity to social expectations or the pursuit of affiliative experiences. Higher-alcohol wines are often symbolically linked with prestige and connoisseurship (Klatsky et al., 1990), and agreeable individuals may prefer such products to align with group norms, demonstrate social literacy, or facilitate harmony in shared tasting settings.

Conversely, both Extraversion ($\beta = -0.008$, $p < 0.001$) and Neuroticism ($\beta = -0.007$, $p < 0.001$) were negatively associated with alcohol content preferences. For extraverted individuals, who typically value sociability and prolonged interaction, the preference for lower-alcohol wines may serve a pragmatic function. Lower-ABV wines allow for extended consumption during social events while minimizing cognitive impairment and maintaining conversational engagement (Lepri et al., 2012).

In contrast, the negative relationship between Neuroticism and preferred alcohol content is more straightforward. Individuals high in Neuroticism are more vulnerable to emotional instability, anxiety, and self-consciousness (Dong et al., 2022). For these consumers, selecting lower-alcohol wines may be a self-protective behavior aimed at minimizing physiological arousal, disinhibition, or negative effect. This aligns with prior findings that Neuroticism is negatively associated with heavy drinking and positively linked to alcohol use driven by anxiety reduction or emotional regulation (Freichel et al., 2023).

Interestingly, Conscientiousness did not show a significant relationship with alcohol content preference ($\beta = 0.000$, $p = 0.709$). This null effect may be due to the internal heterogeneity of the trait. On one hand, conscientious individuals are typically disciplined, health-conscious, and averse to excess (Allen et al., 2024), suggesting a preference for lower-alcohol wines. On the other hand, the same individuals often value structure, goal orientation, and quality—characteristics that could align with preferences for more complex, higher-ABV wines (Tseng et al., 2021).

Implication

Theoretical Implication

This study provides several theoretical contributions to the literature on consumer psychology, personality modeling, and sensory decision-making in digital commerce. First, this study contributes to a deeper understanding of how psychological traits influence product-level consumption decisions by empirically linking the Big Five personality dimensions to alcohol content preference in wine. While personality theory has been widely applied to explain brand choice or shopping orientation, its connection to intrinsic product attributes, particularly sensory intensity, has been insufficiently theorized.

Second, the results refine the interpretation of individual traits by revealing differentiated behavioral pathways associated with each dimension. Rather than treating personality as a uniform predictor of preference, the findings show that traits such as Openness and Neuroticism influence alcohol selection through distinct mechanisms—one via cognitive curiosity and novelty-seeking, the other through affective risk aversion. This granularity supports more mechanistic models of

personality-driven consumption, aligning with calls in the literature to move beyond trait-behavior correlations toward trait-motivation-behavior frameworks.

Third, the use of BERT-based personality inference contributes to theoretical innovation in psychometric methodology. By showing that linguistically inferred traits predict actual consumption preferences, the study reinforces the construct validity of computational personality models. This supports the emerging theoretical position that language, as a behavioral artifact, encodes enduring psychological tendencies, offering a non-invasive and scalable complement to traditional self-report measures in personality research.

Practical Implication

This study also offers practical implications for digital marketing, retail personalization, and public health messaging by illustrating how personality insights can inform consumption-related decision architectures. At the micro-level, the findings have clear implications for personalized recommendation systems in online wine retail. By integrating personality inference models into backend algorithms, retailers can better match products with individual consumer dispositions, particularly around attributes such as alcohol content. This could reduce choice overload and increase consumer satisfaction by aligning suggestions with internal psychological preferences.

Secondly, marketing communication strategies can be adapted based on psychological segmentation.

At the organizational level, wineries and retail platforms can incorporate psychographic variables into broader market segmentation strategies. By clustering consumers not only by demographics but also by personality profiles inferred from behavioral data, firms can tailor inventory decisions, promotional campaigns, and even product design to more precisely meet the preferences of distinct consumer segments. This enables more strategic allocation of marketing resources.

Finally, on a macro level, the ability to predict ABV preferences from personality traits has implications for public health and alcohol regulation. Insights into how personality shapes alcohol content choices can inform the design of more targeted, psychologically attuned health campaigns. Rather than issuing generic consumption warnings, stakeholders can craft personality-sensitive interventions that resonate more deeply with consumers' underlying motivations and emotional profiles, promoting safer and more conscious drinking practices.

Keywords: personality, wine consumption, e-commerce, sensory preferences

References

[1] Alam, M. Z., Rafiq, M., Alafif, A., Nasir, S., & Bashir, J. (2024). Be a rainbow in own cloud: applying trait activation theory to trigger personality using conflict handling styles for intrapreneurial behaviour. *International Journal of Innovation Science*.

[2] Allen, M. S., Mishra, M., Tashjian, S. M., & Laborde, S. (2024). Linking Big Five personality traits to components of diet: A meta-analytic review. *Journal of Personality and Social Psychology*.

[3] Brunner, T. A., & Siegrist, M. (2011). A consumer-oriented segmentation study in the Swiss wine market. *British food journal*, *113*(3), 353-373.

[4] Bruwer, J., Jiranek, V., Halstead, L., & Saliba, A. (2014). Lower alcohol wines in the UK market: some baseline consumer behaviour metrics. *British Food Journal*, *116*(7), 1143-1161.

[5] Compés, R., Faria, S., Gonçalves, T., Rebelo, J., Pinilla, V., & Simon Elorz, K. (2022). The shock of lockdown on the spending on wine in the Iberian market: the effects of procurement and consumption patterns. *British Food Journal*, *124*(5), 1622-1640.

[6] Dhaoui, I. (2019). Electronic governance: An overview of opportunities and challenges.

[7] Dong, J., Xiao, T., Xu, Q., Liang, F., Gu, S., Wang, F., & Huang, J. H. (2022). Anxious personality traits: Perspectives from basic emotions and neurotransmitters. *Brain Sciences*, *12*(9), 1141.

[8] Freichel, R., Pfirrmann, J., Cousijn, J., de Jong, P., Franken, I., Banaschewski, T., ... & IMAGEN Consortium. (2023). Drinking motives, personality traits and life stressors—identifying pathways to harmful alcohol use in adolescence using a panel network approach. *Addiction*, *118*(10), 1908-1919.

[9] Gocłowska, M. A., Ritter, S. M., Elliot, A. J., & Baas, M. (2019). Novelty seeking is linked to openness and extraversion, and can lead to greater creative performance. *Journal of personality*, *87*(2), 252-266.

[10] Klatsky, A. L., Armstrong, M. A., & Kipp, H. (1990). Correlates of alcoholic beverage preference: traits of persons who choose wine, liquor or beer. *British journal of addiction*, *85*(10), 1279-1289.

[11] Lee, R., Murphy, J., & Neale, L. (2009). The interactions of consumption characteristics on social norms. *Journal of Consumer Marketing*, *26*(4), 277-285.

[12] Lepri, B., Subramanian, R., Kalimeri, K., Staiano, J., Pianesi, F., & Sebe, N. (2012). Connecting meeting behavior with extraversion—A systematic study. *IEEE Transactions on Affective Computing*, *3*(4), 443-455.

[13] Louis, D., & Lombart, C. (2010). Impact of brand personality on three major relational consequences (trust, attachment, and commitment to the brand). *Journal of product & brand management*, *19*(2), 114-130.

[14] Maguire, J. S., & Lim, M. (2015). Lafite in China: Media representations of 'wine culture'in new markets. *Journal of Macromarketing*, *35*(2), 229-242.

[15] McCrae, R. R., & Costa Jr, P. T. (1997). Personality trait structure as a human universal. *American psychologist*, *52*(5), 509.

[16] Oliver, G., & Colicchio, T. (2011). *The Oxford companion to beer*. Oxford University Press.

[17] Quinton, S., & Harridge-March, S. (2008). Trust and online wine purchasing: insights into UK consumer behaviour. *International Journal of Wine Business Research*, *20*(1), 68-85.

[18] Rocchi, B., & Stefani, G. (2006). Consumers' perception of wine packaging: a case study. *International Journal of Wine Marketing*, *18*(1), 33-44.

[19] Steenkamp, J. B. E., & Maydeu-Olivares, A. (2015). Stability and change in consumer traits: evidence from a 12-year longitudinal study, 2002–2013. *Journal of Marketing Research*, *52*(3), 287-308.

[20] Swargiary, K. (2024). *The Big Five Trait Theory*. EdTech Research Association, Arizona, US.

[21] Tang, L., Wang, X., Kim, E., & Luo, Y. (2022). What Do Customers Share About Eating-Out on Facebook?. *Advances in Hospitality and Tourism Research (AHTR)*, *10*(3), 448-479.

[22] Tasci, A. D., & Back, R. M. (2023). Definition and measurement of wine snobbery as an empirical concept. *Journal of Wine Research*, *34*(4), 291-297.

[23] Teague, L. (2025). *White or Red Wine? We Asked WSJ Readers What They're Drinking Now*. WSJ.com. https://www.wsj.com/arts-culture/food-cooking/white-or-red-wine-we-asked-wsj-readers-what-theyre-drinking-now-d4b39600

[24] Thach, E. C., & Olsen, J. E. (2006). Market segment analysis to target young adult wine drinkers. *Agribusiness: An International Journal*, *22*(3), 307-322.

[25] Toulaki, A. K., Bozinou, E., Athanasiadis, V., Chatzimitakos, T., Mantanis, G. I., Dourtoglou, V. G., & Lalas, S. I. (2023). Accelerating Xinomavro Red Wine Flavor Aging Using a Pulsed Electric Field and Various Wood Chips. *Applied Sciences*, *13*(23), 12844.

[26] Tseng, F. C., Huang, T. L., Cheng, T. C. E., & Teng, C. I. (2021). Not all qualities are equal: Moderating role of online shopper conscientiousness in quality evaluation. *Electronic Commerce Research and Applications*, *47*, 101056.

[27] Ul Islam, J., Rahman, Z., & Hollebeek, L. D. (2017). Personality factors as predictors of online consumer engagement: an empirical investigation. *Marketing Intelligence & Planning*, *35*(4), 510-528.

[28] Varela, C., Dry, P. R., Kutyna, D. R., Francis, I. L., Henschke, P. A., Curtin, C. D., & Chambers, P. J. (2015). Strategies for reducing alcohol concentration in wine. *Australian Journal of Grape and Wine Research*, *21*, 670-679.

[29] Wang, X., Han, G., Wang, Y., & Zheng, J. (2024a). More than words: Do personality, emotion, and lifestyle matter on the wine tourism?. *International Journal of Tourism Research*, *26*(4), e2667.

[30] Wang, X., Zheng, J., & Luo, Y. (2024b). More Than Taste: Effects of Visitor's Cognitive Appraisal on the Complete Satisfaction of Wine Tourism. *International Journal of Tourism Research*, *26*(5), e2797.

[31] Yang, J., & Lee, J. (2020). Current research related to wine sensory perception since 2010. *Beverages, 6(3), 47.*

The understanding of consumers' attitude towards green hotels: A segmentation analysis

Yunlong FU, Wai Tsz Serene TSE

Ningbo University - University of Angers Joint Institute

Abstract

Behavioral intention

The study of green hotels is an indispensable part of sustainable tourism literature. Green hotels refer to accommodation facilities that have adopted a series of environmental protection measures in their operations, including water conservation, energy efficiency enhancement, and recycling and reuse of items (Trang et al., 2019). These environmental practices not only effectively reduce the burden on the environment but also bring additional financial and commercial value from a business perspective (Khalil et al., 2024). The importance of green practices is increasingly highlighted, not only because of managers' profound understanding of environmental impacts but also due to the growing consumer concern about the environmental actions of hotels (Acampora et al., 2022). Consumers appreciate the efforts made by hotels to reduce environmental impacts and can actively perceive the sustainable activities of hotels. This positive perception enhances customer satisfaction and loyalty, thereby indirectly strengthening the competitiveness of the enterprise in the market (Neto et al., 2020; Quan et al., 2022; Olorunsola et al., 2022). However, researches have also found that not all consumers hold a positive attitude towards green hotels. Consumers' negative perceptions could generate adverse word-of-mouth and diminish the appeal of green hotels (Rahman et al., 2020). However, existing researches have only examined specific dimensions of consumers' perception without considering positive and negative perceptions as a whole when investigating their relationship with other consumers' behaviors (Teng et al., 2018; Yadav et al., 2019; Verma et al., 2019). Moreover, these studies have treated consumers as a homogeneous group, overlooking the differences among them and neglecting the heterogeneity among consumers. For tourism destinations or enterprises, implementing segmentation strategies to cater to the specific demands of certain types of consumers is crucial, rather than attempting to meet the entire tourism market's needs by effectively targeting general tourists (Dolnicar, 2020).

Social identity theory emphasizes the impact of an individual's beliefs and values on their decision-making and behavior (Tajfel, 1986). According to social identity theory, individuals form a sense of identity by categorizing themselves into specific social groups and comparing themselves with other groups (Liao et al., 2020; Schneider & Sachs, 2017). When consumers identify with a company or brand, they tend to hold

positive perceptions of that company or brand and engage in corresponding supportive behaviors (Dang et al., 2020). In the context of green hotels, customers who choose these hotels are actually expressing their identification with environmental and sustainability values through their consumption choices. This sense of identification prompts them to hold positive perceptions of green hotels and are willing to pay additional fees for the environmental practices of these hotels (Kang et al., 2012; Kang et al., 2021). It can be inferred that consumers who are highly concerned with environmental issues are more likely to resonate with hotels that implement green practices, thereby generating a stronger sense of identification.

To validate this hypothesis, the goal of this research is to conceptualize hotel consumers' perception towards green hotels and to segment green hotel consumers based on their different perceptions of green hotels. Moreover, this study aims to investigate the differences among the identified groups in terms of consumers' willingness to pay and behavioral intentions towards green hotels. Through Exploratory and Confirmatory Factor Analysis (EFA and CFA), this research systematically categorizes consumer perceptions into four dimensions: "Pristine", "Useful", "Idealistic", and "Costly", with the former two perceived as positive and the latter two as negative. Besides, through segmentation and comparative analysis, 400 green hotel customers from Shanghai were divided into three groups. The first group comprises the largest number of consumers, who hold the most favorable views of green hotels. The second group follows, with consumers who maintain a relatively neutral stance towards the green hotels they have stayed in. Lastly, the third group consists of individuals who appreciate the green practices and are attracted by the services of green hotels, yet consider these services to be overly expensive. This group holds both positive and negative perceptions towards green hotels. Besides, the three clusters demonstrated significant differences in willingness to pay and behavioral intentions.

Table 1 - Concepts on green hotels

	Attributes	References
Positive	Environment-friendly Fresh Greenery Low-carbon Natural Non-toxic Clean Comfortable Expert Fair Functional Safe Silent	Elnaklah et al., 2021; Han et al., 2021; Hou & Wu, 2021; Liu et al., 2021; Olorunsola et al, 2022; Zhang & Tu, 2021; Asghar et al., 2023; Garay & Font, 2012; Han et al., 2019; Liu et al., 2023; Mishra & Gupta, 2019; Neto et al., 2020; Quan et al., 2022; Väisänen et al., 2023
Negative	Disappointing Concerned Impractical Improper Insincere Misleading Skeptical Costlier Expensive Pricey Overpriced High-priced Prime	Kamboj et al., 2022; Keilmann & Koch, 2023; Nimri et al., 2020; Santos et al., 2023; Torelli et al., 2020; Verma & Chandra, 2018a; Berger, 2019; Galati et al., 2023; Quan et al., 2022; Tang & Lam, 2017; Teng et al., 2018; Verma & Chandra, 2018b; Verma et al., 2019

Table 2 - Results of Exploratory Factor Analysis

Variables	Eigenvalues	Cumulative Variance (%)	Communalities	Standardized Factor Loading
Positive				
Pristine	7.89	38.68		
Natural			0.77	0.82
Fresh			0.71	0.74
Greenery			0.69	0.80
Useful	1.14	30.84		
Comfortable			0.73	0.75
Safe			0.75	0.83
Functional			0.70	0.74
Expert			0.71	0.81
Negative				
Idealistic	7.25	45.65		
Improper			0.75	0.85
Misleading			0.77	0.84
Impractical			0.80	0.85
Costly	1.85	30.19		
High-priced			0.77	0.85
Costlier			0.85	0.88
Overpriced			0.88	0.90
Expensive			0.81	0.85

Table 3 - Construct Intercorrelation

Variables	Pristine	Useful	Idealistic	Costly
Pristine	1.00			
Useful	0.70**	1.00		
Idealistic	-0.58**	-0.41**	1.00	
Costly	-0.34**	-0.31**	0.55**	1.00

Note: **Correlation is significant at the 0.01 level (2-tailed).

Table 4 - Results of Confirmatory Factor Analysis.

Variables	Standardized Factor Loading	Composite Reliability	AVE
Positive			
Pristine		0.863	0.677
Natural	0.812		
Fresh	0.846		
Greenery	0.809		
Useful		0.865	0.615
Comfortable	0.797		
Safe	0.795		
Functional	0.775		
Expert	0.770		
Negative			
Idealistic		0.911	0.774
Improper	0.817		
Misleading	0.899		
Impractical	0.920		
Costly		0.767	0.929
High-priced	0.792		
Costlier	0.932		
Overpriced	0.867		
Expensive	0.906		

Table 5 - Construct Intercorrelations

Variables	Pristine	Useful	Idealistic	Costly
Pristine	***0.822***			
Useful	0.802	***0.784***		
Idealistic	-0.430	-0.270	***0.880***	
Costly	-0.191	-0.174	0.520	***0.876***

Note: Bold value is the squared root of AVE.

Table 6 - Mean responses of clusters to the four dimensions

	Cluster 1 (n=194)	Cluster 2 (n=121)	Cluster 3 (n=85)
Pristine	**6.16**	**4.45**	**5.93**
Natural	6.15	4.29	5.78
Fresh	6.14	4.43	5.93
Greenery	6.20	4.62	6.07
Useful	**5.90**	**4.29**	**5.87**
Comfortable	6.03	4.33	6.02
Safe	5.96	4.40	6.01
Functional	5.93	4.30	5.85
Expert	5.66	4.14	5.60
Idealistic	**2.21**	**3.93**	**4.07**
Improper	2.30	4.10	4.13
Misleading	2.18	3.85	4.11
Impractical	2.16	3.83	3.96
Costly	**2.83**	**3.92**	**5.27**
High-priced	3.06	4.02	5.33
Costlier	2.88	3.98	5.29
Overpriced	2.78	3.83	5.31
Expensive	2.60	3.83	5.16

Table 7 - Discriminant analysis of resulted clusters

Discriminant Functions	Eigenvalue	Canonical Correlation	Wilk's lambda	Chi-square	df	Sign.
1	1.89	0.81	0.16	712.72	16	0.00
2	1.12	0.73	0.47	295.36	7	0.00

Classification results

Actual Group	No of cases	Predicted Group Membership		
		1	2	3
Cluster 1	194	183(94.33%)	6(3.09%)	5(2.58%)
Cluster 2	121	5(4.13%)	115(95.04%)	1(0.83%)
Cluster 3	85	6(7.06%)	4(4.71%)	75(88.23%)

Table 8 - Differences in willingness to pay by cluster

Items	Cluster Groups			ANOVA	
	Cluster 1	Cluster 2	Cluster 3	F-ratio	Pos Hoc
Willingness to pay	5.15	3.71	4.33	72.46	1>3>2
Acceptable to pay more	5.22	3.74	4.36	60.96	1>3>2
Willing to pay more	5.13	3.68	4.28	59.37	1>3>2
444Willing to spend extra money	5.11	3.71	4.34	47.23	1>3>2

Table 9 - Differences in behavioral intention by cluster

Items	Cluster Groups			ANOVA	
	Cluster 1	Cluster 2	Cluster 3	F-ratio	Pos Hoc
Behavioral intention	5.63	4.08	4.90	118.32	1>3>2
Plan to stay in the future	5.54	4.11	4.67	73.45	1>3>2
Prefer to stay next time	5.55	4.04	4.89	80.36	1>3>2
Make an effort to stay in the future	5.71	3.94	5.00	100.34	1>3>2
Will try to stay next time	5.71	4.22	5.02	76.47	1>3>2

The findings offer theoretical and practical contributes. Theoretically, this study conceptualized a multidimensional perception measurement to focus on both the positive and negative perceptions of consumers to explore their behavioral differences, providing a more comprehensive perspective for understanding consumer behavior. By exploring the differences in consumer perception across four dimensions among different consumers, divides hotel consumers into three subgroups, further validating that consumer perception of green hotels can serve as a basis for consumer segmentation, thereby extending existing research. This study reveals the diversity in consumers' perceptions of green hotels, more accurately reflecting the complexity of consumer attitudes. Furthermore, this research also confirms the phenomenon of consumers holding both positive and negative perceptions towards green hotels, indicating that previous studies have incomplete knowledge in examining consumer attitudes. This discovery is significant for deepening the understanding of the complexity of consumer attitudes and enriching the theory of hotel consumer behavior. Practically, managers of green hotels should pay attention to consumer perceptions, focus on the hotel's green practices without sacrificing the consumer experience. By emphasizing their environmental practices through eco-certification certificates, hotel websites, and promotional advertisements, and encouraging customers to participate in green practices, hotels can make consumers more directly feel the efforts made by the hotel for environmental protection, thereby improving their positive perceptions,

reducing their negative perceptions, and ultimately forming loyalty, revisiting green hotels. Hotels can increase the promotion of environmental knowledge and display the effectiveness of the hotel's green practices in rooms or other appropriate locations within the hotel. This will enable consumers to grasp environmental protection knowledge and understand the unique services provided by green hotels, thereby generating a good perception of the hotel and visiting again. Managers of green hotels need to plan their room prices more reasonably while ensuring their environmental measures and services. They should also make consumers understand that green services require more cost than general services, justifying the costs paid by consumers, ultimately reaching a price reconciliation with the consumers. Additionally, the findings of this study can offer insights into hotel staff management, especially for those employees who interact directly with customers. Hotel managers can educate their staff during training to effectively promote green knowledge and explain the hotel's green practices when serving customers, helping them understand the services provided by the hotel, thereby increasing their positive perception.

Keywords: Green hotels, Consumers' perception, Cluster analysis, Willingness to pay,

References

[1] Acampora, A., Lucchetti, M. C., Merli, R., & Ali, F. (2022). The theoretical development and research methodology in green hotels research: A systematic literature review. *Journal of Hospitality and Tourism Management, 51*, 512-528. https://doi.org/10.1016/j.jhtm.2022.05.007

[2] Asghar, A., Asif, R., Akhtar, N. and Islam, T. (2023), "Do green servicescape and perceived quality determine consumerism and its consequences? *Journal of Hospitality and Tourism Insights*, Vol. ahead-of-print, No. ahead-of-print. https://doi.org/10.1108/JHTI-07-2023-0490

[3] Berger, J. (2019). Signaling can increase consumers' willingness to pay for green products. Theoretical model and experimental evidence. *Journal of Consumer Behaviour*, 18(3), 233-246. https://doi.org/10.1002/cb.1760

[4] Dang, V.T., Nguyen, N., & Wang, J. (2020). Consumers' perceptions and responses towards online retailers' CSR. *International Journal of Retail & Distribution Management*, 48, 1277-1299. https://doi.org/10.1108/ijrdm-10-2019-0339

[5] Dolnicar, S. (2020). Market segmentation analysis in tourism: a perspective paper. *Tourism Review*, 75(1), 45-48. https://doi.org/10.1108/TR-02-2019-0041

[6] Elnaklah, R., Walker, I., & Natarajan, S. (2021). Moving to a green building: Indoor environment quality, thermal comfort and health. *Building and Environment*, 191, 107592. https://doi.org/10.1016/j.buildenv.2021.107592

[7] Galati, A., Thrassou, A., Christofi, M., Vrontis, D., & Migliore, G. (2023). Exploring travelers' willingness to pay for green hotels in the digital era. *Journal of Sustainable Tourism*, 31(11), 2546-2563. https://doi.org/10.1080/09669582.2021.2016777

[8] Garay, L., & Font, X. (2012). Doing good to do well? Corporate social responsibility reasons, practices and impacts in small and medium accommodation enterprises. *International Journal of Hospitality Management*, 31(2), 329-337. https://doi.org/10.1016/j.ijhm.2011.04.013

[9] Han, H., Lee, J. S., & Koo, B. (2021). Impact of green atmospherics on guest and employee well-being response, place dependence, and behavior in the luxury hotel sector. *Journal of Sustainable Tourism*, 29(10), 1613-1634. https://doi.org/10.1080/09669582.2020.1861456
[10] Han, H., Yu, J., Lee, J. S., & Kim, W. (2019). Impact of hotels' sustainability practices on guest attitudinal loyalty: Application of loyalty chain stages theory. *Journal of Hospitality Marketing & Management*, 28(8), 905-925. https://doi.org/10.1080/19368623.2019.1570896
[11] Hou, H., & Wu, H. (2021). Tourists' perceptions of green building design and their intention of staying in green hotel. *Tourism and Hospitality Research*, 21(1), 115-128. https://doi.org/10.1177/1467358420963379
[12] Kamboj, S., Matharu, M., Lim, W. M., Ali, F. & Kumar, S. (2022). Consumer adoption of green hotels: Understanding the role of value, innovation, and involvement. *Journal of Hospitality Marketing & Management*, 31(7), 819-849. https://doi.org/10.1080/19368623.2022.2071370
[13] Kang, K. H., Stein, L., Heo, C. Y., & Lee, S. (2012). Consumers' willingness to pay for green initiatives of the hotel industry. *International journal of hospitality management*, *31*(2), 564-572. https://doi.org/10.1016/j.ijhm.2011.08.001
[14] Kang, S., & Nicholls, S. (2021). Determinants of willingness to pay to stay at a green lodging facility. *International Journal of Hospitality Management*, *94*, 102834. https://doi.org/10.1016/j.ijhm.2020.102834
[15] Keilmann, J., & Koch, T. (2023). When Environmental Claims are Empty Promises: How Greenwashing Affects Corporate Reputation and Credibility. *Environmental Communication*, 1-19. https://doi.org/10.1080/17524032.2023.2267782
[16] Khalil, N., Che Abdullah, S. N., Haron, S. N., & Hamid, M. Y. (2024). A review of green practices and initiatives from stakeholder's perspectives towards sustainable hotel operations and performance impact. *Journal of Facilities Management*, *22*(4), 653-682. https://doi.org/10.1108/JFM-03-2022-0025
[17] Liao, G. Y., Pham, T. T. L., Cheng, T. C. E., & Teng, C. I. (2020). How online gamers' participation fosters their team commitment: Perspective of social identity theory. *International Journal of Information Management*, 52, 102095. https://doi.org/10.1016/j.ijinfomgt.2020.102095
[18] Liu, C. H., Horng, J. S., Chou, S. F., Yu, T. Y., Lee, M. T., & Lapuz, M. C. B. (2023). Discovery sustainable servicescape on behavioural intention practices and nationality: The moderating role of parasocial interaction. *Journal of Retailing and Consumer Services*, 71, 103213. https://doi.org/10.1016/j.jretconser.2022.103213
[19] Liu, K., Zhu, B., & Chen, J. (2021). Low-carbon design path of building integrated photovoltaics: a comparative study based on green building rating systems. *Buildings*, 11(10), 469. https://doi.org/10.3390/buildings11100469
[20] Mishra, A., & Gupta, A. (2019). Green hotel servicescape: Attributes and unique experiences. *Current Issues in Tourism*, 22(20), 2566-2578. https://doi.org/10.1080/13683500.2018.1502259
[21] Neto, A. P., da Silva, E. A. L., Ferreira, L. V. F., & Araújo, J. F. R. (2020). Discovering the sustainable hotel brand personality on TripAdvisor. *Journal of Hospitality and Tourism Technology*, 11(2), 241-254. https://doi.org/10.1108/JHTT-05-2019-0076
[22] Nimri, R., Patiar, A., Kensbock, S., & Jin, X. (2020). Consumers' intention to stay in green hotels in Australia: Theorization and implications. *Journal of Hospitality & Tourism Research*, 44(1), 149-168. https://doi.org/10.1177/1096348019862602

[23] Olorunsola, V. O., Saydam, M. B., Arasli, H., & Sulu, D. (2022). Guest service experience in eco-centric hotels: a content analysis. *International Hospitality Review, (ahead-of-print)*. https://doi.org/10.1108/IHR-04-2022-0019

[24] Quan, L., Kim, J. J., & Han, H. (2022). Customer views on comprehensive green hotel selection attributes and analysis of importance-performance. *Journal of Travel & Tourism Marketing*, 39(6), 535-554. https://doi.org/10.1080/10548408.2022.2162657

[25] Rahman, I., Chen, H., & Reynolds, D. (2020). Evidence of green signaling in green hotels. *International Journal of Hospitality Management*, 85, 102444. https://doi.org/10.1016/j.ijhm.2019.102444

[26] Santos, C., Coelho, A., & Marques, A. (2023). The greenwashing effects on corporate reputation and brand hate, through environmental performance and green perceived risk. *Asia-Pacific Journal of Business Administration*, 16(3), 655-676. https://doi.org/10.1108/APJBA-05-2022-0216

[27] Schneider, T., & Sachs, S. (2017). The Impact of Stakeholder Identities on Value Creation in Issue-Based Stakeholder Networks. *Journal of Business Ethics*, *144*(1), 41–57. http://www.jstor.org/stable/45022229

[28] Tang, C. M. F., & Lam, D. (2017). The role of extraversion and agreeableness traits on Gen Y's attitudes and willingness to pay for green hotels. *International Journal of Contemporary Hospitality Management*, 29(1), 607-623. https://doi.org/10.1108/IJCHM-02-2016-0048

[29] Tajfel, H. . (1986). The social identity theory of intergroup behavior. Psychology of intergroup relations, 13(3), 7--24.

[30] Teng, C. C., Lu, A. C. C., & Huang, T. T. (2018). Drivers of consumers' behavioral intention toward green hotels. *International Journal of Contemporary Hospitality Management*, 30(2), 1134-1151. https://doi.org/10.1108/IJCHM-04-2017-0203

[31] Torelli, R., Balluchi, F., & Lazzini, A. (2020). Greenwashing and environmental communication: Effects on stakeholders' perceptions. *Business Strategy and the Environment*, 29(2), 407-421. https://doi.org/10.1002/bse.2373

[32] Trang, H. L. T., Lee, J. S., & Han, H. (2019). How do green attributes elicit pro-environmental behaviors in guests? The case of green hotels in Vietnam. *Journal of Travel & Tourism Marketing*, *36*(1), 14-28. https://doi.org/10.1080/10548408.2018.1486782

[33] Väisänen, H. M., Uusitalo, O., & Ryynänen, T. (2023). Towards sustainable servicescape–tourists' perspectives of accommodation service attributes. *International Journal of Hospitality Management*, 110, 103449. https://doi.org/10.1016/j.ijhm.2023.103449

[34] Verma, V. K. & Chandra, B. (2018a). Sustainability and customers' hotel choice behaviour: a choice-based conjoint analysis approach. *Environment, Development and Sustainability*, 20, 1347-1363. https://doi.org/10.1007/s10668-017-9944-6

[35] Verma, V. K., & Chandra, B. (2018b). An application of theory of planned behavior to predict young Indian consumers' green hotel visit intention. *Journal of Cleaner Production*, 172, 1152-1162. https://doi.org/10.1016/j.jclepro.2017.10.047

[36] Verma, V. K., Chandra, B., & Kumar, S. (2019). Values and ascribed responsibility to predict consumers' attitude and concern towards green hotel visit intention. *Journal of Business Research*, 96, 206-216. https://doi.org/10.1016/j.jbusres.2018.11.021.

[37] Yadav, R., Balaji, M. S., & Jebarajakirthy, C. (2019). How psychological and contextual factors contribute to travelers' propensity to choose green hotels? International Journal of Hospitality Management, 77, 385-395. https://doi.org/10.1016/j.ijhm.2018.08.002.

[38] Zhang, D., & Tu, Y. (2021). Green building, pro-environmental behavior and well-being: Evidence from Singapore. Cities, 108, 102980. https://doi.org/10.1016/j.cities.2020.102980

Mediating effect of trust in stimulating consumers' pro-behaviors towards humanoid service robots

Zephyrine ZHANG, Wai Tsz Serene TSE

Ningbo University - University of Angers Joint Institute

Abstract

The advancement in robotic technology sparks an increasing adoption of humanoid service robots in the hospitality and tourism industry with aim to create novel consumer experience (de Kervenoael et al., 2020; Liu et al., 2023; Moriuchi & Murdy, 2024). Prior studies have examined how consumers' perception towards humanoid service robot may affect their experience, satisfaction, preferences and relating behaviors (Kim et al., 2021; Qiu et al., 2020). Research suggests that this anthropomorphic design makes robots more relatable to consumers; this means that under certain conditions, the perceive does not just see the technical device as a technological tool, but as a more friendly "social entity" (Huang & Liu, 2022). This perceived closeness significantly shapes consumers' willingness to accept service robots and profoundly influences their interaction patterns with them (Lin et al., 2022).Consumers develop cognition, emotions and behaviors in which they form consumer attitudes and behaviors towards humanoid service robots, thus influencing the establishment of human-robot interactions, which deserves more attention in hospitality and tourism research (Huang & Liu, 2022).

Since its inception, Social Exchange Theory (SET) has played an important role in explaining the behavioral patterns and relational constructs of human interaction (Homans, 1958). The theory suggests that human interactions are based on trade-offs between costs and benefits, and that "avoiding harm" is a fundamental principle of behavior (Blau, 2017; Homans, 1958). The theory suggests that people's exchanges in 2social interactions are not limited to material goods, but extend to non-material exchanges such as help, praise, and emotions. At the heart of such exchanges lies the willingness of participants to develop and maintain relationships with each other, whereas robots were originally created for the benefit of humans, and their lack of dissatisfaction and inseparability from human manipulation allows humans to unilaterally make choices that are in their best interest without regard to the feelings of the robots (Fox & Gambino, 2021; Meira & Hancer 2021). Based on this theoretical foundation, this study utilizes social exchange theory to analyze the relationship between users' perceptions and behaviors toward humanoid service robots.

Therefore, based on the above perspectives, this study, by applying social exchange affect theory to human-robot interaction and drawing on cognitive-affective-behavioral theory. It explores the interrelationships between consumers' perception, trust and behavior towards humanoid service robots in the hospitality and tourism industries.Using a non-student and gender balanced sampling, 507 Chinese consumers were recruited. There are several reasons for choosing China as the research context. China has one of the fastest growing service robotics industries in the world, with more than a quarter of the global market share, and is the world's leading robot manufacturer

(IFR, 2022). As a country at a different stage of economic development, China is more likely to focus on the service sector than countries with mature robotics technologies, which focus on research and development, manufacturing, and exporting. Conducting research in China could provide valuable insights and improve the applicability and reliability of findings (Gasteiger et al., 2023; Sister).

To achieve the research objective, structural modelling is employed to map the proposed relationship. The findings revealed that significant relationships were noted among the proposed constructs in which trust mediates the direct effect between consumer's perception and their behaviors towards humanoid service robots. More specifically, trust partially mediates the consumers' perceived functional, innovative, and rigid with approach behavior, and fully mediates the risky aspect and approach behavior. In terms of avoidance behavior, trust has a partial mediating effect from innovative and rigid with avoidance behavior, and a full mediating effect in functional and avoidance behavior, but no mediating effect resulted from risky.

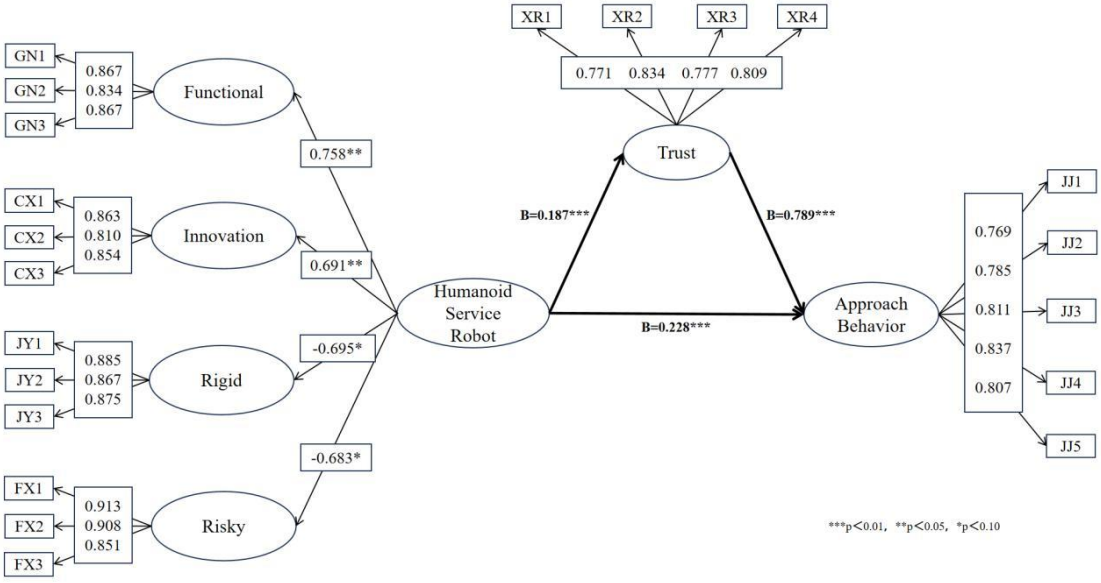


Figure 1 –Results for approach behavior

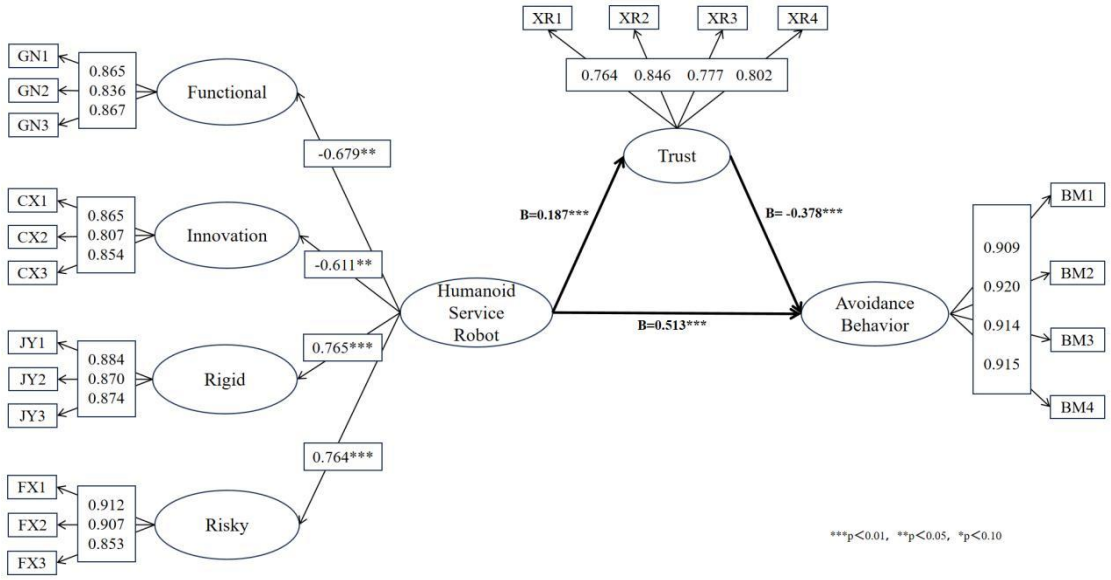


Figure 2 –Results for avoidance behavior

Table 1 – Mediation Analysis of humanoid service robot, trust and approach behavior

Dependent Variable	Functional		Innovation		Rigid		Risky	
	Effect	95%CI	Effect	95%CI	Effect	95%CI	Effect	95%CI
Total Effect	0.628	[0.560, 0.697]	0.601	[0.526, 0.675]	-0.214	[-0.273, -0.154]	-0.183	[-0.246, -0.121]
Direct Effect	0.231	[0.150, 0.312]	0.304	[0.238, 0.370]	-0.076	[-0.120, -0.032]	-0.029	[-0.075, 0.017]
Indirect effect: X -> ***Trust*** -> Y	0.398	[0.310, 0.484]	0.297	[0.218, 0.377]	-0.137	[-0.189, -0.087]	-0.155	[-0.212, -0.099]

Table 2 – Mediation Analysis of humanoid service robot, trust and avoidance behavior

Dependent Variable	Functional		Innovation		Rigid		Risky	
	Effect	95%CI	Effect	95%CI	Effect	95%CI	Effect	95%CI
Total Effect	-0.229	[-0.352, -0.107]	-0.322	[-0.448, -0.196]	0.583	[0.511, 0.655]	0.723	[0.657, 0.788]
Direct Effect	0.024	[-0.144, 0.192]	-0.193	[-0.335, -0.051]	0.557	[0.483, 0.632]	0.709	[0.641, 0.778]
Indirect effect: X -> ***Trust*** -> Y	-0.253	[-0.369, -0.134]	-0.129	[-0.203, -0.049]	0.026	[0.002, 0.060]	0.013	[-0.008, 0.043]

The results of the study provide theoretical and practical contribution. Theoretically, a macro-level contribution is made based on the "cognition-affective-behavioral" framework, which systematically understands the ways in which humanoid robots influence user behavior. This tripartite model, based on social exchange theory, demonstrates how perceptions (e.g., functionality, risk) trigger affective responses (trust, rapport), which in turn drive approach or avoidance behaviors. By unifying cognitive appraisal, affective engagement, and behavioral outcomes, the framework goes beyond traditional isolated perspectives and provides a structured view for analyzing complex human-computer interactions. It also lays the groundwork for future research to explore similar cascading effects in a variety of AI-driven service environments, thereby facilitating interdisciplinary dialog in human-robot interaction research and enriching the understanding of human-robot interaction. Importantly, the

mediating role of trust was empirically validated in this research in enhancing consumers' approach as well as reducing their avoidance behaviors. Demonstrates the central role of trust in reducing risk anxiety and enhancing perceived reliability. The mediating effect, either partially or fully, exhibit the contribution of trust, as an affective component, in building human-robot interaction that were under-explored in previous studies. It also reveals trust as a key mechanism for translating technology acceptance into actionable behavior, providing a basis for optimizing the social and functional design of humanoid robots. Hence, the empirical findings suggest the presence of feeling when consumers are interacting with robot technologies which warrant more investigation in as per increasing employment in the hospitality andtourism industry.
Practically, these results pinpoint the specific perception that foster consumers' approach behaviors towards humanoid service robots. Specifically, the functionality and innovation aspect should be managed as they induced consumers'sense of trust which further cue their willingness to use the humanoid service robots. By analyzing consumers' emotional needs for humanoid robots, research can guide companies in designing robotic services that are more in line with users' psychological expectations and "user-centered" service systems. For example, Hilton's Connie robot assists guests by providing detailed information about hotel amenities, local attractions and dining options.Connie uses AI to interpret guest queries and provide personalized recommendations from a comprehensive database. The aim is to enhance the guest experience through the human touch. In addition, South Korean telecom company KT is using humanoid service robots in its hotels in Seoul, equipped with voice and touch sensors for efficient interactions and AI translation services for those who do not understand Korean, providing information and services in English, Chinese and Japanese.As such, hospitality and tourism practitioners shall focus on the competence level of the robotic technologies employed rather than their appearances to increasing human-robot interaction that are significant to consumer experience.

Keywords: Humanoid service robots, Human-robot interaction, Trust, Anthropomorphism

References

[1] de Kervenoael, R., Hasan, R., Schwob, A., & Goh, E. (2020). Leveraging human-robot interaction in hospitality services: Incorporating the role of perceived value, empathy, and information sharing into visitors' intentions to use social robots. Tourism Management, 78, 104042. https://doi.org/10.1016/j.tourman.2019.104042

[2] Liu, Y., Wang, X., Du, Y., & Wang, S. (2023). Service robots vs. human staff: The effect of service agents and service exclusion on unethical consumer behavior. Journal of Hospitality and Tourism Management, 55, 401-415. https://doi.org/10.1016/j.jhtm.2023.05.015

[3] Moriuchi, E., & Murdy, S. (2024). The role of robots in the service industry: Factors affecting human-robot interactions. International Journal of Hospitality Management, 118, 103682.https://doi.org/10.1016/j.ijhm.2023.103682

[4] Kim, S. S., Kim, J., Badu-Baiden, F., Giroux, M., & Choi, Y. (2021). Preference for robot service or human service in hotels? Impacts of the COVID-19 pandemic. International Journal of Hospitality Management, 93, 102795. https://doi.org/10.1016/j.ijhm.2020.102795
[5] Huang, H., & Liu, S. Q. (2022). Are consumers more attracted to restaurants featuring humanoid or non-humanoid service robots?. International Journal of Hospitality Management, 107, 103310.https://doi.org/10.1016/j.ijhm.2022.103310
[6] Qiu, H., Li, M., Shu, B., & Bai, B. (2020). Enhancing hospitality experience with service robots: The mediating role of rapport building. Journal of Hospitality Marketing & Management, 29(3), 247-268. https://doi.org/10.1080/19368623.2019.1645073
[7] Lin, M., Cui, X., Wang, J., Wu, G., & Lin, J. (2022). Promotors or inhibitors? Role of task type on the effect of humanoid service robots on consumers' use intention. Journal of Hospitality Marketing & Management, 31(6), 710-729. https://doi.org/10.1080/19368623.2022.2062693
[8] Homans, G. C. (1958). Social behavior as exchange. American journal of sociology, 63(6), 597-606.https://doi.org/10.1086/222355 Blau, P. (2017). Exchange and power in social life. Routledge. https://doi.org/10.4324/9780203792643
[9] Fox, J., & Gambino, A. (2021). Relationship development with humanoid social robots: Applying interpersonal theories to human–robot interaction. Cyberpsychology, Behavior, and Social Networking, 24(5), 294-299. https://doi.org/10.1089/cyber.2020.0181
[10] Meira, J. V. D. S., & Hancer, M. (2021). Using the social exchange theory to explore 7the employee-organization relationship in the hospitality industry. International Journal of Contemporary Hospitality Management, 33(2), 670-692. https://doi.org/10.1108/IJCHM-06-2020-0538
[11] International Federation of Robotics (IFR). (2022). World Robotics Report 2022: Service Robots. https://ifr.org/ifr-press-releases/news/service-robots-hit-double-digit-growth-worl dwide
[12] Gasteiger, N., Hellou, M., & Ahn, H. S. (2023). Factors for personalization and localization to optimize human–robot interaction: A literature review. International Journal of Social Robotics, 15(4), 689-701. https://doi.org/10.1007/s12369-021-00811-8
[13] Wu, M., Tse, W. T. S., & Tung, V. W. S. (2025). Enhancing intellectual experiences for users: a multidimensional model of humanoid service robots in hospitality and tourism. International Journal of Contemporary Hospitality Management. https://doi.org/10.1108/IJCHM-06-2024-0821

Social Media's Effect on Destination Image and Tourists' Behavior

Salvador SUN, Shiwei SHEN, Marios SOTIRIADIS

Ningbo University - University of Angers Joint Institute

Abstract

Today, given the swift development and extensive adoption of social media (SM), individuals increasingly integrate the Internet into their daily lives, leading to significant changes in how tourism information is acquired and utilized (Kim et al., 2017). SM is broadly defined as a collection of platforms and applications that operate online, including social networks, blogging platforms, media-sharing platforms, consumer rating networks, and various other information and other tools for creating content like text, images, and videos, while interacting with internet users worldwide (Kim et al., 2017, p. 688; Cheng, 2024, p. 1). Existing literature suggests that SM have become a significant information channel for potential tourists, influence destination image (DI) and can affect their behavior through travel stages (Cox et al., 2009; Koo et al., 2016). Furthermore, SM is considered more trustworthy than the information provided in mainstream media advertisements, making SM a critical platform for spreading word-of-mouth (WOM) and recommendations (Cox et al., 2009). Comprehending and managing SM's impact on DI and tourist behavior is crucial for the tourism sector

As the DI significantly impacts tourists'decisions regarding destinationselection and their visit intentions, it has long been a focal point in tourism literature (Gaffaretal., 2022). DI represents the collection of all knowledge, perceptions, biases, and sentimental associations that an individual holds about a specific objector location, comprising cognitive and affective components" (Lawson & Baud-Bovy, 1977, p. 10; Baloglu & McCleary, 1999, p. 870). As tourism products and experiences are intangible (Leung et al., 2013), shaping a favorable DI is crucial. Extant literature has demonstrated the role played by SM in shaping DI (Liu et al., 2024; Gaffaretal., 2022, Molinillo et al., 2018). Apart from influencing DI, existing literature reviews indicate that SM's impact on tourist behavioral intention has also been widely documented, focusing on three main aspects: its influence on tourists' pre-travel visit intentions, decision-making processes, and post-travel revisit intentions (Koo et al., 2016; Varkaris & Neuhofer, 2017; Abubakaretal., 2017; Gaffaretal., 2022). Through SM, tourists can share real-time experiences before, during, and after their vacations and engage in discussions with other interested users. This participatory discussion has facilitated afresh approach to tourism interaction, complementing and expanding the physical travel experience.

However, prior research has more often examined the impact of SMon certain single behaviors, lacking a comprehensive exploration of its effects across all stages of the tourist journey. The travel experience encompasses a multi-stage process for tourists, including consideration, evaluation and purchase, experience, and post-trip support and promotion. Thus, examining the impact of SM on tourist behavior holistically

across these stages is crucial. Recent studies, such as the works of Stojanovicetal. (2022), Sultan et al. (2021), and Sano etal. (2024), have investigated various types of SM content's effect—including the content generated by user (UGC) and destination (DGC)— on tourists' travel intentions, they have largely overlooked the influence of a newer form of SM content: that created by SM influencers (SMI). For younger generations, behaviors are often more susceptible to the effects of celebrity endorsement and influence (Hudders et al., 2021). However, tourism scholars have not fully explored the persuasive power of SMI in shaping DI and influencing the overall travel experience of tourists. Moreover, the mediating role of DI in linking SM content with tourist decision-making across different stages of the travel journey remains underexplored.

Thus, the primary inquiry of our research is: "How does SM influence DI and tourist behavior throughout the customer journey?" This paper first reviews relevant articles on the customer and consumer journey model to address this question. It then explores previous research on DI and analyses extant literature on the impact of SM on DI and tourist behavior, and classifies the main sources of information on SM into three key types: UGC, DGC, and SMI. Drawing from DI theory and the customer journey model, a conceptual framework is elaborated to analyze the effect of various information sources from SM on DI and each stage of the tourist's consumer decision- making journey (CDJ). The proposed framework is empirically tested and validated in the Chinese context. The primary contributions can be summarized as follows: (1) Firstly, the paper classifies SM content into three distinct categories and systematically explores the relationship between various SM content and DI, thereby expanding our understanding of DI shaping mechanisms. (2) The study highlights the mediating effect of DI in tourist behavior and SM, which will assist destination management organization (DMO) stakeholders in establishing a positive DI through SM and implementing more effective SM strategies. (3) Finally, this research guides relevant practitioners, enabling them to understand better SM's influence on DI and tourist behavior across various travel stages, helping them design and create more appropriate SM content

References

[1] Kim SE, Lee KY, Shin SI, et al. (2017) Effects of tourism information quality in social media on destination image formation: The case of Sina Weibo. *Information & Management* 54(6): 687- 702.

[2] Cheng M (2024) Social media and tourism geographies: Mapping future research agenda *Tourism Geographies*: 1-10.

[3] Cox C, Burgess S, Sellitto C, et al. (2009) The role of user-generated content in tourists' travel planning behavior. *Journal ofHospitality Marketing & Management* 18(8): 743–764.

[4] Koo C, Joun Y, Han H, et al. (2016) A structural model for destination travel intention as a media exposure. *International Journal ofContemporary Hospitality Management* 28(7): 1338–1360.

[5] Gaffar V, Tjahjono B, Abdullah T, et al. (2022) Like, tag, and share: bolstering social media marketing to improve intention to visit a nature-based tourism destination. *Tourism Review* 77(2): 451-470.

[6] Baloglu S and McCleary K (1999) A model of destination image formation. *Annals of Tourism Research* 26(4): 868–897.

[7] Lawson F and Baud-Bovy M (1977) *Tourism and recreation development, a handbook ofphysical planning*. London: Architectural Press.

[8] Liu J, Wang C and Zhang TC (2024) Exploring social media affordances in tourist destination image formation: A study on China's rural tourism destination. *Tourism Management* 101: 104843.

[9] Molinillo S, Liébana-Cabanillas F, Anaya-Sánchez R, et al. (2018) DMO online platforms: Image and intention to visit. *Tourism Management* 65: 116–130.

[10] Leung D, Law R, Van Hoof H, et al. (2013) Social media in tourism and hospitality: A literature review. *Journal ofTravel & Tourism Marketing 30*(1-2): 3-22.

[11] Sultan MT, Sharmin F, Badulescu A, et al. Social media-based content towards image formation: A new approach to the selection of sustainable destinations. *Sustainability* 13(8): 4241.

[12] Varkaris E and Neuhofer B (2017) The influence of social media on the consumers' hotel decision journey. *Journal ofHospitality and Tourism Technology* 8(1): 101-118.

[13] Abubakar AM, Ilkan M, Al-Tal RM, et al. (2017) eWOM, revisit intention, destination trust and gender. *Journal ofHospitality and Tourism Management* 31: 220-227.

[14] Stojanovic I, Andreu L and Curras-Perez R (2022) Social media communication and destination brand equity. *Journal ofHospitality and Tourism Technology* 13(4): 650-666.

[15] Sano K, Sano H, YashimaY, et al. (2024) The effects of temporal distance and post type on tourists' responses to destination marketing organizations' social media marketing. *Tourism Management* 101: 104844.

[16] Hudders L, De Jans S and De Veirman M (2021) The commercialization of social media stars: a literature review and conceptual framework on the strategic use of social media influencers. *International Journal ofAdvertising* 40(3): 327–375.

Multiple Formation Mechanisms of Post-Trip Behaviors Among Self-Driving Tourists in the Tourism Context of Tibet

Mingyuan GAO, Xueji WANG

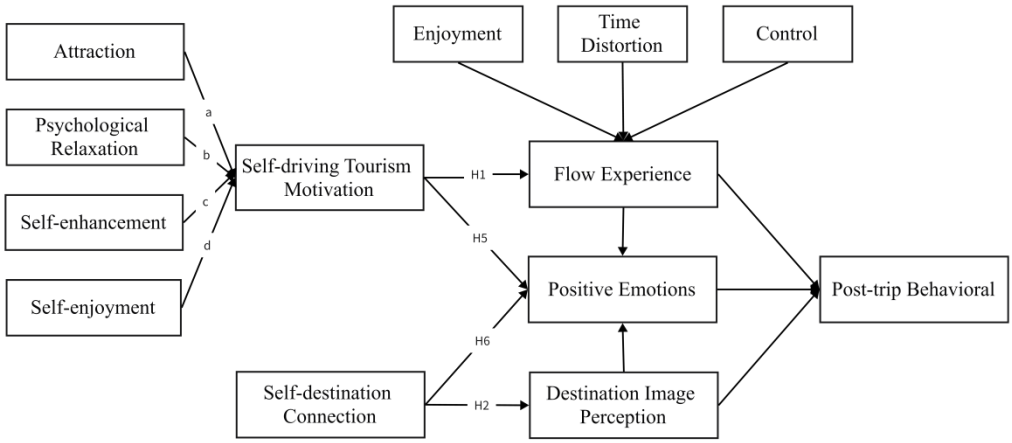
Ningbo University - University of Angers Joint Institute

Abstract

With the increasing demand for personalized tourism, self-driving tourism, known for its autonomy, flexibility, and immersive experiences, is the fastest-growing segment in the global tourism market (Acorn Tourism Consulting, 2023). In China, it has become one of the most popular ways to travel, accounting for over 70% of domestic tourists (Wu Ruoshan, 2024). Tibet, a high-altitude and high-risk self-driving destination, attracts adventurers seeking self-challenge and spiritual growth with its unique natural landscapes and cultural immersion experiences (Zhong & Zhang, 2012; Wang, Xie, & Sun, 2023). However, self-driving tourism differs in its high participation (e.g., self-planned routes) and dynamic environments (e.g., unexpected road, vehicle, and weather conditions causing emotional fluctuations) (Butler & Hannam, 2014). These characteristics make tourists' experiences more unpredictable and necessitate understanding the formation of behavior through multi-level psychological variables. Especially in high-altitude, high-risk settings, tourists' cognition, experiences, and emotions may interact uniquely (Sung, Morrison, & O'leary, 2000), an area not yet fully explored by existing theoretical frameworks.Moreover, prior studies on self-driving tourism often focus on short-distance, urban-fringe scenarios, lacking targeted exploration of complex experiences in high-altitude, high-risk environments (Li et al., 2024). This gap between theoretical limitations and growing practical demands necessitates a breakthrough through theoretical integration. Csikszentmihalyi (1990) first introduced flow theory, emphasizing deep immersion in challenge-skill balanced states. Mannel and Iso-Ahola (1987) applied it to tourism, showing it significantly enhances tourist satisfaction and loyalty. However, most studies treat flow as an outcome variable, overlooking its role as a bridge between motivation and emotional-behavioral processing (Matos et al., 2021). In self-driving scenarios, where driving and sightseeing occur simultaneously, flow experiences may dually trigger emotions and anchor behaviors. Destination image perception, a key tourist cognition concept (Phelps, 1986), was introduced to tourism research by Crompton and McKay (1979). While it is commonly used to evaluate destination satisfaction and loyalty (Honsay et al., 2017), its role in broader psychological and behavioral processes remains underexplored.

Based on the above discussion, this study employs structural modeling to map the proposed relationships (Figure 1), aiming to develop a comprehensive theoretical model for an in-depth understanding of the formation mechanisms of tourists' post-trip behaviors in Tibet's self-driving tourism context. The study also provides empirical evidence for tourism marketing and destination management. Using partial least squares-structural equation modeling (PLS-SEM), a second-order structural equation model was constructed and analyzed with data from 510 self-driving tourists in Tibet,

combined with the PROCESS for mediation analysis. The questionnaire design included measurements of self-driving tourism motivation, flow experience, destination image perception, positive emotions, post-trip behavioral, and self-destination connection, with all items rated on a five-point Likert scale (1 = Strongly Disagree, 5 = Strongly Agree). The results indicate that self-driving tourism motivation, including factors such as attraction, psychological guidance, self-enhancement, and self-enjoyment, significantly influences post-trip behavioral intentions through flow experiences (enjoyment, time distortion, control) and positive emotions. Additionally, the self-destination connection significantly influences post-trip behavioral intentions through destination image perception and positive emotions. Furthermore, self-driving tourism motivation (attraction, psychological guidance, self-enhancement, self-enjoyment) significantly affects behavioral intentions through a chain-mediated path of flow experiences (enjoyment, time distortion, control) and positive emotions, while also directly enhancing flow experiences and positive emotions. Similarly, the self-destination connection impacts behavioral intentions through a chain-mediated path of destination image perception and positive emotions, while also directly strengthening destination image perception and positive emotions.



H3: Self-driving tourism motivation significantly influences post-trip behavioral through flow experience.
H4: Self-destination connection significantly influences post-trip behavioral through destination image perception.
H7: Self-driving tourism motivation significantly influences post-trip behavioral through positive emotions.
H8: Self-destination connection significantly influences post-trip behavioral through positive emotions.
H9: Self-driving tourism motivation significantly influences post-trip behavioral through flow experience and positive emotions.
H10: Self-destination connection significantly influences post-trip behavioral through destination image perception and positive emotions.

Figure 1 Conceptual framework of the study.

Significance and Outlook

Theoretical Significance:This study reveals how flow experiences mediate the transformation process of self-driving tourism motivation into emotional and behavioral outcomes, especially in high-altitude, high-risk settings, by simultaneously triggering emotions and anchoring behaviors. This enriches the application of flow

theory in tourism and offers a new perspective on tourist psychological experiences in complex activities.It explores the role of destination image perception in broader psychological and behavioral processes at the representative Tibetan tourism destination, particularly its influence on post-trip behavioral beyond satisfaction and loyalty evaluations. By integrating the cognition-emotion-behavior theory and the expectation-disconfirmation theory, this study develops a comprehensive model for systematically analyzing tourist behavior formation mechanisms.This study also provides empirical evidence for tourism marketing and destination management, aiding in the development of strategies to enhance positive post-trip behaviors. The results highlight that flow experiences and destination image perception are crucial for promoting positive post-trip behaviors. Managers should optimize tourism product design, improve service quality, and enhance cultural activities to boost these experiences. Future research could compare self-driving tourism across different destinations, including Tibet, to better understand tourist behavior and needs. Additionally, the findings on self-destination connection contradict previous studies, suggesting a need for further research to track its role in different contexts and uncover its mechanisms in linking motivation to experiences, destination image perception, and post-trip behaviors.

Keywords: Self-driving Tourism Motivation, Flow Experience, Self-destination Connection, Destination Image Perception, Post-trip Behavioral

References：

[1] Acorn Tourism Consulting. (2023). Global tourism market trends and the growth of self-driving tourism. Presented at London

[2] Butler, G., & Hannam, K. (2014). Performing expatriate mobilities in Kuala Lumpur. Mobilities, 9(1), 1-20. https://doi.org/10.1080/17450168.2013.873413

[3] Crompton, J. L., & McKay, S. L. (1997). Motives of visitors attending festival events. Annals of Tourism Research, 24(2), 425-439.10.1016/S0160-7383(96)00081-3

[4] Csikszentmihalyi, M., & Csikzentmihaly, M. (1990). Flow: The psychology of optimal experience (Vol. 1990, p. 1). New York: Harper & Row.

[5] Hosany, S., Prayag, G., Van Der Veen, R., Huang, S. S., & Deesilatham, S. (2017). Mediating effects of place attachment and satisfaction on the relationship between tourists' emotions and intention to recommend. Journal of Travel Research, 42, 1–20. https://doi.org/10.1177/0047287516678088

[6] Li, Z., Ye, S., & , J. (2024). Assessing Risks in Cross-Regional Tourism Corridors: A Case Study of Tibetan Plateau Tourism. ISPRS International Journal of Geo-Information, 13(6), 171. https://doi.org/10.3390/ijgi13060171

[7] Mannell, R. C., & Iso-Ahola, S. E. (1987). Psychological nature of leisure and tourism experience. Annals of Tourism Research, 14(3), 314-331.
https://doi.org/10.1016/0160-7383(87)90105-8

[8] Matos, N. M. d., Sá, E. S. d., & Duarte, P. A. d. O. (2021). A review and extension of the flow experience concept. Insights and directions for Tourism research. Tourism Management Perspectives, 38, 100802. https://doi.org/10.1016/j.tmp.2021.100802

[9] Phelps, A. (1986). Holiday destination image - the problem of assessment: An example developed in Menorca. Tourism Management, 7(3), 168-179. https://doi.org/10.1016/0261-5177(86)90036-9

[10] Sung, H. Y., Morrison, A. M., & O'leary, J. T. (2000). Segmenting the adventure travel market by activities: From the North American industry providers' perspective. Journal of Travel & Tourism Marketing, 9(4), 1-20. http://dx.doi.org/10.1300/J073v09n04_01

[11] Wang, X. J., Xie, J., & Sun, J. X. (2023). Travellers' meaning-making of the Sichuan-Tibet highway: from space of flows to place. Tourism Geographies, 25(1), 23-43. https://doi.org/10.1080/14616688.2020.1819402

[12] Wu, R. (2024). 2024 China Self-Driving Tourism Report: Measuring China's Beauty with Wheels. Beijing: New Era Cultural Tourism Research Institute.

[13] Zhong, S., & Zhang, W. (2012). The sacred journey: A study of pilgrimage tourism experiences in Tibet. Tourism Forum, 15(4), 11-15. https://doi.org/10.15962/j.cnki.tourismforum.2012.04.012

Using take-out to order food to experience food tourism: How does online food delivery service influence the travel experience? A goal conflict insight

Jing LIU[1], Wenjie TANG[2*], Qingying LIU[3]

[1]Assistant Professor, Faculty of Hospitality and Tourism Management, Macau University of Science and Technology, Macau, China

[2]PhD Student, Faculty of Hospitality and Tourism Management, Macau University of Science and Technology, Macau, China

[3]Master of International Tourism Management, Faculty of Hospitality and Tourism Management, Macau University of Science and Technology, Macau, China

*Corresponding Email: 382502637@qq.com

Abstract

This study explores how online food delivery (OFD) service quality influence tourists' gastronomic experiences through the lens of goal conflict theory. As food tourism gains prominence and travel itineraries become increasingly time-constrained, travelers often experience conflict between their desire for culinary exploration and other travel goals. Drawing on the concept of food goal disengagement, this research investigates whether travelers deprioritize food-related goals to accommodate broader objectives, and how OFD service quality may buffer or enhance the resulting gastronomic experiences. Guided by two research questions, the study examines (1) how travel goal conflict leads to food goal disengagement, and (2) how this disengagement affects affective and cognitive gastronomy and revisit intention, moderated by OFD service quality. A sequential mixed-methods approach was employed, integrating a survey of 584 Chinese travelers and in-depth interviews with 15 participants. Results show that travel goal conflict significantly predicts food goal disengagement, which in turn reconfigures affective and cognitive gastronomic experiences, enabling travelers to enjoy food in more flexible and less stressful ways. Moreover, OFD service quality strengthens the positive effects of food goal disengagement on gastronomy but does not influence revisit intention. Theoretically, this study introduces food goal disengagement as a novel self-regulatory strategy and positions OFD services as adaptive tools for managing travel-related goal conflict. Practically, the findings offer guidance for hospitality providers, OFD platforms, and destination marketers to support flexible, satisfying, and culturally rich food experiences through high-quality digital food delivery services.

Keywords: online food delivery service; goal conflict; food goal disengagement; gastronomy experience.

Introduction

The convergence of technological innovation and tourism consumption has fueled the rapid growth of online food delivery (OFD) services, fundamentally transforming how tourists engage with food during travel (Li et al., 2024). Initially designed to address operational inefficiencies and expand restaurant market reach (Kimes, 2011; Rivera, 2019). However, their popularity surged during the COVID-19 pandemic, as lockdowns and social distancing measures drove demand for contactless dining options (Das & Ramalingam, 2022). This transformation has positioned OFD not only as a tool of convenience but also as an integral component of the travel and hospitality ecosystem. While OFD services have redefined how food is accessed during travel, they intersect in compelling ways with the growing appeal of food tourism. In recent years, food tourism has gained global prominence as a vital dimension of cultural exploration and destination branding (Ellis et al., 2018; Tsai & Wang, 2017). Travelers increasingly seek culinary experiences that reflect local identity, making food consumption a key motivator of travel. The emergence of online food delivery (OFD) platforms has expanded the scope of food tourism beyond on-site exploration and immersive dining experiences. Travelers can now browse and sample various local cuisines anytime and anywhere via OFD platforms. Despite OFD's increasing integration into tourism behavior, academic research has largely treated it within the domains of technology acceptance, logistics, and consumer behavior, with limited focus on its implications for tourism experience (Ray & Bala, 2021; Salunkhe et al., 2018). A few recent studies have begun to explore the substitution and complementarity effects of OFD on travel behaviors (Li et al., 2024; Spurlock et al., 2020), but little is known about how OFD interacts with tourists' food-related motivations and overall satisfaction. Moreover, previous studies often fail to integrate OFD services into the broader framework of food tourism, overlooking their potential to serve as facilitators of culinary engagement rather than mere convenience tools. To address these gaps, this study applies goal conflict theory to investigate how travelers use online food delivery (OFD) services to fulfill gastronomy experiences when encountering goal conflict during travel. Specifically, it explores whether travelers deprioritize gastronomic goals due to competing travel demands, and how OFD service quality may help maintain or partially substitute gastronomic engagement under such conditions. By analyzing the affective (emotional) and cognitive (analytical) dimensions of gastronomy and examining revisit intention as a behavioral outcome, this study offers a comprehensive understanding of how OFD services influence gastronomic tourism.

This study is guided by two central research questions. First, how does travel goal conflict influence travelers' engagement with local gastronomy via food goal disengagement? Second, how does food goal disengagement affect travelers' gastronomic experiences and revisit intention, and to what extent is this relationship moderated by the quality of online food delivery (OFD) services? To address these questions, the study adopts goal conflict theory as its theoretical foundation. This framework provides a robust lens for understanding the self-regulation strategies tourists adopt when navigating trade-offs between culinary experiences and broader travel objectives. Specifically, this study sets out three main objectives:

(1) To examine the relationship between travel goal conflict and food goal disengagement;

(2) To explore how food goal disengagement influences affective and cognitive gastronomic experiences and revisit intention;

(3) To assess the moderating role of OFD service quality in these relationships.

This study contributes to food tourism literature in two keyways. Theoretically, this study advances tourism and consumer behavior literature by conceptualizing online food delivery (OFD) services not merely as convenience tools, but as strategic mechanisms for managing travel-related goal conflicts. Practically, the findings provide actionable guidance for tourism stakeholders, highlighting the value of high-quality OFD services in supporting flexible, satisfying, and culturally rich food experiences for time-constrained travelers. This perspective opens new pathways for integrating digital food platforms into destination marketing and hospitality strategies.

Goal conflict theory

Goal conflict theory offers a valuable framework for understanding how individuals manage competing objectives in decision-making. This theory posits that individuals must weigh trade-offs when their goals conflict, balancing the pursuit of one objective with potential constraints on another. Laran and Janiszewski (2009) propose that individuals continuously monitor and regulate these conflicts, deciding whether to prioritize one goal or adjust their behavior to accommodate multiple goals. Dhar and Simonson (1999) emphasize that goal conflicts can result in behavioral inconsistencies, particularly when individuals must balance a desired experience with resource constraints. These conflicts result in behavioral variability as individuals strive to balance both goals. For example, consumers experiencing goal conflict tend to prioritize one goal over the other, often opting to save time (Etkin et al., 2015; Fernbach et al., 2015). Previous research also indicates that goal conflict can hinder goal achievement and affect individual responses due to time constraints (Boudreaux & Ozer, 2013; Etkin & Memmi, 2021). Goal conflict is an inherent component of travel decision-making, especially when travel goals are misaligned (Smallman & Moore, 2010). In travel contexts, individuals frequently encounter goal conflicts, particularly between broader travel goals. Travelers must choose between prioritizing their travel experiences or adjusting their food choices to accommodate other priorities (Chen et al., 2023). Although numerous studies have examined goal conflict in consumer behavior (Chen et al., 2023; Etkin & Memmi, 2021), few have explored its impact on travelers' food experiences, despite travelers frequently encountering goal conflict when planning their itineraries. Travelers often visit multiple attractions (e.g., natural landscapes, cultural performances, local cuisine) within a limited timeframe. Therefore, understanding how travelers navigate and manage goal conflict is crucial for tourism managers. This study examines whether travelers temporarily forgo food-related goals as a strategy to manage travel goal conflict.

Methodology

This study employs an explanatory mixed-methods approach, integrating quantitative and qualitative research to comprehensively examine the relationship between food goal disengagement and gastronomic experiences within the framework of goal conflict theory. Given the complexity of tourism behavior, a mixed-methods design is well-suited to capturing both broad statistical trends and in-depth contextual insights (Molina-Azorín & Font, 2016). This research comprises two sequential phases. Study 1 utilizes a quantitative survey to identify patterns in how travelers experience food goal disengagement and its effects on affective and cognitive gastronomic experiences, as well as revisit intention. The findings from Study 1 inform the design of Study 2, a qualitative interview phase aimed at uncovering the underlying reasons behind the observed relationships.

In Study 1, data were collected via an online questionnaire targeting individuals who had traveled within the past year and had used online food delivery services. The analysis tests hypotheses derived from goal conflict theory, examining how disengaging from food-related goals influences gastronomic experiences and travel satisfaction. Study 2 employs a qualitative approach to complement the findings from Study 1 by examining travelers' experiences, perceptions, and decision-making processes regarding food goal disengagement and online food delivery services. Given the complexity of food-related decision-making in tourism, semi-structured interviews yield deeper insights into how travelers navigate goal conflicts and adjust their food consumption behaviors. Respondents were selected to match the demographic composition of the Study 1 sample, ensuring consistency across both phases. By integrating these methods, this study seeks to generate both generalizable findings and nuanced insights into the role of food goal disengagement in shaping tourism experiences. **Fig.1** presents an overview of the relationships within the study framework.

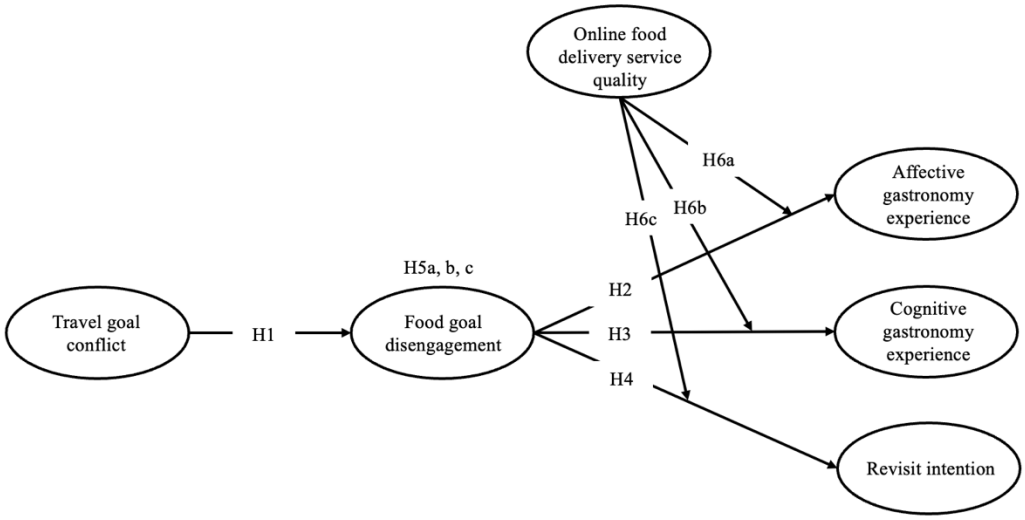


Fig. 1. The research model.

Expected result

This study combines quantitative and qualitative approaches to examine how travel goal conflict leads to food goal disengagement and its impact on gastronomic experiences

and revisit intention, moderated by the quality of online food delivery services. Study 1 employed survey data to identify statistical relationships, revealing that travel goal conflict increases food goal disengagement, which subsequently enhances affective and cognitive gastronomic experiences by reducing stress and encouraging more spontaneous dining. Study 1 also found that high-quality food delivery enhances gastronomic experiences but does not significantly influence revisit intention, suggesting that while convenience is important, travelers prioritize destination appeal over food delivery services when considering a return visit. Study 2 employed qualitative interviews to explore the rationale behind these relationships, revealing that travelers deliberately abandon food-related goals when managing time constraints, often perceiving food delivery as a practical rather than inferior alternative. Unlike Study 1, which provided statistical validation, Study 2 illustrated that travelers view this disengagement not as a sacrifice but as a means to enhance overall trip enjoyment through flexibility. Study 2 further explained why food delivery does not impact revisit intention, as travelers prioritize experiences beyond dining, reinforcing the findings of Study 1. A particularly valuable theoretical insight from this study is the role of frozen goals in influencing revisit intention. Unlike permanently abandoned goals, frozen goals refer to aspirations that individuals temporarily set aside but continue to value (Davydenko et al., 2019). This deferred aspiration creates a lingering sense of incompletion, which in turn motivates travelers to revisit the destination to "finish what they started." Collectively, these studies support goal conflict theory, demonstrating that food goal disengagement reshapes rather than diminishes gastronomic experiences, providing a more adaptive and stress-free approach to food choices during travel.

Keywords: online food delivery service; goal conflict; food goal disengagement; gastronomy experience.

References

[1] Boudreaux, M. J., & Ozer, D. J. (2013). Goal conflict, goal striving, and psychological well-being. Motivation and Emotion, 37(3), 433–443. https://doi.org/10.1007/s11031-012-9333-2

[2] Chen, S., Ahlstrom, D., & Xiao, T. (2023). Too complex to handle: Goal conflict and tourist preference for simple aesthetics. Annals of Tourism Research, 102, 103639. https://doi.org/10.1016/j.annals.2023.103639

[3] Das, M., & Ramalingam, M. (2022). What drives product involvement and satisfaction with OFDs amid COVID-19? Journal of Retailing and Consumer Services, 68, 103063. https://doi.org/10.1016/j.jretconser.2022.103063

[4] Ellis, A., Park, E., Kim, S., & Yeoman, I. (2018). What is food tourism? Tourism Management, 68, 250–263. https://doi.org/10.1016/j.tourman.2018.03.025

[5] Etkin, J., Evangelidis, I., & Aaker, J. (2015). Pressed for Time? Goal Conflict Shapes how Time is Perceived, Spent, and Valued. Journal of Marketing Research, 52(3), 394–406. https://doi.org/10.1509/jmr.14.0130

[6] Etkin, J., & Memmi, S. A. (2021). Goal Conflict Encourages Work and Discourages Leisure. Journal of Consumer Research, 47(5), 716–736. https ://doi.org/10.1093/jcr/ucaa019

[7] Fernbach, P. M., Kan, C., & Lynch, J. G. (2015). Squeezed: Coping with Constraint through Efficiency and Prioritization. Journal of Consumer Research, 41(5), 1204–1227. https://doi.org/10.1086/679118
[8] Li, E., Shi, K., Yang, Y., & Witlox, F. (2024). The influence of online food delivery services on eating-out travel—A case study of chengdu, China. Journal of Retailing and Consumer Services, 81, 104023. https://doi.org/10.1016/j.jretconser.2024.104023
[9] Molina-Azorín, J. F., & Font, X. (2016). Mixed methods in sustainable tourism research: An analysis of prevalence, designs and application in JOST (2005–2014). Journal of Sustainable Tourism, 24(4), 549–573. https://doi.org/10.1080/09669582.2015.1073739
[10] Ray, A., & Bala, P. K. (2021). User generated content for exploring factors affecting intention to use travel and food delivery services. International Journal of Hospitality Management, 92, 102730. https://doi.org/10.1016/j.ijhm.2020.102730
[11] Rivera, M. (2019). Online Delivery Provider (ODP) services: Who is getting what from food deliveries? International Journal of Hospitality Management, 80, A1–A2. https://doi.org/10.1016/j.ijhm.2019.05.008
[12] Salunkhe, S., Udgir, S., & Petkar, S. (n.d.). TECHNOLOGY ACCEPTANCE MODEL IN CONTEXT WITH ONLINE FOOD ORDERING AND DELIVERY SERVICES: AN EXTENDED CONCEPTUAL FRAMEWORK.
[13] Smallman, C., & Moore, K. (2010). PROCESS STUDIES OF TOURISTS' DECISION-MAKING. Annals of Tourism Research, 37(2), 397–422. https://doi.org/10.1016/j.annals.2009.10.014
[14] Spurlock, C. A., Todd-Blick, A., Wong-Parodi, G., & Walker, V. (2020). Children, Income, and the Impact of Home Delivery on Household Shopping Trips. Transportation Research Record: Journal of the Transportation Research Board, 2674(10), 335–350. https://doi.org/10.1177/0361198120935113
[15] Tsai, C.-T. (Simon), & Wang, Y.-C. (2017). Experiential value in branding food tourism. Journal of Destination Marketing & Management, 6(1), 56–65. https://doi.org/10.1016/j.jdmm.2016.02.003

Do Service Robots Empower Employees to Engage in More Proactive Service Behavior? An Experience Sampling Method Study

Xin LIU[1], Zhibin LIN[2], Min LIU[3*], Lu ZHANG[4], Canmian LIU[56], Tengteng ZHU[78]

[1]Shenzhen Tourism College, Jinan University, Shenzhen, China

[2]Durham University Business School, Durham University, Durham, UK

[3]School of Psychology, South China Normal University, Guangzhou, China

[4]School of Hospitality Business, Broad College of Business, Michigan State University, East Lansing, USA

[5]College of Business Administration, Huaqiao University, Quanzhou, China

[6]Institute for International Brand, Huaqiao University, Quanzhou, China

[7]Business School, Foshan University, Foshan, China

[8]The Center for Innovation and Economic Transformation and Upgrading, Research Institute of Social Science in Guangdong, Foshan, China

*Corresponding Email:liumin0703@126.com

Abstract

Background and Research Questions

The Fourth Industrial Revolution has fundamentally transformed the global hospitality industry through the rapid integration of artificial intelligence (AI) and service robots into daily operations (Lee & Yi, 2024; Qiu et al., 2022; Xu et al., 2023). Organizations increasingly adopt hybrid service models that strategically combine robotic efficiency with human adaptability (De Gauquier et al., 2023). However, frontline employees remain indispensable due to robots' limitations in handling complex interpersonal tasks and service recovery scenarios (Belanche et al., 2020; Hu et al., 2021). Customers consistently prioritize the emotional intelligence and problem-solving capabilities unique to human service (Yu et al., 2022), particularly in contexts requiring personalized engagement (Yang et al., 2024). This duality positions employees at the heart of a dynamic human-robot collaboration ecosystem, where balancing technological precision with human intuition becomes a strategic imperative.

Within this hybrid landscape, proactive service behavior—defined as employees' self-initiated efforts to anticipate and address customer needs beyond formal protocols (Cao et al., 2023; Hamzah et al., 2020)—has emerged as a critical determinant of service excellence. Although PSB enhances service quality and organizational performance

(Huo et al., 2019; Zhang et al., 2021), robot integration introduces new challenges. Employees must navigate dual responsibilities: compensating for robotic limitations (e.g., system failures) while leveraging automation to optimize workflows (Liu et al., 2025; Song et al., 2022). This raises a central question: How do daily interactions with service robots influence employees' capacity for proactive service behavior?

Existing research offers fragmented insights. On one hand, studies emphasize employees' negative reactions to robots, including perceived job insecurity (Zhang et al., 2023), emotional burnout (Kong et al., 2021), and resistance to technological displacement (Vatan & Dogan, 2021). On the other hand, emerging work highlights potential benefits, such as reduced monotony (Tang et al., 2022), enhanced role clarity (Li et al., 2024), and opportunities for upskilling (Liu et al., 2024). Yet, these perspectives largely adopt a static view, overlooking the day-to-day dynamics of human-robot interactions. Service environments are inherently fluid, with fluctuating customer demands, unpredictable robot performance, and varying employee workloads (Yang et al., 2024). A dynamic lens is thus essential to unravel how momentary interactions cumulatively influence employees' psychological states and behavioral outcomes.

A critical theoretical gap lies in understanding the mechanisms through which robot interactions affect proactive behavior. While psychological empowerment—a multidimensional construct encompassing employees' sense of meaning, competence, autonomy, and impact (Spreitzer, 1995)—has been linked to proactive behaviors in traditional settings (Hirschfeld et al., 2011), its role in robotic contexts remains unexplored. Empowerment theory posits that contextual resources foster agentic psychological states, which in turn motivate self-directed actions (Zimmerman, 2000). Applied to human-robot collaboration, frequent interactions with robots may serve as a resource, enhancing employees' perceived control over hybrid workflows (e.g., mastering robot-assisted tasks) and reinforcing their belief in their ability to deliver superior service (Kim et al., 2023; Willems et al., 2023). However, this potential pathway remains untested, leaving unresolved whether robots act as enablers of empowerment or mere tools that amplify existing stressors.

Furthermore, individual differences likely shape these dynamics. Technological readiness—an individual's propensity to adopt and adapt to new technologies (Parasuraman, 2000)—may determine how employees interpret and utilize robotic interactions. Employees with high readiness may view robots as collaborators that augment their capabilities, whereas those with low readiness may perceive them as threats, stifling empowerment. Similarly, trait empathy—a stable disposition to understand and respond to others' emotions (Davis, 1980)—could amplify the translation of empowerment into proactive behaviors, as empathetic employees are naturally inclined to prioritize customer needs (Ngo et al., 2020). Yet, no study to date has examined how these traits moderate the interplay between robots, empowerment, and proactive behavior.

This study addresses these gaps by investigating:

RQ1: How does daily interaction frequency with service robots influence employees' proactive service behavior through the lens of psychological empowerment?

RQ2: How do technological readiness and trait empathy moderate (a) the relationship between robot interaction frequency and psychological empowerment, and (b) the subsequent effect of empowerment on proactive behavior?

By addressing these questions, this research advances theoretical understanding of human-robot collaboration, offering actionable insights for designing hybrid service systems that harmonize technological efficiency with human ingenuity.

Method

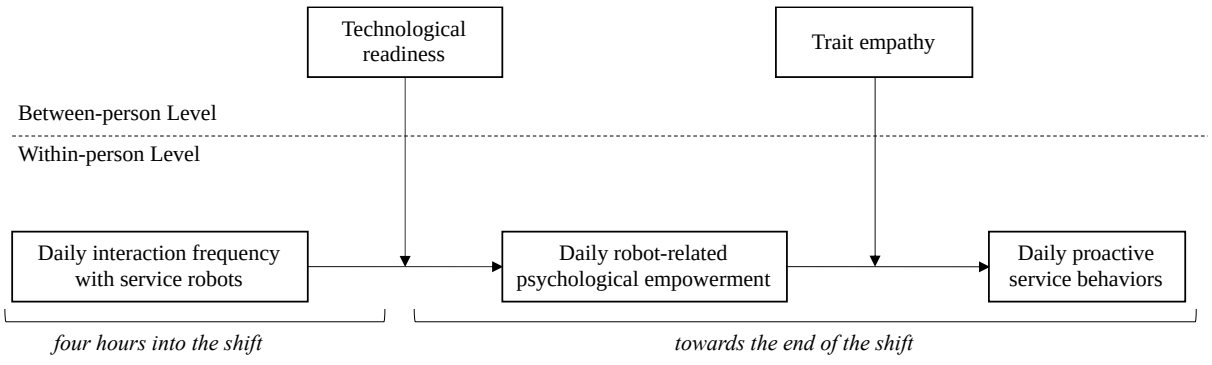
To capture the dynamic interplay of human-robot collaboration, this study employed a 10-day experience sampling method (ESM) with 93 frontline employees from Chinese hotels, yielding 600 daily observations. ESM is uniquely suited to studying within-person variability, minimizing recall bias and capturing real-time psychological and behavioral fluctuations (Gabriel et al., 2019). Data collection involved two phases: a baseline survey assessed trait variables (technological readiness, trait empathy) and controls (demographics, robot-phobia), while daily surveys administered twice per shift measured robot interaction frequency and affect (mid-shift) as well as psychological empowerment and proactive service behavior (end-of-shift). Participants were predominantly female (69.9%), aged 25–35 (80.6%), with a high school education or lower (80.6%), reflecting the demographic profile of China's hospitality workforce.

Robot-related psychological empowerment was evaluated using a 12-item scale adapted from Spreitzer (1995), capturing dimensions of meaning, competence, autonomy, and impact. Proactive service behavior was assessed via a 7-item scale (Rank et al., 2007), and technological readiness was measured using Parasuraman and Colby's (2014) 14-item instrument. Trait empathy was gauged through Davis' (1980) 13-item scale, which includes perspective-taking and empathic concern subscales.

Multilevel path analysis (Mplus 8.3) tested a moderated mediation model (see Figure 1). Within-person variables (robot interaction frequency, empowerment, proactive behavior) were group-mean centered, while between-person variables (technological readiness, trait empathy) were grand-mean centered. Controls included autoregressive effects, temporal trends (day of week, sine/cosine cycles), and daily affect.

Note. Control variables not represented in this figure: Prior-day measure of each endogenous, day of the study, the number of days (t) within a week, sine and cosine, positive affect, negative affect, robot-phobia, gender, age, education and tenure

Figure 1 Theoretical model



Results

Multilevel confirmatory factor analysis supported an eight-factor model (CFI = 0.84, RMSEA = 0.05). Cronbach's α ranged from 0.79 to 0.92. The multilevel model explained 55% of variance in empowerment and 11% in proactive behavior.

The analysis revealed that daily interaction frequency with service robots significantly predicted robot-related psychological empowerment (β = 0.21, *SE* = 0.05, $p < 0.01$), supporting the hypothesis that frequent interactions enhance employees' sense of meaning, competence, autonomy, and impact. Empowerment, in turn, drove proactive service behavior (β = 0.21, *SE* = 0.04, $p < 0.01$), confirming that empowered employees are more likely to initiate customer-focused actions. The indirect effect of robot interaction on proactive behavior via empowerment was significant (*indirect effect* = 0.043, 95% CI [0.018, 0.067]), demonstrating the mediating role of empowerment. Technological readiness moderated the interaction–empowerment relationship (β = 0.23, *SE* = 0.09, $p < 0.01$), with high-readiness employees exhibiting stronger effects (β = 0.32 vs. β = 0.10 for those with low readiness). The indirect effect was significantly larger for high-readiness employees (*indirect effect* = 0.065, 95% CI [0.028, 0.103]) compared to low-readiness counterparts (*indirect effect* = 0.020, 95% CI [-0.003, 0.044]). Similarly, trait empathy amplified the empowerment–proactive service behavior link (β = 0.18, *SE* = 0.07, $p < 0.01$), with high-empathy employees showing a more pronounced relationship (β = 0.28 vs. β = 0.13 for those with low empathy). The indirect effect was more pronounced for high-empathy employees (*indirect effect* = 0.059, 95% CI [0.026, 0.092]) than for low-empathy employees (*indirect effect* = 0.026, 95% CI [0.004, 0.048]).

Discussion and Conclusion

This study advances empowerment theory by introducing robot-related psychological empowerment as a novel construct in AI-driven service contexts. It demonstrates that daily interactions with robots enhance employees' sense of meaning, competence, autonomy, and impact—dimensions traditionally studied in interpersonal settings—thus expanding the theoretical boundaries of human-technology collaboration. By identifying technological readiness and trait empathy as critical moderators, the research bridges psychological empowerment theory with human-robot interaction literature, offering a multilevel framework to explain how individual differences shape adaptation to automation. These findings challenge the dominant narrative of robots as threats to human agency, instead positioning them as enablers of empowerment when aligned with employee characteristics.

For hospitality managers, these results underscore the importance of tailoring robot integration strategies to employee traits. Organizations should encourage frequent robot use while providing training to enhance technological readiness. For instance, simulations and workshops can help employees reframe robots as collaborative tools rather than competitors. Empathy-building initiatives—including customer scenario role-plays and emotional intelligence modules—can help employees translate empowerment into proactive behaviors. Additionally, selecting robots with user-friendly interfaces that allow workflow customization may reinforce autonomy and

competence. Assigning high-readiness employees to robot-supervisory roles and pairing empathetic staff with customer-facing tasks could further optimize human-robot synergy.

While this study provides novel insights, several limitations warrant attention. The reliance on self-reported data from Chinese hotels limits generalizability; future research should incorporate peer or supervisor ratings and cross-cultural samples. Although the ESM design captured daily dynamics, longitudinal studies could explore long-term effects of sustained robot interactions on career trajectories. Additionally, contextual factors such as organizational support structures and leadership styles were not examined but may influence empowerment processes. Future work could extend this framework to other service sectors (e.g., healthcare, retail) and integrate objective performance metrics (e.g., customer satisfaction scores) to validate behavioral outcomes.

This research illuminates the transformative potential of human-robot collaboration when grounded in psychological empowerment theory. By demonstrating that robots can enhance—rather than undermine—employees' proactive service behaviors through daily empowerment dynamics, it provides a roadmap for harmonizing technological efficiency with human-centric values. As industries navigate the challenges of Industry 4.0, fostering robot-related empowerment through trait-aligned integration strategies will be critical to achieving sustainable service excellence. The study ultimately calls for a paradigm shift in automation research: from viewing robots as mere productivity tools to recognizing their role in cultivating empowered, future-ready workforces.

Keywords: service robots; human-robot collaboration; psychological empowerment; technological readiness; trait empathy; experience sampling method (ESM).

References

[1] Belanche, D., Casaló, L. V., Flavián, C., & Schepers, J. (2020). Robots or frontline employees? Exploring customers' attributions of responsibility and stability after service failure or success. *Journal of Service Management*, *31*(2), 267-289.

[2] Gabriel, A. S., Podsakoff, N. P., Beal, D. J., Scott, B. A., Sonnentag, S., Trougakos, J. P., & Butts, M. M. (2019). Experience Sampling Methods: A Discussion of Critical Trends and Considerations for Scholarly Advancement. *Organizational Research Methods*, *22*(4), 969-1006.

[3] Kong, H., Yuan, Y., Baruch, Y., Bu, N., Jiang, X., & Wang, K. (2021). Influences of artificial intelligence (AI) awareness on career competency and job burnout. *International Journal of Contemporary Hospitality Management*, *33*(2), 717-734.

[4] Liu, X., Zhang, L., Lin, Z., Guan, X. (2025). Robots make me feel more like a human! Investigating how employee-robot engagement reduces workplace depersonalization. *Tourism Management*, 109.

[5] Spreitzer, G. M. (1995). Psychological empowerment in the workplace: Dimensions, measurement, and validation. *Academy of Management Journal*, *38*(5), 1442-1465.

[6] Tang, P. M., Koopman, J., McClean, S. T., Zhang, J. H., Li, C. H., De Cremer, D., Lu, Y., & Ng, C. T. S. (2022). When conscientious employees meet intelligent machines: An integrative approach inspired by complementarity theory and role theory. *Academy of Management Journal*, *65*(3), 1019-1054.

[7] Ngo, L. V., Nguyen, T. N. Q., Tran, N. T., & Paramita, W. (2020). It takes two to tango: The role of customer empathy and resources to improve the efficacy of frontline employee empathy. *Journal of Retailing and Consumer Services*, *56*, 102141.
[8] Xu, J., Hsiao, A., Reid, S., & Ma, E. (2023). Working with service robots? A systematic literature review of hospitality employees' perspectives. *International Journal of Hospitality Management*, *113*.
[9] Yang, F., Zhou, Z., & Huang, X. (2024). A lagged experience sampling methodology study on spillover effects of customer mistreatment. *Journal of Service Research*, *27*(3), 450-469.
[10] Zhang, L.-X., Li, J.-M., Wang, L.-L., Mao, M.-Y., & Zhang, R.-X. (2023). How does the usage of robots in hotels affect employees' turnover intention? A double-edged sword study. *Journal of Hospitality and Tourism Management*, *57*, 74-83.

The Power of Idols in Public Opinion Crisis: The Matching Effects of Endorser Type and Destination Gender

Zhen SU[123+], Chunmu WANG[1*+], Dongwei YANG[4], Wei LAI[1]

[1]Department of Tourism Management, Business School, Guangxi University, No. 100 East Daxue Road, Nanning, 530004, China

[2]Guangxi Development Strategy Institute, Nanning, 530004, China

[3]Key Laboratory of Interdisciplinary Science of Statistics and Management, Nanning, 530004, China

[4]Key Laboratory of Island Tourism Resource Data Mining and Monitoring, Ministry of Culture and Tourism, Hainan Tropical Ocean University, 570000, China

*Corresponding Email:2329301035@st.gxu.edu.cn[+]

[+]These authors contributed equally to this work.

Abstract

Purpose – Virtual endorsers are increasingly utilized in destination marketing; however, their effectiveness relative to real endorsers in managing public opinion crises remains underexplored. This study investigates the interaction between idol endorser type (real vs. virtual) and destination gender (masculinity vs. femininity) in shaping crisis communication outcomes.

Design/methodology/approach – Drawing on match-up hypothesis and situational crisis communication theory, this study employs three scenario-based experiments to examine how endorser-destination congruence influences crisis response effectiveness. The study further explores the mediating role of perceived fit and the moderating effect of crisis communication strategies (show weakness vs. show strength).

Findings – Results reveal a significant endorser-destination matching effect: masculinity destinations achieve higher perceived fit and persuasive impact when using real idol endorsers with a "show weakness" strategy, while femininity destinations benefit more from virtual idol endorsers with a "show strength" strategy.

Originality/value – This research extends the application of endorsement theories in tourism crisis management, offering empirical insights into the strategic deployment of virtual and real idols in crisis scenarios. This study advances the brand communication framework by incorporating destination gender into tourism crisis management. The findings provide practical guidance for tourism marketers in optimizing endorsement selection and crisis communication strategies to enhance brand resilience and consumer trust.

This research investigates the effectiveness of real vs. virtual idol endorsers—a rapidly emerging class of digital influencers—on public perceptions during crises, specifically when matched with different brand personalities (destination gender: masculinity vs. femininity). Building on the match-up hypothesis and situational crisis communication theory (SCCT), we propose and test a theory-driven structural model through three controlled scenario-based experiments. Our findings reveal that: (1) Digital (virtual) endorsers, when appropriately matched with brand characteristics and messaging strategies, can outperform real human influencers in restoring consumer trust and engagement. (2) The perceived psychological fit between endorser and brand mediates consumer reactions, while communication strategy (show strength vs. show weakness) moderates these effects. (3) These mechanisms reveal how digital persona design and crisis messaging interact, offering guidance for AI-based system deployment in emotionally charged digital environments.

Our work contributes in the following key ways: (1) Extends IS theory by integrating SCCT and brand-endorser congruence into the context of algorithmic persona (virtual idol) effectiveness, advancing understanding of emotionally intelligent IS applications. (2) Addresses the design and management of digital endorsers as IS artifacts that interface with users during high-stakes, trust-sensitive interactions. (3) Offers actionable insights on how AI-generated communication agents can be optimized for public crisis contexts, contributing to societal welfare and digital resilience—a core mission of study.

Keywords: Idol endorser,Destination gender,Situational crisis communication theory,Match-up hypothesis theory,Persuasive effect

References

[1] Akhtar, N., Hameed, Z., Islam, T., Pant, M. K., Sharma, A., Rather, R. A., & Kuzior, A. (2024). Avatars of influence: Understanding how virtual influencers trigger consumer engagement on online booking platforms. Journal of Retailing and Consumer Services, 78, 103742. https://doi.org/10.1016/j.jretconser.2024.103742

[2] Barbe, D., & Neuburger, L. (2021). Generation Z and Digital Influencers in the Tourism Industry. In N. Stylos, R. Rahimi, B. Okumus, & S. Williams (Eds.), Generation Z Marketing and Management in Tourism and Hospitality: The Future of the Industry (pp. 167–192). Springer International Publishing. https://doi.org/10.1007/978-3-030-70695-1_7

[3] Belanche, D., Casaló, L. V., Flavián, M., & Ibáñez-Sánchez, S. (2021). Understanding influencer marketing: The role of congruence between influencers, products and consumers. Journal of Business Research, 132, 186–195. https://doi.org/10.1016/j.jbusres.2021.03.067

[4] Bernbaum, E. (2022). The Spiritual and Cultural Importance of Mountains. In F. O. Sarmiento (Ed.), Montology Palimpsest: A Primer of Mountain Geographies (pp. 213–224). Springer International Publishing. https://doi.org/10.1007/978-3-031-13298-8_12

[5] Calderón-Fajardo, V., Molinillo, S., Anaya-Sánchez, R., & Ekinci, Y. (2023). Brand personality: Current insights and future research directions. Journal of Business Research, 166, 114062. https://doi.org/10.1016/j.jbusres.2023.114062

[6] Coombs, W. T. (2007). Protecting Organization Reputations During a Crisis: The Development and Application of Situational Crisis Communication Theory. Corporate Reputation Review, 10(3), 163–176. https://doi.org/10.1057/palgrave.crr.1550049
[7] Corrêa, C. C., Alves, H. M. B., & Santos Estevão, C. M. (2024). Deciphering social media's role in tourism during crises: A scientific examination. Current Issues in Tourism, 0(0), 1–24. https://doi.org/10.1080/13683500.2024.2360677
[8] Daniels, M. J. (2021). Review Bettany Hughes, of Venus and Aphrodite: A biography of desire. BMCR 2021.07.46. https://www.academia.edu/50996364/Review_Bettany_Hughes_of_Venus_and_Aphrodite_a_biography_of_desire
[9] Delgado-Ballester, E., & Fernandez-Sabiote, E. (2024). Brand Stereotypes: On the relationships with gendered brand personality and agentic and communal values in fostering Consumer–Brand identification. Journal of Business Research, 177, 114635. https://doi.org/10.1016/j.jbusres.2024.114635
[10] Deng, F., Tuo, M., Chen, S., & Zhang, Z. (2024). Born for marketing? The effects of virtual versus human influencers on brand endorsement effectiveness: The role of advertising recognition. Journal of Retailing and Consumer Services, 80, 103904. https://doi.org/10.1016/j.jretconser.2024.103904
[11] El Hedhli, K., Zourrig, H., & Becheur, I. (2021). Celebrity endorsements: Investigating the interactive effects of internalization, identification and product type on consumers' attitudes and intentions. Journal of Retailing and Consumer Services, 58, 102260. https://doi.org/10.1016/j.jretconser.2020.102260
[12] Gerrath, M. H. E. E., Olya, H., Shah, Z., & Li, H. (2024). Virtual influencers and pro-environmental causes: The roles of message warmth and trust in experts. Journal of Business Research, 175, 114520. https://doi.org/10.1016/j.jbusres.2024.114520
[13] Hamdy, A., Zhang, J., Labben, T., & Eid, R. (2023). The role of destination gender in shaping tourists' responses toward destinations: The mediating role of destination stereotypes. Journal of Hospitality and Tourism Management, 57, 236–249. https://doi.org/10.1016/j.jhtm.2023.10.007
[14] Hornikx, J., Janssen, A., & O'Keefe, D. J. (2023). Cultural Value Adaptation in Advertising is Effective, But Not Dependable: A Meta-Analysis of 25 Years of Experimental Research. International Journal of Business Communication, 23294884231199088. https://doi.org/10.1177/23294884231199088
[15] Hosany, S., Ekinci, Y., & Uysal, M. (2006). Destination image and destination personality: An application of branding theories to tourism places. Journal of Business Research, 59(5), 638–642. https://doi.org/10.1016/j.jbusres.2006.01.001
[16] Kalyvaki, M., McIntosh, H., & Nash, K. (2023). Virtual selfhood and consumer behavior: Exploring avatar attachment and consumption patterns in Second Life's metaverse. Computers in Human Behavior: Artificial Humans, 1(2), 100016. https://doi.org/10.1016/j.chbah.2023.100016
[17] Kamins, M. A. (1990). An Investigation into the "Match-up" Hypothesis in Celebrity Advertising: When Beauty May Be Only Skin Deep. Journal of Advertising, 19(1), 4–13. https://doi.org/10.1080/00913367.1990.10673175
[18] Kim, I., Ki, C.-W., Lee, H., & Kim, Y.-K. (2024). Virtual influencer marketing: Evaluating the influence of virtual influencers' form realism and behavioral realism on consumer ambivalence and

marketing performance. Journal of Business Research, 176, 114611. https://doi.org/10.1016/j.jbusres.2024.114611
[19] Li, Y., Liu, B., & Xie, L. (2022). Celebrity endorsement in international destination marketing: Evidence from eye-tracking techniques and laboratory experiments. Journal of Business Research, 150, 553–566. https://doi.org/10.1016/j.jbusres.2022.06.040
[20] Liu, B., Moyle, B., Kralj, A., & Li, Y. (2023). Celebrity endorsement in tourism: Attention, emotional arousal and familiarity. Tourism Management, 98, 104750. https://doi.org/10.1016/j.tourman.2023.104750
[21] Liu, S., Aw, E. C.-X., Tan, G. W.-H., & Ooi, K.-B. (2023). Virtual Influencers as the Next Generation of Influencer Marketing: Identifying Antecedents and Consequences. In M. A. Al-Sharafi, M. Al-Emran, G. W.-H. Tan, & K.-B. Ooi (Eds.), Current and Future Trends on Intelligent Technology Adoption: Volume 1 (pp. 23–39). Springer Nature Switzerland. https://doi.org/10.1007/978-3-031-48397-4_2
[22] Luo, L., & Kim, W. (2024). How virtual influencers' identities are shaped on Chinese social media: A case study of Ling. Global Media and China, 9(3), 325–343. https://doi.org/10.1177/20594364231188353
[23] Meng, L. (Monroe), Bie, Y., Yang, M., & Wang, Y. (2025). The effect of human versus virtual influencers: The roles of destination types and self-referencing processes. Tourism Management, 106, 104978. https://doi.org/10.1016/j.tourman.2024.104978
[24] Pan, L., Lu, L., & Zhang, T. (2021). Destination gender: Scale development and cross-cultural validation. Tourism Management, 83, 104225. https://doi.org/10.1016/j.tourman.2020.104225
[25] Park, S., & Choi, J.-A. (2023). Comparing public responses to apologies: Examining crisis communication strategies using network analysis and topic modeling. Quality & Quantity, 57(4), 3603–3620. https://doi.org/10.1007/s11135-022-01488-5
[26] Ren, W., & Pan, L. (2024). Unveiling the mediating effects of destination gender on tourist loyalty. Journal of Travel & Tourism Marketing, 41(5), 705–725. https://doi.org/10.1080/10548408.2024.2332276
[27] Robson, J., & Farquhar, J. D. (2021). Recovering the corporate brand: Lessons from an industry crisis. European Journal of Marketing, 55(7), 1954–1978. https://doi.org/10.1108/EJM-09-2019-0698
[28] Roy, S., Dryl, W., & de Araujo Gil, L. (2021). Celebrity endorsements in destination marketing: A three country investigation. Tourism Management, 83, 104213. https://doi.org/10.1016/j.tourman.2020.104213
[29] Thomas, V. L., & Fowler, K. (2021). Close Encounters of the AI Kind: Use of AI Influencers As Brand Endorsers. Journal of Advertising. https://www.tandfonline.com/doi/abs/10.1080/00913367.2020.1810595
[30] Tian, Y., & Yang, J. (2022). Deny or bolster? A comparative study of crisis communication strategies between Trump and Cuomo in COVID-19. Public Relations Review, 48(2), 102182. https://doi.org/10.1016/j.pubrev.2022.102182
[31] Venciute, D., Mackeviciene, I., Kuslys, M., & Correia, R. F. (2023). The role of influencer–follower congruence in the relationship between influencer marketing and purchase behaviour. Journal of Retailing and Consumer Services, 75, 103506. https://doi.org/10.1016/j.jretconser.2023.103506
[32] Xie-Carson, L., & Benckendorff, P. (2024). Insta-fame or insta-flop? The pitfalls of using virtual influencers in tourism marketing. Journal of Hospitality and Tourism Management, 60, 116–126. https://doi.org/10.1016/j.jhtm.2024.06.014

[33] Yan, J., Xia, S., Jiang, A., & Lin, Z. (2024). The effect of different types of virtual influencers on consumers' emotional attachment. Journal of Business Research, 177, 114646. https://doi.org/10.1016/j.jbusres.2024.114646
[34] Yang, T.-T., Ruan, W.-Q., Li, Y.-Q., Zhang, S.-N., & Zhou, Y. (2025). The indelible stains: Exploring destination stereotypes after crisis events. Tourism Management, 106, 105020. https://doi.org/10.1016/j.tourman.2024.105020
[35] Yu, Y., Kwong, S. CM., & Bannasilp, A. (2023). Virtual idol marketing: Benefits, risks, and an integrated framework of the emerging marketing field. Heliyon, 9(11), e22164. https://doi.org/10.1016/j.heliyon.2023.e22164
[36] Zhou, Y., Li, Y.-Q., Ruan, W.-Q., Zhang, S.-N., & Yang, T.-T. (2024). Who should the spotlight be on? The interactive effects of celebrity endorser type and destination personality. Tourism Management, 105, 104957. https://doi.org/10.1016/j.tourman.2024.104957

Revisiting the norm activation model: A multidimensional analysis of eco-friendly hotel consumer behavior with socio-cultural extensions

Shan DING[1], Jaeseok LEE[2*], Sangguk KANG[2]

[1]Ph.D Candidate, Department of Tourism Management,
Gangneung-Wonju National University, Gangneung, Gangwon, South Korea

[2]Associate Professor, Department of Tourism Management,
Gangneung-Wonju National University, Gangneung, South Korea,

*Corresponding Email: jaeseok.lee@gwnu.ac.kr

Abstract

Introduction

In the context of escalating global environmental crises, governments, businesses, and consumers are increasingly raising their awareness regarding ecological preservation. Pro-environmental attitudes constitute a multidimensional concept encompassing value systems, environmental awareness, and behavioral intentions, which exhibit significant variations based on individual characteristics and social environments (Kim, 2024). However, numerous previous studies have approached environmental protection attitudes as a merely uni-dimensional concept, thereby limiting the breadth of interpretation and implication (Nkaizirwa, Nsanganwimana, & Aurah, 2021). This research explores in depth the relationship between eco-friendly attitudes and eco-friendly consumer behavior in the hotel sector, grounded in a multidimensional understanding of pro-environmental attitudes. These eco-friendly attitudes are closely associated with consumers' recognition of environmental issues, while eco-friendly behaviors are constrained by factors such as time and cost. Furthermore, environmentally conscious consumers exhibit not only self-aware cognitive evaluations regarding the severity, inconvenience, and importance of eco-friendly behavior but also a strong interest in the environmental protection performance and sense of responsibility demonstrated by corporations and governments.

According to the Norm Activation Model (NAM), consumer behavioral decisions are influenced by the interaction of awareness of consequences, ascription of responsibility, and personal norms (Schwartz, 1977). Previous studies on green hotels reveal that consumer decision-making processes are not solely dependent on individual cognition and norms but are significantly influenced by social factors (Kim, 2024). Consequently, social norms act as an additional component of the NAM, impacting consumers' intention to patronize green hotels. However, there remains a paucity of structural research on green hotel stay that incorporates an extended Norm Activation Model (NAM) accounting for social norms. This study therefore explores the applicability of an extended NAM framework in green hotel contexts, with a specific focus on analyzing the role of pro-environmental attitudes as antecedent variables. The findings

are expected to provide critical insights for formulating sustainable development strategies and environmental protection policies in the hotel industry.

Research Design and Measurement Items

This study collected data to analyze the factors related to eco-friendly hotel visit intention, including 10 constructs, 62 measurement items, and demographic variables. All measurement items were evaluated using a 5-point Likert scale, where 1 represents "Strongly Disagree" and 5 represents "Strongly Agree." To measure pro-environmental attitudes, items addressing the severity of environmental issues, the inconvenience of eco-friendly behavior, and the importance of eco-friendly behavior were adopted. For instance, an item measuring the severity of environmental issues states, "Energy conservation is necessary due to Korea's limited natural resources" (Laroche et al., 2001). An item related to the inconvenience of eco-friendly behavior reads, "I find washing bottles for recycling inconvenient" (Laroche et al., 2001). Additionally, an item evaluating the importance of eco-friendly behavior includes, "Recycling contributes to reducing environmental pollution" (Laroche et al., 2001). Perceived corporate environmental responsibility and perceived governmental environmental responsibility were also included as variables to measure pro-environmental attitudes. For example, corporate responsibility was assessed with the item, "Hotel companies must responsibly manage natural resources" (Chen & Tung, 2014), while governmental responsibility was evaluated with the statement, "Governments should implement policies to minimize environmental pollution" (van der Werff, Steg, & Ruepert, 2021). Within the framework of the extended Norm Activation Model (NAM), items evaluating ascription of responsibility and personal norms were incorporated. An example of an item measuring ascription of responsibility is: "As a tourist, minimizing environmental impact is my responsibility" (Choi, 2023). Personal norms were assessed with items such as: "I must comply with environmental regulations when using hotels" (Choi, 2023). Social norms were also measured using items such as: "People around me expect me to choose eco-friendly hotels over conventional ones" (Kim & Kim, 2021). Awareness of consequences, the one of the original components of NAM, was replaced by the five dimensions of pro-environmental attitudes.

Lastly, this study included items measuring visit intention and recommendation intention regarding eco-friendly hotels. Visit intention was assessed with statements such as: "I plan to prioritize eco-friendly hotels during travel" (Han, Hsu, & Lee, 2009), while recommendation intention was evaluated with items like: "I will actively recommend eco-friendly hotels to acquaintances" (Ryu, Han, & Jang, 2010).

Data Collection and Analysis

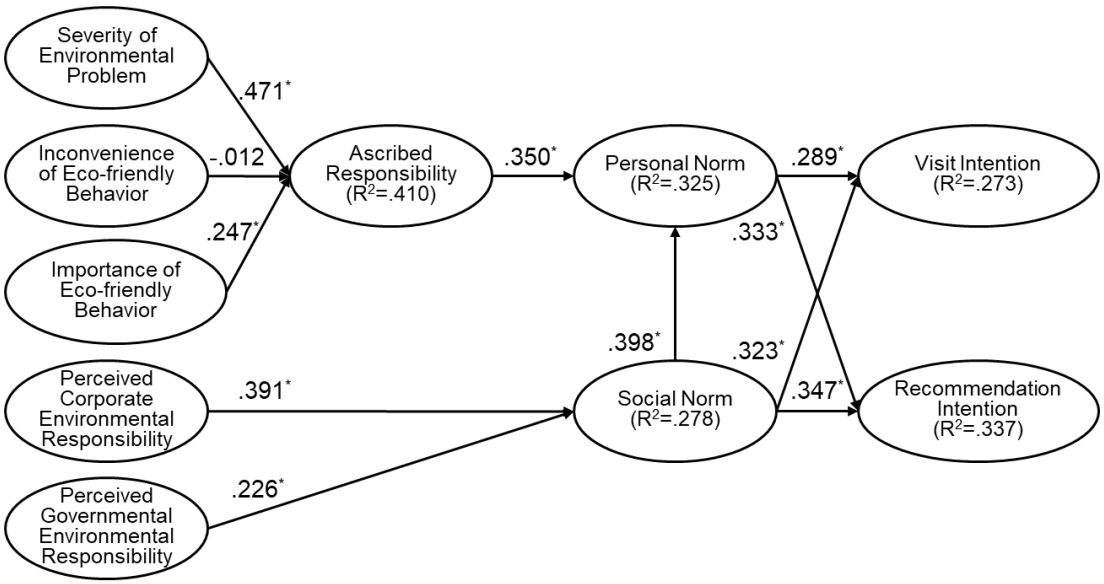
The data for this study were collected through an online survey conducted via Wen Juan Xing, a Chinese platform specializing in data collection, analysis, and management. Wen Juan Xing manages a panel of approximately 6.2 million users (Wen Juan Xing, n.d.). The survey was carried out over a 17-day period from February 15 to March 1, 2025, targeting Mainland Chinese consumers with previous over-night travel experience in the last three years. Using a convenience sampling method, a total of 447

valid responses were obtained and used for analysis. For the demographic information frequency analysis, SPSS 28.0 was employed, while hypothesis testing was conducted using structural equation modeling with Jamovi.

Results

This study investigated the key factors influencing consumers' intentions to visit and recommend eco-friendly hotels by conducting an empirical analysis using Structural Equation Modeling (SEM). The findings revealed that the severity of environmental issues, the inconvenience and importance of eco-friendly behavior, corporate and governmental environmental responsibility, and personal and social environmental norms significantly impacted consumers' environmental behavior in various ways, except the inconvenience of eco-friendly behavior.

The severity of environmental issues and the importance of eco-friendly behavior were found to have a meaningful influence on consumers' ascribed environmental responsibility (β=.471, p<.05). In contrast, the inconvenience of eco-friendly behavior did not significantly affect responsibility perception. This result suggests that while consumers may perceive eco-friendly activities as inconvenient, such discomfort does not necessarily diminish their sense of responsibility toward environmental protection.



Model fit: ML $\chi^2_{(df)} = 1665_{(1303)}$ ($p < .05$), CFI = .973, TLI = .972, RMSEA = .025 (95% CI = .021 - .028)

* $p < .05$

< Figure 1. Results of Structural Equation Modeling >

Personal and social environmental norms were influenced by external factors, with personal norms showing an explanatory power of R^2=.325 and social norms showing R^2=.278. Perceived corporate environmental responsibility (β=.391, p<.05) and perceived governmental concern for environmental protection (β=.226, p<.05) were identified as significant contributors to the formation of social environmental norms.

These findings imply that active efforts from corporations and governments are essential for establishing strong social norms related to environmental protection.

Both personal and social environmental norms were found to significantly impact consumers' intention to visit eco-friendly hotels (R^2=.273) and their intention to recommend such hotels to others (R^2=.337). Among these factors, social environmental norms exerted a stronger influence than personal norms, indicating that consumers' external social influences play a more critical role in shaping their behavior than their individual eco-friendly beliefs.

The model fit indices demonstrated adequate level of fit between modeled covariance and data-derived covariance, with values of CFI=.973, TLI=.972, and RMSEA=.025. These results confirm that the proposed model effectively explains consumers' eco-friendly behavior with appropriate level of validity and reliability.

Conclusion

This study empirically examined the complex relationships among pro-environmental attitudes, ascribed environmental responsibility, personal norm, social norms, and behavioral intention, providing a theoretical foundation for marketing strategies and policy development in the context of eco-friendly hotels. Based on the findings, several implications can be drawn.

First, green hotels should strengthen their commitment to environmental responsibility and enhance the transparency of their environmental policies to build greater consumer trust in eco-friendly behavior. Second, governments need to actively promote eco-friendly policies and foster social norms through these initiatives to further reinforce consumers' environmental awareness. Third, as a marketing strategy for eco-friendly hotels, leveraging word-of-mouth effects and social media promotions can be highly effective in increasing consumers' intentions to visit and recommend such hotels.

Despite offering valuable empirical insights, this study has certain limitations. Majority of samples were chosen from a specific age group (20–39 years), which may restrict the generalizability of the findings. Additionally, as the study relied on cross-sectional data, it is limited in its ability to capture long-term changes. Future research should employ longitudinal studies to better establish causal relationships. Furthermore, analyzing the influence of cultural factors on eco-friendly behavior could expand the applicability of the findings and provide deeper insights into sustainable consumer behavior across diverse contexts.

Keywords: Pro-Environmental Attitudes, Extended Norm Activation Model, Eco-Friendly Hotel, Personal and Social Norm

References

[1] Chen, M.-F., & Tung, P.-J. (2014). Developing an extended theory of planned behavior model to predict consumers' intention to visit green hotels. *International Journal of Hospitality Management, 36*, 221–230.

[2] Choi, Y. (2023). *A Study on Pro-Environmental Behavior of Tourists for Sustainable Tourism: Application of the VBN and VAB Model*. Kyung Hee University Doctoral Dissertation. Seoul, Korea.
[3] Han, H., Hsu, L.-T. (Jane), & Lee, J.-S. (2009). Empirical investigation of the roles of attitudes toward green behaviors, overall image, gender, and age in hotel customers' eco-friendly decision-making process. *International Journal of Hospitality Management, 28*(4), 519–528.
[4] Kim, T. (2024). The impact of eco-friendly hotel corporations' social responsibility on customers' environment behavior: Applying the extended norm activation model. *(Korean) Journal of Service Research, 17*(1), 21-23.
[5] Kim, T., & Kim, Y. (2021). A study of the relationship between restorative servicescapes and environmental behavior: The mediating effect of eco-friendly image and the moderation of social norms, *(Korean) Journal of Tourism Management Research, 25*(2), 121-145.
[6] Laroche, M., Bergeron, J., & Barbaro-Forleo, G. (2001). Targeting consumers who are willing to pay more for environmentally friendly products. *Journal of Consumer Marketing, 18*(6), 503–518.
[7] Nkaizirwa, J. P., Nsanganwimana, F., & Aurah, C. M. (2021). Reexamining the measurement of pro-environmental attitudes and behaviors to promote sustainable development: A systematic review. *Eurasia Journal of Mathematics, Science and Technology Education, 17*(9). 1-21. https://doi.org/10.29333/ejmste/11138
[8] Ryu, K., Han, H., & Jang, S. (Shawn). (2010). Relationships among hedonic and utilitarian values, satisfaction and behavioral intentions in the fast-casual restaurant industry. *International Journal of Contemporary Hospitality Management, 22*(3), 416–432.
[9] Schwartz, S. H. (1977). Normative influences on altruism. In L. Berkowitz (Ed.), *Advances in experimental social psychology* (Vol. 10, pp. 221–279). Academic Press. https://doi.org/10.1016/S0065-2601(08)60358-5
[10] van der Werff, E., Steg, L., & Ruepert, A. (2021). My company is green, so am I: the relationship between perceived environmental responsibility of organisations and government, environmental self-identity, and pro-environmental behaviours. *Energy Efficiency, 14*(5), 50.
[11] Wen Juan Xing (n.d.). https://www.wjx.cn/

Does rural tourism enhance the economic resilience in peripheries? Evidence from China's Leisure Agriculture and Rural Tourism Policy

Minkun LIU, Lianjian LIANG*, Xiaogui DENG, Lili REN

School of Business, Guangxi University, 100 University Road, Nanning, China

*Corresponding Email: 2229401003@st.gxu.edu.cn

Abstract

1.Introduction

In the center-periphery model, the city is the center and dominates, while the countryside is the periphery and is in a state of deprivation. Under the dominant economic model of industrialization, the gap between urban and rural areas in developing countries such as China has gradually widened and the countryside has become increasingly marginalized. This has led to a series of social problems, such as the hollowing out of the countryside and the “big city disease”. Scholars in the field of tourism are exploring ways to develop rural tourism to revitalize the countryside and promote balanced development in urban and rural areas. However, there have been studies that dispute the issue. Some scholars argue that tourism reinforces the deprivation of villages by the center (Britton, 1982; Higgins-Desbiolles, 2022). While another part of scholars believe that tourism can help the peripheral areas to develop economically(Chaperon & Bramwell, 2013; He & Zhang, 2022). The controversy arises from the lack of clarity on the role of tourism for marginalized areas. There is an urgent need for empirical research on the role of tourism in balancing urban and rural economic development.

China is stopping the peripheralization of the countryside by promoting rural tourism. China's history of long-standing urban-biased policies has disadvantaged rural areas, extracting substantial rural value to support urban centers and heavy industries (Li, 2011). To reverse it, China has utilized rural tourism to stimulate economic growth in peripheries and alleviate poverty. The Chinese government has implemented a range of policies aimed at promoting rural tourism, including a comprehensive policy designed to support the growth of leisure agriculture and rural tourism (LART). This policy provides a quasi-natural experiment for examining the impact of rural tourism on the peripheral economic resilience (PER). The aim of this study is to conduct empirical analysis of the effect of LART policy on PER and investigate the pathway towards sustainable development in both rural tourism and economic revitalization in peripheries. And we utilize the PSM-DID method, which combines the propensity score matching and difference-in-differences method.

This study makes four contributions. First, it analyzes for the first time the continuing impact of rural tourism on PER, explains how rural tourism can help peripheries resist urban gravity, and expands the theoretical boundaries of the core-periphery paradigm in the field of tourism. Second, it reanalyzes the resilience metaphor and establishes a resilience measurement system applicable to peripheries, enhancing the explanatory

power of resilience theory for the potential of peripheries. Third, it utilizes quasi-natural experimental methods to empirically test the impact of rural tourism policies on PER of counties, providing empirical evidence for the theory of domestic tourism-led economic growth at the meso-level. Finally, policy recommendations are provided to encourage peripheries to promote rural tourism and economic revitalization.

3.A framework for the impact of LART Policy on PER

China's Ministry of Agriculture and Rural Development recognized nine batches of 388 LART counties from 2010 to 2018. It is a policy to systematically promote rural tourism in counties, including two aspects: improving conditions for rural tourism development and promoting rural tourism products. In terms of development conditions, the policy requires local governments to put in place comprehensive supportive policies and measures based on the industrial needs of their counties. For example, they should actively seek financial, tax, credit, and insurance support policies for rural tourism, attract social capital, and broaden financing channels. Secondly, local governments need to improve transportation, accommodation, catering, entertainment, and hygiene conditions, establish good infrastructure conditions, and improve reception service capabilities. Thirdly, local governments need to create more than 10 well-known rural tourism destinations, forming rural tourism industry belts or clusters that include sightseeing, vacationing, and leisure activities. In terms of promotion, this policy is a demonstration policy with Chinese characteristics, aiming to cultivate demonstration counties as typical examples of rural tourism for other areas to learn from. Secondly, receiving LART policy for the local is also an important part of brand building, enhancing visibility and reputation. Thirdly, the policy mandates implementing rural tourism planning and developing tourism products to enhance local development environment and modernize local image.

According to official government monitoring data for 2015, under the promotion of the LART policy, these counties in China have established a certain scale of rural tourism industry belts or clusters, and the main economic indicators of rural tourism are leading in the local provinces and cities, with an annual reception of around 1 million visitors (Shuai, 2015). This indicates that the policy effectively promotes rural tourism in the local area. Based on existing research, this paper proposes three hypotheses

Policy Impact 1: It is difficult for peripheries to withstand urban gravity due to the traditional agriculture-dominated industrial structure. In the core-periphery theory, the lack of attraction of industrial factors from agriculture makes the rural areas marginalized and the industrial resilience is insufficient(He & Zhang, 2022). Urban gravity further forces the outflow of population, capital and other industrial factors from peripheries (Anderson, 2000), further reducing PER. The policy helps rural areas to develop rural tourism, diversifies the local industrial structure, shortens the core-periphery industrial value gap, and at the same time enhances the local endogenous momentum, strengthening PER from both structural and agentic perspectives. However, there are differences in how Str-PER and Age-PER are affected by the policy due to their different characteristics and functions. According to tourism area life cycle model, the characteristics of industry development differ at different stages (Ma & Hassink,

2013). Initially, rural tourism is an asset-light operation that lacks large-scale industrial investment, but provides many local service sector jobs and entrepreneurial opportunities. In the later stage, the rural tourism market expands, the infrastructure facilities are improved, and large-scale industrial investment is gradually attracted. Therefore, we propose the hypothesis.

Hypothesis 1. (H1): LART policy promotes PER, but the impact of LART policy on Str-PER and Age-PER is not synchronized

Policy Impact 2: Because of the spatial heterogeneity in the relationship between LART policies and PER, studies of this heterogeneity can serve as a useful start to clarify the controversy over the causal relationship between LART policies and PER. According to previous literature, differences in baseline levels of economic development can lead to differential impacts on tourism spillovers following policy implementation (Cuccia et al., 2017). In economically disadvantaged regions, rural tourism has a greater economic impact on peripheries because of the advantages of tourism over other industries. Whereas, in economically developed regions, the effect of rural tourism on the economic impacts of peripheral regions is weakened because these regions are industrially developed and the comparative advantage of tourism is weakened. Based on the above discussion, the following hypothesis on spatial heterogeneity is proposed.

Hypothesis 2. (H2): The effect of LART policies to promote PER varies by economic growth and geographic location

Policy Impact 3: The policy can improve the consumption function and the attractiveness of industrial factors in peripheries. At the level of consumption function, the policy promotes the integration of tourism and agricultural industry, optimizes and adjusts the industrial structure of marginal areas, transforms rural areas from production centers to consumption centers (Chen et al., 2022), attracts urban residents to consume (Yiping Li et al., 2019; Soares da Silva et al., 2016), and raises the overall regional consumption level. The increased consumption level can promote industrial upgrading and social innovation (Zhang et al., 2020), which is conducive to enhancing PER. In terms of rural attractiveness, the policy transforms the economic disadvantages of marginalized areas into regional advantages and changes people's perceptions of the image of rural areas. Rural areas previously considered underdeveloped become areas with more development opportunities, attracting more people to return to the countryside for development and bringing capital and talent back to peripheries (Chen et al., 2022). The return of industrial factors provides support for industrial recovery and transformation, and enhances local PER. therefore we propose this hypothesis.

Hypothesis 3. (H3): The LART policy affects PER mainly by promoting regional consumption level and industrial factor return

3. Material and methods

We construct a PER index based on the structure-agency framework of economic resilience. The structural PER (Str-PER) is based on their inherent and inherited resilience, mainly reflected in terms of resistance and recovery (Martin & Sunley, 2015; Tan et al., 2020). The agency PER (Age-PER) is generated by the deliberate actions of regional actors and is determined by their motivation and ability to change and

influence structural elements (Bristow & Healy, 2020; Tan et al., 2020) . It is mainly reflected in re-orientation and renewal capacity.

We collected data on all Chinese counties to examine PER. We adopt a quasi-natural experimental research methodology with the LART policy as an external shock. The LART counties that received LART policies are considered the experimental group, while the non-LART counties not supported by the policy serve as the control group. The specific steps for sample selection are as follows. First, to ensure consistency in administrative division level and functionality, we use all counties in China's provincial-level administrative units from 2005 to 2019 as our sample. Second, counties with severe missing data are also excluded. Finally, to mitigate the bias caused by self-selection of samples, the propensity score matching (PSM) method is used to exclude counties that are not in the common support region, resulting in panel data for 1,830 counties. There were 265 LART counties in the experimental group and 1,565 non-LART counties in the control group.

We employ the PSM-DID method to quantitatively examine whether and to what extent the LART policy improves PER. We first adopts PSM method. The basic idea of this method is to construct a Logit model based on the characteristics of all counties and calculate the probability of each county being included in the treatment group, i.e., the propensity score. Then, counties with similar probabilities are matched, enabling comparability between the control and treatment groups.

4. Results

The results of the study show that the policy significantly reduces Str-PER at the 1% level of significance without considering control variables, while controlling for other explanatory variables the policy significantly increases Str-PER at the 10% level of significance. It may be that the policy's impact on Str-PER is small and easily overshadowed by other influences. The policy significantly increases Age-PER, regardless of whether control variables are considered or not. Thus, H1 is confirmed. We find that the policy has a larger impact on Age-PER than Str-PER.

The results of mechanism analysis show the impact of the impact on regional consumption levels, capital return, and population return. The policy significantly increases the regional consumption level and the return of capital, while the effect on the return of population is not significant. Thus, H3 is confirmed. This indicates that the policy can enhance PER by increasing local consumption levels and promoting capital return.

5. Conclusions

The study adopts for the first time economic resilience to analyze the mechanism of peripheries resisting urban gravity, explaining the value of rural tourism in resisting the fate of peripheralization in developing countries and regions. The study shows that rural tourism can effectively contribute to PER in developing countries. This is characterized by two features. First, the impact of rural tourism on the peripheral economy is long-term and gradual. Therefore, in the short run rural tourism has a limited impact. This is the reason why previous studies are skeptical about the performance of tourism (Biddulph, 2015). Second, rural tourism in underdeveloped regions mainly counteracts

peripheralization shocks by promoting entrepreneurship and farmer development, while its impact on optimizing economic structure is relatively weak, which empirically supports previous arguments (Chaperon & Bramwell, 2013). This may be due to the relatively slow impact of rural tourism on economic structure.

This provides an explanation for the paradox of dependency theory in tourism impact studies at different scales. For developing countries, relying on international capital to develop international tourism tends to strengthen the dependence of developing countries on developed countries (Higgins-Desbiolles, 2022). In contrast, based on supporting the participation of social agents in entrepreneurship through rural tourism policies and enhancing regional endogenousness, it can help peripheries to get rid of the dependence on urban centers and promote coordinated economic development.

Keywords: Rural tourism, Economic resilience, Peripheries, PSM-DID, Leisure Agriculture and Rural Tourism Policy (LART)

References

[1] Biddulph, R. (2015). Limits to mass tourism's effects in rural peripheries [Article]. *Annals of Tourism Research*, *50*, 98-112. https://doi.org/10.1016/j.annals.2014.11.011

[2] Britton, S. G. (1982). The political economy of tourism in the third world. *Annals of Tourism Research*, *9*(3), 331-358. https://doi.org/https://doi.org/10.1016/0160-7383(82)90018-4

[3] Chaperon, S., & Bramwell, B. (2013). DEPENDENCY AND AGENCY IN PERIPHERAL TOURISM DEVELOPMENT [Article]. *Annals of Tourism Research*, *40*, 132-154. https://doi.org/10.1016/j.annals.2012.08.003

[4] Higgins-Desbiolles, F. (2022). The ongoingness of imperialism: The problem of tourism dependency and the promise of radical equality. *Annals of Tourism Research*, *94*, 103382. https://doi.org/https://doi.org/10.1016/j.annals.2022.103382

[5] He, S., & Zhang, Y. (2022). Reconceptualising the rural through planetary thinking: A field experiment of sustainable approaches to rural revitalisation in China. *Journal of Rural Studies*, *96*, 42-52. https://doi.org/https://doi.org/10.1016/j.jrurstud.2022.10.008

[6] Li, Y. (2011). Urban-rural interaction in China: historic scenario and assessment. *China Agricultural Economic Review*, *3*(3), 335-349. https://doi.org/10.1108/17561371111165770

[7] Martin, R., & Sunley, P. (2015). On the notion of regional economic resilience: conceptualization and explanation [Article]. *Journal of Economic Geography*, *15*(1), 1-42. https://doi.org/10.1093/jeg/lbu015

[8] Tan, J., Hu, X., Hassink, R., & Ni, J. (2020). Industrial structure or agency: What affects regional economic resilience? Evidence from resource-based cities in China. *Cities*, *106*, 102906. https://doi.org/https://doi.org/10.1016/j.cities.2020.102906

Memory That Matters: How AI Memory Enhances Consumer Attitudes and When It Backfires

David CHAI[1*], Jingqiu LI[1], Yidan MA[2], Yangjun LE[1], Jian LI[3*]

[1]School of International Business, Tianjin Foreign Studies University, Tianjin, PR China

[2]Business School, Faculty of Economics, Liaoning University, Shenyang, PR China

[3]School of Economics and Management, Beihang University, Beijing, PR China

*Corresponding Email: 13955211056@163.com, chili@buaa.edu.cn

Abstract

Background

Memory is a foundational cognitive function that underlies human thought, enabling individuals to encode, retain, and retrieve past experiences(Bartlett, 1933; Glenberg, 1997). With the rapid advancement of artificial intelligence (AI), memory is no longer a uniquely human or animal capability—AI systems are now capable of generating and exhibiting forms of memory. For instance, chatbots can retain contextual information across conversations (Hoskins, 2024), recommendation algorithms can remember users' preferences (Glushko and Nomorosa, 2012), and recent progress in meta-learning and continual learning shows that AI can retain prior knowledge and adapt to new information in dynamic environments (Ho et al., 2024; Mazumder and Singh, 2023; Xie et al., 2022). As AI systems increasingly record, store, and reproduce extensive user information, they have acquired the capacity to "remember" consumers and express such memory during interactions. With the increasing proliferation of service-oriented AI—particularly generative AI agents deployed in retail, hospitality, and related sectors, which are projected to reach a global market size of $103.7 billion by 2030(Global Industry Analysts, 2025) —understanding the effects of AI memory on consumer behavior has become a timely and underexplored topic.

In service settings, memory demonstrated by frontline employees often plays a pivotal role in shaping customer experiences. In the hospitality and tourism domains, existing research has primarily focused on consumers' memory formation(Braun, 1999; Braun et al., 2002), exploring how to create memorable experiences. Yet little attention has been paid to the memory exhibited by service providers. In practice, such behaviors are common—hotel employees may recall a guest's preferred checkout time and offer a late checkout option during the next stay; restaurant servers may remember a patron's dietary preferences and tailor dishes accordingly. Remembering personal details is considered a key service skill, enabling frontline employees to convey genuine care and make customers feel unique and valued. However, limited research has examined the effects of such memory displays, and even fewer studies have explored how memory

exhibited by AI (vs. human) service agents influences consumers. Given the marketing potential of memory expression, it is important to understand how consumers react to different types of "rememberers"—AI or human. Yet, whether consumers prefer memory expressed by AI or by humans remains largely unknown.

Prior research has investigated various AI behaviors and their impact on consumers. For example, AI has been shown to influence recommendation effectiveness, persuasion, price negotiation, flattery, and communicative responsibility. In the domain of recommendation, AI recommenders（vs. Human recommenders） were more effective in eliciting perceptions of functional value rather than emotional value (Ahn et al., 2021; Longoni et al., 2019; Xie et al., 2022). In the domain of persuasion , Kim and Duhachek (2020) noted that while AI agents are generally less persuasive, they can be more effective in conveying low-construal information. Shen and Jin (2024) demonstrated that consumers are less willing to adjust prices when negotiating with AI due to a higher trust in algorithmic accuracy. In the domain of flattery, Fogg and Nass (1997) that users respond more positively to computers that use flattery. Li et al. (2024) further demonstrated that when AI agents exhibit communicative responsibility, consumers are more likely to engage in long-term interactions." Despite these insights, how memory expressions by AI (vs. human) service agents affect consumer responses has yet to be explored.

Theoretical Framework

Drawing on uniqueness theory (Snyder and Fromkin, 1980), this study investigates consumers' attitudinal responses to memory expressions by AI versus human service providers. The theory posits that individuals generally view themselves as unique and expect this uniqueness to be acknowledged and respected by others (Longoni et al., 2019; Snyder and Fromkin, 1980). On one hand, when AI fails to exhibit memory, consumers may experience "AI aversion," in part because AI is perceived as neglecting consumers' uniqueness. Human service providers are often believed to offer flexible and personalized services that cater to individual needs, whereas AI is frequently stereotyped as rigid and repetitive, lacking the emotional intelligence necessary to recognize individuality (Belanche et al., 2021; Ho et al., 2018; Longoni et al., 2019). For example, in contexts involving symbolic consumption—where the need for uniqueness is pronounced—consumers exhibit greater aversion toward AI (Granulo et al., 2021). On the other hand, when AI demonstrates memory, this aversion is mitigated. Whether performed by humans or AI, the act of expressing memory signals attentiveness and individualized service, which in turn fulfills consumers' psychological need for distinctiveness(Snyder and Fromkin, 1980). When consumers perceive that a service has been tailored based on their previous behaviors rather than designed for the masses, they feel uniquely recognized and respond more positively to the service provider.

Research Hypothesis and Framework

This research proposed that memory expression serves as an effective strategy for AI to fulfill consumers' uniqueness needs and improve attitudes toward AI. Interpersonal communication is characterized by continuity, whereby responses are shaped by previous interactions (Sundar et al., 2014). Drawing on this principle, artificial intelligence (AI) service agents that exhibit memory—i.e., the ability to recall and act on past user interactions—can simulate this continuity. Prior research suggests that when AI agents remember consumers' preferences and behaviors, they appear less rigid and more adaptive (Go & Sundar, 2019; Sundar et al., 2014). For example, if an AI recalls a consumer's previous early check-in request and proactively accommodates it in a future stay, the consumer may feel that the AI recognizes their individual needs. Such memory-based personalization may thus fulfill consumers' need for uniqueness and enhance their evaluations of the AI. Therefore, we propose:

H1: The presence of memory moderates consumers' attitudes toward different types of service agents (AI vs. human); specifically, when AI with memory, consumers' aversion to AI is attenuated.

H2: The attenuating effect of AI memory on consumers' AI aversion is mediated by the extent to which AI memory satisfies consumers' psychological need for uniqueness.

However, the effectiveness of such memory expression may depend on the emotional context of the interaction. Embarrassment, in particular, plays a critical role in shaping consumer responses during service encounters (Dahl et al., 2001; Pitardi et al., 2022; Sangwan & Maity, 2024). In socially sensitive situations, consumers are often attuned to how much attention is directed toward them and may prefer to avoid behaviors that make them stand out (He et al., 2022). Because memory expressions emphasize individual traits, they may be perceived as intrusive in high-embarrassment contexts. Indeed, previous research suggests that consumers in such situations are more inclined to avoid human interaction and prefer the social neutrality offered by robotic agents (Kirmani et al., 2017). Thus, while AI memory may generally enhance perceived uniqueness, this effect may be attenuated or reversed when consumers experience embarrassment and wish to remain anonymous.

H3: The positive effect of AI memory expression on consumer attitudes will be weaker (or even negative) in high-embarrassment contexts compared to low-embarrassment contexts.

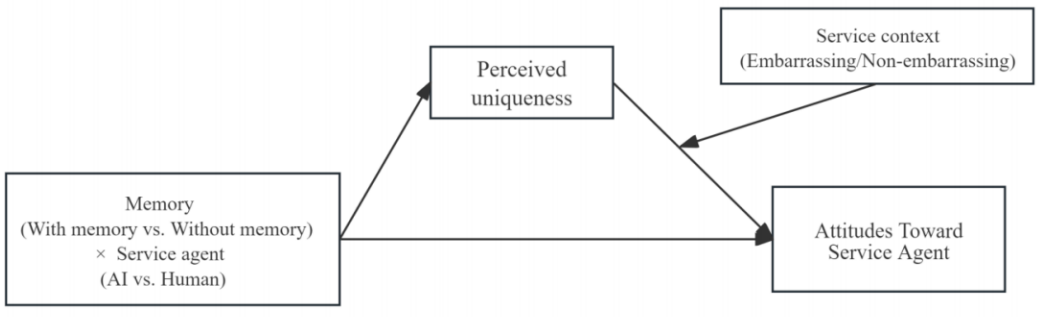


Figure 1. The Research Framework

Method

To test the proposed hypotheses, we conducted three scenario-based experiments in hotel service settings. Study 1 demonstrated that consumers exhibit a general preference for service agents who exhibit memory (vs. those who do not). Specifically, memory moderated consumers' attitudes toward different types of agents (AI vs. human). Study 2 examined the underlying mechanism, revealing that AI memory alleviates consumers' aversion to AI by fulfilling their need for uniqueness. Study 3 further tested the boundary condition of this effect in embarrassing contexts, showing that the beneficial effect of AI memory disappears when the service encounter involves embarrassment, due to the negative consequences of fulfilling the uniqueness need in such settings.

Experimental example

Participants and design

Taking Study 3 as an example, we employed a 2 (context: embarrassing vs. nonembarrassing) × 2 (memory: memory vs. no memory) × 2 (agent type: AI vs. human) betweensubjects design. A total of 448 participants were recruited and randomly assigned to one of the eight experimental conditions. After excluding participants who failed the manipulation checks (n = 14) or did not consent to the ethics statement (n = 5), the final sample included 429 valid responses (Mage = 32.09, SD = 9.05; 67.69% female).

Procedure

Participants were instructed to vividly imagine themselves in a hotel service scenario. In the embarrassing-memory condition, they read that during a previous stay, they had left behind vomit and other mess in the room due to excessive drinking, and, though feeling embarrassed, they believed the staff (AI or human) would not remember the incident. Upon returning to the same hotel, they were welcomed at the front desk by the same staff member, who recognized them and remarked: "Welcome back! I remember last time after you checked out, the room needed some extra cleaning. If you need new linens or anything else this time, please let us know in advance." In the embarrassing-without memory condition, the staff member did not recognize the participant and said: "Welcome! Is this your first time staying with us? We offer complimentary room cleaning—feel free to let us know if you need anything."

In the non-embarrassing condition, participants imagined they were revisiting a hotel they had stayed at a month earlier. The service encounter followed the same script as in the embarrassing condition, with or without memory, but without any reference to an awkward incident.

After reading the scenario, participants completed measures of: (1) attitude toward the service agent (2 items), (2) perceived uniqueness fulfillment (3 items), and (3) three

manipulation checks:(1) “To what extent did the agent remember your previous stay?” (memory manipulation), (2) “Was the agent an AI or a human?” (agent-type manipulation), and (3) “I found this scenario to be embarrassing” (embarrassment manipulation). Participants then reported demographic information.

Results

A 3-way ANOVA on attitudes toward the service agent revealed a significant three-way interaction among context, memory, and agent type ($F(1, 422) = 5.88$, $p = .02$). Significant main effects were found for context ($F(1, 422) = 20.35$, $p < .001$) and memory ($F(1, 422) = 4.72$, $p = 0.03$), but not for agent type ($F(1, 422) = 0.04$, $p = 0.84$). Further analysis showed that in the non-embarrassing context, service agents who demonstrated memory elicited significantly more favorable attitudes ($M = 6.34$, $SD = 0.73$) than those who did not ($M = 6.08$, $SD = 0.94$; $F(1, 193) = 4.59$, $p = 0.03$). Among agents who showed memory, no significant difference was observed between AI ($M = 6.30$, $SD = 0.74$) and human agents ($M = 6.38$, $SD = 0.74$; $F(1, 95) = 0.31$, $p = 0.58$). However, in the without memory condition, participants rated human agents ($M = 6.29$, $SD = 0.74$) significantly more favorably than AI agents ($M = 5.88$, $SD = 1.07$; $F(1, 96) = 4.08$, $p = 0.03$).

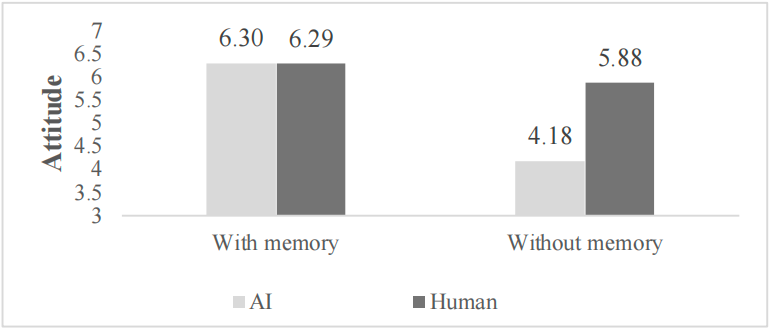


Figure 2. Attitudes Toward Service Agents: Non-Embarrassing Context

In the embarrassing context, however, agents who demonstrated memory significantly decreased consumers’ attitudes ($M = 5.47$, $SD = 1.06$), compared to those who did not ($M = 6.15$, $SD = 0.75$; $F(1, 232) = 30.97$, $p < .001$). Further analysis showed that when memory was demonstrated, there was no significant difference between AI ($M = 5.41$, $SD = 1.09$) and human agents ($M = 5.52$, $SD = 1.05$; $F(1, 122) = 0.36$, $p = 0.55$). However, in the no-memory condition, consumers evaluated AI agents more favorably ($M = 6.38$, $SD = 0.65$) than human agents ($M = 5.91$, $SD = 0.78$; $F(1, 108) = 11.66$, $p < .001$)

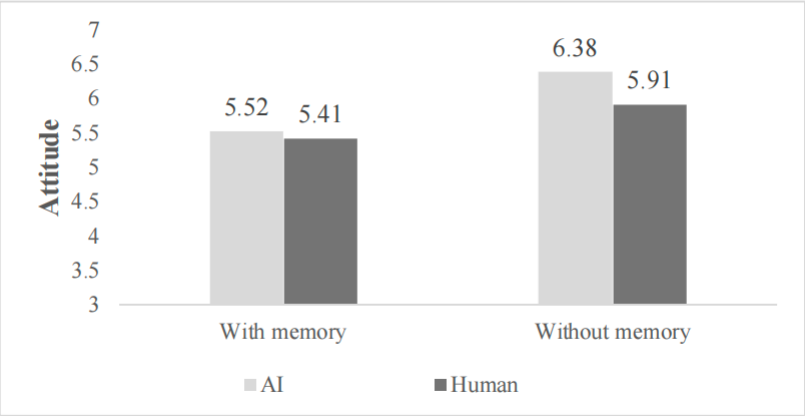


Figure 3. Attitudes Toward Service Agents: Embarrassing Context

Theoretical Implications

Prior research has paid limited attention to the service provider's perspective, particularly regarding whether a provider's memory of customers' traits and behavioral habits can positively influence customer appreciation—such as satisfaction, loyalty, or attitude. Moreover, there has been a lack of systematic investigation into the psychological mechanisms through which memory affects service evaluation. Addressing these gaps, this research conducts three experiments and provides several key insights: (a) In regular service contexts, when service providers display memory (vs. no memory), customer satisfaction significantly improves. Notably, AI aversion is alleviated when AI agents exhibit memory; (b) Consumers' perception that their need for uniqueness has been met mediates the relationship between the provider's memory behavior and consumer loyalty; and (c) In embarrassing service contexts, the effect of memory on uniqueness perception—and consequently on consumer attitude—is significantly moderated. Under such conditions, AI agents with no memory are rated most favorably.

Managerial Implications

This study suggests that "demonstrating memory" can serve as a strategic tool to foster more positive customer–provider relationships. Specifically, in hotel service settings, personnel may benefit from flexibly deploying memory-based strategies to optimize customer experience and strengthen attitudes.

First, in most service encounters, whether the provider is human or AI, proactively referencing past guest behaviors (e.g., room preferences, special requests) enhances customers' perception that their individuality is acknowledged, thereby improving evaluations of both the provider and the hotel. In particular, AI agents exhibiting memory can reduce AI aversion. Hotels may therefore prepare personalized elements—such as previously preferred pillows, drinks, or services—for returning guests and train staff to strategically express memory.

Second, in embarrassing situations—such as those involving prior misconduct orsensitive incidents (e.g., "unattended vomit in the room at checkout")—explicit references to such events by the provider may provoke discomfort and lower overall service evaluations. In these contexts, providers are advised to minimize memory disclosure and maintain an appropriate level of customer anonymity, helping guests avoid the unease of feeling overly scrutinized.

Conclusion

Overall, this research provides a preliminary exploration of how provider memory influences customer appreciation of services. Given the growing prevalence of AI in service delivery and the nuanced effects of memory expression, our findings offer timely insight and encourage further academic attention to memory-based personalization, especially in the context of AI-enabled service encounters.

Reference

[1] Ahn, J., Kim, J., & Sung, Y. (2021). AI-powered recommendations: The roles of perceived similarity and psychological distance on persuasion. *International Journal of Advertising*, *40*(8), 1366–1384. https://doi.org/10.1080/02650487.2021.1982529

[2] Bartlett, F. C. (1933). *Remembering: A study in experimental and social psychology*. Cambridge University Press.

[3] Belanche, D., Casaló, L. V., Schepers, J., & Flavián, C. (2021). Examining the effects of robots' physical appearance, warmth, and competence in frontline services: The Humanness- Value-Loyalty model. *Psychology & Marketing*, *38*(12), 2357–2376. https://doi.org/10.1002/mar.21532

[4] Braun, K. A. (1999). Postexperience advertising effects on consumer memory. *Journal of consumer research*, *25*(4), 319-334. https://doi.org/10.1086/209542

[5] Braun, K. A., Ellis, R., & Loftus, E. F. (2002). Make my memory: How advertising can change our memories of the past. *Psychology & Marketing*, *19*(1), 1-23. https://doi.org/10.1002/mar.1000

[6] Dahl, D. W., Manchanda, R. V., & Argo, J. J. (2001). Embarrassment in consumer purchase: The roles of social presence and purchase familiarity. *Journal of consumer research*, *28*(3), 473-481. https://doi.org/10.1086/323734

[7] Fogg, B. J., & Nass, C. (1997). Silicon sycophants: the effects of computers that flatter. *International journal of human-computer studies*, *46*(5), 551-561. https://doi.org/10.1006/ijhc.1996.0104

[8] Glenberg, A. M. (1997). What memory is for. *Behavioral and brain sciences*, *20*(1), 1- 19. https://doi.org/10.1017/S0140525X97000010

[9] Global Industry Analysts. (2025). *Service Robotics.* https://www.marketresearch.com/Global-Industry-Analysts-v1039/Service-Robotics- 39451130/

[10] Glushko, R. J., & Nomorosa, K. J. (2013). Substituting information for interaction: a framework for personalization in service encounters and service systems. *Journal of Service Research*, *16*(1), 21-38. https://doi.org/10.1177/1094670512463967

[11] Go, E., & Sundar, S. S. (2019). Humanizing chatbots: The effects of visual, identity and conversational cues on humanness perceptions. *Computers in human behavior*, *97*, 304-316. https://doi.org/10.1016/j.chb.2019.01.020

[12] Granulo, A., Fuchs, C., & Puntoni, S. (2021). Preference for human (vs. robotic) labor is stronger in symbolic consumption contexts. *Journal of Consumer Psychology*, *31*(1), 72-80. https://doi.org/10.1002/jcpy.1181

[13] He, D., Jiang, Y., & Gorn, G. J. (2022). Hiding in the crowd: Secrecy compels consumer conformity. Journal of Consumer Research, 48(6), 1032-1049. https://doi.org/10.1093/jcr/ucab036

[14] Ho, A., Hancock, J., & Miner, A. S. (2018). Psychological, relational, and emotional effects of self-disclosure after conversations with a chatbot. *Journal of Communication*, *68*(4), 712-733. https://doi.org/10.1093/joc/jqy026

[15] Ho, S., Liu, M., Gao, S., & Gao, L. (2024). Learning to learn for few-shot continual active learning. *Artificial Intelligence Review*, *57*(10), 280. https://doi.org/10.1007/s10462- 024-10924-x

[16] Hoskins, A. (2024). AI and memory. *Memory, Mind & Media*, *3*, e18. https://doi.org/10.1017/mem.2024.16

[17] Kim, T. W., & Duhachek, A. (2020). Artificial intelligence and persuasion: A construallevel account. *Psychological science*, *31*(4), 363-380. https://doi.org/10.1177/0956797620904985

[18] Kirmani, A., Hamilton, R. W., Thompson, D. V., & Lantzy, S. (2017). Doing well versus doing good: The differential effect of underdog positioning on moral and competent service providers. *Journal of Marketing*, *81*(1), 103-117. https://doi.org/10.1509/jm.15.0369

[19] Li, J., Huang, J., & Ni, B. (2024). Machine communicative responsibility perception: Functional and emotional communicative responsibility of AI advisors and AI partners. *International Journal of Human–Computer Interaction*, *40*(17), 4772-4786. https://doi.org/10.1080/10447318.2023.2221603

[20] Longoni, C., Bonezzi, A., & Morewedge, C. K. (2019). Resistance to medical artificial intelligence. *Journal of consumer research*, *46*(4), 629-650. https://doi.org/10.1093/jcr/ucz013

[21] Mazumder, P., & Singh, P. (2023). Mitigate forgetting in few-shot class-incremental learning using different image views. *Neural Networks*, *165*, 999-1009. https://doi.org/10.1016/j.neunet.2023.06.043

[22] Pitardi, V., Wirtz, J., Paluch, S., & Kunz, W. H. (2022). Service robots, agency and embarrassing service encounters. *Journal of service management*, *33*(2), 389-414. https://doi.org/10.1108/JOSM-12-2020-0435

[23] Sangwan, V., & Maity, M. (2024). Consumer embarrassment: A systematic literature review and research agenda. International Journal of Consumer Studies, 48(2), e13035. https://doi.org/10.1111/ijcs.13035

[24] Shen, Z., & Jin, L. (2024). Bargaining with algorithms: How consumers respond to offers proposed by algorithms versus humans. *Journal of Retailing*, *100*(3), 345-361. https://doi.org/10.1016/j.jretai.2024.05.001

[25] Snyder, C. R., & Fromkin, H. L. (1980). Theory of Uniqueness. *Uniqueness: The human pursuit of difference* (pp. 31–55).

[26] Sundar, S. S., Bellur, S., Oh, J., Jia, H., & Kim, H. S. (2016). Theoretical importance of contingency in human-computer interaction: Effects of message interactivity on user engagement. *Communication Research*, *43*(5), 595-625. https://doi.org/10.1177/0093650214534962

[27] Xie, R., Wang, Y., Wang, R., Lu, Y., Zou, Y., Xia, F., & Lin, L. (2022, February). Long short-term temporal meta-learning in online recommendation. In *Proceedings of the Fifteenth ACM International Conference on Web Search and Data Mining* (pp. 1168-1176).

[28] Xie, Z., Yu, Y., Zhang, J., & Chen, M. (2022). The searching artificial intelligence: Consumers show less aversion to algorithm-recommended search product. *Psychology & Marketing*, *39*(10), 1902-1919.https://doi.org/10.1002/mar.21706

Authors Notes

David Chai and Jingqiu Li are co-first authors. David Chai and Jian Li are the corresponding authors.

Exploring the Influence Mechanism of Emotional Well-being on Tourists' Donation Intention: A Suppression Effect-Based Analysis of Donation Willingness at Tourist Destinations in Greater Bay Area

Xiang JING[1], Zhilan LUO[1], Wenyu YANG[1], Xiaoyi WU[2]

[1]Macau University of Science and Technology

[2]University of Hong Kong

Abstract

Introduction

Traditional research often approaches from the perspective of rational behavior theory, emphasizing the impact of environmental attitudes, subjective norms, or perceived behavioral control on eco-friendly behaviors. However, with the development of positive psychology, scholars have gradually recognized the critical role of emotional factors in driving prosocial behaviors. Emotional well-being, as an individual's positive perception of their own emotional state, has been proven to enhance altruistic tendencies and promote cooperative behavior (Park et al., 2023). Yet, there remains a gap in research regarding its direct association with eco-friendly behaviors (donation intentions). Meanwhile, studies in moral psychology (Granzin & Olsen, 1991) show that individuals' perception of their moral obligations serves as a crucial bridge between internal values and external actions. In the realm of environmental protection, when individuals view protecting the environment as an inescapable moral responsibility, they are more likely to take concrete actions. However, the mechanisms underlying the formation of moral obligations remain unclear, and the chain relationship between emotional well-being and moral obligation and willingness to contribute donations has not yet been systematically verified in existing literature.

To verify the relationships between relevant variables, we selected the Guangdong-Hong Kong-Macao Greater Bay Area as our research destination and conducted a questionnaire survey. The Greater Bay Area has seen rapid development in recent years and is assessed to have good prospects for future growth (King et al., 2025), making it an ideal subject for this study. Existing research often focuses on theeconomic contributions of tourism or environmental governance technologies in the Greater Bay Area, but there is insufficient exploration into how eco-friendly tourism experiences influence tourists' willingness to donate. Therefore, we chose the Greater Bay Area as our research destination, randomly distributing questionnaires to residents and visitors aged 20-50, ultimately collecting 110 responses, 99 of which were valid. Based on the collected data, we analyzed whether emotional well-being could influence the willingness to donate for environmental protection through the mediating effect of moral obligations related to environmental conservation.

This study focuses on the experience of eco-tourism destinations, incorporating the mediating effect of emotional well-being. It explores how destination marketing and management strategies can enhance consumers 'willingness to donate for environmental protection. This not only fills the gap in the "eco-tourism-moral

behavior" theory but also provides strategic support for achieving the goals of "enhancing social civility" and "deepening cultural exchanges between China and foreign countries" in the Greater Bay Area's Plan. It aims to facilitate the transition from environmental awareness to concrete actions among tourists, contributing to the development of a world-class bay area that balances ecological and social benefits.

Methodology

This study adopts a quantitative research method with residents and tourists of Guangdong, Hong Kong and Macao, which is the Greater Bay Area (GBA) as the target population, aiming to investigate the mechanism of the impact of environmentally friendly destination experience on tourists' willingness to make donations. The questionnaires were distributed online and offline, and a total of 110 valid samples were collected. After excluding invalid questionnaires with a missing value of more than 10%, 99 samples were retained for analysis.

1. Research Design

1.1 Type of research: Quantitative research.

1.2 Explicit variables

• Variables: explicit Independent Variables (IV) - *Emotional well-being*

• Mediating Variables (M) - *Moral obligation in protecting the environment*

• Dependent Variables (DV) - *Willingness to contribute donations to protecting environment*

2. Data Collection

2.1 Target population: Residents and tourists aged 20-50 years old in Greater Bay Area

2.2 Sampling method: Simple random sampling

2.3 Sample size: 100 valid questionnaires

2.4 Scale type: 7-point Likert scale

3. Data Analysis Measures

3.1 Data cleaning

• Missing value treatment: Excluding samples with missing values.

• Reverse scoring correction: Reverse scoring of negatively worded items to ensure directional consistency of the scale.

3.2 Correlation analysis

• Analysis idea: Use Pearson's *r* to test the two-way correlation between happiness in environmentally friendly destinations, sense of responsibility to protect the environment, and willingness to donate.

• Analysis formula: $$r = \frac{\sum_{i=1}^{n}(X_i-\bar{X})(Y_i-\bar{Y})}{\sqrt{\sum_{i=1}^{n}(X_i-\bar{X})^2}\cdot\sqrt{\sum_{i=1}^{n}(Y_i-\bar{Y})^2}}$$

• Significance test: $$t = r\sqrt{\frac{n-2}{1-r^2}}$$

Analyzing tool: SPSS 28.0

3.3 Mediation effect test

• Model comparison:

Model 1: Regression of emotional well-being on willingness to donate to protect the environment by including only environmentally friendly destinations

Model 2: After including the potential mediator variable, the sense of responsibility to protect the environment, the emotional well-being of environmentally friendly destinations and the sense of responsibility to protect the environment were regressed simultaneously on the willingness to donate to protect the environment.

• According to mediation effect test (Baron & Kenny, 1986)

4. Data Analysis Results

4.1 Correlation coefficient analysis results

(1) Willingness to donate and emotional well-being ($r=0.303$, $p=0.006$) There is a moderately strong positive correlation between the two, supporting a direct effect of the independent variable on the dependent variable.

(2) Willingness to donate and sense of responsibility towards protecting the environment ($r=0.166$, $p=0.137$) No significant correlation: the correlation is close to zero and insignificant ($p>0.05$).

(3) Emotional well-being and sense of responsibility to protect the environment ($r=0.836$, $p<0.001$) ◦

Extremely strong positive correlation: the two are highly correlated ($r=0.836$)

4.2 Results of mediation effect analysis

(1) the total effect is significant (IV→DV is significant in model 1 with a regression coefficient of 0.353 $p=0.006$), satisfying the premise.

(2) relationship between IV and mediator variable: IV→M significant in model 2 Regression coefficient is 0.788 ($p<0.001$)

(3) relationship between mediator variable and DV: M→DV not significant in model 2 Regression coefficient is -0.361 ($p=0.134$) and direction is negative.

(4) change in direct effect: the effect of IV on DV was enhanced by the addition of M (from 0.353 to 0.637) and the standardized coefficient increased from 0.303 to 0.547.

5. Ethical Considerations

• Informed Consent: voluntarily completed by the participant, clearlycommunicating the purpose of the study.

• Confidentiality: anonymization of data to avoid disclosure of personal information.

6. Limitations

• Small sample size (N=100), which may affect the significance test of weak effects.

• Sample sampling method (simple random sampling) may be biased.

Key Findings

1. Analysis of Correlation Coefficients

The emotional well-being that travelers feel in environmentally friendly destinations may slightly contribute to their willingness to donate, but the correlation is limited. People's moral obligation in protecting the environment is not directly related to donation behavior, but indirectly influenced by other factors (e.g., emotional experience). And staying in an environmentally friendly destination travelers' happy emotions can greatly stimulate their moral obligation for environmental protection.

• Emotional well-being is a potential driver of willingness to donate, but its role is limited.

• Sense of responsibility to protect the environment is not strongly related to donations, but is highly tied to emotional well-being

2.Analysis of Mediation Effects

• There is a suppression effect, i.e., when M is negatively correlated with IV and M is negatively correlated with DV, the true effect of IV is “released” after controlling for M (the portion of the effect that would otherwise be canceled out by M is revealed).

• M may negatively modulate the relationship between IV and DV (e.g. Individuals may believe that the responsibility for donations rests with the government or other environmental protection-related institutions or organizations, thus reducing their willingness to donate).

Conclusion

In examining the effect of the independent variable *Emotional well-being* on the dependent variable *Willingness to contribute donations to protecting environment*, we introduced the mediating variable *Moral obligation in protecting the environment*.

In our expectation, the effect of the independent variable *Emotional well-being* on the dependent variable *Willingness to donate to protect the environment* is partly transmitted through the mediator variable *Moral obligation in protecting the environment*, and partly directly effect by the dependent variable *Willingness to donate to protect the environment*.

However, the results of da ta analysis indicate that the mediating variable did not play a significant role in transmission. Conversely, the introduction of mediating variables leads to the inverse effect of the mediation effect, the suppression effect. This means that the addition of mediating variables dilutes the impact of independent variables on the dependent variables, and people who are willing to donate due to emotional well-being may lose their original willingness to donate due to consideration of mediating variables, such as the belief that individual donations cannot be implemented into actual environmental protection measures and sustainable development of specific tourist destinations for various reasons. Which indicates that people have moral consciousness in protecting the environment, but it is difficult for them to implement it into the action of donating to protect the environment.

Therefore, in order to solve this problem and enhance the implementation of people's moral consciousness of protecting the environment into concrete donation actions, we

propose a series of measures around destination marketing and management aiming to increase the willingness of the public to make donations, promote the donation actions of the public, and raise funds for the construction of sustainable tourism development. So as to promote the development of sustainable tourism.

Here are some specific measures to enhance the implementation of translating people's moral consciousness of environmental protection into specific donation actions, based on destination marketing and management strategies:

1. Destination Branding and Image Creation

1.1 Establish an environmental brand image

Destinations are capable of developing an environmental brand that promotes a commitment to sustainable and environmental tourism. This may be attractive to environmentally supportive tourists aware of the environmental cause. For example, destinations could be marketed as an environmental destination because they are supportive of eco-tourism and support conservation initiatives (Reinhold et al., 2023).

1.2 Leverage destination identity and imagery

A destination may use their unique identity or imagery that lends itself to environmental conservation. This can take the form of storytelling on environmental conservation, where the visitor can relate to the experience and then donate towards that cause (Buhalis, 2000).

2. Collaboration and Management

2.1 Engage local communities

Engage local communities to work on environmental conservation programming. Local communities are often the stakeholders and beneficiaries involved in sustainable destinations. When guests' see engaged local communities are participating, they may feel more compelled to want to connect and or donate towards that cause (Gautam, 2023).

3. Digital Transformation and Technology

3.1 Utilizing digital platforms for donations

Owing to the rapid engagement of digital technology and increasing popularity, tourism destinations can have a contextual way for a visitor to donate for the environment. Digital platforms can possess accept information about an existing environmental cause, projects, options for donor engagement, and outcome commitments and reporting.

3.2 Augmented Reality Experiences

With the conversation of digital transformation in play, tourism destinations could deploy augmented reality (AR) to show the tangible influence while the fund has been implemented. Besides, digital technology can also be used to illustrate environmental issues. For example, a visitor could download an app on their phone about the current negative impacts of the environment in a tourism destination, and include levels of

connectivity between the community, tourism destination, the environmental goal and mechanism of the donation.

4. Incentives and Recognition

4.1 Provide benefits for donors

Providing benefits such as matching funds or providing a resource or experience only to donors (e.g. VIP donor events). This can increase the perceived value of giving and encourage additional donations. Non-profit organizations can take a more conditional approach to utilizing matching incentives to encourage recurring donations. This type of approach utilizes social acceptance and rationalization, because it sends a community's notion while empowering the donor that allows them to feel a sense of accomplishment (Anik et al., 2014).

4.2 Publicly recognize and reward donors

Publicly acknowledge and thank donors in ways such as social media, destination websites, or on a recognition board. This can enhance donor recognition and a sense of accomplishment for the donor and signal to others that they can also join in and donate.

5. Education and Awareness

5.1 Education activities

Educating guests at destinations about environmental issues and ensure them understand the importance of individual actions, including their donations. These could be customized to the destination specifics and whether they prefer activities such as seminars, guided tours, or even interactive museum exhibits set up about the environmental issues.

5.2 Infusing environmental education into tourism activities

Ensuring that environmental education is integrated into all activities rather than just mentioned independently at times. This activity will help tourists understand that they should try to link their actions to the environment and develop ethics around their willingness to donate on-site. **6. Strategy and Governance**

6.1 Developing supportive policies

Governments or destination management organizations can establish policies or strategies that may support an organization or group centered on the topic of environmental issues as well as support for donations.

6.2 Establishing governance structure

Establishing or implementing an appropriate governance structure ensures accountability and trust among donors of contributions, that the funds are being used appropriately, and they are making an impact in terms of the environmental protection.

Contribution

• Explains why individuals'moral obligation of protecting the environment is not translated into actual donations based on suppression effect.
• Provides new evidence for factors influencing willingness to donate, introduce measures to deal with the suppression effect in tourist destination donations, and serves as a valuable reference for policymakers of the Greater Bay Area in their decision.

Reference

[1] Anik, L., Norton, M. I., & Ariely, D. (2014). Contingent match incentives increase donations. *Journal of Marketing Research*, *51*(6), 790-801.

[2] Baron, R. M., & Kenny, D. A. (1986). The moderator–mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. *Journal of personality and social psychology*, *51*(6), 1173.

[3] Buhalis, D. (2000). Marketing the competitive destination of the future. *Tourism management*, *21*(1), 97-116.

[4] Gautam, V. (2023). Why local residents support sustainable tourism development? *Journal of Sustainable Tourism*, *31*(3), 877-893.

[5] Granzin, K. L., & Olsen, J. E. (1991). Characterizing participants in activities protecting the environment: A focus on donating, recycling, and conservation behaviors. *Journal of Public Policy & Marketing*, *10*(2), 1-27.

[6] King, B., Richards, G., & Chu, A. M. C. (2025). Developing a tourism region through tourism and culture: bordering, branding, placemaking and governance processes. *Tourism Recreation Research*, *50*(1), 24-38.

[7] Park, C. L., Kubzansky, L. D., Chafouleas, S. M., Davidson, R. J., Keltner, D., Parsafar, P., Conwell, Y., Martin, M. Y., Hanmer, J., & Wang, K. H. (2023). Emotional well-being: What it is and why it matters. *Affective Science*, *4*(1), 10-20.

[8] Reinhold, S., Beritelli, P., Fyall, A., Choi, H.-S. C., Laesser, C., & Joppe, M. (2023). State-of-the-art review on destination marketing and destination management.
Tourism and Hospitality, *4*(4), 584-603.

How Prepared Food Disclosure Timing Affects Tourists' Moral Judgments in Tourism Dining Contexts

Lei WANG, Ruobing YIN, Xueji WANG*

Joint Institute of Ningbo University and University of Angers, Ningbo University, Ningbo 315211, China.

*Corresponding Email: wangxueji@nbu.edu.cn

Abstract

With the accelerated pace of modern life and the transformation of consumption patterns, prepared food is rapidly developing as an emerging mode of food production and service. Prepared food refers to dishes that are pre-processed by specialized suppliers into semi-finished or finished products, which can be consumed after simple cooking (Huang et al., 2023). Affected by Covid-19, prepared food has been used globally (Gong et al., 2024), especially in the tourism catering industry. Despite the obvious advantages of standardized production of prepared food, there is an obvious ethical dilemma in its application in restaurants in tourist destinations, i.e., the standardized characteristics of prepared food are in strong conflict with tourists' expectations of an authentic on-the-ground cultural experience and local characteristics (Zeng, et al., 2012, Liu & Tse, 2018). In this context, when to disclose information about prepared food becomes an important factor influencing consumers' ethical judgment.

According to Jones' (1991) Issue-Contingent Model, ethical intensity consists of timeliness of disclosure, social consensus, etc. Meanwhile, according to Information Theory and Signaling Theory, consumers may construct perceptions of corporate ethics based on perceptible signals (Boeuf & Darveau, 2019), and the timing of disclosure proactively conveyed by firms directly affects consumers' perceptions and judgments (Spence, 1973). Furthermore, when exploring the destination restaurant industry and consumer behavior, trust is understood as an organization's ability to deliver on its promises to consumers, as evidenced by the reliability to act with integrity, ethics, and consistency, as well as a concern for maintaining the interests and well-being of customers (Pillai et al., 2022). Thus, it can be concluded that pre- consumption disclosure is often seen as a signal of higher ethical intensity because it satisfies the consumer's "right to know beforehand", thus reducing perceived risk and increasing trust, while post-consumption disclosure is easily viewed as opportunistic behavior that may trigger a crisis of trust in the consumer and exacerbate ethical questioning (Hunt & Vitell, 1986). Therefore, the study proposes that the timing of prepared food disclosure significantly influences consumers' evaluations of the perceived ethicality of restaurants in tourist destinations through the mediating mechanism of consumer trust. In addition, consumers' prior knowledge, as an important factor in signal decoding ability (Alba & Hutchinson, 1987), may also moderate the effect of disclosure timing on trust. Consumer prior knowledge is closely related to restaurant, cultural and product knowledge (Zanjani et al.,2008). Different levels of knowledge have significant

spillover effects on consumer attitudes and trust levels (Denton et al., 2020). According to the knowledge bias theory (Cowley & Mitchell, 2003), consumers with high prior knowledge possess more adequate cognitive resources to objectively assess the motives behind the timing of prepared food disclosures, thereby buffering the trust risk associated with information asymmetry, whereas consumers with low prior knowledge are more likely to rely on the timing of disclosures as a signal to make ethical judgments and are more susceptible to negative influences (Folkes, 1984). Therefore, this study further examines the moderating effect of consumers' prior knowledge on the relationship between disclosure timing and trust.

To delve deeper into the above theoretical logic, this study poses three recursive research questions:(1) How does the timing of disclosure of prepared food affect the perceived ethicality of tourism consumers in tourism dining scenarios? (2) Does consumer trust play a mediating role between disclosure timing and perceived ethicality? (3) How does consumers' prior knowledge of prepared food moderate the relationship between disclosure timing and trust, thereby further influencing perceived ethicality?

The study used a scenario-based experimental study to explore and validate the above research questions step-by-step through three rigorously designed experiments. Participants for all three studies were recruited from Credamo, one of the most popular online data collection companies in China, and the sample size of each experiment was pre-determined through G*Power (Cohen, 1992) to ensure the statistical validity of the experiments.

Study 1 is a 2 (timing of disclosure: pre-consumption decision vs. post-consumption decision) × 3 (use of prepared food: prepared food vs. non prepared food vs. control group) between-subjects design, with a total of 405 valid data collected. Participants simulated a meal scenario at a restaurant in a tourist destination and were randomly assigned to receive information about the use of prepared food either before or after the consumption decision. The scale for consumers' perceived ethicality references the study of Brunk (2012). The results showed that compared to pre-consumption disclosure, post-consumption disclosure of prepared food significantly reduced tourists' perceived ethicality ratings. The results remained robust after controlling for consumer attitudes, familiarity, and demographic variables.

Study 2 further validated the mediating role of consumer trust by using a one-way (timing of disclosure: pre vs post consumption decision) between-subjects design with 456 valid data collected. Morgan's (1994) trust scale was used to test the mediating effect via Bootstrap method, which showed that pre-consumption disclosure (compared to post-consumption disclosure) significantly increases the level of consumer trust, which in turn increases the perceived ethicality of the restaurant. The results remained robust after controlling for consumer attitudes, familiarity, and demographic variables.

Study 3 examined the moderating effect of consumers' prior knowledge, using a one-way (timing of disclosure: pre- vs post-consumption decision) experimental design with a total of 435 valid data collected. The prior knowledge measure was referenced to the study by Prayag et al. (2020). It was found that compared to low prior knowledge consumers, high prior knowledge consumers had more significant increases in trust in restaurants in the pre-consumption disclosure context, thus effectively mitigating the

negative perceived ethicality caused by post-consumption disclosure. This suggests that high prior knowledge consumers are able to parse corporate disclosure behavior more objectively and reduce ethical misjudgments due to information asymmetry. The results remained robust after controlling for consumer attitudes, familiarity, and demographic variables.

The theoretical contributions of this study are mainly reflected in three aspects. First, this study expands the theoretical application of perceived ethicality and information disclosure, deeply explores the moral connotation of the timing of information disclosure in the tourism catering service industry, and enriches the research on consumers' perceived ethicality. For example, by including the timing of information disclosure into the scope of tourism ethics research, the study reveals the unique role of "temporal ethics" in tourism catering consumption scenarios, which echoes the call for the temporality of tourism experience. Second, this study explicitly proposes and verifies trust as an important mediating mechanism for the timing of information disclosure to influence perceived ethicality, which bridges the gap in the existing literature on the formation mechanism of ethical judgments. Third, by introducing the moderating variable of consumers' prior knowledge, the application of knowledge bias theory in the study of tourism consumers' ethical behaviors is explored in depth, complementing the theory of information asymmetry and signaling.

In terms of practical significance, this study provides clear guidance for the marketing practice of tourism catering enterprises. First, the establishment of an "active transparency" disclosure mechanism. Tourist restaurants should prioritize the active disclosure of prepared food information prior to consumer decision-making to enhance information transparency. Second, develop consumer education tools. Enterprises can also provide relevant certification and educational materials (e.g., information on ingredient traceability, display boards visualizing the production process of prepared food, etc.) to enhance consumers' prior knowledge, so as to better gain consumers' trust, and then enhance the ethical image and market competitiveness of the enterprise.

This study also has some limitations. Although the internal validity of the scenario-based experimental study is high, further validation of its external validity in real dining scenarios is needed. In addition, cross-cultural comparative research is one of the future research directions, and there may be significant differences in the perception of ethical issues of prepared food by tourists from different cultural backgrounds.

In summary, this study systematically reveals the mechanism and boundary conditions of the effect of the timing of disclosure of prepared food on consumers' perceived ethicality in tourism catering scenarios through multilevel empirical analysis. The study broadens the research horizons at the intersection of tourism marketing and food ethics, provides new theoretical support for understanding ethical decision-making in tourism consumption scenarios, and both deepens the application of service ethics theories in the field of tourism catering and provides a scientific basis and an actionable practical framework for companies to harmonize their operational efficiencies and ethical responsibilities.

Keywords: Prepared food, Timing of disclosure, Perceived ethicality, Consumer trust, Prior knowledge, Tourism catering ethics

References

[1] Alba, J. W., & Hutchinson, J. W. (1987). Dimensions of Consumer Expertise. *Journal of Consumer Research*, 13(4), 411-454. https://doi.org/10.1086/209080

[2] Boeuf, B., & Darveau, J. (2019). An ethical perspective on necro-advertising: The moderating effect of brand equity. Journal of Business Ethics, 155(4), 1077–1099. https://doi.org/10.1007/s10551-017-3490-x

[3] Brunk, K. H. (2012). Un/ethical Company and Brand Perceptions: Conceptualising and Operationalising Consumer Meanings. *Journal of Business Ethics*, 111(4), 551-565. https://doi.org/10.1007/s10551-012-1339-x

[4] Cohen, J. (1992). Statistical Power Analysis. *Current Directions in Psychological Science*, 1(3), 98-101.https://doi.org/doi:10.1111/1467-8721.ep10768783

[5] Cowley, E., & Mitchell, A. A. (2003). The Moderating Effect of Product Knowledge on the Learning and Organization of Product Information. *Journal of Consumer Research*, 30(3), 443-454. https://doi.org/10.1086/378620

[6] Denton, G., Chi, O. H., & Gursoy, D. (2020). An examination of the gap between carbon offsetting attitudes and behaviors: Role of knowledge, credibility and trust. International Journal of Hospitality Management, 90, 102608. https://doi.org/https://doi.org/10.1016/j.ijhm.2020.102608

[7] Folkes, V. S. (1984). Consumer reactions to product failure: An attributional approach. *Journal of Consumer Research*,10(4), 398-409. https://doi.org/10.1086/208978

[8] Gong, J., Sun, Y., Du, H., & Jiang, X. (2024). Research on safety risk control of prepared foods from the perspective of supply chain. *Heliyon*, 10(3), e25012. https://doi.org/https://doi.org/10.1016/j.heliyon.2024.e25012

[9] Huang, J., Zhang, M., & Fang, Z. (2023). Perspectives on Novel Technologies of Processing and Monitoring the Safety and Quality of Prepared Food Products. *Foods*, 12(16), 3052. https://www.mdpi.com/2304-8158/12/16/3052

[10] Hunt, S. D., & Vitell, S. (1986). A general theory of marketing ethics. *Journal of Macromarketing*, 6(1), 5-16. https://doi.org/10.1177/0276146706290923

[11] Jones, T. M. (1991). Ethical Decision Making by Individuals in Organizations: An Issue-Contingent Model. *The Academy of Management Review*, 16(2), 366-395. https://doi.org/10.2307/258867

[12] Liu, P., & Tse, E. C.-Y. (2018). Exploring factors on customers' restaurant choice: an analysis of restaurant attributes. British Food Journal, 120(10), 2289-2303. https://doi.org/10.1108/BFJ-10-2017-0561

[13] Masood, M., & Salman, M. (2023). The role of deceptive advertisements and ethical decision outcomes in determining buying behavior. *The Business and Management Review*, 14. https://doi.org/10.24052/BMR/V14NU02/ART-03

[14] Morgan, R. M., & Hunt, S. D. (1994). The commitment-trust theory of relationship marketing. *Journal of Marketing*, 58(3),20-38. https://doi.org/10.2307/1252308

[15] Pillai, S. G., Kim, W. G., Haldorai, K., & Kim, H.-S. (2022). Online food delivery services and consumers' purchase intention: Integration of theory of planned behavior, theory of perceived risk, and the elaboration likelihood model. *International Journal of Hospitality Management*, 105, 103275. https://doi.org/https://doi.org/10.1016/j.ijhm.2022.103275

[16] Prayag, G., Gannon, M. J., Muskat, B., & Taheri, B. (2020). A serious leisure perspective of culinary tourism co-creation: the influence of prior knowledge, physical environment and service quality. *International Journal of Contemporary Hospitality Management*, 32(7), 2453-2472. https://doi.org/10.1108/IJCHM-10-2019-0897

[17] Spence, M. (1973). Job Market Signaling. *Quarterly Journal of Economics*, 87(3), 355–374. https://doi.org/10.2307/1882010

[18] Zanjani, M., Mehrasa, S., Modiri, M. (2008). 'Organizational Dimensions as Determinant Factors of KM Approaches in SMEs'. World Academy of Science, Engineering and Technology, Open Science Index 21, *International Journal of Industrial and Manufacturing Engineering*, 2(9), 1015 - 1020. https://doi.org/10.5281/zenodo.1070007

[19] Zeng, G., Go, F., & de Vries, H. J. (2012). Paradox of authenticity versus standardization: Expansion strategies of restaurant groups in China. *International Journal of Hospitality Management*, 31(4), 1090-1100. https://doi.org/https://doi.org/10.1016/j.ijhm.2012.01.006

Sustaining Macao's Typographic Heritage with an Augmented Reality Experiential City Tour: Discovery of local historical and cultural resources

Mancheng NG[1*], Poui TANG[2]

[1]Ph.D. Candidate in Global Studies, Faculty of Arts and Humanities, University of Saint Joseph, Estrada Marginal da IlhaVerde, 14-17, Macau, China

[2]Master degree holder, Master of Design Management, Panamerican University, Republic of Costa Rica

*Corresponding Email: ng.man.cheng@usj.edu.mo

Abstract

As long as some other Chinese societies have a Western cultural background worldwide, Macau remains to have a strong typographic heritage of Chinese and Portuguese roots. Historically, visitors could discover the local heritage of Portuguese stone inscriptions in Luís de Camões Garden and Macao Municipal Affairs Bureau, hand-written calligraphy, and hand-carved Chinese storefront signs in Rua dos Mercadores, which was also called "Macao Main Street". According to the aspect of design-based background, stepped into multiple areas in order to observe, explore, and develop the fundamental research field to conduct long-term research and practice of typography as the main content, the city as the background to represent the identity of the cultural capital of East Asia; it become the motivation to promote the positioning of "The Great City of Chinese and Western Typefaces," allowing tourists and residents to understand Macao's distinctive Chinese and Western cultural features and historical content from a new perspective, and bringing an interdisciplinary interactive experience to the audience through technology empowerment. Typography is a medium of written communication, which is the physical form of sign that signifies cultural development, social evolvement, and knowledge sharing (Santo, 2019). Therefore, in the digital age of all people are living here, during these six years, Macao Type Design Society annually launch a cultural city tour called "Typeface Of The City" (TFOC). Explore local historical and cultural resources narratively by a "New Story" and create multicultural nutrients for the city. Typeface Of The City integrates technology and content to develop new cultural indepth products while cultivating frontline talents in the tourism industry, encouraging how humans use and interpret this particular sign to communicate, learn, and build knowledge.

Given the context, this research aims to utilize digital technology to preserve the hand-carved storefront signs that have vanished or may vanish in the city. Utilizing AR real-life technology, attempted to integrate it into a new type of sightseeing and tourism experience product (CITYWALK Tour) that combines reality and a virtual environment. The study also have to clarify the content that is supported by some key groups and characters who have been working in this industry and provide resources for the research study. Particularly, Macao handmade neon sign workers, Macao

storefront sign calligrapher and production practitioners, Macao registered tour guide, typographer, and Macao Type Design Society.

The expected outcomes seek to provide social efficiency, help tour guides find relevant employment opportunities in the tourism industry, and enhance aesthetic education and appreciation of typeface. Also, it helps create economic benefits by enhancing the multiple tourism experience product features and genres, bringing in new investment, and promoting sustainable growth in both tourism and cultural heritage. In the meantime, it strengthens the established local economy and develops new tourist attractions.

Typography can be interpreted from various types of perspectives, such as history, cultural identification, cultural geography, sociology, and marketing. It is relevant to both the physical structure of the built environment and communication. The emphasis is on the visual contribution of design elements visible at a point of heritage origin (Burns & Jarratt, 2022). Consequently, Since the establishment of the Macao Type Design Society in 2018, the society has utilized originally has developed two fundamental core approaches for the city tour package "Typeface Of The City" to promote a cultural tour and intangible heritage value in the digital age.

The first approach is typeface development through local typeface research to revive Macao's historical typefaces and recreate and apply digitization of the specific typeface collections. Indeed, For the preservation of cultural heritage, digitizing old inscriptions, lettering, calligraphy, or handcrafted typography is crucial revitalization. It might strengthen the local economy, generate national awareness, or even discover the heritage value inside (Možina et al., 2018). When developing projects regarding revival and digitization of local historic typeface collections, there are four core components: Motivation, research, preservation, and development. The following typeface collections that have been in progress for these past couple of years also constantly apply to the second approach - Augmented Reality Experiential City Tour.

Bird Posture Calligraphy:	A traditional Chinese typeface developed for the multi-year community art event of Bairro Horta da Mitra, which was also called “Bird Garden”, the collection is available in the entire visual communication approach and promotional media.
Macao Script Style:	Digital development—Based on the original manuscript of Mr. Lam Weng Io, a handwritten storefront signs maker and calligrapher in Macao, this unique signboard work was preserved and executed the extension of the glyph collection to become a digital font collection through a cooperative development by the master and apprentice.
LS1940:	Motivation - Preservation of the Latin script of stone inscription in Macao Municipal Affairs Bureau from 1940.
Mercy1662:	The cover manuscript of the draft charter for the Macau Holy House of Mercy using English Roundhand (ER) calligraphy by Latin script.

As stated above, there is the second approach to launching the Augmented Reality Experiential City Tour to empower participants' experience, the interactive process allows participants to understand the typographic heritage in an in-depth context and trace back the past time of typographic chronicles, immersing the cityscape. In the project, a variety of contemporary digital technologies such as three-dimensional

models, augmented reality technology, smart device application programming, and facial recognition are used to comprehensively present the possibility of content and interaction, particularly providing participants with cohesive and experiential value. For this project, the Macao Cultural Development Fund and Macao Government Tourism Office offered funding and support ideas and projects that serve the public. Since the establishment of the Macau Type Design Society, the city tour has been consecutively held a total of 80 times. Fundamentally focusing on this city tour, "Typeface Of The City" advocate that this positive and sophisticated image should be communicated to local residents and tourists through 'the intimate power trigger your connection' (Morgan et al., 2011:12). Incorporating its heritage and narratives context that is the crucial component continues to contribute to Macao identity. During the progress of Typeface Of The City in 2024, the team conducted a group of 280 participants from various disciplines. The participants are mainly between the ages of 30 and 55. They believe the city tour can provide knowledge and emotional value from the vanishing local urban cultural elements, however, merely the relatable memories left here. On the other hand, most participants between the ages of 18 and 30 believed that the experiential process of using augmented reality technology and tangible props as the detective medium in the project was memorable and meaningful. They could also understand the original appearance of the city through the project and facilitate their in-depth understanding of the city. Meanwhile, currently, master's degree students, doctoral degree students, and historical and cultural scholars consider this content to bring out Macao's unique position and contribution to the history and culture of Chinese and Western characters. It also comprises many modern urban cultural character elements. It is worth becoming the "Cultural tourism and research" resource.

From the first approach regarding local typeface development and digitization, then integrated the second approach to generate a complete experiential feature for participants. It led the interdisciplinary field to become a research study, and the study will adopt mixed methods to develop further. Based on the research method, the study will first conduct qualitative research through semi-structured, in-depth interviews with heritage professionals, visitors, technology developers, community stakeholders, and academic researchers. After conducting a thematic analysis, the allegedly beneficial effects, impact, and challenges of innovation in technology would be discovered. In the next stage, quantitative research through surveys will be conducted. The purpose of this study is to discover the significant perspective of tourism for middle-aged people, as well as the exploration and legacy of significant impact for residents and tourists. Additionally, as stated above, even though it began with a quantitative perspective by multi-areas of 280 participants survey with students, practitioners, teachers, and community stakeholders as a data collection. To improve the quality of the survey, essential changes, and modifications will be made based on the feedback received and problems discovered during a pilot experiment. The finalized survey is going to be formally sent to the targeted participants, and the data collection will be analyzed.

In terms of anticipated contributions, in order to preserve and promote Macao's distinctive typographic heritage, this research study explores the application of augmented reality in digital heritage preservation. Stone inscription, handwritten

storefront signs, and typographic artifacts in Latin script are notable representative of Macao's unique visual culture, which has been triggered by both Portuguese and Chinese influences. However, these cultural expressions are endangering due to rapid globalization and urbanization. Incorporating augmented reality technology into Typeface Of The City, as an immersive city tour presents a novel approach for demonstrating the typographic cityscape is vanishing to both local residents and tourists. The research study sheds light on the ways in which immersive digital technologies might enhance the public's emotional engagement to local history and identity as well as their enjoyment and perception. Since multimedia interactive experiences brought by technological approach, it becomes the emotional investment brought about by people's sense of belonging to the city, identity, collective memories, cultural differences, and in-depth cultural tours. Furthermore, it focuses at how multimedia interaction might make traditional heritage interpretation more collaborative and significant. This study promotes a comprehensive knowledge of audience responses, technological advantages, and narrative techniques in digitization of heritage issues through mixed methods and user experience analysis. Thus, it contributes to a deeper conversation about how emerging technologies might promote cultural sustainability as well as demonstrating how successful augmented reality is as a storytelling medium. For other communities experiencing corresponding historical preservation issues, particularly those with underrated visual cultures, the research study could serve as a model. Finally, by providing theoretical and practical insights into the future of cultural conservation in urban contexts, this research study expands multidisciplinary knowledge at the connection of heritage studies, design, and digital technology. Bringing more diverse cultural research depth to Macau's tourism industry, it is necessary to reinforce the industrial chains to create innovative cultural products, and building a tourism city identity property. The vision for the future would be to develop further the use of artificial intelligence, deep learning, and a new integration of technology and culture to beautify the experiential features and typographic heritage engagement.

Keywords: Augmented Reality, Typography, Heritage preservation, Tourism, Multimedia design

References

[1] Burns, J., & Jarratt, D. (2022). Typography and tourism places: The case of the English seaside resort. Annals of Tourism Research, 97, 103490. https://doi.org/10.1016/j.annals.2022.103490

[2] Santo, T. J. M. (2019). Typography as a mediator of art, space, memory and presence on toponymy. Legado De Arquitectura Y Diseño, 14(26), 75. https://doi.org/10.36677/legado.v14i26.14460

[3] Morgan, N., Pritchard, A., & Pride, R. (2011). Destination brands: Managing place reputation. Abingdon: Routledge.

[4] Huerta, R. (2010). I like cities; Do you like letters? Introducing urban typography in art education. *International Journal of Art & Design Education*, *29*(1), 72–81. https://doi.org/10.1111/j.1476-8070.2010.01633.x

[5] Možina, K., Podlesek, A., & Bračko, S. (2018). Preserving typographic cultural heritage using contemporary digital technology. Journal of Cultural Heritage, 36, 166–173. https://doi.org/10.1016/j.culher.2018.07.010

Assistance or Indifference? The Impact of Customer incivility on Bystanders' Behavioral Intentions

Biyan WEN[12], Le LIN[1], Yaoyi DING[1], Cien WU[1*]

[1]Shenzhen Tourism College, Jinan University, Shenzhen, China.

[2]Management School, Jinan University, Guangzhou, China

*Corresponding Email: 1019648428@qq.com

Abstract

In the hospitality industry, customer incivility has emerged as a significant concern, with research indicating that 82% of service employees in hotels, restaurants, and nightclubs have witnessed or experienced it (Sliter et al., as cited in the study). This behavior, defined as low - intensity deviant acts that violate social norms and harm employees with ambiguous intentions (Andersson & Pearson, 1999), not only negatively affects employees, leading to issues like work withdrawal, increased turnover intention, and reduced job performance (Han et al., 2016; Karatepe et al., 2009), but also has implications for bystander customers. However, existing research has mainly focused on the impact on victimized employees, leaving the influence on bystander customers and the underlying mechanisms under - explored.

This study aims to fill this research gap by investigating the mechanisms and boundary conditions through which customer incivility affects bystanders' behavioral intentions. Specifically, it explores how hotel customer incivility impacts bystander customers' moral anger, moral disengagement, third - party compensatory behavior, and outsider behavior. Additionally, it examines the mediating roles of moral anger and moral disengagement, as well as the moderating role of relationship quality in these relationships.

Guided by the Affective Events Theory (AET) (Weiss & Cropanzano, 1996), which posits that work - related events trigger emotional reactions that influence attitudes and behaviors, this research adopts a mixed - method approach. AET was chosen as it provides a comprehensive framework to explain how specific events in the workplace (in this case, hotel customer incivility) can evoke emotional responses in individuals and shape their subsequent actions. The mixed - method approach combines a thorough review of existing literature to build a theoretical foundation and empirical analysis to test hypotheses.

The research process began with data collection for experimental materials. Semi - structured interviews were conducted with 20 individuals who had witnessed hotel customer incivility within three months. The interviews covered aspects such as the occurrence scenes of incivility, types of behavior, employees' reactions, and bystander customers' emotions. The data from these interviewswere then used to develop experimental materials that were designed to be as realistic as possible. Subsequently, a series of experiments were carried out. In the pre - experiment, a single - factor between - subjects design was employed. The independent variable was customer

incivility, manipulated as high - intensity and low - intensity levels. The researchers created two versions of experimental scenarios, for example, in the “Restaurant staff checking meal vouchers scenario”, the high - intensity scenario had the customer being aggressive and accusatory, while the low - intensity one showed the customer being more cooperative. The dependent variables were moral anger, moral disengagement, third - party compensatory behavior, and outsider behavior. Established scales were used for measurement: the customer incivility scale by Walker (Walker et al., 2014), the moral anger scale by Beugré (Beugré, 2012), an adapted moral disengagement scale based on Bandura’s work (Bandura, 1999), and the outsider behavior scale by Thornberg and Jungert (Thornberg & Jungert, 2013). Third - party compensatory behavior was measured using a task inspired by the dictator game, where participants could allocate points to compensate the victimized employee. The participants were recruited through an online platform, informed about the experiment, and randomly assigned to either the high - or low - intensity incivility group. After reading the experimental materials, they completed the relevant scales and the compensation task. Invalid questionnaires were removed, and 115 valid questionnaires were obtained for analysis.

Experiment 1 also utilized a single - variable between - subjects design, with the same independent, dependent, and control variables as the pre - experiment. The experimental materials were identical to those in the pre - experiment. The participants were recruited in a similar manner and randomly assigned to groups. After data collection and cleaning, 200 valid questionnaires were analyzed. Experiment 2, designed to test the mediating roles of moral anger and moral disengagement, used a single - variable between - subjects design. New experimental materials, such as the “Waiting for a single scene in the hotel’s western restaurant”, were developed to present different incivility scenarios. The participants were recruited through an online platform and in three five - star hotels in Shenzhen, Haikou, and Xiamen using snowball sampling. After random assignment, they completed the necessary tasks, and 237 valid questionnaires were collected for analysis. Experiment 3 adopted a 2×2 between - subjects design, with customer incivility (high - intensity vs. low - intensity) and relationship quality (strong vs. weak) as independent variables. The experimental materials included scenarios related to hotel check - in and relationship - quality - specific descriptions. For relationshipquality, two versions were created: one for a strong relationship where the participant was a satisfied regular customer, and one for a weak relationship with a negative past experience. The participants were recruited through an online platform and in a company in Shenzhen, randomly assigned to one of the four groups, and completed all the measurement tasks. Finally, 317 valid questionnaires were obtained for analysis.

The results of Experiment 1 demonstrated that hotel customer incivility significantly influenced bystanders’ moral anger, moral disengagement, third - party compensatory behavior, and outsider behavior. High - intensity incivility was more likely to evoke moral anger and third - party compensatory behavior while reducing the likelihood of moral disengagement and outsider behavior. As expected, results in experiment 1 indicated a significant effect of customer incivility on moral anger ($F(1,198)=936.201$,

$p < 0.001$) and third - party compensatory behavior ($F(1,198)=266.541$, $p < 0.001$). The high - intensity incivility led to a higher moral anger ($M = 5.60$, $SD = 1.12$) than the low - intensity group ($M = 1.95$, $SD = 0.62$). And the high - intensity incivility led to a higher third - party compensatory behavior ($M = 4.70$, $SD = 1.25$) than the low - intensity group ($M = 1.95$, $SD = 0.78$).

We next used Hayes' PROCESS program to test for the indirect effect of moral anger and moral disengagement in Experiment 2. The results show that the 95% confidence interval is [0.0428, 0.3626], which does not include zero, indicating a significant indirect effect ($\beta=0.2027$, $p<0.05$) of moral anger in the relationship between customer incivility and third - party compensatory behavior. Moreover, moral disengagement mediated the relationship between customer incivility and outsider behavior. The total effect of moral disengagement in this relationship in Experiment 2 was -0.2058 ($p<0.001$), with a 95% confidence interval of [-0.3148, -0.0969], showing its significant mediating role.

Finally, the same method was used to test the moderating effect of relationship quality in Experiment 3. The relationship quality and customer incivility significantly predicted moral anger ($F(1,313)=87.568$, $p<0.001$). The findings demonstrated that in the high-level relationship quality scenario, high - intensity customer incivility (vs. low - intensity customer incivility) induced higher moral anger ($Mhigh = 5.86$, $SDhigh = 0.76$, vs. $Mhigh =1.79$, $SDhigh = 0.64$; $F(1,313) =711.582$,$p<0.001$) Thus, relationship quality moderated the relationship between customer incivility and moral anger. Furthermore, we examined the moderating impact of relationship quality on customer incivility and moral disengagement. The two-way ANOVA revealed a significant interaction effect on moraldisengagement ($F(1,313)=20.657$, $p<0.001$). The findings suggested that in the high-level relationship quality scenario, high - intensity customer incivility (vs. low - intensity customer incivility) induced lower moral disengagement ($Mhigh = 2.32$, $SDhigh = 0.75$, vs. $Mhigh =5.11$, $SDhigh = 0.58$; $F(1,313) =398.547$,$p<0.001$). Thus, relationship quality moderated the relationship between customer incivility and moral disengagement.

This study has important practical and theoretical implications. From a practical perspective, it offers valuable guidance for hotel managers. Hotel managers should strengthen the employee support system by providing regular psychological training to help employees manage the stress and negative emotions caused by customer incivility. When employees encounter such situations, they should be given timely mental and material support, such as public praise for their professional handling and appropriate economic compensation or vacation benefits, which can enhance employees' job satisfaction and well - being and reduce turnover intention (Alola et al., 2019). Secondly, hotels should enhance customer relationship management strategies. By providing personalized services to meet customers' special needs and strengthening communication and interaction with customers to collect feedback and solve problems promptly, hotels can improve relationship quality. High - quality relationships can not only increase customer loyalty but also encourage customers to support employees and even stop incivility when it occurs (Crosby et al., 1990; Hennig - Thurau & Klee, 1997). Thirdly, hotels can guide bystander customers to take positive actions. This can be

achieved by setting up civilized consumption publicity signs in the hotel, using hotel broadcasts to encourage bystanders to support victimized employees or report incivility, and training employees to guide bystanders. Additionally, hotels can offer rewards, like hotel coupons or small gifts, to bystanders who intervene positively. Finally, hotels should optimize the service environment and processes. Ensuring the proper functioning of facilities and a comfortable and clean environment, as well as streamlining service processes to reduce customer waiting time, can enhance the overall service quality and reduce the likelihood of customer incivility. For example, implementing an intelligent queuing system at the hotel front desk and optimizing the seating and food - serving arrangements in the restaurant can improve customer experience (Gonzalez - Mansilla et al., 2019).

Theoretically, this study extends the application boundary of the Affective Events Theory. Traditionally, AET has been mainly applied in the study of employee behavior in organizational behavior. This research innovatively applies it to the context of hotel customer incivility andbystander customer behavior, providing empirical evidence for its application in new fields and enriching its theoretical connotations (Weiss & Cropanzano, 1996). It also enriches the customer incivility research framework from a bystander perspective. Previous studies on customer incivility have mainly concentrated on victimized employees. This study systematically explores bystander customers' emotional feedback, behavioral responses, and the underlying mechanisms and boundary conditions, providing a more comprehensive understanding of customer incivility (Cheng et al., 2020; Jin et al., 2020). Furthermore, it deepens the psychological dimensions of customer behavior studies. By analyzing the mediating roles of moral anger and moral disengagement and the moderating role of relationship quality, this study uncovers the complex psychological processes of bystander customers when facing customer incivility. This contributes to the development of consumer psychology theory, helping to better understand how customers' moral emotions and relationship - related factors influence their behavioral intentions in service encounters (Montada & Schneider, 1989; Bandura, 1999).

In conclusion, this study makes important contributions to both theory and practice in the field of hospitality management. However, it also has some limitations. The experimental scenarios are mainly limited to the hotel industry, and the samples may not be fully representative of all consumer groups. The measurement of variables may not comprehensively capture all aspects in this specific context, and the research design may not account for all potential influencing factors in real - life situations. Future research can expand the research scenarios to other service industries, develop more comprehensive variable measurement methods, and adopt more complex research designs to further explore the long - term impact of customer incivility on bystander customers and effective intervention strategies.

Keywords: Customer incivility, Relationship quality, Moral emotions, Third-party assistance, Outsider behavior

References

[1] Alola, U. V., Olugbade, O. A., Avci, T., et al. (2019). Customer incivility and employees' outcomes in the hotel: Testing the mediating role of emotional exhaustion. *Tourism Management Perspectives*, 29, 9 - 17.

[2] Andersson, L. M., & Pearson, C. M. (1999). Tit for tat? The spiraling effect of incivility in the workplace. *Academy of Management Review*, 24(3), 452 - 471.

[3] Bandura, A. (1999). Moral Disengagement in the Perpetration of Inhumanities. *Personality and Social Psychology Review*, 3(3).

[4] Beugré, C. D. (2012). Development and Validation of a Deontic Justice Scale: DEONTIC JUSTICE SCALE. *Journal of Applied Social Psychology*, 42(9), 2163 - 2190.

[5] Cheng, B., Dong, Y., Zhou, X., Guo, G., & Peng, Y. (2020). Does customer incivility undermine employees' service performance? International Journal of Hospitality Management, 89, 102544.

[6] Crosby, L. A., Evans, K. R., & Cowles, D. (1990). Relationship Quality in Services Selling: An Interpersonal Influence Perspective. *Journal of Marketing*, 54, 68 - 81.

[7] Gonzalez - Mansilla, O., Berenguer - Contri, G., & Serra - Cantallops, A. (2019). The impact of value co - creation on hotel brand equity and customer satisfaction. *Tourism management*, 75, 51 - 65.

[8] Han, S. J., Bonn, M. A., & Cho, M. (2016). The relationship between customer incivility, restaurant frontline service employee burnout and turnover intention. *International Journal of Hospitality Management*, 52, 97 - 106.

[9] Hennig - Thurau, T., & Klee, A. (1997). The Impact of Customer Satisfaction and Relationship Quality on Customer Retention: A Critical Reassessment and Model Development. *Psychology & Marketing*, 14, 737 - 764.

[10] Jin, D., Kim, K., & Di Pietro, R. B. (2020). Workplace incivility in restaurants: Who's the real victim? Employee deviance and customer reciprocity. *International Journal of Hospitality Management*, 86, 102459.

[11] Karatepe, O. M., Yorganci, I., & Haktanir, M. (2009). Outcomes of customer verbal aggression among hotel employees. *International Journal of Contemporary Hospitality Management*, 21(6), 713 - 733.

[12] Montada, L., & Schneider, A. (1989). Justice and emotional reactions to the disadvantaged. *Social Justice Research*, 3(4), 313 - 344.

[13] Thornberg, R., & Jungert, T. (2013). Bystander behavior in bullying situations: Basic moral sensitivity, moral disengagement and defender self - efficacy. *Journal of Adolescence*, 36(3), 475 - 483.

[14] Walker, D. D., Van Jaarsveld, D. D., & Skarlicki, D. P. (2014). Exploring the effects of individual customer incivility encounters on employee incivility: The moderating roles of entity (in)civility and negative affectivity. *Journal of Applied Psychology*, 99(1), 151 - 161.

[15] Weiss, H. M., & Cropanzano, R. (1996). Affective events theory: A theoretical discussion of the structure, causes and consequences of affective experiences at work. In Staw, B. M., & Cummings, L. L. (Eds.), Research in Organizational Behavior: An annual series of analytical essays and critical reviews. *Elsevier Science/JAI Press*, 1 - 74.

The value of service robots in the hotel industry: multi-stakeholder views

Hailey SHIN, Michael LIN, Qu XIAO

Hong Kong Polytechnic University

Abstract

Background

Service robot refers to robots that are capable of performing useful tasks in the provision of service (Shin & Jeong, 2020; Zhong et al., 2022). Many hotels have shown keen interest in service robots since Henn-Na Hotel introduced service robots in front-of-house operation in 2015 (Reis et al., 2020). As service robots bring many benefits, such as operational efficiency and guest experience, many hotels have implemented service robots (Ivanov & Webster 2017). The hotel industry's adoption of service robots has accelerated with the COVID-19, since more consumers have become cautious about hotel interpersonal interactions (Choi & Wan, 2021). As an increasing number of hotels introduced service robots, many studies about service robots were conducted in the context of the hospitality industry. Substantial research has been conducted to understand the factors affecting hotel guests' intention to adopt service robots (Fuentes-Moraleda et al., 2020; Lu et al., 2019; Shin & Jeong, 2020). In addition, as many service failures occur with service robots, researchers (e.g., Choi et al., 2021; Ho et al., 2020; Hu et al., 2021; Wang et al., 2021) also examine consumers' reactions toward service failure and recovery strategies in the context of hotel service robot.

However, while many studies were conducted about service robots, only a limited number of studies examined the perceived quality and/or value of service robots (Choi et al., 2020; Lin & Mattila, 2021). In particular, the understanding of the perceived value of service robots from various stakeholders' perspectives is still lacking. Therefore, the findings of this study can contribute to the theory of perceived value (Boksberger & Melsen, 2011) from the angle of multiple stakeholders' perspectives. In specific, the comparison of multiple stakeholder perspectives of service robots' implementation can indeed aim at filling this research gap. Therefore, in order to provide theoretical and practical implications, this study aims (1) to identify the perceived value of service robots from different stakeholders (i.e., consumers, employees, managers/owners) and (2) to investigate the potential differences in stakeholders' perceived value of service robots. By achieving these objectives, this study is expected to not only enhance the current research framework for service robot adoption, but also provide practical guidelines to support industry practitioners' decision making and implementation of service robots in various hotel organizations.

The advantages of using GBA hotels as the context

The Guangdong-Hong Kong-Macau Greater Bay Area (GBA) was initiated in 2017 by the Chinese central government to further cooperate amongst economic and social development. GBA fully utilizes the advantages of three regions, promoting an international first-class bay area. With an 86 million population, GBA's GDP was $1.67 trillion in 2020, accounting for 11.35% of the national GDP and is expected to reach over 4.6 trillion by 2030. Given the prosperous economic and social development, GBA provides plenty of policy support for firms to pursue innovation (e.g., Ma, 2020; Yang et al., 2021). Since GBA was initiated in 2017, this region has witnessed its largest growth in new hotel projects. According to Ctrip.com (2021), a total of 891 upscale and luxury hotels are in operations in the GBA, and those in Shenzhen were among the most profitable in Mainland China. In particular, this study focuses on one type of hotel management innovation, service robots, in GBA.

Methodology

A mixed method approach has been adopted. First, a qualitative study was conducted to examine the perceived value and relevant issues of hotel service robots from multiple stakeholder perspectives (i.e., consumers, employees, managers/owners) in the GBA. 17 Semi-structured interviews were conducted, including with 8 hotel general managers, 4 owner representatives, 3 hotel department managers, 1 hotel brand manager, and 1 hotel robot company representative. An interview guide that includes questions on the cost and benefit of adopting/using service robots was generated by the research team and consulted with the academic and industry experts. Given the language preference of some of the interviewees, the interview guide was translated into Mandarin. The audio recording of interview data with additional field notes was transcribed. As interviews were in Mandarin or English, the English translation was conducted by a bilingual assistant, who is fluent in English and Chinese. After the transcription process, this study follows Braun and Clarke's (2006) semantic analysis with open-coding and selective coding techniques, in which emerged themes were identified and examined to provide a comprehensive picture of the service robot related issues perceived by various stakeholders. Currently, a quantitative assessment among customers and various employees is conducted to further compare the perceptions of different stakeholder groups, providing generalizable findings.

Findings

Motivations to adopt service robots

Consumer preference for contact-less services

Consumers have shifted their preference from anti-robot services to pro-robot services since the COVID-19 pandemic, given the concerns about health and contactless service. This behavior and preference shift is driven by consumers' value change, as the COVID-19 pandemic could shape how people tend to interact with each other. Almost all the interviewees

pointed out that consumers were more likely to choose contact-less service to avoid human contacts. Such human contacts could be caused by safety concerns or social concerns. In terms of safety concerns, the service provided by service robots could avoid unnecessary human contacts, which might contain gems or viruses that consumers were frightened. Amber explained how COVID-19 could change consumers' values:

"During COVID in 2020, in order to avoid contact between people and many hotels have become isolation places, there was an explosive increase in the demand for food delivery, increasing the use of robots.

In particular, some interviewees emphasized guests with safety concerns (e.g., female consumers) could embrace service robots. They prefer seeing service robots to answer their request to enhance their sense of security. Brittany further explained how female consumers could welcome the usage of service robots:

"If girls wearing pajamas, but receiving a takeaway meal box, they don't want to open the door and being saw by the hotel staff. Meeting people, especially at night, would make the guest feeling embarrassed, especially the mid-age uncles."

On the other hand, some interviewees recognized certain consumers tended to avoid human contacts because of social interactions. Many social interactions with hotel staff required emotion expression, energy, and sometimes courage. Therefore, interactions with service robots can alleviate such concerns. Paige shared her observations on how service robots made hotel guests feel more comfortable.

"Many guests actually like to meet their needs directly and conveniently, and avoid asking hotel staff face to face with facial expressions and adjusting their tone. More people don't want to say anything other than work with others, and strive to reduce redundant words."

With the convenience brought by service robots, consumers are happy with the enjoyable experiences. Given the growing privacy concerns, some consumers might have different definitions of privacy. They might consider the touch-points with service robots as clean and private. Without knowing the service robot may record the level of activities by default, they could prefer using service robots. As Kathy shared her own observations during the operation of service robots:

"Some customers value privacy and prefer to use robots to receive items, such as bath towels, without having to change clothes, do the makeup and greet the employees. Embarrassment could be avoided."

Service innovation

Interviewees highlight that service robot tasks could be used to refine the service procedure. In this case, service robot served as data collector related to their needs, as they generally completed delivery tasks for consumers. Mac shared how he used the task data from service robots to redesign their service standards to ensure consumers having a better experience at his hotel:

"In more than 20,000 records, 47% of guests asked the robot to deliver extra bottled water, in addition to toothpaste, toothbrushes, etc. Therefore, our hotel has placed extra water on each floor for guests to take freely without notifying the front desk."

Cost reduction and addressing employee shortage issue

All the interviews agreed that the first reason why they adopted service robots was cost reduction, particularly labor cost. Similar to service robots' performance indictors, cost reduction could help both hotel owner and management team enhance their financial performance. In many hotels, hotel managers will need to conduct a financial analysis how service robots could impact their financial performance to persuade hotel owners to purchase service robots. Jasmine expressed her understanding how service robot could save labor cost in hotel operation.

"In general, they can replace 1-2 employees, especially in times of heavy passenger flow, as long as there is battery."

In addition, many special situations in hotel operation, service robots can be reliable team members when the human team members were not available. Brittany shared her views on how service robots can help operation during holidays:

"If the money can really save the labor cost of an employee, especially during the Spring Festival or New Year's Day, when many citizens are on holiday and the employees are understaffed and overwhelmed, the hotel is willing to pay for it."

Obstacles of service robot adoption

Brands' adoption decision takes time

In addition, hotel managers and employees sometimes might not be the decision makers for service robot adoption. In many hotel, brand standards would determine or hotel owners would

make such an adoption decision. Catherine expressed how international hotel brands might act cautiously to adopt service robots:

"International brands, such as Marriott, are slow to adopt intelligent management systems. They are relatively conservative and require continuous testing, and dare not blindly introduce thirdparty software."

In addition, Frank shared that luxury brands, compared to other brands, might not be willing to adopt service robots:

"As a luxury brand, our salaries are higher than the industry average, so we can retain talents and find candidates more easily… Even though people's mindsets will change, the communication between people or machines and people are different."

Consumers' misbehavior

Last but not least, acceptance of service robots needed to be rooted in the acceptance of service robots in the society. Many of the cultural or ethical norms cannot be easily developed as the speed of the service robot adoption is growing. Paige expressed her concerns how hotel guests might misbehave.

"But robots still have difficulty integrating into society. For example, people will damage robots. Every year there will be news about " drunk guests damaging robots" and "guests maliciously destroying robots."

Benefits of service robot utilization

Enhanced guest experience

About half of the interviewees expressed the importance of service robots towards hotel's overall review rating. Review ratings had been critical for consumers' judgment prior to their actual stay, which could lead to booking intention and behavior. Service robots could provide convenient service and offer positive image on ICT integration in hotel management. Irvin recognized how service robots could enhance service quality and further positively influenced online review ratings:

"Guests experience the process of delivering goods or solving questions by robots, guests are subconsciously encouraged to improve the hotel ratings on major online review sites, such as Ctrip, Qunar, and Meituan."

Labor cost reduction

Further, the current usage of service reboots mainly remained at midscale hotels. In terms of the expansion of service robots, many interviewees recommended the usage in resorts, as David pointed out: *"Resort hotel is more suitable. First, children, second, more spaces".* Resorts have a distinct guest mix and different operational challenges. Gloria shared her views on why resorts could need some help from robots:

"Especially for resort hotels, the occupancy rate on weekdays is relatively low, but it is very busy on holidays. Guests usually check in at a certain period of time altogether. The waiting time is as long as 40-50 minutes, which brings dissatisfactory experience to guests. Self check-in robots are very popular with employees as they relieve their workload."

More than half of the interviewees acknowledged the service robots can replace a certain level of labor issues. Many hotels encountered labor shortage, particularly the shifts in late night working hours. Service robots could help conduct delivery tasks, which were generally what night shift employees performed other than emergency request. Therefore, service robot performance could be indicated by how many human headcounts or labor costs were saved. Amber explained how service robots can assist her labor cost reduction:

"A robot can replace at least half-of a night-shift employee, which means that the robot can finance itself."

Attracting certain consumer groups

All interviewees talk about guest typology regarding their preferences toward service robots. Different hotel segments encounter diverse hotel guest demographics, such as age, gender, and purpose of travel. In particular, more than half of the interviewees mentioned family guests, as service robot could enhance the experience for kids/children for their curiosity and engagement. Brittany shared her observations from hotel guest comments:

"In some resort or hotels targeting families with kids, children like robots very much. In the comments, we observed that many people say that because of the robot, they will revisit, or the children liked the robot very much, and they want to come to play with the robot next time."

Discussion/Conclusion

This study contributes to the understanding of the perceived value of service robots from multiple stakeholder perspectives, addressing a gap in the existing literature (Choi et al., 2020; Lin & Mattila, 2021). By examining the motivations, obstacles, and benefits associated with service robot adoption, the study provides a comprehensive model that integrates various stakeholder perceptions. This model offers theoretical and practical implications for the hotel

industry, particularly in the GBA, by guiding decision-making and implementation strategies for service robots.

Theoretically, this study makes significant contributions to the theory of perceived value by exploring the adoption of service robots from multiple stakeholder perspectives. By integrating the views of consumers, employees, and managers/owners, the research expands the understanding of perceived value beyond a single stakeholder group (Choi et al., 2020; Lin & Mattila, 2021). Practically, for industry practitioners, this study offers several practical insights. First, understanding the motivations behind consumer preferences for contactless services can help hotels tailor their service offerings to meet evolving guest expectations, thereby enhancing guest satisfaction and loyalty. The study also underscores the importance of leveraging service robots for cost reduction and addressing labor shortages, providing a compelling business case for their adoption.

Reference

[1] Anderson, J. C., & Gerbing, D. W. (1988). Structural equation modeling in practice: A review and recommended two-step approach. *Psychological Bulletin*, 103(3), 411.

[2] Boksberger, P. E., & Melsen, L. (2011). Perceived value: a critical examination of definitions, concepts and measures for the service industry. *Journal of services marketing*.

[3] Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative research in psychology*, 3(2), 77-101.

[4] Choi, S., & Wan, L. C. (2021). The Rise of Service Robots in the Hospitality Industry: Some Actionable Insights. *Boston Hospitality Review*.

[5] Choi, S., Mattila, A. S., & Bolton, L. E. (2021). To err is human (-oid): how do consumers react to robot service failure and recovery?. *Journal of Service Research*, *24*(3), 354-371.

[6] Choi, Y., Choi, M., Oh, M., & Kim, S. (2020). Service robots in hotels: understanding the service quality perceptions of human-robot interaction. *Journal of Hospitality Marketing & Management*, *29*(6), 613-635.

[7] Fiol, L. J. C., Tena, M. A. M., & García, J. S. (2011). Multidimensional perspective of perceived value in industrial clusters. *The Journal of Business and Industrial Marketing*, *26*(2), 132-145.

[8] Fuentes-Moraleda, L., Diaz-Perez, P., Orea-Giner, A., Munoz-Mazon, A., & Villace-Molinero, T. (2020). Interaction between hotel service robots and humans: A hotel-specific Service Robot Acceptance Model (sRAM). *Tourism Management Perspectives*, *36*, 100751.

[9] Ho, T. H., Tojib, D., & Tsarenko, Y. (2020). Human staff vs. service robot vs. fellow customer: Does it matter who helps your customer following a service failure incident?. *International Journal of Hospitality Management*, *87*, 102501.

[10] Hu, Y., Min, H., & Su, N. (2021). How sincere is an apology? Recovery satisfaction in a robot service failure context. *Journal of Hospitality & Tourism Research*, *45*(6), 1022-1043.

[11] Ivanov, S. H., & Webster, C. (2017). Adoption of robots, artificial intelligence and service automation by travel, tourism and hospitality companies–a cost-benefit analysis. *Artificial Intelligence and Service Automation by Travel, Tourism and Hospitality Companies–A Cost-Benefit Analysis*.

[12] Karjaluoto, H., Shaikh, A. A., Saarijärvi, H., & Saraniemi, S. (2019). How perceived value drives the use of mobile financial services apps. *International Journal of Information Management*, *47*, 252-261.

[13] Lee, S. A. (2018). Enhancing customers' continued mobile app use in the service industry. *Journal of Services Marketing*, *32*(6), 680-691.

[14] Lin, I. Y., & Mattila, A. S. (2021). The value of service robots from the hotel guest's perspective: A mixed-method approach. *International Journal of Hospitality Management*, *94*, 102876.

[15] Lu, L., Cai, R., & Gursoy, D. (2019). Developing and validating a service robot integration willingness scale. *International Journal of Hospitality Management*, *80*, 36-51.

[16] Ma, M. H. (2020). Exploring the role of innovation and entrepreneurship in environmental sustainability: Evidence from GBA Cities in China. *Journal of Innovative Studies*, 1(2).

[17] Prentice, C., Dominique Lopes, S., & Wang, X. (2020). The impact of artificial intelligence and employee service quality on customer satisfaction and loyalty. *Journal of Hospitality Marketing & Management*, *29*(7), 739-756. 5

[18] Reis, J., Melão, N., Salvadorinho, J., Soares, B., & Rosete, A. (2020). Service robots in the hospitality industry: The case of Henn-na hotel, Japan. *Technology in Society*, *63*, 101423.

[19] Shaw, N., & Sergueeva, K. (2019). The non-monetary benefits of mobile commerce: Extending UTAUT2 with perceived value. *International Journal of Information Management*, *45*, 44-55.

[20] Shin, H. H., & Jeong, M. (2020). Guests' perceptions of robot concierge and their adoption intentions. *International Journal of Contemporary Hospitality Management*, 32(8), 2613- 2633.

[21] Wang, X., Hwang, Y., & Guchait, P. (2021). When Robot (Vs. Human) Employees Say "Sorry" Following Service Failure. *International Journal of Hospitality & Tourism Administration*, 1-23.

[22] Yang, W., Fan, F., Wang, X., & Yu, H. (2021). Knowledge innovation network externalities in the Guangdong–Hong Kong–Macao Greater Bay Area: borrowing size or agglomeration shadow?. *Technology Analysis & Strategic Management*, 1-18.

[23] Zhong, L., Verma, R., Wei, W., Morrsion, A. M., & Yang, L. (2022). Multi-stakeholder perspectives on the impacts of service robots in urban hotel rooms. *Technology in Society*, 101846.

Emotional Recovery after Tourism Service Failures: The Impact of Narrative Restructuring and the Role of Recovery Experience

Zihang QIU[1], Xiaonan ZHANG[1], Dr. Ho-Kai CHAN[1] , Danting CAI[1], Lingyan ZHANG (Lia)[2]

[1]School of Culture and Creativity (SCC), Beijing Normal-Hong Kong Baptist University (BNBU), Zhuhai 519088, Guangdong, P.R. China

[2]School of Hotel and Tourism Management, The Chinese University of Hong Kong, Hong Kong 999077, China

Abstract

Negative experiences are inherent in tourism, significantly impacting tourists' emotions and behaviours. While research often focuses on positive experiences, understanding recovery from negative events, particularly service failures, is crucial. This study investigates how tourists emotionally recover from different types of service failures (moral vs. competence) through various narrative restructuring writing strategies (relevant, irrelevant/self-compassion, comprehensive). Using a 2x3 between-subjects experimental design (N=187), we examined effects on tourist responses (i.e., revisit intention, emotional response, and memorable tourism experience). Results show competence failures lead to better tourist responses than moral failures. A significant interaction effect revealed that irrelevant (self-compassion) writing was particularly effective in improving emotional response after competence failures. Furthermore, recovery experience significantly mediated the relationship between failure type and tourist responses. Findings highlight the distinct impact of moral versus competence failures and suggest that emotional redirection via self-compassion writing can be an effective recovery tool, especially for competence issues. Recovery experience emerges as a key psychological mechanism in this process. Practical implications involve framing service failures appropriately and potentially integrating recovery-oriented writing tools in tourism service contexts.

Keywords: Service Failure, Emotional Recovery, Narrative Restructuring, Recovery Experience, Moral Failure, Competence Failure, Tourism Experience

1. Introduction

While tourism research traditionally emphasizes positive experiences and their link to satisfaction and loyalty, negative encounters are unavoidable and significantly shape tourist perceptions and future behaviours. An emerging research stream explores the psychological processing of these negative experiences, suggesting emotional regulation can transform them into meaningful outcomes. However, gaps remain in understanding how different types of negative experiences (e.g., moral vs. competence failures) affect recovery and how tourists' internal coping mechanisms, such as narrative restructuring through writing, influence this process.
Service failures can stem from incompetence (e.g., poor skills, inefficiency) or moral lapses (e.g., dishonesty, unfairness). Moral failures often elicit stronger negative reactions. Narrative restructuring, particularly expressive writing, is a known tool for emotional regulation and cognitive processing, yet its application in tourism, especially differentiating between writing styles (e.g., focusing on the event vs. unrelated self-compassion vs. comprehensive review), is limited. While Memorable Tourism Experiences (MTEs) are a common outcome measure, short-term emotional (e.g., SAM) and behavioural (e.g., Revisit Intention) changes might be more sensitive to immediate recovery processes.

This study addresses these gaps by investigating:

1. How moral vs. competence service failures differentially impact tourists' MTE, revisit intention (RI), and emotional response (SAM).
2. How different narrative restructuring writing strategies (relevant, irrelevant/self-compassion, comprehensive) interact with failure type to influence these outcomes.
3. Whether the psychological mechanism of recovery experience mediates these effects.

We employ a 2 (failure type: moral vs. competence) × 3 (narrative restructuring: relevant vs. irrelevant vs. comprehensive) between-subjects experimental design.

2. Theoretical Background and Hypotheses

2.1. Negative Tourism Experiences: Moral vs. Competence Failures

Negative tourism experiences involve dissatisfaction or discomfort falling short of expectations. They can arise from service issues, ethical problems, environmental factors, or cultural misunderstandings. This study focuses on service provider failures, categorized as competence-based (related to skill/quality) and moral-based (related to ethics/fairness). Moral failures are often perceived as more severe and damaging to trust. We expect competence failures, being less indicative of malicious intent, to be perceived less negatively.

- *H1a:* Competence failures lead to higher MTE scores than moral failures.
- *H1b:* Competence failures lead to higher RI than moral failures.
- *H1c:* Competence failures lead to more positive SAM than moral failures.

2.2. Narrative Restructuring and Emotional Recovery

Sharing and reframing experiences, often through narratives, is a coping mechanism. Expressive writing, a form of narrative restructuring, helps process emotions and reframe events. Different writing styles may have varying effects. Relevant writing focuses directly on the negative event; comprehensive writing balances emotional and rational aspects; irrelevant writing, operationalized here as self-compassion writing, shifts focus to unrelated personal feelings with kindness and mindfulness, potentially reducing stress and facilitating emotional distance. We hypothesize that the effectiveness of writing strategies depends on the type of failure encountered.

- *H2:* Failure type and narrative restructuring strategy interact to influence RI, SAM, and MTE.

2.3. The Mediating Role of Recovery Experience

Recovery experience refers to the psychological process of recuperating from stress, involving dimensions like psychological detachment, relaxation, mastery, and control. It helps replenish resources consumed by stress and repair negative emotions. Tourism activities themselves can offer recovery experiences. Narrative restructuring, particularly through achieving cognitive distance and re-evaluation, aligns with recovery concepts like psychological detachment and control. We propose that the impact of failure type and writing strategy on outcomes is channeled through the extent to which individuals experience psychological recovery.

- *H3:* Recovery experience mediates the interaction effect between failure type and narrative restructuring on RI, SAM, and MTE.

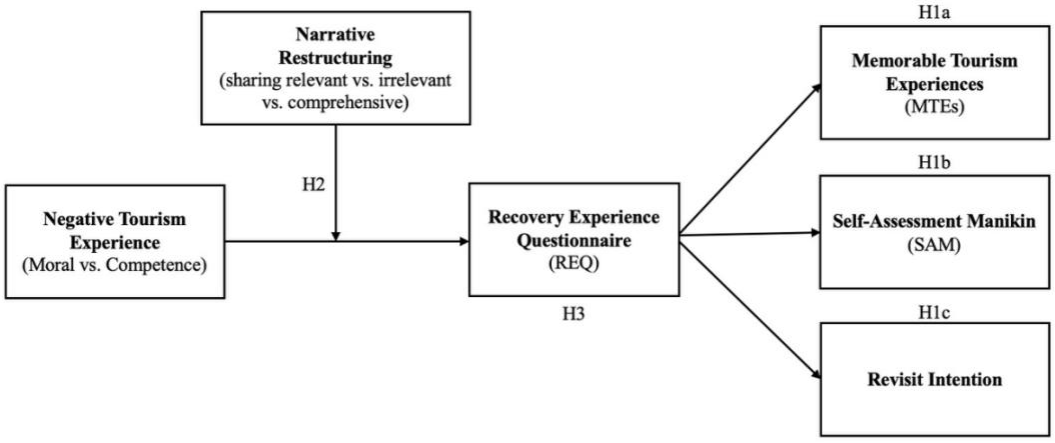


Figure 1. Research Framework

3. Methodology

3.1. Design and Participants

A 2 (scenario type: moral failure vs. competence failure) × 3 (writing style: relevant vs. irrelevant vs. comprehensive) between-subjects factorial design was used. A pre-test (N=138) validated stimulus scenarios adapted from real social media posts. Two scenarios were selected: one clearly perceived as moral failure (unethical tour pricing) and one as competence failure (transportation shortage/poor planning). For the main experiment, 229 participants were recruited via Credamo; 187 valid responses were retained after attention checks (69% female; ~88% aged 18-39; ~68% Bachelor's degree). Participants were randomly assigned to one of the six conditions.

3.2. Procedure

Participants were informed the study explored reactions to negative tourism experiences. They were exposed to either the moral or competence failure scenario (text + image). Pre-intervention measures were taken: RI, SAM, and MTE. Participants then engaged in one of three writing tasks:

- *Relevant:* Describe the assigned negative scenario in detail.
- *Irrelevant (Self-Compassion):* Reflect on an unrelated personal anxious experience with self-kindness.
- *Comprehensive:* Describe the negative scenario, acknowledging negative/positive elements and context. After writing, post-intervention measures were collected: RI, SAM, MTE, and the Recovery Experience Questionnaire (REQ). Manipulation checks confirmed scenario perception.

3.3. Measures

- **Revisit Intention (RI):** 3 items adapted from previous research, 7-point Likert scale.
- **Self-Assessment Manikin (SAM):** Non-verbal pictorial scale measuring emotional valence, arousal, dominance, 9-point scales used here for analysis. We focus on change scores reflecting emotional recovery/shift.
- **Memorable Tourism Experience (MTE):** 24 items adapted from previous research, 7-point Likert scale.
- **Recovery Experience Questionnaire (REQ):** 4 items adapted from previous research, measuring recovery post-writing, 7-point Likert scale.

3.4. Data Analysis

Data were analyzed using SPSS 27. One-way ANOVAs assessed baseline differences (H1). Two-way ANOVAs examined interaction effects on post-minus-pre change scores for RI, SAM, MTE (H2), and on post-intervention REQ. PROCESS macro (Model 4, 5000 bootstraps) tested mediation (H3), examining the indirect effect of failure type on outcomes via REQ.

4. Results

4.1. Baseline Effects (H1)

One-way ANOVAs on pre-intervention scores confirmed H1. Participants in the competence failure condition reported significantly higher RI (M=2.54 vs. M=1.83; $F(1,185)=23.89$, $p<.001$, $\eta 2=.114$), higher MTE (M=3.37 vs. M=3.11; $F(1,185)=7.64$, $p=.006$, $\eta 2=.040$), and more positive initial emotional response (SAM arousal: M=3.93 vs. M=3.17; $F(1,185)=19.49$, $p<.001$, $\eta 2=.095$) compared to the moral failure condition. H1a, H1b, and H1c were supported.

4.2. Interaction Effects (H2)

Two-way ANOVAs on change scores (post-pre) tested H2:

- **RI:** The interaction effect was non-significant ($F(2,181)=1.985$, $p=.140$). However, a significant main effect of writing strategy emerged ($F(2,181)=7.965$, $p<.001$, $\eta 2=.081$), with irrelevant writing ($M_{change}=1.55$) leading to greater improvement than relevant ($M_{change}=0.73$, $p=.001$) and comprehensive writing ($M_{change}=0.91$, $p=.011$). Marginal means suggested irrelevant writing was particularly effective under competence failure ($M_{change}=1.82$).

- **SAM (Emotional Response):** A significant interaction effect was found ($F(2,181)=3.879$, $p=.022$, $\eta 2=.041$). There was also a main effect of writing strategy ($F(2,181)=4.758$, $p=.010$). Irrelevant writing ($M_{change}=2.65$) led to significantly better emotional recovery than relevant writing ($M_{change}=1.73$, $p=.011$). The interaction was driven by the competence failure condition, where irrelevant writing ($M_{change}=2.78$) yielded much higher emotional recovery than relevant ($M_{change}=1.02$) or comprehensive ($M_{change}=1.92$) writing. Differences were non-significant under moral failure.
- **MTE:** No significant interaction or main effects were found (all $p>.17$).

H2 was partially supported, primarily for emotional response (SAM), with directional support for RI.

4.3. Mediation Analysis (H3)

PROCESS macro tested if REQ mediated the effect of failure type on outcomes. Failure type significantly predicted REQ ($b=-0.405$, $p=.028$), with moral failures leading to lower recovery experience (Path a significant).

- **RI:** REQ significantly predicted RI ($b=0.492$, $p<.001$, Path b). The direct effect of failure type on RI became non-significant ($p=.434$, Path c'). The indirect effect via REQ was significant (Indirect Effect = -0.199, 95% CI [-0.400, -0.020]). Full mediation supported.
- **SAM:** REQ significantly predicted SAM change ($b=0.439$, $p<.001$, Path b). The direct effect of failure type remained significant ($b=0.624$, $p=.016$, Path c'). The indirect effect via REQ was significant (Indirect Effect = -0.178, 95% CI [-0.373, -0.025]). Partial mediation supported.
- **MTE:** REQ significantly predicted MTE change ($b=0.111$, $p=.005$, Path b). The direct effect of failure type became non-significant ($p=.432$, Path c'). The indirect effect via REQ was significant (Indirect Effect = -0.045, 95% CI [-0.117, -0.002]). Full mediation supported.

H3 was fully supported across all outcomes. Recovery experience is a key mechanism linking failure type to RI, SAM, and MTE.

5. Discussion

This study confirms that tourists react more negatively to moral service failures than competence-based ones, exhibiting lower initial revisit intentions, less positive emotions, and perceiving the experience as less memorable (supporting H1). This aligns with attribution theory, suggesting moral violations are perceived as more severe and intentional.

The interaction between failure type and writing strategy (H2) yielded nuanced results. While the statistical interaction was only significant for emotional recovery (SAM), the pattern suggested that irrelevant (self-compassion) writing was particularly beneficial after competence failures for both SAM and RI. This strategy allows tourists to detach psychologically and engage in self-kindness, potentially buffering the negative impact more effectively than directly revisiting the competence failure or attempting a balanced rationalization. For moral failures, however, none of the writing strategies significantly improved outcomes, likely because the deep-seated feelings of betrayal or injustice are less amenable to such brief, individual-focused interventions. MTE remained largely unaffected by the post-hoc writing interventions, suggesting core memorability might be encoded earlier and less malleable through short writing tasks.

Crucially, recovery experience emerged as a significant mediator (supporting H3). Moral failures hindered the experience of psychological recovery compared to competence failures. This lower recovery experience, in turn, explained the reduced RI, poorer emotional state (SAM), and even lower MTE scores associated with moral failures. This highlights recovery experience as a vital psychological pathway through which the type of negative event influences downstream attitudes and intentions. Engaging in processes that foster recovery (detachment, relaxation, control) is key to mitigating negative impacts.

6. Implications

6.1. Theoretical Implications

This study contributes by: (1) Empirically demonstrating the distinct psychological impacts of moral versus competence failures in tourism; (2) Showing that narrative restructuring effectiveness varies by writing style *and* failure type, highlighting self-compassion/emotional redirection as potentially potent for competence issues; (3) Identifying recovery experience as a key mediating mechanism linking failure type, coping strategies (implicitly via their effect on recovery), and tourism outcomes.

6.2. Practical Implications

For practitioners: (1) Frame service failures carefully; emphasize unintentionality for competence issues to preserve trust. (2) Consider promoting emotional redirection or self-compassion techniques after competence failures, potentially through guided writing prompts or post-trip reflections on review platforms or apps. (3) Recognize that moral failures require deeper trust-repair strategies beyond individual coping exercises. (4) Design platforms or interventions that foster psychological recovery (detachment, control) to help tourists process negative experiences constructively.

7. Limitations and Future Research

Limitations include a predominantly young sample, potentially limiting generalizability to older tourists; reliance on hypothetical scenarios rather than real experiences; use of self-report SAM for emotion (future work could use physiological measures); and assessment of only short-term effects (longitudinal studies needed). Future research should address these, perhaps using field studies or experience sampling, diverse age groups, and longitudinal designs to track recovery over time.

References

Bradley, M. M., & Lang, P. J. (1994). Measuring emotion: The self-assessment manikin and the semantic differential. Journal of Behavior Therapy and Experimental Psychiatry, 25(1), 49–59.

Chen, C.-C., Huang, W.-J., & Petrick, J. F. (2016). Holiday recovery experiences, tourism satisfaction and life satisfaction – is there a relationship? Tourism Management, 53, 140–147.

Chhabra, D., Healy, R., & Sills, E. (2003). Staged authenticity and heritage tourism. Annals of Tourism Research, 30(3), 702–719.

Ferguson, J. L., & Johnston, W. J. (2011). Customer response to dissatisfaction: A synthesis of literature and conceptual framework. Industrial Marketing Management, 40(1), 118–127.

Hartig, T., Evans, G. W., Jamner, L. D., Davis, D. S., & Gärling, T. (2003). Tracking restoration in natural and urban field settings. Journal of Environmental Psychology, 23(2), 109–123.

Huang, D., & Chen, F. (2015). Summary of researches on tourist satisfaction home and abroad. Journal of Chongqing Technology and Business University(Social Sciences Edition), 32(1).

Juliana, N., Sihombing, S. O., Antonio, F., Rosdiana Sijabat, & Innocentius Bernarto. (2024). The role of tourist experience in shaping memorable tourism experiences and behavioral intentions. International Journal of Sustainable Development and Planning, 19(4), 1319–1335.

Kim, J.-H. (2018). The impact of memorable tourism experiences on loyalty behaviors: The mediating effects of destination image and satisfaction. Journal of Travel Research, 57(7), 856–870.

Kim, J.-H., & Jang, S. (Shawn). (2016). Factors affecting memorability of service failures: A longitudinal analysis. International Journal of Contemporary Hospitality Management, 28(8), 1676–1701.

Kim, J.-H., Ritchie, J. R. B., & McCormick, B. (2012). Development of a scale to measure memorable tourism experiences. Journal of Travel Research, 51(1), 12–25.

Kim, S.-I., & Jeong, C. (2025). Influence of perceived restorativeness on recovery experience and satisfaction with walking tourism: A multiple-group analysis of daily hassles and the types of walking tourist attractions. Land, 14(2), 266–266.

Mattila, A. S., & Ro, H. (2008). Discrete negative emotions and customer dissatisfaction responses in a casual restaurant setting. Journal of Hospitality & Tourism Research, 32(1), 89-107.

McLean, G., AlYahya, M., Barhorst, J. B., & Osei-Frimpong, K. (2023). Examining the influence of virtual reality tourism on consumers' subjective wellbeing. Tourism Management Perspectives, 46, 101088.

Mei, Y., Liu, J., Liu, H., Fu, Y., Luo, X., & Lei, Y. (2023). Self-compassion writing facilitates fear extinction. Acta Psychologica Sinica, 55(8), 1317–1317.

Parasuraman, A., Zeithaml, V. A., & Berry, L. L. (1985). A conceptual model of service quality and its implications for future research. Journal of Marketing, 49(4), 41–50.

Park, J., Ayduk, Ö., & Kross, E. (2016). Stepping back to move forward: Expressive writing promotes self-distancing. Emotion, 16(3), 349–364.

Pennebaker, J. W., & Chung, C. K. (2011). Expressive writing: Connections to physical and mental health. In H. S. Friedman (Ed.), The Oxford handbook of health psychology (pp. 417–437). Oxford University Press.
Pennebaker, J. W., & Seagal, J. D. (1999). Forming a story: The health benefits of narrative. Journal of Clinical Psychology, 55(10), 1243–1254.
Reisinger, Y., & Turner, L. W. (2003). Cross-cultural behaviour in tourism : concepts and analysis. Butterworth-Heinemann.
Skavronskaya, L., Moyle, B., & Scott, N. (2020). The Experience of Novelty and the Novelty of Experience. Frontiers in Psychology, 11.
Sonnentag, S., & Fritz, C. (2007). The recovery experience questionnaire: Development and validation of a measure for assessing recuperation and unwinding from work. Journal of Occupational Health Psychology, 12(3), 204–221.
Su, L., Jia, B., & Huang, Y. (2022). How do destination negative events trigger tourists' perceived betrayal and boycott? The moderating role of relationship quality. Tourism Management, 92, 104536.
Su, L., Pan, L., & Huang, Y. (2023). How does destination crisis event type impact tourist emotion and forgiveness? The moderating role of destination crisis history. Tourism Management, 94, 104636.
Trump, R. K. (2014). Connected consumers' responses to negative brand actions: The roles of transgression self-relevance and domain. Journal of Business Research, 67(9), 1824–1830.
Tsaur, S.-H., Chiu, Y.-T., & Wang, C.-H. (2007). The visitors behavioral consequences of experiential marketing. Journal of Travel & Tourism Marketing, 21(1), 47–64.
Tung, V. W. S., & Ritchie, J. R. B. (2011). Exploring the essence of memorable tourism experiences. Annals of Tourism Research, 38(4), 1367–1386.
Wang, L., & Li, X. (2023). The five influencing factors of tourist loyalty: A meta-analysis. PLOS ONE, 18(4), e0283963. Weiner, B. (2000). Attributional thoughts about consumer behavior. Journal of Consumer Research, 27(3), 382–387.
Wu, A. Y., & Morwitz, V. G. (2024). Digital therapy for negative consumption experiences: The impact of emotional and rational reviews on review writers. Journal of Consumer Research, 51(5), 937–958.
Zhang, H., Wu, Y., & Buhalis, D. (2018). A model of perceived image, memorable tourism experiences and revisit intention. Journal of Destination Marketing & Management, 8, 326–336.

What Makes Macao Attractive? Exploring Multilevel Determinants of International Student's Study Abroad Decision

Linda CHEN, Su-Ying PAN, Ben K. Goh

Faculty of Hospitality and Tourism Management, Macau University of Science and Technology

Abstract

The literature on international education often emphasizes global rankings and economic opportunities as primary drivers of student mobility. However, by introducing and validating destination appeal as a multidimensional construct, we offer a nuanced perspective on emerging educational destinations like Macao. Drawing on the push–pull model, using a qualitative thematic analysis and a quantitative survey, we reveal that city-level (perceived urban safety, institutional support), university-level (university prestige, program relevance), and individual-level (financial feasibility, subjective norms) pull factors enhance destination appeal, which in turn fosters students' future expectations, including career development and further study aspirations. Moreover, subjective norms strengthen the indirect positive influence of pull factors on future expectations via destination appeal, particularly in collectivist cultures. We contribute to understanding the dynamics of student mobility in non-traditional destinations, through which policymakers and universities can enhance Macao's attractiveness as a study destination.

Keywords: international student mobility; push–pull model; destination appeal; higher education; Macao; thematic analysis; structural equation modeling

Introduction

Over the last two decades, international student mobility has become one of the most transformative forces in global higher education. According to UNESCO (2021), the number of internationally mobile tertiary-level students rose from 2.1 million in 2000 to over 6.1 million in 2019, with projections suggesting continued growth in the post-pandemic recovery phase. This global flow has reshaped higher education not only as a vehicle of academic exchange, but also as a policy instrument for economic development, soft power, and knowledge diplomacy (Knight & De Wit, 2018; OECD, 2020). While Anglophone countries such as the United States, the United Kingdom, and Australia still dominate in international enrolments, emerging destinations in Asia, the Middle East, and Europe are increasingly capturing student interest due to their affordability, proximity, cultural familiarity, and evolving academic standards (Brooks & Waters, 2011; Perkins & Neumayer, 2014).

In this shifting geography of student mobility, Macao—a Special Administrative Region (SAR) of China—has gained growing recognition as a regional education hub. Although better known for its tourism and gaming industries, Macao has undertaken a series of higher education reforms in the past decade aimed at diversifying its economy and attracting international talent (Zhou & Lam, 2023). Operating under the "One Country, Two Systems" framework and situated within the economically dynamic Greater Bay Area, Macao offers an attractive alternative for students from mainland China. The government has introduced scholarship schemes, simplified visa procedures, mutual degree recognition policies, and cross-border

Gaokao admissions mechanisms—all of which contribute to reducing the entry barriers for mainland students (Li & Bray, 2007).

At the institutional level, universities such as the University of Macao (UM) and the Macao University of Science and Technology (MUST) have expanded their English-medium programs, improved their research output, and established collaborations with universities in Europe, North America, and Southeast Asia. Fields such as tourism management, gaming studies, law, and translation have gained regional prominence. At the same time, Macao's multicultural environment, low crime rate, and linguistic familiarity—where Mandarin, Cantonese, and English coexist—render it a hybrid space for students seeking international exposure without the psychological distance associated with Western countries (Yu & Zhang, 2016).

From the demand side, the appeal of Macao is also tied to the intense academic competition within mainland China. With more than 10 million students sitting the Gaokao annually, many academically capable students find themselves unable to access top-tier domestic institutions (Chen & Zimitat, 2006). For these students, Macao provides an attractive "third route" that combines geographic proximity with academic prestige and international accessibility. The region's relatively lower cost of study compared to Western countries, combined with scholarship support, makes it a financially viable choice for middle-income families. Moreover, the promise of a globally oriented degree and potential career mobility within the Greater Bay Area or beyond further enhances Macao's appeal as a springboard for upward mobility (Li & Bray, 2007).

Yet despite these advantages, the academic literature on Macao as a study destination remains underdeveloped. Most existing studies have focused on Hong Kong, treating Macao as an addendum or using it for comparative reference (Yu & Zhang, 2016). While the push-pull model of student mobility remains a dominant theoretical tool in explaining destination choice (Maringe & Carter, 2007), it often fails to capture the individual-level processes through which students evaluate perceived benefits, constraints, and social influences. Likewise, while the theory of planned behavior (TPB) provides a robust framework for understanding intention formation (Ajzen, 1991), it has been less frequently integrated with macro- and meso-level educational destination factors—particularly in the context of emerging regional hubs like Macao.

There is also a methodological imbalance in the literature. Many studies rely either on small-scale qualitative interviews that provide depth but limited generalizability, such as Yu and Zhang (2016), or on large-scale surveys that may lack contextual nuance. Few have employed mixed methods approaches to triangulate qualitative insights with quantitative modeling. In addition, relatively little attention has been paid to how destination attractiveness relates to students' longer-term academic and career expectations, which are central in motivating educational choices and evaluating return on investment (Brooks & Waters, 2011). This is particularly relevant for destinations like Macao, whose hybrid identity—Chinese yet international, familiar yet distinct—may produce a unique blend of educational expectations.

This study aims to address these gaps by developing a multi-level conceptual model of educational destination attractiveness. The model is grounded in the push-pull theory and the theory of planned behavior. We empirically test the model to validate its

applicability. Specifically, it investigates how factors at three levels—city (e.g., institutional support, cultural safety), university (e.g., institutional prestige, program fit), and individual (e.g., financial feasibility, social norms)—shape mainland Chinese students' perceptions of Macao as a study destination. It also explores how these perceptions affect students' expectations for future academic progression and career development.

To achieve this, the study employs a sequential mixed-methods approach. In the first phase, semi-structured interviews with prospective and current mainland Chinese students are conducted to thematically identify salient decision-making factors. In the second phase, a structured survey instrument is developed and administered to a larger sample, allowing for statistical validation of the conceptual model using structural equation modeling (SEM). This design allows for the integration of exploratory and confirmatory insights, providing both depth and generalizability.

By centering on an under-researched yet increasingly relevant educational destination, this study contributes to several strands of scholarship. Theoretically, it advances a more integrated understanding of destination attractiveness by linking macro-level conditions, institutional features, and micro-level beliefs. Empirically, it sheds light on the attitudes, constraints, and expectations of a large but underrepresented student population. Practically, it offers actionable insights for institutional leaders and policymakers in Macao seeking to enhance recruitment strategies, student satisfaction, and regional educational competitiveness.

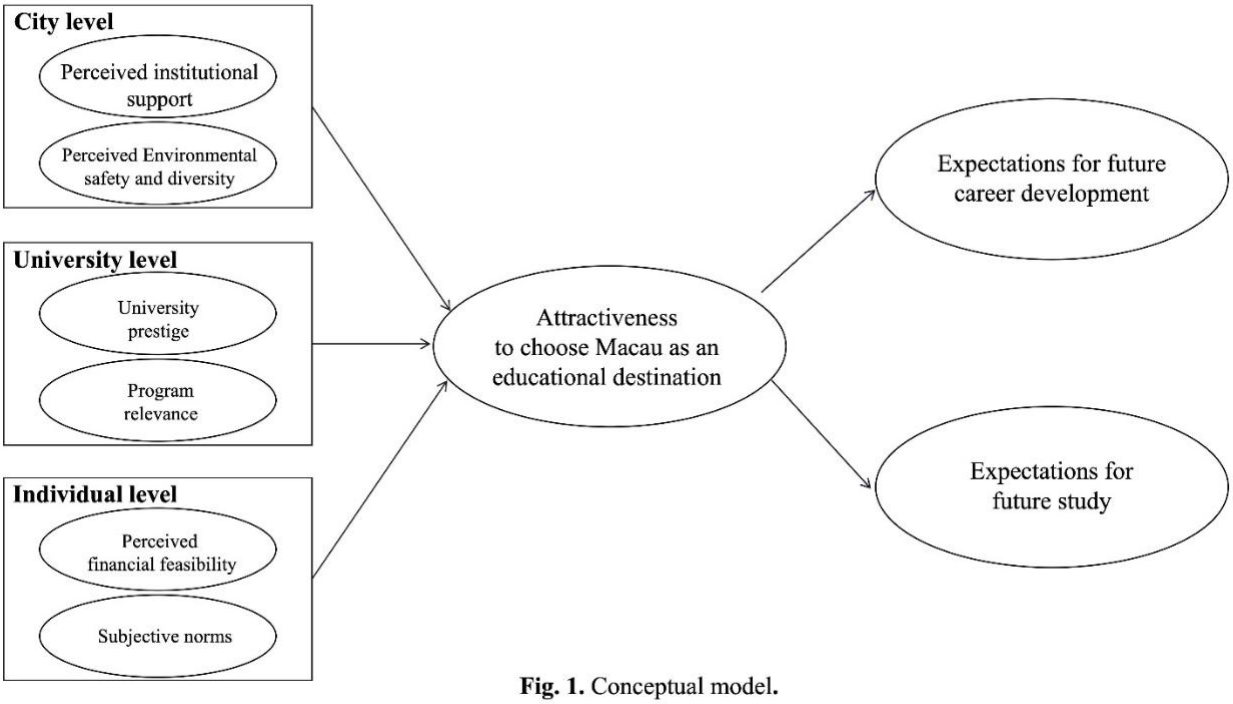


Fig. 1. Conceptual model.

酒吧為休閒空間的探索性研究

張明琳*, 張一航

澳門科技大學

*通訊郵箱：2230001958@student.must.edu.mo

摘要

本研究旨在探索中國城市酒吧扮演的休閒空間以及其體驗感, 揭示其在現代旅遊與休閒中的獨特功能。現有多項研究將酒吧空間概念化為提供商業服務與商業款待的場所, 更多研究聚焦於其享樂體驗以及探訪酒吧動機方面, 而較少關注酒吧作為體驗性社交空間的情感與關係維度, 如歸屬感以及情緒共鳴。為填補這一研究的不足, 本研究通過對來自中國不同城市的 17 名飲酒者的半結構式訪談, 對資料進行了以定性研究為理論基礎的主題分析, 深入挖掘了酒吧為休閑空間的多重維度以及含義。研究表明, 酒吧作為"第三空間", 不僅為受訪者提供了放鬆與逃離日常生活的場所, 學習和培養興趣的機會, 更通過與朋友、陌生人及調酒師的互動產生了局限於酒吧空間的'無用'社交以及'稍縱即逝'的情感關係建設。研究結論表明, 酒吧在中國城市生活中兼具 休閒、文化與社交價值, 超越傳統商業款待的理論框架, 為旅遊與款待業管理提供了新的學術視角, 以及對未來探索酒吧空間的研究提供了理論基石。

關鍵詞: 酒吧, 第三空間, 休閒, 社交, 氛圍, 中國

文化嵌入視角下倫理型領導對員工建言行為的影響路徑：錯誤管理氛圍和組織承諾的作用

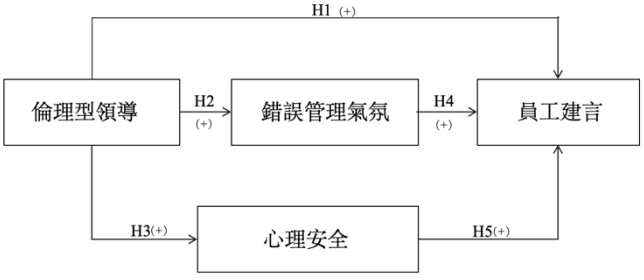
李雨翰，杜婧曄，黃穎祚*

酒店與旅遊管理學院，澳門科技大學，中國澳門

*通訊郵箱：wcwong@must.edu.mo

摘要

酒店業倫理治理已演變為關鍵治理議題。全球頻發的企業倫理失範事件持續引發學界對領導倫理的深度反思，該現象在酒店服務領域尤為凸顯，集中表現為利益輸送、數據安全漏洞及非倫理商業實踐等治理困境。值得關注的是，既有研究多聚焦於製造業場域，對中國文化語境下酒店業倫理型領導的理論建構與實證探討仍存在顯著研究缺口。倫理型領導根植於儒家文化，包括正直誠信、員工關懷、道德管理和社會責任。這些維度反映了倫理原則與優先考慮美德、人類尊嚴和社會福利的領導實踐的融合。因此，本研究旨在探討倫理型領導如何通過錯誤管理氣氛、以及員工對心裡安全感對員工建言進行影響。針對現有研究多集中於製造業且缺乏文化適配性分析的局限，以澳門美高梅酒店400名全職員工為研究對象，採用分層隨機抽樣法進行問卷調查，整合Brown等（2005）倫理領導力量表、Edmondson（1999）心理安全感量表及Cheng等（2022）建言行為量表構建測量體系。研究發現：植根於儒家文化的倫理型領導通過「錯誤管理氛圍-心理安全感」雙路徑機制顯著促進員工建言行為，其中管理者道德示範對促進性建言的影響效應顯著高於抑制性建言，且傳統文化價值觀呈現顯著調節作用。本研究通過揭示儒家倫理觀與現代管理實踐的適配機制，不僅拓展了領導力理論的文化邊界，更為酒店業提供了具體管理路徑：建議通過道德領導力培訓强化管理者的價值示範作用，建立“試錯-反思-改進”的迴圈機制，並將心理安全名額納入績效考核體系。這些發現對提升服務行業組織韌性具有重要啟示，為構建道德型組織生態系統提供了實證依據。



關鍵詞：倫理型領導；酒店管理；員工建言；員工心理安全

參考文獻：

[1]Cheng, J., Bai, H., & Hu, C. (2022). The relationship between ethical leadership and employee voice: The roles of error management climate and organizational commitment. *Journal of Management & Organization*, 28(1), 58-76.

[2]Wen, B., & Chi, C. G. (2023). Conceptualizing ethical leadership in Eastern cultural context and examining its impact on hotel employees' voice behavior. *Journal of Hospitality Marketing & Management*, 32(7), 947-966.

[3]Brown, M. E., Treviño, L. K., & Harrison, D. A. (2005). Ethical leadership: A social learning perspective for construct development and testing. *Organizational behavior and human decision processes*, 97(2), 117-134.

[4]Victor, B., & Cullen, J. B. (1988). The organizational bases of ethical work climates. *Administrative science quarterly*, 101-125.

[5]Edmondson, A. C., & Bransby, D. P. (2023). Psychological safety comes of age: Observed themes in an established literature. *Annual Review of Organizational Psychology and Organizational Behavior*, 10(1), 55-78.

[6]Guchait, P. (2023). Error management orientation: impact on service recovery performance, and the mediating role of self-efficacy. *International Journal of Contemporary Hospitality Management*, 35(10), 3518-3541.

[7]Huang, Y., Sharma, A., & Yu, H. (2023). A systematic review of employee voice literature in hospitality. *Journal of Hospitality and Tourism Management*, 56, 532-542.

[8]Özkan, O. S., Huertas-Valdivia, I., & Üzüm, B. (2023). Fostering employee promotive voice in hospitality: The impact of responsible leadership. *Tourism Management Perspectives*, 49, 101186.

[9]Khairy, H. A., Liu, S., Sheikhelsouk, S., EI-Sherbeeny, A. M., Alsetoohy, O., & Al-Romeedy, B. S. (2023). The effect of benevolent leadership on job engagement through psychological safety and workplace friendship prevalence in the tourism and hospitality industry. *Sustainability*, 15(17), 13245.

[10]Zhang, Y., Zhao, J., & Qin, J. (2024). Research on mechanism of servant leadership on employees' customer-oriented deviance: the mediating role of psychological security and the moderating role of error management climate. *Asia Pacific Journal of Marketing and Logistics*, 36(10), 2464-2482.

閨蜜旅行中的價值共同建設與共同毀滅：基於性格特質、溝通模式、情感支持的多維度研究

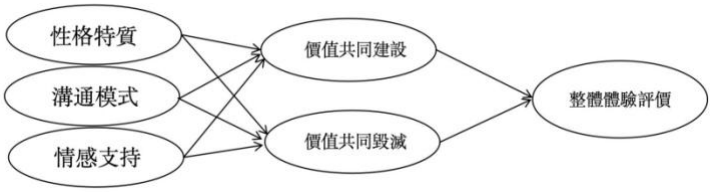
吳趙清，王皎蛟，黃穎祚*

酒店與旅遊管理學院，澳門科技大學，中國澳門

*通訊郵箱：wcwong@must.edu.mo

摘要

隨著女性旅遊市場日益發展，閨蜜旅行因其獨特的社交屬性與情感連結功能備受關注。然而，現有的研究多聚焦於旅遊動機（如逃離現實、自我表達）或目的地選擇（Crompton, J. L. 1979; Pearce, P. L., & Lee, U. (2005)），對旅行過程中互動體驗的動態演變及旅行情境中閨蜜關係質量對旅遊體驗的影響仍未進行深入探討。閨蜜關係被認為是一種非浪漫的親密關係，而親密關係在旅遊情境中可能會出現兩極分化的情況：積極的互動可能促進價值共同建設，即透過合作創造超越個體預期的體驗價值；衝突或壓力則可能導致價值共同毀滅，即互動過程中產生的負面情緒削弱關係質量。但目前尚不清楚哪些因素會影響其價值共同建設或共同毀滅。本研究以社會互動理論為基礎，構建了一個多維分析框架，聚焦性格特質、溝通模式、情感支持三個核心變數，探討其對閨蜜旅行體驗中價值共同建設或共同毀滅的作用機制。研究將採用定量研究方法，於 2025 年 7-9 月透過線上問卷（300 人）的方式，招募在過去一年內有閨蜜旅行經歷的女性。問卷使用 5 點里克特量表：性格特質選用 Rammstedt & John（2007）大五人格量表（BFI-10）、溝通模式選用 Hecht（1978）溝通滿意度量表（CSS）、情感支持選用 Cutrona & Russell（1990）社會支持行為量表（SS-B），價值共同建設選用 Yi, Y., & Gong, T. (2013)價值共同創造行為量表，結合旅行情境調整題項，並透過預測試驗證信效度。本研究將共同毀滅概念引入閨蜜旅行研究，揭示閨蜜關係在旅行互動中的動態演變機制，突破傳統旅遊學對「積極體驗」的單一關注，為理解社交旅遊的複雜性提供了新的理論視角。研究為旅遊業者設計閨蜜專屬產品（如衝突解決引導服務、情感支持型行程）提供理論依據，同時為女性旅客優化旅遊決策、提升旅遊體驗提出可行建議。



關鍵詞：閨蜜旅行；價值共同建設；價值共同毀滅；社會互動理論；性格特質；溝通模式；情感支持

參考文獻：

[1]Small, J. (2008). 'The absence of gender in tourism studies'. Tourist Studies, 8(2), 127-148.
[2]Kim, J.-H., Ritchie, J. R. B., & McCormick, B. (2019). Development of a scale to measure memorable tourism experiences. Journal of Travel Research, 51(1), 12-25.
[3]Fehr, B. (2004). Intimacy expectations in same-sex friendships: A prototype interaction-pattern model. Journal of Personality and Social Psychology, 86(2), 265-284.
[4]Plé, L., & Chumpitaz Cáceres, R. (2010). Not always co-creation: Introducing interactional co-destruction of value in service-dominant logic. Journal of Services Marketing, 24(6), 430-437.
[5]Rammstedt, B., & John, O. P. (2007). Measuring personality in one minute or less: A 10-item short version of the Big Five Inventory in English and German. Journal of Research in Personality, 41(1), 203-212.

[6]Hecht, M. L. (1978). The conceptualization and measurement of interpersonal communication satisfaction. Human Communication Research, 4(3), 253-264.
[7]Cutrona, C. E., & Russell, D. W. (1990). Type of social support and specific stress: Toward a theory of optimal matching. In I. G. Sarason, B. R. Sarason, & G. R. Pierce (Eds.), Social support: An interactional view (pp. 319-366).

澳門旅遊紀念品的地方性建構及其對遊客情感價值與旅行後幸福感的影響

李雅文，章詩怡，黃穎祚*

酒店與旅遊管理學院，澳門科技大學，中國澳門

*通訊郵箱：wcwong@must.edu.mo

摘要

隨著全球旅遊業的蓬勃發展，旅遊體驗的內涵和外延不斷拓展，紀念品作為旅遊體驗的重要組成部分，逐漸受到學者和實踐者的關注。澳門作為中西文化交融的歷史名城，其獨特的文化符號（如大三巴牌坊、葡式碎石路）、傳統工藝（如杏仁餅製作、葡國瓷磚彩繪）和地方故事（如媽祖傳說、土生葡人文化）構成了豐富的旅遊紀念品資源。紀念品不僅是物質商品，更是承載地方文化和情感記憶的重要載體。它能夠將遊客的旅行經歷具象化，成爲為連接遊客與目的地之間情感紐帶的重要媒介。旅行後的幸福感（Post-Travel Well-being）是指遊客在旅行結束後，因旅行經曆而產生的持續性積極情感狀態，包括愉悅感、滿足感等。這種幸福感不僅在旅行過程中形成，還會在旅行結束後通過回憶和分享等方式得以延續和強化。本研究提出“文化—情感—幸福感”的整合模型，通過澳門紀念品的地方性建構，探討其對遊客情感價值和旅行後幸福感的深遠影響。然而，現有研究多集中於紀念品的經濟價值和消費行為，關於澳門旅遊紀念品如何通過地方性建構影響遊客情感價值及旅行後幸福感的研究尚不充分，亟需基於文化符號、工藝傳承和地方故事的整合視角展開探討。結合不同文化背景遊客的感知差異，為世界旅遊紀念品的情感化設計和文化可持續發展提供了新的理論視角和實踐依據。

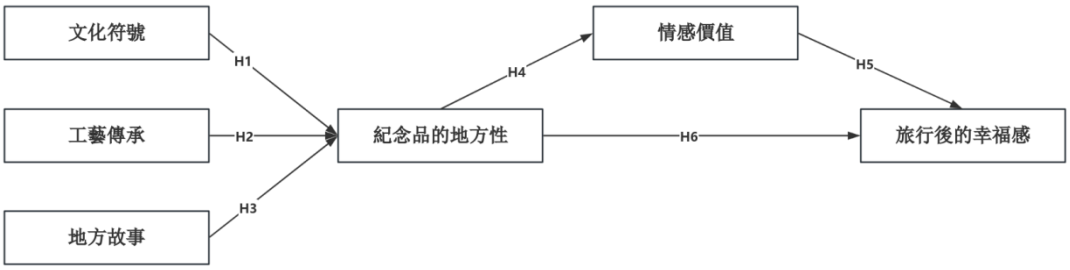


圖 1. 研究模型。

本研究将中国澳门作为研究地点，基於以上模型（H1-H6），採用混合研究方法展開分析。首先通過深度訪談與文本分析，挖掘澳門紀念品中的文化符號、工藝技藝及地方故事對紀念品的地方性有顯著影響（H1-H3），紀念品的地方性影響情感價值（H4）；隨後設計結構方程模型（SEM），以問卷調查收集遊客對紀念品的情感價值（H5）及幸福感（H6）的感知數據，驗證理論路徑的顯著性。研究發現：澳門紀念品的地方性由文化符號、工藝獨特性和地方敘事三重維度共同塑造，且地方性顯著正向影響遊客的情感價值，進而提升旅行後幸福感；不同文化背景遊客的感知存在顯著差異。

本研究具有重要的理論與實際意義。理論層面，拓展了地方性理論在旅遊研究中的應用，提出“文化—情感—幸福感”的整合模型；實踐層面，為澳門文旅部門優化紀念品設計、制定情感化行銷策略提供依據，助力文化可持續發展。

關鍵字：旅遊紀念品、情感價值、旅行後的幸福感、澳門、文化符號

參考文獻：

[1] Ram, Y., Björk, P., & Weidenfeld, A. (2016). Authenticity and place attachment of major visitor attractions. Tourism management, 52, 110-122.
[2] Gao, J., & Wu, B. (2017). Revitalizing traditional villages through rural tourism: A case study of Yuanjia Village, Shaanxi Province, China. Tourism management, 63, 223-233.
[3] Fu, Y., Kim, S., & Zhou, T. (2015). Staging the 'authenticity'of intangible heritage from the production perspective: the case of craftsmanship museum cluster in Hangzhou, China. Journal of Tourism and Cultural Change, 13(4), 285-300.
[4] Kim, J. H., & Ritchie, J. B. (2014). Cross-cultural validation of a memorable tourism experience scale (MTES). Journal of Travel Research, 53(3), 323-335.
[5] Liu, Y., Chen, Y., Font, X., Zhang, Y., & Hu, J. (2025). Echoes of a destination: The representation of locality in souvenirs and their role in sustaining post-trip, tourist well-being. Tourism Management, 108, 105125.
[6] Hosany, S., Prayag, G., Deesilatham, S., Cauševic, S., & Odeh, K. (2015). Measuring tourists' emotional experiences: Further validation of the destination emotion scale. Journal of Travel Research, 54(4), 482-495.
[7] Swanson, K. K., & Horridge, P. E. (2006). Travel motivations as souvenir purchase indicators. Tourism management, 27(4), 671-683.
[8] Nawijn, J. (2010). The holiday happiness curve: A preliminary investigation into mood during a holiday abroad. International Journal of Tourism Research, 12(3), 281-290.

探究中國寵物主人攜寵物旅遊的出行體驗感

王璽卓* ，張一航

澳門科技大學

*通訊郵箱：2230020865@student.must.edu.mo

摘要

隨著中國寵物擁有量的增長，攜寵物旅行在旅遊與酒店行業中逐漸成為了一種趨勢，反映了文化態度的轉變以及新興商業機會的湧現。本研究旨在探索寵物旅遊如何影響旅行體驗及寵物與主人之間的關係，聚焦於寵物主人與寵物間的情感關係層面、旅遊與酒店行業的運營與管理層面，以及中國獨特背景下的社會文化層面。基於寵物依附理論和旅行期望理論，本研究探索了這些課題如何在中國快速發展的寵物旅遊市場中展開。通過對 10 位有攜寵物旅行經歷的主人進行半結構化訪談，並通過基於定性研究的主題分析法進行數據分析後，共產生三大主題；首先，寵物旅行所產生的情感與關係動態凸顯了寵物旅遊的重要性；將寵物視為重要家庭成員的主人們，通過旅行和共同經歷的旅遊體驗，與寵物建立並強化了深厚的情感聯結。其次，旅遊與酒店行業的運營以及管理障礙,如酒店政策不一致和交通選擇局限性,對攜寵物旅行構成了極大的負面影響。最後，因受中國地區差異和對動物作為寵物的多樣社會態度，顯著影響寵物主人的旅行體驗。研究結果表明，儘管寵物旅遊在豐富主人與寵物關係，以及為旅遊與酒店業帶來經濟增長和機會方面具有巨大潛力，其未來發展取決於完善行業障礙並充分利用中國蓬勃發展的寵物文化。本研究的發現有助於理解寵物旅遊在現代旅行中所扮演的角色，並為中國未來的寵物旅遊相關政策制定和行業改進提供了基礎。

關鍵詞: 寵物，旅行，旅遊業，款待業，依附理论，中國

為何機會-資源整合在酒店與旅遊業中失效？動態能力理論的擴展視角

耿直，徐曄，劉敬*

澳門科技大學酒店與旅遊管理學院

*通訊郵箱:jiliu@must.edu.mo

摘要

動態能力理論強調機會-資源整合是企業通過市場導向獲取競爭優勢的關鍵路徑，然而這一理論在新創企業情境下的行業異質性效應尚未被充分探討。本研究以中國的新創企業為對象，聚焦酒店旅遊業與非酒店旅遊業的對比，構建“市場導向—機會-資源整合—新創企業成長”理論模型，採用混合方法，揭示動態能力作用的行業邊界條件。基於686家新創企業高管的問卷調查數據，研究發現：市場導向通過機會-資源一體化的仲介作用正向驅動新創企業成長，但酒店旅遊業顯著負向調節仲介路徑的後半段。為解構這一矛盾，研究進一步對20名新創企業高管展開深度訪談，發現酒店旅遊業存在三重機制性約束：（1）動態能力陷阱；（2）資源柔性悖論；（3）成長資源錯配。基於此，本研究提出動態能力理論的行業適配性框架，主張在酒店與旅遊等客戶主導型行業中，需在資源敏捷性與戰略耐性間尋求平衡，避免陷入“高整合-低成長”陷阱。研究結論不僅拓展了動態能力理論在新創企業與服務密集型行業的解釋邊界，亦為行業實踐者優化資源管理提供實證依據。

關鍵字：動態能力理論 機會-資源整合 酒店與旅遊業 行業異質性 新創企業成長

免簽政策對韓國青年遊客旅遊決策的影響及目的地選擇偏好研究：以上海為例

张睦琳[1]，陈芊卉[1]，赵晨晨[1]，唐娟[2]

[1]澳門科技大學酒店與旅遊管理學院碩士生

[2]澳門科技大學酒店與旅遊管理學院副教授

摘要

過境免簽政策的實施和完善成為連接各國家和地區的重要橋樑，但其對細分市場和特定客群的具體影響機制仍有待深入探討。本研究以上海為出境遊目的地案例，探討免簽政策對韓國年輕遊客旅遊決策和目的地選擇的影響。本研究基於計畫行為理論（TPB）和感知價值理論構建 S-O-R 模型，以免簽政策為外部刺激（S），通過 TPB 的行 為態度、感知行為控制以及目的地功能價值、情感價值、社會價值（O）共同作用於韓 國年輕遊客的旅遊意向與目的地選擇（R）。電子口碑作為調節變數，通過強化或削弱免簽政策對感知價值的正向影響，間接調節“刺激-反應”路徑的傳導效果。通過線上 問卷收集數據，有效問卷 301 份。使用 SPSS 進行探索性因數分析確認各變數的維度，運用結構方程模型檢驗假設並確認電子口碑的調節作用。研究發現，免簽政策通過影響遊客的行為態度、感知價值和感知行為控制，進而影響其目的地選擇決策，而電子口碑在這一過程中起到正向調節作用。研究結果表明，簽證政策不僅是影響遊客決策的直接因素，還能通過影響遊客的心理狀態間接影響其行為決策。此外，線上口碑信息在政策效應中發揮重要作用，積極的線上評論可以增強簽證政策對遊客決策的積極影響。本研究為理解簽證政策對遊客決策的影響提供了新的理論框架，也為目的地管理和旅遊行銷實踐提供了有價值的參考。未來研究可進一步探索不同類型的簽證政策對不同遊客群體的影響，以及社交媒體在政策傳播和效果增強中的作用。

關鍵字:免簽政策;S-O-R 模型;電子口碑;旅遊決策; 目的地選擇;上海

美食旅遊中遊客的食物浪費行為：美食目的地形象、相機先吃行為、身份信號和衝動購買傾向的作用

林嫣然，張溯*

澳門科技大學酒店與旅游管理學院

*通訊郵箱：szhang@must.edu.mo

摘要

美食与旅游深度融合的背景下，美食旅游越來越受游客青睐，然而，在美食旅游中的食物浪费問題日益突出，與可持續發展理念相悖。同時，隨著社交媒體與美食旅遊的深度融合，“相機先吃”行為逐漸成為遊客美食體驗的重要環節，但其對食物浪費的影響機制還尚不明確。探究遊客食物浪費行為的前因及應對策略，已成為旅遊研究和行業實踐中的重要課題。

本研究基於印象管理理論，以澳門為案例地，探究美食目的地形象對“相機先吃”行為與身份信號需求的影響，並分析二者通過衝動購買傾向作用於食物浪費的路徑。研究人員在澳門的官也街、大三巴牌坊周邊等美食聚集街區進行問卷調查，收集了 332 份有效資料，並採用軟體 SPSS 26.0 和 Amos 26.0 進行分析。結果顯示：美食目的地形象正向影響遊客的“相機先吃”與身份信號；“相機先吃”與身份信號正向影響食物浪費行為；衝動購買傾向在“相機先吃”、身份信號與食物浪費間起部分中介作用。本研究對美食旅遊研究範疇的文獻進行了補充，為減少美食旅遊中的食物浪費提供了理論依據和實踐指導。

關鍵字：美食旅遊、印象管理理論、美食目的地形象、“相機先吃”行為、身份信號、衝動購買傾向、食物浪費行為

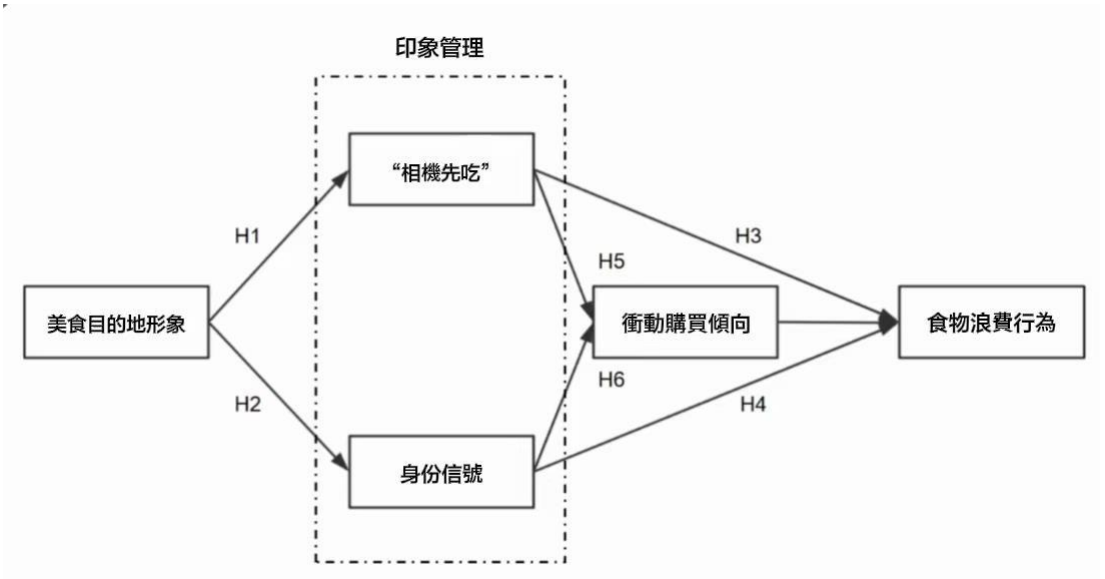


图 1：研究模型

包容性領導影響團隊績效的雙路徑機制：最優獨特性理論的解釋

劉敬[1]，王勇[2*]，潘書恬[3]

[1]澳門科技大學酒店與旅遊管理學院助理教授

[2]澳門科技大學酒店與旅遊管理學院旅遊管理專業博士研究生

[3]澳門科技大學酒店與旅遊管理學院旅遊管理專業碩士研究生

[*]通訊郵箱：kaiiw0516@163.com

摘要

在多元化和數字化協作日益增強的組織環境中，包容性領導因其同時滿足員工“歸屬感”與“獨特性”需求而受到廣泛關注。基於最優獨特性理論與社會交換理論，本研究構建並驗證了一個多重仲介模型，探討包容性領導如何通過感知的內部人地位與積極獨處雙路徑影響員工之間的網路友誼，進而提升團隊合作與團隊創新。本研究基於中國酒店行業樣本，採用問卷調查法，收集362份有效數據，通過結構方程建模（PLS-SEM）驗證了八項研究假設。研究結果表明：包容性領導顯著正向預測員工的內部人地位與積極獨處；兩者分別通過增強網路友誼，進一步正向預測團隊合作與創新。更重要的是，網路友誼在上述路徑中發揮顯著的鏈式仲介作用，支持了包容性領導通過關係身份與個人身份雙路徑實現組織績效提升的理論模型。

本研究在理論層面豐富了包容性領導的研究視角，揭示了個體身份動機動態波動與線上社交機制之間的內在聯繫；在實踐層面則為組織如何通過培育包容型領導力以增強員工關係、促進協作與創新提供了路徑指導。

關鍵字：包容性領導、最優獨特性理論、感知的內部人地位、積極獨處、網路友誼、團隊創新

從“共生”到“共創”：數字遊民與旅居地的共生模式與優化路徑研究

鍾穎[1*]，林彥希[2]，植接弟[1]

[1]華南農業大學公共管理學院，中國廣東 廣州 510642

[2]澳門科技大學旅遊與酒店管理學院，中國 澳門 999078

[*]通訊郵箱：1601446373@qq.com

摘要

基金項目：國家社會科學基金重點項目《基於數據賦能的基層社會治理現代化研究》（20AZD088）

數字遊民作為全球化與數字化深度融合的產物，其空間流動性、技術依賴性與文化交融性使其成為推動區域發展的重要共生單元。作為一種輕量化、可持續的人才引進模式，數字遊民群體日益受到地方政府、文旅企業、社區組織、數字平台等多方利益相關者的重視。

本文基於共生理論，系統考察數字遊民作為核心共生單元與旅居地協同發展的外部支撐環境，並根據共生程度由淺入深、社區融合由表及裡的演進邏輯，選取中國大理、安吉、三亞三個典型旅居地作為案例，結合前人觀點，提煉出“點共生”、“連續共生”與“一體化共生”三類漸進式發展模式。

研究發現，三類模式呈現出明顯的價值升級特徵：“點共生”模式以短期經濟互動為主，表現為數字遊民通過文化消費與內容創作激活地方經濟。“連續共生”模式強調周期性社會融入，數字遊民通過技能轉移與產業協同助力鄉村振興。“一體化共生”模式則表現為深度社區共創，招引數字遊民由“遊”轉“留”，進一步做強數字產業，充分展現從個體價值實現到集體價值創造的躍遷過程，實現數字遊民與地方發展的良性互動、共同成就。

數字遊民與旅居地的價值共創機制通過四大路徑實現：政策制度賦能、技術設施支撐、社區關係建構以及文化價值融合。在此過程中，數字遊民完成了從“旅居者”到“共建者”的角色轉變，其流動性特質轉化為推動區域發展的持續動力。

本研究為理解人才流動與區域發展關係提供了新視角，對城鄉融合發展、鄉村產業振興及區域創新體系建設具有重要啟示。未來研究應關注數字遊民網絡對區域創新擴散的影響、不同發展階段政策工具的適配性，以及長期發展中的文化生態平衡等議題，充分釋放“數字遊民經濟”的多元價值。

關鍵詞：數字遊民；共生理論；價值共創；協同發展

參考文獻：

[1] 雷明,王鈺晴.交融與共生：鄉村農文旅產業融合的運營機制與模式——基於三個典型村莊的田野調查[J].中國農業大學學報(社會科學版),2022,39(06):20-36.

[2] [2]呂宛青,肖釗富,王旭熙,等.基於共生理論的農文旅融合發展機理與實證研究——以雲南4個典型茶葉縣為例[J/OL].中國農業資源與區劃,1-17[2025-04-10].

[3] [3]羅敏.數字遊民：青年高質量充分就業的新樣態[J].中國青年研究,2025,(04):112-119.

[4] [4]李東航.引導數字遊民助力鄉村全面振興[J].人民論壇,2025,(05):87-89.

[5] [5]虞鑫,李一諾.尋找失落的附近：數字遊民的流動社交與空間實踐[J].新聞與寫作,2024,(12):5-15.

[6] [6]周碧蕾.本土數字遊民：內涵特徵與形成機理[J].求索,2024,(06):62-71.

[7] [7]王旭輝,蘭若冰.數字時代"流動性聚合社區"的形態特徵與秩序維繫——DNA 數字遊民公社的個案研究[J].社會發展研究,2025,12(01):40-61+243.

[8] [8]陳拓,李立傑,王珏.從"遊"到"民"：DNA 數字遊民公社的組織力量與鄉村嵌入[J].傳媒觀察,2024,(08):75-86.

[9] [9]王雲龍.從"遊走"到"入鄉"：數字遊民的鄉村嵌入與重塑——基於浙江省 A 縣的經驗考察[J].中國青年研究,2024,(06):68-77+67.

目的地文化與酒店的融合對遊客選擇影響因素研究——以麗江和府洲際度假酒店為例

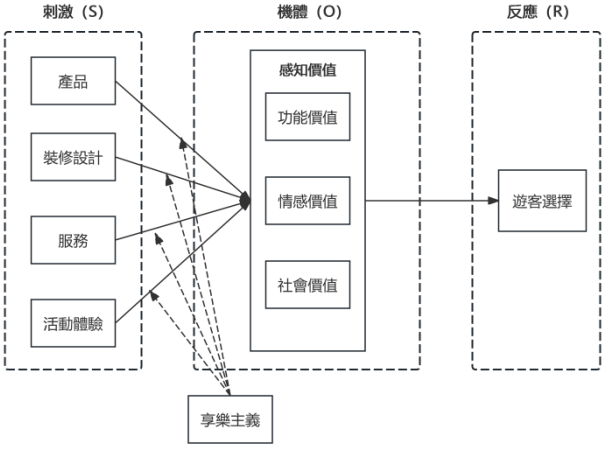
周宜翀，喻璇*，葉昕榮

澳門科技大學酒店與旅遊管理學院

*通訊郵箱: 1006511669@qq.com

摘要

目的地文化與酒店的融合意在將目的地的多元文化融入酒店的產品、裝修設計、服務以及活動體驗（田彩雲等，2020）之中。同時，隨著遊客綜合經濟能力與文化素養的提升，對於酒店的要求也日益需要更具吸引力和獨特性（Pavia et al., 2013），因此遊客在選擇目的地酒店的過程中會受到多種因素的影響，如居家氛圍（戴其文等，2025）、傳統中國文化（Wang et al., 2020）等等。而本篇研究選擇探討目的地文化和酒店的融合對遊客選擇的影響因素。由於近年來古鎮旅遊再次興起，因此我們選擇位於麗江古鎮的和府洲際度假酒店為例，使用「刺激—機體—反應」理論建立酒店選擇的概念模型。通過運用結構方程建模技術，分析酒店與目的地文化融合的設施對遊客的感知價值與遊客選擇之間的關係，並探討享樂主義（Apaolaza et al., 2022）的調節作用。本研究結果可用於推動目的地文化與酒店的融合，幫助文化目的地吸引遊客。同時可以為酒店經營者提供消費者行為意向的角度，有助酒店的升級創新。



基於SOR理論的酒店選擇意向概念模型

關鍵詞： 目的地文化、酒店、行為意向、消費意願

參考文獻：

[1] 田彩雲, 王瑤, 楊勁松.（2020）. 酒店中國文化元素的運用及對顧客感知價值的影響研究. 北京聯合大學學報（人文社會科學版）, 18(2), 32–38.

[2] Pavia, N., Stipanovic, C., & Floričić, T. (2013). Sustainable Development in Increasing the Competitiveness of Hotel Offer--Case Study Istra County. *Tourism and Southern and Eastern Europe*, 279-293.

[3] 戴其文，陳景蓮，鄭燕巧.（2025）. 民宿居家氛圍對遊客選擇意向的影響研究——共享經濟平臺信息源的調節作用. 人文地理，(1)，170–180.doi:10.13959/j.issn.1003-2398.2025.01.018.

[4] Wang, W., Ying, S., Mejia, C., Wang, Y., Qi, X., & Chan, J. H. (2020). Independent travelers' niche hotel booking motivations: the emergence of a hybrid cultural society. *International Journal of Hospitality Management*, *89*, 102573.

[5] Vanessa Apaolaza , Mario R. Paredes , Patrick Hartmann , Jose Domingo García-Merino , Aitor Marcos.（2022）.International Journal of Hospitality Management, 103255

氣溫上升對滑雪旅遊需求的影響

倪文盛，黃銳*

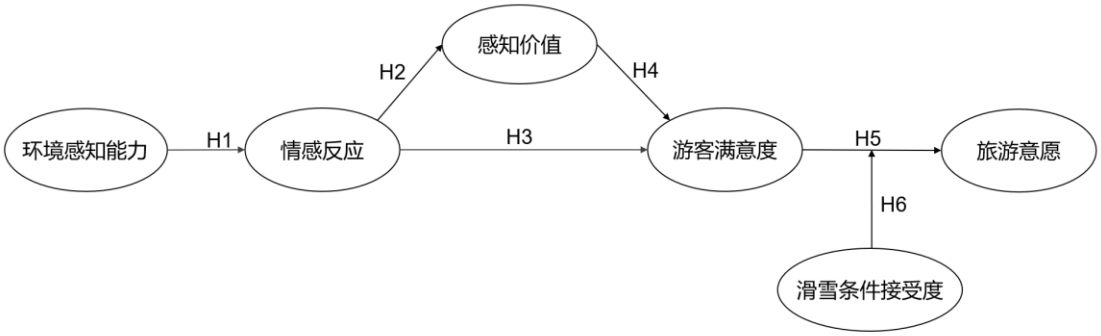
澳門科技大學酒店與旅遊管理學院

*通訊郵箱：1220022471@student.must.edu.mo

摘要

滑雪工業已成為全球許多雪區旅遊地的主要經濟活動之一。然而，這項旅遊活動的可行性在很大程度上取決於氣候條件的年際變化。隨著全球氣候變化的加劇，氣溫上升對滑雪旅遊業的影響日益顯著。儘管當前研究在探討氣溫上升對滑雪場本身的影響上取得一定成果，但對於旅遊滑雪需求方面仍存在許多研究空白。本研究旨在探討氣溫上升如何影響滑雪旅遊的需求，並分析其中的關鍵驅動因素。我們構建了一個結構方程模型（SEM），通過對滑雪場地的氣溫和降雪數據進行分析，並在微信、小紅書、抖音以及嗶哩嗶哩等社交平臺投放問卷，最後結合遊客的調查問卷所得到的數據，以揭示氣溫變化對滑雪條件滿意度、滑雪意願以及整體旅遊需求的影響路徑。本研究以情緒對價值和滿意度影響的研究模型和滿意度與行為意圖之間的結構關係方程為基礎，再次之上引入了滑雪條件接受度作為調節變數。探尋其在滿意度與意願之間的調節作用，這樣不僅豐富了氣候變化對旅遊業影響的理論研究模型，也為滑雪場和相關旅遊企業提供了應對氣候變化的實踐建議。為氣溫上升後滑雪場的持續發展提出了相關的建議滑如雪場開發多樣化的活動專案，提高對氣候變化的適應能力，以維持和提升滑雪旅遊的吸引力。

關鍵字：氣候變化；冬季旅遊場景；滑雪旅遊；環境感知能力；遊客滿意度；滑雪條件接受度



探究服務機器人的外型設計對顧客服務失敗容忍度的影響

付果然，王碩，李俊檳

澳門科技大學酒店與旅遊管理學院

摘要

隨著科技的發展，人工智慧在旅遊業中的應用日益廣泛(Lietal., 2021; Mariani et al., 2023; Saydam et al., 2022) ，在一定程度上提高了 服務的效率和質量。然而，由於技術缺陷導致的服務失敗仍舊頻繁 發生(Lewis & McCann, 2004; Akarsu et al., 2023) 。如何減輕消費者在 遭遇服務失敗時對人工智慧的負面印象和反應是一個值得研究的話 題(Zhang et al., 2022; Lv et al., 2022; Yim et al., 2024) 。通過兩個住客 辦理酒店入住時遭遇服務失敗的情景實驗, 本文深入探討了服務機 器人的外型設計特徵（可愛度與擬人度）對消費者服務失敗容忍度 的影響。

實驗一採用單因素組間設計，對比了消費者對可愛程度不同 （高可愛度 vs 低可愛度）的迎賓機器人在過程失敗時的反應。實 驗結果表明，當消費者面對可愛度高的擬人機器人時能感知到更高 的溫柔及形成更高的能力預期，從而對服務失敗更寬容。實驗二在 控制機器人外型可愛度的基礎上進一步探究了消費者在遭遇結果失 敗時，對擬人化程度不同（高擬人化 vs 低擬人化）的可愛迎賓機 器人容忍度上的差異。研究發現，面對同樣的結果失敗，消費者對 擬人化程度高（低）的可愛迎賓機器人能產生更多（少）的寬容。

機器人擬人化程度對服務失敗容忍度的影響是通過感知溫柔來仲介 的，而能力預期的仲介作用並不顯著。

關鍵詞：服務機器人；容忍度；可愛度；擬人化；感知溫柔；能力預期

參考文獻

[1] Akarsu, T. N., Marvi, R., & Foroudi, P. (2023). Service failure research in the hospitality and tourism industry: A synopsis of past, present and future dynamics from 2001 to 2020. International Journal of Contemporary Hospitality Management, 35(1), 186–217. https://doi.org/10.1108/IJCHM-11-2021-1441

[2] Lewis, B. R., & McCann, P. (2004). Service failure and recovery: Evidence from the hotel industry. International Journal of Contemporary Hospitality Management, 16(1), 6–17. https://doi.org/10.1108/09596110410516516

[3] Li, M., Yin, D., Qiu, H., & Bai, B. (2021). A systematic review of AI technology-based service encounters: Implications for hospitality and tourism operations. International Journal of Hospitality Management, 95, 102930. https://doi.org/10.1016/j.ijhm.2021.102930

[4] Lv, X., Luo, J., Liang, Y., Liu, Y., & Li, C. (2022). Is cuteness irresistible? The impact of cuteness on customers' intentions to use AI applications. Tourism Management, 90, 104472. https://doi.org/10.1016/j.tourman.2021.104472

[5] Mariani, M. M., Hashemi, N., & Wirtz, J. (2023). Artificial intelligence empowered conversational agents: A systematic literature review and research agenda. Journal ofBusiness Research, 161, 113838. https://doi.org/10.1016/j.jbusres.2023.113838

[6] Saydam, M. B., Arici, H. E., & Koseoglu, M. A. (2022). How does the tourism and hospitality industry use artificial intelligence? A review of empirical studies and future research agenda. Journal of Hospitality Marketing & Management, 31(8), 908–936. https://doi.org/10.1080/19368623.2022.2118923

[7] Yim,A., Cui,A. P., & Walsh, M. (2024). The role of cuteness on consumer attachment to artificial intelligence agents. Journal of Research in Interactive Marketing, 18(1), 127–141. https://doi.org/10.1108/JRIM-02-2023-0046

[8] Zhang, T., Feng, C., Chen, H., & Xian, J. (2022). Calming the customers by AI: Investigating the role of chatbot acting-cute strategies in soothing negative customer emotions. Electronic Markets, 32(4), 2277–2292. https://doi.org/10.1007/s12525-022-00596-2

旅遊業如何實現高數字創新績效 ——基於數字創新生態系統的動態 QCA 分析

梁宸源

廣西大學

*通訊郵箱: lcw1183577655@163.com

摘要

數字創新是旅遊業高質量發展的新動能，數字創新生態系統是推動旅遊業數字創新的根本保障。基於數字創新生態系統視角，採用2018-2022年我國省域面板數據，運用動態QCA方法，探索影響旅遊業數字創新的要素及其組態效應。研究發現：數字企業在提升旅遊業數字創新績效中發揮核心作用；有助於旅遊業實現高數字創新績效的路徑有三條，即環境驅動的產學研合作型、資本驅動的多元聯動型和環境支撐的產教融合型，並具備時空序列上的普適性；在時間維度，三條路徑的一致性變化均受到新冠疫情和5G技術的共同影響；在空間維度，組態案例呈現東西部差異。本文揭示旅遊業實現高數字創新績效的路徑，為我國數字創新政策制定以及旅遊業高質量發展的戰略決策提供理論參考。

探討海洋康養旅遊中遊客感知目的地恢復質量對重訪意圖的影響

郭立威，衛作能

澳門科技大學酒店與旅遊管理學院

*通訊郵箱：glw567@qq.com，wzn0207@163.com

摘要

本研究聚焦於海洋康養旅遊背景下，探討遊客對感知目的地恢復品質（PDRQs）的多維認知 如何影響其重訪意圖。基於依戀理論與注意力恢復理論，構建包含五個PDRQs 維度（相容性、 適度性、心理逃離、物理遠離、迷戀）的結構模型，引入難忘的旅遊體驗（MTE）與地方依 戀作為仲介變數，同時納入健康意識作為調節變數。通過在青島地區實地問卷調查獲取數據， 並採用Smart-PLS 4 進行偏最小二乘結構方程建模分析。研究發現：PDRQs 各維度對遊客重 訪意圖具有顯著正向影響，MTE 與地方依戀在其中發揮仲介效應，健康意識對PDRQs 與地方 依戀路徑具有顯著調節作用。預測研究結果豐富了旅遊恢復性環境與行為意圖領域的理論體 系，亦為海洋康養旅遊目的地優化環境設計、激發遊客情感聯結及促進可持續發展提供了實 踐指導。

關鍵字：海洋康養旅遊；感知目的地恢復品質；難忘的旅遊體驗；地方依戀；健康意識；重訪意圖

歸因風格視角下酒店及旅遊領域創業者心理健康差異及干預路徑研究

魏嘉怡

澳門科技大學酒店與旅遊管理學院

摘要

本研究聚焦於歸因風格對酒店及旅遊領域創業者心理健康的影響，旨在揭示不同歸因風格酒店及旅遊領域創業者的心理健康差異及有效干預路徑。在創業過程中，酒店及旅遊領域創業者面臨諸多不確定性與挑戰，歸因風格作為個體對創業事件因果解釋的獨特方式，對其心理健康具有潛在影響，但現有研究對此關注不足。本研究採用分層抽樣與隨機抽樣相結合的方法，選取 300 名不同創業階段的酒店及旅遊領域創業者為樣本，運用歸因風格量表、症狀自評量表（SCL-90）等專業工具收集數據，並通過結構方程模型、方差分析等統計方法進行深入分析。結果顯示，樂觀歸因風格的酒店及旅遊領域創業者在面對創業挫折時，更傾向於將失敗歸因於外部不穩定因素，其心理健康水準顯著高於悲觀歸因風格的酒店及旅遊領域創業者，後者常把失敗歸因為內部穩定因素，易產生焦慮、抑鬱等負面情緒。進一步研究發現，歸因風格通過影響酒店及旅遊領域創業者的應對策略選擇，進而作用於心理健康。基於此，本研究提出針對不同歸因風格酒店及旅遊領域創業者的心理干預路徑，如對悲觀歸因風格酒店及旅遊領域創業者開展認知重構訓練，引導其調整歸因方式，增強心理韌性，為提升酒店及旅遊領域創業者心理健康水準、優化創業環境提供理論與實踐依據。

關鍵詞：酒店及旅遊領域創業者；歸因風格；心理健康；差異分析；干預路徑

基於刺激-有機體-反應模型—AI 生成旅遊短視頻對消費者旅遊意向的影響研究

宋洽，羅聆瑞*

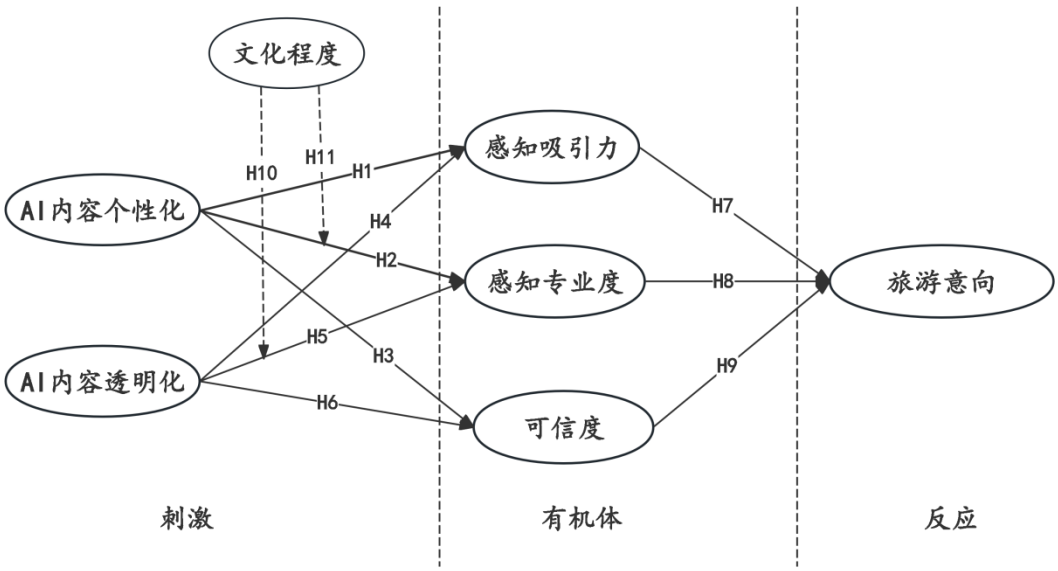
澳門科技大學酒店與旅遊管理學院

*通訊郵箱：2529983233@qq.com

摘要

以往研究集中在社交媒體或人工智慧對消費者旅遊意向影響上，較少關注AI生成短視頻對消費者旅遊意向的影響。本研究採用刺激-有機體-反應模型，將AI內容個性化、AI內容透明化作為刺激，感知吸引力、感知專業度、信任度作為內部變數，旅行意向作為回應，並引入文化水準作為調節變數，探討AI生成短視頻對消費者旅遊意向的影響。研究通過定量調查，對曾經看過AI生成視頻並對其旅遊意向有影響的消費者進行210份問卷調查。研究表明，AI內容個性化和透明化會增強感知吸引力、感知專業度及可信度並提高旅遊意向。同時，調節效應分析表明，變數文化程度對變數AI內容個性化與感知專業度和變數AI內容透明化與感知專業度之間有顯著的調節作用。本研究在旅遊研究領域中引入了AI生成視頻對旅遊意向的影響機制，豐富了刺激-有機體-反應模型的應用場景，強調了調節變數在這一關係中的作用，為相關理論研究提供了新的視角。同時研究結果為數字化旅遊市場行銷提供了重要啟示，啟示目的地政府和當地旅遊機構應加強AI視頻監管，而消費者應綜合性客觀地通過AI產出視頻對旅遊目的地做出選擇。

關鍵字：AI；短視頻；旅遊意向；刺激-有機體-反應模型



澳門“花園城市”與“城市花園”身份的雙重探索：從歷史遺產到現代生態建設的演變

李畢星*

澳門科技大學酒店與旅遊管理學院

*通訊郵箱：lrfprxvx@gmail.com

摘要

本研究探討澳門“城市花園”歷史遺產與“花園城市”現代化轉型的協同發展路徑。澳門依託加思欄花園、盧廉若花園等歷史園林，展現中西文化交融的造園特色，並通過城市歷史景觀（HUL）方法實現歷史城區“不拆遷優化保護”，為世界遺產保護提供創新範式。在現代化進程中，澳門推動綠地功能向複合生態服務轉變，通過垃圾填埋場改造、垂直綠化等項目提升生態承載力，同時以景觀影響評價制度平衡開發與保護矛盾。研究表明，澳門通過文化活化、社區參與及新舊城區分層規劃策略，實現了歷史文化保護與生態現代化的動態融合，其經驗為全球高密度城市可持續發展提供了重要借鑒。

關鍵詞：澳門；城市花園；花園城市；歷史文化遺產保護；城市歷史景觀（HUL）；中葡文化交融；生態轉型；可持續發展；高密度城市；社區參與

整合型 TOD-文化遺產復興框架：車站-城市語境下的空間重構、數字沉浸與多元主體治理的文化遺產活化

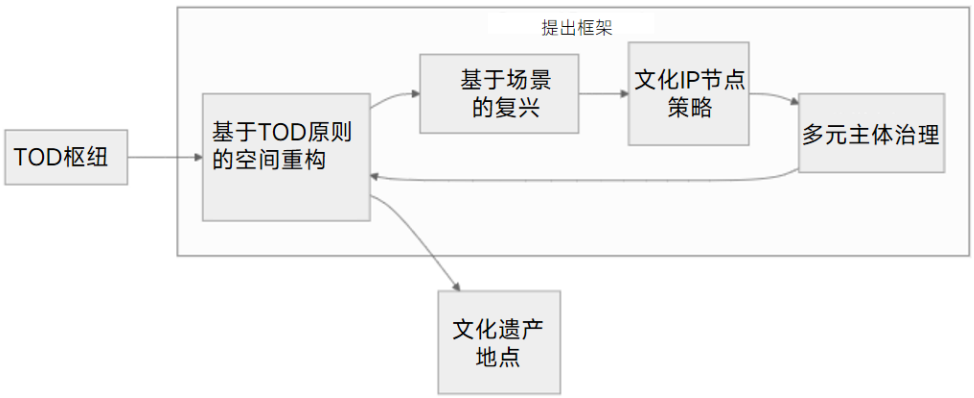
何一行

澳門科技大學酒店與旅遊管理學院

摘要

本文提出一個整合交通導向型發展(TOD)與文化遺產復興的框架，目的在於啟動車站，城市語境中的可利用的文化遺產空間，針對傳統遺產活化中存在的空間功能割裂、體驗形式單一、主體協同不足等局限，構建空間-技術-社會三重創新框架。該框架借助“3C”TOD模型——連通性（Connectivity）-便利性（Convenience）-社區性（Community）——對高鐵站內文化遺產空間進行重新定義，打造多功能樞紐，使遺產地點與交通網絡及本地參與產生聯繫。靜態遺產借助數字增強技術轉化為動態體驗，參與式設計活動則促使遊客角色從單純觀察者變為積極傳播者，此方法更進一步將車站定位為文化IP節點，解碼本地符號的同時整合全球流動，促成身份融合。多元主體治理模型在政府、企業、社區與遊客之間建立協調，平衡保護性發展與創新轉型，從而確保決策適應性。所提框架通過系統結合空間重構、數字沉浸與協作治理推動遺產活化，為可持續城市-文化整合提供可複製模型。

關鍵字：交通導向型發展（TOD）；文化遺產；城市-文化整合；空間重構



参考文献

[1]Bertolini, L., Curtis, C., & Renne, J. (2012). Station area projects in Europe and beyond: Towards transit oriented development?. Built Environment, 38(1), 31-50.

[2]AL-THANI, S. M. A. (2021). TOD'S ROLE IN ENHANCING URBAN QUALITY OF LIFE AND PRESERVING BUILT HERITAGE: THE CASE OF MSHEIREB DOWNTOWN DOHA (Master's thesis).

[3]Zou, M. , Lin, X. , Mao, C. , Zhang, K. , & Li, M. . (2014). Review on the theory and planning principle of transit-oriented development. 3532-3547.

[4]Olsen, D. H. (2003). Heritage, tourism, and the commodification of religion. Tourism recreation research, 28(3), 99-104.

[5]Yang, Y. (2025). Research on the Protection and Renewal of Urban Historical and Cultural Districts from the perspective of Scene Theory-Double Degree, Tongji University (Doctoral dissertation,

Technische Universität Wien).
[6]Rahaman, H. (2018). Digital heritage interpretation: a conceptual framework. Digital creativity, 29(2-3), 208-234.
[7]Juan, L. (2024). An Empirical Study on the Incubation Growth Path and Business Transformation of Cultural Intellectual Property for Chinese Tourism Destination Cities. Journal of Digitainability, Realism & Mastery (DREAM), 3(01), 25-32.
[8]黃衛東, & 蘇茜茜. (2010). 基於tod理論的公交社區建設模式研究——以杭州為例. 城市規劃學刊(S1), 6.
[9]張坦坦, & 戴瑞. (2017). 存量規劃視角下的歷史文化街區復興路徑探索. 城鄉建設(12), 4.
[10]韋亞. (2023). 山地傳統村落活化類型及活化路徑研究——以重慶市傳統村落為例. (Doctoral dissertation, 重慶師範大學).
[11] Dhonju, H. K., Xiao, W., Mills, J. P., & Sarhosis, V. (2018). Share our cultural heritage (SOCH): Worldwide 3D heritage reconstruction and visualization via web and mobile GIS. ISPRS International Journal of Geo-Information, 7(9), 360.
[12] Foroughi, M., de Andrade, B., Roders, A. P., & Wang, T. (2023). Public participation and consensus-building in urban planning from the lens of heritage planning: A systematic literature review. Cities, 135(2023), 104235.

美食旅遊體驗對遊客重遊意願的影響研究——以貴州省凱裏市為例

楊騫，張溯*

澳門科技大學酒店與旅遊管理學院

*通訊郵箱：szhang@must.edu.mo

摘 要

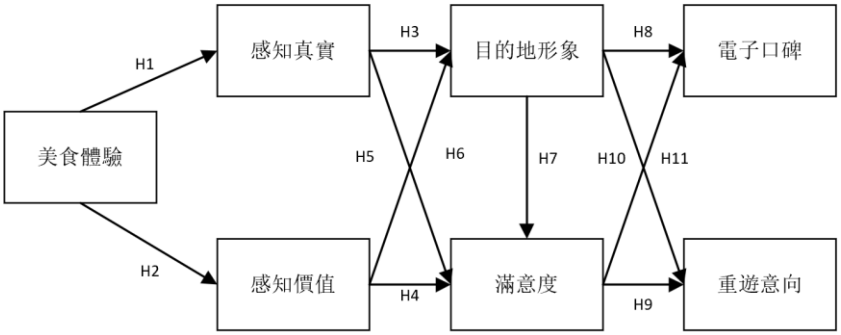
近年來，旅遊產業呈現多元發展態勢，美食旅遊備受遊客青睞，美食從單純的消費品轉變為重要旅遊吸引物。貴州省凱裏市是黔東南苗族侗族自治州首府，匯集16個縣市的特色美食，因此擁有豐富且獨特的美食文化資源，但如何將其轉化為吸引遊客遊覽的動力，有進一步研究的空間。

在此背景下，本研究以貴州省凱裏市為例，基於感知價值理論，聚焦美食體驗對遊客重遊意願和推薦意願的影響。研究首先對美食體驗作出明確定義，即遊客在旅途中因品嚐當地特色美食，參與美食製作等活動所獲得的感官、情感及文化等多方面的綜合體驗 ，並系統梳理了美食體驗對感知真實、感知價值、目的地形象、滿意度、重遊意願、電子口碑的影響，構建研究模型，提出假設。

本研究通過對貴州省凱裏市的遊客展開問卷調查收集數據，並使用SPSS25.0和AMOS23.0軟件對採集數據進行驗證。

本次研究證實了美食體驗通過對影響重遊意願和電子口碑的影響，為美食旅遊發展提供理論支持，有助於目的地優化美食旅遊產品和服務，幫助目的地市場行銷機構指定更有效的宣傳推廣策略，吸引更多遊客，促進目的地旅遊業可持續發展。

關鍵詞：美食體驗；感知真實；感知價值；目的地形象；滿意度、；重遊意願；電子口碑



數據要素配置對旅遊業高質量發展的影響及空間效應

郭巒[12]，彭帥[1*]，梁宸源[1]

[1]廣西大學工商管理學院，廣西南寧530004

[2]廣西發展戰略研究院，廣西南寧530004

[*]通訊郵箱：pengshuai1998@163.com

基金專案：國家社會科學基金專案“數位化創新驅動民族地區旅遊業高質量發展的路徑與支持體系研究”(21BJY193)

摘要

2017年12月，習近平總書記在中央政治局集體學習中指出：“在互聯網經濟時代，數據是新的生產要素，是基礎性資源和戰略性資源，也是重要生產力”。2023年12月，國家數據局文化和旅遊部等17部門聯合印發的《“數據要素×”三年行動計畫（2024—2026年）》強調，要充分發揮數據要素乘數效應，提升旅遊服務水準和治理能力。數據作為數字經濟時代的關鍵生產要素，儼然已成為促進旅遊業高質量發展的重要經濟資源和新質生產力，探究數據要素對旅遊業高質量發展的影響效應具有重要理論和實踐意義。

目前，關於數據要素配置促進產業高質量發展的研究主要集中於以下兩個方面，一方面是理論研究，主要討論數據要素價值實現機制。單純的數據是“可能的生產要素”[1]，數據要素配置則是數據要素生產、流通、應用等過程的綜合體，即數據需要實現“生產要素化”和“配置市場化”的過程[2, 3]。另一方面是實證研究，驗證了數據對經濟高質量發展的異質性、非線性與溢出效應等特徵[4]；一些學者針對農業[5]、製造業[6]等具體產業探究了數據要素在高質量發展中的驅動作用，並比較了數據要素提升不同產業生產率的差異[6, 7]。

綜上所述，學界目前從數據要素影響高質量發展的實現路徑以及其產生的效用進行了充分的理論探討，並以相關產業為例進行開展了實證研究，通過梳理研究結論發現，數據要素配置對經濟發展的作用呈現動態化和差異化的特徵，並存在顯著的外部性特徵。旅遊業作為資訊密集型和資訊依託型產業[8]，其各個環節都高度依賴數據的獲取、處理和傳遞，因此數據要素對旅遊業高質量將會產生多方位多層次的影響，但關於數據要素對旅遊業高質量發展的影響鮮有研究。數據是數字經濟龐大體系中最核心的要素，開展數據要素配置對旅遊業高質量發展影響研究，能夠更深層次、更全方面和更具體地探究數字經濟對旅遊業高質量發展的作用機理，挖掘數字經濟時代旅遊業高質量發展具體路徑，提供更具靶向性建議和理論依據。因此，無論是從理論還是實踐應用上，探究數據要素配置對旅遊業高質量發展影響效應及作用機理，仍是目前亟需解決的科學問題。

鑒於此，本文選取數據要素配置作為核心解釋變數，旅遊業高質量發展作為被解釋變數，融合統計年鑒數據、國家專利數據、網路搜索指數等多源數據構建省域層面數據要素配置和旅遊業高質量發展指標體系，並採用熵權TOPSIS法科學測度2013—2022年中國30個省級行政區數據要素配置和旅遊業高質量發展水準；其次，通過固定效應面板模型、仲介模型、門檻模型以及SDM空間杜賓模型實證分析數據要素配置對旅遊業高質量發展的影響及作用路徑。研究結果表明：（1）數據要素配置對旅遊業高質量發展具有顯著促進作用，已成為數字經濟時代下驅

動旅遊業高質量發展的重要力量。在結論經過一系列內生性檢驗和穩健性檢驗後依舊成立；在區域異質性上，東部地區釋放的數據要素配置紅利相比中西部地區更大；在數據要素配置維度異質性上，數據要素研發、流動和應用能夠顯著促進旅遊業高質量發展，且研發維度作用係數最大，而要素基建維度的負向作用不顯著。（2）數據要素配置對旅遊業高質量發展的影響存在仲介與門檻效應。首先，數據要素配置可以通過提高市場化水準來間接促進旅遊高質量發展，以仲介變數作為門檻變數的回歸結果表明，當市場化水準超過單一門檻值後，數據要素對旅遊業高質量發展的影響會降低。其次，數據要素配置自身也存在門檻效應，當超過單一門檻值後，會弱化對旅遊業高質量發展的促進作用。（3），空間杜賓模型結果證實，數據要素對旅遊業高質量發展具有顯著的負向空間溢出效應，即本地區數據要素配置水準的提高會抑制鄰近地區旅遊業發展水準，產生虹吸效應。本文可能的創新點在於：直觀地提供了新型數據要素對旅遊業高質量發展影響效應及作用路徑的經驗證據，豐富和完善旅遊業高質量發展理論體系；延伸了數據要素對不同產業發展的作用機制及外部性特徵。

關鍵字：數據要素配置；旅遊業高質量發展；門檻效應；溢出效應

參考文獻

[1]謝康, 夏正豪, 肖靜華. 大數據成為現實生產要素的企業實現機制：產品創新視角[J]. 中國工業經濟, 2020, (05): 42-60.
[2]孔豔芳, 劉建旭, 趙忠秀. 數據要素市場化配置研究:內涵解構、運行機理與實踐路徑[J]. 經濟學家, 2021, (11): 24-32.
[3]徐翔, 趙墨非. 數據資本與經濟增長路徑[J]. 經濟研究, 2020, 55(10): 38-54.
[4]王欣亮, 張家豪, 劉飛. 大數據是經濟高質量發展的新引擎嗎？——基於數據基礎設施與技術應用的雙重效應解釋[J]. 統計研究, 2023, 40(05): 103-19.
[5]劉華. 數據要素配置、農業新質生產力與農業高質量發展[J]. 統計與決策, 2024, 40(21): 11-6.
[6]王德祥. 數字經濟背景下數據要素對製造業高質量發展的影響研究[J]. 宏觀經濟研究, 2022, (09): 51-63+105.
[7]陳曉佳, 徐瑋. 數據要素、交通基礎設施與產業結構升級——基於量化空間一般均衡模型分析[J]. 管理世界, 2024, 40(04): 78-98.
[8]楊彥鋒. 互聯網技術成為旅遊產業融合與新業態的主要驅動因素[J]. 旅遊學刊, 2012, 27(09): 7-8.

澳門的文化旅遊魅力何在？基於推拉理論探究其中的遊客動機與行為意向

熊崢灝

澳門科技大學酒店與旅遊管理學院

摘要

澳門作為一個擁有深厚歷史與文化底蘊的目的地，近年來逐漸向文化旅遊轉型。儘管博彩業曾主導其旅遊經濟，但隨著“旅遊+文化”發展戰略的實施，文化旅遊的吸引力逐漸上升。在旅遊研究中，推拉理論被廣泛應用於分析遊客的行為動機。該理論將推動力視為遊客內在的需求，而拉動力則指向目的地所具備的吸引因素。本研究基於推拉理論，探討了遊客的動機及其行為意向，具體分析了推力因素和拉力因素如何影響遊客選擇澳門文化旅遊的決策。本研究通過問卷調查，發放304封問卷，運用相關性分析、廣義線性模型和仲介效應分析的方法，揭示了推力因素和拉力因素的交互作用如何影響遊客的目的地忠誠度和文化保護意圖。研究發現，文化體驗動機與目的地的拉力均對遊客的忠誠度和文化保護意圖產生顯著的正向影響。這表明，遊客不僅因文化旅遊的獨特魅力而重遊澳門，還更願意支持文化遺產的保護。本研究為澳門文化旅遊的推廣與可持續發展提供了理論支援，並為相關政策的制定提供了實證依據。通過深入分析遊客的動機與行為意向，本研究為澳門在文化旅遊領域的未來發展提供了重要的參考。

關鍵字：澳門文化旅遊，推拉理論，遊客動機，行為意向，目的地忠誠度，文化保護意圖

虛擬現實技術品質感知對主題公園遊客遊後行為意向影響研究

郭巒[1 2] 唐可昕[1]，鞏麗朵[1*]

[1]廣西大學 工商管理學院

2廣西發展戰略研究院

[*]通訊郵箱：775685022@qq.com

基金項目：國家社會科學基金項目（21BJY193）

摘要

本研究以中國首個5G+VR主題樂園為案例，結合紮根理論與結構方程模型，揭示VR技術品質（系統、內容、服務）通過臨場感和體驗品質影響遊客遊後行為意向的鏈式機制。結果表明，內容品質對行為意向的直接效應最強（β=0.580），臨場感的仲介效應占比7.88‰ 研究為文旅場景的VR技術優化提供了可落地的設計框架。

元宇宙是當前世界各國前瞻佈局數字經濟的重要領域。它是利用科技手段進行鏈接與結合的，與現實世界映射與交互的虛擬世界，是一種新型社會體系的數字生活空間。虛擬現實技術 (Virtual Reality)，也稱為VR技術，作為構建元宇宙的關鍵性技術，將重新組合生產要素，建構新場景、新情境，改變消費者的行為模式。為了破解這一關鍵核心環節，國家有關部門出臺了《虛擬現實與行業應用融合發展行動計畫（2022-2026年）》，大力支持在文化旅遊、融合媒體、教育培訓、體育健康等領域的虛擬現實應用。在此背景下，主題公園作為先導者，如火如荼地開展起虛擬現實旅遊實踐。總結主題公園虛擬現實旅遊應用的成效，成為當前亟待解決的問題。

在旅遊體驗中，遊客遊後行為意向一直是學者們關注的焦點。現有研究已經探討了目的地形象、體驗品質、他人互動等外在因素，情緒、態度、內化感知、滿意度等內在因素，與遊客遊後行為意向的關係。虛擬現實技術的引入，為這一研究領域提供了新的切入點，虛擬現實技術與遊客遊後行為意向的關係也受到了重視，但是主要集中在現象描述上，鮮少解釋其內在機理。因此，探究虛擬現實技術品質感知對遊客遊後行為意向的影響，將有力揭示虛擬現實技術與旅遊產業的融合創新路徑，構建虛擬現實旅遊的效果機理，推動旅遊經濟高質量發展，具有非常重要的理論意義和現實價值。

本研究基於“刺激-機體-反應”（SOR）理論框架，整合體驗經濟理論的效用遞進原則與臨場感理論的技術-心理交互機制，構建了虛擬現實主題公園場景下“技術刺激-心理機體-行為反應”的鏈式傳導模型。模型以虛擬現實技術品質感知（系統/內容/服務品質）為外源性刺激變數，臨場感與遊客體驗品質為內生仲介變數，遊後行為意向為終端回應變數，系統解構了“技術屬性→心理沉浸→行為轉化”的層級作用路徑。值得強調的是，模型通過引入多模態感官模擬（Multi-modal Sensory Simulation）與動態內容生成演算法（Dynamic Content Generation Algorithm）作為技術調節因數，突破了傳統SOR模型對技術細粒度表徵的忽視，為揭示沉浸式技術對遊客行為的非線性驅動效應提供了新的理論錨點。

同時，本研究立足文旅產業數位化轉型的前沿，以國家級5G+VR技術集成示範區

——柳州So Real煥真螺樂園為實證錨點，突破性地揭示虛擬現實技術品質感知通過“臨場感—體驗品質”鏈式仲介效應驅動遊客行為意向的多維機制，填補了沉浸式技術賦能旅遊業態的理論—實踐轉化路徑研究空白。沉浸式技術品質作為遊客遊後行為意向的核心驅動杠杆，需通過系統-內容-服務三維協同優化，嵌入主題公園數位化轉型的戰略優先順序，構建“技術-體驗-行為”傳導路徑的閉環管理框架。

未來研究可結合區塊鏈技術實現分佈式算力共用，並通過神經科學實驗（如EEG腦電監測）優化人機交互舒適度，構建“技術-生理-行為”的全要素管理模型。

關鍵字：虛擬現實技術品質；遊後行為意向；臨場感；遊客體驗品質；主題公園

參考文獻

[1]Guttentag, D., et al. (2021). Virtual reality in tourism: A status quo analysis. Journal of Travel Research, 60(3), 420-435.
[2]Wei, W., Qi, R., & Zhang, L. (2023). From immersion to loyalty: Chain mediation effects of presence and experience quality in VR tourism. Annals of Tourism Research, 99, 103555.
[3]WEI W, QI R, ZHANG L. Effects of virtual reality on theme park visitors' experience and behaviors: A presence perspective[J]. Tourism Management, 2019,71(APR.): 282-293.
[4]Hosany, S., Prayag, G., Van der Veen, R., Huang, S., & Deesilatham, S. (2020). Hedonic consumption experience in tourism: Emotional antecedents and behavioral consequences. Journal of Travel Research, 59(4), 693-708.
[5]BIGNÉ J E, SÁNCHEZ M I, SÁNCHEZ J. Tourism image, evaluation variables and after purhase behaviour: Inter-relationship[J]. Tourism Management, 2001,22(6): 607-616.
[6]Rahmani, K., Kock, N., & Josiassen, A. (2021). Narrative-driven experience design and its impact on tourist word-of-mouth. Annals of Tourism Research, 89, 103256.
[7]ZEITHAML V A, BERRY L L, PARASURAMAN A. The Behavioral Consequences of Service Quality[J]. Journal of Marketing, 1996,60(2): 31-46.
[8]Huang, S., & Liu, Y. (2023). From virtual experience to loyalty: How VR tourism reshapes post-visit behavioral intentions. Journal of Travel Research, 62(3), 512-530.

旅遊商業化中文化迷失：原真性視角下傳統服飾體驗評價研究

羅清揚，許子悅

澳門科技大學酒店與旅遊管理學院

摘要

文化旅遊目的地往往與傳統民族服飾緊密相連，在商業化過程中遊客民族服飾體驗形成產業鏈。但是非物質文化遺產與商業化之間存在結構性矛盾，背離文化旅遊景觀原真性的觀念。在旅遊景區商業化進程中，脫離宣傳當地民族服飾，會遭成文化原真性流失。然而，商業化又被認為是旅遊地發展和傳播文化的重要手段。從建構主義立場出發，在原真性視角下開展傳統服飾體驗研究評價，探索該產業鏈商業化帶來的風險。本文以肇興侗寨為案例，針對遊客偏好選擇非當地民族傳統服飾導致“服飾文化空心化”現象，通過驗證性因數分析方法構建原真性視角下的文化關聯性的評價維度，明確了傳統服飾體驗與當地文化的關聯性：讓遊客體驗傳統服飾初衷向好，但在商業化進程中融入了多民族傳統服飾，並不利於宣傳當地民族文化，反而造成遊客的認知失調，影響遊客原真性體驗；傳統服飾體驗可以商業化，但需要因地制宜，與當地民族文化相符。

關鍵詞：文化迷失；原真性；傳統服飾；旅遊體驗；旅遊商業化

參考文獻：

[1]周其樓.(2023).原真性視域下文化旅遊景觀商業化評價研究. 社會科學家(09),63-70.

[2]孔維剛 & 張平.(2017).原真性視閾下的我國少數民族非物質文化遺產保護模式與博弈分析. 蘭州大學學報(社會科學版)(04),170-174. doi:10.13885/j.issn.1000-2804.2017.04.020.

“鄉”得“意”彰：基於 LDA 和紮根理論的永州鄉村旅遊地意象研究

李敏瑩

湖南師範大學旅游學院

摘要

鄉村旅遊已成為國內旅遊的一種重要模式，而鄉村旅遊意象則是構成鄉村旅遊的核心吸引力。該文以“瀟湘之源”湖南永州為例，基於網路遊記數據，綜合運用LDA主題模型與紮根理論，分析鄉村旅遊地要素特徵，構建鄉村旅遊意象概念模型，旨在為後續鄉村旅遊地意象的測量和評價研究提供理論依據。研究發現：（1）旅遊者對永州鄉村旅遊地意象要素的感知表現出形成歷史與當下、生態與人文、守真與發展相結合的特徵；（2）鄉村旅遊地整體意象的具體由鄉村景觀意象、鄉村文化意象、地方意象、服務意象及情感意象五大維度構成；（3）基於鄉村旅遊地整體意象提出以鄉村景觀續脈、以鄉土文化賦魂、以守真立命、以服務築基、以情感著魅五大方向為目的地的行銷與管理提供借鑒。

關鍵字：鄉村旅遊意象；鄉村旅遊；LDA模型；紮根理論；湖南永州

參考文獻

[1]GARTNER W C. Image formation process[J]. Journal of Travel&Tourism Marketing, 1994, 2 (2-3) :191-216.

[2]BALOGLU S, BRINBERG D. Affective images of tourism destinations[J]. Journal of Travel Research, 1997, 35 (4) :11-15.

[3]AGAPITO D, VALLE P O D, MENDES J D C. The cognitiveaffective-conative model of destination image:A confirmatory analysis[J]. Journal of Travel&Tourism Marketing, 2013, 30 (5) :471-481.

[4]BEERLI A, MARTÍN J D. Tourists’characteristics and the perceived image of tourist destinations:A quantitative analysis-a case study of Lanzarote, Spain[J]. Tourism Management, 2004, 25 (5) :623-636.

[5]LIN C H, MORAIS D B, KERSTETTER D L, et al. Examining the role of cognitive and affective image in predicting choice across natural, developed, and theme-park destinations[J].Journal of Travel Research, 2007, 46 (2) :183-194.

[6]Stylidis D, Shani A, Belhassen Y. Testing an integrated destination image model across residents and tourists[J]. Tourism management, 2017, 58: 184-195.

[7]MARTIN H S, BOSQUE I A R D. Exploring the cognitive-affective nature of destination image and the role of psychological factors in its formation[J]. Tourism Management, 2008, 29 (2) :263-277.

[8]HUNT J D. Image as a factor in tourism[J]. Journal of Travel Research, 1975, 13 (3) :1-7.

[9]Chang T C, Lim S Y. Geographical Imaginations of‘New AsiaSingapore’[J]. Geografiska Annaler, 2010, 86 (3) :165-185.

[10]陸利軍，廖小平．基於UGC數據的南嶽衡山旅遊目的地形象感知研究[J]．經濟地理，2019,39(12):221-229.

[11]GLASER B G,STRAUSS A L. The Discovery of Grounded Theory:Strategies for Qualitative Research[M]. New Brunswick:Aldine Transaction,1967.

[12]餘構雄，曾國軍．都市旅遊體驗的一個理論探索：以廣州珠江夜遊為例[J]．經濟管理，2019,41(6):140-156.

[13]劉衛梅,林德榮.鄉村旅遊體驗場景對心理恢復的作用機制研究——兼論地方依戀的仲介作用[J].旅遊學刊,2024,39(03):106-118.

[14]崔鳳軍.實現鄉村旅遊可持續發展需要正確把握的七個關係[J].中國人口·資源與環境,2006,(06):202-206.

[15]陶玉霞.傳統鄉村根性意象旅遊感知的實證研究——以郭亮村為例[J].河南師範大學學報(哲學社會科學版),2017,44(04):69-73.

[16]尤海濤,馬波,陳磊.鄉村旅遊的本質回歸:鄉村性的認知與保護[J].中國人口·資源與環境,2012,22(09):158-162.

[17]盧新元,許姣,張恒等.多社交媒體平臺環境下用戶搖擺行為研究——基於紮根理論的探索[J].

情報理論與實踐,2022,45(9):127-134.

消費者環境責任感對綠色酒店溢價支付意願的影響

劉姍姍

湖南師範大學

摘要

在“雙碳 ”目標與生態文明建設背景下，酒店行業“漂綠 ”行為導致 消費者信任缺失，阻礙環境責任感向支付意願轉化。研究基於規範啟動理論、認 知反應理論與感知價值理論，構建“消費者環境責任感-綠色感知價值—綠色酒 店溢價支付意願 ”理論模型，引入環境懷疑作為調節變數，通過問卷調查收集數 據，運用結構方程模型進行實證分析。結果表明：消費者環境責任感對綠色酒店 溢價支付意願呈顯著正向影響，同時正向影響綠色感知價值；綠色感知價值亦正 向作用於溢價支付意願。進一步分析發現，綠色感知價值在環境責任感與溢價支付意願間發揮部分仲介作用；環境懷疑的負向調節效應未達顯著水準，但分組回歸顯示，低環境懷疑群體中環境責任感對溢價支付意願的驅動效應更突出。本研究拓展了消費者環境責任感在酒店服務場景的應用，深化綠色消費行為理論內涵，為綠色酒店增強消費者信任、提升溢價支付意願提供理論支撐，推動酒店行業實現低碳發展與經濟效益的協調統一。

關鍵字：環境責任感；綠色感知價值；環境懷疑；溢價支付意願

生態旅遊體驗要素對感知價值及行為意圖的影響-以環境意識的仲介作用為中心-

張蒙蒙，武揚，강상국(Sangguk KANG)

國立江陵原州大學旅遊管理系

摘要

生態旅遊通過保護自然和文化，提供與環境和諧共生的獨特旅遊體驗。近年來，隨著人們生活節奏的加快，生態旅遊逐漸受到關注。人們渴望遠離城市喧囂，享受大自然的寧靜與美麗。生態旅遊不僅滿足了遊客的休閒需求，還促進了可持續發展和環境保護，成為現代旅遊的趨勢之一。本研究採用定量研究方法，以中國河南省白雲山國家森林公園的遊客為對象，探討生態旅遊體驗要素對遊客感知的生態旅遊價值及行為意圖的影響關係，並驗證環境意識的仲介作用。研究結果如下：首先，生態旅遊體驗要素的各子因素對感知價值中的功能價值產生正向影響。娛樂體驗、教育體驗和審美體驗對情感價值具有正向影響，逃離體驗對情感價值無顯著影響。娛樂體驗和教育體驗對認知價值產生正向影響，審美體驗和逃離體驗對認知價值無顯著影響。其次，功能價值和認知價值對環境意識有顯著正向影響，情感價值對環境意識的影響不顯著。第三，功能價值、情感價值和認知價值均對行為意圖產生顯著正向影響，環境意識也對行為意圖有顯著正向影響。最後，環境意識在情感價值與行為意圖之間起部分仲介作用，但功能價值和認知價值與行為意圖之間沒有顯著的仲介效應。

基於研究結果，本研究為制定生態旅遊可持續性政策、促進遊客環保行為的戰略提供了有價值的參考資料，並為未來中國生態旅遊地的開發方向和專案設計提供了建議。

關鍵字：生態旅遊體驗要素；感知價值；環境意識；行為意圖

數字“增”綠：數位化轉型與旅遊企業碳排放效率

林軼，齊鑫

廣西大學 工商管理學院，廣西 南寧 530004

摘要

隨著社會對可持續發展問題的關注不斷增加，減少溫室氣體排放已成為全 球共識。作為世界經濟的重要組成部分，旅遊業發展所引致的碳排放量不容小覷。 在遊客往返於常住地和目的地的過程中，旅遊活動的每個環節都伴隨著大量的能源消耗。作為旅遊經濟中最具活力的市場主體，旅遊企業不但是旅遊服務的供應商，更是綠色發展理念的踐行者，在旅遊業的整體降碳中扮演著至關重要的角色。只有旅遊企業積極採取降碳措施，才能從源頭上減少旅遊活動對環境的影響，推動全行業向綠色、高效、可持續方向轉型。因此，如何在滿足旅遊消費需求的同時盡可能地減少二氧化碳排放，已經成為旅遊企業亟待回答的時代之問。

數字技術的廣泛應用為“雙碳”目標的如期實現創造了新的“機會之窗”。 在數位化技術為綠色化目標提供底層支持的同時，綠色化目標同樣為數字化技術 指明了改進方向。在這一背景下，釋放數位化轉型在旅遊減排方面的巨大潛能， 不但是旅遊企業實現高質量發展的戰略選擇，更是企業邁向綠色未來的必由之路。只有積極擁抱綠色化發展，旅遊企業才能更好地適應瞬息萬變的市場需求，錨定“雙碳”政策部署，實現長期穩定的可持續發展。

為揭示數位化轉型與旅遊企業碳排放效率之間的因果關聯，本文以 2010- 2022 年我國A 股旅遊上市公司為研究樣本，基於文本分析法和 Super-SBM 模型 分別構建數位化轉型和企業碳排放效率的衡量指標，深入剖析了數位化轉型對旅遊企業碳排放效率的影響及其傳導機理。研究結果表明：（1）數位化轉型對旅遊企業碳排放效率存在顯著的提升作用，且這一結論在經過一系列穩健性檢驗，以及運用工具變數法處理內生性問題後依然可靠。（2）機制分析發現，旅遊企業的數位化轉型可以從改進技術手段、提升人力資本水準和改善融資環境三個渠道提升旅遊企業的碳排放效率。（3）異質性分析顯示，數位化轉型在旅遊企業中的降碳效能在不同的內外部情景下存在顯著差異。從企業特徵的視角看，旅遊企業數位化轉型對其碳排放效率的正向影響在國有、政策經濟不確定性感知較高的旅遊企業中更為顯著；從區域條件的視角看，旅遊企業所處的地區的數字關注度越高、環境規制越強，越有助於數位化轉型降碳效能的釋放。

基於上述實證結果，本文從企業和政府兩個維度提出對策建議，以期為旅遊 企業在數字時代下更好地實現脫碳轉型、兌現環境社會承諾提供經驗啟示和決策參考。從企業的角度看， 首先，數位化轉型是賦能旅遊企業降碳擴綠、優化收益的重要引擎，旅遊企業應樹立對於數位化轉型的正確認知，積極回應國家“雙碳”目標願景，制定科學的轉型戰略，積極尋求轉型機遇；其次，機制檢驗結果表明，技術手段的革新、人力資本的優化、融資環境的改善是數位化轉型釋放減碳潛力的重要環節，旅遊企業應借助數字技術實現企業整體的系統性變革，暢通數位化轉型與企業碳排放效率間的作用管道；最後，旅遊企業在追逐“雙碳”目標的過程中要結合自身特點，制定針對性的發展策略，從而最大限度地釋放數位化轉型的降碳潛能。從政府的角度看，地方政府應需加強整體統籌，進一步提升對數字中國建設的重視程度，因地制宜地出臺綜合性支持政策，為旅遊企業通過實現“數字降碳 ”提供有力支持。同時，政府應繼續發揮環境規制在旅遊企業“雙化協同”中的賦能作用，明確旅遊碳排放的行業標準，設定清晰、可執行的環境考核指標，

使旅遊碳足跡有“跡”可循，為旅遊企業的低碳轉型指明方向。

關鍵字：旅遊企業；數位化轉型；碳排放效率；TOE；框架

參考文獻

[1] SUN Y Y, HIGHAM J. Overcoming information asymmetry in tourism carbon management: The application of a new reporting architecture to aotearoa new Zealand [J]. Tourism Management, 2021, 83: 104231.
[2] GöSSLING S, HUMPE A, SUN Y Y. On track to net-zero? Large tourism enterprises and climate change [J]. Tourism Management, 2024, 100: 104842.
[3] 畢金玲, 董淑悅. 數位化轉型能助力文旅公司績效提升嗎？ [J]. 旅遊學刊, 2023, 38(09): 91-103.
[4] HU B, FAN S, ZHANG K. Does digital transformation exacerbate or mitigate maturity mismatch in hospitality and tourism firms? [J]. International Journal of Hospitality Management, 2024, 123: 103915.
[5] 吳非, 胡慧芷, 林慧妍, 等. 企業數位化轉型與資本市場表現——來自股票 流動性的經驗證據 [J]. 管理世界, 2021, 37(07): 130-144+110.
[6] PLANGGER K, GREWAL D, DE RUYTER K, et al. The future of digital technologies in marketing: A conceptual framework and an overview [J]. Journal of the Academy of Marketing Science, 2022, 50(6): 1125-1134.
[7] NAMBISAN S, WRIGHT M, FELDMAN M. The digital transformation of innovation and entrepreneurship: Progress, challenges and key themes [J]. Research Policy, 2019, 48(8): 103773.
[8] GUO X, LI M, WANG Y, et al. Does digital transformation improve the firm’s performance? From the perspective of digitalization paradox and managerial myopia [J]. Journal of Business Research, 2023, 163: 113868.
[9] 戴翔, 楊雙至. 數字賦能、數字投入來源與製造業綠色化轉型 [J]. 中國工業 經濟, 2022, (09): 83-101.
[10] ZHANG J, YU C-H, ZHAO J, et al. How does corporate digital transformation affect green innovation? Evidence from China's enterprise data [J]. Energy Economics, 2025, 142: 108217.
[11] GALVIN R. The ICT/electronics question: Structural change and the rebound effect [J]. Ecological Economics, 2015, 120: 23-31.
[12] BIESER J C T, HINTEMANN R, HILTY L M, et al. A review of assessments of the greenhouse gas footprint and abatement potential of information and communication technology [J]. Environmental Impact Assessment Review, 2023, 99: 107033.
[13] CHEN S, PARAMAIAH C, KUMAR P, et al. Toward sustainable tourism: Insights from green financing and renewable energy [J]. Energy Strategy Reviews, 2025, 57: 101618.
[14] ZHANG J, ZHANG Y. Carbon tax, tourism CO2 emissions and economic welfare [J]. Annals of Tourism Research, 2018, 69: 18-30.
[15] 王凱, 關銳, 甘暢. 低碳試點是否有助於提高旅遊業碳排放效率？——基於 雙重差分的實證檢驗 [J]. 中國人口 · 資源與環境, 2023, 33(11): 47-56.
[16] WANG L, ZHAO H, LIU J, et al. How does the digital economy affect carbon emissions from tourism? Empirical evidence from China [J]. Journal of Cleaner Production, 2024, 469: 143175.
[17] 王凱, 何靜, 甘暢, 等. 中國旅遊產業結構變遷對旅遊業碳排放效率的空間 溢出效應研究 [J]. 中國軟科學, 2022, (12): 50-60.
[18] PENG H, ZHANG J, LU L, et al. Eco-efficiency and its determinants at a tourism destination: A case study of Huangshan national park, China [J]. Tourism Management, 2017, 60: 201-211.
[19] ERDOGAN S, GEDIKLI A, CEVIK E I, et al. Eco-friendly technologies, international tourism and carbon emissions: Evidence from the most visited countries [J]. Technological Forecasting and Social Change, 2022, 180.
[20] SUN Y Y. Decomposition of tourism greenhouse gas emissions: Revealing the dynamics between tourism economic growth, technological efficiency, and carbon emissions [J]. Tourism Management, 2016, 55: 326-336.
[21] STJEPIĆ A-M, PEJIĆ BACH M, BOSILJ VUKŠIĆ V. Exploring risks in the adoption of business intelligence in SMES using the toe framework [J]. Journal of Risk and Financial Management, 2021.

[22] 劉俊, 曹恩桓, 楊璐瑜. 科技創新賦能旅遊業實現“雙碳”目標 [J]. 旅遊學 刊, 2023, 38(11): 13-14.
[23] SIGALA M. The information and communication technologies productivity impact on the UK hotel sector [J]. International Journal of Operations & Production Management, 2003, 23(10): 1224-1245.
[24] TANG R. Digital economy and total factor productivity of tourism enterprises in China: The perspective of market competition theory [J]. Current Issues in Tourism, 2024, 27(1): 76-91.
[25] 戚聿東, 肖旭. 數字經濟時代的企業管理變革 [J]. 管理世界, 2020, 36(06): 135-152+250.
[26] 姚雲浩, 高啟傑. 網路關係嵌入、創新擴散與旅遊企業創新績效 [J]. 旅遊科 學, 2014, 28(05): 68-78.
[27] SOLBERG E, TRAAVIK L E M, WONG S I. Digital mindsets: Recognizing and leveraging individual beliefs for digital transformation [J]. California Management Review, 2020, 62(4): 105-124.
[28] 文藝, 李何姍, 張磊. 數字基礎設施、技術創新與能源消費低碳化 [J]. 經濟 地理, 2024, 44(09): 144-152.
[29] CANTORE N, CHENG C F C. International trade of environmental goods in gravity models [J]. Journal of Environmental Management, 2018, 223: 1047-1060.
[30] TURBAN D B, GREENING D W. Corporate social performance and organizational attractiveness to prospective employees [J]. Academy of management journal, 1997, 40: 658-672.
[31] GRAYER, BALMER J M T. Managing corporate image and corporate reputation [J]. Long Range Planning, 1998, 31(5): 695-702.
[32] 劉長生, 簡玉峰, 尹華光. 旅遊信用、人力資本與旅遊產業發展 [J]. 旅遊學 刊, 2009, 24(11): 13-20.
[33] 肖土盛, 孫瑞琦, 袁淳, 等. 企業數位化轉型、人力資本結構調整與勞動收入 份額 [J]. 管理世界, 2022, 38(12): 220-237.
[34] 張運來, 王儲, 王峰娟. 旅遊企業多元化類型與融資約束——基於 2005 ~ 2013 年 A 股旅遊業上市公司數據的實證研究 [J]. 旅遊科學, 2016, 30(03): 28-43.
[35] ANTONIO DURO J, PEREZ-LABORDA A, TURRION-PRATS J, et al. Covid-19 and tourism vulnerability [J]. Tourism Management Perspectives, 2021, 38: 100819.
[36] 孫潔, 李傑. 大數據應用、融資約束和企業創新效率 [J]. 證券市場導報, 2022, (11): 13-23.
[37] 王馨. 互聯網金融助解“長尾”小微企業融資難問題研究 [J]. 金融研究, 2015, (09): 128-139.
[38] CHU S, CHEN L, LIU Y. Does industrial agglomeration curb corporate carbon emissions? A perspective of financial constraints [J]. International Review of Economics & Finance, 2024, 96: 103673.
[39] TAN Y, ZHU Z. The effect of ESGrating events on corporate green innovation in China: The mediating role of financial constraints and managers' environmental awareness [J]. Technology in Society, 2022, 68: 101906.
[40] 王彩萍, 普涵藝, 代姍姍. 女性高管會提升旅遊企業績效嗎？——來自旅遊 上市公司的經驗研究 [J]. 旅遊學刊, 2020, 35(02): 26-37.
[41] QIU S, JIANG J, LIU X, et al. Can corporate social responsibility protect firm value during the covid-19 pandemic? [J]. International Journal of Hospitality Management, 2021, 93: 102759.
[42] PENG H, ZHANG J, ZHONG S, et al. Corporate governance, technical efficiency and financial performance: Evidence from Chinese listed tourism firms [J]. Journal of Hospitality and Tourism Management, 2021, 48: 163-173.
[43] WANG J, LI J, ZHANG Q. Does carbon efficiency improve financial performance? Evidence from Chinese firms [J]. Energy Economics, 2021, 104: 105658.
[44] 謝園方, 趙媛. 長三角地區旅遊業能源消耗的 CO2 排放測度研究 [J]. 地理 研究, 2012, 31(03): 429-438.
[45] SHANG Y, RAZA S A, HUO Z, et al. Does enterprise digital transformation contribute to the carbon emission reduction? Micro-level evidence from China [J]. International Review of Economics & Finance, 2023, 86: 1-13.
[46] ZHANG J, LI Y, XU H, et al. Can ESG ratings mitigate managerial myopia? Evidence from Chinese listed companies [J]. International Review of Financial Analysis, 2023, 90: 102878.
[47] 方明月, 林佳妮, 聶輝華. 數位化轉型是否促進了企業內共同富裕?——來自 中國 A 股上市公司的證據 [J]. 數量經濟技術經濟研究, 2022, 39(11): 50-70.

[48] 趙璨, 陳仕華, 曹偉. “互聯網+”資訊披露：實質性陳述還是策略性炒作——基於股價崩盤風險的證據 [J]. 中國工業經濟, 2020, (03): 174-192.
[49] CHEN W. Can low-carbon development force enterprises to make digital transformation? [J]. Business Strategy and the Environment, 2023, 32(4): 1292- 1307.
[50] LEWBEL A. Constructing instruments for regressions with measurement error when no additional data are available, with an application to patents and R&D [J]. Econometrica, 1997, 65(5): 1201-1213.

基於服務設計理論下影響 Brunch 餐廳服務體驗分析

寧震昆

西安華輻射檢測技術有限公司

摘要

目的：自新冠疫情結束以來，餐飲行業的服務質量研究逐漸增多，但缺乏從系統性整體視角進行的分析。隨著市場的不斷擴展，本研究旨在識別並分析影響 Brunch 餐廳顧客體驗的關鍵因素。通過比較不同類型餐廳的服務質量與顧客滿意度，研究揭示了消費者感知存在顯著差異。本研究的核心目標是優化 Brunch 餐廳的服務流程，並探討其對品牌認同及二次消費行為的影響因素。方法：本研究採用紮根理論（GT）作為主要研究方法，結合實地考察、用戶評論分析和深度訪談，對五傢俱有代表性的 Brunch 餐廳進行了多維度調研。通過構建三級編碼影響因素模型，本研究向喜愛早午餐（Brunch）的顧客發放了在線電子問卷，使用系統抽樣方法共收集 432 份有效樣本。研究採用探索性因數分析（EFA）和驗證性因數分析（CFA）對消費行為假設進行了驗證。發現：研究發現，有形資產、顧客服務、支持保障、餐廳管理和效率滿意五個核心因素共同構成了 Brunch 餐廳服務體驗的關鍵驅動體系。基於探索性因數分析的結果，驗證性因數分析進一步確認了模型結構的有效性。研究表明，環境性因數與創新性因數僅對餐廳服務產生一般性影響，而保證性因數、價值性因數及深入性因子則顯著影響顧客選擇餐廳的行為。研究局限性：本研究採用問卷調查法，可能存在樣本抽樣偏差的潛在問題，建議未來研究通過擴大樣本量或採用其他數據收集方式以提高研究的外部效度。原創性：本研究首次將紮根理論應用於餐飲管理領域，通過定性與定量方法相結合，對餐廳服務標准進行系統分析，驗證研究假設，從而確保了模型的科學性與准確性。

關鍵詞：Brunch 餐廳；服務設計；紮根理論；因數分析；混合研究

參考文獻

[1] Davis, M.M. and Heineke, J. (1998), "How disconfirmation, perception and actual waiting times impact customer satisfaction ", International Journal of Service Industry Management, Vol. 9 No. 1, pp. 64-73.

[2] Pedraja Iglesias, M. and Jesus Yagüe Guillén, M. (2004), "Perceived quality and price: their impact on the satisfaction of restaurant customers ", International Journal of Contemporary Hospitality Management, Vol. 16 No. 6, pp. 373-379.

[3] Sabbir Rahman, M. (2012), "Dynamics of consumers ' perception, demographic characteristics and consumers ' behavior towards selection of a restaurant: an exploratory study on Dhaka city consumers ", Business Strategy Series, Vol. 13 No. 2, pp. 75-88.

[4] Luoh, H.-F. and Tsaur, S.-H. (2024), "Looking good and sounding right: a scale development of aesthetic labor in the hospitality industry ", Journal of Hospitality and Tourism Insights, Vol. 7 No. 2, pp. 1263-1281.

[5] Ge, L., Tang, C.-H.(H)., Behnke, C. and Ghiselli, R. (2024), "Palate vs plate: segmenting restaurant consumers through food quality and portion size trade-offs ", Journal of Hospitality and Tourism Insights, Vol. 7 No. 4, pp. 2367-2383.

[6 Suttikun, C., Mahasuweerachai, P. and Bicksler, W.H. (2025), "Back to the table: how omnichannel social media marketing returns customers to restaurant locations ", International Journal of Contemporary Hospitality Management, Vol. 37 No. 3, pp. 956-975.

[7] 苗淩雲.淺談“用戶滿意度”新理念[J]. 中國郵政,1998,(12):15-16. 《2025 年餐飲產業現狀及發展趨勢分析》郭夢 2024.12.07 https://www.chinairn.com/hyzx/20241227/160438891.shtml

[8] 李子晨.地域特色為精緻餐飲提供增長新空間[N]. 國際商報,2025-01-09(002). A Brief History of Brunch， Andrea Victory，
https://www.touchbistro.com/blog/a-brief-history-of-brunch/
[9] Fiona ,Samantha .Brunch 與雞蛋密不可分[J].美食,2020,(02):19-20.
[10] Anderson, E.W. & Sullivan, M.W. (1993) The Antecedents and Consequences of Customer Satisfaction for Firms. Marketing Science. [Online]. 12 (2) pp.125 –
143. Available from: doi:10.1287/mksc.12.2.125.
[11] 黄堅平,李晉明.用戶滿意理念及用戶滿意度指數在中國的應用[J].北京商學院學報,2000,(05):60-63.DOI:10.16299/j.1009-6116.2000.05.017.
[12] 謝贊,趙平.構成型模型在用戶滿意度測量模型中的應用[J].南開管理評論,2005,(02):4-8.
[13] 顧永強.員工滿意度關乎企業成敗[J].企業文化,2010,(04):28-29.
[14] 何菁欽.設計客戶滿意的產品[J].通信企業管理, 2011(8):2.2011-08-013.
[15] 陳翠玲,饒培倫,全起徽,等.北京和廣州連鎖速食店的顧客體驗管理比較研究[J].
[16] 人類工效 學,2013,19(02):47-51+36.DOI:10.13837/j.issn.1006-8309.2013.02.009.
[17] 李華東,川菜人工智慧重點實驗室,樊麗娟,等. 智慧餐廳管理模式對用戶體驗的實際影響[J].中國食品,2024(16):118-122. DOI:10.3969/j.issn.1000-1085.2024.16.038.
[18] 衛東.論餐廳形象[J].旅遊學刊,1989,(04):17-21.
[19] 胡大勇.餐廳室內環境氣氛的設計探討[J].渝州大學學報(自然科學版),1999,(02):86-89.
[20] 餘魯.論餐廳室內環境氣氛之營造[J]. 四川教育學院學報,2001,(09):48-49.
[21] 薛慶平.餐廳環境因素的實證研究[J].河南商業高等專科學校學報,2004,(06):42-44.
[22] 馬娜娜.《餐廳設計》 中餐廳背景音樂的選擇與應用[J].食品工業,2020,41(09):383-384.
[23] 王敏. 自助餐飲店內部環境氛圍設計[J].食品工業,2020,41(12):454.

機器人類型和服務情境塑造減少餐盤浪費意願

匡政

廣西大學

摘要

全球食物浪費問題持續加劇，餐飲消費環節產生的餐盤浪費占比高達35%，成為可持續發展的重要阻礙 (Jiang et al., 2024)。隨著服務機器人在酒店餐飲業的規模化應用 (Yu et al., 2024)，其通過人機交互干預餐盤浪費的潛力引發學界關注。現有實踐表明，當機器人僅執行基礎服務職能（如餐品配送）而依賴人工干預時，不僅會因人機協作斷層削弱干預效能 (Liu et al., 2023)，更可能因人類介入的潛在評判性引發顧客抵觸 (Filimonau et al., 2021)。相較之下，服務機器人憑藉非對抗性、中立化的交互特徵 (Honora et al., 2023)，為減少餐盤浪費提供了創新路徑。然而，當前研究多聚焦於視覺提示的靜態干預 (Scheutz et al., 2021)，尚未系統解析言語提示的動態作用機制，亦缺乏對服務情境調節效應的深度探討。

本研究突破傳統干預策略的二元劃分（先行干預 vs. 結果干預），聚焦機器人言語提示的內容設計，提出利己型與利他型提示的差異化作用框架。前者通過強調個人利益（如節約開支）激發自我保護動機，後者則依託社會價值（如生態福祉）觸發利他認同 (Cozzio et al., 2022)。進一步引入服務情境作為關鍵調節變數：享樂主義主導情境以情感體驗為核心（如主題餐廳），注重愉悅感與自我實現 (Liu et al., 2022)；功利主義主導情境以功能效用為導向（如速食門店），強調效率與成本控制 (Liu et al., 2023)。基於調節契合理論，研究發現兩種情境分別與提升焦點（追求理想）和預防焦點（規避損失）形成動態匹配，進而通過預期情緒（自豪感/內疚感）的仲介作用驅動行為改變。具體而言，在享樂情境中，利己型提示通過啟動自我滿足預期自豪（“節約使我更優雅”）實現干預，利他型提示則通過環境溢出效應觸發社會價值感知（“光碟助力碳中和”） (Kim et al., 2022; Peng et al., 2023; Maduku, 2024)；而在功利情境中，僅利己型提示有效，其通過預期內疚（“浪費增加經濟負擔”）驅動補償行為 (Maduku, 2024; Meng et al., 2024)。這一發現揭示了情境適配對提示效力的決定性作用。

研究進一步整合期望值理論，發現機器人擬人化程度對干預機制存在極化調節效應。高擬人化設計會強化顧客對提示-情境契合度的心理預期：當契合達成時（如享樂情境中的利他型提示），擬人化通過情感共鳴顯著增強干預效果；但若出現契合失調（如功利情境中的利他型提示），擬人化則會加劇認知衝突，導致“人機信任損耗”與干預失效 (Oliver, 1980)。這一邊界條件的揭示，為技術應用中的擬人化閾值控制提供了理論依據。

理論層面，本研究在三方面實現突破：其一，構建“提示類型-服務情境-擬人化”三維干預框架，填補了人機交互在可持續消費研究中的理論空白；其二，通過雙重理論視角（調節契合與期望值）闡明預期情緒的仲介路徑與調節焦點匹配邏輯，深化了行為干預的機制解釋；其三，首次將言語提示的動態交互屬性納入餐盤浪費研究範疇，拓展了服務機器人研究的維度。實踐層面，研究為餐飲管理者提供可操作策略：在主題餐廳等享樂場景中，可交替使用利己/利他型提示強化情感動員；在速食門店等功利場景中，需優先採用利己型提示並控制擬人化程度；同時建議通過A/B測試動態優化機器人語音語調，以實現人機交互的精准觸達。這些發現為構建低碳化餐飲服務體系提供了科學支撐，對推動聯合國可持續發展目

標（SDG 12.3）具有現實意義。

參考文獻

[1] Cozzio, C., Donato, C., & D'Aniello, A. (2022). Tell me more and make me feel proud: the role of eco-labels and informational cues on consumers' food perceptions. British Food Journal, 124(4), 1365-1382.10.1108/BFJ-04-2021-0416
[2] Filimonau, V., & Sulyok, J. (2021). 'Bin it and forget it!': The challenges of food waste management in restaurants of a mid-sized Hungarian city. Tourism Management Perspectives, 37, 100759.https://doi.org/10.1016/j.tmp.2020.100759
[3] Honora, A., Chih, W.-H., & Ortiz, J. (2023). What drives customer engagement after a service failure? The moderating role of customer trust. International Journal of Consumer Studies, 47(5), 1714-1732.https://doi.org/10.1111/ijcs.12939
[4] Jiang, S., Chen, H., Shan, P., & Wang, X. (2024). Efficacy of informational intervention on food waste: Evidence from a randomized controlled trial. Journal of Cleaner Production, 443, 141106.https://doi.org/10.1016/j.jclepro.2024.141106
[5] Kim, S.-H., Huang, R., & Kim, S. (2022). Exploring advertising strategy for restaurants sourcing locally: The interplay of benefit appeal and regulatory focus. Journal of Hospitality and Tourism Management, 50, 127-138.https://doi.org/10.1016/j.jhtm.2022.01.009
[6] Liu, J., & Xu, X. a. (2023). Humor type and service context shape AI service recovery. Annals of Tourism Research, 103, 103668.https://doi.org/10.1016/j.annals.2023.103668
[7] Liu, X., Yi, X., & Wan, L. C. (2022). Friendly or competent? The effects of perception of robot appearance and service context on usage intention. Annals of Tourism Research, 92, 103324.https://doi.org/10.1016/j.annals.2021.103324
[8] Maduku, D. K. (2024). How environmental concerns influence consumers' anticipated emotions towards sustainable consumption: The moderating role of regulatory focus. Journal of Retailing and Consumer Services, 76, 103593.https://doi.org/10.1016/j.jretconser.2023.103593
[9] Meng, J., & Chen, K. (2024). Rethinking preemptive consumption: Building mechanisms of reciprocity, contextuality, and risk hedging across scenarios. Journal of Retailing and Consumer Services, 78, 103766.https://doi.org/10.1016/j.jretconser.2024.103766
[10] Oliver, R. L. (1980). A Cognitive Model of the Antecedents and Consequences of Satisfaction Decisions. Journal of Marketing research, 17(4), 460-469.https://doi.org/10.2307/3150499
[11] Peng, X., Fang, P., Lee, S., Song, W., et al. (2023). Overcoming double positive spillovers: automatic habits and dual environmental cognitions driving pro-environmental behaviors among hotel customers. Journal of Sustainable Tourism, 1-25.https://doi.org/10.1080/09669582.2024.2325011
[12] Scheutz, C., Law, T., & Scheutz, M. (2021). EnviRobots: How Human–Robot Interaction Can Facilitate Sustainable Behavior. Sustainability, 13(21).
[13] Yu, J., Liu, X., He, M., Huang, L., et al. (2024). It takes two to empower: Customer responses to empowerment recovery in the context of robot service failure. International Journal of Hospitality Management, 120, 103759.https://doi.org/10.1016/j.ijhm.2024.103759

節慶活動故事敘述的選擇屬性與品牌資產，品牌態度，滿足度，行動 意圖間的影響關係研究——以蘇州端午節活動為例

武揚[1]，張蒙蒙[1]，강상국 Sangguk Kang[2]

[1]國立江陵原州大學旅遊管理系博士

[2]國立江陵原州大學旅遊管理系主任，副教授

摘要

節慶活動憑藉其高附加值的產業特性，在全球範圍內迅速發展。我國每年舉辦近萬個節慶活動，但由於缺乏獨創性、內容重複、遊客參與度低等問題，許多節慶活動在可持續發展方面遇到困難。在競爭激烈的市場環境中，如何確保節慶活動的獨特性、如何打造受大眾認可的節慶品牌、以及如何滿足遊客需求並持續吸引他們的關注，已成為節慶活動生存與發展的關鍵問題。為此，本研究分析了故事敘述（Storytelling）的選擇屬性對品牌資產、品牌態度、滿足度、行動意圖的 影響。

為了進行實證分析，本研究針對 2023 年至 2024 年期間參加過蘇州端午節活動的遊客進行了線上問卷調查，共回收 427 份問卷，最終篩選出406 份有效樣本通 過 SPSSAU 24.0 程式進行了分析。研究結果表明，在節慶活動故事敘述的子因素 中，獨特性、趣味性和情感性對品牌資產產生了正向影響，而易理解性對品牌資 產沒有顯著影響。在品牌資產的子因素中，品牌價值對遊客的品牌態度產生了正 向影響，而品牌形象對遊客的品牌態度未產生顯著影響。遊客的品牌態度對滿足度和行動意圖產生了正向影響，同時，滿足度對行動意圖也產生了正向影響。本 研究填補了我國在節慶活動故事敘述領域的空白，為後續學術研究提供了理論支 持，並為節慶活動的內容策劃與品牌開發帶來了重要啟示。

關鍵詞: 蘇州端午節；節慶活動；故事敘述；品牌資產；品牌態度

網紅動物的旅遊吸引力及其對目的地行銷的驅動機制作用研究——以上海動物園“紅糖寶寶”為例

任倩宜，周宜翀*

澳門科技大學酒店與旅遊管理學院

*通訊郵箱：1220027736@student.must.edu.mo

摘要

隨著熊貓“花花”和南京紅山動物園動物等明星動物的爆火現象，它們不僅成為新型旅遊吸引物，也逐漸成為相應目的地的行銷重點（Wang et al., 2024）。研究表明，情感需求已成為旅遊消費的核心訴求，明星動物通過情感聯結與流量轉化，能有效刺激遊客的消費意願，提高旅遊目的地的行銷成果和曝光率。然而，以往研究多聚焦於傳統動物旅遊產品的形態與市場（Von Essen et al., 2020），對於網紅熱潮現象背後的原理及其推動作用的深度探討仍然不足。

本研究以明星動物背後的共情傳播和“AIDA”行銷模式為框架，分析上海動物園“紅糖寶寶”案例。通過命名萌化與短視頻傳播吸引遊客注意（Attention），以科普故事與互動體驗提高遊客興趣（Interest）；通過限時活動與獨家周邊激發消費欲望（Desire），最終通過門票銷售與場景引導促進遊客的參觀行動（Action）。情感化IP運營能有效提升目的地流量與品牌價值，為旅遊目的地提供“動物+”行銷範本。

本研究解構了網紅現象，填補了動物旅遊領域在網紅經濟與目的地行銷交叉研究中的空白，為旅遊目的地提供了一條可行的動物擬人化IP行銷路徑。這有助於提升目的地知名度與吸引力，豐富旅遊產品供給。

關鍵字：明星動物，情感聯結，AIDA行銷模式，動物擬人化IP，旅遊目的地行銷

參考文獻

[1] Wang, Z., Udomwong, P., Fu, J., & Onpium, P. (2024). Destination image analysis and marketing strategies in emerging panda tourism: a cross-cultural perspective. Cogent Business & Management, 11(1), 2364837.

[2] Von Essen, E., Lindsjö, J., & Berg, C. (2020). Instagranimal: Animal welfare and animal ethics challenges of animal-based tourism. Animals, 10(10), 1830., E., Lindsjö, J., & Berg, C. (2020). Instagranimal: Animal welfare and animal ethics challenges of animal-based tourism. Animals, 10(10), 1830.

深度休閒視角下大熊貓粉絲休閒行為影響過程與機制

程勵，袁圓

四川大學旅遊學院

摘要

社會的發展為休閒帶來了新的環境、知識和機會。伴隨“大熊貓熱潮”的掀起，大熊貓粉絲（簡稱“貓粉”）將參加與大熊貓相關的活動作為其日常生活的休閒方式，以探尋美好生活，促進人與動物和諧共處。文章聚焦貓粉的深度休閒行為，用質性研究與量化研究結合的方法，探索貓粉的休閒行為形塑熊貓保護和心理益處的機制。研究發現：（1）貓粉的休閒行為屬於深度休閒，由深度涉入、熊貓保護、心理益處三個主範疇構成，其中深度涉入具體體現為“堅持不懈”、“個人努力”、“休閒生涯”、“強烈認同”、“獨特精神”五個特徵；（2）貓粉深度涉入顯著影響保護行為和心理益處的產生，其子維度又存在一定的差異化影響；（3）情感依戀在深度涉入與保護行為和心理益處之間具有仲介效應，動物共情在情感依戀對保護行為的影響中均起正向調節作用。該研究不僅豐富了深度休閒理論的內涵，還對貓粉如何更規範地開展休閒活動以及大熊貓管理機構如何處理與貓粉的關係提出了科學合理的建議，以更好地促進國寶大熊貓的保護和發展。

關鍵字：深度休閒，情感依戀，動物共情，大熊貓粉絲

參考文獻

[1] Liu Z, Yang T, Yi C, Zhang K. Effects and functional mechanisms of serious leisure on environmentally responsible behavior of mountain hikers: Mediating effect of place attachments and destination attractiveness[J]. Journal of Outdoor Recreation and Tourism, 2024, 1(5): 45.

[2] Prato-Previde E, Basso Ricci E, Colombo E S. The complexity of the human–animal bond: Empathy, attachment and anthropomorphism in human–animal relationships and animal hoarding[J]. Animals, 2022, 12(20): 2835.

[3] 劉松,樓嘉軍. 深度休閒:國外文獻述評與研究啟示[J]. 旅遊學刊, 2019, 34(02): 137-146.

[4] Gould J, Moore D W, McGuire F, et al. Development of the serious leisure inventory and measure[J]. Journal of leisure research, 2008, 40(1): 47-68.

[5] Fennell D A, Guo Y. Ubiquitous Love or Not? Animal Welfare and Animal-Informed Consent in Giant Panda Tourism[J]. Animals, 2023, 13(4): 718.

[6] Kim H H, Park I, Bae J S. Happy campers? The relationships between leisure functioning, serious leisure, and happiness[J]. Social Behavior and Personality, 2019, 47(11): 1-9.

[7] Maguire P, Kannis-Dymand L, Mulgrew K E, et al. Empathy and experience: understanding tourists' swim with whale encounters[J]. Human Dimensions of Wildlife, 2020, 25(2): 105-120.

[8] Berenguer, J. The effect of empathy in proenvironmental attitudes and behaviors[J]. Environment and Behavior, 2007, 39(2): 269-283.

探究「網紅城市」的營銷與管理—以山東省淄博市為例

賈彤悅文*，張庭嘉，章于藍

澳門科技大學酒店與旅遊管理學院

*通訊郵箱:1220005483@student.must.edu.mo

摘要

近年來中國有許多城市在新媒體作用下一躍成為「網紅城市」，但許多「網紅城市」往往會後勁不足而無法長久的保持旅遊熱度。 所謂「網紅城市」是指通過互聯網平臺依據自身某種特質而迅速走紅的城市。 「網紅城市」的基本類型可以劃分為三類：旅遊熱門景點主導型、網路名人效應主導型和特色地域文化主導型（曹冬松，方雷，2025）。 （1）遊遊熱門景點型城市的特點是資源稟賦多且有自主性的行動者網路，這類城市通常是傳統的旅遊城市：例如哈爾濱，其本身擁有豐富的文化資源，再加上互聯網平臺的正向“包裝”而變得“爆火”。（ 資源稟賦：一個城市在自然、人文、經濟、社會等方面所擁有的資源和條件。 行動者網路：由多種行動者（包括人和非人因素）通過相互作用和關係網絡共同構建.）(2)網路名人效應型城市的特點是資源稟賦少但具有自主性的行動者網路，這類城市大多是非典型性的熱門旅遊城市：例如河南開封，“王婆說媒”節目作為景區表演在互聯網迅速走紅，在“王婆”的名人效應下帶動城市的知名度。(3)特色地域文化型城市具有資源稟賦多且有約束性行動者網路的特點，這類城市擁有排他性和獨特地域性的文化資源，並且個別人物和角色不會對網紅城市的生成起到關鍵作用：例如甘肅天水，天水麻辣燙走紅的本質是依託於其有核心競爭力的口感品質，位於天水的“中國辣椒之鄉” 甘穀縣是我國辣椒栽培最早的縣份之一，辣椒種類多、品質高，這些都為天水麻辣燙的走紅奠定基礎。

與天水類似的，山東淄博作為特色地域文化型城市，擁有獨特的燒烤飲食文化，於 2023 年憑藉新媒體躋身於新興「網紅城市」之列。 2023 年 3 月，「淄博燒烤」一夜爆紅，“大學生組團到淄博吃燒烤”等詞條衝上熱搜，伴隨著淄博當地一些基於燒烤的特殊活動，不斷增長的高關注度帶領淄博文旅快速發展。 但是，據調查抖音旗下巨量算數顯示，「淄博燒烤」關鍵詞在四月底到達峰值，之後逐漸呈下跌趨勢。 同時，根據淄博政府發佈的報告顯示，從 2022 年到 2023 年，接待的國內遊客數量從 3648.60 萬次（淄博市文化和旅遊局，2023）到 6114.9 萬人，同比上漲 67.59%（淄博市人民政府，2024）。 但 2024 年旅遊市場逐漸回歸理性從住宿行業視角來看，調查顯示，連鎖酒店的入住率較 2023 年同期有下降，在淄博酒店入住率相對較高的暑期，也並未出現像 2023 年 5、6 月出現的市場供不應求的狀態。聚焦民宿數據，雖然預訂量與 2023 年持平，但整體流量卻不及 2023 年「出圈時段」。可見淄博旅遊業在一定程度上呈現後勁不足的趨勢，且調查顯示淄博的關注度也有所下降。 同時，淄博市作為爆火的「網紅城市」，一些典型的非傳統旅遊城市的弱點也逐漸出現，例如以“人情味”“煙火氣”等網路標籤出圈的八大局便民市場，在淄博燒烤爆火後隨之轉變為同質化嚴重的美食街，從前便民的肉菜店鋪被網紅小吃和連鎖店取代，導致淄博文旅想要營造的一系列“人情味”等網路標籤失去效力， 同時本地居民的生活受到了一定程度的負面影響。 此外，由於燒烤露天且油煙較大這一特殊條件，旅遊城市衛生成為了新的關注點。

基於以上背景，本文選取山東淄博為例去探究網紅城市對獨特銷售點（unique selling point）的營銷與管理，探究淄博未能從在新媒體爆火的“網紅”變成有線上持續關注度加線下持續人流量的“長紅”背後的原因及營銷問題，同時為網紅城市的長久可持續發展提出一些建議。 本文以擁有“淄博燒烤”這個獨特銷售點（unique selling point）的淄博為案例，採用問卷調查的方法瞭解消費者對“燒烤”的認知度，自身的消費體驗以及以“淄博燒烤”為切入點下的淄博文旅產業營銷策略的有效性。 問卷結果在一定程度上可以顯示出淄博文旅對於燒烤這一獨特銷售點及其他旅遊特色營銷的有效程度和缺陷問題。 針對淄博文旅行業存在的缺陷，本文將從文化內涵和品牌的營銷，旅遊產品創新的營銷以及城市治理和服務優化營銷三個方面提出建議。

關鍵詞：「網紅城市」，可持續發展，旅遊目的地營銷與管理，新媒體

參考文獻：

[1] 曹冬松，方雷. 數字時代的“網紅城市”：生成形態、流量效應與治理轉型——基於典型城市的案例考察[J]. 電子政務，2025（01）： 52-64

[2] 淄博市文化和旅遊局. (2023-12-26). 淄博市文化和旅遊局關於對《淄博市“十四五”文化和旅遊發展規劃》重大行政決策後評估報告-工作計劃及完成情況-政務公開-淄博市文化和旅遊局

[3] 淄博市人民政府. （2024）. 淄博市 2024 年國民經濟和社會發展計劃的通知 [市政府檔]. 淄博市發展和改革委員會.

酒店行業高學歷實習生——在實習過程中的資質過剩感、對員工的影響以及管理策略

林映棋

澳門科技大學酒店與旅遊管理學院

摘要

近年來，酒店行業高學歷實習生在實習過程中普遍出現資質過剩感（Perceived Overqualification），即個體感知自身所具備的教育水平、知識技能及能力遠超崗位實際需求。這一現象的產生主要源於三方面矛盾：首先，酒店一線工作多具有重複性高、技術含量低的特徵；其次，高校教育更側重管理能力培養，而實習內容往往局限於基礎操作；最後，實習生期望通過實習積累管理經驗、構建「未來管理者」身份，卻在實際工作中被定位為「工具化勞動力」。這種期望與現實的巨大落差，使得「大材小用」的資質過剩問題尤為突出。調查顯示，許多高學歷實習生因此產生「懷才不遇」心理，甚至自嘲為「池塘裡的大魚」，認為自身能力未得到合理運用。

高學歷實習生在實習過程中易出現動機衰退與工作滿意度下降的現象，此種現象可歸因於「高能力-低挑戰」的職業困境。本研究從以下三個維度進行機制分析：

首先，職業期望崩塌效應。當實習生的專業能力無法在工作中得到有效運用時，其職業期望與現實體驗產生顯著落差。例如，具備系統餐飲管理知識的實習生被長期安排從事傳菜、清潔等基礎服務工作，導致其專業優勢無從體現。此種「能力-崗位」錯配會引發「努力無意義」的認知偏差，進而造成期望值持續降低。

其次，工具性感知斷裂。組織若缺乏清晰的職業發展路徑，會使實習生難以建立「績效-回報」的預期關聯。實證案例顯示，某酒店實習生雖超額完成垃圾清運任務並獲得即時獎勵（次日免於該任務或獲得口頭表揚），但這些回報與其職業發展目標（如餐廳運營管理或成本控制實務經驗）缺乏實質關聯，最終導致工具性感知弱化。

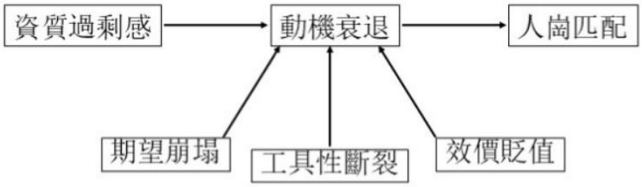
最後，激勵價值錯位效應。組織提供的物質性獎勵（如加班費、餐飲折扣）與高學歷實習生的核心需求（職業成長性、技能認證、專案管理機會）存在結構性偏差。此種錯位會引發三個負面連鎖反應：1）資質過剩感的持續累積；2）組織承諾水平下降；3）激勵效價評估趨於負面，最終形成「能力閒置-動機衰竭-滿意度遞減」的惡性循環。

因此，相關行業組織應該遵循人崗匹配的原則，為該專業的高材生提供清晰透明的職業發展規劃。有以下幾個方面參考：

遵循人崗匹配，讓員工能力充分發揮。建立標準招聘流程，把崗位職責、能力要求、晉升空間表述清楚，讓相關實習生可以提前瞭解真實情況。雙方資訊透明，可以減少入職後的資質過剩感，同時可以把高學歷人才放在最合適的位置上。

有意識的派發有挑戰性的工作，增加工作自主性。酒店可以通過授權賦能、增強工作豐富度的方式讓高學歷的實習生挑選更有挑戰性的工作任務。

研究模型：



關鍵字： 資質過剩, 期望理論, 人崗匹配, 高品質發展

參考文獻

[1] 丁秀玲,王慧,趙李晶. 員工資質過剩的成因、影響及管理策略——高品質發展語境的審視[J]. 江海學刊,2019(2):238-242. DOI:10.3969/j.issn.1000-856X.2019.02.049.

[2] 李朋波,陳黎梅,褚福磊,等. 我是高材生:資質過剩感及其對員工的影響[J]. 心理科學進展,2021,29(7):1313-1330.

[3] 程豹,周星,郭功星. 資質過剩感知對顧客服務主動性行為的影響[J]. 管理科學,2021,34(6):101-112. DOI:10.3969/j.issn.1672-0334.2021.06.011.

消費者對於餐飲循環經濟商品消費行為、消費動機與消費偏好之研究

楊蕙芬*

臺北城市科技大學烘焙創意與經營管理學士學位學程助理教授

*通訊郵箱: hf.yang@tpcu.edu.tw

摘要

從工業革命以來，全球的商業模式是為開採、製造、使用、丟棄的線性經濟，此種用完就丟的經濟發展法則，使能源與原物料過度開採造成生態破壞、土壤、水、空氣污染，「循環經濟」近年來成為國際之間的熱門議題的核心為以創新思維擺脫過去製造、生產、廢棄的「線性經濟」模式，透透過資源的妥善循環在滿足社會需求的同時，帶動經濟發展及環境保護。

根據董德波（1999）研究指出綠色消費的思潮起源於 1970 年末期之歐洲。過去幾十年来，各國經濟起飛，民眾的生活品質也斷改善，當氣候開始發生變化，生態環境被嚴重的破壞，地球資源也逐漸枯竭，人們開始注重環境保護，為我們這些年來對地球造成的傷害做修補。

2015 年聯合國宣布「2030 永續發展目標 SDGs」中的 SDG12 責任消費及生產就是要促進綠色經濟，確保永續消費及循環經濟生產模式，開啟鼓鼓勵綠色消費的環保新領域，期望宣導民眾從綠色消費層面，以減少污染及資源浪費，達到環境永續再利用的目的，使得綠色消費開始漸漸受到人們所重視。

本研究主要談討消費者對於餐飲業中的循環經濟商品消費模式，循環經濟是指具有可回復性和可再生性，其特性是透過用心的設計，從一條完整價值鏈與跨不同價值鏈的系統，檢討各式各樣的經濟活動，建立資源循環圈，這是英國循環經濟的 Ellen MacArthur Foundation，於 2012 年報告所提出的概念。循環經濟並非傳統「廢棄物減量」，循環經濟更強調在新的面向產生變革性的設計，以影響經濟體系的價值鏈，其層面包含技術、組織及社會面的創新。

而 1990 年成立的國際綠色餐廳協會(Green Restaurant Association, GRA)，其宗旨就是在於促進餐飲業之環境關懷與永續思考。強調能源節約與物資善用，為綠色餐廳設設立各種標準，目前已成為多數先進國家參考的典範。

由於從文獻回顧觀之，目前少有研究結合餐飲消費者循環經濟商品消費行為理論以及消費動機與消費偏好之間的互動關係進行探討。相關研究對於循環經濟商品消費行為、消費動機與消費偏好之間的關係之探討大都應用在一般服務產業上，應用在餐飲服務業上非常少見，此乃本研究所欲探討之另一個動機。

本研究使用質性與量化混合研究方法，以質性半結構式深度訪談法以及量化問卷調查法分析，本研究質性研究採用半結構深度訪談，共深度訪談從事餐飲業相關消費者包含，學生、教師及上班族，邀請 20 位，其中 11 位女性、9 位男性。量化研究部分，發放 500 份紙本問卷，將發放的問卷回收後，進行人工校對檢查以及整理與統計，過濾出無效問卷，並透過 SPSS 程式進行統計分析。本研究採自編之「消費者對於餐飲循環經濟商品消費行為、消費動機與消費偏好」之不記名研究調查問卷進行調查與分析，於 2024 年 2 月發放問卷 500 份，回收 495 份，有效問卷 415 份，回收率 99%，本研究之資料分析方法採用敘述統計、T 檢定、ANOVA 差異分析工具，檢定所探討之各項研究假設。

本研究敘述統計分析先說明受訪者的人口背景變項，項目分析和信度分析與驗證性因素分析旨在評估餐飲循環經濟商品消費行為、消費動機與消費偏好意向。受訪者人口背景資料分析在性別分布上，男生佔 37.1%；女生佔 62.9%，以女性居多。在年齡分布上，21-30 歲佔 54.7%填答人數居多。在教育程度分布上，大學佔 82.9%填答人數佔比較多。

消費者認為了解綠色餐廳帶來的好處相當重要，綠色餐飲已逐漸變成世界趨勢，店家有結合綠色觀念會增加消費意願。消費者認為願意購買有機食材的重要性相當高，會願意自帶環保餐具不使用一次性產品（水壺、筷子、湯匙等）重要性相當高。餐飲循環經濟中，透過租賃方式可以更有效地推動可持續發展。消費者會為了減少環境污染，購買綠色商品也會支持有環保意識的商店、餐廳，也會因為減少食物的碳排放量而選擇在地當令食材。消費者會選擇有進行環保社會福祉的企業購買商品。

本研究使用獨立樣本 T 檢定來測驗不同性別對於商品消費行為、消費偏好與消費動機願意購買有機食材為有顯著性，在有沒有自備環保筷的習慣為有顯著性。繼續使用 ANOVA 單因子變異數分析來檢測不同年齡、教育程度、科系類別、教育地區、職業類別的消費者對於商品、環保、知覺三個面向之影響，具有顯著差異性，再以雪費法（Scheffe）進行事後檢定。

質性訪談結果呈現受訪者多數認為過去工業革命都是採用開發、生產、使用、丟棄的一次性模式，但循環經濟是從不過度開發、減少不必要生產、減少使用一次性產品、多回收再利用的循環經濟模式。對於目前地球嚴重的氣候問題，循環經濟可以有效地減少二氧化碳排放量以及對於氣候進行有益的改善和處理。

受訪者認為循環經濟對於餐飲業的正向影響，認為可以減少使用一次性的塑膠餐具以及減少食材浪費，但另外一面來說有許多店家會因為使用綠色的商品而提高單價，對於消費者來說就會減少購買意願。

受訪者認為在開發國家，需要政府極力在背後推動，建立完整政策、提高人民的環保意識。設置專屬機構處理相關事務。小型企業會因為成本考量而無法使用更多綠色商品，但以 大型企業來說，他們會為了提高企業形象進而推動使用更多綠色商品。如果政府能提供更多獎勵制度及回饋，想必會增加更多餐飲產業的加入。

過去在疫情影響下，餐飲業被迫從內用改為外帶，外送產業也逐漸增加。更多的餐飲業選擇使用在地食材。包裝部分選用再生材質，避免使用塑料型包裝，減少

過度包裝。餐飲教育的部分，透過結合食農教育讓大家知道食物從產地到餐桌之歷程。

對於剩食的處理，受訪者提出剩食帶給自然的回饋是很深的，不但能回收做飼料、土地的推肥，相對其實企業在這個部分也做出相當的貢獻，像有企業將原本只能當垃圾丟棄的蛋殼進行處理變成紙托。對不同的產業鏈也有許多連結，咖啡廳到紡織業，原本不同的產業，能夠互相進行有益的互動。在疫情前後，不管是餐飲業或是消費者也持續為這個新議題帶來持續性的關注及討論。

本研究結論認為餐飲產業目前在循環經濟的導入尚在啟蒙階段，大多為解決企業面臨的廢棄物處理問題及資源不足的問題停留在資源再生及減廢的商業模式中，未真正以破壞性創造及創新的思維改變，來將產品創新及商業模式創新的循環經濟模式做到產品延壽、資源再生、共享平台、產品服務化。

由於線性經濟的消費長久以來是主流的消費文化，未來消費者市場若要轉向循環經濟，支持循環經濟發展，則需要資源有效之消費文化，並從少數消費者，擴散大到廣大的消費族群。擴散的成敗攸關消費者能否意識及體驗到新的價值，才能成為消費者接受因素，產業需要提供這些消費動機給予消費者。

餐飲產業大多數針對剩食的解決方案主要聚焦在末端，也就是廚餘的處理和回收，其中解決方法包含設立即期品專區以及食物銀行。這意味著大部分討論和資源都集中在如何有效地處理廚餘，以減少環境的負擔。這些努力固然重要，但我們也應該關注食品浪費的更深層次問題。工廠端剩食，也就是生產和供應鏈中的食品浪費，是一個相對較少被討論的問題。這包括在加工廠過程中浪費的食物，這些浪費往往是因為規模過大、質量不符合標準或運輸過程中的損耗。

本研究建議透過教育宣導，鼓勵民眾使用可循環再利用之商品，減少廢棄資源產出。同時，鼓勵民眾消費時，優先考慮採購製造、用餐中使用較少天然資源，可重複使用、易維護設備之商品，以擴大循環商品的市場。

關鍵詞：循環經濟，餐飲產業，消費者行為，消費者動機，消費者偏好

心理所有權對聊天機器人服務用戶滿意度及客戶忠誠度的影響研究

黃一嘉，宋瑜欣*

澳門科技大學酒店與旅遊管理學院

*通訊郵箱：SammyYuXinSong@outlook.com

摘要

本研究基於心理所有權理論，深入探討了聊天室機器人在旅游業客戶關係管理中的應用對客戶心理所有權感、滿意度和忠誠度的影響，旨在揭示其潛在負面影響並提供有效的應對策略。 隨着人工智能技術的快速發展，聊天機器人在旅游業中的應用日益廣泛，其高效、便捷的特點為旅遊預訂、諮詢等環節帶來了顯著優勢。 然而，儘管機器人在技術層面具有諸多潛力，但其在客戶關係管理中的應用效果卻受到一系列複雜心理因素的影響（Cao et al.，2023），這引發了學術界和實踐界的廣泛關注。

心理所有權力理論認為，個體在某種情境下會形成一種對目標物的心理所有權力感，這種心理所有權力感由自我效能感、責任感、歸屬感和自我承認等心理因素構成（Pierce et al.，2003）。 當個體感受到對目標物的心理所有權時，他們會更傾向於對目標物產生積極的評價和態度，從而增強滿意度和忠誠度（McLean et al.，2016）。 在旅游業客戶關係管理中，客戶的心理所有權感對於維護良好的客戶關係至關重要。 因此，本研究聚焦於心理所有權理論，旨在深入探討聊天室機器人在旅游業客戶關係管理中的應用對客戶心理和行為的影響。

基於這一模型，本研究提出，與人類服務提供者相比，使用聊天機器人會降低客戶的心理所有權感； 心理所有權力感的降低會對自我效能感、責任感和認同感產生負面影響； 這些心理因素的減弱會進一步影響客戶的滿意度； 最終，使用聊天機器人會減少關係承諾（Scarpi et al.，2022），，並導致客戶降低忠誠度。為驗證這些假設，本研究將採用定量研究設計，通過在線調查問卷的方式收集數據。 問卷內容包括對客戶與聊天機器人或人類服務提供者互動經歷的詢問，以及對心理所有權感各個維度、滿意度和忠誠度的測量。 為了確保問卷的有效性和可靠性，在正式調查之前進行了預測測試，並根據反饋對問卷進行了修訂。 數據收集完成后，運用統計軟件進行了描述性統計、相關性分析和結構方程建模等分析。 描述性統計用於了解樣本的基本特徵和數據分佈情況； 相關性分析用於檢驗變量之間的線性關係； 結構方程建模則用於評估概念之間的關係並檢驗假設。

本研究的預期結果表明，與人類服務提供者相比，使用聊天機器人確實會降低客戶的心理所有權感。 具體來說，心理所有權感的降低對自我效能感、責任感和認同感產生了顯著的負面影響。 這些心理因素的減弱進一步影響了客戶的滿意度，最終導致客戶忠誠度降低。 這一結果驗證了本研究的假設，揭示了聊天機器人在旅游業客戶關係管理中可能存在的潛在問題。 儘管聊天機器人在提高效率和便捷性方面具有顯著潛力，但其在與客戶互動過程中可能無法充分滿足客戶的心理需求，從而削弱了客戶的心理所有權感。

本研究的潛在理論貢獻和潛在的實際貢獻在於推進了心理所有權理論在旅游業客戶關係管理中的應用。 通過實證研究，進一步驗證了心理所有權在客戶與服務提供者互動過程中的重要作用，以及其對客戶滿意度和忠誠度的影響機制。 這

為後續相關研究提供了新的視角和理論支持。 同時，本研究也為旅游業管理者提供了重要的實踐指導。 儘管管理聊天機器人可以提高效率和降低成本，但管理者需要認識到其可能帶來的負面影響，尤其是對客戶心理所有權感的削弱。為了有效使用聊天機器人並維護客戶關係，旅游業管理者需要在提高效率和維護客戶關係之間找到平衡。 具體而言，管理者可以通過優化聊天機器人的交互設計，使其更加人性化、個性化，增強客戶與聊天機器人之間的交互體驗，從而提高客戶的心理所有權感。 例如，為聊天機器人賦予獨特的個性和語音風格，使其能夠更好地與客戶建立情感聯繫； 根據客戶的歷史數據和偏好，提供個性化的推薦和服務，讓客戶感受到被重視和關注。 此外，管理者還可以考慮結合使用聊天機器人和人類服務提供者，在一些關鍵環節和複雜問題上安排人類服務提供者介入，以提供更專業、更貼心的服務，彌補聊天機器人在情感交流和個性化服務方面的不足。

未來的研究可以進一步探討不同類型和設計的聊天機器人如何影響客戶的心理所有權感和行為意圖。 例如，研究具有不同交互方式、不同智能程度的聊天機器人對客戶心理的影響差異。 此外，咱們可以深入研究如何通過結合使用聊天機器人和人類服務提供者，實現優勢互補，提高客戶滿意度和忠誠度。 同時，可以關注客戶在不同旅遊場景下的心理需求和行為特點，為聊天機器人的應用提供更精準的策略建議。 通過進一步的研究和實踐，我們相信聊天機器人在旅游業中將發揮更大的作用，為客戶和企業帶來更多的價值。

關鍵詞：心理所有權力，聊天機器人，滿意度，忠誠度，個人性化服務

參考文獻

[1] Cao, L., Chen, C., Dong, X., Wang, M., & Qin, X. (2023). The dark side of AI identity: Investigating when and why AI identity entitles unethical behavior. Computers in Human Behavior, Article 107669.

[2] Pierce, J. L., Kostova, T., & Dirks, K. T. (2003). The state of psychological ownership: Integrating and extending a century of research. Review of General Psychology, 7(1), 84–107.

[3] McLean, G.; Wilson, A. Evolving the online customer experience ... is there a role for online customer support? Comput. Hum. Behav. 2016, 60, 602–610.

[4] Scarpi, D., Raggiotto, F., & Visentin, M. (2022). Untying the knot: Drivers of the intention to downgrade the relationship in B2B service contexts. Industrial Marketing Management, 105, 200–210.

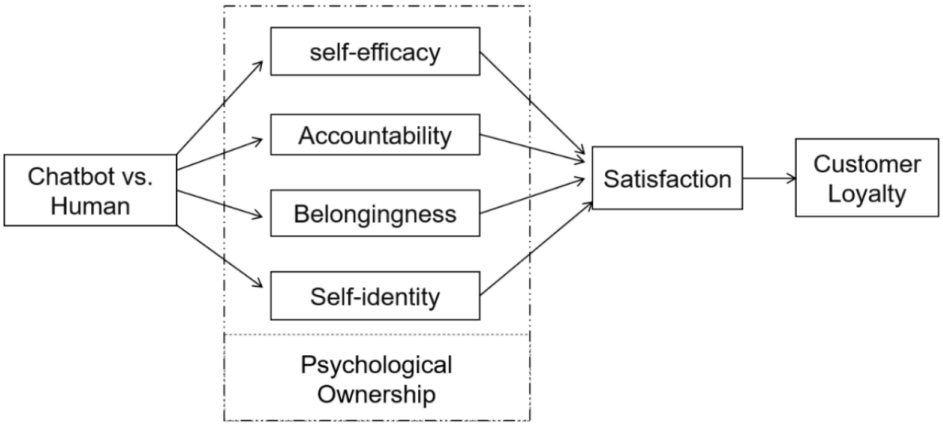


圖 1 研究模型框架

雙重評估路徑下的員工行爲分化：劣勢者成見對‘內卷’與‘躺平’的影響機制

生成式人工智慧（GenAI）在旅遊教育中的接受度研究：基於UTAUT模型對學生採納意願關鍵影響因素探析

林蘊柔，李遠航，黃藝菲

廣東職業技術學院

摘要

隨著生成式人工智慧（Generative AI）技術的快速發展，其在教育領域的應用逐漸受到關注。隨著全球旅遊業的發展，旅遊專業成為一門熱門的學科並受到關注。伴隨著旅遊產業市場環境與局勢的巨大變化，市場與行業對旅遊專業人才培養提出了更高要求與嶄新的期望。數位化教育時代的來臨則推動了旅遊人才培養模式的根本性轉變，為旅遊人才培養帶來了嶄新的機遇與挑戰。本研究基於科技接受模型(UTAUT)，探究旅遊與酒店管理專業學生對生成式人工智慧工具的使用接受度及其影響因素，旨在為旅遊教育機構優化技術整合策略提供理論支持和實踐建議。

研究以高等學校中旅遊及酒店管理專業學生為研究對象，通過文獻綜述梳理生成式人工智慧在其旅遊及酒店管理教育中的應用場景，比如課堂參與、模擬客戶服務訓練、學術寫作支持等，並結合UTAUT模型構建研究框架。在原有模型變數（績效期望、努力期望、社群影響、便利條件）的基礎上，新增“數據安全感知”調節變數，組合成為學生選擇使用生成式人工智慧輔助學習的影響因素的研究模型，以更全面地反映學生在使用生成式人工智慧時的獨特考量。研究假設包括：績效期望、努力期望、社群影響、便利條件、數據安全感知對使用意向具有正向影響。

本研究數據收集聚焦於廣東省內多所開設了旅遊管理、酒店管理等相關專業的高校，通過線下問卷發放及網絡管道搜集問卷，使用SPSS 26.0對數據進行分析。調查結果表明：績效期望、努力期望、社群影響、便利條件及數據安全感知均對生成式人工智慧的使用意向產生正向影響。本項研究的成果將有助於開展生成式人工智慧在旅遊教育中的可持續應用，從而促進人工智慧輔助旅遊教育學生學習環境的構建。

參考文獻

[1] Abbad, M. M. M. (2021). Using the UTAUT model to understand students' usage of e-learning systems in developing countries. Education and Information Technologies. doi:10.1007/s10639-021-10573-5

[2] Balkaya, S., & Akkucuk, U. (2021). Adoption and Use of Learning Management Systems in Education: The Role of Playfulness and Self-Management. Sustainability, 13(3), 1127. https://doi.org/10.3390/su13031127

[3] Ioannou, A., Tussyadiah, I., & Lu, Y. (2020). Privacy concerns and disclosure of biometric and behavioral data for travel. International Journal of Information Management, 54, 102122.

[4] Jeon, H. M., Sung, H. J., & Kim, H. Y. (2020). Customers' acceptance intention of self-service technology of restaurant industry: expanding UTAUT with perceived risk and innovativeness. Service Business.doi:10.1007/s11628-020-00425-6

[5] Ng, K.S.P., Lai, I.K.W.,& Ng, K.K.(2022), "The Acceptance of the Online Gamification Learning Platform by Higher Education Students in Hospitality and Tourism ", International Journal of Innovation and Learning,3(31):330-347

[6] Lai, I. K. W. (2013). Traveler Acceptance of an App-Based Mobile Tour Guide. Journal of Hospitality

& Tourism Research, 39(3), 401–432.
[7] Li, W. (2021). The Role of Trust and Risk in Citizens' E-Government Services Adoption: A Perspective of the Extended UTAUT Model. Sustainability, 13(14), 7671. doi:10.3390/su13147671
[8] Paine, C., Reips, U.-D., Stieger, S., Joinson, A., & Buchanan, T. (2007). Internet users' perceptions of "privacy concerns" and "privacy actions." International Journal of Human-Computer Studies, 65(6), 526–536.
[9] Slade, E. L., Dwivedi, Y. K., Piercy, N. C., & Williams, M. D. (2015). Modeling Consumers' Adoption Intentions of Remote Mobile Payments in the United Kingdom: Extending UTAUT with Innovativeness, Risk, and Trust. Psychology & Marketing, 32(8), 860–873.doi:10.1002/mar.20823
[10] Venkatesh, V.; Morris, M.G.; Davis, G.B.; Davis, F.D. User acceptance of information technology: Toward a unified view. MIS Q. 2003, 27, 425–478.
[11] Wang, H., Tao, D., Yu, N., & Qu, X. (2020). Understanding consumer acceptance of healthcare wearable devices: An integrated model of UTAUT and TTF. International Journal of Medical Informatics, 104156. doi:10.1016/j.ijmedinf.2020.10
[12] 吳存華 & 朱慧貞. (2025). 生成式人工智慧與職業教育智慧教育平臺的融合應用研究. 現代職業教育, (11), 121-124.
[13] 王偉毅. (2025). 智慧旅遊背景下高職旅遊類教師教學方法創新研究. 山西青年, (04), 139-141.
[14] 李藍藍. (2025). 智慧旅遊背景下旅遊教學模式的變革與實踐路徑探究. 旅遊與攝影, (01), 100-102.
[15] 劉星煜. (2025). 基於旅遊教育視角的生成式人工智慧發展及應用. 旅遊縱覽, (01), 68-70.
[16] 徐昡 & 袁子雅. (2025). 數字文旅賦能的高職旅遊人才培養路徑構建. 黃岡職業技術學院學報, 27 (01), 21-24.
[17] 張宇青, 劉慶發 & 趙現軍. 生成式人工智慧參與科研:風險衝擊、國際借鑒與中國應對. 西南交通大學學報(社會科學版), 1-14.

朱亮亮[1]，馮俏彥[1]，吳若希[2]

[1]澳門科技大學酒店與旅遊管理學院博士生

[2]澳門科技大學酒店與旅遊管理學院碩士生

摘要

在酒店行業高度服務導向組織情境中，員工常因能力評估差異被劃分爲不同發展梯隊(Xue et al., 2022)。當部分成員被管理者賦予"明日之星"的期許時，另一羣體往往面臨着"劣勢者成見"(underdog expectation) 的認知困境。Nurmohamed (2020)將其定義爲個體感到自己不被看好抑或被周圍人預期不太可能取得成功。既往研究表明，這種成見會降低個體的自我效能，並誘發焦慮等情緒困擾(Binyamin, 2020; Chang et al., 2014)。傳統觀點提出的“傀儡效應”認爲，當員工內化外界的負面預期時，其自我價值和主觀能動性將受到限制(Loi et al., 2021)。另一方面，新興研究發現了相悖的"黑馬效應"，即部分員工能將劣勢者成見轉化爲進取動力(Nurmohamed, 2020)。然而，兩類相悖效應共存的深層機制尚未明晰：何種條件導致個體對同一壓力源產生差異化反應?現有研究既缺乏整合性理論框架，也未能解釋新興現象在壓力應對中的定位。

本研究將整合壓力交互模型(Transactional Model of Stress)構建理論框架，將劣勢者成見視爲組織壓力源，其作用效果取決於個體的認知評估模式。Lazarus and Folkman (1985)將壓力源評估分爲挑戰評估與威脅評估兩種路徑：前者表現爲對逆境中潛在成長機會的積極解讀，後者則聚焦於對資源損失的消極預期(Lazarus, 1991)。值得注意的是，既有文獻雖探討了評估模式對壓力反應的調節作用(Skinner et al., 2003)，卻未將其延伸至組織成見領域，更未觸及中國職場特有的"內卷"(過度競爭性努力)與"躺平"(最低限度投入)這對矛盾行爲(Anand et al., 2024; Zhang et al., 2024)。我們認爲這兩種評估方式將分別通過促進目標導向行爲或觸發防禦性反應，最終導致不同的行爲結果——即內卷與躺平。因此，本文提出，挑戰型評估通過目標導向機制驅動內卷行爲，表現爲對壓力源的主動征服(Zhang et al., 2024)；而威脅型評估則激活心理防禦機制，催生躺平式工作疏離(Scheyett, 2023)。此理論構建不僅彌合了傀儡效應與黑馬效應的解釋鴻溝，更通過壓力動態評估視角，爲理解新生代員工行爲極化現象提供新範式。

爲解析評估路徑的分化機制，本研究還引入成就動機(Achievement Motivation)作爲關鍵調節變量。成就動機是指個人取得優異成績的動力、願望和毅力(Alismail et al., 2025; Smith et al., 2021)。高成就動機者具有更強的自我調節資源與成長型思維，能有效重構壓力認知 (Huang et al., 2022)。具體而言，當成就動機水平較高時，個體更傾向於將劣勢者成見評估爲自我證明的機遇，反之則易形成習得性無助的威脅感知。

本研究的貢獻主要體現在以下三個方面: 首先本文首次將劣勢者成見視爲組織情境下的壓力源，通過引入壓力交互模型，構建了職場劣勢者成見影響員工行爲的"雙路徑"理論模型，系統揭示了"抗爭-妥協"行爲譜系形成的認知情感路徑，突破了傳統單維度解釋框架的侷限性。其次我們創造性的將“內卷”與“躺平” 這對本土化現象置於普適性的理論框架下，構建了"壓力感知-資源評估-行爲選擇"的整合模型，彌補了內卷與躺平的前因機制。最後本文明確了成就動機的邊界作用，

揭示了動機強度與行爲選擇間的關係，並爲個性化干預策略提供依據。在實踐方面研究結果爲緩解酒店業的高競爭壓力與衝突背景下的職場內耗提供了新思路，例如通過重塑組織公平感知或優化動機激勵機制，打破“內卷-躺平”的惡性循環。綜上所述，本研究基於壓力認知交互理論模型，旨在探究酒店業背景下的劣勢羣體在不同評估機制下的行爲分化路徑及其內在機理。通過構建雙重路徑理論框架，將挑戰型評估與威脅型評估作爲核心中介變量，系統闡釋"黑馬效應"(內卷行爲)與"傀儡效應"(躺平行爲)的形成機制，並深入考察員工成就動機在其中的調節作用。基於此，研究擬採用縱向追蹤研究設計，以三家五星級酒店員工爲研究對象，通過多階段問卷調查收集數據，以期揭示組織場域中被賦予劣勢者成見的個體在差異化評估機制下的行爲選擇規律。在研究方法上，爲有效控制共同方法偏差，數據收集將分四個時間點進行，每期間隔一個月，共計四個月完成追蹤調查。研究採用 Likert 7 點量表進行測量（1=非常不同意，7=非常同意），所有測量條目均經嚴格信效度檢驗。爲保障研究倫理，問卷實施過程採取雙重保護措施：其一，全程採用匿名填寫制度，在問卷設計階段即去除所有身份識別信息；其二，向參與者出具書面保密承諾，明確告知數據僅用於學術研究，所有個人信息將進行加密處理，研究結束後原始數據將按規定程序銷燬。此外，在數據採集環節設置獨立問卷回收渠道，實現數據收集與人員管理的完全隔離。

關鍵詞：劣勢者成見；挑戰評估；威脅評估；內卷；躺平；成就動機

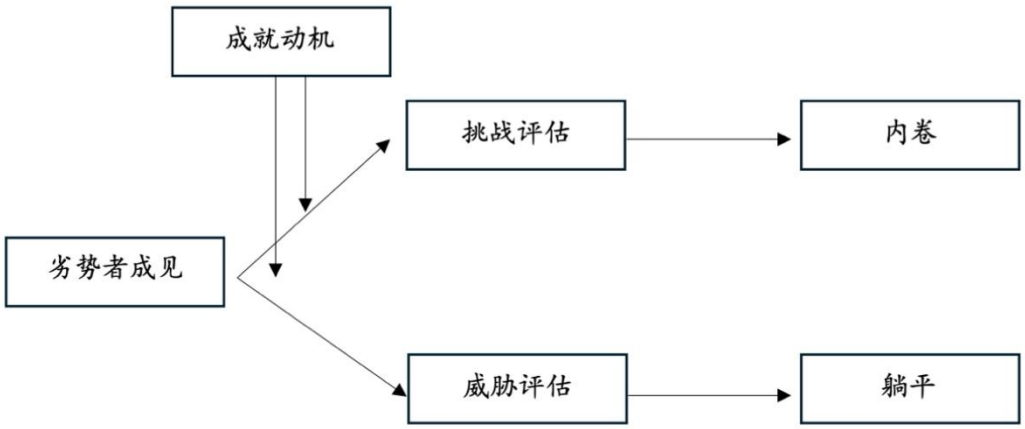


圖 1 研究模型框架

參考文獻

[1] Alismail, A. M., Almulla, M. O., Albohnayh, A. S. M., & Abdou, A. H. (2025). The psychological resources of success: satisfaction with academic majors, psychological capital, and achievement motivation among future tourism and hospitality leaders. Frontiers in Psychology, 15, 1501861. https://doi.org/https://doi.org/10.3389/fpsyg.2024.1501861

[2] Anand, A., Doll, J., & Ray, P. (2024). Drowning in silence: a scale development and validation of quiet quitting and quiet firing. International Journal of Organizational Analysis, 32(4), 721-743. https://doi.org/ https://doi.org/10.1108/IJOA-01-2023-3600

[3] Binyamin, G. (2020). Do leader expectations shape employee service performance? Enhancing self-expectations and internalization in employee role identity. Journal of Management & Organization, 26(4), 536-554. https://doi.org/https://doi.org/10.1017/jmo.2017.68

[4] Chang, E., Chin, H., & Ye, J. (2014). Organizational work-family culture and working mothers' affective commitment: How career expectations matter. Human Resource Management, 53(5), 683-700. https://doi.org/ https://doi.org/10.1002/hrm.21581

[5] Huang, X., Wang, C., Hua, L., Gao, Y., Zhou, S., & Wang, X. (2022). Social context, self-efficacy, and patient-centered service behavior of medical professionals: The moderating role of achievement motivation. Frontiers in Psychiatry, 13, 784228. https://doi.org/https://doi.org/10.3389/fpsyt.2022.784228

[6] Lazarus, R., & Folkman, S. (1985). Stress and coping. New York, 18(31), 34-42.

[7] Lazarus, R. S. (1991). Emotion and adaptation. Oxford University Press.

[8] Loi, T. I., Feng, Z., Kuhn, K. M., & Tripp, T. M. (2021). When and how underdog expectations promote cheating behavior: The roles of need fulfillment and general self-efficacy. Journal of business ethics, 1-21. https://doi.org/https://doi.org/10.1007/s10551-021-04976-0

[9] Nurmohamed, S. (2020). The underdog effect: When low expectations increase performance. Academy of Management Journal, 63(4), 1106-1133. https://doi.org/https://doi.org/10.5465/AMJ.2017.0181

[10] Scheyett, A. (2023). Quiet quitting. In (Vol. 68, pp. 5-7): Oxford University Press.

[11] Skinner, E. A., Edge, K., Altman, J., & Sherwood, H. (2003). Searching for the structure of coping: a review and critique of category systems for classifying ways of coping. Psychological bulletin, 129(2), 216. https://doi.org/https://doi.org/10.1037/0033-2909.129.2.216

[12] Smith, J., Guimond, F.-A., Bergeron, J., St-Amand, J., Fitzpatrick, C., & Gagnon, M. (2021). Changes in students' achievement motivation in the context of the COVID-19 pandemic: A function of extraversion/introversion? Education Sciences, 11(1), 30. https://doi.org/ https://doi.org/10.3390/educsci11010030

[13] Xue, J., Zhu, M., Guo, Y., & Kong, D. (2022). The double-edged sword of underdog expectations in organizations in Shanghai, China: The mediating role of feedback-avoiding behaviors and proving others wrong and the moderating role of regulatory focus. Psychology Research and Behavior Management, 2205-2218. https://doi.org/https://doi.org/10.2147/PRBM.S368632

[14] Zhang, W., Pan, C., Yao, S., Zhu, J., Ling, D., Yang, H., Xu, J., & Mu, Y. (2024). "Neijuan" in China: The psychological concept and its characteristic dimensions. Acta Psychologica Sinica. https://doi.org/https://doi.org/10.3724/SP.J.1041.2024.00107

“小院經濟”助推新興文旅業態拓展路徑開發——以山東省濟寧市爲例

趙月陽

濟寧學院經濟管理學院

摘要

隨着全球旅遊產業的快速發展，數字化和互聯網技術已逐漸滲透到旅遊業的各個層面，推動了傳統旅遊模式的轉型升級。特別是智慧旅遊作爲一種新興的旅遊發展模式，以信息技術爲支撐，利用大數據、物聯網、人工智能等數字化手段，提升了旅遊服務的效率和質量。在這一背景下，鄉村旅遊，尤其是以農家小院爲載體的文化旅遊，逐漸成爲推動鄉村振興和經濟發展的重要途徑之一。

濟寧市作爲山東省的重要文化旅遊城市，近年來致力於推動鄉村旅遊的發展，尤其是在農家小院經濟和文化旅遊方面，取得了一定的成果。智慧旅遊的應用不僅能夠提升旅遊體驗，還能爲農家小院經濟注入新的活力，進一步推動區域經濟的可持續發展。然而，如何利用智慧旅遊的技術和模式，打造創新的農家小院經濟文化旅遊開發運營模式，仍然是當前研究的重點。故本研究旨在探討智慧旅遊如何賦能農家小院經濟與文化旅遊，分析其開發與運營模式，探索其在濟寧市及下轄縣市區的具體應用案例。通過對智慧旅遊技術的運用進行深入研究，能夠爲提升鄉村旅遊的運營效率、改善遊客體驗以及促進地方經濟發展提供重要理論依據和實踐指導。此外，本研究還希望能夠爲全國其他地區的鄉村旅遊開發提供借鑑，推動智慧旅遊在鄉村振興中的應用，爲實現農村經濟的可持續發展做出貢獻。

本研究的創新點主要體現在一是聚焦智慧旅遊與農家小院經濟的結合，本研究首次嘗試將智慧旅遊的概念與農家小院經濟相結合，分析其在鄉村文化旅遊中的應用。二是基於濟寧市的實證研究：以濟寧市及其下轄的十一個縣市區爲研究對象，通過實地調研和數據分析，提供了具體的地方性案例，具有較強的地方特色和實踐意義。三是提出智慧旅遊的運營模式路徑：通過對現有案例的分析，提出了一條基於數字化技術和平臺經濟的智慧旅遊運營模式路徑，爲鄉村旅遊的發展提供新的思路。

一、“小院經濟”研究現狀

在智慧旅遊研究方面，智慧旅遊作爲新興的旅遊發展模式，已經成爲全球旅遊領域的研究熱點。國外學者早在 20 世紀 90 年代就開始探索智慧旅遊的概念，隨着信息技術的不斷髮展，智慧旅遊逐漸成爲現代旅遊業的重要組成部分。根據 Gretzel 等（2015）的研究，智慧旅遊不僅是技術驅動的旅遊體驗，更是通過技術提升遊客與目的地之間的互動與體驗質量。通過信息化手段，旅遊產品的定製化和個性化得到了極大的發展，遊客能夠在更智能化的環境下進行決策、預訂和消費。國內學者對智慧旅遊的研究起步較晚，但近年來發展迅速。楊玉峯（2017）提出，智慧旅遊應當包括智能化基礎設施、數字化服務平臺以及大數據分析等多個維度，尤其是大數據技術的應用，使得遊客的需求能夠得到精準預測與滿足。此外，李俊傑（2018）認爲，智慧旅遊的發展不僅僅是技術的應用，更重要的是通過技術促進旅遊業的可持續發展，從而推動整個社會的經濟與文化進步。

在農家小院經濟開發方面，農家小院作爲一種新的鄉村旅遊模式，近年來在中國的鄉村振興戰略中發揮了重要作用。農家小院不僅是鄉村旅遊的載體，也是農民增加收入的重要途徑。根據陳鵬（2016）的研究，農家小院經濟不僅能夠提供住

宿、餐飲等基本服務，還能通過農耕體驗、文化活動等形式吸引遊客，提升農村經濟活力。然而，農家小院經濟面臨着旅遊管理不規範、資源利用低效等問題，需要藉助智慧旅遊手段提高其運營效率。在國外，類似的鄉村旅遊模式也得到了廣泛應用。例如，日本的“民宿”模式和歐洲的一些農村旅遊項目，都通過科技手段提升了遊客的參與感和體驗感，這爲中國農家小院經濟的創新提供了可借鑑的經驗。

在智慧旅遊與農家小院經濟的結合方面，國內外的研究尚處於起步階段。大多數研究集中在智慧旅遊技術在大城市旅遊中的應用，鄉村旅遊的數字化轉型則相對較少。張偉（2019）提出，智慧旅遊與農家小院經濟的結合可以通過智能化管理、數字化營銷以及大數據分析等手段，提升農家小院的運營效率和遊客體驗。然而，當前的研究多停留在理論層面，缺乏具體的實證研究。針對這一問題，本文通過對濟寧市及下轄縣市區的實地調研，結合當地農家小院經濟發展具體情況，探討智慧旅遊技術如何具體賦能農家小院經濟，並提出相應的開發與運營模式。

二、“小院經濟”研究框架

本研究的框架結構圍繞智慧旅遊如何賦能農家小院經濟與文化旅遊展開，主要分爲以下幾個部分：

1.智慧旅遊的理論基礎

智慧旅遊是基於信息技術，特別是大數據、物聯網、人工智能等技術，構建的一個全新的旅遊發展模式。首先，本文介紹智慧旅遊的基本概念、核心技術和發展趨勢。在此基礎上，分析智慧旅遊對旅遊產業鏈條各個環節的影響，尤其是對農村地區農家小院經濟的促進作用。通過對智慧旅遊相關理論的梳理，爲後續研究提供理論支持。

2.農家小院經濟的運營現狀與挑戰

通過對濟寧市及下轄十一個縣市區的農家小院經濟現狀進行分析，揭示了其發展中面臨的一些問題，包括資源的低效利用、遊客體驗的不足、管理模式的單一等。在此基礎上，分析智慧旅遊技術如何幫助農家小院解決這些問題，並推動其向高效、可持續的方向發展。

3.智慧旅遊技術在農家小院中的應用

本文重點探討智慧旅遊技術在農家小院中的應用，包括大數據分析、智能營銷、在線預訂平臺、虛擬現實（VR）等技術手段。通過案例分析，展示這些技術如何在實際運營中提升農家小院的管理效率、市場推廣和遊客體驗。此外，結合濟寧市的具體情況，分析如何通過智慧旅遊的手段改進農家小院的運營模式。

4.基於智慧旅遊的農家小院經濟發展模式與路徑

根據前述分析，本文提出了一個基於智慧旅遊的農家小院經濟發展模式。該模式包括三大核心路徑：智能化管理路徑、數字化營銷路徑和創新的遊客互動體驗路徑。通過這三條路徑的結合，實現智慧旅遊賦能農家小院經濟的良性循環。

5.發展建議與政策支持

最後，本文結合濟寧市的具體情況，提出了一系列發展智慧旅遊與農家小院經濟相結合的政策建議。這些建議主要從政府支持、技術平臺建設、人才培訓等方面進行，旨在爲地方政府和相關企業提供可操作的解決方案。

三、濟寧市農家小院經濟的現狀分析

濟寧市位於山東省西南部，近年來積極推動鄉村振興戰略，通過發展農家小院經濟和文化旅遊，推動了地方經濟的轉型升級。

濟寧市及其下轄的十一個縣市區的農業資源豐富，擁有獨特的鄉村自然景觀和傳統農耕文化，這爲農家小院經濟的發展提供了豐富的基礎資源。同時，濟寧市大力推動鄉村振興戰略，依託豐富的農業資源和文化旅遊資源，農家小院經濟逐步發展壯大。目前，濟寧市及其下轄縣市區已形成多個較具規模的農家小院聚集區，如微山縣漁家樂、鄒城市鄉村民宿等。

濟寧市政府也出臺了一系列政策措施，鼓勵農家小院經濟的發展。例如，《濟寧市鄉村旅遊發展規劃（2021-2025 年）》明確提出，要依託智慧旅遊技術，提升農家小院的數字化管理水平，並提供財政補貼以支持智能化改造。此外，政府還鼓勵本地高校、科研機構與農家小院經營者合作，共同探索智慧旅遊在農家小院經濟中的創新應用。

目前，濟寧市的農家小院經濟主要呈現三種經營模式：一是傳統農家樂模式，以家庭爲單位，提供餐飲、住宿和簡單的農事體驗。二是文旅融合型農家小院，依託當地特色文化（如運河文化、孔孟文化），開發特色民宿、鄉村研學基地，吸引不同年齡層次的遊客。三是生態休閒農業模式，結合智慧農業技術，打造集農業觀光、採摘體驗、生態餐飲於一體的休閒農業園區，例如泗水縣的“智慧農莊”模式。

隨着遊客需求不斷增長，人們生活水平和旅遊消費需求的多樣化，越來越多的遊客開始選擇鄉村旅遊，尤其是農家小院成爲人們體驗鄉村生活、享受田園風光的熱門選擇。根據濟寧市文旅局的統計數據，截至 2024 年，全市已有超過 500 家農家小院經營主體，涵蓋民宿、農家樂、生態農業體驗等多種業態，每年接待遊客超過 200 萬人次，爲當地農村經濟創造了顯著收益。

儘管農家小院經濟有較大的發展潛力，但在實際運營過程中，濟寧市的農家小院經濟發展仍然面臨一些問題。由於許多農家小院是家庭式經營，管理水平參差不齊，影響遊客體驗和品牌塑造，存在管理模式單一、缺乏標準化管理問題。部分農家小院仍依賴傳統的線下運營模式，缺乏線上推廣渠道，導致市場覆蓋範圍有限，存在數字化程度較低、市場推廣不足問題。隨着鄉村旅遊的普及，農家小院之間競爭激烈，但差異化特色不足，容易陷入價格戰和遊客體驗差等問題。雖然部分高端民宿已開始使用智慧旅遊技術（如智能預訂、數據分析等），但整體行業對數字化手段的應用仍較少，亟需提升信息化水平，提升運營效率。

四、智慧旅遊賦能農家小院經濟的應用模式

智慧旅遊的核心在於運用現代信息技術提升遊客體驗和運營效率。對於農家小院經濟而言，智慧旅遊技術的應用主要體現在以下幾個方面：

1.智能化管理：通過智能化管理系統，對農家小院的房間預訂、入住管理、財務覈算等進行高效處理，減少人力成本，提高管理效率。通過雲計算平臺，農家小院可以實時掌握經營狀況，進行數據分析和決策支持，優化資源配置。例如：濟寧市城郊的運河農家小院。該小院採用了智能化管理系統，通過與地方政府的智慧旅遊平臺對接，實時獲取遊客數據、天氣預報等信息，從而合理安排資源和服務。該系統不僅提升了管理效率，還通過數據分析爲農家小院提供了針對性的改進建議，例如優化菜品供應、調整活動安排等，從而提高遊客滿意度和復購率。

2.數字化營銷：隨着社交媒體和在線平臺的普及，農家小院可以藉助數字營銷手段進行精準推廣。通過微信公衆號、短視頻平臺（如抖音、快手）等，向目標遊客羣體進行宣傳，提高知名度和市場佔有率。大數據分析可以幫助農家小院精準定位潛在客戶，並根據遊客的行爲數據和偏好，推送定製化的產品或服務。例如：濟寧市泗水縣等閒谷藝術小鎮鄉村旅遊區，採用了智慧旅遊中的一整套技術解決

方案。通過與當地旅遊平臺的合作，該農家小院實現了線上預訂、遊客信息管理、智能客服等功能。遊客可以通過手機 APP 進行房間預定、查詢旅遊線路、在線支付等操作，極大提高了遊客的便利性。同時，農家小院通過社交平臺進行線上推廣，吸引了大量年輕遊客的關注。數據分析表明，數字化轉型後，該農家小院的遊客接待量和收入增長了約 30%。

3.虛擬旅遊體驗：隨着虛擬現實（VR）和增強現實（AR）技術的發展，農家小院可以爲遊客提供沉浸式的虛擬體驗。例如，遊客在選擇農家小院時，可以通過 VR 技術提前體驗農家小院的環境、住宿條件及周圍景點，增強遊客的決策信心和體驗感。

五、智慧旅遊模式的運營路徑

結合濟寧市的實際情況，可以得出智慧旅遊模式在農家小院經濟中的運營路徑，主要體現在智能化管理、數字化營銷、遊客體驗創新、智慧服務生態和政府支持五個方面，通過科技賦能，實現農家小院經濟的可持續發展。

一是智能化管理路徑，通過數字化運營提升管理效率。智慧旅遊的核心在於提升管理效率，減少人力成本，並優化運營流程，主要包括：智慧預訂與客流管理系統：通過 OTA（在線旅遊平臺）及自有小程序，實現線上房間預訂、實時查詢空房情況，並結合大數據預測遊客流量，合理安排接待能力。智能支付與財務管理：引入支付寶、微信支付等移動支付方式，結合智能財務管理系統，實現自動對賬，提高運營效率。智能安防與環境監控：安裝智慧監控系統，對農家小院的公共區域進行實時監測，確保遊客安全，並利用物聯網設備監測空氣質量、溫溼度等，提高住宿舒適度。

二是數字化營銷路徑，精準推廣提升市場競爭力。利用大數據和社交媒體平臺，實現精準營銷，提升農家小院的市場競爭力。社交媒體與短視頻營銷，利用抖音、小紅書、微信視頻號等平臺，通過 KOL（意見領袖）及 UGC（用戶生成內容）進行推廣，增強品牌曝光度。大數據精準投放廣告，藉助百度推廣、今日頭條信息流廣告，根據用戶搜索習慣、消費偏好進行精準廣告投放，提高轉化率。直播帶貨與沉浸式體驗營銷，通過淘寶直播、抖音直播，讓主播帶領觀衆“雲遊”農家小院，結合限時優惠促成訂單轉化。

三是創新遊客體驗路徑，智慧技術提升旅遊沉浸感。智慧旅遊的核心之一是提升遊客的互動體驗，通過科技手段打造更具吸引力的旅遊產品，虛擬現實（VR）與增強現實（AR）體驗：遊客在出發前可以通過 VR 技術“預覽”農家小院環境，增強預訂信心；到訪後可使用 AR 設備體驗歷史文化、農業知識等互動內容。個性化智能導覽：利用 AI 語音助手和 AR 導航，爲遊客提供個性化的景點介紹、特色活動推薦，提高遊客遊覽體驗。智慧互動娛樂設施：例如智能種植體驗區，讓遊客通過手機 App 遠程控制農作物的灌溉、施肥，增強互動樂趣。

四是智慧服務生態路徑，打造多元增值服務。智慧旅遊不僅限於住宿和觀光，還可以打造綜合性的智慧服務生態，增加收入來源。智慧餐飲系統，遊客可以通過手機點餐，選擇本地特色農家菜，並結合 AI 推薦系統，提供個性化菜品建議。智能導購與特產電商，結合小程序或直播電商，遊客在旅行結束後仍可在線購買本地特色產品，如微山湖鹹鴨蛋、金鄉大蒜等，形成長期消費關係。沉浸式鄉村研學活動，推出智能化的鄉村研學課程，例如使用平板設備進行農業知識互動教學，提高研學旅遊的科技感和趣味性。

五是政府支持與行業協同，推動智慧旅遊生態建設。政府在智慧旅遊與農家小院經濟的發展中起到關鍵的引導作用，應通過政策支持和基礎設施建設，助推產業

升級。建立區域智慧旅遊平臺，整合各鄉鎮的農家小院資源，形成統一的智慧旅遊服務平臺，提供標準化服務，提升整體競爭力。提供財政補貼與低息貸款，鼓勵農家小院經營者應用智慧旅遊技術，通過財政補貼、創業基金等方式降低技術應用成本。加強數字基礎設施建設，優化鄉村 5G 網絡覆蓋，推廣智慧 POS 系統，確保智慧旅遊應用的穩定運行。

結論與建議

通過對濟寧市及其下轄的十一個縣市區農家小院經濟的分析，本文發現，智慧旅遊技術的應用爲農家小院經濟提供了新的發展機遇。智慧旅遊的數字化手段，如智能化管理、數字化營銷和虛擬現實技術，能夠有效提升農家小院的運營效率、遊客體驗和市場競爭力。通過案例分析，我們可以看出，智慧旅遊不僅有助於解決農家小院管理上的諸多問題，還能夠爲遊客提供更加個性化和便捷的服務，推動農家小院經濟向可持續發展方向發展。

然而，儘管智慧旅遊在農家小院經濟中的應用取得了一定的成果，仍存在一些挑戰和不足。例如，智慧旅遊技術的普及和應用程度仍存在地域差異，一些農家小院由於資源不足，尚未能夠充分利用這些技術。此外，智慧旅遊的發展也依賴於政府的政策支持、地方基礎設施的建設以及相關技術的研發和推廣。

根據研究結果，提出以下幾點發展建議：

一是加強技術支持與平臺建設：地方政府和旅遊部門應積極推動智慧旅遊技術的普及應用，爲農家小院提供必要的技術支持與平臺建設。例如，建設區域性的智慧旅遊平臺，彙集農家小院的各類資源，提升旅遊管理的智能化水平。

二是加大市場推廣力度：農家小院應利用社交媒體和短視頻平臺等新興渠道進行精準的市場推廣，通過數字化營銷手段吸引更多年輕遊客羣體。同時，建議農家小院結合大數據分析，對潛在遊客進行精準定位，提升營銷的效果和效率。

三是提升遊客體驗：農家小院可以通過引入虛擬現實（VR）和增強現實（AR）等技術，提升遊客的沉浸式體驗。例如，在遊客預定時，通過 VR 技術展示農家小院的環境和活動，讓遊客能夠提前感知旅遊體驗，增強其參與感。

四是加大政策支持：政府應出臺更多關於智慧旅遊的政策和支持措施，鼓勵地方農家小院在智慧旅遊領域的投資與創新。例如，提供稅收優惠、財政補貼等措施，幫助農家小院降低技術應用成本。

五是促進跨行業合作：智慧旅遊的發展離不開跨行業的協同合作。地方政府、技術企業、旅遊平臺和農家小院應加強合作，共同推動智慧旅遊技術的創新與應用。通過這種合作，農家小院能夠獲得更多的技術支持和市場資源，推動經濟的快速發展。

關鍵詞： 智慧旅遊，農家小院經濟，文旅新業態，數字化技術，濟寧市

參考文獻

[1]陳鵬.(2016).農家小院經濟與鄉村旅遊發展研究.北京:中國旅遊出版社.

[2]劉建新.(2021).鄉村旅遊中的智慧技術應用.北京:中國社會科學出版社.

[3]李俊傑.(2018).智慧旅遊的理論與實踐.旅遊學刊,33(5),34-42.

[4]楊玉峯.(2017).智慧旅遊與旅遊產業轉型升級.經濟管理出版社.

[5]張偉.(2019).智慧旅遊賦能鄉村旅遊的路徑探索.旅遊學研究,10(2),77-85.

[6]李春輝,&王磊.(2020).農家小院經濟發展模式探討.山東農業大學學報,31(6),65-72.

[7]李桂玲.(2019).大數據背景下的智慧旅遊發展研究.旅遊學刊,34(4),45-55.

[8]楊國英.(2021).鄉村振興與智慧旅遊融合的實踐與探索.山東省社會科學學會年會論文集.
[9] UNWTO. (2020). Tourism and Rural Development. United Nations World Tourism Organization. https://www.unwto.org/rural-tourism
[10] Gretzel, U., Reino, S., Kopera, S., & Koo, C. (2020). Smart tourism and smart destinations: A critical review. Sustainability, 12(14), 1-22. https://doi.org/10.3390/su12145518
[11] Li, Y., Hu, C., Huang, C., & Duan, L. (2021). The concept of smart tourism in the context of tourism information services. Tourism Management, 58, 293-300. https://doi.org/10.1016/j.tourman.2021.06.014
[12] Koo, C., Shin, S., Gretzel, U., & Hunter, W. C. (2021). Conceptualization of smart tourism destination competitiveness. Asia Pacific Journal of Tourism Research, 26(4), 365-378. https://doi.org/10.1080/10941665.2021.1876797
[13] Boes, K., Buhalis, D., & Inversini, A. (2020). Smart tourism destinations: Ecosystems for tourism destination competitiveness. International Journal of Tourism Cities, 6(1), 71-90. https://doi.org/10.1108/IJTC-12-2018-0105
[14] Del Vecchio, P., Mele, G., Ndou, V., & Secundo, G. (2021). Creating value from social big data: Implications for smart tourism destinations. Information Processing & Management, 58(3), 102-110. https://doi.org/10.1016/j.ipm.2021.102110
[15] Mariani, M. M., & Baggio, R. (2021). Big data and analytics in tourism and hospitality: A perspective article. Tourism Review, 76(1), 28-31. https://doi.org/10.1108/TR-06-2019-0259
[16] Sigala, M. (2020). Tourism and COVID-19: Impacts and implications for advancing and resetting industry and research. Journal of Business Research, 117, 312-321. https://doi.org/10.1016/j.jbusres.2020.06.015
[17] Yung, R., & Khoo-Lattimore, C. (2021). New realities: a systematic literature review on virtual reality and augmented reality in tourism research. Current Issues in Tourism, 24(14), 2066-2082. https://doi.org/10.1080/13683500.2020.1770801
[18] Huang, C. D., Goo, J., Nam, K., & Yoo, C. W. (2020). Smart tourism technologies in travel planning: The role of exploration and exploitation. Information & Management, 57(8), 103-120. https://doi.org/10.1016/j.im.2020.103120
[19] Choe, Y., & Fesenmaier, D. R. (2021). The role of smart tourism technologies in tourism experience: A case study of Seoul. Tourism Geographies, 23(3), 529-555. https://doi.org/10.1080/14616688.2020.1765015
[20] Gretzel, U., Koo, C., & Law, R. (2015). Smart tourism: Foundations and developments. Information Technology & Tourism, 15(1), 1-14. https://doi.org/10.1007/s40558-015-0012-

基於 CIPP 模型的紅領巾兒童紅色研學旅遊，評價指標構建研究

沈潘琳*，吳俊，楊雯凱

浙江工商大學 旅遊與城鄉規劃學院

*通訊郵箱:1974915565@qq.com

摘要

一、研究背景

紅色研學旅遊作爲愛國主義教育的重要實踐形式，近年來受到國家政策的 高度重視。然而，現有研究與實踐大多從產品供給角度出發，且普遍存在“重 資源開發、輕教育成效 ”的傾向，尤其在兒童羣體中，活動設計同質化、評價 體系碎片化的問題尤爲突出 。同時，多數研究仍停留在理論探討層面，缺乏可量化、可操作的評價工具，導致紅色教育功能難以有效落地。本文首次將 CIPP 模型引入紅色研學旅遊評價領域，突破傳統供給導向的評價範式，構建以兒童體驗爲核心的全過程動態評估框架。通過聚焦兒童認知特點與行爲反饋，填補了現有研究中“兒童視角缺失“的空白，爲紅色研學旅遊的高質量發展提供了兼具科學性與實踐性的理論支撐。

二、研究問題

本研究圍繞三大核心問題展開：一是如何將教育領域的 CIPP 評價模型與紅色研學旅遊的實踐需求深度融合；二是如何精準捕捉兒童的真實體驗，切實從兒童視角展開研究，避免成人視角的認知偏差；三是如何構建動態可調的評價 指標體系，適應不同地域資源與兒童年齡的差異化需求。因此，本研究通過“媽媽語式訪談法 ”與德爾菲法的結合，既保證了兒童表達的真實性，又藉助專家共識提升了指標的科學性，實現了質性數據與量化分析的有機統一。

三、研究方法

本研究採用混合研究方法，通過質性訪談與量化分析相結合，構建並驗證基於 CIPP 模型的紅色研學旅遊評價指標體系，具體分爲四個階段：

（一）文獻研究與理論框架構建

本研究以 CIPP 模型爲理論核心，將紅色研學旅遊評價分解爲“背景—輸入—過程—結果 ”四大維度，突破傳統評價的靜態侷限。背景評價聚焦資源質量 與教育目標適配性，輸入評價強調活動策劃的創新性與師資隊伍的專業性，過 程評價引入技術賦能指標，結果評價則側重行爲轉化與社會影響。同時，系統梳理《研學旅行服務規範》《紅色旅遊助推鑄魂育人行動計劃》等政策文件，明確紅色研學旅遊“教育性 ”與“ 實踐性 ”雙重導向，爲指標構建提供政策依據。

（二）媽媽語式訪談與數據編碼——兒童視角的深度挖掘

針對 7-12 歲兒童認知特點，選用“媽媽語式訪談法 ”獲取兒童真實體驗數據，通過模擬兒童語言風格（如誇張表情、語調調整） 有效降低溝通壁壘 ，提升低齡受訪者的表達意願與數據可信度。隨機抽取 42 名兒童（低年級 16 人、高年級 24 人）進行半結構化訪談，問題涵蓋認知差異（如“紅色研學旅遊與其 他遊玩有何不同 ”）、體驗深度（如 “活動中最難忘的細節 ”）及行爲影響（如 “活動後是否更願意幫助他人 ”）。研究發現顯著年齡分層：低年級兒童偏好家庭組織的感官互動（換裝體驗、VR 場景模擬等），但對歷史內涵理解較淺； 高 年級兒童更認同學校集體活動，能主動將紅色精神與日常行爲（節約糧食、保 護環

境）聯繫。通過人工編碼提取“莊嚴”“互動”“愛國”等高頻關鍵詞，歸納出四大維度的核心要素，爲指標初擬提供實證支撐。

（三） 德爾菲法修正指標——科學性與共識性並重

邀請 10 位旅遊管理、教育學領域專家（教授 6 人、副教授 4 人）參與函詢，確保指標信效度。函詢回收率 80%，專家對二級指標認可度達 4.5 分（5 分制），提出 18 條改進意見，如將“紅色精神傳遞路徑完整性”細化爲“專業講解”“創新故事表達”“文物多樣化展現”，強化過程評價的可操作性。此外，爲反映專家對指標認可度的離散程度，研究分析發現各二級指標得分變異係數均小於 0.5，說明專家對二級指標設置合理性的意見一致性較高。

（四） CIPP 模型指標整合——動態化與實操性兼顧

CIPP 模型以其“背景—輸入—過程—結果”的全過程評價框架，高度適配紅色研學旅遊的動態性與教育性需求。首先，背景評價聚焦紅色資源與兒童認知需求的匹配，確保主題目標與育人環境契合；輸入評價通過活動策劃與師資評估，強化資源投入的科學性；過程評價關注互動體驗與技術賦能，提升紅色精神傳遞的沉浸感與有效性；結果評價則衡量教育成效的持續性與社會推廣潛力。CIPP 模型的循環改進邏輯能夠靈活響應紅色研學旅遊的階段性問題，其綜合性、動態性與決策導向特徵，爲量化評估體系的缺失提供了系統性解決方案，助力紅色基因教育從形式到實效的全面提升。

四、研究結果

最終構建的評價體系包含 4 個一級指標、9 個二級指標、22 個三級指標。

表 1 紅色研學旅遊評價指標

一级指标	二级指标	三级指标
背景评价	红色研学主题与目标明确性	高质量红色资源和场景
		高契合的红色教育目标
	红色研学动机与需求清晰度	学生红色基因感知需求
		学生红色文化学习动机
	红色育人场景氛围	有红色的住宿体验氛围
		餐饮食物红色主题鲜明
		场地布置红色氛围营造
输入评价	红色研学课程活动策划	红色文化挖掘深度
		红色文化展示形式
		红色体验活动类型
	红色研学师资队伍专业	专业红色研学导师

过程评价	红色精神传递路径完整	红色讲师授课水平 师资队伍分工明确合理 红色讲解专业导入 红色故事创新表达 红色基因多样展现
	红色研学沉浸式体验	红色文化展陈易理解、体验 突显红色主题的服化道配备
结果评价	红色基因传承的推广性	红色教育的社会反响强烈 红色精神的现实意义结合
	红色基因教育的有效性	红色精神获得感明显 红色实践自发性提升

五、研究創新點

（一）動態適應性

首次將 CIPP 模型系統引入紅領巾兒童紅色研學旅遊評價領域，突破傳統教育評價模型的單一性。構建“背景—輸入—過程—結果”全鏈條評估框架，突破靜態評價侷限，允許根據地域資源特色（如革命老區與城市紀念館）和兒童年齡分層（低年級 vs 高年級）靈活調整指標權重。例如，低齡段活動中“沉浸式技術使用率”權重較高，而高齡段更側重“精神與現實意義結合度”。

（二）技術融合導向

在過程評價中納入“AR/VR 技術還原度”“服化道配備合理性”等指標，推動紅色教育從“單向灌輸”向“多感官互動”轉型。爲紅色基因的具象化傳承提供新路徑。

（三）行爲轉化聚焦

結果評價中提出“紅色實踐自發性”指標，通過兒童參與紅色研學活動後的日常行爲（如節約糧食、幫助他人）量化教育成效，突破了傳統以知識記憶爲主的評價模式。

六、討論與結論

（一）理論貢獻

本文的創新在於構建了首個以兒童爲中心的紅色研學旅遊動態評價模型。一方面，通過 CIPP 模型的全過程覆蓋，實現了“資源—活動—效果”的閉環管理；另一方面，將兒童體驗數據直接轉化爲三級指標，推動了評價理論從“成人主導”向“兒童本位”的範式轉變。

（二） 實踐突破

指標體系爲紅色研學旅遊提供了可落地的操作指南。例如，輸入評價中的“師資隊伍專業性”要求紅色導師年均培訓不低於 20 學時，過程評價中的“沉浸式體驗”建議每場活動至少設計 3 項互動環節。此外，研究提出的“家庭—學校協同機制”爲政策制定者優化資源配置提供了新思路。

（三） 侷限與展望

本研究存在三方面侷限：一是樣本集中於東部地區，未來需納入西部、邊疆等多樣化案例；二是未深入探討指標權重分配的數學模型，需結合 AHP 層次分析法進一步優化；三是長期教育成效尚未追蹤。未來創新方向包括：開發 AI 驅動的實時情緒監測工具，通過情感計算技術動態調整活動內容；構建“雲-端”協同的評價平臺，實現數據採集與分析的智能化。

關鍵詞：紅色研學旅遊， 紅色基因， CIPP 模型， 評價指標構建

參考文獻

[1] Stufflebeam D L. The Relevance of the CIPP Evaluation Model for Educational Accountability [J]. Journal of Research and Development in Education, 1971:30.

[2] SCHAFFER H R. Introducing Child Psychology. New York: Wiley & Sons, 2004.

[3] 王詠, 李冬花, 符琳蓉, 等. 紅色旅遊教育功能的實現: 基於變革性旅遊體驗的視角 [J]. 旅遊學刊, 2024, 39(02):135-150.

[4] 鍾士恩, 陸文鑌, 彭紅松, 等. 紅領巾兒童對紅色旅遊資源與愛國主義的認知——雨 花臺烈士陵園案例實證及啓示[J]. 自然資源學報, 2021, 36(07):1684-1699.

[5] 毛齊明, 周嘉騰. 基於 CIPP 模型的中小學研學旅行評價指標體系建構研究[J]. 教學 與管理, 2023, (36):104-108.

酒店服務機器人的擬人化對顧客使用意願的影響

鄭子瑞

澳門科技大學

摘要

一、引言

服務機器人已經越來越普遍的運用到酒店行業中，這種機器人的運用在讓酒店更具 科技感的同時，也滿足了不同顧客羣體的多樣化需求（Ingrid Y. Lin & Anna S. Mattila, 2021）。瞭解不同顧客羣體對服務機器人的使用意願，成爲酒店設計服務的關鍵。特別是在享樂主義和功利主義影響下的顧客對服務型機器人的選擇，值得深入探索。

已經有越來越多的研究表明，酒店服務機器人的擬人化對顧客的使用意願有着積極 影響（Rinaldo Kuhne & Jochen Peter, 2023; Cuicui Cao et al., 2022）。但很少有研究探討在 擬人化情境下，享樂與功利主義顧客對酒店服務機器人的使用意願。在消費者行爲研究領域，享樂與功利主義常用於解釋消費者的動機和決策過程。享 樂主義反映了消費者追求愉悅、享受和感官刺激的動機，而功利主義則與消費者追求實 用性、功能性和效率的動機相關（Aiping Shao & Hong Li, 2021）。本研究將揭示享樂與功利主義在顧客對酒店擬人化服務機器人進行使用時的調節作用。同時，在此基礎上本研究還將進一步探討社會臨場感（Social Presence）與期望績效（Performance Expectancy）在這一關係中的中介作用，提供一個更加細緻的視角。

二、文獻綜述與假設

（一）擬人化

擬人化是指顧客將人類特徵賦予非人類物體，幫助他們對不瞭解的事物做出初步判斷（Aggarwal & McGill, 2007）。擬人化是理解顧客如何對非人類主體做出擬人化判斷的理論支撐（Wenhuan Wang, 2017）。擬人化理論包含三個決定因素——引發的主體知識、 社會性和效能感，共同決定擬人化的認知過程（Wenhuan Wang, 2017）。例如，當我們稱 呼手機智能語音助手 Siri 時，就好像是我們在呼喚一個朋友的名字。因此研究提出假設：

H1：擬人化正向影響社會臨場感

H2：擬人化正向影響期望績效

（二）社會臨場感(Social Presence)與使用意願

社會臨場感（Social Presence）被定義爲 “一種與他人在一起的感覺”（Edwardset al., 2016）。在人機交互情境下，特別是涉及虛擬服務助理（VSA）時，它指的是用戶在與 VSA 交互過程中所感受到的與“另一個”存在的聯繫感。

當顧客在與服務機器人互動的過程中，若顧客能夠感受到更強的社交聯系和情感支 持，提升好感與信任，進而能夠增強顧客對服務機器人的使用意願（Chin et al., 2024）。 服務機器人可以通過個性化問候、關心顧客需求、營造溫馨氛圍來提升顧客的社會臨場感，契合顧客的社交需求期待，從而可以不斷的強化顧客的使用意願（Premathilake et al., 2024）。同時擬人化的服務機器人外貌、動作、聲音，也會影響使用顧客的社會臨場感 受。因此本研究提出假設：

H3：社會臨場感正向影響使用意願

（三）期望績效(Performance Expectancy)與使用意願

期望績效是顧客在使用服務機器人時的重要考慮因素。在人工智能的背景下，服務機器人能否提供可靠有效的服務，是顧客的主要期望績效(Gursoyet al., 2019)。在人機交互的情境下，顧客希望語音助手能夠精準地理解並回應其語音命令，這涉及到對自然語言 的準確解析及迅速的反應（Mohd Rahim et al., 2022）。顧客希望服務機器人擁有着強大 的功能，不僅僅是能夠執行簡單的語音命令，不同類型的消費者還可能會要求服務機器人有智能居家管理、日程規劃、高級信息檢索等功能。

已經有了很多研究探討了顧客對服務機器人在各種場景下的使用意願，例如顧客可能會考慮到隱私風險、心理等因素，進而影響使用意願（Xingyang Lv et al., 2022）。當顧客隨着與服務機器人的不斷互動，服務機器人所帶來的功能價值、實際效用以及滿意度，都會影響顧客對服務機器人的使用意願（Paletal., 2021）。因此本研究提出假設：

H4：期望績效正向影響使用意願

（四）享樂主義與功利主義

享樂主義主對傳統消費研究進行了擴展，提供了一個新的消費行爲視角。Elizabeth C. Hirschman 和 Morris B. Holbrook 最早對享樂主義的概念進行了系統的探討，它們指出享樂主義主要是消費者行爲層面的情感滿足和感官體驗等，它包括了不同的多感官的體驗，例如味覺、聲音、觸覺、幻想、喜悅等等。Ying Jiang 等人在 2006 年的一項研究中表明，在享樂型服務情境中消費者的滿意度與情感滿意密切相關，例如消費者在使用卡拉 OK 等享樂型服務時，會根據體驗到的愉悅程度來評價滿意度。

功利主義恰恰與享樂主義相反，它更加註重於描述產品的功能性和實用性、功能性和效率，消費者主要考慮的是產品是否能夠滿足實際需求、解決問題以及提供有效的解決方案（Huber et al., 2018; Zohra Zinoubi Ghalietal., 2019）。Maleeha Shahid Sameeni 等人在 2022 年的一項研究中發現，當消費者發現所購買的產品未能提供宣傳中的信息時，對消費者後悔的情緒、品牌負面口碑的產生都有着正向影響，這種表現在功利主義產品 中更爲明顯。因此本研究提出假設：

H5a：享樂主義正向調節擬人化與社會臨場感之間的關係
H5b：享樂主義正向調節擬人化與期望績效之間的關係
H6a：功利主義正向調節擬人化與社會臨場感之間的關係
H6b：功利主義正向調節擬人化與期望績效之間的關係

因此本研究包含了在擬人化條件下，社會臨場感、期望績效、享樂主義和功利主義 對顧客使用服務機器人意願影響的探討，研究模型如圖 1 所示。

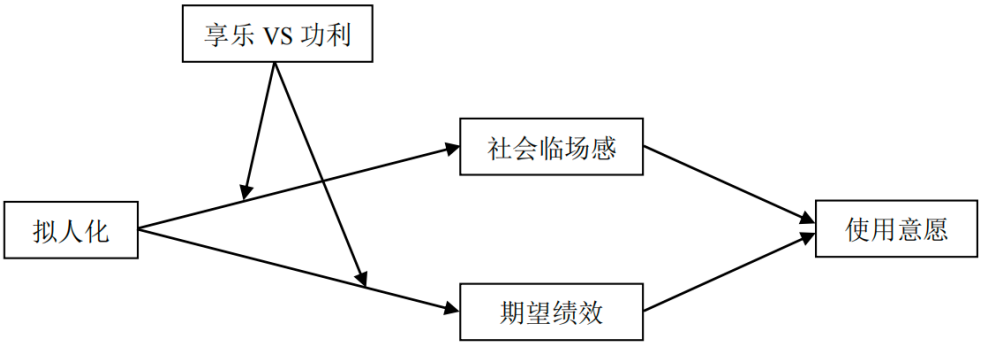


图 1. 研究模型

三、量 表

Variable	ID	Measurement item	Reference source
社会临场感	1	我感到与服务机器人存在跨时空联系	谢莹,高鹏 & 李纯青.(2021).直播社会临场感研究:量表编制和效度检验. *南开管理评论* (03),28-36+71+37-38. doi:CNKI:SUN:LKGP.0.2021-03-004.
	2	我感到与他人同时存在于线上	
	3	我感到仿佛置身于服务机器人的交流之中	
	4	我有社交的感觉	
	5	我可以与服务机器人持续的交流看法	
	6	我可以与服务机器人顺利地交换观点	
	7	我的疑问可以得到服务机器人的回应	
	8	服务机器人给我带来热情的感觉	
	9	服务机器人使我变得敏感	
	10	服务机器人能一定程度影响到我的情绪	
功利主义	1	我发现这个服务机器人对我很有用	Choi, K., Wang, Y., & Sparks, B. A. (2022). THE ROLE OF VALUE AND TRUST IN SHAPING RECOMMENDATION INTENTIONS: EVIDENCE FROM TRAVEL APP USERS.
	2	使用这个服务机器人可以帮助我更方便地完成许多事	
	3	使用这个服务机器人能让我在任何地方都能获取对我有用的信息	
	4	使用这款服务机器人提高了我的办事效率	
	5	使用该服务机器人是管理旅行时间的有效方式	
享乐主义	1	使用这个服务机器人真是一件乐事	Lee, C. H., & Wu, J. J. (2017). Consumer online flow experience The relationship between utilitarian and hedonic value, satisfaction and unplanned purchase..
	2	使用这个服务机器人，我不仅可以解决问题，而且感到很开心	
	3	这个服务机器人功能真的很有趣	
	4	这个服务机器人让我忘记了所有的烦恼和不愉快	
使用意愿	1	有意在酒店中积极运用服务机器人	Du, W. B., Liang, R. Y., & Liu, D. H. (2022). Factors Influencing School Teachers' Continuous Usage Intention of Using VR Technology for Classroom Teaching.
	2	有意将服务机器人作为常用的工具	
	3	有意向他人推荐服务机器人	
拟人化	1	与服务机器人互动让我感到很自在，就好像在和朋友在一起一样	Bartneck, C., Kulić, D., Croft, E., & Zoghbi, S. (2009). Measurement Instruments for the Anthropomorphism, Animacy, Likeability, Perceived Intelligence, and Perceived Safety of Robots.
	2	当我与服务机器人互动时，有一种人与人交流的感觉	
	3	与服务机器人的互动让我感受到了社交生活	

参考文献：

[1] Mohd Rahim, N. I., A. Iahad, N., Yusof, A. F., & A. Al-Sharafi, M. (2022). AI-Based Chatbots Adoption Model for Higher-Education Institutions: A Hybrid PLS-SEM-Neural Network Modelling Approach. Sustainability, 14(19), 12726-.https://doi.org/10.3390/su141912726

[2] Munnukka, J., Talvitie-Lamberg, K., & Maity, D. (2022). Anthropomorphism and social presence in Human–Virtual service assistant interactions: The role of dialog length and attitudes. Computers in Human Behavior, 135, 107343-.https://doi.org/10.1016/j.chb.2022.107343

[3] Kühne, R., & Peter, J. (2023). Anthropomorphism in human–robot interactions: a multidimensional conceptualization. Communication Theory, 33(1), 42–52. https://doi.org/10.1093/ct/qtac020

[4] Lv, X., Yang, Y., Qin, D., Cao, X., & Xu, H. (2022). Artificial intelligence service recovery: The role of empathic response in hospitality customers' continuous usage intention.Computers in Human Behavior, 126, 106993-.https://doi.org/10.1016/j.chb.2021.106993

[5] Gursoy, D., Chi, O. H., Lu, L., & Nunkoo, R. (2019). Consumers acceptance of artificially intelligent (AI) device use in service delivery. International Journal of Information Management, 49, 157–169.https://doi.org/10.1016/j.ijinfomgt.2019.03.008

[6] Edwards, C., Beattie, A. J., Edwards, A., & Spence, P. R. (2016). Differences in perceptions of communication quality between a Twitterbot and human agent for information seeking and learning. Computers in Human Behavior, 65, 666–671.https://doi.org/10.1016/j.chb.2016.07.003

[7] Pal, D., Babakerkhell, M. D., & Zhang, X. (2021). Exploring the Determinants of Users' Continuance Usage Intention of Smart Voice Assistants. IEEE Access, 9, 162259–162275. https://doi.org/10.1109/ACCESS.2021.3132399

[8] Chin, C.-H., Wong, W. P. M., Cham, T.-H., Thong, J. Z., & Ling, J. P.-W. (2024). Exploring the usage intention of AI-powered devices in smart homes among millennials and zillennials: the moderating role of trust. Young Consumers, 25(1), 127. https://doi.org/10.1108/YC-05-2023-1752

[9] Shao, A., & Li, H. (2021). How do utilitarian versus hedonic products influence choice preferences: Mediating effect of social comparison. Psychology & Marketing, 38(8), 1250–1261. https://doi.org/10.1002/mar.21520

[10] Aggarwal, P., McGill, A. L., & John Deighton served as editor and Jennifer Aaker served as associate editor for this article. (2007). Is That Car Smiling at Me? Schema Congruity as a Basis for Evaluating Anthropomorphized Products. The Journal of ConsumerResearch, 34(4), 468–479. https://doi.org/10.1086/518544

[11] Wang, W. (2017). Smartphones as Social Actors? Social dispositional factors in assessing anthropomorphism. Computers in Human Behavior, 68, 334–344.https://doi.org/10.1016/j.chb.2016.11.022

[12] Lin, I. Y., & Mattila, A. S. (2021). The Value of Service Robots from the Hotel Guest's Perspective: A Mixed-Method Approach. International Journal of Hospitality Management, 94, 102876-. https://doi.org/10.1016/j.ijhm.2021.102876

[13] Premathilake, G. W., & Li, H. (2024). Users' responses to humanoid social robots: A social response view. Telematics and Informatics, 91, 102146-.https://doi.org/10.1016/j.tele.2024.102146

[14] Cao, C., Hu, Y., & Xu, H. (2022). A Mind in Intelligent Personal Assistants: An Empirical Study of Mind-Based Anthropomorphism, Fulfilled Motivations, and Exploratory Usage of Intelligent Personal Assistants. Frontiers in Psychology, 13, 856283–856283. https://doi.org/10.3389/fpsyg.2022.856283

[15] Jiang, Y., & Lu Wang, C. (2006). The impact of affect on service quality and satisfaction:the moderation of service contexts. The Journal of Services Marketing, 20(4), 211–218. https://doi.org/10.1108/08876040610674562

[16] Ghali, Z. Z. (2020). Effect of utilitarian and hedonic values on consumer willingness to buy and to pay for organic olive oil in Tunisia. British Food Journal (1966), 122(4), 1013–1026. https://doi.org/10.1108/BFJ-06-2019-0414

[17] Huber, F., Eisele, A., & Meyer, F. (2018). The role of actual, ideal, and ought self-congruence in the consumption of hedonic versus utilitarian brands. Psychology & Marketing,35(1), 47–63. https://doi.org/10.1002/mar.21070

[18] Shahid Sameeni, M., Ahmad, W., & Filieri, R. (2022). Brand betrayal, post-purchase regret, and consumer responses to hedonic versus utilitarian products: The moderating role of betrayal discovery mode. Journal of Business Research, 141, 137–150. https://doi.org/10.1016/j.jbusres.2021.12.019

虛擬現實體驗因素對遊客滿意度和重遊意願的影響：基於 TAM 模型的分析

李澤龍[1*]，吳曉紅[2*]

[1]澳門城市大學國際旅遊與管理學院，國際款待與旅遊業管理碩士

[2]澳門城市大學國際旅遊與管理學院，助理教授

[*]通訊郵箱：T2309110415@cityu.edu.com，xhwu@cityu.edu.mo

基金專案：澳門基金會項目“基於遊客視角的澳門智慧旅遊評價體系及實證分析”（MF2040）

摘要

1. 引言

虛擬現實（VR）技術被認為是實現可持續旅遊業，推廣景點、吸引遊客和保護環境的有效方法。VR 技術發展使遊客能夠通過在互動和模擬環境中加強參與和擴展體驗共同創造來實現更獨特的旅遊體驗。

先前大量的研究將注意力放在用戶在使用 VR 的行為上，特別是用戶的滿意度和技術接受。技術接受模型（Technology Acceptance Model, TAM）作為經典理論在 VR 研究中被廣泛應用。基於 TAM 的研究已經充分驗證了感知有用性（PU）和感知易用性(PEOU)對消費者技術滿意度、行為意向和實際使用行為的重要影響。然而，既有研究多從技術功能視角切入，鮮少結合體驗經濟探討用戶多維體驗對技術感知的影響。體驗經濟框架指出消費者體驗可劃分為娛樂性、教育性、審美性與逃避現實性四大維度，這些體驗價值在旅遊場景中尤為重要。當前研究尚未明確旅遊者在 VR 體驗中產生的 4E 體驗如何通過塑造 PU 與 PEOU，進而影響其後續行為意向的內在機制。

因此，基於體驗經濟理論與 TAM 的整合視角，本研究旨在探討旅遊者在體驗 VR 時所產生的不同體驗是否會影響 VR 的 PU 與 PEOU，從而進一步影響遊客的滿意度和重遊意向。

2. 文獻綜述

Pine 和 Gilmore（1998）將體驗描述為現象學上獨特的經濟產品，並引出了消費者感知體驗的四個維度（教育、逃避、美學和娛樂）。教育體驗是指在 VR 的體驗過程中，互動內容和沉浸式環境幫助用戶獲取知識。娛樂體驗涉及顧客的被動參與，通常根據體驗到的樂趣來評估。審美體驗是指 VR 具有豐富的感官和動覺刺激，能給用戶提供的審美體驗。逃避現實體驗是指 VR 技術能夠給使用者提供一個虛擬空間，使用戶能夠暫時逃離現實世界的壓力。研究表明感知體驗是評估和提高 VR 用戶體驗整體品質的重要標準。

TAM 包含了有 PU 和 PEOU。作為研究用戶接受技術的經典模型之一，多被用來探索用戶對 VR 技術的使用意圖。Wi 等人（2024）研究表明 PEOU 和 PU 在體驗和用戶使用意圖間起重要作用。

遊客滿意度也會對重遊意願產生積極的影響。為了額外探究遊客體驗 VR 技術後的行為結果，本研究在此基礎上增加了遊客的滿意度和重遊意願。因此，提出以下假設：

H1:VR 的娛樂(a)，教育(b)，審美(c)，和逃避現實(d)體驗對遊客的 PEOU 產生積極影響。

H2:VR 的娛樂(a)，教育(b)，審美(c)，和逃避現實(d)體驗對遊客的 PU 產生積極影響。

H3:VR 的 PEOU(a)和 PU(b)對遊客滿意度產生積極影響。

H4:VR 的 PEOU(a)和 PU(b)對遊客的重遊意願產生積極影響。

H5:VR 的遊客滿意度對重遊意願產生積極影響。

3. 方法論

調查對象限定為在澳門大三巴牌坊景點體驗了《時空穿梭·遊歷三巴》VR 專案和澳門大賽車博物館 VR 專案的遊客。本研究採用問卷調查的方式進行數據的搜集。問卷收集線上線下相結合，採用便利抽樣的方式。線上問卷鏈接透過微信、小紅書等管道發放。線下問卷髮放地點在 VR 體驗館出口處。本研究共收集到 321 份有效樣本。

研究採用偏最小二乘結構方程模型（PLS-SEM）進行假設檢驗，通過 Bootstrapping（5000 個子樣本）以檢查研究模型。結果表明，娛樂對 PEOU（β=0.143，p≤0.05）、娛樂對 PU（β=0.343，p≤0.001），美學對 PEOU（β=0.331，p≤0.001），美學對 PU（β=0.205，p≤0.01），教育對 PEOU（β=0.178，p≤0.05），教育對 PU（β=0.149，p≤0.05），逃避現實對 PEOU（β=0.191，p≤0.005）和逃避現實對 PU（β=0.195，p≤0.001）均有顯著影響。因此，假設 1、2 均得到支持。假設 3、4 表明 PEOU 和 PU 對遊客滿意度和重遊意願的積極影響。H3 均得到支持（βPEOU→滿意度=0.292，p≤0.001）（βPU→滿意度=0.568，p≤0.001）。H4 部分成立（βPEOU→滿意度=0.163，p≤0.05）（βPU→重遊意向=0.148，p>0.05）。假設 5 表明遊客滿意度對重遊意向有積極影響。H5 得到支持（β 滿意度→重遊意向=0.302，p≤0.05）

4. 研究結果

PEOU 和 PU 是滿意度的關鍵因素，而 PU 和滿意度是推動重遊意願的主要驅動力，與先前的研究一致。美學和娛樂和逃避現實對 PEOU 和 PU 的影響較大，而教育的影響相對較小，該結果驗證了先前研究人員的結論。然而 PU 對重遊的影響不成立。

5. 討論和研究貢獻

本研究的結果拓展了體驗經濟學在 VR 領域的應用，強調了體驗的重要性，拓展了對遊客行為影響的理解，為旅遊行業如何通過 VR 專案提升遊客體驗和行為意向提供了理論支援。同時，為旅遊當局優化 VR 體驗專案的建議。此外，確定在虛擬旅遊背景下優化 VR 體驗的美學設計和娛樂性更有利於提高遊客滿意度，吸引遊客重遊，以便管理者更好地推廣其目的地。

本研究的樣本局限於特定 VR 專案，未來研究可擴大樣本範圍，並探索不同文化背景下 VR 體驗的影響。此外，可進一步研究其他體驗維度（如社交互動）對遊客行為的影響。

關鍵詞：虛擬現實技術；體驗經濟理論；技術接受模型

參考文獻:

[1]Pine, B. J., & Gilmore, J. H. (1998). Welcome to the experience economy. Harvard Business Review, 76(4), 97-105.

[2]Wi, J. H., Park, C., Cha, H. S., & Kim, T. (2024). Understanding factors influencing virtual reality acceptance using a unified SOR-TAM approach. Asia Pacific Journal of Information Systems, 34(4), 1025–1047. https://doi.org/10.14329/apjis.2024.34.4.1025

高密度都市的旅遊韌性重構——基於澳門可持續與負責任旅遊的概念辨析

阮楠欣，湯子萱，朱亮亮

澳門科技大學

摘要

澳門作為全球人口密度最高的微型都市（21340 人/平方公里）及典型旅遊依賴型經濟體（旅遊業占 GDP 超 50%），長期依賴“博彩驅動+福斯旅遊”模式（澳門統計暨普查局，2023）。 然而，疫情與經濟波動暴露其韌性短板，疊加歷史城區原真性退化（UNESCO，2021）、社區資源分配衝突等結構性衝突，亟需探索從“高流量”向“高品質”與“高韌性”的轉型路徑。 本研究以澳門為實證對象，通過辨析永續旅遊（ST）與負責任旅遊（RT）的覈心差异與協同機制，構建“高密度都市旅遊韌性”複合理論框架，旨在提出兼顧經濟彈性、遺產保護與社會包容的治理策略，並為全球同類都市提供“小空間-高韌性”的轉型範式。

1 研究方法論

1.1 研究設計

本研究採用混合研究方法，結合定性與定量分析，全面剖析高密度都市旅遊韌性重構，以澳門為典型案例，聚焦永續與負責任旅遊概念辨析。 運用多學科理論，從城市規劃、旅遊管理等角度出發，確保研究的全面性與深度。

1.2 數據收集

（1）文獻研究：全面梳理國內外關於高密度都市、旅遊韌性、永續旅遊和負責任旅遊的文獻，涵蓋學術期刊、報告、書籍等。 分析相關理論發展脈絡，歸納現有研究成果與不足，為本研究提供理論支撐與研究基礎。

（2）案例分析：以澳門為主要案例，收集其都市發展、旅遊產業數據，包括遊客流量、旅遊收入、旅遊設施建設等。

2 概念辨析與理論框架

2.1 永續旅遊的概念

永續旅遊指在滿足當代旅遊者需求的同時，確保不損害後代滿足其旅遊需求的能力，並通過協調旅遊發展與自然、社會、文化及經濟環境的關係，實現代際公平與系統平衡的旅遊模式（田道勇，1996）。 對於澳門這一以福斯旅遊與博彩業為覈心的經濟體而言，可持續性需重點解決資源消耗（如土地、能源）與文化遺產保護（如歷史城區原真性退化）之間的張力，同時推動經濟多元化以降低系統性風險。

2.2 負責任旅遊的概念

負責任旅遊主張通過旅遊行為主體（遊客、企業、政府）的主動責任履行（張帆，2012）。 其覈心邏輯在於：責任內化（如遊客減少塑膠使用）、利益協同（如企業 ESG 實踐）與政策規制（如政府碳減排目標）的聯動機制，而非依賴外部道德約束。 在澳門脉络下，負責任旅遊需回應博彩業過度擴張引發的社區空間擠壓與文化認同危機。

2.3 區別

維度	永續旅遊（ST）	負責任旅遊（RT）
聚心焦點	宏觀層級的代際公平與系統協調（環境-經濟-社會）	微觀主體的行為責任與利益平衡（遊客-企業-政府）
實施路徑	政策導向（如碳配額制度）	行動導向（如遊客環保選擇、企業社會責任投資）
時間尺度	長期願景（跨代際可持續性）	短期到中期實踐（行為可量測、責任可追溯）

永續旅遊更側重於從宏觀層面，關注旅遊發展與環境、社會、經濟的整體協調和長期可持續性； 而負責任旅遊則更強調旅遊活動各參與主體在微觀層面的具體行為責任。

2.4 聯系

儘管 ST 與 RT 在尺度與路徑上存在差异，但他們的目標是一致的，都是為了保護目的地自然與文化資源的完整性（如澳門歷史城區）。 其次，兩者之間存在互補性，例如 ST 通過政策框架設定底線（如環境承載力閾值），RT 通過主體行為填補執行缺口（如企業節能技術應用）。 最後 ST 和 RT 都擁有增强機制，ST 提供系統抗風險能力（如經濟多元化），RT 强化主體適應能力（如遊客危機響應意識）。 兩者結合可以保護旅遊目的地的自然和文化資源，促進當地社會經濟的發展，提升遊客的旅遊體驗。

3 案例實證

澳門威尼斯人（2013a）採用了新方法以提高資源利用效率，例如使用節能燈、改進空調系統和樓宇自動化系統。 使得澳門威尼斯人截至 2012 年 12 月 31 日的年度電費比 2008 年運營第一個完整年度的電費低 13%，節省了 560 萬美元的能源。澳門威尼斯人（2013b）報告還稱“我們對地球的責任與我們對客人和團隊成員的舒適和福祉的承諾同樣重要。金沙 ECO360°全球可持續發展戰略旨在幫助最大限度地減少我們對環境的影響，它反映了我們在永續建築開發和度假村運營方面處於領先地位的願景。”上述案例體現了金沙中國有限公司踐行負責任理念，促進澳門旅遊經濟可持續發展、減少運營對自然環境的影響、提高客人的度假體驗，從而增强了金沙公司的旅遊經濟彈性。

4 發展方向

4.1 政府層面

澳門作為全球博彩業高度集聚的微型經濟體，需通過產業多元化重構經濟韌性，破解“博彩依賴-資源約束”的路徑鎖定效應。 基於此，政府需以“旅遊+”戰畧為聚心抓手，優先推動會展旅遊（MICE）發展：首先，如錶 1 所示，2023 年“旅遊+會展”直接經濟效益達 11.7 億澳門元，同比激增 770.1%，其高附加值特性可顯著延長遊客停留時間，並緩解季節性波動對旅遊收入的衝擊（澳門統計暨普查局，2024）； 最後可以通過“商務+文化”雙核定位（如“世界遺產論壇”“葡語國家會展樞紐”），重塑澳門國際形象，弱化博彩標籤的單一認知。

錶 4.1“旅遊+”的直接經濟效益

	2019	2020		2021		2022		2023	
“旅遊 ✚”項目	金額（億澳門元）	金額（億澳門元）	變動	金額（億澳門元）	變動	金額（億澳門元）	變動	金額（億澳門元）	變動
旅遊 ✚ 會展	14.1	1	93	1.7	73.7	1.3	21.6	11.7	770.1

數據來源：澳門統計暨普查局

4.2 旅遊企業層面

旅遊企業需超越“股東至上”的傳統範式，以利益相關者理論（Freeman，1984）為內核，構建“環境-社會-治理”（ESG）導向的永續運營體系。 首先，將可持續發展目標納入企業戰略覈心，例如金沙中國通過 ECO360 戰畧實現年度節能 13%（2012 vs. 2008），同步降低運營成本與碳足迹。 其次，建立“員工-客戶-社區”共生關係。 此外，領導者在組織中擔任的角色對組織而言十分重要（Haigh & Hoffman，2012），領導者應嵌入“緩慢增長”理念，優先投資綠色技術與社會創新項目公司。

4.3 遊客層面

遊客作為旅遊系統的終端參與者，其行為選擇直接塑造目的地韌性。 需通過“教育-激勵-約束”三重機制推動責任內化。 首先遊客要感知責任陞級，尊重旅遊目的地的自然和文化環境，儘量減少自身行為對環境的破壞。 例如，減少使用塑膠製品。 其次應選擇永續旅遊產品，優先選擇具有可持續發展理念的旅遊企業和旅遊產品，支持永續旅遊的發展。

5 結論與展望

本文首先提出澳門作為高密度福斯旅遊城市的現狀，基於永續與負責任旅遊的概念辨析，提出了澳門多元化旅遊經濟的發展韌性需要。 澳門永續旅遊需以多主體履責為覈心，從政策法規製定、經營管理模式創新、行為意識轉變等多個角度入手，積極探索永續與負責任旅遊的實踐路徑。

未來，隨著人們對可持續發展理念的深入理解和實踐經驗的不斷積累，永續旅遊與負責任旅遊將在全球旅遊發展中發揮更加重要的作用。 而澳門在實踐中發展應不斷探索“碳中和旅遊目的地”認證的可能性，同時深化灣區合作，打造跨境永續旅遊示範區，促進負責任旅遊與經濟可持續性發展。

參考文獻

[1]澳門威尼斯人（Venetian）.（2013a）.金沙中國年報. [具體網址]. Retrieved [具體日期，格式為：日/月/年] from http://www.hkexnews.hk/listedco/listconews/advancedsearch/search_active_main.aspx

[2]澳門威尼斯人（Venetian）.（2013b）.社區事務. [具體網址]. Retrieved [具體日期，格式為：日/月/年] from http://www.sandschina.com/community-affairs/responsible-gaming/

[3]澳門統計暨普查局. （2024）. 統計資料. [具體網址]. Retrieved [具體日期，格式為：日/月/年] from https://www.dsec.gov.mo/zh-MO/Statistic?id=810

[4] Tian， D. Y. (1996). On the sustainable development of tourism. Human Geography， 11（2），12–15. [淺談旅遊可持續發展].

[5]銀河娛樂場（銀河）.（2013）. 企業社會責任. [具體網址]. Retrieved [具體日期，格式為：日/月/年] from http://www.galaxyentertainment.com/en/corp/supporting-the-community

[6] Yuan， M. Q. (2013). Research on the sustainable development of Macau's gambling industry (Master's thesis, Huazhong University of Science and Technology). https://doi.org/10.7666/d.D409980

[7] Zhang， F. (2012). Government management behaviors based on responsible tourism. Tourism Science, 26(2), 10–18. https://doi.org/10.3969/j.issn.1006-575X.2012.02.002

[8] Zhen， J. W. (2002). Environment and sustainable development in Macau. Tropical Geography, 22(2), 134–137. https://doi.org/10.3969/j.issn.1001-5221.2002.02.009

[9] Liu， J. Y. (2022). Research on Macau's social population development strategy for sustainability. Journal of Urban and Regional Planning, S1, 73–85.

[10] Edwards， D., Griffin, T., & Hayllar, B. (2008). Urban tourism research: Developing an agenda. Annals of Tourism Research, 35(4), 1032–1052. https://doi.org/10.1016/j.annals.2008.09.002

[11] Macau Government Tourist Office. (2012b). Positioning and planning of Macau as a World Centre of Tourism and Leisure. The 6th UNWTO Asia/Pacific executive training program on strategic tourism planning, Bhutan, 25–28 June 2012. [具體網址]. Retrieved [具體日期，格式為：日/月/年] from http://asiapacific.unwto.org/sites/all/files/pdf/macau_1.pdf

名人依戀和影視屬性如何影響旅遊行為

楊海，張韻璇

澳門城市大學

摘要

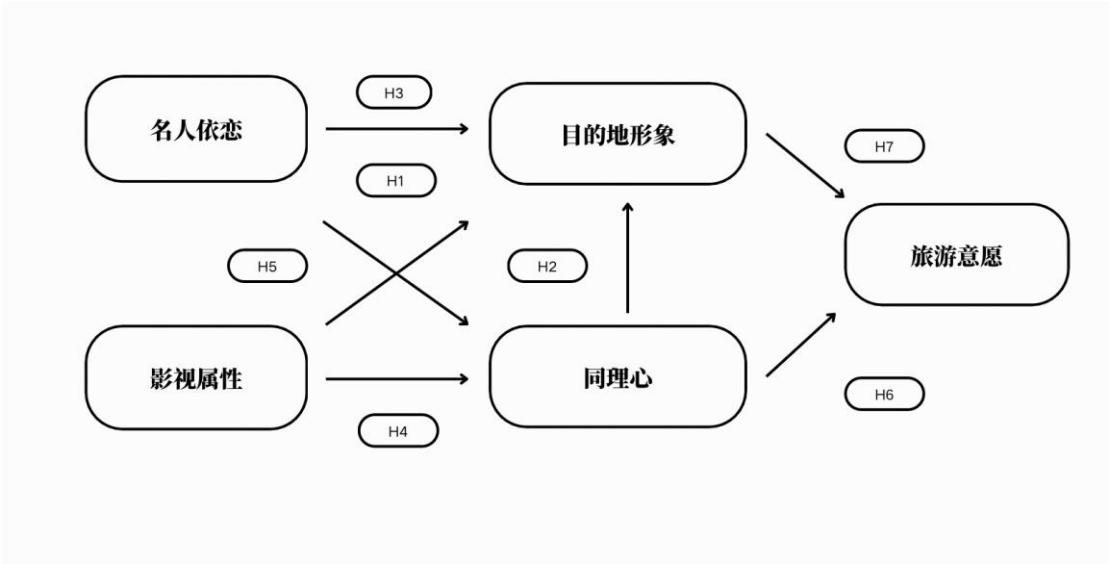
本研究以《陳情令》為例，通過 322 份問卷和 SMART-PLS 分析支持了名人依戀和影視內容通過同理心與目的地形象可以間接提升旅遊意願。 本研究首次將文化差异與同理心引入東方影視旅遊研究，結果可為跨文化旅遊實踐提供理論依據。

引言

近年來，影視旅遊-遊客前往影視作品的拍攝地或劇情所在地進行旅遊（Connell, 2012）-成為旅遊研究的重要領域。 這其中，名人依戀對旅遊意願也著重要影響。粉絲會新增其對相關目的地產生興趣。 在多數國家，影視旅遊業可占到國家總 GDP 的 10%以上（Contu & Pau，2022）。

此外，影視內容也會影響觀眾對目的地的感知。 優質的影視作品能營造迷人的場景和故事，使觀眾對其中的真實地點產生嚮往。 同理心在這一過程中起到了橋樑作用：觀眾投入劇情，對角色產生同理心後，更容易對拍攝地產生情感同理心和嚮往（安瑩等人，2025）。 曰此，本研究基於名人依戀理論，通過定量研究方法收集了有效樣本 322 份以影視劇《陳情令》為例進行實證檢驗（圖 1）。

圖 1 研究模型



文獻綜述和研究假設

名人依戀理論和影視旅遊

名人依戀理論是通過心理學的視角來研究粉絲與名人之間建立的關係。 它深入研究了個人與名人之間情感紐帶背後的心理機制。 這些關係通常被描述為一種模仿現實社會關係的寄生社會互動（Chen et al.，2022）。 名人依戀理論認為，個體與名人之間的情感紐帶會影響個體的思想、感受和行為。 先前的研究通過名人依戀理論來探討了名人與粉絲之間的關係（向麗蓉，胡傳東，2024）。

名人依戀指粉絲與名人之間形成的情感聯結，屬於一種擬社會關係。 粉絲與名人之間的情感聯結增强了他們對相關議題的同理心能力（Chen et al.，2022）。特別是，當名人公開表達情感或支持某些社會事業時，粉絲可能產生更强的情感

同理心（Padmi，2016）。 此外，很多研究認為，同理心能够通過加深遊客與目的地的情感聯系，提升他們對該地的正面看法（李惠等人，2025）。 名人依戀通過將名人的情感特質與目的地聯系起來，塑造遊客對目的地的認知（向麗蓉，胡傳東，2024）。

H1： 名人依戀與同理心呈正相關。

H2： 同理心與目的地形象呈正相關。

H3： 名人依戀與目的地形象呈正相關。

影視內容

電視劇能够通過長時間的情節發展和人物塑造激發觀眾的同理心。 觀眾對角色的情感投入使他們更容易與劇中的人物產生情感同理心，從而在觀劇過程中激發對拍攝地的同理心（安瑩等人，2025）。 同時，電視劇的視覺呈現、情節發展和場景描繪會顯著影響觀眾對實際目的地的認知（萬津津，陳剛，2012）。 特別是當電視劇展現了某個目的地的美麗風光或文化魅力時，觀眾可能會對該地產生好感，從而提升目的地的整體形象（李惠等人，2025）。

H4： 影視內容與同理心呈正相關。

H5： 影視內容與目的地形象呈正相關。

旅遊意願

當遊客產生强烈的情感同理心時，他們更有可能前往這些地點進行實地訪問（Li & Liu，2020）。 此外，同理心促使遊客產生探索的欲望，從而提升旅遊意願。正面的目的地形象能够激發遊客的旅行動機，特別是當目的地被視為具有吸引力且符合遊客需求時（安瑩等人，2025）。

H6： 同理心與旅遊意願呈正相關。

H7： 目的地形象與旅遊意願呈正相關。

名人依戀通過影響遊客對目的地的情感和認知，間接影響他們的旅遊意願。 當粉絲對某比特名人產生依戀時，他們通常會對名人推薦或關聯的目的地產生興趣，並最終激發旅遊意願（向麗蓉，胡傳東，2024）。 而電視劇通過塑造目的地形象也能激發觀眾的同理心，間接影響他們的旅遊意願。 電視劇中的場景、劇情和人物設定能够增强觀眾對目的地的興趣，從而提升他們的旅遊意願（萬津津，陳剛，2012）。

H8： 名人依戀通過目的地形象間接影響旅遊意願；

H9： 名人依戀通過同理心間接影響旅遊意願。

H10： 影視內容通過目的地形象間接影響旅遊意願；

H11： 影視內容通過同理心間接影響旅遊意願。

研究方法

研究採用見數線上問卷平臺，於 2024 年 10 月共收集 373 份問卷，剔除 51 份無效問卷。 最終保留 322 份有效樣本來自觀看過《陳情令》的成年人。 通過 7 級李克特成熟量表（1=非常不同意，7=非常同意）量測名人依戀、影視內容、同理心、目的地形象和旅遊意願。 名人依戀通過三個問題來衡量（Zhu et al.，2023），四個問題用來量測影視內容（Rajaguru，2014）。 來自 Li and Liu（2020）的三個問題用來評估樣本的同理心。 九個問題用來量測目的地形象（Tang et al.，2022）。 旅遊意願共三個問題來自 Tan and Wu（2016）。 最後，參與者回答性別、年齡、教育背景、收入、以及旅行頻率。

結果

本研究受訪者較為年輕，女性占 55.6%。 大約一半的樣本具有專科或本科教育水准(45.0%), 每年出遊 1–2 次(50.9%), 並且月收入在 5001–8000 元間(37.0%)。約 81.1%的受訪者曾經去過拍攝地貴州。

各構念量表的 Cronbachα 值在 0.89-0.97 之間，組合信度超過 0.90，顯示量表具有良好的信度。 驗證性因數分析結果顯示，各題項在各自構念上的標準因數載荷範圍為[0.87，0.93]，並且構念的平均方差選取值（AVE）範圍為[0.79，0.85]。Fornell-Larcker 準則檢驗顯示，每個構念 AVE 的平方根（0.84–0.92）均大於其與他構念的相關係數。 因此該模型數據具有良好的收斂和區分效度。

首先，Smart-PLS 分析結果支持了 H1-H7（錶 2）。 名人依戀和同理心之間具有正向的相關性（β=0.34，p<0.001）。 並且同理心（β=0.15，p<0.05）和名人依戀（β=0.31, p<0.001)都能够增强目的地形象。影視內容和同理心(β=0.30, p<0.001)以及目的地形象(β=0.33, p<0.001)具有正相關。 最後, 同理心(β=0.29, p<0.001)和目的地形象（β=0.53，p<0.001）正向影響旅遊意願。

錶 2.直接效應檢驗

	β	*SD*	*T*
H1.CA→EM	0.34***	0.07	4.96
H2.EM→DI	0.15*	0.06	2.47
H3.CA→DI	0.31***	0.07	4.47
H4.FA→EM	0.30***	0.07	4.40
H5.FA→DI	0.33***	0.07	4.84
H6.EM→TI	0.29***	0.05	5.36
H7.DI→TI	0.53***	0.05	10.28

注：* p<0.05, ***p<0.001; CA=名人依戀，EM=同理心，DI=目的地形象，FA=影視內容，TI=旅遊意願。

仲介效應檢驗支持了 H8-H11（錶 3）。 名人依戀通過目的地形象（β=0.17，95%CI=[0.09，0.24]）和同理心（β=0.10，95%CI=[0.05，0.15]）正向影響旅遊意願。 影視內容也可以通過仲介變數目的地形象（β=0.18，95%CI=[0.10，0.27]）和同理心（β=0.09，95%CI=[0.04，0.15]）增强旅遊意願。

錶 3.仲介效應檢驗

	β	95%CI
H8.CA→DI→TI	0.17	[0.09, 0.24]
H9.CA→EM→TI	0.10	[0.05, 0.15]
H10.FA→DI→TI	0.18	[0.10, 0.27]
H11.FA→EM→TI	0.09	[0.04, 0.15]

注: CA=名人依戀，EM=同理心，DI=目的地形象，FA=影視內容，TI=旅遊意願。

結論

本研究的理論創新性體現在首次將人種因素納入影視旅遊研究的分析框架, 拓展了該領域的理論邊界。 過往影視旅遊研究多聚焦於西方文化脉络，此類研究的結論在非西方脉络下的普適性仍存疑。 東西方文化在情感表達、社會互動及心

理機制上存在差异（Kolstad & Gjesvik，2014），該差异可能導致仲介變數對旅遊意願的作用路徑產生文化特异性。 該研究也首次將“同理心”這個關鍵仲介變數運用於東方文化背景下，填補了先前研究的空白。 同時，該研究也可以為旅遊局和廣電總局提供相應的建議。 例如，影視劇可以通過選擇流量藝員來增强觀眾的同理心，最終新增觀眾的旅遊意願。

參考文獻

[1]安瑩，徐健騰，郭亞男．（2025）．全通路行銷和城市形象感知對重遊意願的影響．時代經貿（02），81-84.

[2]李惠，程丹丹，於輝，孫瑩，王永霞．（2025）．畢業旅遊儀式感構成要素研究——基於紮根理論分析．湖北文理學院學報（02），38-44.

[3]萬津津，陳剛．（2012）．江蘇省影視文化地域特徵與旅遊開發．中國商貿（35），139-140.

[4]向麗蓉，胡傳東．（2024）．影視明星粉絲追星旅遊的具身崇拜體驗研究．安順學院學報（04），25-31.

[5]Connell, J. (2012). Film tourism–evolution, progress and prospects. Tourism Management, 33(5), 1007-1029.

[6]Chen, O., Zhao, X., Ding, D., Zhang, Y., Zhou, H., & Liu, R. (2022). Borderline pathological celebrity worship and impulsive buying intent: Mediating and moderating roles of empathy and gender. Frontiers in Psychology, 13, 823478.

[7]Contu, G., & Pau, S. (2022). The impact of TV series on tourism performance: The case of Game of Thrones. Empirical Economics, 63(6), 3313-3341.

[8]Kolstad, A., & Gjesvik, N. (2014). Collectivism, individualism, and pragmatism in China: Implications for perceptions of mental health. Transcultural Psychiatry, 51(2), 264-285.

[9]Li, C.H., & Liu, C.C. (2020). The effects of empathy and persuasion of storytelling via tourism micro-movies on travel willingness. Asia Pacific Journal of Tourism Research, 25(4), 382-392.

[10]Pradhan, D., Moharana, T.R., & Malik, G. (2023). Influence of celebrity, destination and tourist personality on destination attachment and revisit intention: Moderating roles of endorsement embeddedness, destination crowding and gender. Journal of Destination Marketing & Management, 27, 100754.

[11]Rajaguru, R. (2014). Motion picture-induced visual, vocal and celebrity effects on tourism motivation: Stimulus organism response model. Asia Pacific Journal of Tourism Research, 19(4), 375-388.

[12]Tan, W.K., & Wu, C.E. (2016). An investigation of the relationships among destination familiarity, destination image and future visit intention. Journal of Destination Marketing & Management, 5(3), 214-226.

[13]Tang, H., Wang, R., Jin, X., & Zhang, Z. (2022). The effects of motivation, destination image and satisfaction on rural tourism tourists' willingness to revisit. Sustainability, 14(19), 11938.

Zhu, C., Fong, L.H.N., Gao, H., & Liu, C.Y.N. (2023). When TikTok meets celebrity: An investigation of how celebrity attachment influences visit intention. Current Issues in Tourism, 26(17), 2762-2776.

解碼旅遊直播“種草”：雙路徑驅動與組態效應下的購買意願生成機制

王如，王學基*，鄧夢巧

寧波大學昂熱大學聯合學院旅遊管理專業

*通訊郵箱: wangxueji@nbu.edu.cn

摘要

旅遊直播作為數位時代創新旅遊行銷的重要手段，對啟動旅遊消費具有重要意義。本文基於詳盡可能性模型（ELM），構建結構方程模型，分析旅遊直播中消費者購買意願的中心與邊緣路徑影響因素，並採用模糊集定性比較分析（fsQCA）方法探索前因條件的組合效應。 通過對 636 份有效問卷的資料分析發現：資訊質量在中心路徑下對購買意願有顯著正向影響，且資訊有用性在其中起到仲介作用；主播魅力和平臺表達性在邊緣路徑中對購買意願有顯著正向影響，准社互動動具有仲介作用； 個人信任傾向主要正向調節邊緣路徑。 fsQCA 分析發現 14 條有效組態，可歸納為五種類型。 研究揭示了旅遊直播中消費者購買意願的影響機制，為相關主體借助直播促進旅遊線上消費提供啟示。

關鍵字：旅遊直播； 資訊有用性； 准社互動動； 個人信任傾向； 詳盡可能性模型

1.引言

隨著數位媒介更迭，直播已經成為一種重要的網路行銷手段[1]，“旅遊+直播”的新興場景行銷模式正在旅遊業內迅速崛起[2]，然而，旅遊直播作為一種以販賣體驗型產品的直播類型，如何實現流量變現依舊是其發展的難題[3]。 且現有研究多從單一因素視角探索旅遊直播中消費者購買意願的前因，缺乏對多因素協同作用的系統性分析[4]。 傳播說服理論在旅遊直播情境中的應用尚未充分量化檢驗，較多學者運用 SOR 模型忽略了資訊說服過程的差異性[5]。 此外，現有研究多關注單變數對購買意願的作用，缺乏從組態視角探索多變數複雜關係的系統性解釋。 曰此，本研究依據傳播說服理論“主體-內容-通路-客體”四維度與和詳盡可能性模型（Elaboration Likelihood Model，ELM）結合的雙路徑分析框架，試圖回答以下問題：（1）旅遊直播情境中哪些資訊線索會影響消費者的購買意願？ （2）不同類型的資訊線索影響消費者購買意願的機制是什麼？ 並通過 fsQCA 方法挖掘購買意願產生的多元組合條件構型。

2.理論基礎與假設研究

2.1 傳播說服理論

傳播說服理論由 Hovland 等人提出，說服是引起人的行為、態度變化的有效途徑，引導接受者的態度和行為趨向於勸說者預定的方向[6]。 說服模型將影響傳播效果的外部要素劃分為資訊傳播說服主體、內容、通路和客體[7]，共同影響著資訊主體的行為態度且說服效果受到個人特質等因素的影響[8]。

Petty 和 Cacioppo 提出的 ELM 模型是導致說服的雙重過程理論模型，由於消費者動機與能力的差異，主要採用中心和邊緣兩種路徑來處理資訊[9]。 中心路徑指消費者更傾向於以理性客觀的管道分析和深入思考來評估資訊質量和有用性形成自己的判斷[10]。 邊緣路徑是指消費者較少關注資訊內容，而更依賴於資訊

來源的可信度、情境因素和環境特徵，用主觀和非理性的管道做出簡單判斷[10]。由此，本研究將旅遊直播資訊質量作為中心路徑因素，以主播魅力和平臺表達性作為邊緣路徑因素。

2.2 中心路徑因素

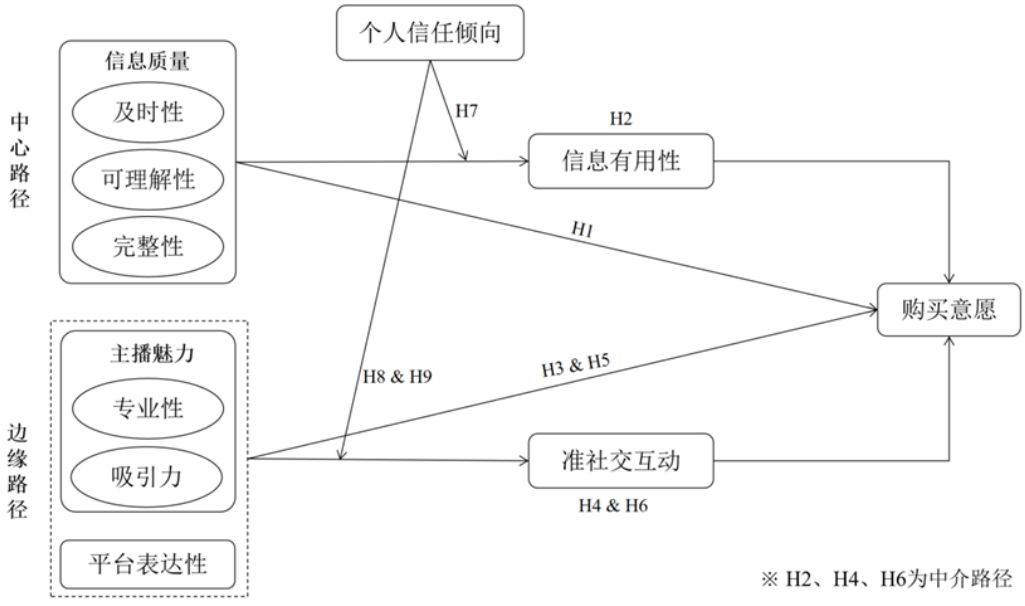
在旅遊直播場景中，資訊質量是影響消費者認知評估的關鍵前因，具有完整性、準確性和及時性特質[11]。 資訊採納模型（IAM）強調資訊有用性是影響消費者資訊接受與否的關鍵因素，是消費者對資訊價值效用的認知判斷[12]。 曰此，提出假設：旅遊直播資訊質量對消費者購買意願具有顯著正向影響（H1），資訊有用性在資訊質量與購買意願之間具有仲介作用（H2）。

2.3 邊緣路徑因素

直播情境中，主播是傳播效果中不可缺少的說服主體，其專業性與吸引力對消費者影響顯著[13]。 消費者與主播之間的准社交互動有助於使其感知更多資訊，產生購買欲望。 平臺表達性可增强用戶對商品資訊的瞭解，促進購買意願。 曰此，提出假設：主播魅力對消費者購買意願具有顯著正向影響（H3），准社互動動在主播魅力與購買意願之間具有仲介作用（H4）； 平臺表達性對消費者購買意願具有顯著正向影響（H5），准社互動動在平臺表達性與購買意願之間具有仲介作用（H6）。

2.4 調節變數

根據傳播說服理論，說服效果受說服對象個人特質的影響[14]。 個人信任傾向較高時，消費者更傾向於對接收的資訊進行詳細加工，能更好區分資訊質量，增强說服效果。 曰此，提出假設：個人信任傾向在旅遊直播資訊質量與資訊有用性的關係中起調節作用(H7)，在主播魅力與准社互動動的關係中起調節作用(H8)，在平臺表達性與准社互動動的關係中起調節作用（H9）。 基於上述理論分析和研究假設，本研究所構建的概念模型如圖 1 所示：



3.研究方法與資料分析結果

3.1 研究方法

本研究採用定量研究範式，利用 SPSS 和 AMOS 等統計分析軟件對收集到的數據進行處理和分析。 通過 Cronbach'sα 係數和驗證性因數分析（CFA）檢驗問卷的信度和效度，採用多元回歸分析探討各影響因素對觀眾購買意願的直接效應，

通過結構方程模型（SEM）檢驗資訊有用性的仲介作用，採用分層回歸分析檢驗個人信任傾向的調節作用，並用 fsQCA 探討多個影響前因條件之間的複雜因果關係。

3.2 資料分析結果

3.2.1 信效度檢驗

尅隆巴哈值介於 0.823～0.936 之間（>0.7），CMIN/DF 的值=1.396（<3），RMSEA 的值=0.025（<0.08），IFI、TLI 和 CFI 的檢驗結果（0.984、0.982、0.984），組合信度（CR）為 0.8290.935，AVE 值介於 0.5990.693 之間，表明問卷具有良好的信度和效度。

3.2.2 回歸分析結果

資訊質量（及時性、可理解性、完整性）對消費者購買意願存在顯著的正向影響（β=0.221/0.097/0.285，p<0.05），主播魅力（吸引力、專業性）也會影響消費者的購買意願（β=0.152/0.154，p<0.05），平臺表達性同樣正向影響消費者的購買意願（β=0.091，p<0.05）。

3.2.3 仲介效應檢驗結果

資訊有用性在資訊質量（及時性和完整性）與購買意願之間起到仲介作用，但在可理解性和購買意願之間不存在仲介作用。 准社互動動在主播魅力、平臺表達性與購買意願之間發揮仲介作用。

3.2.4 調節效應檢驗結果

個人信任傾向正向調節主播魅力與平臺表達性對準社交互動的影響，但在資訊完整性和及時性對資訊有用性的影響中，調節作用並不顯著。 具體結果見錶 1 所示。

錶 1 個人信任傾向的調節效應檢驗結果

自变量	YYX			SJ		
	模型 1	模型 2	模型 3	模型 4	模型 5	模型 6
常数	3.924***	4.450***	2.708**	3.425***	2.303**	2.598**
JS	0.456***					
KLJ		0.232***				
WZ			0.465***			
ZY				0.420***		
XY					0.368***	
BD						0.409***
XR	0.215***	0.334***	0.199***	0.308***	0.358***	0.322***
JS×XR	0.060					
KLJ×XR		0.082**				
WZ×XR			0.038			
ZY×XR				0.115***		
XY×XR					0.076**	
BD×XR						0.136***
R^2	0.347	0.227	0.344	0.418	0.391	0.416
△R	0.004	0.007	0.001	0.013	0.006	0.018
F	47.181	27.714	48.474	66.146	59.277	65.739
△F	3.446	5.552	1.349	14.071	5.808	19.769

3.2.5 fsQCA 分析結果

通過真值表的構建進行組態分析，結果顯示旅遊直播購買意願的 14 條路徑可歸納為五種類型，總體解一致性達 0.989（＞0.8），驗證了模型的穩健性。

4.結論與討論

4.1 主要結論

在中心路徑下，旅遊直播資訊質量對購買意願有顯著正向影響，資訊有用性在其中起到仲介作用。 在邊緣路徑中，主播魅力和平臺表達性對購買意願有正向影響，准社互動動具有仲介作用。 個人信任傾向主要正向調節邊緣路徑。 從複雜組態角度探究了旅遊直播中消費者購買意願的觸發條件主要有專業引領多元協同型、多要素協同驅動型、魅力社交驅動型、專業依賴驅動型、光環效應驅動型五種類型。

4.2 研究貢獻

本研究將傳播說服理論與 ELM 框架綜合並引入旅遊直播研究中，驗證了三個信息源對旅遊直播中的消費者購買意願均有不同程度的影響，拓展了傳播說服理論和 ELM 框架的應用。 揭示了旅遊直播情境下，資訊質量、主播魅力和平臺表達性等因素通過不同路徑對消費者購買意願的作用機制，引入並驗證了資訊有用性和准社互動動的仲介作用，豐富了對旅遊直播中消費者購買意願影響機制的研究。從個體特質的角度深化了對旅遊直播中消費者信任條件的理解，補充了對消費者個人特質的關注。 從組態視角出發，揭示了多重條件在影響旅遊直播消費者購買意願中的聯動協同效應。

參考文獻

[1]LIU H, LIU S. Optimal decisions and coordination of live streaming selling under revenue-sharing contracts[J]. Managerial and Decision Economics, 2021,42(4): 1022-1036.

[2]陳偉軍. 網路直播的日常展演與場景魅惑[J].新聞與傳播評論， 2019,72（04）：54-63.

[3]蘇思晴，呂婷. 雲旅遊：基於眼動實驗的線上評論對旅遊直播體驗的影響研究[J].旅遊學刊，2022,37（08）：86-104.

[4] QIU Q, ZUO Y, ZHANG M. Can live streaming save the tourism industry from a pandemic? A study of social media[J]. ISPRS International Journal of Geo-Information, 2021,10(9): 595.

[5]何暢，畢瑋，劉佳，等. 旅遊直播如何影響衝動消費和持續觀看意圖——基於數位可供性視角[J].旅遊學刊， 2023,38（12）：113-129.

[6] HOVLAND C I, JANIS I L, KELLEY H H. Communication and persuasion.[J]. 1953.

[7] HOVLAND C I, HARVEY O J, SHERIF M. Assimilation and contrast effects in reactions to communication and attitude change.[J]. The Journal of Abnormal and Social Psychology, 1957,55(2): 244.

[8] HOVLAND C I. Reconciling conflicting results derived from experimental and survey studies of attitude change.[J]. American psychologist, 1959,14(1): 8.

[9] PETTY R E, CACIOPPO J T, GOLDMAN R. Personal involvement as a determinant of argument-based persuasion.[J]. Journal of personality and social psychology, 1981,41(5): 847.

[10] J. KITCHEN P, KERR G, E. SCHULTZ D, et al. The elaboration likelihood model: review, critique and research agenda[J]. European Journal of marketing, 2014,48(11/12): 2033-2050.

[11]劉春，趙琦，鄭紅. 旅遊產品直播購物情境下消費者購買行為的前因及其影響機制[J].旅遊學刊， 2024,39（03）：119-132.

[12] MUDAMBI S M, SCHUFF D. Research note: What makes a helpful online review? A study of customer reviews on Amazon. com[J]. MIS quarterly, 2010: 185-200.

[13]餘軍，謝朝武. 電子服務場景如何喚起旅遊電商直播觀眾的購買意願——基於場所依戀的鏈式仲介模型[J].旅遊學刊， 2024,39（02）：89-102.
[14] CACIOPPO J T, PETT R E, STOLTENBERG C D. Processes of social influence: The Elaboration Likelihood model of persuasion.[J]. 1985.

欠發達地區旅遊發展與居民生活質量的耦合協調及互動效應研究

趙贊，張晶婧

廣西大學工商管理學院，廣西南寧 530004

摘要

提升居民生活質量是中國式現代化的重大任務，旅遊業則是具有顯著時代特徵的民生產業、幸福產業。 本文建構旅遊發展與居民生活質量耦合協調與互動效應的理論框架，基於滇黔桂地區 39 個地級及以上都市面板數據，利用耦合協調度模型、核密度估計等，研究 2007-2021 年旅遊發展與居民生活質量耦合協調的時空演化特徵，採用面板向量自回歸模型探索旅遊發展與居民生活質量的互動效應，分析其障礙因數。 結果表明：①旅遊發展與居民生活質量均呈上升態勢，二者呈耦合協同變化發展特徵，但旅遊發展整體呈不均衡狀態，且增長速度逐漸滯後於居民生活質量。② 旅遊發展與居民生活質量耦合協調程度逐步優化，具有一定穩健性，但總體仍處較低水準，且存在明顯的空間異質性，表現為省會城市和旅遊城市耦合協調度較高，並對周邊都市產生一定的空間正溢出效應。③ 旅遊發展與居民生活質量受自身衝擊的響應效應較大，長期均呈現自我增强機制，但旅遊發展短期存在自我減弱效應，內驅動力不足。④ 旅遊發展與居民生活質量呈積極影響互動效應，但二者長期動態互動正向推動效應不足，前者對後者的促進作用略大於後者對前者的影響。⑤ 旅遊發展與居民生活質量耦合協調障礙因數包括國際旅遊外匯收入、接待入境旅遊人數、都市公共廁所數量、住宿和餐飲營業額以及公共圖書館藏書量，表明旅遊發展不足是滇黔桂地區旅遊發展與居民生活質量耦合協調的主要障礙。

關鍵字： 旅遊發展； 居民生活質量； 耦合協調； 互動效應； 欠發達地區

旅遊業作為世界最大的社會經濟產業之一，被普遍認為是經濟發展的重要驅動力[1-2]，在促進實現共同富裕和可持續發展目標（SDGs）方面發揮著重要作用[3]。《國務院關於加快發展旅遊業的意見》（國發〔2009〕41 號檔案）和《關於進一步擴大旅遊文化體育健康養老教育培訓等領域消費意見》（國辦發〔2016〕85 號），明確了旅遊業培育成為人民群眾更加滿意的現代服務業的社會功能，將其列為“五大幸福產業”之首，“是人民生活水準提高的一個重要名額”。 旅遊發展為目的地創造就業機會，强化經濟韌性，推動經濟永續包容性增長[4]，完善基礎設施建設和公共服務[5]，增進不同文化的理解和包容[6]，促進經濟和社會共同繁榮，提升居民生活質量[7]，是化解新時代我國社會主要衝突的重要途徑[8]。

一個社區一旦成為旅遊目的地，居民生活質量將受到旅遊發展的影響[9]。 居民生活質量作為衡量旅遊業社會功能的重要標準[10]，是目的地實現可續發展的決定性因素[11]。 如果管理得當，旅遊發展將有利於增强目的地社會、經濟、文化和環境的可持續性，目的地可持續發展意味著居民高水准的福祉和生活質量[3]，從而促進旅遊可持續性發展：一方面，目的地居民幸福生活營造熱情歡迎的目的地氛圍，進一步增強遊客出遊的行為意願[12]； 另一方面，生活質量水准高的居民受教育程度更高，收入可觀且更支持當地旅遊業發展[13]，可持續發展在旅遊發展與居民生活質量之間起到仲介作用[14]。 曰此，促進旅遊發展和居民生活質

量耦合协調和互動效應，推動目的地社會經濟高品質發展，成為現階段需高度關注的重要問題[15]。

滇黔桂地區擁有豐富的旅遊資源和眾多獨具特色的自然人文景觀，旅遊業作為該地區經濟發展的重要支柱性產業之一，由於門檻低、科技要求不高，覆蓋面廣、勞動力需求大、降低人口的發展成本，在促進地方經濟發展、提供就業和居民增收等方面的乘數效應顯著[16]，是經濟落後的欠發達地區依託旅遊發展促進居民生活質量提升的典型代表。 由於受制於地理區位、經濟基礎、自然條件等因素，滇黔桂地區旅遊發展與居民生活質量仍存在空間發展不平衡的顯著特徵，旅遊發展在促進經濟發展及居民增收的響應作用尚待進一步提升[11]。 鑒於此，在嘗試建構可持續發展背景下旅遊發展與居民生活質量耦合協調及互動效應的理論框架基礎上，以滇黔桂地區 39 個地級及以上都市為案例地，選取科學全面的客觀名額建立旅遊發展與居民生活質量評價指標體系，採用耦合協調模型、核密度估計等分析旅遊發展與居民生活質量耦合協調的時空演化規律，採用面板向量自回歸（PVAR）模型和障礙度模型探究二者動態互動效應及障礙因數，提出促進耦合協調及互動效應的建議對策，以期進一步豐富旅遊發展與居民生活質量研究，為其他欠發達地區研究旅遊發展與居民生活質量關係提供參攷借鑒。

1 文獻綜述

“生活質量”這一概念由美國經濟學家加爾佈雷思首次提出，包括個人客觀生活條件和主觀精神感受[17]，涉及經濟基礎、生態環境、文化生活、設施建設等影響個人實現自我價值的客觀條件以及個人健康、情感及心理[18]等主觀要素，是自然因素、社會經濟因素和個人感知因素的綜合體[19]。 提高經濟發展水准，改善生活環境，達到可接受和公平的生活質量，是實現社會可持續性的基本要求[20]。作為衡量可持續發展績效標準，居民生活質量直接影響旅遊發展支持度[1、21]、環境責任[22]、主—客價值共創[23]等居民態度和行為，是目的地可持續發展的重要旅遊資源[24]，是提升目的地競爭力的重要途徑[25]。 居民生活質量影響因素包括居民參與度[26]、社會關係[27]、政府信任[28]社區歸屬感和地方依戀[29]等。

可持續發展背景下，旅遊發展對目的地社會、經濟、文化和環境積極和消極影響受到廣泛關注[30-31]。 隨著國際社會發展理念轉向以人為中心視角[32]，旅遊發展已從強調經濟績效轉變為提升居民生活質量[22、33]，政府規劃者和旅遊開發商在旅遊開發中特別關注居民生活質量[34]，越來越多學者强調研究旅遊發展與居民生活質量之間的關係[12、32、35]。 既有研究表明旅遊發展為目的地帶來經濟效益，產生新的就業機會、居民收入、社交互動、環境改善等正面影響對提升居民生活質量具有積極貢獻[2、36]，進一步提升目的地旅遊可持續發展支持度[37]。 生活成本新增、犯罪率上升、自然資源破壞和污染等負面影響則降低居民生活質量[38]。 旅遊發展對居民生活質量的影響，隨著目的地旅遊地生命週期[35、39]、社區環境[2、40]和居民個體因素等[12、41]不同條件而有所變化。

上述研究表明旅遊發展與居民生活質量之間存在單向因果關係，學者對旅遊發展與居民生活質量研究集中在兩個重要方面：首先，通過探討旅遊發展對經濟、社會、文化和環境的作用，確定旅遊發展與居民生活質量之間的仲介，分析旅遊發展影響居民生活質量的途徑； 其次，從經濟學、社會學等理論出發，研究不同經濟地位、社會關係、旅遊影響感知下，居民對旅遊可持續發展的支持行為，探討生活質量對旅遊發展的影響作用機制。 旅遊發展與居民生活質量雖已明晰存在著雙向因果關係[13]，但多限於一個結論，關注二者的雙向因果關係的實證研

究還較少涉及，僅有少數學者從省域尺度[42]或經濟較發達地區都市[43]進行探討，實證檢驗研究有待加强，而二者的雙向因果關係的內在邏輯機理也亟待分清。

2 旅遊發展與居民生活質量耦合協調及互動效應機理

旅遊發展是目的地經濟社會發展的重要戰畧，居民生活質量是經濟社會發展的重要目標，旅遊發展屬於居民生活質量提升的內在需求，旅遊發展是改善居民生活質量的重要手段[42]。旅遊發展需要依靠目的地居民參與，同時又惠及民生；居民生活質量提升則需要借助旅遊發展及其帶動相關行業發展，兩者存在客觀共生關係，具有相互影響、耦合協調的內容特徵[43-44]。可持續發展背景下，旅遊高品質發展為提升居民生活質量提供驅動力，居民生活質量的提升離不開旅遊發展的帶動與輻射[33]；居民生活質量作為旅遊發展的覈心要義和重要保障，强化了旅遊可持續發展導向（圖 1）。

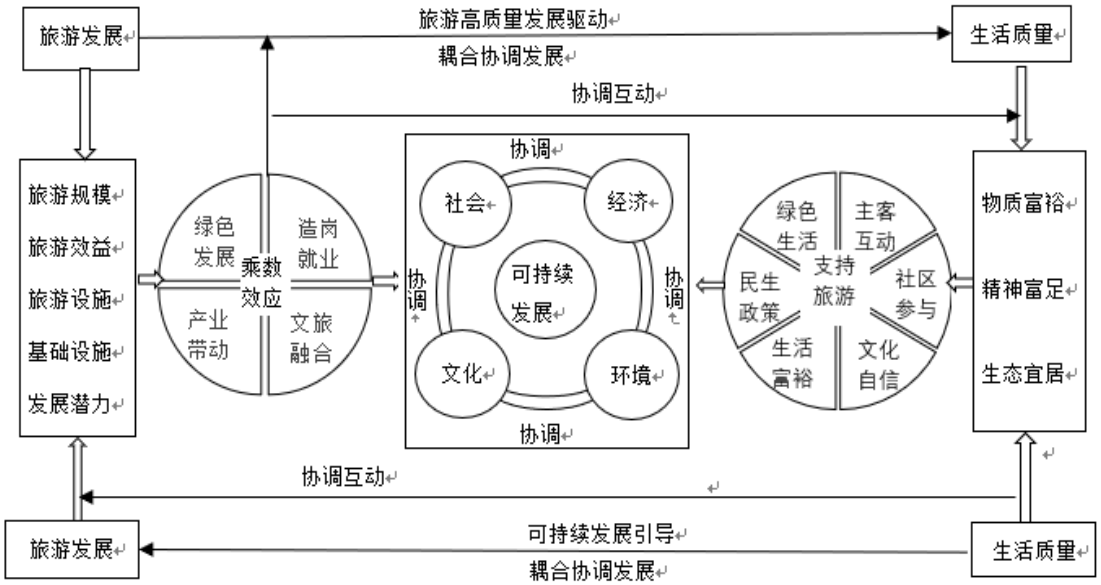


圖 1 旅遊發展與居民生活質量耦合協調及互動效應的理論框架

旅遊發展是提升居民生活質量的重要路徑和動力引擎。結合中國《“十四五”旅遊業發展規劃》，旅遊發展由旅遊規模、旅遊效益、旅遊接待設施、旅遊基礎設施和旅遊發展潛力[15]五個子系統名額構成[45]。旅遊發展帶動相關產業發展，新增居民就業和商業投資機會[46]，完善地方交通和醫療等基礎設施，提升當地治安水准[47]和社會穩定性[46]，乘數效應顯著，是地區經濟增長、提升居民收入水准和生活條件的重要管道[48]。其次，以可持續發展為目標，旅遊發展採用保護和改善生態環境的綠色發展模式，促進居住環境的改善及優化，居民健康水准的提高[36]。再者，文化和旅遊深度融合作為旅遊高品質發展的重要路徑，强化當地文化的保護與傳承，豐富居民的日常生活，增進主客間的文化交流與資訊溝通[49]，提升居民的生活滿意度和幸福感[50]。

居民生活質量改善反向促進旅遊可持續發展。可持續發展目標（SDGs）下，社會、經濟、文化、環境協調發展，物質富裕、精神富足、生態宜居是居民生活滿意、幸福的體現[2、51]。首先，目的地居民作為旅遊發展的重要利益相關者，經濟收入新增和物質生活富裕增强居民對當地旅遊發展的支持和參與度[2]，促進旅遊產品供給、旅遊服務質量提升[52]和旅遊業態創新，改善居民納稅意願，進一步刺激旅遊需求，擴大旅遊市場，深化旅遊可持續發展導向。第二，居民精神生活富足，有助於當地文化氛圍的營造[53]，增進居民-遊客價值共同創造意

願[23]，優化主客關係[52]，增强居民文化自信[54]和地方依戀[12]，促進社會經濟和諧發展； 第三，居民生態宜居的綠色生活環境和健康的生活需求是目的地旅遊業綠色轉型，建立健全綠色低碳經濟體系，促進經濟社會全面綠色發展的重要動力。 最後，政府為滿足居民不斷提升的生活需求，製定的民生政策及措施，在改善居民生活質量同時，為旅遊高品質發展提供政策指導和支持，進一步增強區域可持續發展的內生動力。

3 研究方法和數據來源

3.1 研究區域概況

滇黔桂地區（97.07°E～112.45°E、20.72°N～29. 40°N）包括我國雲南、貴州、廣西 3 省（區）39 個地級及以上都市行政區，由於地理位置偏遠和複雜地形條件，交通發展相對滯後，整體經濟、文化發展處於較落後狀態，居民生活水準相對較低。 近年來，依託保存較好的原始自然旅遊資源，豐富而獨特的少數民族文化遺產，滇黔桂地區大力發展旅遊業，帶動當地經濟發展，促進傳統民族文化傳承和創新，居民生活水準穩步提高[55]，2021 年接待旅遊者人數和旅遊總收入為 223490 萬人和 24102.2 億元，旅遊總收入占 GDP 比重達 32%，在地區經濟發展中佔有重要地位，居民人均可支配收入為 25463 元。 滇黔桂地區作為我國脫貧攻堅的重點區域，已完成新時代扶貧攻堅目標，社會民生持續改善，但發展不平衡、不充分，要素配寘效率低下等問題還較為突出[56]，仍然是我國全面建成小康社會的短板和薄弱環節。 促進旅遊包容性發展，不斷提高居民生活質量，是滇黔桂地區實現共同富裕和可持續發展目標的條件和保障[57]。 為此，本文選擇滇黔桂地區 39 個地級及以上都市為案例地，其中包含昆明、南寧和貴陽經濟相對較發達都市，確保研究區域地理完整性以描述空間耦合特徵，具有典型性和代表性。

3.2 名額選取

3.2.1 旅遊發展評價指標體系

結合《“十四五”旅遊業發展規劃》中旅遊發展的內涵，借鑒前人的研究[58-59]，在數據可獲得基礎上，構建旅遊規模、旅遊效益、旅遊服務設施、旅遊基礎設施、旅遊發展潛力共 5 個一級名額和 16 個二級名額的旅遊發展評價指標體系（錶 1）。

錶 1 旅遊發展評價指標體系

系統	目標層	名額層	名額性質	權重	
旅遊發展	旅遊市場規模	國內旅遊人數（萬人次）	正向	0.05727	Y1
		接待入境旅遊人數（萬人次）	正向	0.09841	Y2
		人數（萬人次）	正向	0.05695	Y3
	旅遊市場效益	國內旅遊收入（萬元）	正向	0.08422	Y4
		國際旅遊外匯收入（萬美元）	正向	0.12440	Y5
		總收入（萬元）	正向	0.08317	Y6
		住宿和餐飲業營業額（萬元）	正向	0.10015	Y7
	旅遊接待設施	3A 級以上景區數量（個）	正向	0.04794	Y8
		博物館（個）	正向	0.07369	Y9
		文化館（個）	正向	0.03270	Y10
	旅遊基礎設施	星級酒店（個）	正向	0.04255	Y11
		都市公共廁所數量（座）	正向	0.09914	Y12
		建成區綠化覆蓋率	正向	0.00768	Y13

	公路里程數	正向	0.03185	Y14
旅遊市場潛力	服務業占 GDP 之比	正向	0.01667	Y15
	地方公共預算支出	正向	0.04322	Y16

3.2.2 居民生活質量評價指標體系

基於馬斯洛需求層次理論，依據居民生活質量含義，結合中國式現代化共同富裕的內涵及前人研究[60]，並在數據可獲得基礎上，選取反映目的地居民生活質量的客觀名額，構建生態宜居、物質富裕、精神富足 3 個一級名額和 20 個二級名額的居民生活質量評價指標體系（錶 2）。

系統	目標層	名額層	名額性質	權重	
居民生活質量	生態宜居	城市生活垃圾無害化處理率（%）	正向	0.00467	*X1*
		城市汙水處理率（%）	正向	0.02089	*X2*
		人均公園綠地面積（平方米）	正向	0.03252	*X3*
		都市用氣普及率（%）	正向	0.01367	*X4*
		都市用水普及率（%）	正向	0.00927	*X5*
	物质富裕	物質富裕人均 GDP（元）	正向	0.07117	*X6*
		農民人均純收入（元）	正向	0.05782	*X7*
		农民人均生活消费支出(元)	正向	0.07201	*X8*
		城市居民人均可支配收入(元)	正向	0.04524	*X9*
		城鎮居民人均消费性支出(元)	正向	0.05258	*X10*
		在崗職工年薪水（元）	正向	0.07022	*X11*
		最低生活保障人數比例（%）	正向	0.00529	*X12*
	精神富足	基本醫療保險參保率（%）	正向	0.13227	*X13*
		失業保險參保率（%）	正向	0.04093	*X14*
		每萬人衛生機构床位數（張）	正向	0.03703	*X15*
		衛生機构數（個）	正向	0.09627	*X16*
		公共圖書館數（個）	正向	0.06587	*X17*
		公共圖書館藏書量（萬册）	正向	0.10811	*X18*
		成人識字率（%）	正向	0.01046	*X19*
		每十萬人擁有大學教育程度	正向	0.05371	*X20*

3.3 研究方法

3.3.1 熵權法

選取熵值法確定各項研究名額權重，採用加權求和測度旅遊發展和居民生活質量綜合指數。 具體步驟如下：

步驟 1：由於原始名額間存在不同量綱，對不同量綱原始數量進行標準化處理，基本公式為：

正向名額：$\frac{X_{ij}-\min(X_{i1},\ldots,X_{in})}{\max(X_{i1},\ldots,X_{in})-\min(X_{i1},\ldots,X_{in})}$

負向名額：$\overline{x_{ij}}=\frac{\max(X_{i1},\ldots,X_{in})-X_{ij}}{\max(X_{i1},\ldots,X_{in})-\min(X_{i1},\ldots,X_{in})}$

式(1)(2)中$\overline{x_{ij}}$和X_{ij}分别表示数據標準化值和原始數值，$\max(X_{i1},\ldots,X_{in})$和$\min(X_{i1},\ldots,X_{in})$代表原始數據最大值和最小值。依據名額值變化方向，將名額分為正向名額和負向名額。

步驟 2：確定第 j 列名額的熵值e_j

e_j=-k$\sum_{i=1}^{m} p_{ij}\, ln\, p_{ij}$, k=$1/ln\, 11$,　0≤e_j≤1　　(3)

其中，p_{ij}為第 j 項名額下第 i 個樣本值占該名額的比重：$p_{ij}=\frac{\overline{x_{ij}}}{\sum_{i=1}^{m}\overline{x_{ij}}}$；該值越大表明無序性越强，信息量越小，權重也就越小。

步驟 3：確立評估名額熵權比重，計算第 j 個名額的權重w_j：$w_j=\frac{g_j}{\sum_{j=1}^{n} g_j}$ (4);其中$g_j=1-e_j$，代表第 j 項名額的變異係數。

步驟 4: 通過線性加權法構建評估名額矩陣。將標準值$\overline{x_{ij}}$與第 j 個名額權重w_j進行相乘，計算綜合指數。$v_i=\sum_{j=1}^{n}\left(w_j\times\overline{x_{ij}}\right)$;(i=1,2,...,m)　　(4)

3.2.2 耦合協調度模型

構建旅遊發展與居民生活質量的耦合協調度模型, 衡量旅遊發展與居民生活質量兩個系統之間的耦合協調水准，具體公式如下：

$C=2[(U1\times U2)/(U1+U2)^2]^{\frac{1}{2}}$　　(5)

$T=\alpha U1\times\beta U2$　　(6)

D=$\sqrt{C\times T}$　　(7)

式（5）～（7）中：C 為耦合度；D 為耦合協調度；U1 、U2 分別為旅遊發展與居民生活質量兩個子系統綜合得分； T 表示子系統的綜合發展指數; α 和 β 為待定係數，且 α+β=1。由於旅遊發展與居民生活質量存在互動影響，互相促進作用，借鑒以往研究通行做法，取 α=β=0.5, 並參照相關文獻劃分標準[61]，本文將耦合協調度劃分為 10 個等級（錶 3）。

錶 3 耦合協調度等級劃分

耦合協調度	協調等級	協調類型
0≤D≤0.1	極度失調	失調
0.1<D≤0.2	嚴重失調	
0.2<D≤0.3	中度失調	
0.3<D≤0.4	輕度失調	過渡
0.4<D≤0.5	瀕臨失調	
0.5<D≤0.6	勉强協調	
0.6<D≤0.7	初級協調	協調發展
0.7<D≤0.8	中級協調	
0.8<D≤0.9	良好協調	

0.9<D≤1.0	優質協調

3.2.3 核密度估計

核密度估計主要用於計算隨機變數的概率密度，避免預設函數形式造成的實際值與計算值之間的差异。 通過這種管道，可以更準確地描述變數的分佈。 公式如下：

$$f(x) = \frac{1}{nh}\sum_{i=1}^{n} K[\frac{X_i - x}{h}]$$

其中 n 是總樣本，即各個都市； h 表示估計頻寬的密度； K 是內核函數。 頻寬越大，密度估計越平滑，偏差越大。

3.2.4 面板向量自回歸模型（PVAR）

PVAR 模型適用於分析各個內生變數及其滯後變數對模型中其他變數的影響，相較於傳統面板資料模型，充分考慮實證分析中的內生性、異質性和動態性問題[62]。

$$Y_{it} = \gamma_0 + \alpha_i + \beta_i + \sum_{j=1}^{k} \gamma_j Y_{i,\ t-j} + \varepsilon_{it}$$

式中 i 為都市，t 為年份，Y_{it}為旅遊發展與居民生活質量的（2×1）維列向量的系統變數矩陣，γ_0為截距項向量,α_i、β_i分別為個體固定效應和時間效應列向量，γ_j表示滯後項參數矩陣，k 為資訊準則確定的最優滯後階數，ε_{it}為隨機誤差，j為滯後階數。

3.2.5 障礙度模型

在綜合評價模型基礎上，識別影響系統發展的關鍵障礙因數。 公式如下：$A_{ij} = \frac{W_j \times I_i}{\sum_{j=1}^{n}(W_j \times I_i)} \times 100\%$ (10)

式中：A_{ij}為第 i 年對旅遊發展與居民生活質量耦合協調的障礙度，其值越大，表示阻滯作用越明顯；W_j為各名額權重；I_i為名額偏離度，$I_i = 1 - X_{ij}$；X_{ij}表示各項名額的標準化值。

3.4 數據來源

以《國務院關於在全國建立農村最低生活保障制度的通知》（國發〔2007〕19 號）為時間節點，研究區域數據收集與處理的時段為 2007-2021 年，所需數據主要來源於：《中國旅遊統計年鑒》《中國城市統計年鑒》《中國區域經濟統計年鑒》等國家級統計年鑒、《廣西統計年鑒》《貴州統計年鑒》《雲南統計年鑒》等省級統計年鑒、《桂林統計年鑒》《遵義統計年鑒》《昆明統計年鑒》等地級統計年鑒及歷年各地級市國民經濟與社會發展統計公報和年鑒，其中個別的缺失值是通過差值法補齊的。.

4 結果分析

4.1 旅遊發展與居民生活質量水准分析

繪製 2007-2021 年滇黔桂地區旅遊發展與居民生活質量演變趨勢圖（圖 2），2007-2021 年滇黔桂地區旅遊發展與生活質量總體呈上升態勢，二者變化趨勢大體一致。 由初期二者同步發展狀態向旅遊發展增長逐漸滯後狀態轉變，特別受 2020

年新冠疫情影響，旅遊發展呈下降回落後緩慢恢復趨勢，年平均增長率為 6.13%；居民生活質量水准則呈越發快速增長態勢，年平均增長率達到 10.39%。

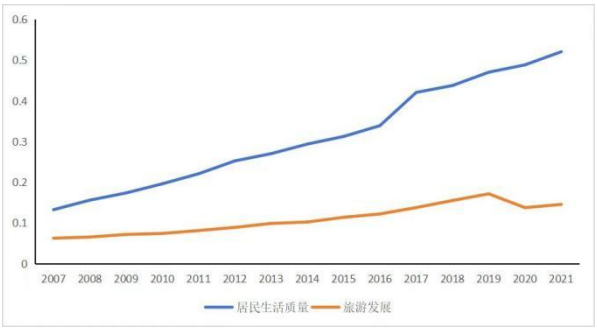


圖 2 旅遊發展與居民生活質量演變趨勢

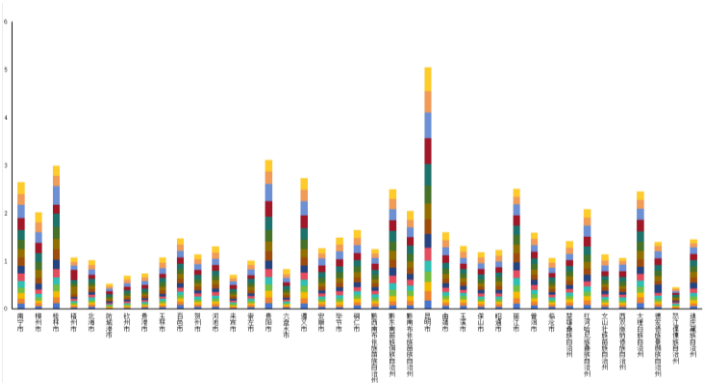


圖 3 2007-2021 年 39 個地級及以上都市旅遊發展水准

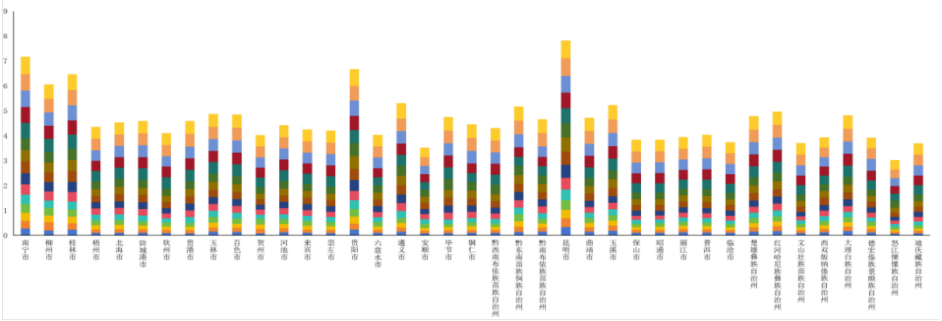


圖 4 2007-2021 年 39 個地級及以上都市居民生活質量水准

由圖（3）可知，隨著基礎設施的改善，在旅遊資源稟賦優勢和政府支持作用下，滇黔桂地區 39 個地級及以上都市旅遊發展水准呈不斷上升趨勢，從 2007 年的 0.0545 上升到 2019 年的 0.1618。 旅遊發展水准較高是省會城市（南寧、昆明、貴陽）和旅遊城市（桂林、遵義、麗江和大理），這些都市具有著名的旅遊資源或優越的地理區位條件，成為區域旅遊發展的覈心都市； 而其它大多數都市旅遊發展水准仍相對落後，旅遊發展整體呈不均衡狀態。

圖（4）表明，2007 年滇黔桂地區 39 個地級及以上都市居民生活質量水准偏低，90%地區居民生活質量水准在 0.08-0.19 之間； 2021 年地區居民生活質量水准顯著提高，大部分地區居民生活質量水准在 0.45-0.57 之間，南寧、貴陽、昆明、桂林、柳州都在 0.57 以上。 總體上，地區各都市居民生活質量水准相差不大，呈區域均衡協調發展狀態。 與旅遊發展水准相比較，旅遊發展較高都市就業機會多、基礎設施條件好、居民收入較高，居民生活質量水准也相對較高，表明旅遊發展與居民生活質量呈耦合協同變化發展特徵。

4.2 旅遊發展與居民生活質量時空耦合協調的演變

4.2.1 旅遊發展與居民生活質量耦合協調時序演變

2007-2021 年滇黔桂地區 39 個地市級及以上都市旅遊發展與居民生活質量耦合協調度如錶 4 所示：①2007 年除省會城市昆明、南寧、貴陽和著名旅遊城市桂林，其它城市旅遊發展與居民生活質量耦合協調關係均處於失調狀態，其中防城港和怒江州處於嚴重失調，地區整體旅遊發展與居民生活質量耦合協調效應不顯著。② 2008-2019 年各都市旅遊發展與居民生活質量的耦合協調關係逐年改善。2019 年昆明耦合協調度最優，處於中級協調； 其次為南寧、貴陽、桂林和遵義；防城港、怒江州旅遊發展水准最低，仍處耦合失調狀態。 2007-2019 年間耦合協調度呈逐年增長趨勢，但仍有很大提升空間，尚未出現耦合協調良好都市。③ 受新冠疫情影響，2020 年各都市耦合協調度雖有一定程度下降，但整體變動幅度不大，具備一定穩健性。 2021 年各都市耦合協調度均有所回升，大多都市處於協調狀態，而防城港和怒江州仍處於失調狀態，屬於特例，需要更多的政策指引。總體上，呈省會城市和旅遊城市旅遊發展與居民生活質量耦合協調度優於其它城市發展態勢。

借助核密度估計刻畫 2007-2021 年耦合協調度時序發展特徵(圖 6)：第一，2007—2014 年核密度曲線的峰值中心分佈在左側，耦合協調度低。 2015—2021 年核密度曲線顯著右移，表明耦合系統已從不協調向協調演進。 第二，存在一定數量的耦合協調度較高都市，且耦合協調度較高都市數量占比從 2014 年開始逐年增加，導致核密度曲線出現顯著的右拖尾現象。 第三，2007 年核密度曲線表現為雙峰，主次波峰值分別代表低水準和高水准的耦合協調情況； 隨著時間推移核密度曲線逐漸以單峰為主，反映各都市耦合協調度逐漸接近。 第四，核密度曲線主峰寬度仍較大，各城市之間耦合協調度空間差异仍然存在，整體上未能達到耦合協調度地區均衡發展態勢。

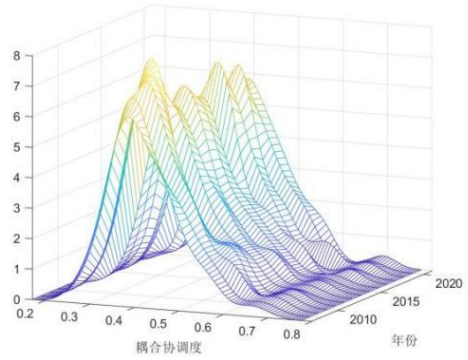


圖 5 耦合協調度的核密度估計曲線

錶 4 2007-2021 年 39 個地市級及以上都市耦合協調度

	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
南宁市	0.41547901	0.425676815	0.444275291	0.44788959	0.475656851	0.501626122	0.518184181	0.535861094	0.533623533	0.550366945	0.598874682	0.62505811	0.655645561	0.619416872	0.647563004
柳州市	0.330036248	0.36769228	0.362104925	0.372410876	0.382589976	0.431160603	0.457841453	0.46982102	0.506701865	0.518081388	0.556971631	0.57596136	0.588203563	0.577896799	0.590713731
桂林市	0.403213836	0.419139915	0.434028439	0.447284616	0.464031767	0.508800034	0.535739617	0.553737547	0.557749846	0.577552001	0.630167386	0.573185348	0.696147151	0.6004401	0.607912782
梧州市	0.235962234	0.250906666	0.279412031	0.284593345	0.305415513	0.320657325	0.32419291	0.33773212	0.467872924	0.370026069	0.411934937	0.53797044	0.447436532	0.436592669	0.457255789
北海	0.265860491	0.277223397	0.304935532	0.316746846	0.329995167	0.349071917	0.349210312	0.359477521	0.372861594	0.389365188	0.430599322	0.438440652	0.471661969	0.453373519	0.470737388
防城港市	0.196436331	0.213085676	0.235957674	0.250698098	0.274431673	0.293250328	0.300744315	0.310808209	0.325661632	0.335412704	0.370363825	0.413833267	0.406568361	0.38798034	0.396060066
钦州市	0.205019716	0.228443181	0.249775178	0.25281857	0.267470053	0.285574313	0.298540211	0.313108339	0.329686744	0.343959308	0.39903583	0.423176954	0.423108283	0.426861992	0.443287772
贵港市	0.215541032	0.239867933	0.252685506	0.264270676	0.298459788	0.316295311	0.326161843	0.33136964	0.344015963	0.353434606	0.409687657	0.428888132	0.446333128	0.445467232	0.457204348
玉林市	0.273990465	0.28342203	0.309885176	0.315993195	0.327714981	0.341247768	0.352278468	0.378302643	0.39702688	0.414356586	0.450649287	0.439803223	0.493511368	0.478475653	0.494683851
百色	0.321549117	0.320837235	0.334239802	0.351359111	0.366381443	0.385616593	0.393223779	0.404986695	0.416650978	0.430765015	0.479756624	0.493112477	0.512767584	0.506334875	0.516961668
贺州市	0.248040841	0.293901628	0.317193782	0.331669433	0.322117083	0.336378643	0.336409263	0.349080933	0.369440749	0.38103184	0.433745933	0.449701132	0.473905066	0.457304109	0.4653192
河池	0.28081403	0.300327876	0.311893293	0.322714052	0.336985123	0.363579328	0.372841396	0.38508016	0.398392869	0.411877911	0.46077438	0.471362538	0.498435011	0.48768824	0.502588189
来宾市	0.220472293	0.24107392	0.259281193	0.277361073	0.287299927	0.299874396	0.312148169	0.327295761	0.337684923	0.348024254	0.387424672	0.436766159	0.416895915	0.415332265	0.429013345
崇左市	0.248292508	0.265928237	0.282532409	0.295372792	0.313738027	0.327368676	0.337908207	0.349669603	0.366380164	0.387861391	0.441805351	0.426942299	0.4766631	0.457414789	0.464056333
贵阳市	0.404071563	0.418456557	0.440614553	0.448548001	0.483975463	0.50097976	0.5224959	0.544342784	0.573620979	0.592929495	0.619998802	0.655066355	0.685332324	0.621615273	0.639981891
六盘水市	0.234031102	0.241554384	0.254120126	0.275720229	0.283473292	0.298985267	0.316230018	0.340341373	0.356431729	0.367759205	0.392229396	0.414178266	0.437579261	0.429458229	0.484224361
遵义市	0.352720045	0.372598858	0.393288307	0.399956235	0.443350927	0.463554316	0.475343457	0.495625836	0.512968669	0.531122846	0.567680365	0.5909686	0.619742073	0.586639417	0.625902521
安顺市	0.253317481	0.262948571	0.283773628	0.307376862	0.315176797	0.335394883	0.349414204	0.364153121	0.381316427	0.40844209	0.43379469	0.456889419	0.477885818	0.435442857	0.45742685
毕节市	0.244113954	0.271097154	0.297373696	0.310129819	0.332421441	0.383428246	0.397794286	0.409375592	0.425960288	0.478364599	0.489685561	0.515989377	0.534563708	0.514529613	0.530619467
铜仁市	0.297484954	0.29229262	0.321840891	0.330935202	0.3428381	0.384091655	0.398771483	0.41189217	0.431559964	0.450513088	0.470599649	0.489314803	0.532379869	0.530834062	0.543755959
黔西南布依族苗族自治州	0.265768816	0.285288273	0.295960379	0.30884834	0.337503221	0.353382678	0.370047088	0.379274911	0.392853287	0.434765377	0.449518684	0.484414714	0.488749447	0.45154412	0.464421094
黔东南苗族侗族自治州	0.317395427	0.366597445	0.397180323	0.434086268	0.442610343	0.466402093	0.476086562	0.485462326	0.502973345	0.517860129	0.538755941	0.537626172	0.59421748	0.579155778	0.58624044
黔南布依族苗族自治州	0.324221405	0.342828562	0.3657198	0.384550106	0.395667886	0.423107035	0.433654479	0.437096869	0.461401315	0.479084678	0.49885797	0.514024117	0.538169969	0.540395801	0.565724212
昆明	0.494837265	0.504936581	0.512559633	0.533994516	0.561736545	0.598025107	0.62006006	0.634884707	0.6572978	0.678355679	0.72664983	0.761226995	0.775406865	0.749430398	0.771054281
曲靖	0.313513916	0.327252787	0.342611089	0.345114731	0.354327479	0.376681993	0.390388001	0.407919014	0.417875866	0.432084727	0.482903909	0.517615858	0.533470983	0.524127063	0.548788296
玉溪	0.330356007	0.338919815	0.344855767	0.344836823	0.356158461	0.366543691	0.3771109	0.406112201	0.416769222	0.428811725	0.464073531	0.49442888	0.501353826	0.508274322	0.518821556
保山	0.267744253	0.275950883	0.281547095	0.286019464	0.307779261	0.322735868	0.342256176	0.351966038	0.364960377	0.38566199	0.439855604	0.459199966	0.480192997	0.475471173	0.483420769
昭通	0.268345479	0.275215491	0.285022221	0.292096772	0.308962594	0.320429531	0.340394212	0.370575931	0.384891786	0.396213053	0.434794402	0.460304229	0.478846863	0.479226708	0.484216072
丽江	0.339909669	0.348611471	0.369311106	0.383450501	0.403108721	0.418148391	0.434294946	0.45352178	0.460242005	0.486172554	0.518672084	0.533021579	0.558475667	0.51301474	0.523213992
普洱市	0.305106343	0.309311274	0.311242182	0.333988395	0.357425685	0.371737791	0.387819163	0.403443109	0.403710357	0.417162447	0.466154464	0.486418509	0.499491882	0.491164205	0.502011481
临沧市	0.258358601	0.26552605	0.272866374	0.282426101	0.294505379	0.315716684	0.336609712	0.348782441	0.359645768	0.37478387	0.421809655	0.44050274	0.457244342	0.457070915	0.459381699
楚雄彝族自治州	0.315205941	0.323669349	0.334393148	0.343314178	0.3525101	0.364082615	0.385279292	0.398271722	0.41023704	0.429590272	0.470933158	0.491350458	0.506534533	0.504615023	0.523163755
红河哈尼族彝族自治州	0.351018105	0.361322858	0.365113383	0.367480023	0.401913656	0.414619329	0.445470446	0.442159785	0.457492569	0.475632535	0.529260039	0.557410049	0.579580204	0.54086718	0.559308336
文山壮族苗族自治州	0.250913944	0.269661062	0.278855667	0.287416218	0.303261991	0.309906222	0.341750339	0.344102497	0.361328044	0.374036105	0.426609554	0.445224617	0.471616328	0.460225099	0.487328158
西双版纳傣族自治州	0.261252678	0.271794589	0.298677817	0.298516081	0.335089571	0.333512476	0.336460865	0.369695077	0.36573652	0.392371734	0.428482569	0.456291147	0.477004904	0.403569851	0.4115327
大理白族自治州	0.374071081	0.3826788	0.377371406	0.391505128	0.404175441	0.420726341	0.449421295	0.466467766	0.48169857	0.496004924	0.556154649	0.577804437	0.582335611	0.558893967	0.55472325
德宏傣族景颇族自治州	0.275579359	0.28961465	0.28400516	0.307468344	0.333989032	0.329206189	0.433422283	0.369471102	0.394422216	0.406841798	0.459932926	0.483486463	0.515145752	0.458488627	0.435369502
怒江傈僳族自治州	0.171631078	0.199302608	0.201540439	0.221885851	0.255447775	0.2453589	0.257453388	0.268539225	0.284736922	0.305120579	0.313857368	0.330140569	0.338209706	0.338081306	0.346881779
迪庆藏族自治州	0.256247764	0.270251703	0.29513985	0.307866503	0.331452564	0.365094275	0.390685249	0.387070677	0.407825987	0.418202779	0.464390777	0.476661366	0.48519036	0.435972075	0.445574897

4.2.2 旅遊發展與居民生活質量耦合協調空間演化

依據耦合協調度等級劃分，以 5 年為時間間隔，繪製空間演化圖（圖 7）：

（1）2007-2021 年滇黔桂地區旅遊發展與居民生活質量耦合協調水准總體呈均衡向好態勢，從失調向中度協調穩步提升。 憑藉得天獨厚的旅遊資源，滇黔桂地區旅遊業已成為推動地區社會經濟發展的重要支柱，為居民生活質量提升提供了經濟基礎； 隨著我國精准扶貧和綠色發展戰略轉型政策的實施，環境基礎設施和公共服務體系持續優化完善，居民生活質量水准提升反過來又為地區旅遊發展提供內生動力，耦合協調水准不斷改善。

（2）中部都市耦合協調水准大多相對較高且較為相近，形成以昆明、貴陽、南寧、桂林、遵義為代表的中部覈心區和怒江州、防城港為代表的邊緣區； 整體協調水准仍較低，未有達到優質協調水准都市。 昆明作為雲南省省會城市，社會經濟發展基礎較好，同時擁有獨特的旅遊資源，旅遊發展和居民生活質量水准一直處於最高值，耦合協調水准最優。 怒江州地處青藏高原東南緣，自然人文旅遊資源豐富，但地勢險峻，內外部交通都極不便利，基礎設施落後，貧困發生率高達 56%，屬於我國扶貧開發工作重點縣，旅遊發展和居民生活質量水准都較低，耦合協調水准從 2007 年嚴重失調提升到 2021 年輕度失調，處於不斷優化狀態。 防城港近年來得益於港口建設不斷完善，經濟水准增長較快，居民生活質量處於中等水准，但一直以來旅遊投入資金較少，海濱旅遊資源未能得到充分利用開發，專業人才欠缺，旅遊產品單一，競爭力較弱，旅遊發展仍處較低水準，耦合協調水准在輕度失調與瀕臨失調之間波動。

（3）從省域來看，貴州和雲南旅遊發展與居民生活質量耦合協調發展較為穩定，形成以貴陽、遵義和昆明為中心向周邊都市輻射，呈空間異質性較小、收斂顯著特徵； 而廣西旅遊發展與居民生活質量耦合協調度雖圍繞桂林、南寧向周圍輻射遞減，但輻射範圍有限，都市間異質性較大。 整體上，耦合協調水准高的覈心都市對耦合協調水增較低的周邊都市表現出一定的空間正溢出效應。

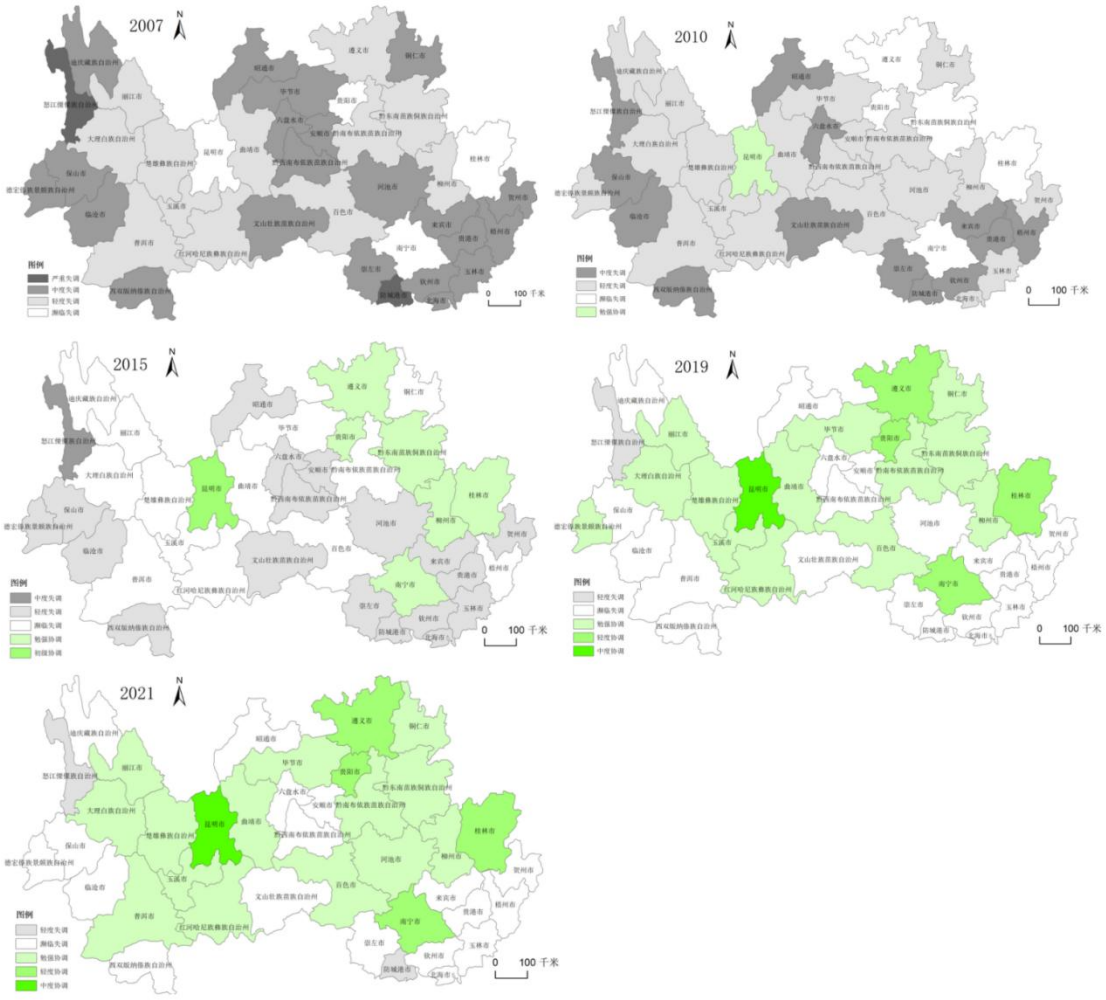


圖 6 旅遊發展與居民生活質量耦合協調度的空間演變

4.3 旅遊發展與居民生活質量互動效應分析

PVAR 模型在考慮變數的異質性和內生性前提下，能够展現變數之間相互作用動態機制。 為此，採用 PVAR 模型分析旅遊發展與居民生活質量的互動效應，旨在探索旅遊發展與居民生活質量耦合協調關係作用下的欠發達地區實現共同富裕和可持續發展目標的路徑。

4.3.1 平穩性檢驗

鑒於數據可能存在异方差局限性，為規避其非平穩性造成的“偽回歸”，應用 PVAR 模型之前對數據進行 LLC、IPS、ADF-Fisher 組織根檢驗，明確旅遊發展與居民生活質量是否存在因果聯系和互動關係。 據錶 5 可知，旅遊發展原數據未通過平穩性檢驗，對旅遊發展和居民生活質量的一階差分後展開檢驗，結果顯示 P 值<0.05，表明二者存在長期穩定關係。 選用 Kao、Pedroni、Westerlund 三種方法進行協整檢驗，結果顯示在 1%的水准下旅遊發展與居民生活質量存在穩定均衡關係（錶 6）。

錶 5 組織根檢驗結果

变量	LLC（P 值）	IPS（P 值）	ADF-Fisher（P 值）	结论
lntd	-1.6053** (0.0542)	-4.6168*** (0.000)	78.3889 (0.4663)	不平稳
lnqol	-9.0909*** (0.000)	-6.6826*** (0.000)	147.5793*** (0.000)	平稳
d.lntd	-8.8723*** (0.000)	-12.0124*** (0.000)	295.8795*** (0.000)	平稳

d.lnqol	-9.1746*** (0.000)	-11.0796*** (0.000)	180.5403*** (0.000)	平衡

注：*、**、***表示在 10%、5%、1%顯著性水准下顯著

錶 6 協整檢驗結果

检验方法	统计量名	t 值	P 值
Pedroni 检验	Modified Phillips-Perron t	-4.5878	0.000
	Phillips-Perron t	-21.7143	0.000
	Augmented Dickey-Fuller t	-21.0789	0.000
Kao 检验	Augmented Dickey-Fuller t	-13.2554	0.000
Westerlund 检验	Variance ratio	-3.9486	0.000

4.3.2 最優滯後階數

PVAR 模型對滯後階數比較敏感，選擇滯後階數過大將會新增模型估計參數，降低自由度，滯後階數過小則會降低估計結果的可靠性[82]。 依據 AIC、BIC 及 HQIC 資訊準則確定滯後 1 階是 3 個分組的最優滯後階數（錶 7）。

錶 7 滯後期數選擇

滞后期	AIC	BIC	HQIC
1	-2.33458*	-1.60772*	-2.04856*
2	-2.27554	-1.46135	-1.95401
3	-2.21114	-1.29587	-1.84832
4	-2.13412	-1.10017	-1.72261

4.3.3 Granger 因果檢驗

Granger 因果檢驗如錶 8 所示：居民生活質量顯著正向促進旅遊發展增長； 而旅遊發展沒有顯著正向促進居民生活質量提升。 這可能的解釋是滇黔桂地區作為欠發達地區，旅遊開發中引入大量外來資本，但由於旅遊資源產權主體模糊，造成利益大部分被開發商攫取，當地居民參與層次低，享受收益有限[63]，對當地居民生活質質量改善沒有起到顯著提升作用，旅遊發展促進居民生活質量提升作用機制有待加强。

錶 8 格蘭傑因果檢驗

原假设	Chi2 统计量量	df	P 值	结论
LNQOL does not Granger Cause LNTD	18.588	1	0.000	拒绝
LNTD does not Granger Cause LNQOL	0.83317	1	0.361	接受

4.3.3 GMM 參數估計

面板 PVAR 模型 GMM 估計結果如錶 9 所示：①居民生活質量滯後一期對其本身產生正向影響，呈顯著正向累進效應，表明居民生活質量提升在一定程度上存在慣性發展特徵。② 旅遊發展滯後一期對其本身產生負向影響，存在短期的自我減弱機制，表明旅遊發展內驅動力不足。 滇黔桂地區經濟還較為落後，雖然自然人文旅遊資源豐富，但旅遊產品結構單一、互補不足，旅遊產業結構有待調整和陞級，旅遊基礎設施和公共服務體系建設仍待加强。 應積極發自然生態、民族民俗、邊境風光等旅遊資源優勢，完善旅遊業體系，加大旅遊資源整合力度，促進旅遊品牌陞級，不斷增強旅遊發展內驅動力。③ 居民生活質量滯後一期在 1%的水准下對旅遊發展起到正向顯著影響，旅遊發展滯後一期對居民生活質量起到正向影響但不顯著。 這與格蘭傑因果檢驗結果相一致：一方面，隨著基礎設施、生活環境及公共服務體系不斷完善，居民生活質量不斷提高，居民周邊旅遊需求持續增强，促進了本地旅遊消費，為旅遊可持續發展提供良好的物質基礎；另一方面，旅遊發展初期在一定程度促進地方社會經濟發展，居民生活水準得到

提高，但由於旅遊發展及利益分配機制不完善[64]，隨著旅遊開發帶來的原著居民流失、民族文化原真性喪失等社會文化消極影響，對居民精神生活帶一定的負面影響，導致旅遊發展對居民生活質量正向推動效應不顯著。

錶 9 PVAR 模型 GMM 估計結果

变量	dlntd	dlnqol
L1.dlntd	-0.2225954**	0.0244264
L1.dlnqol	0.4158042***	0.0991343**

4.3.4 脈衝回應分析

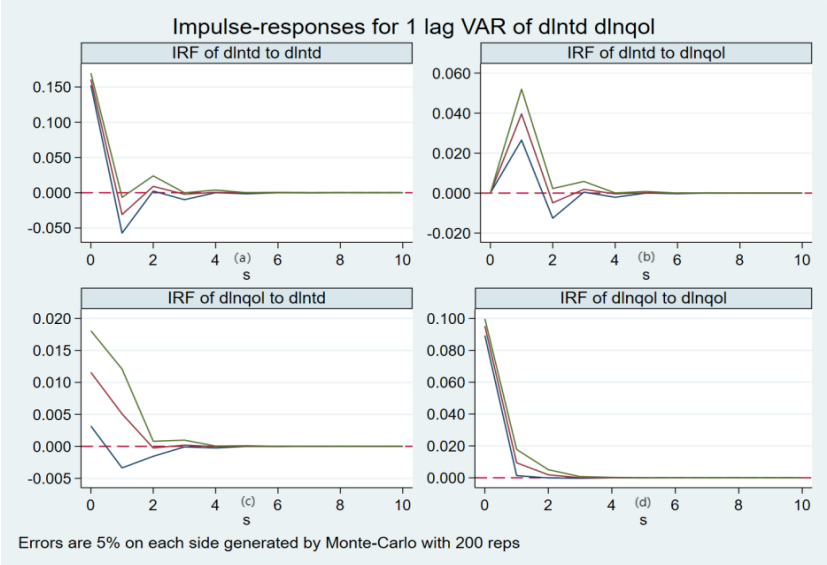


圖 7 旅遊發展和居民生活質量的脈衝回應圖

脈衝回應反映系統內生變數受到衝擊後，當期和未來變化的趨勢（Inoue，A.et al，2013）。對揭示旅遊發展與居民生活質量動態波動中的協同作用具有重要意義。為提高結果的穩定和置信度，執行 200 次 Monte Carlo 類比，得到滯後 10 個週期的脈衝回應軌跡。

圖 7a 顯示旅遊發展受到自身衝擊，呈現出急劇下降—上升—趨於平穩的變化趨勢：初期響應值最高，正向衝擊效應最大；隨即迅速減弱，至第 1 期下落為負向效應，隨即上升；至第 2 期回升至正向效應；第 4 期後衝擊效應趨於 0 漸穩定。表明滇黔桂地區旅遊發展對自身的影響存在滯後性。旅遊發展處於初級階段，經濟基礎設施仍較落後，產業結構不完善，容易忽視環境和可持續發展問題[65]，不利於旅遊自身發展。隨著旅遊發展水准不斷提高，產業結構持續優化陞級，旅遊發展潛力和自身發展慣性逐漸顯現，進入良性發展軌道。

圖 7b 顯示，旅遊發展受到居民生活質量的一個標準差衝擊，產生“倒 U”型促進效應：初期影響為 0，隨後響應值上升；第 1 期促進效果達到峰值後，呈緩慢減弱趨勢；第 2 期負向效應達到最強，隨即回升；第 3 期後逐步向 0 收斂。說明居民生活質量在短期內對旅遊發展具有明顯的正向影響，但作用機制逐漸減弱，長期顯著正向推進效應不强。可能的解釋是，由於地理條件、交通與基礎設施、資源配置以及教育與人才培養等因素制約了滇黔桂地區經濟發展，大部分居民經濟收入還處於較低水準，旅遊需求不高，對本地旅遊發展促進作用有限。

圖 7c 顯示，居民生活質量面對旅遊發展一個標準差衝擊，呈現正向響應：初期達到峰值響應效果最强，而後逐漸減弱，在滯後 2 期明顯減弱後趨近於 0，表明旅遊開發初期居民收入新增，促進居民生活質量提升效應最為明顯；隨著旅遊

發展過程中居民生活成本新增、旅遊收入分配不均、環境惡化等負面影響出現，旅遊發展提升居民生活質量效果欠佳，衝量曲線呈下降趨勢，長期脈衝積極效應減弱趨勢明顯，正向效應後勁不足。

圖 7d 顯示，居民生活質量受到自身一個標準差衝擊，初期正向影響最大，在第 1 期逐漸減弱，在第 2 期向 0 逐漸收斂趨於穩定。 表明居民生活質量短期脈衝積極效應最强，長期自我提升效應逐漸減弱。

4.3.5 方差分解分析

錶 10 方差分解結果

期数	dlntd 方差分解		dlnqol 方差分解	
	dlntd	dlnqol	dlntd	dlnqol
1	1.000	0.000	0.015	0.985
2	0.945	0.055	0.017	0.983
3	0.944	0.056	0.017	0.983
4	0.944	0.056	0.017	0.983
5	0.944	0.056	0.017	0.983
10	0.944	0.056	0.017	0.983
15	0.944	0.056	0.017	0.983

運用方差分解分析結構衝擊對系統內生變數的波動貢獻度，解析滇黔桂地區旅遊發展與居民生活質質量互動促進的動態關係，為預測二者交互作用趨勢提供進一步見解。 如錶 10 所示：（1）旅遊發展與居民生活質量影響主要來自其自身，在第 3 期後分別在 94.4%和 98.3%，說明二者均存在自我增强機制，具有極强的慣性和自我强化特徵。 （2）旅遊發展與居民生活質量對彼此的貢獻程度呈現出一定的增長態勢。 值得注意的是，旅遊發展對居民生活質量貢獻度從初期 0，到第 2 期上升至 5.5%，第 3 期後固定在 5.6%； 而居民生活質量對旅遊發展貢獻度在初期達到 1.5%，第 2 期後固定在 1.7%。 說明旅遊發展促進居民生活質量提升效應呈逐年增强態勢，而居民生活質量對旅遊發展的影響初期已基本顯現，之後影響較小。 從貢獻解釋度來看，旅遊發展對居民生活質量的影響略大於居民生活質量對旅遊發展的貢獻。

4.4 旅遊發展與居民生活質量耦合協調障礙因數分析

運用障礙度模型分析滇黔桂地區旅遊發展與居民生活質量耦合協調的障礙因數。由於研究名額較多，將 2007-2021 年每年障礙度排名前 5 的障礙因數及障礙度清單（錶 5），主要包括：國際旅遊外匯收入（Y5）、接待入境旅遊人數（Y2）、都市公共廁所數量（Y12）、住宿和餐飲營業額（Y7）以及公共圖書館藏書量（X18）。2007-2016 年，基本醫療保險參保率名額作為障礙因數前五位之一，說明社會保障體系仍存在不足； 2017-2021 年，基本醫療保險參保率從障礙因數前五位消失，表明隨著社會保障體系的完善，滇黔桂地區已基本實現保障和改善民生。 國際旅遊外匯收入（Y5）和接待入境旅遊人數（Y2）名額的障礙度數值較高，表明滇黔桂地區入境旅遊的接待人數和旅遊收入較低，旅遊發展國際化程度不高，高品質旅遊業態較少，國際旅遊吸引力和旅遊市場行銷强度仍然不足。 住宿和餐飲營業額障礙因數（Y7），說明過夜旅遊者平均停留時間和旅遊餐飲消費較低，滇黔桂地區旅遊產業結構單一，異質性不高，仍以傳統觀光旅遊模式為主，旅遊消費深化不足。 圖書館藏書量（X18）和都市公共廁所數量（Y12），表明公共文化設施和服務設施建設不足，未能適應旅遊發展需求。 總體而言，旅遊發展與居民生活質量耦合協調關係障礙因數屬於旅遊發展評估名額，表明旅遊發展不

足是滇黔桂地區旅遊發展與居民生活質量協調發展的主要障礙。 應進一步加強旅遊和公共教育設施建設, 製定適配的金融支持政策, 不斷豐富和創新旅遊業態, 提升旅遊品質，推動旅遊產品向觀光、休閒、度假並重轉變，以多樣化高品質供給滿足旅遊消費新需求。

錶 11 不同年份排名前五的障礙因數

年份	障礙因子	障碍度	障碍因子	障碍度	障礙因子	障碍度	障礙因子	障碍度	障礙因子	障碍度
2007	X13	7.00%	Y5	6.77%	X18	5.52%	Y7	5.41%	Y12	5.36%
2008	Y5	6.87%	X13	6.81%	X18	5.63%	Y7	5.47%	Y2	5.46%
2009	Y5	6.94%	X13	6.79%	X18	5.67%	Y2	5.51%	Y7	5.51%
2010	Y5	7.01%	X13	6.73%	Y7	5.75%	X18	5.74%	Y2	5.57%
2011	Y5	7.07%	X13	6.70%	Y7	5.85%	X18	5.81%	Y2	5.63%
2012	Y5	7.20%	X13	6.78%	Y7	5.94%	X18	5.86%	Y2	5.76%
2013	Y5	7.27%	X13	6.90%	Y7	5.97%	X18	5.92%	Y12	5.80%
2014	Y5	7.36%	X13	6.92%	Y7	5.96%	Y2	5.93%	X18	5.93%
2015	Y5	7.43%	X13	7.05%	Y12	6.05%	Y2	6.04%	Y7	6.03%
2016	Y5	7.52%	X13	6.81%	Y12	6.17%	Y2	6.14%	Y7	6.10%
2017	Y5	7.98%	Y2	6.58%	Y7	6.54%	X18	6.47%	Y12	6.42%
2018	Y5	8.06%	Y2	6.73%	Y7	6.61%	X18	6.56%	Y12	6.53%
2019	Y5	8.08%	Y2	6.94%	Y12	6.92%	Y7	6.82%	X18	6.72%
2020	Y5	9.02%	Y2	7.20%	Y12	6.78%	X18	6.69%	Y7	6.63%
2021	Y5	9.38%	Y2	7.43%	Y12	6.84%	Y7	6.75%	X18	6.76%

5 結論與建議

5.1 結論

本文聚焦欠發達地區旅遊發展與居民生活質量的耦合協調及互動效應, 建構可持續發展背景下二者耦合協調及互動效應的理論框架, 從時空動態視角分析其耦合協調演變特徵及互動效應, 以期進一步豐富旅遊學與社會學等交叉學科領域的研究體系, 為發揮旅遊業强大的市場優勢、巨大經濟帶動作用和強勁造血減貧功能, 實現欠發達地區共同富裕和可持續發展目標提供參攷借鑒。 結論如下:

（1）2007-2021 年滇黔桂地區旅遊發展和居民生活質量總體均呈上升態勢，二者變化趨勢大體一致，呈耦合協同變化發展特徵。 居民生活質量總體呈快速增長均衡發展態勢，旅遊發展因旅遊資源稟賦、社會經濟發展水准及區位因素差异，整體呈不均衡發展狀態，且增長速度逐漸滯後於居民生活質量。

（2）耦合協調程度逐步優化，同時具有一定穩健性，但總體仍處較低水準，且存在明顯的空間異質性，表現為省會城市和旅遊城市的耦合協調水准較高，並對周邊都市產生一定的空間正溢出效應。 旅遊發展不均衡是耦合協調程度空間異質性存在的根本原因，而空間正溢出效應可能與覈心區域旅遊流的擴散效應，有助於鄰近地區旅遊發展及生產效率提升[66]，進而改善居民生活質量，提高耦合協調水准有關。

（3）旅遊發展和居民生活質量受自身衝擊的響應效應較大，二者在初期自我正向響應值均最高，長期均存在自我增强機制。 但旅遊發展呈急劇下降—上升—趨於平穩的變化趨勢，短期存在自我减弱效應，內驅動力不足，隨著旅遊自身發展慣性逐漸顯現，將進入良性發展軌道。

（4）旅遊發展與居民生活質量呈積極影響互動效應，但二者長期動態互動正向推動效應不足，旅遊發展對居民生活質量促進作用略大於居民生活質量對旅遊發展影響。 旅遊發展對居民生活質量積極影響效應不顯著，二者互動正向促進作用存在一定的潛在機制。 旅遊高品質發展為改善居民生活質量提供強大動力，促進經濟、社會、文化、環境協調發展，反過來又推動旅遊可持續發展。

（5）旅遊發展與居民生活質量耦合協調障礙因數包括國際旅遊外匯收入、接待入境旅遊人數、住宿和餐飲營業額、都市公共廁所數量及公共圖書館藏書量，障礙因數多屬旅遊發展評估名額，錶明旅遊發展不足是滇黔桂地區旅遊發展與居民生活質量耦合協調發展的主要障礙。

5.2 討論

持續推動欠發達地區走新內生發展道路，以人民為中心推進區域協調發展，是中國式現代化行程中的關鍵環節。 探究旅遊發展與居民生活質量耦合協調及互動效應，對欠發達地區通過旅遊發展提升居民生活質量，實現共同富裕和可持續發展目標具有重要理論價值和實踐意義。 一直以來，學術界對旅遊發展能否促進欠發達地區減輕貧困、提升居民生活水準未達成共識[67]。 旅遊發展並不意味著能够幫助欠發達地區居民減貧，只有通過旅遊發展與居民生活質量在形成良性迴圈中互動促進，實現社會、經濟、文化、生態環境協調發展，進一步強化旅遊可持續發展[68]，才能持續提升居民生活水準。 本文在理論層面構建了可持續發展背景下旅遊發展與居民生活質量耦合協調及互動效應的理論框架，通過實證研究探索欠發達地區旅遊發展與居民生活質量耦合協調時空演變特徵，在一定程度上解析旅遊發展與居民生活質量互動效應的作用機制，分清了一條基於“旅遊發展”提升居民生活質量的新內生發展路徑，有助於完善旅遊學與社會學等相關領域的理論和實證研究，推進欠發達地區實現共同富裕和可持續發展目標，為管理者製定相關發展戰略與政策提供決策參考。

既有研究表明，旅遊發展對居民經濟收入的影響在經濟發達地區與欠發達地區有所不同[69]。 本文發現滇黔桂地區旅遊發展與居民生活質量長期互動正向推動效應不足，旅遊發展對居民生活質量積極影響效應不顯著，這與 Godovykh 等[36]探索旅遊業對一組中美洲國家居民福祉的影響結論相類似，而與 Wang 等[43]關於中國長江三角洲城市群（經濟較發達地區）旅遊發展與居民幸福感具有長期穩定的顯著互動促進關係有所不同。 表明不同經濟發展程度、旅遊發展階段及政策[70]是影響旅遊發展與居民生活質量互動效應的重要因素。 此外，本文觀察到旅遊發展與居民生活質量耦合協調度存在空間正溢出效應，進一步驗證了旅遊發展與居民生活質量耦合協調程度的空間相關性[71]，這種空間效應為區域旅遊合作與一體化發展提供了新的理論基礎，為欠發達地區旅遊發展與居民生活質量的協調發展，走“旅遊發展”型內生發展道路提供了新的思路。

為了進一步促進欠發達地區旅遊發展與居民生活質量耦合協調與互動效應，本文提出以下管理建議：①加快推進旅遊傳統產業結構調整和轉型陞級，推動旅遊高品質發展。 積極發揮區域特色旅遊資源優勢，加大優質旅遊產品和服務供給，加快旅遊基礎設施和公共服務體系建設，健全綠色旅遊發展體系，强化旅遊休閒功能，加强高品質旅遊景區和旅遊度假區建設，提高服務品質和改善文化體驗，由單一“觀光”旅遊向“觀光+休閒度假”複合型旅遊轉變，增强旅遊發展內驅動力。②構建減貧長效機制，完善分配制度，促進機會公平，加快提升居民生活水準。應增强機构管理質量，建立公平、合理、動態的利益分配機制[72]，及時有效提高本地居民旅遊參與度，擴大居民受益面，製定改善居民福利政策，加大公共服

務設施投資建設，加速居民生活質量提升行程。③ 加强區域旅遊協同合作。 綜合資源優勢，統籌功能佈局，推動區域旅遊產業優勢互補、錯位發展，聯手打造品質化、特色化、定制化旅遊產品和精品線路； 創新區域聯合行銷機制，構建國際性一體化文宣行銷平臺，形成線路互推、客源互送、利益共用的行銷體系；實現區域旅遊市場全面開放和有效對接，推動形成旅遊產品互補、線路互通、市場互動、客源互流的新格局，增强區域旅遊整體實力和國際競爭力。 積極發揮省會城市和旅遊城市的正溢出效應，縮小都市間旅遊發展與生活質量協調程度的空間異質性差距，帶動區域整體協調度提升。

本文探索性地研究了欠發發達地區旅遊發展與居民生活質量耦合協調及互動效應，但仍存在一些問題需要討論與深化。 首先，囿於數據可獲性限制，旅遊發展和居民生活品質評價名額選取仍較為局限，多為反映客觀方面的名額，對於文化自信、社區參與等主觀評估名額等尚未涉及，應不斷完善指標體系以全面反映旅遊發展和居民生活質量水准。 其次，障礙因數識別僅限於旅遊發展與居民生活質量的評估名額，可進一步從影響二者關係的仲介變數進行深入探討。

參考文獻：

[1] CHI, C. G.-q., CAI R., LI, Y. Factors influencing residents' subjective well-being at World Heritage Sites[J]. Tourism Management, 2017,63(12):209-222.

[2] WANG, R., DAI, M., Ou, Y., et al. Residents' happiness of life in rural tourism development[J]. Journal of Destination Marketing & Management, 2021,20(6):100612.

[3]世界旅遊組織（2023 年），旅遊：共同富裕的驅動力–主要觀點[EB/ OL].中文版，世旅組織，馬德里，DOI： https://doi.org/10.18111/9789284424924

[4] SPENCELEY, A., HABYALIMANA, S., TUSABE, R., et al. Benefits to the poor from gorilla tourism in Rwanda [J]. Development Southern Africa, 2010,27(5):647-662.

[5] ALMEIDA-GARCIA, F., PELAEZ-FEMANDEZ, M. Á., BALBUNA-VAZQUEZ, A., et al. Residents' perceptions of tourism development in Benalmádena (Spain) [J]. Tourism Management, 2016. 54(6): 259-274.

[6] RICHARDSON, R. B., FENANDEZ, A., TSCHIRLEY, D., et al. Wildlife Conservation in Zambia: Impacts on Rural Household Welfare[J]. World Development, 2012,40(5):1068-1081.

[7] CROES, R., RIVERA, M. A. Tourism's potential to benefit the poor: A social accounting matrix model applied to Ecuador[J]. Tourism Economics, 2017, 23(1): 29-48.

[8]粟路軍，唐彬禮. 旅遊地居民生活質量：研究回顧與未來展望[J].旅遊學刊,2020, 35(6): 78-95.

BERBEKOVA, A., UYSAL, M., ASSAF, A. G. Toward an assessment of quality of life indicators as measures of destination performance[J]. Journal of Travel Research, 2022, 61(6):1424-1436.

[9] KAFASHPOR, A., GHASEMPOUR GANJI, S. F., SADEGHIAN, S., et al. Perception of tourism development and subjective happiness of residents in Mashhad, Iran[J]. Asia Pacific Journal of Tourism Research, 2018,23(6):521-531.

[10]張俊，程勵. 旅遊發展與居民幸福：基於系統動力學視角[J].旅遊學刊,2019,34(8):12-24.

LI, J., RIDDERSTAAT, J., YOST, E. Tourism development and quality of life interdependence with evolving age-cohort-based population[J]. Tourism Management, 2022(93): 104621.

[11] RIDDERSTAAT, J., CROES, R., NIJKAMP, P. The tourism development–quality of life nexus in a small island destination[J]. Journal of Travel Research, 2016. 55(1): 79-94

[12] MATHEW, P. V., SREEJESH, S.. Impact of responsible tourism on destination sustainability and quality of life of community in tourism destinations[J]. Journal of Hospitality Tourism Management, 2017,31(6): 83-89.
[13] MENGHAN WANG, MING MING SU , CHANG GAN , et al. A coordination analysis on tourism development and resident well-being in the Yangtze River Delta Urban Agglomeration, China[J].Journal of Cleaner Production,2023(421):138361
[14]史舒悅，汪俠，海少琪，等. 旅遊發展對貧困地區城鄉收入差距的非線性影響[J].資源科學,2022,44(11), 2341-2355.
[15] SCHUESSLER, K. F., FISHER, G. A.. Quality of life research and sociology[J]. Annual review of sociology, 1985(11):129-149.
[16] KANG, Y., LEE, E. Quality of life and its factors in Korean elderly with mild cognitive impairment[J]. Clinical Nursing Research, 2018,27(7):871-889.
[17] AROCA GONZALEZ, P. The heterogeneous level of life quality across Chilean regions[J]. Habitat International, 2017.68(10):84-98.
[18] EIZENBERG, E., JABAREEN, Y. Social sustainability: A new conceptual framework[J]. Sustainability, 2017,9(1): 68-72.
[19] NAZNEEN, S., Xu, H., UD Din, N. Assessment of residents' destination image and their pro-tourism development behaviour: perspectives on the China–Pakistan economic corridor[J]. Tourism Review, 2021,76(1): 184-197.
[20] SU, L., HUANG, S., PEARCE, J. How does destination social responsibility contribute to environmentally responsible behaviour? A destination resident perspective[J]. Journal of Business Research, 2018,86(5):, 179-189.
[21] LIN, Z., ChEN, Y., FILIERI, R. Resident-tourist value co-creation: The role of residents' perceived tourism impacts and life satisfaction[J]. Tourism Management, 2017, 61(8): 436-442.
[22] PYKE, S., HARTWELL, H., BLAKE, A., et al.. Exploring well-being as a tourism product resource[J]. Tourism Management, 2016,55(8): 94-105.
[23] CHEN, Y., Li, X.. Does a happy destination bring you happiness? Evidence from Swiss inbound tourism[J]. Tourism Management, 2018,65(4): 256-266.
[24] JUROWSKI C, BROWN D O. A comparison of the views of involved versus noninvolved citizens on quality of life and tourism development issues[J]. Journal of Hospitality and Tourism Research, 2001, 25(4): 355-370.
[25] WOO E, UYSAL M, SIRGY M J. Tourism impact and stakeholders'quality of life [J]. Journal of Hospitality and Tourism Research, 2018, 42(2): 260-286.
[26] OUYANG Z, GURSOY D, SHARMA B. Role of trust, emotions and event attachment on residents'attitudes toward tourism [J]. Tourism Management, 2017, 63(12): 426-438.
[27]李瑞，吳殿廷，殷紅梅，等. 民族村寨旅遊地居民滿意度影響機理模型與實證——以社區、政府和企業力量導向模式的比較研究[J].地理學報, 2016, 71(8): 1416-1435
[28] NUNKOO, R., So, K. K. F.. Residents' support for tourism: Testing alternative structural models[J]. Journal of Travel Research, 2016,55(7):847-861.
[29] RIBEIRO, M. A., PINTO, P., SILVA, J. A., et al. Residents' attitudes and the adoption of pro-tourism behaviours: The case of developing island countries[J]. Tourism Management, 2017, 61(8): 523-537.
[30] WANG, S., BERBEKOVA, A., Uysal, M. Pursuing justice and quality of life: Supporting tourism[J]. Tourism Management. 2022,89(4):10446

[31] LIANG, Z.-X., HUI, T.-K.. Residents' quality of life and attitudes toward tourism development in China[J]. Tourism Management, 2016 57(12): 56-67.
[32] UYSAL, M., SIRGY, M. J., WOO, E., et al. Quality of life (QOL) and well-being research in tourism[J]. Tourism Management, 2016,53(4): 244-261.
[33] SU, L., YANG, X., Swanson, S. R. The impact of spatial-temporal variation on tourist destination resident quality of life[J]. Tourism Management, 2022,93,(12):104572.
[34] GODOVYKH, M., RIDDERSTAAT, J., Fyall, A.. The well-being impacts of tourism: Long-term and short-term effects of tourism development on residents' happiness[J]. Tourism Economics, 2023,29(1): 137-156.
[35] NAZNEEN, S., XU, H., UD DIN, N. Assessment of residents' destination image and their pro-tourism development behaviour: perspectives on the China–Pakistan economic corridor[J]. Tourism Review, 2021.76(1):184-197.
[36] LAI, H. K., PINTO, P., & PINTASSILGO, P.. Quality of Life and Emotional Solidarity in Residents' Attitudes toward Tourists: The Case of Macau[J]. Journal of Travel Research, 2021,60, 1123 - 1139.
UYSAL, M., SIRGY, M. J. Quality-of-life indicators as performance measures[J]. Annals of Tourism Research, 2019,76(5): 291-300.
[37] SU, L., HUANG, S., NEJATI, M.. Perceived justice, community support, community identity and residents' quality of life: Testing an integrative model[J]. Journal of Hospitality and Tourism Management, 2019. 41(12): 1-11.
[38]王金偉，張麗豔，王國權. 民族地區居民旅遊扶貧參與意願的影響機制——一個仲介與調節效應的混合模型[J].旅遊學刊,2022, 37 (8): 40- 57.
[39]朱麟奇，李秋雨，劉繼生. 中國旅遊業與地區發展及民生改善協調關係研究[J].地理科學，2020,40(8):1328-1335.
[40] WANG, M., SU, M. M., GAN, C., et al. A coordination analysis on tourism development and resident well-being in the Yangtze River Delta Urban Agglomeration China[J]. Journal of Cleaner Production, 2023(421): 138361.
[41]王兆峰，張先甜. 中國省域旅遊發展與民生福祉的動態響應及協調效應研究[J].旅遊科學,2023,37(3):1-18
[42]劉雨婧，唐健雄. 中國旅遊業高品質發展水准測度及時空演化特徵[J].統計與決策,2022,38(05):91-96
[43] CAMARGO, B. A., WINCHENBACH, A., VÁZQUEZ-MAGUIRRE, M.. Restoring the dignity of indigenous people: Perspectives on tourism employment[J].Tourism Management Perspectives, 2022,41(1): 100946.
[44] WANG, D., HOU, Y., LI, X., et al. Spatio-temporal Analysis of China's Livelihood Development: Evidence from a Functional Index Model[J]. Applied Spatial Analysis and Policy, 2022,15(6): 1493-1523.
[45] LEE, C.-C., CHEN, M.-P., PENG, Y.-T. Tourism development and happiness: International evidence. [J] Tourism Economics, 2021,27(5):1101-1136.
[46] APPAU, S., CHURCHILL, S. A., FARRELL, L. Social integration and subjective wellbeing[J]. Applied Economics, 2019,51(16):1748-1761.
[47] RIVERA, M., CROES, R., LEE, S. H. Tourism development and happiness: A residents' perspective[J]. Journal of Destination Marketing & Management, 2016,5(1): 5-15.

[48] LINDBERG, K., MUNANURA, I. E., KOOISTRA, C., et al. Understanding effects of tourism on residents: A contingent subjective well-being approach[J]. Journal of Travel Research, 2022,61(2):346-361.

[49] IZURIETA, G., TORRES, A., PATIÑO, J., et al. Exploring community and key stakeholders' perception of scientific tourism as a strategy to achieve SDGs in the Ecuadorian Amazon[J]. Tourism Management Perspectives, 2021. 39(7): 100830.

[50] NGUYEN, C. P., SCHINCKUS, C., SU, T. D., et al. The influence of tourism on income inequality[J]. Journal of Travel Research, 2021, 60(7): 1426-1444.

[51]MOAYERIAN, N., MCGEHEE, N. G., STEPHENSON, M. O. Community cultural development: Exploring the connections between collective art making, capacity building and sustainable community-based tourism[J]. Annals of Tourism Research, 2022. 93(3): 103355.

[52]YU, Z., LIU, W., REN, Q., et al. Analysis of the coordinated evolution and driving mechanism of the coupling of tourism economy and urbanization in Southwest China[J]. Current Issues in Tourism, 2024(1):2309154.

[53]丁建军,柳艳红.精准扶贫、全要素生产率与县域经济发展——基于滇桂黔国家级贫困县的证据[J]. 湘潭大学学报(哲学社会科学版),2021,45(03):81-86

[54]LOR, J. J., KWA, S., DONALDSON, J. A.. Making ethnic tourism good for the poor. Annals of Tourism Research, 2019,76(5): 140-152..

[55]汤礼莎,龙花楼,杨嘉艺,等.洞庭湖区乡村人居环境和乡村旅游发展“障碍诊断—耦合协调”分析[J].经济地理,2023,43(10):211-221

[56]MENG G, WANG K, WANG F, et al. Analysis of the tourism-economy-ecology coupling coordination and high-quality development path in karst Guizhou Province, China[J]. Ecological Indicators, 2023, 154: 110858

[57]赵宏波,岳丽,刘雅馨,董冠鹏,苗长虹. 高质量发展目标下黄河流域城市居民生活质量的时空格局及障碍因子[J]. 地理科学,2021,41(08):1303-1313

[58]杨孟阳.京津冀金融创新与经济增长的耦合协调度研究[J]. 统计理论与实践,2023,(10):42-47.
刘翠霞,史代敏.基于关系聚类的截面相关 PVAR 模型研究[J].数理统计与管理,2019,38(06):1026-1036.

[59]TU, J., ZHANG, D. Does tourism promote economic growth in Chinese ethnic minority areas? A nonlinear perspective[J]. Journal of Destination Marketing & Management, 2020(18): 100473.

[60]QIN, D.,XU, H., CHUNG, Y.. Perceived impacts of the poverty alleviation tourism policy on the poor in China. Journal of Hospitality and Tourism Management, 2019,41(12): 41-50.

[61]DIEDRICH, A., GARCÍA-BUADES, E. Local perceptions of tourism as indicators of destination decline[J]. Tourism Management, 2009,30(4): 512-521.

[62]ZHOU, B., XU, Y., LEE, S. K. Tourism development and regional production efficiency: evidence from southwestern China. Tourism Economics, 2019.25(5):800-818.

[63]WANG, K., GAN, C., CHEN, L., et al. Poor residents’ perceptions of the impacts of tourism on poverty alleviation: From the perspective of multidimensional poverty[J]. Sustainability, 2020,12(18):7515.

[64]TAM, P. S., LEI, C. K., ZHAI, T.. Investigating the bidirectionality of the relationship between residents’ perceptions of tourism impacts and subjective wellbeing on support for tourism development[J]. Journal of Sustainable Tourism, 2023,31(8): 1852-1868.

[65]DOSSOU, T. A. M., NDOMANDJI KAMBAYE, E., BEKUN, F. V., et al. Exploring the linkage between tourism, governance quality, and poverty reduction in Latin America[J]. Tourism Economics, 2023,29(1): 210-234.
[66]CHI, J. Revisiting the tourism-inequality nexus: evidence from a panel of developed and developing economies. Current Issues in Tourism, 2021,24(6):755-767.
[67]WANG, H., XU, Y., LI, C. Coupling coordination and spatio-temporal pattern evolution between ecological protection and high-quality development in the Yellow River Basin[J]. Heliyon, 2023,9(10):e21089.
[68]ZHAO, L. Tourism, institutions, and poverty alleviation: Empirical evidence from China[J]. Journal of Travel Research, 2021,60(7): 1543-1565.

如何做好賓客關係維護提升賓客對酒店的滿意度與忠誠度——以桂林雁山宋品酒店為列

陳亞妮

澳門城市大學

摘要

一、引言與酒店概況

本研究聚焦於桂林雁山宋品酒店賓客關係維護及忠誠度提升策略。作為華住會旗下高端品牌，該酒店以卓越服務、豪華環境及品牌影響力著稱，酒店坐落於桂林市雁山區融創國際旅遊度假區內，擁有完善設施與優質服務團隊。但在激烈競爭中，持續深化賓客關係仍是關鍵挑戰。本文通過回顧國內外文獻並結合酒店實際情況，研究分析其賓客維護現狀，提煉成功經驗，識別改進空間，旨在制定切實可行建議，鞏固市場優勢，促進口碑傳播，吸引潛在客源。

二、SERVQUAL 模型

SERVQUAL 模型作為服務品質評估的經典工具，由 Parasuraman、Zeithaml 和 Berry（1985）提出，其核心邏輯在於通過量化顧客對服務"期望"與"感知"的差距，系統性診斷服務短板。其包含五個維度：有形性、可靠性、回應性、保證性、和移情性。這五個維度涵蓋了賓客對服務品質的全面評價，是評估賓客滿意度的重要工具。

表 1 SERVQUAL 維度模型

維度	內容
有形性	服務的有形部分，如酒店的環境、設施、員工的儀容儀錶等，這些都是賓客可以直接感知到的服務要素。
可靠性	酒店能夠可靠地、準確地履行服務承諾的能力，如準時提供預訂的服務、確保設施設備的正常運行等。
回應性	酒店員工對賓客需求的回應速度和效率，包括快速解決賓客的問題、及時提供幫助等。
保證性	酒店員工的專業知識、禮貌以及他們讓賓客感到信任的能力，如員工的專業技能、服務態度等。
移情性	酒店員工對賓客的個性化需求的關注和滿足程度，如提供定制化的服務、關注賓客的特殊需求等。

三、研究方法與數據來源

本研究採用了定性研究方法，對桂林雁山宋品酒店員工及賓客進行了線下半結構訪談，訪談時長約 35 至 40 分鐘，根據交流情況靈活調整。訪談地點設在酒店房間，確保環境熟悉且私密。取樣方法上，員工層面選取了 8 名不同部門和職位的員工，賓客則通過前臺及 CRM 系統篩選 8 名具有代表性的賓客，覆蓋不同年齡、性別及旅客類型，以保證樣本多樣性。訪談問題設計借鑒 SERVQUAL 模型的五個維度作為核心框架，旨在全面、科學地衡量酒店服務品質提供堅實的理論支撐。同時也通過攜程平臺上的 760 條點評為數據來源，借助 Thonny 軟體以及 python 進行數據爬蟲分析，在數據處理階段，依據哈工大停用詞表對評論中的停用詞進行刪除，有效剔除無意義辭彙。隨後，利用 Pandas 來進行數據讀取與整理，並使用用 Jieba 中文分詞工具對文本進行解析，最終通過詞頻統計技術直觀呈現賓

客關注焦點，例如“服務”“及時”“好吃”等這些出現頻率較高的辭彙，表明這些方面是賓客較為關注的重點。根據這些辭彙分別對賓客及員工制定了 16 個訪談問題，如：“您在入住桂林雁山宋品酒店期間，您覺得酒店員工的業務知識和禮貌程度如何，哪些服務細節讓您印象深刻，舉列說明”、“當賓客在酒店遇到緊急需求或需要幫助時，酒店的回應機制是否高效”等等通過這些問題能夠更深入地瞭解賓客及員工對酒店服務的看法和需求，為酒店進一步優化賓客關係維護、提升賓客滿意度與忠誠度提供有力支持。

四、研究結果

分析層面借助 NVivo 12 軟體，對桂林雁山宋品酒店賓客及員工就如何優化賓客關係管理、提升賓客滿意度與忠誠度的訪談內容進行系統化編碼與解析。通過軸向式編碼策略，將原始訪談資料與 SERVQUAL 服務品質模型的五大核心維度進行多個維度映射與理論對話。這一過程為桂林雁山宋品酒店制定更具針對性、實效性的服務優化策略提供了堅實的實證基礎與理論支撐。具體而言，服務品質提升策略需從多方面入手，如員工的著裝、精神面貌、接待賓客的方式、解決問題的能力以及主動服務的意識等提升滿意度。竇梓雯（2014）指出，這種以顧客需求為導向的服務行為可增進消費體驗，實現酒店利益最大化。同時，快速回應、高效解決問題的回應機制也至關重要。研究（Jones & Davies, 2010）指出，良好的員工培訓和完善的緊急預案能夠顯著提升酒店在應對突發事件時的處理效率和賓客滿意度。房間整潔舒適度直接影響滿意度，需注重清潔度及文化元素融入。Poon & Huang（2001）提到賓客期待住宿中的文化特色和個性化服務。餐飲品質方面在於食材新鮮、烹飪技藝、衛生安全及創新體驗，需結合賓客口味偏好與地域文化特色，提升賓客滿意度與探索欲。康慶(2008)認為這種最具旅遊地民族區域特色的菜點，可以使旅遊者領略到當地民間飲食文化的底蘊。酒店地理位置方面需兼顧風景與交通便利性，餘華、陳雅婷（2015）指出服務品質常超預期才能有效提升滿意度。酒店設施設備通過完善配置與定期維護提升服務品質，研究中（王志文，張小妮 2024），指出其作為情境價值能增強賓客滿意度與忠誠度。酒店增值服務方面以超預期體驗為核心，研究（林萌，2024）指出，在酒店行業，會員管理尤為關鍵，它不僅涉及提供優惠和獎勵計畫來吸引和保留客戶，還包括通過個性化服務提升客戶體驗。會員管理關鍵在於精准兌現承諾，通過標準化流程保障服務可靠性。個性化服務方面基於遊客需求提供差異化服務，通過系統追蹤偏好、團隊分析需求，兼顧利潤與滿意度。研究（徐君宜，2023）表明，通過個性化機制，酒店在獲取精准用戶的同時也帶動了賓客的複購和相關服務消費，為酒店創造了更多經濟效益。

五、理論意義與實踐意義

本研究旨在豐富酒店業理論體系，通過實際案例提煉特色策略，為賓客關係維護提供新視角。研究融合了酒店管理、客戶關係管理、心理學等多學科知識，推動相關理論共同發展。在實踐意義方面，總結出了桂林雁山宋品酒店在提升服務品質與賓客忠誠度的經驗與不足，並提出實用建議助力酒店提升市場競爭力。研究建議具普適性，可為其他酒店優化賓客。

參考文獻：

[1] Jones,T.O., & Davies,B. L.(2010). Training for quality service in the hotelIndustry.A review and research agenda.Intemational Journal of Contemporary Hospitality Managenment.22(1),5-22.

[2] Poon, A., & Huang, S.(2001). Tourists perceptions of service quality: A study of cultural tourism in Hong Kong. Tourism Management, 22(3), 331-339.

[3]竇梓雯（2014）.淺析酒店管理中的整體服務意識.湖南社會科學，34-35.
[4]康慶(2008).餐飲滿意度對旅遊體驗品質影響的實證研究.廈門大學,Available from Cnki
[5]餘華 、陳雅婷(2015)。千島湖度假型酒店服務行銷策略研究.現代商業(31),24-25.
[6]王志文、張小妮（2014）.酒店住宿體驗中的價值共創機制研究. 旅遊科學(5)，96-111.
[7]林萌(2024).經濟型酒店會員管理系統 W 軟體的服務品質優化(碩士）電子科技大學.
[8]徐君宜(2023).酒店線上評論對遊客消費行為的影響——基於酒店類型與個性化服務的實證.商業經濟研究(15),69-72.

鄉村文化美學實驗：非遺民宿的場景表徵及其生成機制

牛欣慧，龐兆玲，王學基

宁波大学昂热大学联合学院

摘要

非遺民宿作為文旅融合的創新載體，通過構建“文化資本-經濟資本”的互構轉換機制，成為破解民宿同質化困境、實現文化增值的關鍵路徑，鮮有研究關注到這一特殊的民宿類型。 本研究以場景理論為基礎，遴選寧波市楓湖廬民宿與宋小姐別院為典型案例，建構“真實性-戲劇性-合法性”的框架刻畫非遺民宿的場景表徵，同時建構“制度嵌入—主體響應”理論框架揭示其生成機制。 研究發現：楓湖廬民宿的場景表徵為遵循氛圍協調的脫嵌型傳統文化飛地； 宋小姐別院的場景表徵為彰顯視覺張力的混雜型創新消費空間。 非遺民宿場景的生成是地方政府、民宿主體、物質設施和數位媒介協同作用的結果。 研究為文旅融合的微觀動力學提供了理論框架，並為鄉村振興中的文化治理實踐提供了科學依據。

關鍵字：非遺民宿； 場景理論； 場景表徵； 場景生成

在城鄉融合發展背景下，民宿作為新型文旅業態成為城鄉要素雙向流動的關鍵媒介[1-2]。 當前，民宿產業雖呈現規模化增長，卻也陷入“麥當勞化”困境，面臨產業內部符號模仿以及消費者體驗淺錶化等結構性衝突，暴露出傳統的民宿發展範式在文化增值維度上的失靈。 後物質主義時代，消費者對文化認同與美學體驗的需求陞級[3]，曰此，如何突破上述瓶頸是實現民宿高品質發展亟待解決的關鍵問題。 “民宿+非遺”的耦合範式突破了傳統文旅融合的物理疊加模式，通過構建“文化資本-經濟資本“的互構轉換機制實現雙重價值增值。這種雙向互構過程本質上構成了“文化經濟化”與“經濟文化化”的辯證統一[4]，使非遺民宿成為兼具“文化—經濟”雙重內容的融空間[5]。 非遺民宿最早由浙江省率先推行並付諸制度化實踐，近年逐漸擴散、蔓延至其他地區。 既有研究通常孤立地審視民宿和非遺兩個議題，多聚焦民宿的經營管理或非遺保護的科技路徑，鮮少探討二者之間的雙向互構實踐。 非遺民宿作為一個充滿文化意義的消費空間，本身即是一個場景[6]，基於此，本研究引入場景理論，遴選寧波市楓湖廬民宿與宋小姐別院為典型案例，圍繞“非遺民宿的場景何以生成？”這一覈心問題，分別從場景構成的形態學分析以及場景生成機制的過程性闡釋兩方面進行研究。場景理論由美國芝加哥大學特裏·克拉克教授及其團隊提出，該理論認為不同的生活文化設施、活動以整體組合的管道共同創造出具有獨特文化風格與美學特徵的場景，從而賦予地方特定的文化意涵。 在克拉克看來，場景由客觀的舒適物設施、活動和主觀的價值觀構成，其中場景所蘊含的價值觀包括真實性（Authenticity）、 戲劇性（Theatricality）和合法性（Legitimacy）三個維度[7]。 真實性用以描述文化實踐中所表達和實現的身份內涵； 戲劇性用以描述人們相互自我呈現的管道； 合法性則用以描述指導文化實踐並使之合法化的價值觀與動機[8]。真實性、戲劇性和合法性可分別進一步細化為 5 個子維度（錶 1），不同子項目之間的排列組合，

將場景組織為風格鮮明的多元複雜體[8]。

表 1 场景的 3 个主维度和 15 个子维度

真实性	戏剧性	合法性
本土的—全球的	迷人的—普通的	传统的—新奇的
族群的—非族群的	爱炫的—矜持的	领袖魅力—常规的
企业的—非企业的	睦邻的—冷漠的	自我表达—含蓄表达
理性的—非理性的	礼节的—非礼节的	功利主义—非生产性的
国家的—非国家的	越轨的—遵从的	平等主义—特殊主义

基於上述理論基礎以及浙江省非遺民宿發展的社會現實，本研究分別建構理論分析框架，對非遺民宿的場景表徵和場景生成展開實證研究。 在非遺民宿的場景表徵方面，建構“真實性—戲劇性—合法性”框架分別刻畫兩家非遺民宿的場景“是什麼樣的”。 在非遺民宿的場景生成方面，建構“制度嵌入—主體響應”框架，揭示非遺民宿的場景“是如何形成的”

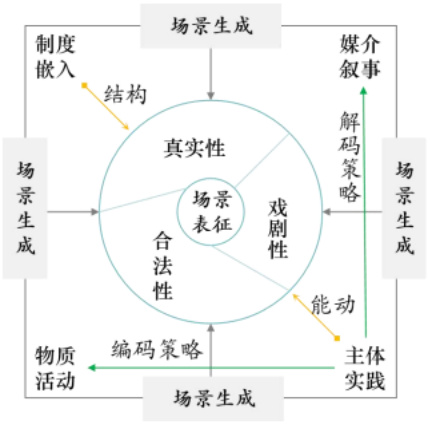


图 1 分析框架示意图

本文選取寧波市楓湖廬民宿與宋小姐別院為典型案例。 楓湖廬民宿與宋小姐別院分別於 2023 年和 2022 年被評為浙江省省級非遺民宿。 楓湖廬民宿以寧傳統戲臺建造技藝為覈心，由老宅改建而來，建築形制為明清四合院，強調“修舊如舊”的古典美學； 宋小姐別院以古法釀酒技藝為基底，空間設計融合現代消費符號（網紅標語等），具有現代、時尚氣息。 民宿主不僅抖音直播賣酒及當地農產品，也在小紅書等自媒體平臺開設帳號文宣行銷。



图 2-3 枫湖庐民宿庭院（左）和宋小姐别院内部（右）（作者拍摄）

研究發現：楓湖廬民宿的場景主要呈現為本土的真實性、矜持而睦鄰的戲劇性與傳統的合法性等文化意涵（如圖 4 所示）。

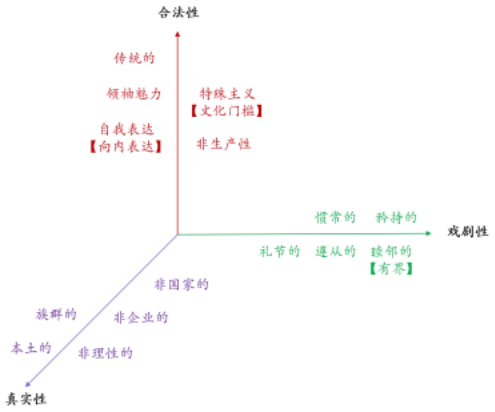


图 4 枫湖庐民宿的场景表征示意图

其由一系列基於本土真實性和傳統合法性的物質設施和文化活動，以矜持、睦鄰的展示管道，向內營造出一處內斂不張揚、具有深厚文化底蘊的獨立場景。該場景脫嵌於當下時空，其文化內容弱化了商業內容，使其成為一處自成獨立體系的傳統文化飛地，一定程度實現了經濟的文化化（如圖 5 所示）。

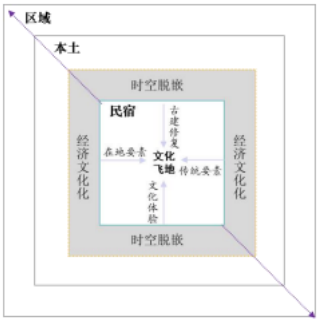


图 5 枫湖庐民宿的场景营造示意图

宋小姐別院的場景主要體現為族群的真實性、愛炫而迷人的戲劇性與功利主義的合法性（圖 6 所示）。

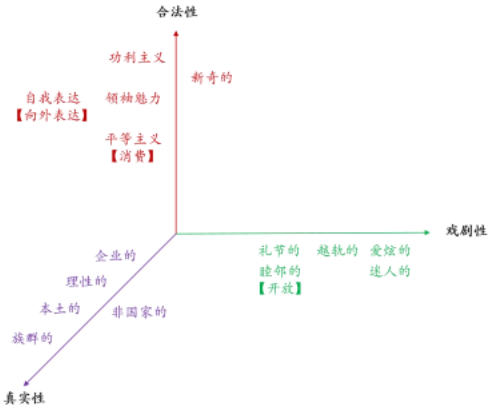


图 6 宋小姐别院的场景表征示意图

其由一系列基於族群真實性和和功利合法性的物質設施和文化活動，以愛炫、迷人的展示管道，對外營造出跨尺度多元要素雜糅的創新消費場景。 該場景以在地性的非遺為工具，借助數位媒介科技手段，積極向上嵌入更大尺度空間之中，文化內容强化和溢價了商業價值，一定程度上助推了文化的經濟化（圖 7）。

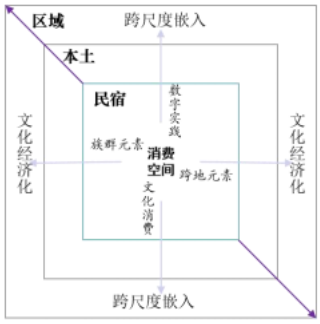


图 7 宋小姐别院的场景营造示意图

進一步地，場景的文化風格與美學特徵是地方政府、民宿主體、物質設施和數位媒介協同作用的結果。 具體而言，地方政府的制度嵌入為非遺民宿開展美學實驗建構了正當性； 民宿主體通過經濟文化化和文化經濟化兩種範式路徑實現了文化—經濟的協商平衡； 其中，物質設施與文化活動以組合的形式實現了場景文化符號的具象表達，而媒介敘事助推了場景文化意涵的轉譯和賦予。

本研究為鄉村振興中的文化治理與文旅融合實踐提供了理論依據與策略參考。理論方面，本研究拓展了場景理論的應用邊界，將其引入微觀尺度的非遺民宿研究，揭示鄉村文化混雜性的生成邏輯； 提出“文化資本-經濟資本”互構機制，為文旅融合的微觀動力學提供新的分析工具。 實踐方面，地方政府需平政策引導與主體能動性，避免非遺民宿淪為符號化展演； 民宿應差异化選擇場景路徑——傳統主題可深化文化沉浸，創新主題需注重符號的在地轉譯。

参考文献

[1]張廣海，孟禹．國內外民宿旅遊研究進展[J].資源開發與市場，2017,33（04）：503-507.

[2]張海洲，徐雨晨，陸林．民宿空間的地方表徵與建構——網絡部落格的質性分析[J].旅遊學刊，2020， 35（10）：122-134.

[3]鄢方衛，舒伯陽，趙昕，等．世俗體驗還是精神追求？—— 消費主義背景下網紅打卡旅遊的歸因研究[J].旅遊學刊，2022,37（06）：94-105.

[4]朱竑，呂祖宜，錢俊希．文化經濟地理學：概念、理論和實踐[J].經濟地理，2019,39（09）：1-11.

[5]孫九霞，李菲，王學基.“旅遊中國”：四十年旅遊發展與當代社會變遷[J].中國社會科學，2023,(11):84-104+206.
[6]丹尼爾·亞倫·西爾，特裏·尼科爾斯·克拉克. 場景：空間品質如何塑造社會生活[M].祁述裕，吳軍，等譯. 北京：社會科學文獻出版社，2019， 2-12.
[7]祁述裕. 建設文化場景培育都市發展內生動力—以生活文化設施為視角[J].東嶽論壇, 2017(1):25-34.
[8]吳軍，王桐，丹尼爾·亞倫·西爾等. 場景文化力[M].北京：社會科學文獻出版社，2022，153-156.

從互動到行動：非遺數位化項目中互動對共創價值與遊客行為意圖的影響研究

蘭最，張玲

廣東財經大學文化旅遊學院，廣州，510320

摘要

數位化科技在旅遊領域已經得到越來越廣泛地運用，尤其是遺產旅遊方面（Roodposhti & Esmaeelbeigi，2024；鄭春暉等，2024）。 數位化科技與非物質文化遺產的融合發展也得到一些學者的關注和重視(曾顯惠, 2025; Baldi & Botti, 2023； 李婷婷，2019）。 數位化科技在非物質文化遺產領域的研究主要集中在非遺數位化保護（李婷婷，2019）、非遺數位化項目的遊客體驗（Singh et al.，2024；Tussyadiah et al.，2018；庾君芳，2017）等方面。 雖然一些學者提出，互動與遊客參與能够提升遺產的價值，比如 Lin 等（2017）研究發現居民認為旅遊發展提升了他們的生活質量（如經濟改善、社區活力），他們的生活滿意度會顯著提高，進而更願意與遊客互動並參與價值共創； Omran et al.（2024）研究發現 AR/VR 科技通過沉浸式體驗（如虛擬景點遊覽、歷史場景重現）和互動功能（如 AR 導航、遊戲化元素）顯著提升遊客的情感投入和行為參與，增强旅遊體驗的吸引力和記憶點。 綜合了文化遺產中 VR 和 AR 在旅遊參與的作用。 但是在非遺方面, 較少學者關注非遺數位化科技對遊客共創旅遊體驗的影響研究。 共創價值理論強調企業與顧客互動創造價值。 而非遺數位化過程中涉及到非遺傳承人、企業、遊客、政府相關部門等多個利益相關者，非遺數位化項目能否通過科技增强與遊客互動進而提升共創旅遊價值, 成為業界和學界共同關心的問題。 曰此，本研究主要以共創價值理論為框架，主要研究數位化科技帶來的互動對共創旅遊價值和遊客行為意向和保護意願的影響。 具體研究目標包括：第一、探討非遺數位化科技中人機互動、人際互動對遊客行為意向和保護意願的影響； 第二、探討非遺數位化科技中人機互動、人際互動對共創旅遊價值的影響； 第三、研究共創旅遊價值對遊客行為意圖和保護意願的影響。

本研究中互動借鑒李等人的研究（2023），將互動分為人機互動和人際互動兩個維度，共 10 個量測題項； 共創價值參攷 Sweeney & Soutar（2001）研究，分為享樂價值、學習價值和娛樂價值三個維度共 12 個量測題項； 行為意圖參攷 Chung 等人（2019）的研究，共 7 個量測題項； 保護意願參攷 Ruan 等（2020）的研究，共 7 個量測題項。 論文採用自填問卷方法形式收集數據。 調查地點是廣州陳家祠數位體驗館。 該數位體驗館將館藏非遺資源融合 VR（虛擬實境）、AR（增强現實）等科技，開發設計的數位化的展廳。 館內有兩個 50 多英寸的觸屏顯示器，遊客可以通過觸控熒幕觀賞數十件藏品的三維立體影像。

調查時間從 2024 年 11 月至 2025 年 1 月期間。 調查人員在數位體驗館出口，隨機地訪問參與過體驗的遊客，邀請他們幫忙微信掃碼並填寫調查問卷。 本次調研共發放問卷 245 份，收回 228 份，剔除無效或者亂填的問卷，得到有效問卷 217 份，有效回收率為 88.57%。

本研究採用 Spss27.0 與 Mplus 7.0 進行資料分析，採用驗證性因數分析檢驗效度、多元回歸分析檢驗研究假設。 信度檢驗結果表明，人機互動、人機互動、享樂價值、學習價值、娛樂價值、行為意圖和保護意願 7 個研究變數

Cronbach's a 在 0.92-0.96 之間，均大於 0.7，表明各量表具有較高的內部一致性。 以上七個研究變數的 CR 值在 0.87-0.92 之間，AVE 值在 0.69-0.76 之間，所有 CR 值均大於 0.7，AVE 值均大於 0.5，表明該量表具有良好的收斂效度。多元回歸分析結果表明：（1）非遺數位化項目中人機互動（β=0.62，p<0.01）和人際互動（β=0.65，p<0.01，）顯著地積極影響遊客的行為意圖； （2）非遺數位化項目中人機互動（β=0.59，p<0.01）和人際互動（β=0.69，p<0.01）顯著地正向影響遊客的保護意願； （3）非遺數位化項目中人機互動顯著地正向影響遊客感知的享樂價值（β=0.72，p<0.01）、學習價值（β=0.63，p<0.01）和娛樂價值（β=0.74，p<0.01）； （4）非遺數位化項目中人際互動顯著地正向影響遊客感知的享樂價值（β=0.69，p<0.01）、學習價值（β=0.67，p<0.01）和娛樂價值（β=0.57，p<0.01）； （5）非遺遊客感知的享樂價值（β=0.44，p<0.01）、學習價值（β=0.20，p<0.01）和娛樂價值（β=0.21，p<0.01）正向影響行為意圖； （6）非遺遊客感知的享樂價值（β=0.21，p<0.01）、學習價值（β=0.22，p<0.01）和娛樂價值（β=0.21，p<0.01）正向影響保護意願。 本研究構建了互動、共創旅遊價值、遊客行為意向和保護意願之間的理論概念模型，並證明數位化科技帶來的互動提升了共創旅遊價值，將共創價值理論拓展到非遺旅遊研究領域。

關鍵字： 互動； 感知價值； 行為意圖； 共創價值

*本研究得到教育部人文社會科學研究規劃基金項目的支持（No.22YJA790087）。

參考文獻

[1]Baldi, G., & Botti, A. (2023, April). The Use of Technology Enhancing Tourist Engagement at an Archaeological Site: A Cross-Cultural Analysis. In The International Research & Innovation Forum (pp. 573-590). Cham: Springer International Publishing.

[2]Chung, M. (2019). The message influences me more than others: How and why social media metrics affect first person perception and behavioral intentions. Computers in Human Behavior, 91, 271-278.

[3]Li, M., & Wang, Y. (2023). Unpacking technological and interpersonal interaction on value co-creation and outcomes in trade show: A dyadic examining view. Journal of Business Research, 160, 113802.

[4]Lin, Z., Chen, Y., & Filieri, R. (2017). Resident-tourist value co-creation: The role of residents' perceived tourism impacts and life satisfaction. Tourism Management, 61, 436-442.

[5]Omran, W., Ramos, R. F., & Casais, B. (2024). Virtual reality and augmented reality applications and their effect on tourist engagement: a hybrid review. Journal of Hospitality and Tourism Technology, 15(4), 497-518.

[6]Roodposhti, M. S., & Esmaeelbeigi, F. (2024). Viewpoints on AR and VR in heritage tourism. Digital Applications in Archaeology and Cultural Heritage, 33, e00333.

[7]Ruan, W., Kang, S., & Song, H. (2020). Applying protection motivation theory to understand international tourists' behavioural intentions under the threat of air pollution: A case of Beijing, China. Current Issues in Tourism, 23(16), 2027-2041.

[8]Singh, P., Sharma, M., & Daim, T. (2024). Envisaging AR travel revolution for visiting heritage sites: A mixed-method approach. Technology in Society, 76, 102439.

Sweeney, J. C., & Soutar, G. N. (2001). Consumer perceived value: The development of a multiple item scale. Journal of retailing, 77(2), 203-220.

[9]Tussyadiah, I. P., Jung, T. H., & Tom Dieck, M. C. (2018). Embodiment of wearable augmented reality technology in tourism experiences. Journal of Travel research, 57(5), 597-611.
[10]李婷婷. （2019）. 基 AR-VR 混合科技的公共空間內非物質文化遺產傳播. 收藏， 12.
[11]庾君芳. （2017）. 構建 VR 旅遊體驗店商業模式. 中國管理資訊化， 20（12），55-56.
[12]曾顯惠.（2025）. 互動式敘事視角下非遺文化數位化展示設計研究. 湖北第二師範學院學報, 42（03），83-88.
[13]鄭春暉, 張佳&朱佳樂. 穿越時空的“對話”: 文化遺產數位化展示中的想像激發與實地旅遊意願. 旅遊學刊 1-21. doi:10.19765/j.cnki.1002-5006.2024.00.013.

基於 GIS-ML 的廣西民族旅遊空間異質性與發展機制研究

臧雲飛[1]，譚湘燁[2]

[1]桂林理工大學南寧分校

[2]國家統計局廣西調查總隊

摘要

本研究以廣西壯族自治區民族旅遊資源為研究對象，系統探討廣西民族旅遊資源的空間分佈特徵和規律及可持續發展的內在機制。 研究在基於可持續發展理論的覈心要義基礎上，構建系統化的廣西民族旅遊資源評估與管理框架。 綜合旅遊地理學的空間分析視角、文化人類學的文化闡釋範式以及空間計量經濟學的量化研究方法等多學科理論框架，將 GIS 空間分析科技、地理探測器模型和機器學習聚類演算法等方法進行融合，構建了包含“資源評估-空間分析-因素探測-管理決策”四個維度下的廣西民族旅遊資源評估與管理體系，通過科學性、系統性、多維度、多尺度的綜合分析，為廣西民族旅遊資源的永續開發與科學管理提供了系統化的解決方案。

本研究採用多源異構數據融合的數據獲取管道，包括官方統計資料、遙感影像、田野調查資料以及政府開放數據等多源資訊，通過核密度估計、空間自相關分析和網絡分析等方法，全面揭示廣西民族旅遊資源在區域尺度上的空間分佈格局，和與自然環境、社會經濟因素的耦合關係。 其次，本研究的研究方法在傳統空間分析科技與現代機器學習算灢上進行有機融合，空間分析模塊採用 ArcGIS 平臺，運用核密度估算（Kernel Density Estimation）識別旅遊資源空間集聚特徵，通過全域 Moran's I 指數和局部 Getis-Ord Gi*熱點分析測度空間自相關程度，借助網絡分析工具評估交通可達性對旅遊資源開發的制約作用。 影響因素探測模塊運用地理探測器（Geodetector）模型，從自然地理環境（高程、氣候、植被覆蓋指數）、區域社會經濟（經濟發展水准、旅遊收入、基礎設施投資）和民族文化特徵（非物質文化遺產數量、民族村落、傳統節慶活動規模）三個維度選取多個解釋變數，通過地理探測器的因數探測和交互作用探測，量化各影響因素對旅遊資源空間分异的解釋力，而交互作用探測器則揭示關鍵因數間的非線性協同效應。

最後，研究採用機器學習聚類演算法中的 K-means 與層次聚類相結合的混合策略，通過輪廓係數（Silhouette Coefficient）和肘部法則（Elbow Method）確定最優聚類數，最終形成具有空間異質性的旅遊功能區劃方案。 為驗證模型結果的穩健性，研究還引入了實地調研驗證相結合的方法評估框架。

在理論創新方面，本研究通過構建“生態-經濟-文化”三維耦合模型，深化了對廣西民族旅遊可持續發展內在機理的認識。 首先，在生態維度建立“生態約束閾值”評估名額，為平衡旅遊開發與環境保護提供了理論依據； 在經濟維度設計“利益分配均衡度”評估名額，完善了廣西民族地區旅遊發展的利益協調理論； 而文化維度提出了“文化資本積累”的概念框架，闡釋了非物質文化遺產向旅遊產品的轉化機制。 這些理論創新不僅拓展了旅遊地理學的研究邊界，也為文化人類學和區域可持續發展研究提供了新的理論視角。 其次，促進廣西民族地區旅遊業高品質發展具有重要的學術價值和實踐意義，主要體現在：一是多學科理論整

合進而推動民族旅遊研究從經驗描述向理論解釋的範式轉變； 二是建立了多源數據融合的旅遊資源資訊採集系統，解決了民族地區基礎數據匱乏的研究瓶頸；三是運用空間分析科技與機器學習算灢協同的框架，提高了民族旅遊研究的科學性和精確性； 四是構建的系統化研究框架，為後續相關研究提供了可複製的方法範本。

最後，在實踐應用方面，研究成果可為制定差异化的民族旅遊發展政策提供科學依據，為旅遊企業投資決策提供區位選擇參攷，為民族社區參與旅遊發展提供能力建設支持，最終實現民族文化有效傳承、生態環境持續改善和經濟社會協調發展的多重目標。

研究框架如圖所示：



参考文献：

[1]. Yang, H., & Zhang,etc.Research on the Interaction between Ethnic Cultural Inheritance and Tourism Product Innovation: A Case Study of Yao Cultural Tourism in Guangxi[J].may be from Yao Studies,2020,1(10).

[2]. Chen, L., & Zhang,etc.Analysis of urban tourism traffic network based on GIS network analysis[J].Journal of Urban Tourism,2020,5(1).

[3]. Zhao, H., & Wang,etc.Exploration of the influencing factors and interaction effects of tourist destination.[J].Rural Tourism Research,2021.

[4]. Zhang, S., & Liu,etc.Classification of Tourism Resources Based on Cluster Analysis and Its Implications for Regional Tourism Planning[J].Tourism Planning & Development,2023,2(6).

[5]. Yu D ,Wang Z ,Yue C , et al. Spatial modeling of brine level and salinity in the Qarhan Salt Lake using GIS and automated machine learning algorithms [J]. Journal of Hydrology: Regional Studies, 2025, 58 102195-102195.



澳 門 科 技 大 學

MACAU UNIVERSITY OF SCIENCE AND TECHNOLOGY

ISBN 978-99981-60-60-6

