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THE HONG KONG POLYTECHNIC UNIVERSITY
香港理工大學

ATF

Asia Tourism Forum 2026

11–13 JUNE 2026

Ulaanbaatar, Mongolia
www.atf2026.mto.mn

Supported by

Ministry of Culture, Sports, Tourism and Youth of Mongolia

Ulaanbaatar City Tourism Department

TOURISM EDUCATION AND DEVELOPMENT SOCIETY

ISBN 978-988-7884644

Foreword from Conference Chair

Since its inception in 1993, the Asia Tourism Forum has been addressing important issues facing Asia's tourism industry, particularly in the areas of development, service management, marketing, and sustainability. Over the years, the Forum has served as a valuable platform for tourism scholars, educators, and industry practitioners to exchange knowledge, share research findings, and discuss emerging trends and challenges in tourism development.

The 15th Asia Tourism Forum 2026, with the theme "The Asian Paradigm in Hospitality and Tourism", highlights the importance of forward-looking dialogue and collaboration in exploring Asian perspectives, values, and innovations that are shaping the future of hospitality and tourism. Held in Ulaanbaatar, Mongolia from 11 to 13 June 2026, the Forum is co-hosted by the Mongolia Tourism Organization, and The Hong Kong Polytechnic University School of Hotel and Tourism Management.

We are delighted that the Forum has attracted contributions from researchers and professionals from different parts of the world. This year, the Forum accepted 98 abstracts/full papers, which are published in this conference proceedings. These contributions reflect the diversity, relevance, and quality of current tourism research and practice.

I would like to express my sincere appreciation to all authors for their valuable contributions, and to the reviewers and members of the organising and paper review committees for their dedication and hard work in making this publication possible. Special thanks also go to our co-hosts, partners, and supporters for their commitment to the success of the Forum.

I hope you will find the papers in this volume insightful and inspiring, and that the 15th Asia Tourism Forum 2026 will foster meaningful discussion, collaboration, and new opportunities for advancing tourism knowledge and practice.

Professor Kaye Chon
Dean and Chair Professor
Walter and Wendy Kwok Family Foundation Professor in
International Hospitality Management School of Hotel and Tourism Management
The Hong Kong Polytechnic University

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A Meaningful Tourism Approach to Nomadic Tourism Development: A Case of Mongolia

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Abstract

Mongolia has an ambitious vision to increase visitor numbers to 2 million by 2030, with in-destination spending of $3-4 billion. This will lead to increased job creation and a significant economic boost to the sector, local economic impact, and related industries. To achieve this goal, proper tours and itineraries involving nomadic herders, along with relevant infrastructure and transportation, must be developed. The UNDP/PAGE has conducted a comprehensive study to develop a concept for the Ger and Nature scheme[1] for nomadic tourism in Mongolia.

The main objective of the project study was to develop and propose the most suitable concept for the "Ger and Nature" (G&N) scheme for nomadic tourism. This could be achieved by conducting tourism market assessments and implementing new trends in sustainable tourism for nomadic culture-based ecotourism. Additionally, the study aimed to identify the potential impacts of the G&N scheme on the environment, the domestic economy, engagement with key stakeholders, particularly herder families, and the social inclusion of local community groups.

Recently, the Meaningful Tourism Centre[2](MTC) has recommended that countries work towards establishing a sustainable and meaningful tourism economy.

The purpose of this research is to support improvements in the offerings, organization, sustainability, business volume, and profit of nomadic tourism activities in Mongolia. To achieve this goal, the Meaningful Tourism approach will be used to develop nomadic tourism in Mongolia. The study specifically aims to evaluate the stakeholders involved in nomadic tourism, their respective roles, and to identify the challenges that the Meaningful Tourism Game Workshop may encounter.

Keywords -Nomadic tourism; Ger and Nature; herders; Meaningful Tourism Game workshops

[1] https://www.un-page.org/static/1eaff9f279f7978cf43f27f419c2b750/final-draft-concept-gn-choikhand-janchivlamdan.pdf

[2] https://meaningfultourismcentre.org/

A Qualitative Study on Behavioral, Emotional and Cognitive Engagement of Tourism and Hospitality Students During Internships

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Abstract

This study explores the behavioral, emotional, and cognitive engagement of tourism and hospitality students during internships, examining how these dimensions interact and what factors influence them. Grounded in the three-dimensional engagement model of Fredricks et al. (2004), qualitative interviews were conducted with 30 undergraduates in Macau who had completed three to six months of practical training in internship. The findings reveal that behavioral engagement is characterized by proactive learning, time management, and a growing sense of professional responsibility. Emotional engagement manifests through self-regulation, coping strategies under emotional labor, and affective resilience in customer-facing environments. Cognitive engagement involves reflective thinking, the integration of theory and practice, and the formation of professional identity. Engagement emerged not as a static psychological state but as a dynamic and developmental process shaped by personal traits (e.g., optimism, resilience), workplace support (e.g., supervisory guidance, feedback climate), and institutional mechanisms (e.g., counseling, reflective mentoring). The study extends the behavioral–emotional–cognitive framework by integrating emotional labor and contextual resource mediation, addressing the underexplored link between emotion management and professional learning. Practically, it emphasizes that universities should strengthen emotional management and reflection-oriented support systems to sustain student engagement and facilitate their transition from education to employment.

1. Introduction

Internship programs, as a core component of tourism and hospitality education, serve as a bridge between theoretical instruction and practical experience, enabling students to connect classroom knowledge with real industry practices. Within the interactive and service-oriented nature of the hospitality sector, internships function as essential practical training that promotes industry understanding, enhances employability, and cultivates professional competencies (Koc et al., 2014).

According to Trogden et al. (2023), student engagement is a defining feature of high-impact educational practices such as internships, shaping how meaning is constructed and how deeply learning is achieved through experiential activities. Although extensively studied in classroom contexts, engagement within workplace-based learning remains underexplored. According to Fredricks et al. (2004), conceptualized student engagement as a multidimensional construct encompassing behavioral (effort and participation), emotional (affective reactions), and

cognitive (investment and self-regulated learning) dimensions. In commercial internship, how supportive environments and pedagogical alignment enhance student engagement within internship contexts (Machera, 2023).

Grounded in the work of Fredricks et al. (2004) about student engagement, this study used qualitative interviews with Macau undergraduates who completed tourism and hospitality internships, exploring how students engage behaviorally, emotionally, and cognitively in real work settings, contributing to both theoretical advancement and practical strategies for enhancing holistic professional development.

2. Literature Review

2.1. Conceptualizing Student Engagement

The construct of student engagement has become a central focus in educational research, encompassing the behavioural, emotional, and cognitive investment learners make in their learning processes (Fredricks et al., 2004; Lo et al., 2024). Fredricks et al. (2004) conceptualized behavioral engagement involves participation and effort, emotional engagement reflects affective reactions such as interest or boredom, and cognitive engagement represents students' investment in deep learning and self-regulation. However, the majority of engagement literature has been developed in school-based or classroom contexts. Extending the model to internship or work-integrated learning environments requires recontextualizing engagement as situated, socially mediated, and dynamically shaped by workplace norms and emotional demands. As Hu et al. (2025) noted, positive emotional displays are integral to service quality in hospitality contexts, enhancing organizational performance and customer experience. Building on this, engagement in hospitality education should likewise consider the roles of emotional labor and identity construction in shaping students' professional learning.

2.2 Engagement in Work-Integrated Learning and Internships

Internships serve as a bridge between classroom learning and practical experience, allowing students to apply theoretical knowledge, gain industry exposure, and enhance employability skills (Koc et al., 2014). Rashed et al. (2025) highlight that students' participation in experiential learning activities such as internships is strongly influenced by the nature of institutional and supervisory support. Supportive environments that provide constructive feedback and autonomy foster engagement and motivation, whereas limited guidance may diminish students' learning commitment. In hospitality and tourism settings, internships are uniquely influenced by the emotional and interactive nature of service work (Buzova et al., 2023). Research shows that students must manage emotional expressions when dealing with customers and operate under high interpersonal demands (Buzova et al., 2023). Consequently, emotional engagement, not just behavioral participation, becomes crucial to understanding how students adapt, find meaning, and sustain motivation in these settings.

2.3 Behavioral, Emotional, and Cognitive Dimensions and Factors Influencing them

Given the limited research on student engagement in hospitality internships, the present study draws partially on the literature concerning employees' work engagement in the hospitality sector. Based on Al Halbusi et al. (2023), work engagement in this context comprises

behavioral engagement, which refers to the energy and effort employees invest in their work; emotional engagement, which reflects feelings of enthusiasm and attachment; and cognitive engagement, which represents mental focus and complete absorption in job tasks. In the few studies that factors were discussed during hospitality internships, such as those by Ng et al. (2023) and Liu et al. (2022), factors encompasses behavioral ones, referring to the active participation and effort students devote to learning and applying skills; emotional ones, relating to their enthusiasm, satisfaction, and sense of belonging within the internship or industry; and cognitive ones, concerning reflective and analytical thinking that connects academic knowledge, self-efficacy, and future career understanding.

However, these conceptualizations remain insufficient to fully capture the multifaceted nature of student engagement during internships in the hospitality context. Student engagement during hospitality internships is shaped by a variety of contextual and individual factors. Supportive supervision and positive interpersonal relationships within the internship environment enhance emotional and behavioral engagement by fostering belonging and motivation (Ng et al., 2023). In addition, perceived learning opportunities and reflective thinking strengthen cognitive engagement as students link theoretical knowledge with professional practice. Educational preparation and self-efficacy also play critical roles in sustaining engagement and shaping career intentions (Liu et al., 2022). Moreover, organizational resources and job characteristics such as feedback, autonomy, and skill variety encourage deeper involvement and psychological attachment, consistent with evidence from employee work-engagement research in hospitality settings (Al Halbusi et al., 2023). Together, these factors illustrate that both environmental support and students' internal cognitive and motivational states are essential in promoting holistic engagement throughout hospitality internship experiences.

2.4 Theoretical Lens: Extending the Three-Dimensional Model

While Fredricks et al. (2004) conceptualized engagement primarily within classroom settings, internship environments differ substantially in their social and emotional dynamics. In such contexts, students are not only learners but also temporary employees who must navigate hierarchical structures and the demands of emotional labor. Therefore, extending the model proposed by Fredricks et al. (2004) to work-based learning, particularly hospitality internship contexts, allows for an exploration of how behavioral, emotional, and cognitive engagement evolve in authentic, high-stress service contexts.

2.5 Research Questions

Specifically, this study addresses the following research questions: (1) How do tourism and hospitality students in Macau demonstrate behavioral, emotional, and cognitive engagement during internships? (2) What personal, workplace, and institutional factors influence these dimensions of engagement? (3) How do these three dimensions interact dynamically to shape students' professional identity development?

3. Methodology

This study employed a qualitative research design using semi-structured interviews to explore the learning experiences and engagement processes of tourism and hospitality management students during internships in Macau. This approach allowed an in-depth understanding of participants' perceptions, meaning construction, and engagement development. Interview questions focused on students' internship experiences, influencing factors, and challenges. A pilot study ensured clarity and alignment with research objectives. Purposive and snowball

sampling methods were used to recruit 30 undergraduate students from tourism and hospitality programs at universities in Macau. Inclusion criteria required participants to be at least 18 years old, have completed a minimum of three to six months of internship, be willing to share their experiences. Interviews were conducted online in Chinese language, lasting 60–90 minutes. Recordings were transcribed verbatim using iFlyrec software and cross-checked for accuracy. All data were anonymized and securely stored.

Thematic analysis was conducted following the six-step method proposed by Braun and Clarke (2006). The findings revealed the interconnection of behavioral, emotional, and cognitive engagement, highlighting the dynamic interaction between higher education and workplace learning in Macau's tourism and hospitality sector. Thematic saturation was achieved after the 30th interview, when no new themes emerged.

Participant	Gender	Age	Internship organization
1	Male	22	Hotel
2	Female	22	Recreational Resort
3	Male	21	Recreational Resort
4	Male	21	Recreational Resort
5	Male	20	Government Organization
6	Male	22	Recreational Resort
7	Male	21	Designer Association
8	Male	22	Macau state-owned enterprises
9	Male	21	Macau state-owned enterprises
10	Male	23	Hotel
11	Male	21	Travel agency
12	Male	23	Recreational Resort
13	Male	22	Recreational Resort
14	Female	23	Hotel
15	Female	22	Recreational Resort
16	Female	25	Recreational Resort
17	Female	22	Government Organization
18	Male	21	Leisure Resort
19	Female	22	Government Organization
20	Male	24	Fine Dining Restaurant
21	Female	21	Recreational Resort
22	Female	22	Recreational Resort
23	Female	21	Hotel
24	Female	20	Recreational Resort
25	Female	22	Hotel
26	Male	21	Education & Consulting Firm
27	Female	21	Leisure Resort
28	Male	20	Aviation Service Company
29	Female	20	Corporate HR Department
30	Female	21	Leisure Resort

4. Findings

Drawing on engagement in Fredricks et al. (2004), this analysis of qualitative interview data reveals that student engagement is a dynamic and context-dependent process, profoundly shaped by emotional labor and support systems rather than representing a single or stable

psychological state. The following sections elaborate on each of these three dimensions in detail.

4.1 Behavioral Engagement: From Passive Compliance to Active Learning

Behavioral engagement was reflected in participants' time management, sense of responsibility, and proactive attitude toward work. Most students initially exhibited a pattern of passive compliance but gradually transitioned to more self-directed learning and higher levels of personal accountability as their workplace experience accumulated.

Participant 4, who worked in the company's human resources department, explained, "*After receiving a task, I first try to understand my supervisor's expectations, then arrange the work according to its urgency. I also write a short summary after each event to see what I can improve next time.*" This statement demonstrates the student's emerging capacity for self-regulation and efficiency awareness, suggesting that behavioral engagement had progressed beyond simple task execution to an active form of task management.

Participant 17 expressed a strong sense of task ownership: "*Our KPI is not assigned individually, but I still try my best to finish what the manager assigns. Many times, I stay late to organize materials.*" This type of self-initiated effort indicates that the student had begun to internalize a sense of professional responsibility even within a structured organizational system.

In contrast, a few students showed minimal behavioral engagement. One intern (participant 1) admitted, "*Every day I just work nine and a half hours according to the schedule and complete what's required, nothing more.*" This comment illustrates how, in high-pressure service environments, interns without intrinsic motivation or supervisory support may adopt a surface-level, compliance-oriented approach to work.

Overall, behavioral engagement was moderated by three key factors. First, job type played an important role: front-office and customer service positions demanded quick responses, leading to more situational and reactive forms of engagement, whereas administrative roles emphasized sustained task organization. Second, supervisor feedback proved influential; as participant 4 noted, "*My supervisor gives me feedback every month and compliments me.*" indicating that positive recognition enhanced the intensity of engagement. Third, self-efficacy emerged as a motivational driver. Students with a clear sense of achievement, such as participant 10, demonstrated a stronger and more persistent level of engagement throughout their internship experience.

4.2 Emotional Engagement: Self-Regulation and Balancing Strategies under Emotional Labor

The defining feature of emotional engagement among the participants was emotional regulation and self-balance. Most students acknowledged experiencing emotional fluctuations during their internships, particularly when confronted with customer complaints, managerial pressure, or self-doubt. Many described the necessity of suppressing negative emotions and maintaining a "*professional smile*" to meet organizational expectations.

Participant 1, who worked in the front office department, explained, "*When dealing with guests who lost money, they often became emotionally agitated, and I could only keep smiling. After work, I would call my family to vent my frustration.*" This reflects a typical form of surface

acting, yet she also recognized that prolonged emotional suppression hindered her confidence, "*It didn't help at all; it actually reduced my self-esteem.*"

In contrast, several students developed deeper emotional regulation strategies. Participant 18, who interned in the digital marketing department, shared, "*Although I was nervous when presenting reports, I forced myself to stay calm and express ideas logically.*" This process of transforming emotions into professional performance exemplifies cognitive reappraisal and emotional intelligence in practice. Similarly, participant 6 described a behavioral coping strategy for stress relief: "*After work, I buy a slice of cake to reward myself, and on weekends, I sleep in. That gives me the energy to smile the next day.*"

Participant 18 further illustrated a process of adapting from anxiety to composure when facing performance pressure: "*Sometimes, I have to report figures directly to my supervisor. It makes me nervous, but I calm myself down and speak logically.*" She added, "*That actually gives me a greater sense of control.*" This transition from emotional anxiety to rational coping indicates the development of emotional resilience and demonstrates a deeper level of emotional engagement.

Emotional engagement was also closely intertwined with workplace culture. Many respondents noted that their companies explicitly emphasized "*smile service*", but organizational concern for employees' emotional well-being varied considerably. Participant 17 remarked, "*My internship organization provided no psychological support and showed no concern for staff emotions.*" In contrast, participant 18 observed institutional support: "*The company's HR department had a counseling hotline. I never used it, but knowing that it was available made a difference.*" Such comparisons highlight that formalized emotional support mechanisms can mitigate emotional exhaustion and sustain a higher level of emotional engagement over time.

4.3 Cognitive Engagement: Reflection, Meaning-Making, and Professional Identity

Cognitive engagement was primarily manifested in how students connected academic knowledge with workplace practices, engaged in self-reflection, and developed a sense of professional identity.

Participant 16 noted, "*What I learned during three and a half years at university was mostly abstract theory, but six months of internship helped me concretely understand how the tourism industry operates.*" This statement illustrates a process of learning transformation, in which theoretical knowledge is translated into experiential understanding.

Many students also developed reflective learning habits. Participant 4 explained, "*After handling a colleague's complaint, I always think about what I could do better next time.*" Similarly, participant 18 described her systematic approach to learning, stating, "*I kept two notebooks where I organized everything I learned about the industry.*" These examples indicate that cognitive engagement deepened through reflective journaling and the internalization of strategies that enhanced self-understanding and professional growth.

Cognitive engagement was further demonstrated through the exploration of professional identity. Participant 12 described his experience presenting at an international tourism expo: "*At that moment, I felt I was contributing to my hometown. It gave me a strong sense of achievement.*" This experience marked a transition from perceiving oneself as a student to feeling part of the professional community, signaling the emergence of a professional identity.

However, cognitive engagement did not always result in continued commitment to the industry. Participant 1 remarked, "*I didn't learn much from this internship, but it made me realize that I don't want to work in the front office in the future.*" This response suggests that cognitive engagement can also yield recognition of occupational misalignment. In such cases, disengagement from a specific career path may represent a different but equally meaningful form of learning and self-awareness.

4.4 Cross-Level Factors Influencing Engagement

The overall analysis indicates that the formation of student engagement is a multi-layered and interwoven process driven by three key mechanisms: personal traits, workplace support, and institutional resources.

Personal traits such as optimism, self-discipline, curiosity, and stress tolerance were found to be crucial internal motivators for sustained engagement. Participant 6 emphasized, "*I am generally optimistic, so my emotions do not easily affect me.*" This reflects how positive dispositions help students maintain emotional stability and persistence in challenging work environments.

Workplace support, including supervisory guidance and the peer climate, also played a critical role. Participant 4 noted, "*My supervisor's monthly feedback made me feel that my efforts were recognized.*" Conversely, the absence of mentorship often led to feelings of isolation, as participant 26 explained, "*There was no internship mentor; I had to figure everything out on my own.*" These findings suggest that supportive supervision not only validates effort but also strengthens students' sense of belonging and professional confidence.

Institutional support, such as regular university follow-ups and access to counseling services, further served a moderating function. Participant 20 remarked, "*My teacher would call to check on my situation and asked both me and my supervisor to complete mutual evaluations. That encouraged me to face the internship more positively.*" This demonstrates how formal academic support systems can sustain motivation and bridge the gap between the university and the workplace.

4.5 Comprehensive Understanding: From Psychological State to Developmental Process

A cross-case comparison reveals that engagement is not a stable psychological state but rather a relational and developmental process. At the beginning of the internship, most students exhibited passive compliance, gradually progressing toward sustainable professional identification through three interconnected steps: emotional regulation, experiential reflection, and self-positioning. Students had to navigate the uncertainties and hierarchical structures of real workplace environments, transforming their initial adaptation into meaningful professional learning.

As participant 22 reflected, "*I hope my future jobs will be like this internship, where my supervisor is willing to teach me instead of just assigning tasks.*" This statement highlights that the endurance of engagement depends largely on the quality of interpersonal relationships rather than individual effort alone.

Accordingly, this study deepens the interpretation of Fredricks et al.'s model (2004) within the context of workplace learning. Behavioral engagement forms the foundation, determining how much one participates. Emotional engagement regulates how one feels throughout the process.

Cognitive engagement guides why one acts and how meaning is constructed. These three dimensions are closely intertwined and, mediated by emotional labor and contextual resources, collectively shape the trajectory of students' professional growth during their transition from academia to the workplace.

Overall, figure 1 summarizes the conceptual framework emerged from the data. Behavioral engagement forms the foundation, emotional engagement acts as a mediating mechanism through emotional regulation and relational support, and cognitive engagement represents reflective meaning-making and professional identity construction. These three dimensions are dynamically influenced by three contextual layers, personal traits, workplace support, and institutional mechanisms, collectively shaping students' integrated engagement during internships.

Figure 1. Integrated conceptual framework of students' behavioral, emotional, and cognitive engagement during internships.

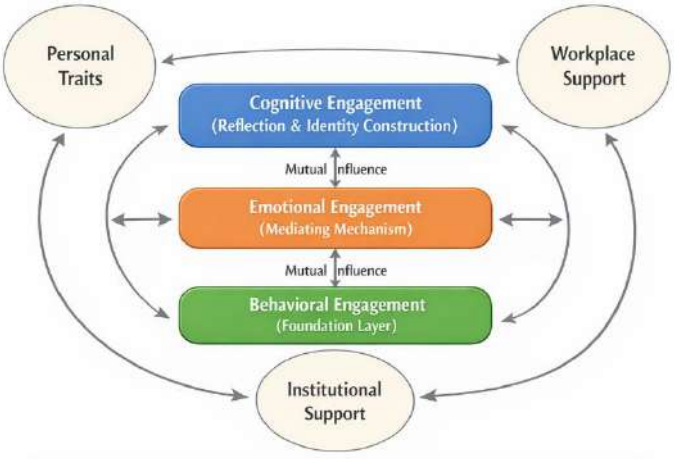

Figure 1. Conceptual Framework of Student Engagement in Internships.

5. Discussion

This study examined the engagement of tourism and hospitality students in Macau during their internships across three dimensions: behavioral, emotional, and cognitive. The findings revealed that (1) behavioral engagement was primarily reflected in students' proactive learning, time management, and sense of responsibility. Most participants reported a gradual shift from passive compliance to self-directed planning and agency. (2) Emotional engagement was evident in students' ability to regulate emotions and develop resilience when facing stress and conflict in real workplace contexts; many maintained stable performance through self-soothing, peer support, or guidance from supervisors. (3) Cognitive engagement manifested in reflective learning and the construction of professional identity, as students increasingly connected theory to practice and clarified their career direction through experiential reflection.

The study found that engagement is a dynamic and interactive process, shaped jointly by personal traits such as optimism, self-discipline, and stress tolerance; workplace climate, including supervisory guidance and collegial support; and institutional resources such as psychological counseling and university follow-up mechanisms. The results empirically support Fredricks et al. (2004) and extend the three-dimensional engagement model to the

context of workplace-based learning. Student engagement emerged not as a fixed psychological state but as a multilayered process that integrates emotional labor with contextual resources. Compared with classroom-based studies (Chau, 2025), this research highlights emotional labor as a critical mediating mechanism influencing emotional engagement. Students were required to reconcile organizational expectations with internal feelings, a process that enhanced self-awareness and professional maturity. Moreover, the findings align with prior research by Hanaysha et al. (2023), who framed student engagement as a process influenced by environmental support and students' sense of competence. The dynamic trajectory identified in this study suggests that students progress through three developmental stages, adaptation, reflection, and internalization, initially relying on external norms, subsequently learning self-regulation, and ultimately forming a coherent professional identity. This process resonates with the theory of situated learning (Spanellis et al., 2022), which posits that learners become legitimate members of professional communities through active participation in workplace practices. Theoretically, this study contributes to engagement literature by integrating emotional labor (Hochschild, 1983) into the three-dimensional model, positioning emotional engagement as a mediating bridge between behavioral action and cognitive reflection. This reconceptualization highlights that students' emotional regulation not only sustains participation but also facilitates deeper learning and identity formation within real workplace environments.

Methodologically, this study adopted a qualitative interview approach. Although the sample of 30 participants was sufficient to achieve thematic saturation, the limited representativeness constrains the generalizability of results to the broader population of tourism and hospitality students in Macau. Furthermore, as data were primarily based on self-reports, they may be affected by recall bias and social desirability tendencies, leading participants to emphasize positive experiences. In addition, significant differences exist across company cultures and job types, such as front-line versus administrative roles, but this study adopted an integrative perspective rather than a comparative one. These limitations suggest that the findings should be interpreted as exploratory rather than universal.

Theoretically, this research extends the existing student engagement framework to workplace learning and proposes an integrated conceptual model that combines emotional labor and contextual support mechanisms. It addresses a gap in previous literature that has largely focused on academic settings, underscoring the bridging function of emotional engagement that links behavioral and cognitive dimensions while positioning emotion management as a critical component of professional development. Practically, the study calls for higher education institutions to strengthen emotion-oriented and reflection-based support systems. Suggested initiatives include establishing regular psychological counseling services, organizing internship reflection and feedback sessions, and embedding emotional intelligence and workplace resilience training within curricula. These measures can sustain student engagement and professional confidence during the transition from education to employment. Simultaneously, industry partners are encouraged to cultivate a mentoring culture and provide constructive feedback to enhance interns' psychological safety and lifelong learning motivation.

Future research can build upon this study in three ways: (1) employing mixed-method designs to quantitatively examine the relationship between engagement and emotional labor, complementing qualitative insights; (2) conducting longitudinal studies to trace how engagement evolves from internship to employment; and (3) comparing diverse cultural and industrial contexts, such as gaming, events, or public sector settings, to explore how

organizational cultures shape emotional and cognitive engagement. Through multi-level and multi-method research, future scholarship may further develop an evidence-based model of workplace engagement in tourism and hospitality education.

6. Conclusion

This study, focusing on tourism and hospitality students in Macau, reveals a dynamic three-dimensional process of engagement during internships. Students demonstrated behavioral engagement through proactive participation, emotional engagement through self-regulation and adaptation, and cognitive engagement through reflective learning and the development of insight, progressively forming a sense of professional identity in the midst of workplace conflict and pressure. The formation of engagement did not occur automatically but resulted from the interactive interplay of personal dispositions, workplace support, and institutional care mechanisms. Theoretically, the study extends Fredricks et al. (2004) tripartite model of engagement by applying it to the context of workplace learning and incorporating the perspective of emotional labor, thereby advancing the understanding of engagement as a situated and relational construct. Practically, the findings highlight the need for higher education institutions and industry partners to pay attention to students' emotional experiences and reflective processes when designing internship programs, ensuring that these experiences serve as bridges for developing professional competence and emotional resilience. Ultimately, this research conceptualizes student engagement as a relational learning process in which students not only acquire technical and procedural knowledge but also learn to feel, regulate, and reconstruct the self, discovering in emotional management a vital source of personal and professional growth.

Declaration

During the preparation of this work, the authors used AI tools Poe and ChatGPT in order to polish the English language and generate Figure 1. After using these tools, the authors reviewed and edited the content and Figure 1 as needed and take full responsibility for the content of the publication

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A Structural Equation Model of Causal Factors Influencing Behavioural Intention through Motivation, Trail Event Management, and Post-Participation Feelings in Trail Running for Community-Based Tourism Promotion

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Abstract

The growth of community-based tourism in Thailand has been obviously increasing, because of being an important mechanism to promote sustainable tourism. However, fewer CBTs successfully operated, due to the similarities in tourism attractions and activities, especially CBTs having nature-based destinations and the same activities. There are various activities to create differentiations among CBTs, sport events can also provide different activities and promote uniqueness of the CBT destinations, but it's still neglected by both academics and practitioners.

Apart from positive economic impact of organizing running events, the running events can also provide negative impacts such as environments including waste, garbage, traffic jams or road closures (Poczta et al., 2020), causing injuries and fatal accidents from heart attacks (Kluitenberg et al., 2021). Consequently, environmental and social impacts have been concerned in organizing responsible running events with stronger collaboration with community. Additionally, runners increasingly seek for natural based environment such as steam, forest, waterfall, etc. (Rosenkrantz, Schuurman, & Lear, 2024), which are accordant with the CBTs resources and Trail running events.

Trail is a kind of running event giving runners experiencing nature and locals. Trail running events can promote community-based tourism, as they can be locally managed and integrated into communities with natural or adventure tourism resources (Perrin-Malterre, 2018). It can contribute to create destination awareness, increase numbers of quality visitors and revisit intention (Halpenny et al., 2016; McKay, McEwan, & Baker, 2019; Voltes-Dorta & Martín, 2021).

Furthermore, organizing a trail in CBT aligns well with the CBT contexts, as the trail can be organized seasonally or during low season to manage carrying tourism capacity which candistribute income and economic benefits for local communities (Duglio & Beltramo, 2017; McKay et al., 2019).

In explaining trail runner's behavior intentions through motivation, satisfaction and post-participation feelings are less attention from academics. Previous research has mainly focused on trail management and behavior (McEwan, McKay, & Baker, 2020), race performance and

re -participation (Voltes-Dorta & Martín, 2021), event and park attachment (Halpenny et al., 2016), motivation (Chang et al., 2017), and marketing mix strategies (Somnil et al., 2020). Motivation has positive impact on event management satisfaction which positively influences runner's emotions (Duan, Liu & He, 2020). Additionally, satisfaction is a mediating variable of the indirect effect of motivation on behavioral intention (Duan, Liu & He, 2020). However, feeling after participating in the trail event remains underexplored, especially in the CBT contexts. While the emotions that appeared along the trail route significantly influences runner's behavioral intention (Jeong, Kim & Kim, 2020).

Therefore, this study aimed to investigate the influence of trail runner's motivation, trail management satisfaction, and post participation feeling to promote understanding of runner's behavior intention within the context of community-based tourism. The research samples were 311 trail runners who experienced trail events in CBT destinations, Thailand, at least twice. A non-probability with convenience sampling method was employed. Online questionnaire was used to collect data, reviewed by 3 experts with an Index of Item-Objective Congruence (IOC) of 0.67 or higher for all items. The questionnaire showed high reliability with the coefficients of the motivation, trail management satisfaction, post-participation feelings and behavioral intention were 0.65, 0.88, 0.92 and 0.88, respectively. Data were analyzed using Structural Equation Modeling (SEM).

The results revealed that the hypothesized structural model demonstrated a good fit with the empirical data ($\chi 2/df = 2.126$, RMSEA = 0.060, GFI = 0.864, CFI = 0.936). Trail runner's motivation had a significant positive effect on trail event management satisfaction, with a path coefficient of 0.435. Trail management satisfaction significantly influenced post-participation feelings, with a path coefficient of 0.586. Furthermore, both trail management satisfaction and post-participation feelings had significant effects on behavioural intention, with path coefficients of 0.347 and 0.440, respectively. Implications for promoting CBT with trail running events, feelings including excitement, thrill, and enjoyment should be considered in designing the trail events to increase repetition of trail runners.

Keywords: Trail, Community-based Tourism, Motivation, Running Event Management, Feelings

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A Study on the External Factors Influencing Hotel Employees' Adoption of LLM-Based AI Marketing Technologies

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1. Research Background and Objectives

Against the backdrop of the Fourth Industrial Revolution (Schwab, 2016; Syam & Sharma, 2018), Large Language Model (LLM) technologies driven by deep learning are rapidly penetrating service-intensive industries such as hospitality, profoundly reshaping marketing practices and competitive dynamics (Gu, 2024). Due to their strong capabilities in multimodal data processing and unstructured information generation, LLMs have been widely applied in key marketing scenarios, including dynamic pricing optimization, personalization, customer interaction, and automated content production (V. Kumar, Kotler, Gupta, & Rajan, 2024). Platform-based AI marketing systems, exemplified by TikTok, are capable of continuously learning from real-time user behavior data, achieving advertising ROI improvements of up to 47% (城市研究院, 2023), thereby demonstrating the substantial potential of LLMs in hospitality marketing practices.

Within the hotel industry, the application of AI technologies not only enhances operational efficiency but also improves customer experience, thus further strengthening customer satisfaction and brand loyalty (Al-Hyari, Al-Smadi, & Weshah, 2023; M.-H. Huang & Rust, 2018; Tung & Au, 2018; V. Kumar, Ashraf, & Nadeem, 2024). However, despite rising awareness among hotel groups regarding the potential of AI marketing technologies, the industry as a whole remains in an exploratory and observational stage, with limited comprehensive adoption of AI. In practice, hotel employees often show low willingness to adopt AI marketing tools and, in some cases, outright resistance (Chowdhury et al., 2023). As a result, employee acceptance has emerged as a critical determinant of whether AI marketing technologies can be successfully implemented in hotel organizations.

To systematically understand the psychological mechanisms underlying employees' technology adoption, this study adopts the Technology Acceptance Model (TAM) as its theoretical foundation. Originally proposed by Davis (Davis, 1989; Davis, Bagozzi, & Warshaw, 1989), TAM posits that users' technology adoption intentions are primarily driven by perceived usefulness (PU) and perceived ease of use (PEOU). Subsequent studies have emphasized the crucial role of external variables in shaping technology adoption processes (Davis, Bagozzi, & Warshaw, 1992; Igbaria & Parasuraman, 1989; Venkatesh, 2000; Venkatesh & Bala, 2008), particularly in high-contact service industries such as hospitality, where organizational and social-contextual factors exert significant influence on employee behavioral intentions (Morosan & DeFranco, 2016; Y. Wang & Qualls, 2007).

Accordingly, this study extends the classical TAM framework by incorporating key external variables specific to both the hospitality context and AI technology context, thereby constructing an Extended Technology Acceptance Model (ETAM). The study focuses on examining how subjective norms, trust, self-efficacy, and AI anxiety influence hotel employees' intentions to use and potentially adopt LLM marketing tools, providing a

theoretical explanation for technology acceptance on the employee level in the context of hotel digital transformation.

2. Research Methodology

2.1 Research Design

This study employs a qualitative research approach, using semi-structured in-depth interviews to systematically identify key external factors influencing hotel employees' adoption of LLM marketing technologies. Compared with survey-based methods, qualitative interviews allow for a deeper exploration of participants' authentic perceptions, attitudes, and emotional responses in real organizational contexts, thereby offering a solid empirical foundation for theory building.

2.2 Sample Selection

A purposive sampling method was adopted (Tongco, 2007), resulting in interviews with 12 key informants possessing substantial experience in the hotel industry or AI marketing-related fields. The interviewees included senior executives of hotel groups, group-level marketing directors, general managers of hotels across different market segments, regional managers from platform providers such as TikTok Life Services, project managers from AI marketing agencies, and AI marketing technology experts. This sampling method ensured diversity in organizational hierarchy, functional roles, and levels of technological exposure, thus ensuring the overall representativeness and generalizability of the sample.

2.3 Interview Procedure and Data Processing

A semi-structured interview guide was developed prior to data collection (see Appendix I), covering topics such as perceptions of AI marketing, adoption motivations and barriers, emotional responses, trust and anxiety concerns, and organizational training and support mechanisms. The guide was refined through pilot interviews and expert review to ensure clarity and relevance. All interviews were conducted with informed consent, lasted approximately 30–60 minutes, and were audio-recorded in full.

Interview recordings were transcribed verbatim, yielding approximately 87,000 words of textual data. NVivo 15 software was employed for qualitative data analysis. A combination of word frequency analysis and open coding was used to identify themes, following a dual approach that integrated theory-driven and data-driven coding strategies.

3. Analysis and Findings

3.1 Coding Structure and Theme Development

The coding results indicate that interview content can be categorized into three primary thematic groups: driving factors, influencing factors, and implementation mechanisms. Among these, influencing factors accounted for the largest proportion of coded references, underscoring the central role of employees' cognitive and emotional factors in the adoption of AI marketing technologies. Further analysis revealed that constructs such as self-efficacy, individual characteristics, AI anxiety, subjective norms, and trust were repeatedly emphasized and exhibited strong explanatory power.

3.2 Employees' Emotional and Attitudinal Orientations

The emotional analysis revealed clear differentiation in employees' attitudes toward LLM marketing technologies, which can be broadly classified into three categories: supportive, skeptical, and observant. Employees holding supportive attitudes generally acknowledged the advantages of AI marketing in terms of precise customer targeting, enhanced brand exposure, and improved operational efficiency, viewing such technologies as aligned with broader industry trends (V. Kumar, Kotler, et al., 2024). Skeptical respondents expressed concerns regarding high technological complexity, shortages of skilled personnel, potential conflicts with high-end brand images, and uncertain investment returns (Chowdhury et al., 2023). Meanwhile, a group of respondents adopted a neutral or observant stance, recognizing the inevitability of AI marketing but emphasizing the need for more successful cases and clearer performance evaluation frameworks before full-scale implementation. Overall, employee attitudes toward AI marketing were not dichotomous but rather shaped by the interplay of multiple cognitive and emotional considerations.

3.3 Key External Influencing Factors

(1) Subjective Norms (SN)

Interview findings indicate that attitudes from senior management, organizational culture, and industry peers exert substantial influence on employees' adoption of AI marketing technologies. When top management explicitly endorses AI marketing or when peer hotels have widely adopted such practices, employees are more inclined to follow suit. This finding is consistent with TAM2, which posits that subjective norms significantly affect technology usage intentions (Venkatesh & Davis, 2000).

(2) Trust (TR)

Employees' level of trust in AI systems directly influences their willingness to use AI marketing tools. Interviewees expressed concerns regarding the reliability of AI-generated recommendations, algorithmic transparency, and data privacy and security. These findings align with prior studies identifying trust as a critical antecedent of technology adoption (Flavián, Guinalíu, & Gurrea, 2006; Kaushik et al., 2015).

(3) Self-Efficacy (SE)

Self-efficacy emerged as the most frequently cited influencing factor in the interviews. Employees with higher levels of self-efficacy demonstrated greater willingness to experiment with and continuously use AI marketing tools. This result is consistent with established findings in information systems research, which highlight the positive impact of self-efficacy on perceived ease of use (Compeau & Higgins, 1995b; Venkatesh & Bala, 2008).

(4) AI Anxiety (AIA)

AI anxiety refers to employees' concerns about decision errors, job displacement risks, and perceived inadequacy in adapting to AI-driven work environments. Such negative emotions can undermine perceived usefulness and perceived ease of use, thereby inhibiting technology adoption intentions (Venkatesh, 2000; Johnson & Verdicchio, 2017; A. Kaplan & Haenlein, 2019).

(5) Individual Characteristics

Interview data also suggest that individual characteristics such as age, work experience, and organizational position influence attitudes toward AI marketing. Compared with younger employees, more experienced staff tend to rely on established practices and adopt a more cautious stance. Moreover, managerial support—or lack thereof—can amplify or constrain adoption processes at the organizational level.

4. Implications for ETAM Development

Based on the qualitative findings, this study constructs an Extended Technology Acceptance Model (ETAM) tailored to the context of LLM marketing in the hotel industry. The results support the inclusion of subjective norms, trust, self-efficacy, and AI anxiety as key external variables within the TAM framework, thereby enhancing its explanatory power in hospitality-specific AI adoption contexts. This extension is theoretically consistent with prior TAM-based models such as TAM2, TAM3, and UTAUT (Venkatesh & Davis, 2000; Venkatesh & Bala, 2008; Venkatesh et al., 2003), while emphasizing contextual specificity in hotel AI marketing applications.

5. Research Contributions and Implications

5.1 Theoretical Contributions

By systematically examining LLM marketing adoption from the employee perspective, this study addresses a notable gap in existing research, which has predominantly focused on customer experience and technological performance (Fouad et al., 2024). The findings provide empirical evidence that extends technology acceptance research within hospitality and tourism management by incorporating employee-level cognitive and emotional mechanisms.

5.2 Practical Implications

The results suggest that successful implementation of AI marketing technologies in hotels requires a strategic shift from purely technological deployment toward managing employees' perceptions and emotions. Specifically, hotels should enhance self-efficacy through training, build trust via transparent systems and institutional support, and alleviate AI anxiety through incentives and change management practices, thereby improving the likelihood of successful technology adoption.

AI and Service Robots in Tourism: A Dual Perspective from Service Providers and Technology Integrators

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Abstract

The rapid adoption of artificial intelligence (AI) and service robots is reshaping the global tourism and hospitality industry. While existing studies largely emphasize efficiency gains, automation potential, and customer satisfaction, limited attention has been paid to the gap between conceptual expectations and real-world implementation. This gap is particularly evident in Asian hospitality contexts, where service quality is deeply embedded in cultural values emphasizing human interaction, attentiveness, and emotional labor.

This study addresses this limitation through a qualitative, practitioner-led, case-based approach grounded in direct operational experience. Drawing on the author's dual role as both a tourism service operator and a technology integrator importing and deploying cleaning, service, and reception robots, the research examines how AI-driven systems function in real public and large-scale service environments. Field deployments conducted inhigh traffic, non-controlled settings allow for an empirical assessment of operational performance, human response, cultural alignment, and cybersecurity risks.

The findings reveal that AI adoption in tourism is primarily driven by labor shortages, service consistency demands, and scalability requirements. However, successful implementation depends less on technological sophistication and more on human–robot collaboration, service process redesign, contextual adaptation, and proactive cybersecurity governance. Rather than replacing human labor, service robots reconfigure work structures and redistribute tasks. The study argues that service robots should be understood as components of a broader socio-technical system and proposes a human-centered, context-sensitive framework for responsible AI adoption in tourism, particularly relevant for Asian and emerging tourism markets.

Keywords: artificial intelligence; service robots; tourism; hospitality; Asian hospitality; cybersecurity

I. Introduction

Artificial intelligence (AI) and service robotics have become central elements of digital transformation in tourism and hospitality. Technologies such as AI-based chatbots, automated check-in systems, autonomous cleaning robots, service robots, and reception robots are increasingly deployed in hotels, airports, shopping complexes, convention centers, and tourist destinations. These technologies promise improved efficiency, reduced operational costs, and enhanced service consistency in an industry traditionally characterized by labor-intensive processes and continuous human interaction.

In Asian tourism markets, AI adoption has accelerated due to structural labor shortages, seasonal demand volatility, urban concentration of services, and rising expectations from international travelers for technology-enabled experiences. At the same time, hospitality across Asia remains deeply relational, shaped by cultural values such as respect, attentiveness,

politeness, and emotional engagement. This creates an inherent tension between automation-driven efficiency and culturally grounded expectations of human-centered service.

Despite growing academic interest, much of the existing literature remains conceptual, survey-based, or technologically deterministic. Many studies focus on user acceptance or innovation potential while overlooking implementation realities such as workflow disruption, staff adaptation, environmental constraints, and cybersecurity risks. In particular, few studies integrate the perspectives of both tourism service providers and technology integrators, and even fewer are informed by direct deployment experience.

This study addresses these gaps by adopting a practitioner-led dual perspective. Grounded in the author's direct involvement in operating tourism services while simultaneously importing, deploying, and testing service robots in public and large-scale facilities, the research examines how AI and service robots function under real operational constraints. The central research question guiding this study is**: How can AI and service robots be effectively, safely, and culturally aligned within tourism operations, particularly in Asian hospitality contexts and emerging tourism markets?**

II. Theoretical Background

2.1 Artificial Intelligence Adoption in Tourism

Artificial intelligence refers to computational systems capable of learning, reasoning, and decision-making to support or automate human activities. In tourism, AI applications include demand forecasting, pricing optimization, customer service automation, recommendation engines, and operational planning. These systems enable organizations to process large volumes of data and respond dynamically to market changes.

From a theoretical perspective, AI adoption is often explained through innovation diffusion and technology acceptance models. Organizations adopt AI to improve efficiency, reduce dependency on human labor, and enhance service quality. However, tourism services differ fundamentally from manufacturing or logistics because value is co-created through direct interaction between service providers and guests. Consequently, AI adoption must be evaluated not only on technical performance but also on its integration with human-centered service processes.

2.2 Service Robots in Hospitality Operations

Service robots represent a physical and visible manifestation of AI in hospitality environments. They perform tasks such as cleaning, guiding visitors, delivering items, and supporting reception functions. Because service robots operate in shared public spaces, their acceptance is shaped by customer perceptions, staff attitudes, and environmental suitability.

Research consistently demonstrates that robots perform most effectively when assigned clearly defined, repetitive, and standardized tasks. Cleaning robots typically achieve higher reliability than service or reception robots due to task clarity and limited interaction complexity. Introducing service robots also necessitates organizational adjustments, including workflow redesign, role clarification, and staff training.

2.3 Human–Robot Interaction in Service Contexts

Human–robot interaction examines how humans perceive and respond to robotic systems. In tourism and hospitality, these interactions directly influence service satisfaction because encounters are inherently interpersonal. Expectation management plays a critical role, as users are more satisfied when a robot's capabilities and limitations are clearly communicated.

Social presence, defined as the degree to which a robot is perceived as a social actor, further shapes interaction outcomes. While limited social cues can enhance engagement, excessive anthropomorphism often leads to unrealistic expectations and subsequent dissatisfaction. Cultural background significantly influences these dynamics.

2.4 Asian Hospitality as a Cultural Framework

Asian hospitality is commonly associated with values such as respect, attentiveness, harmony, and emotional labor. Hospitality is not purely transactional but relational and situational. While efficiency and consistency are valued, excessive standardization may conflict with expectations of personalized care. Evaluating AI adoption in Asian tourism contexts therefore require careful consideration of cultural alignment alongside operational performance.

2.5 Country-Specific Perspectives in Asia

Japan exhibits relatively high acceptance of service robots due to cultural narratives portraying robots as cooperative and helpful. South Korea emphasizes speed and technological innovation, resulting in widespread hybrid service models. China has adopted service robots at scale due to labor pressures and policy support, though concerns about depersonalization persist. Mongolia, as an emerging tourism market, places strong emphasis on personal interaction and flexibility, making contextual adaptation essential.

III. Research Methodology

This study employs a qualitative, case-based research design informed by practitioner-led inquiry. A qualitative approach is appropriate because the research seeks to understand processes, perceptions, and implementation dynamics rather than measure causal relationships statistically.

Primary data were derived from direct operational involvement in deploying autonomous cleaning robots, service robots, and reception robots in public and large-scale service environments associated with tourism and hospitality. These deployments were conducted in real, non-controlled settings characterized by high foot traffic, diverse users, and operational constraints. Additional insights were obtained through informal semi-structured interactions with managers, frontline employees, and technical specialists involved in deployment and daily operation.

Secondary data sources included academic literature, industry reports, and policy documents related to smart tourism, AI adoption, and service robotics. Data were analyzed using a thematic approach, identifying recurring patterns related to operational performance, human response, cultural alignment, and cybersecurity considerations. Ethical considerations included maintaining anonymity of organizations and avoiding disclosure of proprietary information.

IV. Research Findings and Analysis

4.1 Positionality of the Study: Practitioner-Led Dual Perspective

This research is grounded in direct practical experience derived from the author's dual role as both a tourism service operator and a technology integrator specializing in artificial intelligence, cybersecurity, and service robotics. Unlike studies based solely on surveys, simulations, or secondary observations, the findings presented here emerge from real-world deployment, testing, and operational use of service and cleaning robots in tourism-related environments.

The author's companies are engaged in importing and deploying autonomous cleaning robots, service robots, and reception robots, which have been tested in public spaces and large-scale service facilities with high daily foot traffic. This dual positionality enables the study to move beyond abstract assumptions and examine how AI and service robots function within the actual constraints of hospitality operations, including spatial limitations, staff readiness, customer behavior, and organizational culture.

This insider perspective reveals a clear gap between how service robots are marketed or theoretically discussed and how they perform once introduced into real service ecosystems.

4.2 Deployment of Cleaning and Service Robots in Public and Large-Scale Facilities

As part of operational trials, autonomous cleaning robots and service robots were deployed in large public areas and high-traffic service environments associated with tourism and hospitality functions. These environments were intentionally selected because they represent realistic and demanding operational conditions rather than controlled or experimental settings.

Cleaning robots were deployed in spacious, shared areas with repetitive cleaning requirements. Their performance was evaluated based on operational stability, consistency, maintenance demands, and interaction with human movement. Service and reception robots were tested in environments where they interacted directly with visitors, providing information, guidance, or basic service support.

The trials demonstrated that cleaning robots consistently outperformed service robots in terms of reliability and ease of integration. Their tasks were clearly defined, environments could be partially structured to support navigation, and human expectations were aligned with robotic capabilities. In contrast, service and reception robots encountered more variability due to language diversity, unpredictable human behavior, and culturally nuanced service expectations.

4.3 Operational Impact and Process-Level Outcomes

From an operational standpoint, robots did not eliminate human labor but reshaped how labor was allocated. Cleaning robots reduced repetitive physical workload and allowed staff to redirect attention toward supervision, quality control, and guest-facing tasks. This resulted in improved staff efficiency rather than workforce reduction.

Service robots contributed positively to standardized information delivery and basic guidance, particularly during peak hours when human staff were overstretched. However, their effectiveness was highly dependent on service process redesign. In cases where robots were introduced without adjusting workflows, signage, or staff roles, their contribution remained marginal.

A key operational insight was that robots functioned best when treated as part of the service infrastructure rather than as standalone innovations. Successful deployment required spatial planning, staff coordination, and continuous monitoring.

4.4 Human Response: Staff Adaptation and Customer Behavior

Staff responses evolved significantly throughout the deployment period. Initial reactions were marked by skepticism and concern, primarily related to job security and unfamiliarity with robotic systems. Over time, hands-on interaction and practical experience reduced resistance, particularly when employees recognized that robots functioned as support tools rather than replacements.

Employees reported decreased physical fatigue and greater ability to focus on tasks requiring human judgment and emotional engagement. This shift contributed to a more balanced distribution of labor between humans and machines.

Customer responses varied across demographic groups. Younger visitors and international travelers demonstrated higher levels of curiosity and acceptance, often perceiving robots as indicators of innovation and modern service quality. Older customers and local visitors tended to prefer human interaction, especially for problem-solving and personalized requests. These patterns underscore the necessity of hybrid service models in hospitality environments.

4.5 Limitations, Misconceptions, and Critical Insights from Practice

One of the most persistent misconceptions observed during deployment was the belief that service robots could autonomously manage complex hospitality interactions. In practice, robots performed optimally only when their roles were clearly limited and supported by human oversight.

Service failures occurred when robots were expected to interpret ambiguous requests, manage emotional situations, or operate without contextual guidance. These failures were not technological flaws alone but reflections of unrealistic expectations and insufficient service design adaptation.

The findings emphasize that AI and service robots should not be evaluated as independent solutions. Their value lies in augmentation, standardization, and workload redistribution rather than full automation. When positioned incorrectly, robots can introduce friction rather than efficiency.

4.6 Reflective Evaluation: What This Means for Tourism and Hospitality

The empirical evidence from these deployments suggests that the success of AI and service robots in tourism depends less on technological sophistication and more on human-centered integration. Organizations that view robots as strategic tools within a broader service system achieve more sustainable outcomes than those seeking rapid automation.

For emerging tourism markets, including Mongolia, these insights are particularly relevant. Directly importing technological models from highly automated contexts without local adaptation risks undermining core hospitality values. Instead, gradual implementation, contextual testing, and continuous human involvement are essential.

V. Discussion

The findings of this study reinforce the argument that AI and service robot adoption in tourism should be understood as a socio-technical transformation rather than a purely technological upgrade. While existing literature often frames robots as tools for efficiency and automation, the practitioner-led evidence presented here demonstrates that their real value emerges only when technology, human labor, and service design are intentionally aligned.

From a dual perspective of service operator and technology integrator, a clear disconnect was observed between expectations and outcomes. Service providers frequently approached robots with the assumption that technology alone could resolve labor shortages and operational inefficiencies. In contrast, implementation experience revealed that robots amplified both strengths and weaknesses of existing service systems. Where workflows were clear, environments were prepared, and staff roles were redefined, robots enhanced consistency and reduced physical workload. Where these conditions were absent, robots introduced friction rather than efficiency.

Cultural alignment emerged as a critical moderating factor, particularly in Asian hospitality contexts. While efficiency and innovation are valued, hospitality remains fundamentally relational. The empirical evidence shows that guests consistently distinguished between tasks suitable for automation and interactions requiring human empathy and judgment. This supports the hybrid service model advocated in prior research but extends it by demonstrating how misalignment between cultural expectations and robot roles can undermine service quality.

Cybersecurity considerations further complicate AI adoption in tourism. From the technology integrator perspective, security risks were not theoretical but operational realities. Networked service robots operating in public spaces process data, interact with multiple systems, and remain vulnerable to misconfiguration or misuse. Yet these risks were frequently underestimated by service providers during early adoption phases. This gap highlights the need to treat cybersecurity not as a technical afterthought but as a core component of responsible AI governance in hospitality.

Importantly, the findings challenge the dominant narrative of robot-driven labor replacement. Instead, they point toward labor reconfiguration, where robots absorb repetitive and physically demanding tasks while humans focus on roles requiring emotional intelligence, situational awareness, and problem-solving. This reframing is particularly relevant for emerging tourism markets, where preserving hospitality identity is as important as improving efficiency.

VI. Conclusion

This study set out to examine AI and service robot adoption in tourism through a dual perspective that integrates the roles of service provider and technology integrator. By grounding the analysis in real-world deployment of cleaning, service, and reception robots, the research moves beyond speculative assumptions and contributes practice-based evidence to the academic discourse.

The key conclusion is that AI and service robots do not function as standalone solutions. Their effectiveness depends on human-centered integration, service process redesign, cultural sensitivity, and proactive security management. Robots succeed not when they replace humans, but when they are embedded within thoughtfully designed service ecosystems.

For tourism organizations, particularly in Asian and emerging markets, the implications are clear. Rapid automation without contextual adaptation risks eroding core hospitality values and

undermining guest experience. Conversely, incremental implementation supported by staff training, realistic expectation setting, and continuous evaluation enables technology to enhance rather than dilute service quality.

This study underscores the need for a shift in mindset: from asking whether robots can replace humans to asking how robots and humans can collaborate to deliver better, more sustainable hospitality services.

VII. Practical Implications and Future Research

From a practical standpoint, tourism operators should approach AI adoption as an organizational transformation rather than a technology purchase. This includes investing in staff training, redefining service workflows, and involving employees early in the deployment process. Technology integrators, meanwhile, must prioritize contextual understanding, cultural alignment, and cybersecurity readiness alongside technical performance.

For policymakers and industry leaders, the findings suggest the importance of governance frameworks that support responsible AI adoption, particularly in public and high-traffic service environments. Standards related to data protection, safety, and interoperability should be integrated into smart tourism strategies.

Future research could build on this study by incorporating quantitative performance metrics, comparative cross-country analysis, or longitudinal studies examining long-term impacts of human–robot collaboration. However, continued emphasis on practitioner-led research will remain essential to bridge the gap between theory and implementation.

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An Exploration of the Impact of Chinese Tourists on the Malaysian Economy: A Tourism Perspective within the RCEP Framework

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Abstract

Due to the economic decline post Covid-19, numerous tourism businesses have been forced to shut down. Surprisingly, the industry is seeing a revival as the number of tourist arrivals continues to increase. This paper explores the economic impact of Chinese tourists in Malaysia and examines how the Regional Comprehensive Economic Partnership (RCEP) contributes to boosting their visits to the country. **Methodology:** This research is based on a comprehensive review of existing literature alongside relevant datasets/statistics. **Findings:** Malaysia is anticipating an increase in the influx of Chinese tourists due to the ratification of the RCEP. RCEP has effectively decreased tariffs and lowered trade barriers among member states, resulting in a notable surge in commercial activities and investments across national borders. The ratification of RCEP arrives at a perfect time for member states to enhance economic recovery in the region. There is a tendency for economic prosperity in a region to positively influence the development of tourism. This development has directly benefited the tourism sector by facilitating and reducing the cost of travel for Chinese tourists to Malaysia. Moreover, the deal has effectively resulted in an enhancement of the economic climate and infrastructure in Malaysia, therefore increasing its appeal as a tourism destination. **Conclusion:** The RCEP framework's collaborative endeavors are expected to persist in promoting sustainable development and innovation, which could indirectly increase tourism flows between China and Malaysia.

Keywords: Chinese tourist, Economy, Malaysia, RCEP, Tourism.

Asian Tourism Slogans as Thematic Interpretation

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Abstract

Business and institutions use slogans and logos to establish a verbal and visual identity and to distinguish themselves from others. Nike's "Just Do It" and the Swoosh are memorable; they become an asset to the brand. As beneficial as it can be, a good logo is scarce because it must achieve recognizability, desirability, and relatability (Chen, 2024; Hwang & Lee, 2025; Pettey, 2003; Yassin, 2023). Slogans assert a brand's unique attitudes and beliefs through words into meanings; its undertaking is an intentionality of turning reading as a sensory capacity to think and feeling in the mental space. Making an impactful slogan such as "I (heart/love) NY" is challenging because, in addition to recognizability, desirability, and relatability, it must also be clever and honest in essence, and brevity in form.

Slogans are effectively an interpretative narration targeted at an audience emotionally. Nations have flags and emblems as a graphic identity. Their anthems verbally and expressively tell a story of identity. Many countries around the world have a tourism slogan to show hospitality to an international audience. Of the 52 Asian countries and state parties, 47 have an official tourism slogan. As the tourism market is prominent and growing in the region, creative tourism slogans for media attention are indispensable.

Interpretation is purposeful communication that reveals tourism resource meanings to an audience. National parks, museums, and heritage sites use interpretation to advance their goals, e.g., education, preservation, membership recruitment, and public relations. Tourism attractions also use interpretation to accentuate their brand, e.g., Disney's princess dreams. Effective interpretations have a strong theme (Ham, 2013), because people remember themes but forget facts. The theme is storytelling with a takeaway message. With a theme, visitors think, seek personal relevance, and draw a conclusion. We wondered if slogans qualify for theme statements. For this reason, it was the purpose of this study to examine Asian tourism slogans in terms of theme writing techniques according to Ham (2013) and (U.S.) National Association for Interpretation's training for Certified Interpretative Guides.

A theme writing construct was developed, containing eight positive criteria: a main point, a so-what, a complete sentence, a tangible substance, an intangible concept, a relevance to an audience, a first-person perspective, and a conspicuous word. Additional are two negative criteria: a theme is not an imperative, and not in the form of a question.

The research questions were RQ1: How many national tourism slogans are theme statements? RQ2: How well is the theme writing construct (10 criteria) performed in the 47 slogans? The research methods involved data collection, criteria/variable selection, and a content analysis. The 47 Asian tourism slogans were inspected according to the 10-criteria/variables by four coders. Each of the 470 data points (47 slogans times 10

criteria/variables) was rated as yes, no or cannot-be determined. Frequencies and percentages were recorded. Target coding reliability of 85% was exceeded.

For RQ1, all 47 slogans qualified for theme interpretation by meeting at least one theme writing criterion. Two slogans each met four theme criteria (the least): Take Another Look (Azerbaijan), and One Country, Many Destinations (Yemen). Five slogans reached five criteria: Armenia, The Hidden Track (Armenia), Kingdom of Wonder (Cambodia), Set Forth on a Great Journey (Jordan), Go Nomadic (Mongolia), and Seven Emirates, One Destination (United Arab Emirates). By scoring five or more of the 10 theme writing criteria, 45 of the 47 slogans passed the five-criteria test (midpoint, .500 batting average). One slogan had the highest number of criteria met (nine of 10): Best of It All, It's in Hong Kong. Five slogans scored eight points out of the 10 criteria: Cyprus in Your Heart, Emotions Are Georgia, It's More Fun in the Philippines, Saudi, A Kingdom That Inspires, and Amazing Thailand, It Begins with People.

In a 47-slogans by 10-theme criteria matrix, each affirmation was a data point, i.e., a slogan scored a "yes" as a theme writing technique. A total of 312 theme data points was accounted, meaning that a slogan statement in the sample had a 66% probability (n=312/470 data points) of being perfect in qualifying all 10 theme writing techniques. As to RQ2, regarding the 10-criteria of the theme writing construction, a slogan that has a main point (theme writing technique 1) and that it is not in the form of a question (theme writing technique 10) were the most performed (47/47 slogans, 100%). A slogan that is sensory relevant to the reader (theme writing technique 6, 2/47, 4%) and that the slogan is spoken from a first-person perspective (theme writing technique 7, 13/47, 28%) were the least achievable criteria.

Tourism slogans elicit audience impression and tourist visitation. Many of the Asian countries' slogans are remarkable thematic interpretations; some of them are also provocative, humorous, and playful with words. It is suggested that city and local destinations draw inspiration from Asian countries' slogans and try the interpretive theme writing techniques in their slogan design.

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Beyond Direct Access: The Agglomerative Push of Startups Towards Exploited-Access Resources

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Abstract

Introduction and Research Gap

Startups in the hospitality and tourism industry face substantial resource constraints that threaten their survival and growth. Unlike established firms, startups lack the financial capital, brand recognition, and network access necessary to compete effectively (Zahra, 2021). The Resource-Based View (RBV) has traditionally focused on internal firm attributes as sources of competitive advantage (Barney, 1991); however, this perspective inadequately explains how resource-constrained startups overcome their inherent limitations. Responding to calls for extending RBV beyond firm boundaries (Barney, 2018), this study investigates how hospitality startups exploit external resources through agglomeration dynamics.

The Knowledge Spillover Theory of Entrepreneurship posits that startups are direct beneficiaries of knowledge spillovers, compensating for limited internal R&D capabilities (Audretsch & Belitski, 2021). Geographic clustering amplifies these effects through increased interactions and tacit knowledge transfer (Marshall, 1920). While agglomeration economies in hospitality have been documented from the perspective of established hotels benefiting from demand-side externalities (Canina, Enz, & Harrison, 2005), supply-side benefits for startups remain underexplored. Furthermore, existing literature predominantly examines resources explicitly allocated by venture capitalists or governments, while ignoring resources startups must proactively harness from their competitive environment.

This study addresses this gap by examining how hospitality startups leverage agglomeration dynamics to access resources from competitors and proximate firms, investigating knowledge spillovers through patent citations and the effects of co-location with startups and incumbent hospitality firms on performance.

Theoretical Foundation

This research integrates the Resource-Based View with agglomeration theory and competitive dynamics. We distinguish between resources explicitly allocated by external entities and those emerging organically from the competitive landscape requiring strategic positioning to capture. This study focuses on the latter category, which has received limited scholarly attention.

Agglomeration economies generate three primary externalities: knowledge spillovers, labor market pooling, and specialized inputs access (Marshall, 1920; Audretsch & Feldman, 1996). For technology-intensive hospitality startups, knowledge spillovers represent particularly valuable resources. Patent citations provide measurable traces of knowledge flows between

firms (Jaffe, Trajtenberg, & Henderson, 1993), enabling empirical examination of how startups absorb knowledge from neighboring entities.

The coopetition literature suggests startups can simultaneously compete with and benefit from incumbents through resource complementarity (Bengtsson & Johansson, 2014). Geographic proximity facilitates informal interactions through which tacit knowledge transfers, enabling startups to learn from neighboring competitors (Kalnins & Chung, 2004). We propose the following hypotheses:

H1: Higher inbound patent citations from geographically proximate firms are positively associated with startup performance.

H2: The presence of incumbent hospitality firms within the geographic cluster is positively associated with startup performance.

H3: The density of hospitality startups within the cluster is positively associated with startup performance.

H4: The density of technology startups within the cluster is positively associated with startup performance.

Methodology

This study employs panel data regression analysis with hospitality and tourism startups worldwide, using data from Crunchbase and Pitchbook databases (Bianco, Zach, & Liu, 2022). Patent data construct citation-based spillover measures following established methodologies (Kukalis, 2010).

Geographic clusters are identified using Hierarchical Density-Based Spatial Clustering of Applications with Noise (HDBSCAN), a machine learning algorithm determining cluster boundaries based on local density variations (Campello, Moulavi, & Sander, 2013). Unlike fixed-radius approaches, HDBSCAN adaptively fits boundaries to actual firm distributions, accommodating heterogeneity in startup density across regions.

Startup performance is operationalized through funding received, survival duration, and IPO progression. Independent variables include inbound patent citations, incumbent hospitality establishment counts, hospitality startup counts, and technology startup counts within clusters. Panel regression models control for firm-level heterogeneity, with additional controls for startup age, team size, and macroeconomic conditions.

Expected Contributions

This research makes three contributions. First, it extends RBV by theorizing how startups strategically position themselves to capture resources from their competitive environment without explicit allocation, complementing literature on investor-provided resources.

Second, the study advances hospitality startup ecosystem literature by empirically examining how geographic clustering affects startup performance. While agglomeration benefits for established firms are documented (Marco-Lajara et al., 2016), this provides novel evidence regarding supply-side externalities for startups.

Third, employing HDBSCAN introduces methodological innovations capturing organic ecosystem boundaries better than administrative geographic delineations.

Findings offer insights for startup founders regarding location decisions and for policymakers designing support programs leveraging organic agglomeration dynamics.

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Beyond Faith as a Single Construct: A Multidimensional Religiosity Model of Halal Tourism Behavior and Satisfaction

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Abstract

Religion remains a powerful force shaping values, identities, and consumption choices, particularly within Islamic societies where faith informs daily practices, including travel behavior. As the global Muslim travel market expands, understanding how religiosity influences Halal tourism decisions has become increasingly important for both scholars and practitioners. Existing research, however, often treats religiosity as a unidimensional construct, limiting insight into the diverse motivations that guide Muslim travelers. This study addresses this gap by integrating the Religious Life Inventory (RLI), a multidimensional framework distinguishing intrinsic, extrinsic, and quest-oriented religiosity, into Halal tourism research. A structural model is developed to examine the relationships among religiosity, Halal awareness, Halal services, Halal destination image, intention to purchase, and tourist satisfaction, while also testing the moderating role of religiosity level. Data were collected from 551 respondents and analyzed using Structural Equation Modeling (SEM). The findings demonstrate that multidimensional religiosity provides stronger explanatory power than traditional single-measure approaches, significantly shaping purchase intention and indirectly influencing tourist satisfaction through mediating mechanisms. Moreover, varying religiosity levels alter the strength of key relationships, confirming religiosity as both a predictor and a contextual moderator. The study advances theory by introducing a psychologically grounded measurement of faith into tourism behavior models and offers practical guidance for segmenting Muslim travelers and designing more culturally responsive Halal tourism experiences.

Keywords: Halal tourism, Religiosity, Religious Life Inventory (RLI), Purchase intention, Tourist satisfaction

Beyond the Stay: How Push and Pull Forces Shape Guest Behavior in the Modern Staycation

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Abstract

This study examines the influence of push and pulls motivational factors on hotel guest behavior within the staycation program context in Indonesia. Utilizing a quantitative approach, data from 268 domestic tourists were analyzed via Structural Equation Modeling with Partial Least Squares (SEM-PLS). The findings robustly validate the push-pull framework, revealing that both internal push motivations (ego-enhancement, knowledge-seeking, relaxation) and external pull motivations (cost-benefit, facility quality, hygiene) significantly predict guest satisfaction. Satisfaction, in turn, emerges as the critical mediator, strongly driving revisit intention and positive word-of-mouth behavior. The research further identifies the core staycation market as predominantly female, aged 29–44, with middle-to-upper incomes, who favor short-duration, family-oriented getaways primarily booked through digital channels. The study concludes that staycation success hinges on fulfilling the intertwined psychological desire for accessible escape and the tangible demand for high-quality, verifiable accommodation attributes. This integrated model provides both theoretical advancement for understanding proximate tourism and actionable strategic imperatives for hoteliers to foster loyalty in this growing market segment.

Keywords: staycation, hospitality, tourist behavior, hotel attributes, push and pull motivation

1. INTRODUCTION

The concept of a staycation, an integration of "stay" and "vacation," has gained significant traction in recent years, particularly within the hospitality industry. A staycation involves spending time off in one's local area rather than traveling long distances (Zhang et al., 2025). This trend has been especially prominent in the hotel sector, where staycations have become a vital strategy for attracting local guests. This research aimed to examine the rise of hotel staycations, exploring the underlying trends, the benefits they offer to guests, and their prospects in enhancing the customer experience in leisure activities.

Several factors have contributed to the growing popularity of staycations. Economic considerations play a crucial role. Economic downturns and financial uncertainties have made long-distance travel less feasible for many individuals and families (James et al., 2017). Staycations offer a more affordable alternative, allowing people to enjoy the benefits of a vacation without incurring significant travel costs. The COVID-19 pandemic further accelerated the staycation trend (Yan et al., 2022). Travel restrictions and safety concerns made international travel difficult, and moreover, it is not possible to conduct due to the lockdown policy. Consequently, people turned to local destinations to satisfy their travel desires. Hotels capitalized on this shift by offering attractive packages and promoting local experiences, thus reinventing themselves as ideal staycation destinations.

However, long before the pandemic, staycations had gained popular attraction among local people in America (Molz, 2009). The economic downturn in 2008 raised the concern on travelling budget among American families. Hence, the trend of staying at home for vacation is gaining popularity. Later, the trend is expanding to not only staying at home but also in any accommodation near their houses. Hotel management also offered several staycation programs at their property. Moreover, local government also promoted their city as the best destinations for vacation to attract domestic tourists (Kou et al., 2024).

Another study also investigates the trend of staycation from the perspective of travelers' mental health (Misra et al., 2024). The study argued that tourist who perform staycations for their tourism activity are related to their mental health purpose. Some tourists are looking for quite place, some others are choosing a staycation for family bonding or romantic time with their partners. Moreover, the staycation program is also popular among millennials who wish to optimize their quality time and get a break from their daily routine (Saidin et al., 2024). Staycation is still developing in their own style development. Several studies shall be conducted to elaborate deeper this new style of tourism to understand more about tourist behavior in this segment.

The push and pull framework is popularly known as a model for understanding travel motivation among tourists. Push motivation is an internal factor that encourages an individual to travel. It represents someone's socio-psychological needs, which create the desire to travel. The need to gain new experience, for example, by breaking the mundane routine, experiencing a relaxing ambiance, and seeking enjoyment, motivates someone to travel to achieve those personal needs. Push motive is a psychological need that substantially influences a disequilibrium feeling in someone's mind and drives that feeling to an action that can be stabilized through a tourism experience (Roy & Sharma, 2021). Meanwhile, the pull factors are the clear motives that attract tourists to a particular destination. Pull factors are those items in terms of the destination's features, attractions, or attributes (Klenosky, 2002).

Thus, this study aims to investigate the push and pull motivation factors of Indonesian tourist that perform staycations in the post-pandemic era. What are the influencing factors of tourists in choosing staycation offerings in a specific hotel or accommodation? This question is the main topic of research.

2. LITERATURE REVIEW

The influencing factors in hotel room decision-making are categorized into several determinants, such as external environmental factors and internal personality factors. Hotel products influence consumer decision-making in hotel choice, including received information and personal preferences (Chen et al., 2022; Jeaheng et al., 2019). Moreover, several attributes (factors) of hotel products might influence hotel selection and market segmentation (Huertas-Garcia et al., 2014; Quadri-Felitti et al., 2022; Yoo & Yoon, 2022). To become a successful hospitality business, managers should understand how consumers perceive the service attributes and their importance compared to the competitors.

What are the most influential attributes in the hotel purchase decision? This million-dollar question is a top discussion among hotel managers around the world. Various research has been done regarding the hotel attributes that influence purchase decisions. For example, the attributes of smart hotel consumption (Xiaobing, 2020) also involve the customer risk on technology usage regarding the hotel purchase decision. Meanwhile, for business purposes, the quality of in-room facilities (mattress, shower, and room cleanliness) is the main factor

contributing to the purchase decision (Lockyer, 2002). In the context of the COVID-19 pandemic, hygiene facilities are becoming the most priority attribute in purchase decisions (Lin & Chen, 2021).

In the past two decades, scholars and researchers in tourism and hospitality studies have investigated the hotel attributes that influence purchase decisions. However, there is not only one framework for answering this question. The study on hotel attributes and purchase decisions is dynamic and relatable to the context of segmentation. Meanwhile, to better understand the attributes that influence the hotel purchase decision, Baruca & Civre (2012) suggest categorizing the hotel segmentation into four groups of behavior that explain the purchase behavior in each segmentation. Hence, the different segments will be concerned with the different attributes in their decision-making process (Baruca & Civre, 2012).

Leiper's (1990) framework remains a cornerstone in tourism studies, offering a multidimensional perspective on tourist behavior and motivation. From a geographical standpoint, tourism is conceptualized as a system of movement between places, comprising five key elements which are the human component (tourists), the industrial component (tourism businesses), and three geographical components (tourist-generating regions, transit routes, and destinations) (Leiper, 1990). This framework highlights tourism not only as a set of practices but also as an ideological construct that shapes tourist identities and behaviors, as he mentioned in his earlier publication (Leiper, 1979).

A critical aspect of Leiper's (1979) framework is its alignment with push-pull theory, which elucidates the motivational forces behind travel decisions. Push factors represent internal drivers that compel individuals to travel, such as the desire for escape, relaxation, or novelty (Crompton, 1979). For instance, Chan & Baum (2007), in the context of push-pull motivation for ecotourist choices, reveal that ecotourists are mostly attracted by the destination attributes (natural attractions, wildlife, local lifestyle, and eco-activities).

At the same time, ecotourists are also pushed by their social-psychological desire to escape from their routine by visiting ecolodges. This suggests that there are two different motivational forces among the ecotourists: "seeking" and "escaping" as motivational dimensions of leisure behavior (Chan & Baum, 2007).

Another study used a push-and-pull framework to segment tourists based on their leisure motivation. In an application to the girlfriend getaway (GGA) market, the research employs a Fuzzy C-Medoids clustering algorithm on a sample of 749 women travelers to segment the market by motivation (push) and accommodation (pull) attributes, revealing three distinct clusters: Socializers, Enjoyers, and Rejoicers. The analysis further identifies relationships between these clusters, their accommodation preferences, and sociodemographic characteristics through a multinomial fractional model (Khoo-Lattimore et al., 2019).

The push-pull framework has long served as a foundational paradigm in tourism research, providing a robust analytical lens for dissecting the complex forces that underpin travel decision-making (Mehmetoglu, 2011). Its application has yielded significant insights into diverse tourism segments, from adventure travel to cultural tourism, effectively segmenting markets and clarifying the nuanced relationship between a traveler's socio-psychological needs and their evaluation of destination attributes (Ayoub & Mohamed, 2024; Gupta et al., 2023; Iso-Ahola, 1982). Consequently, the model remains indispensable for both theoretical exploration and practical strategy in destination marketing and product development.

Despite its extensive application and proven utility, a conspicuous gap persists within the academic literature regarding the framework's specific deployment in the context of the modern staycation phenomenon. It is characterized by unique motivational drivers, including convenience, perceived safety, budget constraints, and a rediscovery of proximal attractions. While existing studies have begun to explore the demographic profiles and broad motivations for staycations, the scholarly conversation has yet to systematically interrogate the pivotal role of accommodation choice within this paradigm using the push-pull lens. Therefore, the following research model and hypotheses are proposed to be further investigated. Push Factors (ego-enhancement, knowledge-seeking, and relaxation) and Pull Factors (cost-benefit, event & facility, and Hygiene Factors) are proposed as the antecedents toward staycation behavior among the domestic tourists.

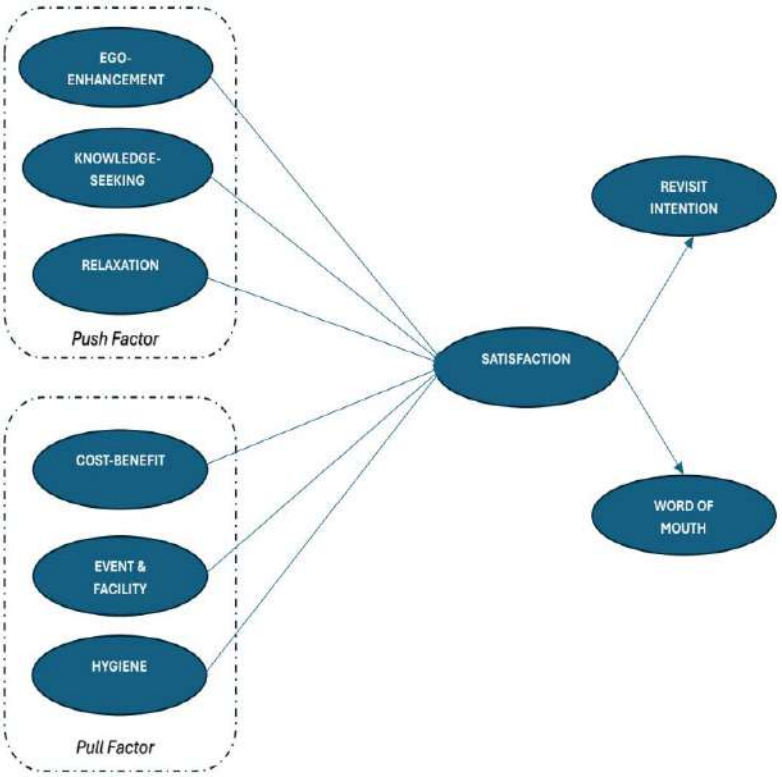


Figure 1: Research model and hypothesis development

3. METHODOLOGY

3.1 Research Design and Data Collection Technique

In order to evaluate the proposed relationships between the study constructs, a quantitative research methodology was used. Data from samples of domestic tourists were gathered using a cross-sectional survey design. Partial Least Squares (PLS-SEM), a method appropriate for examining and forecasting correlations in complicated models, was used to test the research model as it was presented in the structural model that was presented (Hair et al., 2019).

Consumers who conducted a staycation activity during the first semester of 2025 are eligible as respondent in this study. Those respondents come from various educational backgrounds and leisure activities. Convenience sampling, a non-probability sampling technique, was

employed to find participants. Based on the G-Power sampling calculation, a comprehensive demographic profile of at least 150 responses is required for this study. A wide range of ages, years of service, and educational backgrounds were represented in the sample, which improves the representativeness of the findings within the target community.

A survey conducted online was used to gather data. In order to measure the variables in the research model, a questionnaire was created. Sections on respondent demographics and questions about the three aspects of push motivation (ego enhancement, knowledge seeking, and Relaxation), and also three aspects of pull motivation (cost-benefit, event & facility, and Hygiene). Meanwhile, for consumer staying behavior, there are three variables in this study, which are satisfaction (three indicators), revisit intention (three indicators), and word of mouth (three indicators).

3.2 Data Analysis Technique

The collected data were analyzed using PLS-SEM with SmartPLS software. This method was chosen for its ability to handle complex models with both reflective and formative constructs. The analysis proceeded in two stages.

Evaluation of the Measurement Model: The validity and reliability of the measurement scales were evaluated. To make sure the constructs were valid and dependable, this involved assessing indicator loadings, Cronbach's alpha, composite reliability (CR), and average variance extracted (AVE). Convergent validity was confirmed when it was discovered that the factor loadings for every construct were higher than the suggested cut-off (Hair et al., 2020).

Evaluation of the Structural Model: The path coefficients (β), their significance, and the coefficient of determination (R^2) were used to evaluate the connections among the latent variables. The p-values and t-statistics indicated whether the presented hypotheses were confirmed or rejected, and the path analysis demonstrated the direction and significance of the correlations. The R^2 values for the endogenous variables were used to assess the predictive potential of the model (Hair et al., 2020).

4. ANALYSIS AND DISCUSSION

4.1. Respondent Profile

The demographic and behavioral profile of the 268 respondents surveyed for this study offers a comprehensive snapshot of the contemporary staycation market segment in the observed context. The sample comprised a majority of female participants, who represented 58.6% (n=157) of respondents, with males constituting the remaining 41.4% (n=111) as described in Table 1. In terms of age distribution, the cohort was predominantly composed of young and middle-aged adults, with the 29-44 years old bracket forming a significant majority at 68.6% (n=184). Younger adults aged 18-28 accounted for 22.4% (n=60), while older demographics were less represented, with those aged 45-60 and over 60 constituting 7.8% (n=21) and 1.2% (n=3) respectively. This indicates that the core staycation consumer in this study is likely a professionally active individual within their prime earning and family formation years.

Behaviorally, the data reveal clear patterns in trip composition and organization. The dominant stay-cation type was overwhelmingly "with family," accounting for 63.8% (n=171) of responses, underscoring the role of staycations in fulfilling family-oriented leisure and bonding needs. Staycations with friends as a couple followed at 16.1% (n=43) and 14.2% (n=38)

respectively, while solo staycations were the least common at 5.9% (n=16). Regarding trip duration, the vast majority, 69.8% (n=187), opted for short getaways of 1-2 nights, aligning with the concept of a convenient, efficient break. Longer durations of 3-4 nights were chosen by 23.1% (n=62), with trips extending beyond four nights being comparatively rare. Finally, the booking method highlights the digital transformation of travel planning, with 60.1% (n=161) utilizing Online Travel Agents (OTAs). Direct contact methods, such as phone, chat, or hotel websites, were also significant at 33.4% (n=90), whereas traditional offline travel agencies and walk-in bookings were minimal, at 3.4% (n=9) and 3.1% (n=8) respectively. This profile collectively paints a picture of a market driven by young families and professionals seeking short-duration, easily bookable leisure accommodations primarily for family-centric experiences.

Table 1. Respondent's Profile in the Study

Sex	Male	111	41.4%
	Female	157	58.6%
Age	18-28 Years old	60	22.4%
	29-44 Years old	184	68.6%
	45-60 Years old	21	7.8%
	>60 Years old	3	1.2%
Monthly Income *(Indonesian Rupiah)*	≤ 5.000.000	25	9.3%
	5.000.000 - 15.000 000	137	51.1%
	15.000.001 - 25.000.000	40	14.9%
	25.000.001 - 35.000.000	27	10%
	35.000.001 - 45.000.0000	17	6.3%
	45.000.001 - 55.000.000	7	2.6%
	> 55.000.000	15	5.6%
Staycation Type	Staycation with Family	171	63.8%
	Staycation with Friends	43	16.1%
	Couple Staycation	38	14.2%
	Solo Staycation	16	5.9%
Stay Duration	1-2 Nights	187	69.8%
	3-4 Nights	62	23.1%
	4-5 Nights	12	4.5%
	> 5 Nights	7	2.6%
Booking Method	Online Travel Agent (OTA)	161	60.1%
	Direct Contact (Phone, Chat, web, etc)	90	33.4%
	Travel Agency (Offline office)	9	3.4%
	Walk-in	8	3.1%

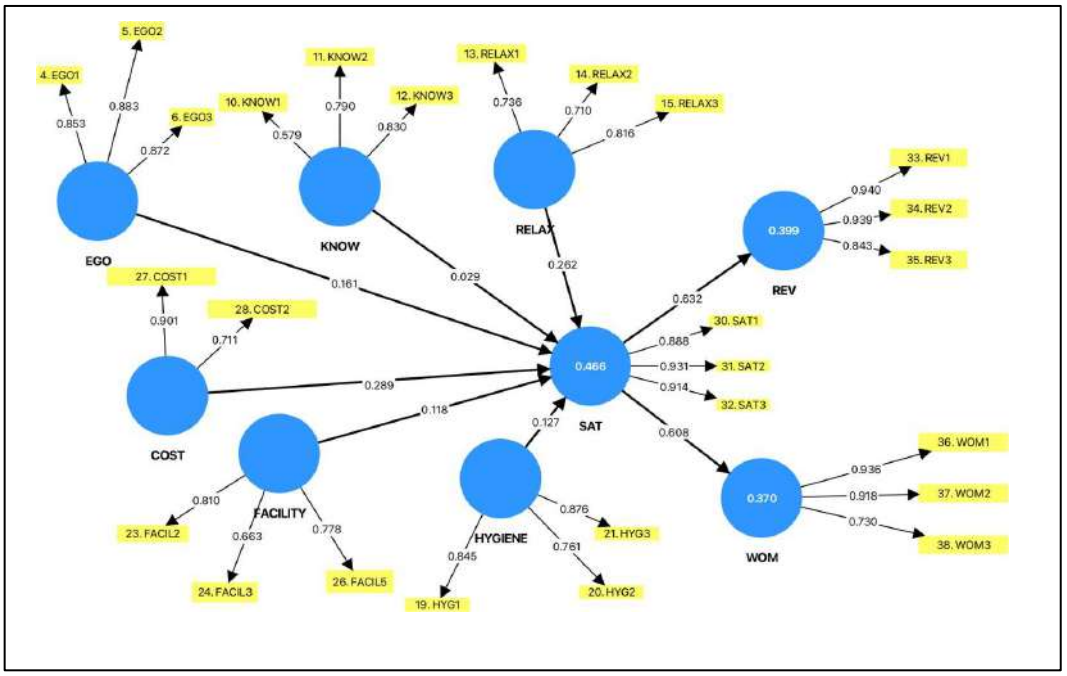
4.2. Measurement Model

Through comprehensive implementation of this SEM-PLS method, the nine reflective latent constructs covering Push Motivations (EGO, KNOW, RELAX), Pull Motivations (COST, FACILITY, HYGIENE), and Behavioral Outcomes (SAT, REV, WOM), were carefully assessed through four sequential criteria (Hair et al., 2020). This validation process confirms that the measures accurately capture the intended psychological and behavioral concepts before any hypotheses are tested.

Validity testing confirms that each survey item (indicator) sufficiently represents its assigned construct. This is assessed using outer loadings, which measure the correlation between the

indicator and its latent construct (Figure 2). However, there are two indicators that fell below the ideal threshold, which are KNOW1 (0.579) and FACIL3 (0.663). Following PLS-SEM guidelines, indicators with loadings between 0.40 and 0.70 may be retained if their removal does not significantly improve validity metrics and if they are essential for preserving the content scope of the construct (Hair et al., 2020).

Figure 2. Measurement Model Output from Smart-PLS



Meanwhile, regarding reliability testing, internal consistency ensures that all items measuring a single construct are cohesive and consistently measure the same underlying concept. In PLS-SEM, this is primarily assessed using Composite Reliability, which should be ≥ 0.70. All nine constructs achieved highly acceptable internal consistency (Table 2). The Composite Reliability values ranged from a minimum of 0.781 (KNOW) to a maximum of 0.936 (SAT). These results confirm that the scales are internally reliable measures of their respective constructs. Although constructs like Cost-Benefit (COST) and Knowledge Seeking (KNOW) showed lower Cronbach's Alpha (0.503 and 0.603, respectively), composite reliability, which is more appropriate for PLS-SEM, confirmed their reliability, justifying their retention.

Table 2. Reliability Testing

	Cronbach's alpha	Composite reliability (rho_a)	Composite reliability (rho_c)	Average variance extracted (AVE)
COST	0.503	0.579	0.792	0.659
EGO	0.838	0.840	0.903	0.756
FACILITY	0.628	0.652	0.796	0.567
HYGIENE	0.773	0.795	0.868	0.687
KNOW	0.603	0.660	0.781	0.549
RELAX	0.626	0.632	0.799	0.570
REV	0.894	0.913	0.934	0.825
SAT	0.897	0.899	0.936	0.830
WOM	0.832	0.885	0.899	0.750

4.3. Structural Model Analysis

In this section, the author further analyzes the model to understand how Push and Pull motivations influence customer Satisfaction (SAT), and subsequently, how SAT drives Revisit Intention (REV) and Word of Mouth behavior (WOM). This analysis focuses on the Coefficients of Determination (R2) and the significance of the path coefficients (β).

The Coefficient of Determination (R2) indicates the proportion of variance in the endogenous construct that is explained by its predictor variables. In PLS-SEM, this metric assesses the predictive accuracy of the research model. First, satisfaction (R2= 0.466), which signifies that the six motivational constructs (EGO, KNOW, RELAX, COST, FACILITY, HYGIENE) collectively explain 46.6% of the variance in customer Satisfaction. This value suggests a substantial explanatory power for the motivational factors in predicting customer contentment during a staycation program.

Meanwhile, Revisit Intention (R2=0.399) indicates that Satisfaction explains 39.9% of the variance in the customer intention to revisit the hotel for their staycation activities. Word of Mouth (R2= 0.370) shows that Satisfaction accounts for 37.0% of the variance in customers' propensity for positive word-of-mouth communication. Overall, the R2 values for all three behavioral outcome constructs (SAT, REV, and WOM) are moderate to strong, confirming that the proposed nomological network has robust explanatory capabilities within the staycation context.

Furthermore, the structural model analysis examines the direct influence of Satisfaction (SAT) on the two core behavioral outcomes. Both paths are found to be highly significant (p<0.001). The relationship of satisfaction toward revisit intention is strong and highly significant (β=0.632, p=0.000). This robust coefficient confirms that high customer satisfaction is the most powerful catalyst for generating future loyalty and encouraging a repeat staycation. Meanwhile, the influence of satisfaction toward word-of-mouth behavior is also demonstrated to have a strong and highly significant positive relationship (β= 0.608, p= 0.000). The magnitude of this effect confirms that satisfied stay-cation guests are highly likely to engage in positive recommendations and external endorsements of the accommodation.

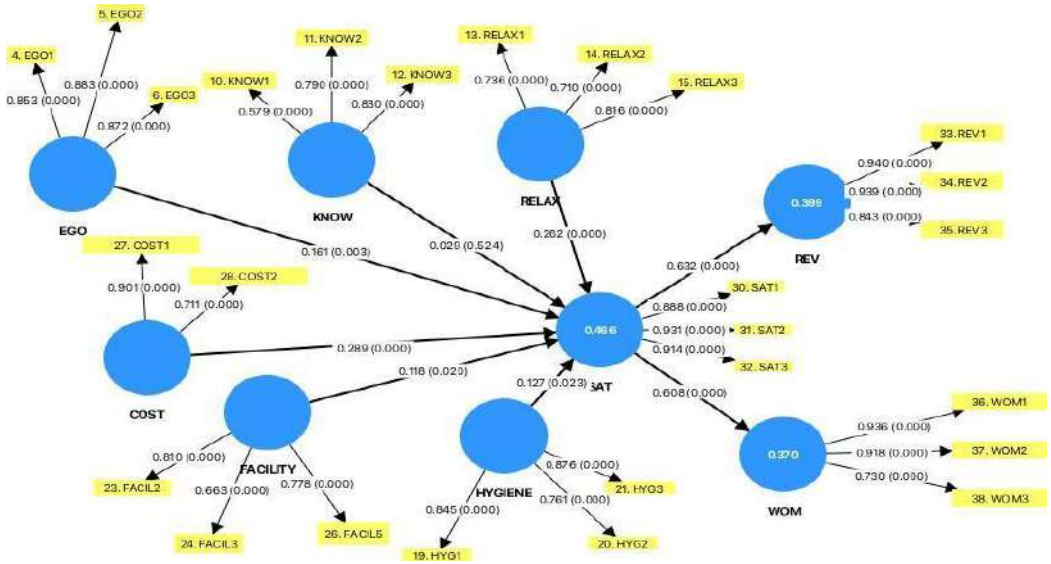


Figure 3. Structural Model in SmartPLS Result

5. DISCUSSION

The structural model identifies ‘Relaxation’ as a dominant push factor with a strong, direct path to satisfaction. The overwhelming prevalence of family-oriented staycations (63.8%) and the preference for short-duration trips of 1-2 nights (69.8%) paint a clear picture of the underlying need state. This segment appears to be driven by a pursuit of convenient, time-efficient respite from daily routines, a quick “recharge” within the familiar confines of domestic travel. This finding supports the previous study regarding lodging choices and hotel decision-making among tourists (Arisandi et al., 2023; Nicolau et al., 2024; Yan et al., 2022).

Conversely, the significant influence of pull factors, particularly ‘Hygiene’ and ‘Facilities’, in the SEM-PLS model finds strong support in the behavioral patterns related to information sourcing. The heavy reliance on Online Travel Agents (OTAs) (60.1%) and, by extension, digital reviews for booking decisions creates a marketplace where tangible quality attributes are paramount. In the absence of prior personal experience with a proximate property, potential guests depend heavily on the aggregated experiences of others. Hygiene standards and facility quality are not only critical experiential components, but also key risk-reduction criteria evaluated during the digital pre-purchase phase as also mentioned in the previous study (López-Vizcarra et al., 2022; Maulana et al., 2020; Sastri et al., 2024). The importance of these pull factors is thus amplified in the staycation context, where the decision-making cycle is shorter and more digitally mediated than in long-haul international travel.

The culminating finding, the strong, validated pathway from satisfaction to both revisit intention and word-of-mouth (WOM) advocacy, holds profound strategic implications. It confirms that in the staycation market, where alternatives are plentiful and switching costs are low, delivering on the core promise of relaxation and quality is not merely a path to transactional success but to sustainable competitive advantage. A satisfied staycation guest is likely to become a loyal repeat customer and an organic brand ambassador, challenging the finding of the previous study on eco-friendly hotels (Hashish et al., 2022) and toward online review influence (Li et al., 2013). This creates a virtuous cycle where positive online reviews, driven by satisfaction, feed back into the initial pull factors that attract new guests, thereby reducing customer acquisition costs and building long-term brand equity.

6. CONCLUSION

The findings robustly validate the application of the push & pull framework to this contemporary leisure phenomenon, confirming its utility as a powerful explanatory model in the staycation context. Specifically, both intrinsic push motivations (encompassing ego enhancement, knowledge-seeking, and, most dominantly, relaxation) and extrinsic pull motivations (including cost-benefit perception, facility quality, and hygiene standards) were found to be significant, direct predictors of customer satisfaction. Satisfaction, in turn, emerged as the critical mediator, strongly and positively influencing both revisit intention and the likelihood of generating positive word-of-mouth, thereby establishing the pathway to loyalty and market advocacy.

The research further contextualizes these motivational dynamics within a distinct demographic and behavioral profile. The Indonesian staycation market is characterized by a core segment of educated, middle-to-upper-income professionals, predominantly aged 29–44, with a notable majority of female participants. Behaviorally, this segment favors short-duration, family-oriented getaways of 1–2 nights, a pattern that underscores the pursuit of convenient and accessible respite. Crucially, the digital channel dominates consumer journey where bookings

are primarily made through Online Travel Agents (OTAs). This digital mediation amplifies the importance of verifiable pull attributes, such as hygiene and facilities, as they are meticulously scrutinized during the pre-purchase phase.

Ultimately, this investigation moves beyond theoretical validation to offer an integrated and actionable model. It demonstrates that staycation behavior is not a simple, monolithic trend but a complex interaction where psychological desires (push) are fulfilled through the evaluation of tangible accommodation attributes (pull), a process largely facilitated and moderated by digital platforms and demographic variables. For academia, this research provides a contextualized framework for future studies on proximate tourism and domestic consumption. For industry practitioners, the findings deliver clear strategic imperatives: to develop targeted, family-friendly packages that promise and deliver relaxation, to meticulously manage online reputation by ensuring and communicating high standards of hygiene and facilities, and to recognize that in the competitive staycation landscape, guest satisfaction is the essential catalyst for fostering repeat business and organic market growth.

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Beyond the Zoo: Tourist Motivations and Market Segmentation in Komodo National Park, Indonesia

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Abstract

1. Introduction

Nature-based tourism and ecotourism have expanded rapidly as global travel has become more accessible, particularly in biodiversity-rich regions in the Global South, where protected areas increasingly function not only as instruments of biodiversity conservation but also as sites of tourism development, community benefits, and international visibility (Mutanga et al., 2017). However, substantial gaps remain between these ideals and their implementation in practice, particularly in resource-limited protected areas (Fennell, 2026; UNWTO, 2025).

Understanding tourist motivation is central to addressing these challenges. Tourist motivations shape destination choice, on-site behavior, satisfaction, and willingness to support conservation initiatives. While widely applied in tourism research, empirical studies examining motivation and market segmentation in Indonesian protected areas remain limited. We addressed this knowledge gap by examining tourist motivations and developing a motivation-based segmentation of visitors to Komodo National Park (KNP), a UNESCO World Heritage Site and global destination that has been receiving growing visitation but not commensurate research attention.

2. Methods

This study employed a quantitative survey-based research design grounded in Push–Pull Motivation Theory and the Recreation Experience Preference (REP) framework (Dann, 1977; Crompton, 1979; Driver & Manfredo, 1991). Data were collected during the 2018 peak season through on-site intercept surveys administered to domestic and international tourists at two primary terrestrial tourism sites in KNP. The survey instrument assessed push and pull motivations and socio-demographic characteristics. Motivation items were adapted from established REP and destination image literature (Baral et al., 2017). Data analyses included Principal Component Analysis (PCA) and Exploratory Factor Analysis (EFA) to identify underlying motivational dimensions, followed by K-means clustering to segment visitors based on motivational profiles. Differences among segments were examined using ANOVA and chi-square tests.

3. Results

A total of 289 valid responses were obtained. Factor analysis identified five push motivation dimensions: learning and excitement, exploration, tension release, escape and privacy, and social recognition—indicating a multidimensional structure of visitor motivation. Learning and excitement, and exploration emerged as the most influential push motivations, whereas social recognition was the least influential. Three pull motivation dimensions were identified: destination authenticity, wildlife uniqueness and safety, and destination attractiveness, with wildlife uniqueness and destination authenticity emerging as the strongest pull factors shaping destination appeal.

Cluster analysis revealed three distinct visitor segments. Adventure seekers (39%) emphasized exploration and novelty and were dominated by international visitors, particularly from Europe and the Americas. Passive tourists (33%) exhibited lower motivational intensity across dimensions and included a higher proportion of domestic and Asian visitors. Want-it-all tourists (28%) demonstrated high motivation across all push and pull dimensions and represented the most diverse group in terms of income and travel background. Significant differences among segments were observed for nationality, continent of origin, income, and marital status.

4. Discussion

The findings indicate that learning, excitement, and exploration are the most salient push motivations for survey respondents, whereas wildlife uniqueness and destination authenticity are the strongest pull factors. These results confirm patterns observed in other wildlife-based destinations (Mutanga et al., 2017; Carvache-Franco et al., 2019) and demonstrate their intensification in KNP, attributable to its remoteness and the global iconicity of its endemic species. Motivation-based segmentation identified three distinct tourist groups, confirming substantial heterogeneity among visitors. Adventure seekers, largely international visitors, prioritize exploration and novelty, while passive tourists—more common among domestic and Asian visitors—exhibit lower motivational intensity, likely reflecting different travel constraints and expectations. Want-it-all tourists show high motivation across all dimensions, indicating diverse experience preferences not solely explained by income. These patterns mirror findings from protected areas in South Africa and Nepal (Kruger et al., 2017; Baniya et al., 2021).

This study was constrained by limited sample size, self-selection bias, and insufficient alignment of the REP framework with culturally specific or emerging motivations in Southeast Asia. Despite these limitations, this first motivation-based segmentation of KNP tourists may

inform managers in designing differentiated visitor management strategies. Recognizing diverse motivational profiles can inform zoning, interpretation, infrastructure planning, and conservation education. Future research can expand data collection across seasons and marine tourism zones and employ mixed methods approaches to examine post-visit outcomes.

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Bridging Institutional Gaps in Kenya's Business Tourism: Legal and Governance Challenges of the Absent National Convention Bureau

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Abstract

Business tourism anchored in Meetings, Incentives, Conferences, and Exhibitions (MICE) has become a defining pillar of economic competitiveness, knowledge diplomacy, and innovation-driven growth in leading global destinations. Countries that have successfully positioned themselves as international MICE hubs such as Rwanda, South Africa, Germany, Singapore, and the United Arab Emirates share a common structural feature: the presence of well-resourced, strategically empowered national convention bureaus mandated to coordinate destination marketing, research, global bidding, and multi-sectoral partnerships. In contrast, Kenya presents an institutional paradox. Despite possessing strong comparative advantages including Nairobi's status as a diplomatic capital, advanced airline connectivity, expanding hotel infrastructure, and a youthful knowledge workforce the country lacks a dedicated national convention bureau. Instead, destination promotion functions are vested in a venue, the Kenyatta International Convention Centre (KICC), through its establishing Act. This unique legislative configuration has produced deep-seated institutional and policy constraints that impede Kenya's ascent in the global business events landscape.

This paper interrogates the implications of this structural arrangement through a rigorous policy, governance, and institutional economics lens. Drawing on institutional theory particularly concepts of path dependency, mandate misalignment, and organizational overload the analysis demonstrates how assigning national MICE promotion responsibilities to a venue-based state corporation generates role ambiguities, weakens institutional specialization, and limits the agility required for competitive global bidding. Comparative benchmarking with countries that have established convention bureaus reveals Kenya's relative deficit in market intelligence, subvention systems, stakeholder coordination, global association membership, and long-term destination strategy coherence.

Through a mixed-methods approach incorporating policy analysis, legislative review, African and global benchmarking, and key informant interviews with MICE stakeholders, the study identifies four core institutional constraints. First, mandate conflation at KICC creates structural inefficiencies: while convention centers globally focus on venue management and event delivery, Kenya's venue is simultaneously expected to undertake destination marketing, research, and bidding tasks typically carried out by specialized bureaus. Second, the absence of a bureau has entrenched coordination failures, reducing Kenya's capacity to mobilize counties, industry associations, professional conference organizers, hotels, and transport providers into unified national bids. Third, legislative rigidity embedded in the KICC Order constrains innovation in digital marketing, MICE intelligence systems, public–private funding models, and research-driven destination development. Fourth, the lack of a bureau undermines Kenya's ability to meet ICCA, UNWTO, and OECD governance benchmarks, weakening global visibility, data quality, and international competitiveness.

The economic implications are significant. Using comparative evidence from countries that adopted convention bureaus, the paper shows that Kenya's institutional gap translates into foregone opportunities for GDP growth, job creation, foreign exchange earnings, knowledge transfer, and enhanced geopolitical presence. With global conventions increasingly linked to strategic industries health, agriculture, technology, climate, and education the absence of a bureau limits Kenya's ability to position itself as a thought leader and host for high-impact international congresses.

The paper concludes with a transformative reform blueprint grounded in global best practice and adaptive governance principles. Recommendations include: (a) revising the KICC Act to separate venue functions from national MICE promotion; (b) establishing an autonomous Kenya Convention Bureau with defined governance, performance, and funding structures; (c) developing a cross-county MICE ecosystem anchored in a national strategy; (d) institutionalizing a centralized MICE intelligence platform aligned with ICCA standards; and (e) adopting a national subvention model to support international bid acquisition. Collectively, these reforms would enable Kenya to transition from a venue-led model to a strategically coordinated, research-informed, globally competitive MICE architecture.

Ultimately, this paper argues that Kenya's business tourism sector stands at a critical inflection point. Without institutional realignment and the establishment of a functional national convention bureau, Kenya will remain constrained in its ability to leverage business tourism as a catalyst for sustainable economic development, knowledge diplomacy, and global competitiveness. The institutional reform proposed is therefore not merely desirable it is a strategic imperative for repositioning Kenya within the global MICE economy.

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Can Virtual Heritage Inspire Conservation? Examining the Roles of Presence, Authenticity, and Nostalgia

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Introduction

Immersive technologies, especially virtual reality (VR), have fundamentally changed how cultural heritage is experienced (Allal-Chérif, 2022; Bec et al., 2019). Through immersive 360-degree experiences, VR is able to transcend the temporal and spatial limitations and facilitate the exploration of distant, endangered, and even lost heritage sites (Bec et al., 2021; Jiang et al., 2023; Liu et al., 2025). In addition, by moving from static preservation toward dynamic experiential reconstruction, VR enables visitors to transition from passive, detached observation to active engagement with historical moments (Balakrishnan et al., 2023; Sinha et al., 2025).

A growing body of empirical research has examined the effects of VR heritage tourism context, predominantly focusing on experiential outcomes. Studies reveal that VR enhances perceived authenticity (Zhang & Chen, 2025), affective responses and emotional arousal (Cheng & Huang, 2022; Lee et al., 2025), flow states and engagement (Sinha et al., 2025), visitor satisfaction and memorable tourism experiences (Balakrishnan et al., 2024; Liu et al., 2025). Beyond the experiential outcomes, research has also examined behavioral outcomes including intentions to visit the physical sites (Atzeni et al., 2022), word-of-mouth intentions (Cheng & Huang, 2022), willingness to pay more for heritage experiences (He et al., 2018), and continued use of virtual platforms (Cheng & Huang, 2022), among others.

Several constructs have attracted significant attention as key factors influencing these outcomes, including technological features such as person-virtual environment (VE) interaction and vividness (Guo et al., 2024; Liu & Tian, 2024), sense of presence (Atzeni et al., 2022; Guo et al., 2024), and perceived authenticity (Atzeni et al., 2022; Nam et al., 2023). However, nostalgia, an important emotional response particularly relevant to heritage experiences, has remained underexplored (Shin & Jeong, 2022; Wang, 2023). In addition, prosocial behavior regarding heritage conservation, an essential behavioral outcome in heritage tourism, has been largely neglected as well. To fill in theses gaps, built on the stimulus-organism-response (SOR) model, this study proposed an integrative framework that links technological stimuli in VR heritage (person-VE interaction and vividness) to key organism (sense of presence, perceived authenticity, and nostalgia), and ultimately to prosocial behavioral responses (intentions to conserve). In addition, the study examined the underlying pathways through which immersive heritage experiences translate into prosocial behavior.

Literature Review

Sense of presence, the feeling of "being there" in a mediated environment, is considered a core attribute of immersive virtual experiences (Slater & Wilbur, 1997; Steuer, 1992). Presence represents a psychological state that is shaped by technological features and experiential design factors (Cummings & Bailenson, 2016; Kim & Ko, 2019). Among its various antecedents,

person-VE interaction and vividness have been identified as two of the most salient prerequisites (Cummings & Bailenson, 2016).

Person-VE interaction refers to the degree to which users can manipulate and influence the form and content of a virtual environment in real time (Hudson et al., 2019; Steuer, 1992). When users can navigate freely through virtual spaces or manipulate virtual objects, they experience a heightened sense of control, which helps reduce the psychological distance between user and the simulated environment (Steuer, 1992). Research has consistently shown that person-VE interaction positively influences sense of presence. For example, Guo et al. (2024) found that interactivity in both VR and AR heritage tourism programs significantly impact sense of presence.

H1: Person-VE interaction positively influences sense of presence.

Vividness refers to the richness of sensory representation within a mediated environment and describes how effectively information is communicated to the human senses (Kim & Ko, 2019; Steuer, 1992). It is suggested that when sensory inputs are detailed and multisensory, users are more likely to perceive the virtual environment as realistic and immersive. Such enhanced sensory engagement reduces perceptual gaps between the virtual and physical realities, hence enhancing the sense of "being there" (Guo et al., 2024; Sra, 2023). In VR heritage tourism, empirical studies demonstrate a positive correlation between vividness and sense of presence (Liu & Tian, 2024; Zhu et al., 2023).

H2: Vividness positively influences sense of presence.

Perceived authenticity is defined as the perceived genuineness and historical accuracy of the objects such as architectures, artifacts or rituals; in this study, this pertains to the reconstructed site within a VR environment (Atzeni et al., 2022; Kolar & Zabkar, 2010). When users feel genuinely immersed in a virtual heritage site, their cognitive and emotional systems are more readily convinced of the reality and fidelity of the presented objects and environments (Choi & Nam, 2024). The literature suggests a strong positive relationship between sense of presence and their perceived authenticity (Guo et al., 2024; Li et al., 2024).

H3: Sense of presence positively influences perceived authenticity.

Nostalgia has been defined as a wistful affection or sentimental longing for the past, typically characterized by positive affect despite its association with loss and temporal distance (Holak & Havlena, 1998; Sierra & McQuitty, 2007). Although direct link from sense of presence to nostalgia is not tested, the literature on VR and emotional responses generally supports the idea that higher levels of presence facilitate stronger positive emotions (Cheng & Huang, 2022; Lee et al., 2025). It is therefore reasoned that when users feel a strong sense of presence in a VR heritage environment, the environment becomes a believable link to a bygone era, thereby facilitating emotional connection to that past and evoking a nostalgic response.

H4: Sense of presence positively influences nostalgia.

Research in heritage tourism demonstrates that authenticity perceptions enhance place attachment, and personal meaning derived from heritage encounters (Ram et al., 2016; Yi et al., 2023; Zhao & Li, 2023). When individuals perceive heritage as authentic and meaningful, they are more likely to feel a moral obligation to its protection and preservation (Wang et al., 2025). Therefore, although the relationship between authenticity and intentions to conserve has

not been empirically tested, it stands to reason that, the strong emotional bonds with cultural content triggered by the appreciation for its historical significance can translates into senses of responsibility, or intentions to preserve and conserve what is perceived as being genuine (Li et al., 2025).

H5: Authenticity positively influences intentions to conserve.

Research indicates that nostalgia functions as a proactive social resource rather than a passive emotion (Juhl & Biskas, 2023). As nostalgic recollections often center on collective histories and shared past, nostalgia enhances proximity motivation and fosters closer interpersonal connections (Routledge et al., 2011). The formation and maintenance of positive social connection are key antecedents of prosocial behavior (Zhou et al., 2012). In addition, nostalgia promotes self-positivity and optimism about the future and contributes to a stronger sense of life meaning, which in turn encourages prosocial tendencies (Christou et al., 2018). While empirical studies explicitly linking nostalgia in VR heritage tourism to conservation intentions are less abundant, research has established that nostalgia increases social connectedness, empathy, and prosocial intentions (Kim & Childs, 2021; Zhou et al., 2012).

H6: Nostalgia positively influences intentions to conserve.

In addition to direct relationships, it is also proposed that VR design features lead to prosocial behavior via presence and authenticity and via presence and nostalgia.

H7: Sense of presence and perceived authenticity serially mediate the relationships between (a) person-VE interaction, and (b) vividness, and intentions to conserve.

H8: Sense of presence and nostalgia serially mediate the relationships between (a) person-VE interaction, and (b) vividness, and intentions to conserve.

Based on the literature reviewed and the hypotheses developed, a conceptual framework was proposed (Figure 1).

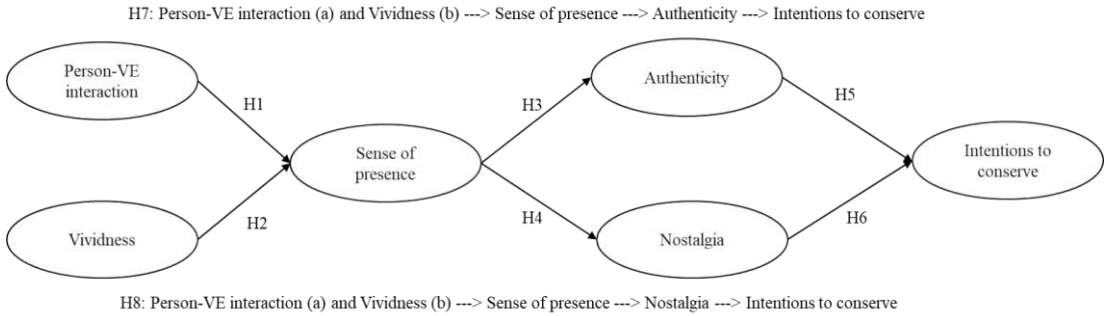

Figure 1. Conceptual framework

Methodology

The research population was individuals who had experienced the VR Exhibition at the Ruins of St. Paul's. Questionnaire was initially designed in English and translated into Traditional Chinese. All measurement items were borrowed from established scales in prior literature. Three items were used to measure person-VE interaction (Hudson et al., 2019; Kim & Ko,

2019) and vividness (Kim & Ko, 2019) respectively. Sense of presence was also measured with three times (Pizzi et al., 2020; Yang et al., 2021), authenticity with 4 items (Kolar & Zabkar, 2010), nostalgia with 7 items (Hu et al., 2021), and prosocial behavior with 3 items (Lwoga, 2017). All items' wording was adjusted to fit in the context of the VR Exhibition at the Ruins of St. Paul's. All constructs were measured with a 7-point Likert scale (1 = strongly disagree). In addition, demographic information was gathered. The survey was distributed via social media platform. A convenience sample of 302 was drawn and analyzed. Of the 302 respondents, 58.3% were female, 40.6% were aged between 18-24 years old. More than half of them held a bachelor's degree (58.9%). Regarding monthly income, 45.5% earned between MOP10,001 to 20,000. SmartPLS4 was then used to test the measurement model and hypothesized paths.

Results

A confirmatory factor analysis (CFA) was performed to test the overall measurement model with the constructs including person-VR interaction, vividness, sense of presence, authenticity, nostalgia and prosocial behavior. All standardized factor loadings were significant at 0.001 level, ranging from .719 to .909 (Table 1). The average variance extracted (AVE) estimates for all the constructs were above the cutoff value of .50, suggesting adequate convergent validity (Fornell & Larcker, 1981). Cronbach's alpha and composite reliability coefficients were all above the threshold value of .70, demonstrating satisfactory internal consistency (Hair et al., 2021). Discriminant validity was assessed with both HTMT ratio of correlations and the Fornell-Larcher criterion (Table 2). All HTMT estimates were no more than the cutoff value of .90 (Hair et al., 2021), and the square root of each reflective construct's AVE was greater than its correlations with other reflective constructs, supporting discriminant validity (Fornell & Larcker, 1981).

Table 1. CFA results

Factor and Indicators	Factor loading	Cronbach's alpha	CR	AVE	VIF
Person-VE interaction (PVEI)		**0.819**	**0.893**	**0.735**	
PVEI1	0.864				1.905
PVEI2	0.859				1.903
PVEI3	0.847				1.714
Vividness (V)		**0.771**	**0.867**	**0.686**	
Vividness1	0.787				1.480
Vividness2	0.852				1.776
Vividness3	0.844				1.592
Sense of presence (SOP)		**0.736**	**0.848**	**0.65**	
SOP1	0.822				1.404
SOP2	0.789				1.585
SOP3	0.808				1.438
Authenticity		**0.763**	**0.850**	**0.586**	
Authenticity1	0.726				1.376
Authenticity2	0.815				1.788
Authenticity3	0.763				1.567
Authenticity4	0.756				1.426
Nostalgia		**0.855**	**0.889**	**0.535**	

Nostalgia1	0.72				1.619
Nostalgia2	0.692				1.608
Nostalgia3	0.719				1.658
Nostalgia4	0.752				1.797
Nostalgia5	0.742				1.684
Nostalgia6	0.759				1.775
Nostalgia7	0.734				1.648
Intentions to conserve (ITC)		**0.844**	**0.905**	**0.761**	
ITC1	0.865				1.832
ITC2	0.909				2.499
ITC3	0.842				2.060

Table 2. Discriminant validity

Heterotrait-monotrait (HTMT) matrix		1	2	3	4	5	6
1	Person-VE interaction						
2	Vividness	0.883					
3	Sense of presence	0.581	0.534				
4	Authenticity	0.839	0.840	0.598			
5	Nostalgia	0.705	0.685	0.592	0.900		
6	Intentions to conserve	0.438	0.428	0.524	0.472	0.470	
Fornell-Larcker criterion		1	2	3	4	5	6
1	Person-VE interaction	**0.857**					
2	Vividness	0.702	**0.828**				
3	Sense of presence	0.462	0.416	**0.806**			
4	Authenticity	0.665	0.648	0.461	**0.765**		
5	Nostalgia	0.590	0.559	0.485	0.730	**0.731**	
6	Intentions to conserve	0.368	0.352	0.411	0.383	0.408	**0.872**

Prior to hypothesis testing, VIF values were assessed to examine multicollinearity (Table 1). All VIF values were below 3, indicating no multicollinearity issues. The structural model was assessed using PLS-SEM to examine the hypothesized direct and indirect relationships. The results (Table 3) indicate that all direct relationships were significant. Specifically, both person-VE interaction and vividness had a significant positive influence on sense of presence, supporting both H1 and H2. Sense of presence exerted significant effects on both authenticity and nostalgia, providing support for H3 and H4. In addition, both authenticity and nostalgia were found to be significant determinants of intentions to conserve, lending support to H5 and H6.

In addition, the indirect effects of person–VE interaction on intentions to conserve through sense of presence and authenticity ($\beta = 0.038$, $p = .035$) and through sense of presence and nostalgia ($\beta = 0.046$, $p = .034$) were both significant, supporting H7a and H8a. In contrast, the corresponding indirect effects originating from vividness were not significant, and thus both H7b and H8b were not supported.

Table 3. Hypothesis testing

Hypothesized Paths	**β coefficient**	**P value**	**Decision**

H1	Person-VE interaction -> Sense of presence	0.334	< 0.001	Supported
H2	Vividness -> Sense of presence	0.182	0.037	Supported
H3	Sense of presence -> Authenticity	0.461	< 0.001	Supported
H4	Sense of presence -> Nostalgia	0.489	< 0.001	Supported
H5	Authenticity -> Intentions to conserve	0.182	0.028	Supported
H6	Nostalgia -> Intentions to conserve	0.279	0.001	Supported
H7a	Person-VE interaction -> Sense of presence -> Authenticity -> Intention to conserve	0.038	0.035	Supported
H7b	Vividness -> Sense of presence -> Authenticity -> Intentions to conserve	0.015	0.242	Not supported
H8a	Person-VE interaction -> Sense of presence -> Nostalgia -> Intentions to conserve	0.046	0.034	Supported
H8b	Vividness -> Sense of presence -> Nostalgia -> Intentions to conserve	0.025	0.118	Not supported

Conclusion and Discussion

Building on SOR model, this study examined how technological stimuli in VR heritage (person-VE interaction and vividness) influence visitors' intentions to conserve through cognitive and emotional mechanisms. Both person-VE interaction and vividness positively influence sense of presence, supporting the notion that highly interactive and vivid features of immersive experiences can enhance visitors' illusion of being in virtual environments. In addition, sense of presence was found to significantly enhance both authenticity and nostalgia, both of which subsequently led to intentions to conserve. These findings underscore the importance of VR-induced emotional and cognitive appraisals in translating immersive experiences into intentions to conserve, providing empirical support for previously underexplored relationships. Furthermore, while person-VE interaction exerted significant indirect effects on intentions to conserve through sense of presence and authenticity, and though sense of presence and nostalgia, vividness failed to show significant mediating effects. This finding suggests that, in comparison with vivid sensory cues, interactive features are more effective in eliciting meaningful cognitive and emotional responses that inspire conservation intentions. These findings offer important empirical implications for experience designers and heritage managers. Specifically, VR heritage experiences should prioritize interactive design elements that actively engage visitors and foster deeper emotional connections with cultural heritage presented to promote intentions to support its conservation.

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Cloud Ger: The Integration of Traditional Culture and Modern Tourism (The Path of Innovation in Mongolia's Tourism Experience)

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Abstract

The Mongolian ger (yurt) is one of the most distinctive cultural symbols of the Mongolian nation, representing the historical memory and spiritual heritage of nomadic life. For a long time, it has not only served as a dwelling but also functioned as a core cultural symbol of Mongolia's tourism industry. However, with the rapid development of modern tourism, the traditional ger no longer fully meets travelers' expectations in terms of comfort and convenience. In response, this study explores a new type of dwelling known as the Cloud Ger, an innovative model that preserves traditional forms while incorporating modern technologies. The findings indicate that the Cloud Ger not only significantly improves tourist comfort but also opens new possibilities for the sustainable and international development of Mongolia's tourism industry.

Keywords: Ger, Uulen Ger, Cloud Ger

1. Introduction

Mongolia is internationally renowned for its vast grasslands, unique nomadic culture, and rich traditional customs. The Mongolian ger embodies the spiritual values and lifestyle of the Mongolian people, and many international visitors come to Mongolia specifically to stay in a ger and experience nomadic life. However, under the conditions of contemporary tourism development, travelers seek not only a "natural experience" but also a comfortable living environment that integrates cultural atmosphere with modern amenities. While the traditional ger holds high cultural value, it often suffers from issues such as insufficient insulation, moisture, and lack of sanitary facilities, failing to meet international accommodation standards. These limitations have, to some extent, constrained the further development of Mongolia's tourism industry.

2. Limitations of the Traditional Ger

The traditional ger was designed for a nomadic lifestyle and mobility, which makes it less suitable for long-term or large-scale use in modern tourism. It is vulnerable to weather conditions—rainwater may seep in, it is cold in winter, and overheated in summer. Moreover, it lacks modern infrastructure such as electricity, hot water, and indoor sanitation, making it incompatible with contemporary tourist expectations. As a result, visitor satisfaction may decline, negatively affecting Mongolia's tourism reputation.

3. Innovative Features of the Cloud Ger

The Cloud Ger is a new type of dwelling that preserves the traditional appearance of the Mongolian ger while integrating modern technological solutions. It follows the principle of "traditional form combined with modern comfort." Externally, it retains the circular roof and

wooden structural elements of the traditional ger, while internally it uses advanced materials with enhanced insulation against water, wind, and heat. In addition, it is equipped with indoor bathrooms, hot water, electricity, and Wi-Fi systems. Some versions also incorporate solar energy and smart temperature control systems. As a result, tourists can enjoy hotel-level comfort while staying in the natural environment of the Mongolian steppe.

Since around 2010, traditional Mongolian artifacts—particularly the structural design and stylistic features of the Mongolian ger—have inspired world-renowned architects, who have incorporated these elements into their own branded architectural styles, drawing global attention. In line with this trend, we have integrated traditional ger design into a contemporary architectural style and developed a model known as “Wulen Ger” (Cloud Ger).

As a modern reinterpretation of the Mongolian ger, the Cloud Ger is characterized by environmentally friendly construction that does not damage soil or pastureland, emphasizing ecological protection.

At the same time, the study of traditional Mongolian household objects—including their craftsmanship, decorative patterns, color schemes, symbolic meanings, and origins—has gained increasing attention from both domestic and international scholars. Moreover, opportunities are expanding to integrate traditional ger structures, ornamentation, and design principles into contemporary architectural and residential models.

4. Design Rationale and Spatial Innovation

For modern users, the traditional ger presents several practical limitations, such as lack of privacy, absence of separate kitchen, living, sleeping, bathing, and sanitation spaces, and difficulty accommodating multiple residents. Additionally, problems such as moisture absorption, insect infestation, heat loss during winter, and limited spatial comfort further reduce its suitability for modern living.

Therefore, it has become necessary to adapt and innovate ger design in response to contemporary needs. In other words, technological advancements must be applied within modern architectural frameworks while preserving traditional values, to improve overall living quality. Based on this concept, we have reinterpreted the Mongolian ger’s traditional form and designed the Cloud Ger to align with modern architectural aesthetics. The overall structure of the Cloud Ger breaks away from the single circular form of the traditional ger, instead creating a cloud-like configuration by combining three units with diameters of 3 m, 5 m, and 6 m. This modular composition allows for the functional separation of bedrooms, bathrooms, living areas, and kitchens, achieving an optimized and comfortable living environment.

Through continued research and practical exploration, this work aims to highlight the significance of the Cloud Ger, adapt it to contemporary needs, and preserve traditional values, ultimately contributing to future academic research and development.

5. Tourism Statistics (2024–2025) of Mongolia

According to data from the National Statistics Office of Mongolia and international media sources, Mongolia received approximately 727,400 foreign tourists in 2024, with some estimates reaching 808,900 visitors. Tourism revenue reached approximately USD 1.6 billion. In 2025, this growth continued, with 751,879 foreign tourists visiting Mongolia as of October. These figures demonstrate a strong recovery and expansion of the tourism sector, further increasing the demand for improved accommodation quality. Under these conditions, the Cloud Ger emerges as a highly suitable and timely solution.

6. Social and Economic Impacts of Cloud Ger

The Cloud Ger not only enhances tourist comfort but also plays a significant role in the development of Mongolia's tourism industry. First, by improving travel experiences and visitor satisfaction, it enhances Mongolia's international tourism image. Second, it contributes to local economic development by supporting the construction and service sectors and creating employment opportunities. Third, the Cloud Ger is evolving into a modern cultural symbol of Mongolia, representing the country's innovative spirit and serving as a distinctive national brand on the global stage.

7. Recommendations and Future Prospects

The Government of Mongolia should develop standardized guidelines for tourism-oriented accommodation. Cooperation between public institutions and the private sector should be strengthened to expand Cloud Ger projects at the investment level. The Cloud Ger should be developed not merely as accommodation, but as a center for cultural exchange. Furthermore, international promotion efforts should be expanded to establish and promote the "Cloud Ger Mongolia" brand worldwide.

8. Conclusion

The Cloud Ger represents a new era in the integration of tourism, culture, and technology in Mongolia. By addressing the limitations of traditional gers and combining cultural heritage with modern technological solutions, it offers an innovative and sustainable model. As tourist numbers continue to grow, maintaining a balance between heritage preservation and modern comfort will be increasingly important. The Cloud Ger exemplifies this balance and stands as a key driver of Mongolia's future tourism development.

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Conceptualizing Tourism Pressure in National Parks through Digital Traces

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Acknowledgement

The work described in this paper was substantially supported by a grant from The Hong Kong Polytechnic University (PolyU project ID: P0059202), under the project "Invisible (Shadow) Overload: Detecting Tourism Pressure through Digital Trace Analysis in Under-Instrumented Natural Landscapes of Central Asia", PolyU–KazNU Centre for Sustainable Development in Central Asia Joint Research Projects.

Abstract

Tourism pressure in protected and ecologically sensitive areas has increased as mobility has expanded, destination visibility has intensified through digital platforms, and recreational practices have diversified (Muñoz et al., 2019; Tenkanen et al., 2017). Natural landscapes increasingly operate as multi-use spaces where conservation objectives intersect with tourism development, local livelihoods, and visitor experience. In this context, the ability to monitor and interpret visitor use has become central to sustainability-oriented management (Zejda & Zelenka, 2019). However, many protected areas, particularly outside core tourism regions, remain under-instrumented, lacking continuous visitor counts, fine-scale monitoring infrastructure, or integrated environmental datasets (Yang et al., 2014). This limits the identification of emerging pressures and constrains adaptive management responses.

Existing research addresses tourism pressure through several analytically distinct traditions. Spatial approaches focus on concentration and intensity of use, employing visitor counts, hotspot analysis, kernel density estimation, or mobility-based indicators to identify areas of high visitation (Cvelbar et al., 2018; Tenkanen et al., 2017). A second strand examines experiential and affective dimensions, such as perceived crowding, satisfaction, or emotional responses, commonly derived from surveys or user-generated content (Geng et al., 2021; Liang

et al., 2021). A third tradition assesses environmental vulnerability through concepts including carrying capacity, limits of acceptable change, habitat sensitivity, and species disturbance thresholds (Yang et al., 2014; Zenth et al., 2026). While each perspective offers insights, they have largely developed in parallel, with limited conceptual/analytical integration.

As a result, tourism pressure is often operationalized through single-dimensional proxies. Spatial approaches capture where visitors concentrate but provide limited insight into how pressure is experienced or how ecosystems respond (Tenkanen et al., 2017). Experiential studies foreground perceptions and satisfaction yet are rarely connected to measured intensity or ecological sensitivity (Liang et al., 2021). Vulnerability assessments offer robust evaluations of environmental fragility but rely on static indicators weakly linked to visitor behaviour (Yang et al., 2014; Zenth et al., 2026). Even where multidimensionality is acknowledged, integration frequently remains limited to juxtaposition rather than synthesis, leaving fragmented signals for interpretation (Zejda & Zelenka, 2019).

This fragmentation has practical consequences for under-instrumented landscapes. In the absence of dense monitoring systems, managers often rely on partial or indirect indicators, such as sporadic counts or qualitative assessments (Muñoz et al., 2019). When spatial, experiential, and ecological signals are produced through separate analytical pipelines, interpretation becomes ad hoc and context dependent. Single-dimensional indicators may obscure emerging risks, for example, when moderate visitor numbers coincide with high ecological sensitivity, or when socially tolerated densities generate ecological disturbance (Friswold et al., 2026). These limitations highlight the need for parsimonious integrative approaches supporting diagnostic interpretation and targeted management without instrumentation.

This paper introduces the Digital Pressure Profile (DPP) as a conceptual diagnostic framework designed to address this gap. The aim is to clarify the fragmentation of tourism pressure across research traditions and to propose an integrative framing that supports decision-making in data-limited contexts. The DPP is not presented as a predictive model or a comprehensive monitoring system, but as an analytically restrained construct that brings together three interrelated dimensions of tourism pressure: spatial intensity, experiential signals, and ecological vulnerability.

Within the DPP, spatial intensity refers to the concentration and distribution of visitor activity inferred from digital or conventional proxies (Tenkanen et al., 2017). Experiential signals capture affective and perceptual responses, such as perceived crowding or satisfaction, expressed directly or indirectly by visitors (Liang et al., 2021). Ecological vulnerability reflects the sensitivity of landscapes or species to disturbance, derived from ecological knowledge rather than from digital traces (Yang et al., 2014; Zenth et al., 2026). Operationally, these dimensions can be represented as a comparative pressure profile, enabling different configurations of intensity, experience, and vulnerability to be examined side by side rather than collapsed into a single composite metric. This perspective allows mismatches between use intensity, perceived experience, and ecological sensitivity to become visible.

The DPP assumes the use of aggregated, non-identifiable digital traces and explicitly acknowledges representation biases and visibility effects inherent in platform-based data. The contribution of this work is conceptual: it synthesizes fragmented approaches to tourism pressure into an integrative diagnostic framework suitable for under-instrumented protected areas. Empirical operationalization and context-specific testing remain important directions for future research.

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Dialect Use in Destination Promotion Videos

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Abstract

As tourism increasingly evolves toward multi-sensory experiences, the role of soundscapes in shaping destination perception has attracted growing scholarly attention (Duffy & Waitt, 2013). Unlike visual cues, sound transcends spatial and cognitive boundaries and directly engages tourists' emotions. Within the acoustic landscape, dialect functions not merely as a communicative medium but as a salient carrier of local cultural identity, collective memory, and intangible heritage (Xu, 2006). Recent studies further demonstrate that verbal characteristics—such as dialect use—significantly influence the dissemination effectiveness of tourism short videos (Hu et al., 2025). Despite these insights, existing research has largely overlooked the psychological mechanisms through which dialect use shapes tourists' travel intentions and behaviors. In particular, the mediating role of perceived authenticity and the boundary conditions under which dialect cues are effective remain insufficiently understood.

Authenticity theory provides a foundational framework for addressing this gap, positing that tourists' subjective perceptions of genuineness are central determinants of satisfaction and behavioral intention (Wang, 1999). Perceived authenticity is conceptualized as a multidimensional construct encompassing evaluations of originality, symbolic credibility, and experiential self-congruence. Dialect, due to its intrinsic connection to place and community, can serve as a powerful auditory "authenticity marker" that enhances immersion and emotional resonance within destination promotion (Bai et al., 2024). However, the effectiveness of such culturally embedded cues is not uniform across audiences. Drawing on research indicating that vocal attributes influence perception through hedonic value (Barattin & Latusi, 2025) and that linguistic features shape destination personality (Chen et al., 2024), this study argues that

tourists' familiarity with a dialect constitutes a critical boundary condition moderating its impact on perceived authenticity.

Accordingly, this study proposes an integrated model in which exposure to local dialect (vs. Mandarin) in destination promotional videos enhances perceived authenticity, which in turn increases travel intention. Dialect familiarity is examined as a moderator of the relationship between dialect exposure and perceived authenticity (Figure 1).

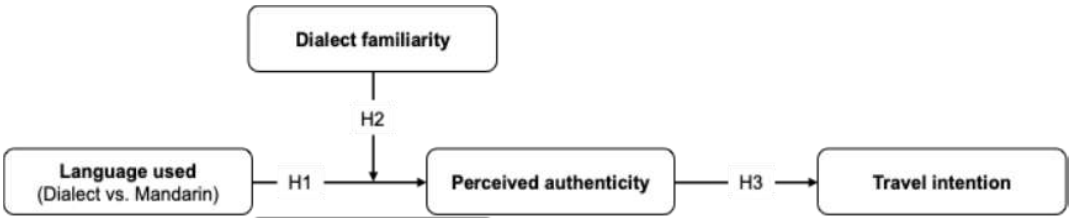

Figure 1. Proposed research model

A between-group experimental design was employed, manipulating the language used in the video (Yunnan dialect vs. Mandarin) and voice gender (male vs. female). Voice gender was included as a controlled auditory feature of the stimulus. Professional speech synthesis technology was used to generate standardized promotional videos for a Yunnan destination. A total of 201 participants were recruited via social media; Yunnan natives were excluded to avoid familiarity bias. Participants were randomly assigned to one experimental condition and completed measures of perceived authenticity, dialect familiarity, and travel intention.

Data analysis was conducted using IBM SPSS 29.0 in three stages. First, chi-square tests and one-way ANOVAs confirmed the absence of significant sociodemographic differences across experimental groups, ensuring sample equivalence. Second, two-way factorial ANOVAs revealed that videos using the Yunnan dialect elicited significantly higher perceived authenticity ($F = 24.499$, $p < 0.001$) and travel intention ($F = 39.013$, $p < 0.001$) than Mandarin. Additionally, male voice narration generated higher perceived authenticity ($F = 9.590$, $p < 0.005$) and travel intention ($F = 6.523$, $p < 0.05$). Finally, a moderated mediation analysis using Hayes' (2018) PROCESS macro (Model 7), following Nitzl et al.'s (2016) indirect-effect-based mediation approach, demonstrated that perceived authenticity partially mediated the effect of language use on travel intention. Importantly, this indirect effect was significant only at a moderate level of dialect familiarity ($b_{female} = 0.403$, 95% CI = [0.155, 0.667]; $b_{male} = 0.258$, 95% CI = [0.170, 0.300]), indicating a complementary partial mediation pattern.

This study makes several theoretical contributions. First, it advances tourism marketing and soundscape research by providing robust experimental evidence for the causal role of dialect in shaping travel intention through perceived authenticity. Second, it empirically establishes perceived authenticity as a key psychological mechanism linking auditory linguistic cues to behavioral outcomes, extending prior work on non-visual sensory stimuli in destination communication. Third, and most importantly, this study extends information gap theory by revealing that the effectiveness of culturally specific auditory cues follows an optimal familiarity logic: only moderate dialect familiarity activates authenticity perceptions that translate into behavioral intention. When familiarity is too low, comprehension barriers inhibit authenticity formation; when familiarity is too high, novelty and informational gaps diminish. This finding refines existing assumptions about information gaps by demonstrating that neither minimal nor excessive familiarity, but rather an intermediate level, maximizes persuasive impact.

From a managerial perspective, the findings offer actionable implications for destination management organizations (DMOs). Incorporating local dialects into promotional content can significantly enhance perceived authenticity and destination appeal; however, such strategies should be carefully calibrated through audience segmentation based on cultural and linguistic familiarity to maximize effectiveness while minimizing potential exclusionary effects.

Keywords: Dialect, destination marketing, destination promotion video, perceived authenticity, soundscape, dialect Familiarity

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Digital Travel Purchase Decision-making of Gen-Z Generation (Based on the example of Mongolian universities and college students)

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Abstract

Digital travel has become a necessity for young people in the GEN-Z generation, and for many people, traveling abroad and domestically for some purpose has become a normal phenomenon. 1.4 billion tourists have traveled worldwide. The travel purchasing process of young people The “Strategy for the Recovery of the Tourism Industry” shows that the travel purchasing behavior of GEN-Z is increasing. The survey, which was conducted among 207 participants, sought to show that many factors influence their travel purchases, and that the most important is increasing their budget and income sources. In the future, the GEN-Z generation will create more new ideas and ideas, and the opportunities for traveling around the world and even to space are always open.

Keywords: Digital purchasing, GEN-Z, travel, decision-making

GEN-Z offers an easy and efficient way to plan and purchase trips (Bigne et al., 2020; Ristova & Maglovski, 2018). Digital transformation in the travel industry is changing, creating competition and new opportunities. Lee et al. (2014) argued that digital transformation is the driving force behind modern society. Henriette et al. (2016) sees digital transformation as having two main dimensions:

1. Digital technology,

2. Customer experience.

Research rationale, needs, and requirements:

The research "Digital travel purchasing decision-making of GEN-Z generation" has the following rationale, needs, and requirements. These include:

• Because the digital travel purchasing decision-making of GEN-Z generation youth changes every day, including their behavior, attitude, social position, and many other things,

• Because "Social relations" are important for people living in the digital and online world during the rapid development of information and technology, and the issue of "Digital transformation" is being discussed a lot,

• Because research studies investigating the digital travel purchasing situation of GEN-Z generation students and youth in Mongolian schools and vocational schools are extremely rare,

• At a time when the world is making decisions in a digital environment, it will help to develop the knowledge and skills of young people in order to optimally implement the choices, activities, conveniences, recreation, and methods of GEN-Z generation youth.

Research goals and objectives:

The following objectives were set within the framework of the goal of identifying factors in the digital travel purchasing decision-making of the GEN-Z generation. Including:

• Analyze theoretical materials on the travel purchasing of the GEN-Z generation,

• Consider the social factors in travel purchasing through a questionnaire survey, and determine the results of the research methodology and consumer research,

• Analyze the factors in the digital travel purchasing decision-making of the GEN-Z generation, including students from universities and vocational schools.

Research Methods:

The following research methods were used in the study "Digital Travel Purchase Decisions of GEN-Z Generation". These include:

• The research methodology was based on literature review, analysis, synthesis, and comparison.

• The research was processed using SPSS 26 software.

• The research was conducted using a sampling method and a questionnaire to determine the factors influencing the digital travel purchases of GEN-Z generation. The research was conducted using business statistics.

Theoretical and practical significance:

Developing a study on the psychological and economic influences on GEN-Z youth when making travel purchases and the factors influencing decision-making in the digital environment involves analyzing practical situations, identifying problems, and suggesting solutions.

Innovative aspects of the research:

Research on the factors influencing travel purchase decisions of the GEN-Z generation has not been conducted before, and it is of particular importance to identify the influences and find solutions.

RESULTS OF THE RESEARCH ON DIGITAL TRAVEL PURCHASE DECISIONS OF GEN-Z GENERATION

In order to determine the scope and sample size in line with the objectives of the research, young people aged 14-18 from active secondary schools, vocational schools, and tourism training institutions in Mongolia were included. Considering the characteristics of the study and the representativeness of the sample, a random sampling method was used. The sample size was 1197.

Confidence limit – 0.969, Margin of error – 0.58,

Research materials. The study was conducted in a descriptive design:

1. Survey questionnaire on the topic of "GEN-Z generation's digital travel purchasing decisions" taken in 2025,

Survey questionnaire on the topic of "GEN-Z generation's digital travel purchasing decisions":

A total of 207 participants participated in the survey on the possibility of improving the services of citizens participating in the study on the digital travel purchasing decisions of the GEN-Z generation. Question structure:

1. 13 questions

Answers are given on a scale of 1-5, with the following answers: 1-Never, 2-Very rarely, 3-Occasionally, 4-Sometimes, 5-Always.

Research results and comparative study

Students from the Gen-Z generation (born 1997–2012) participated, and this research is very important in determining how the digital environment affects the decision-making process for purchasing travel products and services. This survey was developed using google.form and aimed to investigate how digital devices influence travel purchasing. A total of n=207 participants participated in this study.

CONCLUSION

The consumer behavior of the GEN-Z generation, as noted in the theories of previous researchers, clearly shows the characteristics of being fully integrated into the digital environment, such as the speed of information reception, platform usage, sensitivity to social content, and purchases. The theoretical examination revealed that there is almost no research on the travel decision-making of the GEN-Z generation in Mongolian and that the research base is lacking. However, in international studies, the GEN-Z generation is described as "Digital Native", "Visual-driven consumer", and "Experience-oriented decision maker", and the results of the study are fully consistent with these theoretical positions.

The results of the statistical analysis of the SPSS 26 program show that the GEN-Z generation decision-making model is more powerful than the traditional model and is suitable for effectively using the influence of multiple factors.

• Experience and satisfaction of work services are working at the highest efficiency by 37.2%,

• Price and budget - 24.6%,

• Location conditions and social opportunities - 23.7%,

• Trust factor - 8.2%,

• Image and video content - 6.3%, the study showed. However, the use of mobile phones and digital travel choices have an average rating of 3.42 out of 94.8 products. The results of the

survey, which was conducted by 207 participants, show an average rating of 3.04 for the questions “I get information from multiple sources before making a travel decision” and “I leave online travel reviews and share my experiences”.

Customer trust and experience are becoming an essential part of GEN-Z’s decision-making. They are making choices based on UGC (user-generated content), reviews, ratings, and real-life experiences of others, rather than formal marketing, consistent with previous research. This suggests that travel organizations need to develop a robust ecosystem of customer experience and reviews, rather than relying on traditional marketing channels

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Digital Visibility of Tourism Activity in a Mountain National Park: A Cross-Platform UGC Analysis

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Acknowledgement

The work described in this paper was substantially supported by a grant from The Hong Kong Polytechnic University (PolyU project ID: P0059202), under the project "Invisible (Shadow) Overload: Detecting Tourism Pressure through Digital Trace Analysis in Under-Instrumented Natural Landscapes of Central Asia", PolyU–KazNU Centre for Sustainable Development in Central Asia Joint Research Projects.

Abstract

Background

User-generated content (UGC) has become a widely used data source for analysing tourism activity where conventional visitor statistics are spatially coarse or unavailable (Runge et al., 2020; Wood et al., 2020). Previous studies demonstrate that geotagged social media data can reproduce broad spatiotemporal patterns of tourism activity and relative destination popularity at both regional and local scales (Ciesielski et al., 2022; Gao & Mou, 2021; Tenkanen et al., 2017). In mountainous and protected landscapes, UGC has been applied to examine seasonal dynamics and accessibility-related spatial structures (Gao & Mou, 2021; Hu et al., 2021). At the same time, growing evidence shows that UGC does not represent tourism activity uniformly, producing systematic spatial blind spots shaped by platform and infrastructural conditions (Runge et al., 2020; Yubero et al., 2021).

Problem statement and research questions

Despite increasing methodological sophistication, many UGC-based tourism studies continue to treat digital traces as neutral proxies for visitor presence, with limited attention to representational bias and divergence across platforms (Kim et al., 2021; Nyelele et al., 2023). This limitation is particularly pronounced in mountainous national parks, where accessibility gradients and seasonality may substantially reduce digital visibility. This study addresses this gap by assessing the digital visibility of tourism activity in Ile-Alatau National Park using

publicly available digital traces derived from user-generated and platform-indexed data. The analysis is guided by three research questions (RQs):

- (RQ1): What spatiotemporal patterns of tourism activity are observable through digital traces in Ile-Alatau National Park?
- (RQ2): To what extent do different platforms produce convergent or divergent representations of tourism activity?
- (RQ3): What limitations and biases emerge when digital traces are interpreted as indicators of tourism presence in a mountainous national park?

Methodology

The study adopts a comparative, exploratory research design based on two complementary digital platforms: Flickr and Google Maps. Geotagged photographs from Flickr are used to capture demand-side expressions of tourism activity through user-generated behavioural traces, while Google Maps data represent place-based and infrastructure-linked digital visibility through platform-indexed place listings. Flickr data were collected for the period 2006–2024 within Ile-Alatau National Park and a surrounding 5 km buffer zone, yielding more than 14,000 geotagged photographs. After data cleaning, the dataset was aggregated into user-day units, resulting in approximately 4,000 Flickr user-days generated by around 1,300 unique users. Google Maps data were compiled from platform-indexed place listings associated with the park, producing an analytical sample of 180 tourism-related places. All data were spatially aggregated into a common hexagonal grid with a 500 m resolution and analysed at seasonal and monthly temporal scales. Cross-platform comparison focused on cell-level spatial overlap, hotspot coincidence, and divergence between expressive and place-based representations of tourism activity. Accessibility variables, including proximity to roads and elevation, were used to contextualise observed patterns and identify areas of systematically reduced digital visibility.

Results

The analysis reveals pronounced spatial and temporal concentration of digitally visible tourism activity within Ile-Alatau National Park. Flickr user-days are highly unevenly distributed, with 61% of all recorded user-days occurring in fewer than 15% of grid cells, primarily concentrated near major park entrances, road-accessible valleys, and prominent viewpoints. Digital visibility exhibits strong seasonality: 78% of Flickr user-days occur between May and October, while winter visibility remains sparse. In contrast, Google Maps place listings display a markedly different spatial pattern, with tourism-related entities densely clustered around formal access points and developed nodes, most notably in the Medeu–Shymbulak area. Cross-platform comparison indicates limited spatial concordance: only about one-third of grid cells containing Flickr activity also include at least one tourism-related Google Maps place, and agreement is largely restricted to the most accessible and formalised locations. Extensive areas of the park remain digitally invisible across both platforms despite physical and infrastructural accessibility, highlighting systematic representational blind spots.

Contribution

This study demonstrates that digital traces derived from UGC capture digital visibility of tourism activity rather than its full spatial presence. By comparing expressive behavioural traces from Flickr with place-based representations from Google Maps, the analysis shows that

different platforms generate divergent and only partially overlapping portrayals of tourism activity. The findings identify persistent digital blind spots in protected mountain landscapes and provide a replicable framework for the critical interpretation of UGC-based tourism indicators in complex terrain.

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Digital-Driven Travel Behavior of Generation Z: Evidence from Young Consumers in Mongolia

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Abstract

This study investigates the digital determinants influencing travel behavior among Generation Z consumers in Mongolia. As digital natives, Gen Z individuals rely heavily on social media, user-generated content (UGC), and online peer recommendations when planning travel. Despite global research growth on Gen Z and digital tourism, empirical insights from emerging markets like Mongolia remain limited. This research addresses that gap through a quantitative survey of 412 Mongolian Gen Z participants, analyzing the impact of digital information exposure, social media engagement, and online trust on travel decision-making. Using structural equation modeling (SEM), the results demonstrate that digital content significantly enhances online trust, which in turn mediates travel behavior. Peer-generated content and influencer narratives emerged as key trust-building mechanisms, shaping destination choices and travel intentions. These findings offer theoretical contributions to digital tourism literature and provide practical implications for tourism stakeholders seeking to engage Gen Z consumers in emerging digital markets.

Keywords: Generation Z, Digital Tourism, Online Trust, Social Media Engagement, Travel Behavior

1. INTRODUCTION

Digital transformation has significantly reshaped the global tourism industry by changing how travelers seek information, evaluate options, and make decisions. Technologies such as social media, online review systems, and mobile apps now play a central role across all stages of the travel process—from inspiration and planning to booking and post-trip feedback (Buhalis & Law, 2008; Xiang & Gretzel, 2010).

Among today's travelers, Generation Z—those born between the late 1990s and early 2010s—emerges as a particularly influential group. As digital natives, they are highly reliant on online platforms, prefer visually engaging content, and place greater trust in peer recommendations over traditional advertising (Priporas et al., 2017; Djafarova & Bowes, 2021).

This generation is becoming a driving force in both domestic and international tourism due to their growing spending power and desire for authentic, experience-based travel (Robinson & Schänzel, 2019). Their responsiveness to digital marketing and preference for personalized, peer-driven content make them a key target for tourism marketers.

In Mongolia, these trends are clearly visible. The country has seen rapid increases in internet penetration and smartphone adoption, especially among youth. Young Mongolians now rely heavily on social media and mobile tools for travel inspiration, planning, and sharing experiences. However, despite these developments, there is a lack of empirical research on how digital environments shape the travel behavior of Gen Z in emerging markets like Mongolia.

To address this gap, the current study examines the digital determinants of travel behavior among Mongolian Gen Z consumers. Specifically, it explores the roles of social media engagement, user-generated content (UGC), and online trust in shaping their travel decisions. This research contributes to digital tourism literature and offers practical insights for engaging young travelers in digitally evolving markets.

2. LITERATURE REVIEW

2.1 Generation Z and Consumer Behavior

Generation Z is typically defined as the cohort born roughly between the mid-1990s and the early 2010s. As true digital natives, they have grown up surrounded by smartphones, social media, and high-speed Internet, making technology and online content integral to their daily lives. Research emphasizes that Gen Z's media consumption habits differ markedly from older cohorts. They are characterized by very rapid content consumption and a famously short attention span (often cited as on the order of 8 seconds). To capture their interest, content must be concise and engaging almost immediately. Consequently, Gen Z favors visually-rich, bite-sized media (such as short videos and images on Instagram or TikTok) over long-form text. This visual orientation also reflects their comfort with multimedia storytelling and tendency to learn and make decisions through images and videos.

In terms of consumer psychology, Gen Z places a high premium on authenticity and peer trust. They tend to distrust overt advertising and polished marketing content, preferring instead recommendations that feel genuine. In particular, Gen Z respondents often report trusting personal endorsements and user-generated content from friends or influencers more than official brand messages. For example, studies have found that Gen Z travelers "are more likely to trust peer-generated content and online reviews than traditional advertisements". This generation also values social proof and relatability: they view social-media influencers and knowledgeable peers as quasi-friends whose opinions carry weight in travel decisions. In short, Gen Z's consumer traits include a preference for authenticity, quick and visual content formats, and reliance on peer-based social media recommendations when forming attitudes about products and destinations.

2.2 Digital Platforms and Travel Decision-Making

Digital platforms – notably social media, blogs, and online review sites – have fundamentally transformed how tourists search for and evaluate travel options. These platforms dramatically reduce information asymmetry and perceived risk by making abundant traveler-generated content available. For tourism, which is an inherently intangible and experiential product, easy access to peer reviews and travel stories is especially valuable. For example, Tao et al. (2025) note that "online travel reviews (OTRs) on social media have significantly transformed the tourism industry," with 75% of tourists now using social media for travel inspiration. Because most OTRs are written by other tourists (unpaid and unbiased), they are considered highly

credible. Indeed, research shows that positive review content and credible sources not only inform decisions but also lower perceived risk and increase travel intention. In other words, user-generated information fills the information gaps about a destination's experience, thereby reducing uncertainty and making potential travelers more confident.

Generation Z in particular turns first to digital channels when planning trips. Surveys indicate that a large majority of Gen Z consumers use the Internet as their primary travel-information source. Platforms such as Instagram, YouTube, and TikTok are especially important: they provide visually compelling content like influencer travel vlogs, photo stories, and short videos that appeal to Gen Z's preferences. For many young travelers, a destination is discovered through social feeds or travel blogs rather than traditional guidebooks. As one study summarizes, "Gen Z typically obtains tourism information via social media networks (Instagram, YouTube, TikTok) through travel influencers, user-generated content, and visual storytelling". Blogs and online travel communities also serve as rich repositories of information. In practice, Gen Z often consults TripAdvisor reviews, travel blogs, and social feeds after seeing a destination advertised to confirm details. In sum, digital platforms enable instant access to others' travel experiences, helping Gen Z consumers evaluate destinations efficiently. These platforms reduce uncertainty and perceived risk by supplying up-to-date, peer-validated information, and they fundamentally shape both destination choice and travel intention for young consumers.

2.3 Online Trust and User-Generated Content

Online trust is central to digital-driven travel behavior. As Gen Z is skeptical of traditional marketing, the credibility of online content determines its influence. Numerous studies find that peer-generated content and reviews are viewed as highly trustworthy by Gen Z. For instance, potential travelers rely heavily on peer-written travel reviews because they are seen as authentic and unbiased. Tao et al. (2025) note that since online reviews come from "unpaid tourists," they are more credible than advertisements, thus helping readers make informed decisions. Moreover, source credibility in these contexts has been shown to lower perceived risk – again enhancing travel intentions. In essence, Gen Z consumers use user-generated content (UGC) as a kind of digital word-of-mouth, trusting it to provide truthful insights about destinations, accommodations, and activities.

Social media influencers and visual storytelling play a parallel role in building trust and shaping attitudes. Travel influencers who share personal narratives and vivid imagery can inspire young travelers and make destinations seem more attainable. Because influencers communicate in a peer-like, casual manner, their content often feels more relatable than corporate ads. Research confirms that when influencers are perceived as credible and authentic, they can significantly sway followers' travel choices. For example, visual travel content on Instagram or TikTok – such as a short influencer video tour – can spark a desire to visit the featured location. One study observes that "visually engaging content shared by travel influencers fosters trust among followers" and that many travelers rely on such influencer recommendations alongside traditional reviews. Similarly, Gen Z often interprets influencer advice as equivalent to a recommendation from a friend, reinforcing trust in that content. Notably, some Gen Z travelers explicitly report distrusting overt influencer promotions and instead give more weight to honest peer reviews.

In summary, online trust determines which digital content drives behavior. Rich user-generated reviews, authentic influencer posts, and immersive visual narratives all build confidence in travel options for Gen Z. This cohort's decisions are especially influenced by content that feels credible and peer-like – whether it is a friend's vacation vlog or an uncompromised reviewer's hotel write-up. By contrast, polished official tourism websites or ads generally carry less influence in the eyes of Gen Z, who may regard them as less authentic. Consequently, peer reviews and user content often have a disproportionate impact on young travelers' attitudes and choices.

2.4 Research Hypotheses

Based on the literature above, we propose the following hypotheses regarding Gen Z travel behavior:

> **H1:** Digital information exposure positively influences travel intention. In other words, greater exposure to tourism-related content on digital platforms leads to higher likelihood of planning a trip. Prior research supports this link: for example, Wang and Yan (2022) find that higher-quality social media tourism information significantly increases consumers' intention to travel.
>
> **H2:** Social media engagement has a significant effect on destination choice. Gen Z's use of social platforms (e.g. interacting with travel posts, following influencers) is expected to shape which destinations they select. Studies show that visually rich social media content exerts strong influence on where young travelers decide to go.
>
> **H3:** Online trust mediates the relationship between digital content and travel behavior. That is, the impact of digital travel information on Gen Z's intentions is channeled through their trust in that content. Consistent with this, Wang and Yan (2022) demonstrate that trust serves as a mediator between social media information quality and travel intention. When Gen Z trusts the source (whether a review site or influencer), they are more likely to act on the digital information.
>
> **H4:** Peer-generated content has a stronger influence on Gen Z than official tourism websites. We expect that user-generated reviews and social posts will be more persuasive than content from official sources. Research indicates that Gen Z travelers "are more likely to trust peer-generated content and online reviews than traditional advertisements", implying user content will outweigh corporate sites in driving choices.

These hypotheses will be tested empirically with Mongolian Gen Z travelers to understand how digital media factors combine to shape their tourism intentions.

3. METHODOLOGY

3.1 Research Design

This study employed a quantitative, cross-sectional survey design to test hypothesized relationships between digital media factors and travel decision-making among Mongolian Generation Z consumers. A structured questionnaire was used, allowing for consistent measurement and statistical analysis of the constructs. As Creswell (2014) notes, quantitative methods are suitable for confirming theoretical relationships through empirical data. The non-experimental and explanatory nature of the design enabled efficient data collection from a broad Gen Z sample, aligning with best practices for digital behavior studies.

3.2 Sample and Data Collection

The target population consisted of Mongolian Generation Z individuals aged 18–26, a demographic characterized as digital natives. Convenience sampling was used, with survey distribution via Facebook, Instagram, and local youth-oriented platforms—effective channels given Mongolia's high social media penetration (~74% as of 2025).

A total of 412 valid responses were retained after cleaning from an initial sample of ~450, satisfying SEM sample size recommendations (Hair et al., 2019). Respondents were balanced by gender (54% female, 46% male) and represented various educational backgrounds. The online format enabled geographic diversity, reaching both urban and rural areas. Data collection took place over four weeks, ensuring anonymity and voluntary participation.

3.3 Measurement

All variables were measured using 5-point Likert scales (1 = "Strongly Disagree" to 5 = "Strongly Agree"). Constructs were adapted from established sources to ensure content validity:

- **Digital Information Exposure:** Adapted from Nazneen et al. (2020) and Wen & Huang (2019), items measured how often participants use digital sources (websites, blogs) for travel information.
- **Social Media Engagement:** Based on Harrigan et al. (2017) and Dessart et al. (2016), items assessed participants' interaction with travel-related content (e.g., following influencers, sharing posts).
- **Online Trust:** Adapted from McKnight et al. (2002) and Kim et al. (2011), this construct captured perceived credibility and confidence in online travel sources.
- **Travel Decision-Making Behavior:** Derived from Gardiner et al. (2013) and Karl et al. (2020), items measured the degree to which digital inputs influence planning, destination choice, and bookings.

4. RESULTS

Data analysis was conducted using Structural Equation Modeling (SEM), chosen for its ability to assess complex relationships among latent constructs while accounting for measurement error (Hair et al., 2019). Preliminary analysis was done with SPSS 26, and SEM was conducted using AMOS 24 (maximum likelihood estimation).

4.1 Measurement Model Results

The measurement model demonstrated strong reliability and validity across all constructs. Cronbach's alpha values ranged from 0.88 to 0.92, while Composite Reliability (CR) values were all above 0.90, exceeding the recommended 0.70 threshold (Hair et al., 2019). Average Variance Extracted (AVE) values ranged from 0.64 to 0.70, confirming convergent validity (AVE ≥ 0.50).

All standardized factor loadings were significant ($p < .001$) and ranged from 0.72 to 0.91, indicating strong item-to-construct alignment. These results affirm that the survey instrument measured its intended constructs with high internal consistency.

Table 1. Reliability and Convergent Validity

Construct	Items	Cronbach's α	CR	AVE
Digital Information Exposure	5	0.88	0.90	0.64
Social Media Engagement	5	0.91	0.92	0.67
Online Trust	5	0.89	0.91	0.66
Travel Decision-Making Behavior	5	0.92	0.93	0.70

α = Cronbach's alpha; CR = Composite Reliability; AVE = Average Variance Extracted. All values exceed recommended thresholds (α, CR > 0.70; AVE > 0.50).

Discriminant validity was established using the Fornell–Larcker criterion and HTMT ratios**:**

- For each construct, the square root of AVE exceeded its correlations with other constructs.
- All HTMT values were below 0.85 (maximum observed = 0.72), meeting conservative thresholds for construct distinction.

Table 2. Discriminant Validity: Fornell–Larcker Criterion

Construct	DIE	SME	OT	TDB
Digital Information Exposure (DIE)	**0.80**			
Social Media Engagement (SME)	0.48	**0.82**		
Online Trust (OT)	0.52	0.45	**0.81**	
Travel Decision-Making Behavior (TDB)	0.56	0.60	0.63	**0.84**

Diagonal values (bold) represent the square root of AVE. Each diagonal value exceeds the corresponding inter-construct correlations.

These results indicate that respondents were able to differentiate clearly between the constructs of digital exposure, engagement, trust, and travel behavior.

The structural model showed **good overall fit**:

Table 3. Model Fit Indices

Fit Index	Recommended	Obtained
χ^2/df	< 3.00	2.45
CFI	≥ 0.90	0.94
TLI	≥ 0.90	0.92
RMSEA	≤ 0.06	0.055
SRMR	≤ 0.08	0.047

All HTMT values are below the conservative threshold of 0.85

These indices confirm that the model adequately represents the observed data. The chi-square goodness-of-fit test was significant (χ^2(df) = ***, p < .001), which is common with large samples (N = 500). However, the relative chi-square (χ^2/df) was 2.45, falling below the often-cited threshold of 3.0 for acceptable fit. Other fit indices met or exceeded conventional criteria for good model fit. The Comparative Fit Index (CFI) was 0.94 and the Tucker–Lewis Index (TLI) was 0.92, both close to the 0.95 benchmark for good fit. The Root Mean Square Error of Approximation (RMSEA) was 0.055 (90% CI [0.050, 0.060]), well under the 0.06 cutoff for a close fit. Likewise, the Standardized Root Mean Square Residual (SRMR) was 0.047, below the 0.08 threshold. In combination, these indices suggest that the specified model provides an adequate representation of the data. In sum, the fit statistics (CFI/TLI ~0.95, RMSEA ~0.05, SRMR ~0.05) indicate that the model fits the sample data well, justifying proceeding to interpret the structural relationships.

4.2 Structural Model Results

Having established a sound measurement model and acceptable fit, we examined the structural model to test the hypothesized relationships (H1–H4). Figure 1 and Table 1 (not shown) summarize the standardized path coefficients (β), their significance levels, and R^2 values for endogenous variables. All three direct effect hypotheses (H1, H2, H3) were supported by the data. H1 predicted that Digital Content would positively influence Travel Behavior. In line with this, Digital Content had a significant positive direct effect on Travel Behavior (β = 0.25, p < .001), supporting H1. H2 posited that Digital Content positively affects Online Trust; indeed, Digital Content was a strong predictor of Online Trust (β = 0.55, p < .001), providing support for H2. Similarly, H3 stated that Online Trust would positively influence Travel Behavior. This hypothesis was confirmed, as Online Trust had a significant positive effect on Travel Behavior (β = 0.40, p < .001). These path coefficients suggest that young Mongolian consumers who engage more with digital travel content tend to develop greater trust online, and that trust, in turn, is associated with more active travel behaviors (such as higher likelihood of visiting destinations discovered online).

Table 4. Structural Model Results and Hypothesis Testing

Hypothesis	Pathway	β	p-value	Result
H1	Digital Information Exposure → Travel Behavior	0.25	< .001	Supported
H2	Digital Information Exposure → Online Trust	0.55	<.001	Supported
H3	Online Trust → Travel Behavior	0.40	<.001	Supported

The proportion of variance explained in the endogenous constructs was substantial. Digital Content alone explained about 30% of the variance in Online Trust ($R^2 = 0.30$), indicating that Gen Z consumers' trust in online travel information is strongly shaped by their exposure to and engagement with digital content. Meanwhile, approximately 45% of the variance in Travel Behavior was jointly explained by Digital Content and Online Trust ($R^2 = 0.45$). This denotes a considerable effect size, as nearly half of the variability in young consumers' travel behavior (e.g., destination choice or travel frequency) can be accounted for by the digital factors in our model. In summary, the structural model results show strong support for the theoretical framework: greater digital content engagement leads to higher online trust and more pronounced travel activities. All three direct hypotheses (H1–H3) are supported by statistically significant coefficients in the expected direction.

Finally, we tested the mediating role of Online Trust between Digital Content and Travel Behavior (H4). A bootstrapped mediation analysis (5,000 resamples) was conducted to estimate the indirect effect and its significance. The indirect effect of Digital Content on Travel Behavior through Online Trust was positive and statistically significant. Specifically, the standardized indirect effect was $\beta = 0.22$, with a 95% bootstrap confidence interval of [0.14, 0.32] ($p < .001$). Because this confidence interval does not include zero, we conclude that the mediation effect is significant. Moreover, the direct effect of Digital Content on Travel Behavior remained significant ($\beta = 0.25$, $p < .001$) even after including Online Trust in the model, indicating that the mediation is partial rather than full.

Table 5. Mediation Analysis

Pathway	Indirect β	95% CI	p-value	Mediation Type
Digital Content → Online Trust → Travel Behavior	0.22	[0.14, 0.32]	< .001	Partial

Direct effect remains significant ($\beta = 0.25$, $p < .001$), indicating partial mediation.

In practical terms, this finding means that exposure to digital travel content influences travel behavior in two ways: **(a)** directly (for example, inspiring trips through engaging media), and **(b)** indirectly by first increasing the consumer's trust in online information, which then encourages travel decisions. H4 was therefore supported – Online Trust partially mediates the

effect of Digital Content on Travel Behavior. The partial mediation is evidenced by the reduction, but not elimination, of the direct path when the mediator is included. This result underscores the importance of online trust as a mechanism: it carries a significant portion of the influence (about $\beta_{indirect} = 0.22$) from digital content to travel behavior, while a direct pathway ($\beta_{direct} = 0.25$) also persists. Overall, the mediation analysis reinforces our earlier conclusions that digital engagement drives youth travel behavior, and it highlights online trust as a key intermediary process in this digital-driven relationship.

5. DISCUSSION

The findings confirm that digital engagement significantly shapes the travel behavior of Mongolian Generation Z. In line with global trends, this cohort relies heavily on social media and peer-generated content when making travel decisions. The results validate prior research indicating that Gen Z favors visual, authentic content and values social proof over traditional advertising (Djafarova & Bowes, 2021; Tao et al., 2025).

Social media engagement emerged as a strong predictor of travel interest, particularly through visually immersive platforms like Instagram and TikTok. Authentic content such as user reviews, videos, and influencer narratives not only provides inspiration but also enhances the perceived credibility of destinations. These findings support studies that emphasize Gen Z's preference for relatable, trustworthy sources over curated brand messages (Wang & Yan, 2022; Priporas et al., 2017).

Crucially, the study identifies online trust as a mediating variable. Trust in digital content was shown to significantly enhance the impact of digital exposure on travel behavior. This supports the role of e-WOM and influencer credibility in shaping Gen Z's travel intentions. When content is perceived as authentic and peer-like, it builds confidence and reduces perceived travel risk—a finding consistent with prior literature (Tao et al., 2025; Karl et al., 2020).

These results suggest that Mongolian Gen Z exhibits similar digital behavior patterns to their international peers. They prioritize personalized, authentic, and socially endorsed content over traditional marketing approaches. This highlights a convergence in digitally mediated travel behavior among Gen Z consumers across both developed and emerging markets.

6. CONCLUSION

This study provides empirical evidence that Generation Z in Mongolia is a digitally driven travel segment, heavily influenced by social media engagement and peer-generated content. The findings confirm that online trust plays a significant mediating role, shaping how digital exposure translates into actual travel intentions.

By demonstrating that Mongolian Gen Z exhibits similar behaviors to their global counterparts, the study reinforces the universal nature of digital-native consumer patterns. The results also underscore the importance of authentic, relatable content in building trust and motivating travel decisions among young consumers.

For tourism stakeholders, the study highlights the need to move beyond traditional marketing and embrace peer-centered, trust-based digital strategies. By doing so, they can more effectively engage this influential generation and contribute to sustainable tourism growth in emerging markets like Mongolia.

In sum, cultivating credible digital experiences—through influencer partnerships, user-generated content, and mobile-optimized platforms—can unlock the potential of Gen Z as a key driver of future tourism.

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Appendix

Construct	**Item Code**	**Factor Loading**
Digital Information Exposure	DIE1	0.75
	DIE2	0.81
	DIE3	0.78
	DIE4	0.84
	DIE5	0.79
Social Media Engagement	SME1	0.82
	SME2	0.86
	SME3	0.88
	SME4	0.83
	SME5	0.80
Online Trust	OT1	0.78
	OT2	0.84
	OT3	0.88

	OT4	0.81
	OT5	0.86
Travel Decision-Making Behavior	TDB1	0.83
	TDB2	0.87
	TDB3	0.91
	TDB4	0.85
	TDB5	0.88

Dilemmas and Opportunities in Medical Tourism Education: Bringing Disciplines Together for Competitive Human Capital

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Introduction

Medical tourism has emerged as a strategic growth area in recent years, driven by rapid advances in medical technologies, diversification of transportation options, and increasing global patient mobility (Fortune Business Insights, 2026; WHX Insights, 2025). Countries with strong healthcare systems and competitive tourism infrastructures have sought to leverage this growth potential as a means of economic diversification and international positioning (Connell, 2013; Gaines & Lee, 2019). However, the sustainability of medical tourism development depends not only on physical infrastructure and technological capacity, but also—critically—on the availability of a qualified, ethically grounded, and interdisciplinary human resource base (Fetscherin & Stephano, 2016). Previous studies identify shortages of trained personnel as one of the main constraints limiting sectoral development, despite the growing volume of cross-border healthcare activity (Kim et al., 2013; Kumar et al., 2025). In this context, the limited number and scope of academic programs dedicated specifically to medical tourism, both globally and in Türkiye, raises important questions regarding the adequacy of current education models (Collins et al., 2019; 2022).

This empirical study aimed to evaluate the perceived value, effectiveness, and future direction of medical tourism education by integrating perspectives from multiple educational stakeholder groups, including students, graduates, and academics from both tourism and medical disciplines. Building upon the premises of human capital theory (Becker, 1990) and stakeholder theory (Freeman et al., 2010), the study employed a mixed-methods design that combines quantitative survey data with qualitative interview findings to provide a holistic understanding of how medical tourism education is conceptualized, experienced, and evaluated across disciplinary boundaries.

Methods and Data Collection

Quantitative data were collected through a structured survey administered to four distinct groups: tourism students without exposure to a medical tourism elective, tourism graduates without such exposure, medical school students who completed a medical tourism elective, and medical school graduates who completed the same elective (N = 489). Survey instruments included Likert-type items measuring perceptions of educational support, curriculum integration, institutional and governmental backing, and perceived career opportunities in medical tourism. To contextualize and explain the quantitative patterns, qualitative data were

gathered through semi-structured interviews with tourism school instructors (n = 6) and medical school instructors (n = 8). The latter group included two instructors directly responsible for medical tourism courses, alongside faculty from nursing, medicine, dentistry, audiology, and nutrition-related fields.

Results

The quantitative findings revealed a consistent pattern across the four samples: respondents broadly acknowledged the economic, strategic, and national importance of medical tourism, yet this recognition did not translate proportionally into personal career intentions. ANOVA and post-hoc analyses revealed that a "value–career gap" was particularly pronounced among tourism-track participants. Group differences further indicated that tourism students and graduates expressed significantly stronger support for integrating medical tourism into core curricula and for increased public or institutional support. In contrast, medical-track students and graduates who completed a medical tourism elective were more likely to perceive medical tourism as a distinct and viable career path offering unique professional opportunities. These differences suggested that educational exposure and disciplinary context shape not only knowledge levels but also how medical tourism is framed—as a system-level policy and curriculum issue or as an individual professional trajectory.

Thematic analysis of the interviews revealed a clear divergence in how medical tourism is perceived and justified within different academic cultures. Tourism school instructors framed medical tourism as a high-potential but under-institutionalized sector. While they recognized its strategic importance for Türkiye, they expressed concerns regarding curriculum overload, lack of in-house medical expertise, and the risk of compromising academic quality without adequate interdisciplinary collaboration. For these instructors, the primary challenge lied in establishing legitimacy and feasibility within tourism curricula, particularly in elite academic settings. Medical tourism education was thus discussed largely in terms of structural integration, policy alignment, and institutional capacity. Medical school instructors, by contrast, described medical tourism as an already embedded clinical reality rather than a prospective or emerging field. Many reported direct encounters with international patients in public and private healthcare settings, often without these activities being formally labeled as "medical tourism." Their narratives were dominated by ethical considerations, patient safety, legal liability, and quality of care. Concerns regarding insufficient patient screening, incomplete disclosure of medical histories, unclear post-treatment responsibility, and the role of non-clinical intermediaries feature prominently. Within this group, education was framed not primarily as a market-driven workforce pipeline, but as a protective mechanism to mitigate risk, prevent harm, and safeguard institutional and national reputations.

Discussion and Implications

Taken together, the quantitative and qualitative findings indicated that the absence of explicit employer demand or regulatory mandates for medical tourism graduates were not necessarily an evidence of educational irrelevance, but rather a reflection of the sector's ongoing institutionalization challenges. Stakeholders converge on the need for interdisciplinary, practice-oriented education models that bridge medical and tourism disciplines, strengthen the alignment between theory and practice, and foreground human-centered competencies such as ethics, empathy, communication, and cultural awareness. Experiences during the COVID-19 pandemic further exposed the limitations of purely technical or online education models, reinforcing calls for resilient, stakeholder-engaged pedagogies aligned with international frameworks such as those proposed by the Tourism Education Futures Initiative.

Findings emphasize the centrality of care quality (before and after treatments) as a long-term competitive advantage for medical tourism. Sustainable growth in medical tourism may depend less on individual procedures or physicians and more on holistic patient experiences, continuity of care, and human-centered service delivery. An important highlight was the managerial dimensions of medical tourism, calling for education that integrates clinical governance, process management, insurance systems, ethics, and intercultural communication alongside clinical knowledge. The type of human resource base needed for a competitive workforce in medical tourism is not easily substitutable by AI in the near future.

Within the Turkish context—where structured undergraduate and doctoral programs in medical tourism remain scarce despite recent associate- and graduate-level initiatives—this study supports a strategic shift away from degree-title debates toward role-based competency standards, modular electives, and micro-credentialing developed in collaboration with healthcare institutions. Such an approach offers a pragmatic pathway of professionalization also for other developing or newly developed destinations around the globe.

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Dining as a Relational Third Place: How Subjective Age Shapes Memorability and Attachment for Chinese Seniors

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Abstract

Chinese senior tourists' travel dining is central yet difficult to address, partly because reliance on chronological age obscures important differences. Using a sequential mixed-methods design grounded in relational third-place theory, this study identifies three need dimensions and seven culturally rooted subdimensions of senior dining experiences and tests a conceptual model. *Mianzi* affirmation, familiarity, authenticity, and health enhance attachment and behavioral intentions, with memorability as a mediator and subjective age as a moderator. The study clarifies underlying mechanisms and offers implications for senior-focused marketing and restaurant strategies.

Keywords: Senior tourism; place attachment; memorability; dining experiences; relational third-place theory

1. Introduction

Senior tourism represents a rapidly expanding global market (Otoo et al., 2021). This growth is particularly robust in China, where seniors currently comprise 20% of the tourist population—a figure projected to rise further (National Development and Reform Commission, 2025). Despite their purchasing power (Otoo & Kim, 2020), Chinese senior tourists spend less than anticipated (Pan et al., 2025), suggesting a mismatch between tourism offerings and their needs. This gap is especially evident in travel dining, a central component of tourism experiences. For seniors, dining can be challenging due to unfamiliar environments, age-related sensory decline, and chronic health conditions (Hao et al., 2025; Wen et al., 2020; Wu & Lin, 2023), often turning an anticipated pleasure into stress.

Existing research portrays Chinese senior tourists inconsistently, as either curious explorers (Wang et al., 2018) or risk-averse travelers (Otoo et al., 2021), highlighting the limitations of chronological age as a segmentation tool (Otoo et al., 2020). Subjective age, how young individuals feel (Peluso et al., 2021), offers greater explanatory power for consumer behavior but remains underexamined in tourism (Li & Su, 2025), particularly regarding dining.

Most studies adopt a supply-side perspective, overlooking seniors' experiential mechanisms. Relational third-place theory suggests attachment forms when instrumental, social, and emotional needs are met (Rosenbaum, 2006), but its Western-centric assumptions require cultural adaptation for Chinese seniors, who emphasize family and social status (*Mianzi*) over commercial interactions (Yang et al., 2022; Zheng et al., 2023). Travel dining also differs from routine meals, with memorability playing a key role in attachment (Tsai et al., 2020). But the travel experiences among Chinese seniors remain unknown (Huang et al., 2024), warranting a target investigation.

This study uses a mixed-methods approach integrating relational third-place theory with subjective age to: (1) explore Chinese seniors' travel dining experiences, (2) examine effects on memorability, attachment, and behavioral intentions, and (3) assess subjective age as a moderator. The research develops a culturally adapted framework for senior travel dining, offering practical insights for destination managers.

2. Literature Review

2.1. Chinese senior tourists

Senior tourists represent an important market segment for the tourism and hospitality industry; however, profiling this group remains challenging due to the absence of a universally accepted age threshold for defining "senior" (Wen et al., 2020). Following the American Association of Retired Persons (AARP) and literature on senior-specific dining behaviors, this study defines seniors as individuals aged 50 and above.

Most research focuses on motivations and constraints. Wen et al. (2020) identified Chinese seniors' four travel constraints. While these studies attempt to infer needs through desired travel activities, stated motivations often diverge from actual experiences, particularly for Chinese tourists. Such divergence is salient in the travel dining context, where Chinese tourists frequently suppress personal food preferences to maintain group harmony (Chang et al., 2010). For example, they may consume disliked local dishes to preserve the *Mianzi* of chef or companions, viewing this compliance as a form of politeness (Lin et al., 2020). Investigating motivations alone thus fails to capture the complexity of their consumption experiences. Since experiential value is contingent on the fulfillment of actual needs (Andersson, 2007), investigating the lived travel experience serves as a superior proxy for uncovering these needs. However, empirical research on how Chinese seniors actually experience travel remains insufficient (Huang et al., 2024).

2.2. Relational third-place theory

Relational third-place theory suggests that senior diners form attachments to commercial establishments when their instrumental, social, and emotional needs are fulfilled (Rosenbaum, 2006; Rosenbaum et al., 2007). Through this process, routine service encounters may evolve into meaningful "places of attachment," fostering positive behavioral intentions (see Figure 1; Vada et al., 2019). Familiarity, comfort, and belonging enhance emotional support, encouraging loyalty and reciprocal behavior (Hanks et al., 2020). This mechanism is especially important for Chinese senior tourists, who often face uncertainty, anxiety, and learned helplessness in unfamiliar environments (Wen et al., 2020). Supportive dining spaces—offering emotional comfort or companionship—can function as practical, gathering, or home-like places, facilitating psychological attachment (Song et al., 2018).

The theory identifies three core needs: instrumental (functional support), social (relational interaction), and emotional (psychological comfort). While these dimensions are broadly applicable, cultural differences necessitate adaptation. In China, seniors prioritize in-group socialization (e.g., with family) over interactions with staff or other customers, reflecting traditional social structures (Yang et al., 2022). Contextually, travel dining differs from everyday dining, with memorability serving as a critical predictor of attachment (Tsai, 2016). Existing research rarely considers seniors' experiential needs in travel settings (Huang et al., 2024), highlighting the need to examine how relational third-place mechanisms operate in Chinese seniors' travel dining.

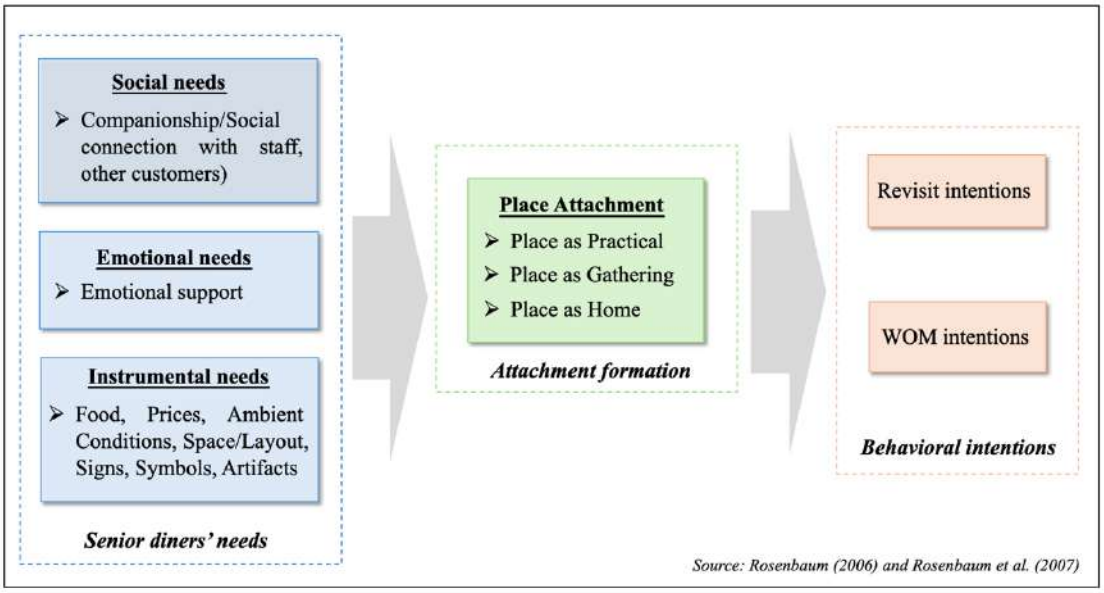

Figure 1. Conceptual model

3. Methodology

3.1. Reasons for Mixed-Methods Design

This study employs an exploratory sequential mixed-methods design to conceptualize and validate the travel dining experiences of Chinese senior tourists. Given that this phenomenon is under-researched and lacks established measurement indicators, an exploratory entry point is required. This design facilitates an inductive discovery of context-specific dimensions followed by deductive validation (Creswell & Plano Clark, 2018). As illustrated in Figure 2, the research proceeded in two distinct phases.

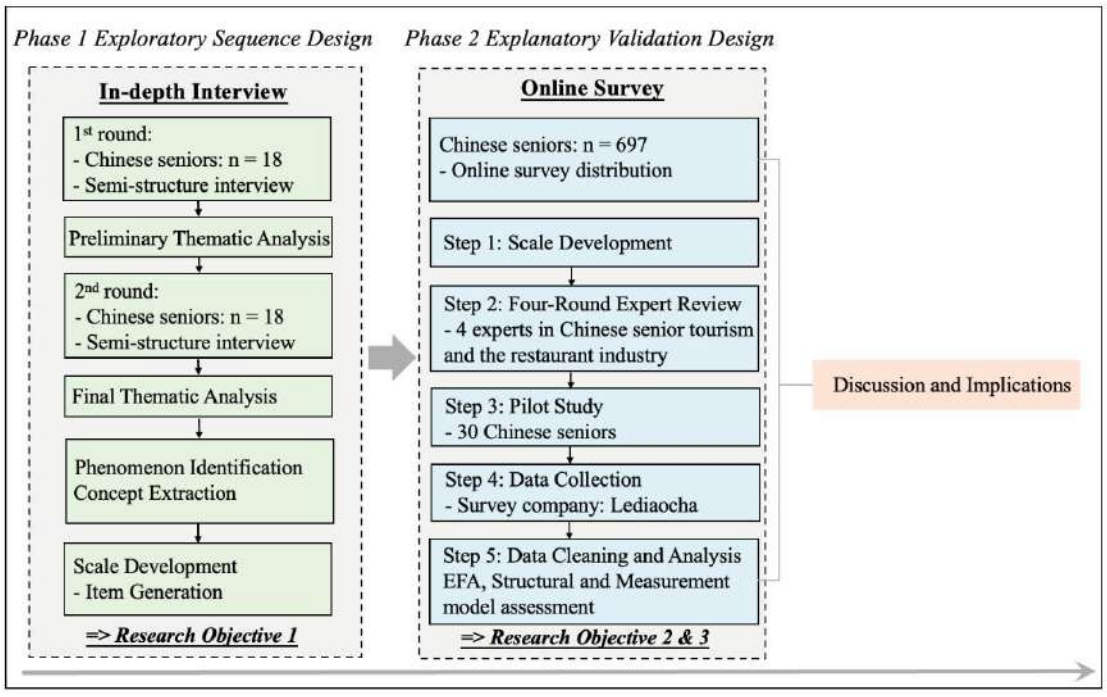

Figure 2. Research Design

3.2. Phase 1

3.2.1. Data collection

This study employed semi-structured interviews to collect narrative data from Chinese seniors aged 50 or above who had undertaken travel within the previous year. Participants were recruited through personal networks via social media (WeChat) and campus poster advertisements at The Hong Kong Polytechnic University, using purposive and snowball sampling. Ethical approval was obtained from the university's Ethics Review Board (Approval No. HSEARS20220928006), and all interviews were conducted in accordance with established ethical protocols.

Initial recruitment involved 18 eligible interviewees through campus poster advertisements. At the outset, participants were informed of the study's purpose and assured of confidentiality. With informed consent, all interviews were digitally recorded. Key prompts included: "Please describe the most recent travel dining experience within the past year" and "What made this experience memorable for you and why?" A semi-structured interview format was adopted to allow flexibility and encourage rich, in-depth responses.

Preliminary coding revealed recurring social, instrumental, and emotional themes; however, thematic saturation had not yet been achieved. To enhance thematic coverage, additional senior tourists were recruited, ensuring variation in age group, service context, and prior tourism experience. Saturation was continuously monitored, and recruitment ceased when no new conceptual categories emerged (Hennink et al., 2017). Saturation was reached after the 11th interview and confirmed through 7 subsequent interviews. In total, 36 Chinese seniors (16 males and 20 females) were interviewed between May 2024 and August 2024 via either online or face-to-face sessions lasting approximately 45 minutes.

3.2.2. Data analysis

All interviews were audio-recorded and transcribed verbatim and analyzed using Braun and Clarke's (2006) six-step thematic analysis in NVivo 15.0. The analysis identified seven dimensions of Chinese seniors' dining experiences (see Table 1): *guanxi* with companions, *guanxi* with employees, *mianzi* affirmation, nostalgia, familiarity, authenticity, and health.

Themes	Sub-themes - *Definition*		Illustrative Quote
Social aspects	**Guanxi with companions** - *Social connection with travel companions*	• Companions' satisfaction • A comfortable and sociable atmosphere • Food variety	*The whole family was happy when we ate there* (Informant #F15)
	Guanxi with employees *-Social connection with restaurant employees*	• Friendly and polite service • Equal treatment • Warm and heartfelt conversation	*I remember that restaurant so fondly because the staff were very friendly and even chatted with us proactively* (Informant # F16)
	Mianzi affirmation - *The maintenance of social standing and connectedness*	• Fine-dining establishments • Online brand reputation • A decent dining atmosphere	*It was a trendy restaurant that everyone knew about, but none of my friends had been there. I happened to visit it, and after the trip I wanted to brag about the experience to them.* (Informant #M8)
Emotional aspects	**Nostalgia** - *An emotion yearning for past experiences*	• Unchanged table settings • Unchanged recipes • Unchanged décor • Traditional tastes and smells	*When I had the tom yum soup there, it felt like being back in those relaxing days traveling in Thailand.* (Informant #F19)
Instrumental aspects	**Familiarity** - *Recognition of the known*	• Habitual flavors • Common ingredients • Familiar restaurant types/names/brands • Familiar cooking methods	*We'd done thorough research beforehand and knew their dishes well.* (Informant #F1)
	Authenticity - *Perceived genuineness of local character*	• Local specialty • Local popularity • Local ingredients • Servers' recommendation • Local-style décor	*We had authentic local lamb at that Xinjiang BBQ place, and it wasn't gamey at all.* (Informant #F10)
	Health - *Perceived healthiness of meals*	• Hygienic dining environment • High-quality ingredients • Healthy food options • Light flavors • Smaller portions • Soft and warm food options	*That restaurant's dishes weren't too salty or oily, and they were easy on the stomach* (Informant #F14)

Table 1. Results of phase 1.

3.2.3. Hypothesis development

The role of attachment. Place attachment refers to a strong emotional bond with a specific location and is affective in nature (Hanks et al., 2020). Relational third-place theory posits that such attachment emerges when restaurants fulfill instrumental, social, and emotional needs (Rosenbaum et al., 2007). Travel dining experiences can satisfy multiple needs simultaneously, including physiological needs, curiosity about local food, and the desire to savor local culture (Tsai, 2016). Accordingly, drawing on relational third-place theory, we propose the following hypothesis:

H1a-g. Travel dining experience dimensions (i.e., *guanxi* with companions, *guanxi* with employees, *mianzi* affirmation, nostalgia, familiarity, authenticity, and health) significantly influences place attachment.

Prior tourism research has established place attachment as a robust predictor of tourist behaviors (Mohamed et al., 2022). In the context of Chinese seniors, these behaviors increasingly manifest digitally. Social media platforms like WeChat and TikTok are deeply integrated into their daily lives (Zhao et al., 2021) and seniors are becoming active adopters of travel technology (Zhang et al., 2024). Accordingly, rather than employing the broad construct of electronic word-of-mouth (eWOM), this study operationalizes behavioral intentions as social media sharing alongside traditional word-of-mouth (WOM) to capture the specific nuances of this demographic. Consistent with relational third-place theory (Rosenbaum et al., 2007), we propose the following hypothesis:

H2a-b. Attachment significantly influences WOM intentions and social media sharing intentions.

The role of memorability. Memorable experiences are defined by the subjective recollection and evaluation of past events (Kim et al., 2012). Memorability is a critical outcome in tourism experiences (Vada et al., 2019), diners increasingly seek memorable experiences over mere consumption, prompting research into memory formation (Lin, 2022). Memorability arises when emotional, intellectual, or physical stimulation absorbs the individual, drawing them closer to the setting (Patterson et al., 2017). Hence, memorable food consumption facilitates deep emotional investment. Just as positive experiences strengthen identification and sense of belonging with a destination (Tsai, 2016), vivid dining memories can forge a specific attachment to the dining venue itself. Accordingly, the following hypothesis is proposed:

H3a-g. Memorability mediates the relationship between travel dining experience dimensions (i.e., *guanxi* with companions, *guanxi* with employees, *mianzi* affirmation, nostalgia, familiarity, authenticity, and health) and attachment.

Recent evidence suggests that memorable experiences are one of the strongest predictors of positive tourist behaviors (Kim et al., 2024). Therefore, we propose the following hypothesis:

H4a-b. Memorability significantly influences WOM intentions and social media sharing intentions.

The moderating effect of subjective age. Subjective age refers to how young an individual perceives themselves to be (Peluso et al., 2021). Cross-cultural evidence indicates that older adults typically report feeling younger than their actual age, reflecting a pervasive youthful bias (Barak, 2009). Seniors who feel younger generally exhibit more positive self-evaluations and

greater openness to new experiences (Peluso et al., 2021; Stephan et al., 2013). Accordingly, the following hypotheses are proposed (see Figure 3):

H5a-g. Subjective age moderates the relationships between travel dining experience dimensions (i.e., *guanxi* with companions, *guanxi* with employees, *mianzi* affirmation, nostalgia, familiarity, authenticity, and health) and attachment.

H6a-g. Subjective age moderates the relationships between travel dining experience dimensions (i.e., *guanxi* with companions, *guanxi* with employees, *mianzi* affirmation, nostalgia, familiarity, authenticity, and health) and memorability.

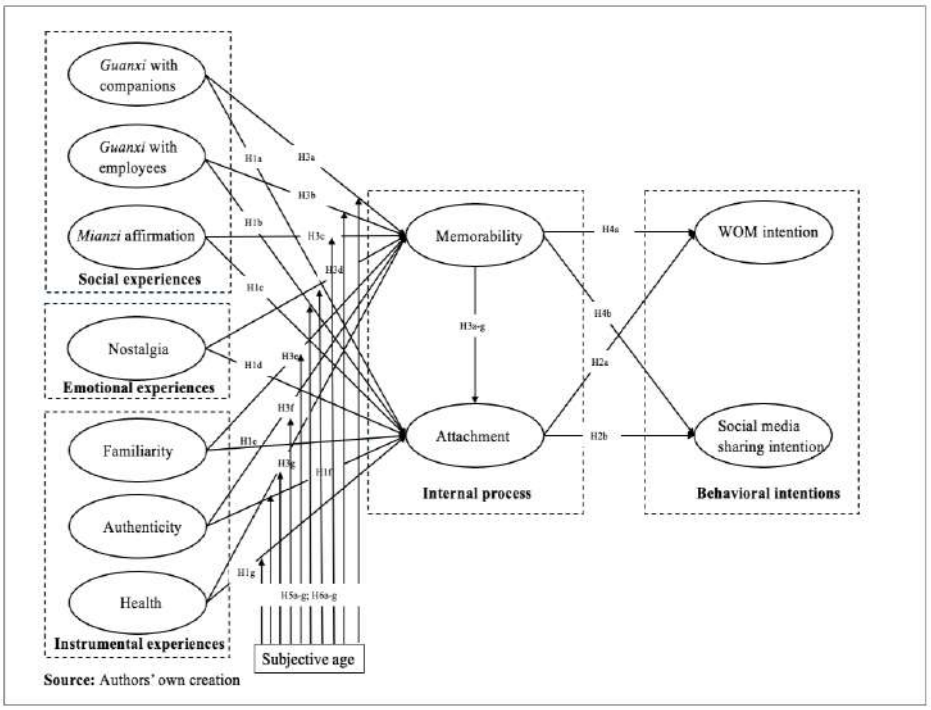

Figure 3. Hypothesized model

3.3. Phase 2

3.3.1. Measurement

The final questionnaire included 50 items measured on 7-point Likert scales (1 = strongly disagree, 7 = strongly agree), assessing travel dining experiences, internal processes, and future behavioral intentions. Scale items and sources are summarized in Table 2. Subjective age was assessed by asking participants to indicate their "felt age" on a scale from 0 to 120 (Stephan et al., 2013).

Variable	Items	Sources
Guanxi with companions	GC1: Dining there made me feel related to my companions. *GC2: Dining there made me feel like it helped strengthen my relationships with my companions GC3: Dining there made me feel a sense of togetherness with my companions	Dogerlioglu-Demir et al. (2022); Interview data*
Guanxi with employees	GE1: Interacting with employees of the restaurant made me feel comfortable. GE2: I interacted well with employees of the restaurant. GE3: I enjoyed interacting with employees of the restaurant. *GE4: The employees were relaxing to interact with.	Lin and Wong (2020); Interview data*
Mianzi affirmation	MI1: Dining there made me feel like I was experiencing something my friends haven't experienced. MI2: Dining there made me feel like I was experiencing what my friends had already experienced. MI3: Dining there made me feel like I'd have something to talk about regarding this dining experience with my friends after returning home. MI4: Dining there made me feel like I earned "mianzi" from those around me.	Fu et al. (2017)
Nostalgia	*NOS1: Dining there made me feel the changing of time. *NOS2: Dining there made me feel remembering something from the past. NOS3: Dining there reminded me of past accomplishments or other important events in my life. NOS4: When dining there, I reminisce about good events from my past. NOS5: Dining there made me feel sentimental. NOS6: When I think about the restaurant, I am reminded about good things that have happened in my life.	Brocato et al. (2015); Interview data*
Familiarity	FA1: I was very familiar with information on the restaurant's food. FA2: I was more familiar than the average person regarding the restaurant's food. FA3: I was more familiar than those who travel to this destination frequently regarding the restaurant's food. FA4: I was more familiar than my companions regarding the restaurant's food. FA5: I spent time gathering information about the restaurant's food	Horng et al. (2012)
Authenticity	*AU1: Seeing lots of local people when dining there made me feel that it is authentic. AU2: Dining there made me feel connected to the culture AU3: The properties of the restaurant matched my impression of the local culture AU4: Dining there made me feel like I was tasting authentic local food	Kim and Lee (2022); Interview data*
Health	*HE1: The restaurant offered food that does not put a burden on the stomach HE2: The food of the restaurant was hygienic HE3: The food of the restaurant was safe HE4: The food of the restaurant provided good nutrition	Choe and Kim (2018); Interview data*
Memorability	MEM1: I will remember many positive things about the dining experience. MEM2: I won't forget my experience at the restaurant.	Lin (2022)
Attachment	ATTA1: I would not substitute any other restaurant for the overall experience I get at the restaurant in that tourism destination. ATTA2: I think that my taste is similar to other customers at the restaurant.	Kim and Lee (2022)
Social media sharing intention	SMS1: I would like to chat with friends about this travel dining experience on mobile social media SMS2: I would like to create posts about this travel dining experience on mobile social media SMS3: I would like to post messages about this travel dining experience on mobile social media SMS4: I would like to get replies from friends about my posted travel dining experience on mobile social media SMS5: I would like to receive "Likes" regarding this travel dining experience on mobile social media SMS6: I would like to post photos about this travel dining experience on mobile social media	Wong et al. (2020)
WOM intention	WOM1: I would recommend the restaurant to my friends	Maxham III (2001)

Source: Authors' own creation

Table 2. Scale items.

3.3.2. Data collection

This stage extended and validated the qualitative findings. The sampling frame for the online survey comprised Chinese seniors who were: (a) aged 50 or older; (b) residents of mainland China; and (c) had traveled within the past year. Data were collected via Lediaocha (https://www.lediaocha.com/), a leading survey platform in mainland China, yielding 700 responses between November 21 and November 28, 2025. Following data screening, 3 responses exhibiting straight-lining (i.e., identical ratings for >90% of items) were removed, resulting in a final sample of 697 for analysis.

3.3.3. Data analysis

This study used two statistical programs to analyze the data. First, we utilized SPSS (version 27). We then tested the proposed research model using partial least squares-SEM (PLS-SEM), which is more appropriate for this study (Hair et al., 2011).

3.3.4. Results

Samples. Of the 697 valid responses (Table 3), 52.4% were male, slightly outnumbering females (47.6%).

Variable		n	%
Gender	Male	365	52.4
	Female	332	47.6
Age	50-54	198	28.4
	55-59	200	28.4
	60-64	199	28.6
	≥ 65	100	14.3
Educational level	Junior high school and below	3	0.4
	High school / Secondary specialized school graduate	66	9.5
	Associate degree / Vocational college graduate	130	18.7
	Bachelor's degree	440	63.1
	Master's degree	51	7.3
	Doctoral degree	7	1
Marital Status	Married	664	95.3
	Divorced	27	3.9
	Widowed	3	0.4
	Single	3	0.4
Individual monthly income	CNY 5,000 and below	328	47.1
	CNY 5,001-10,000	231	33.1
	CNY 10,001-15,000	60	8.6
	CNY 15,001-20,000	43	6.2
	CNY 20,001–25,000	0	0
	CNY 25,001-30,000	18	2.6
	CNY 30,001-35,000	12	1.7
	CNY 35,000 and above	5	0.7
Travel companions	Parents	65	9.3
	Spouse	492	70.6
	Children	353	50.9
	Other relatives	32	4.6
	Friends or (former) co-workers	120	17.2
	Alone	43	6.2

Source: Authors' own creation

Table 3. Participant Profile.

Exploratory factor analysis. An exploratory factor analysis with Promax rotation in SPSS 27.0 was performed to uncover the underlying structure of the travel dining experiences among Chinese seniors. Using a factor loading threshold of 0.45 and communalities of 0.5 (Comrey & Lee, 2013), items GC4 and HE5 were dropped to extract 7 factors that accounted for up to 75.871% of the variance (Table 4).

Dining experience	1	2	3	4	5	6	7	Cumulative %
Factor 1: Nostalgia								**47.881**
NOS1	0.999							
NOS2	0.948							
NOS3	0.901							
NOS4	0.842							
NOS5	0.809							
NOS6	0.800							
Factor 2: Familiarity								**59.172**
FA1		0.914						
FA2		0.910						
FA3		0.898						
FA4		0.818						
FA5		0.757						
Factor 3: Guanxi with employees								**64.100**
GE1			0.886					
GE2			0.853					
GE3			0.833					
GE4			0.781					
Factor 4: Health								**67.573**
HE1				0.865				
HE2				0.822				
HE3				0.811				
HE4				0.635				
Factor 5: Authenticity								**70.570**
AU1					0.873			
AU2					0.778			
AU3					0.784			
AU4					0.715			
Factor 6: Guanxi with companions								**73.241**
GC1						0.892		
GC2						0.838		
GC3						0.745		
Factor 7: Mianzi affirmation								**75.871**
MI1							0.949	
MI2							0.653	
MI3							0.636	
MI4							0.617	

Table 4. Exploratory factor analysis of travel dining experiences.

Common variance bias test. Harman's single-factor analysis showed that the largest factor accounted for 46.127% of variance in the whole dataset, below the 50% threshold (Podsakoff et al., 2003). Tolerance values were with the acceptable limits (>0.2), and all variance inflation factor (VIF) values were well below 5 (ranging from 1.609 to 4.292), indicating no multicollinearity.

Measurement model assessment. As suggested by Hair et al. (2019), the convergent validity of the proposed model was deemed acceptable because (a) all factor loadings exceeded 0.6, (b) all composite reliability (CR) values were greater than .6, and (c) all average variance extracted

(AVE) values were above 0.5 (Table 5). Cronbach's alpha values also verified the reliability of the measure employed in this exploratory social science study; all alpha values were higher than 0.6 (Nunnally & Bernstein, 1994). The discriminant validity of all constructs was considered acceptable because the square root of the AVE for each construct was greater than its correlations (r) with other constructs (Chin, 1998), and all heterotrait-monotrait ratio (HTMT) values fell below 0.9 (Henseler et al., 2016); see Table 6.

Construct	Items	FL	AVE	CR	CA
Guanxi with companions			0.762	0.906	0.843
	GC1	0.874			
	GC2*	0.858			
	GC3	0.886			
Guanxi with employees			0.744	0.921	0.885
	GE1	0.867			
	GE2	0.874			
	GE3	0.872			
	GE4*	0.837			
Guanxi with companions			0.762	0.906	0.843
	GC1	0.874			
	GC2	0.886			
	GC3*	0.858			
Mianzi affirmation			0.733	0.916	0.878
	MI1	0.802			
	MI2	0.884			
	MI3	0.870			
	MI4	0.865			
Nostalgia			0.796	0.959	0.949
	NOS1*	0.867			
	NOS2*	0.900			
	NOS3	0.913			
	NOS4	0.894			
	NOS5	0.881			
	NOS6	0.896			
Familiarity			0.749	0.937	0.916
	FA1	0.875			
	FA2	0.893			
	FA3*	0.885			
	FA4	0.865			
	FA5	0.807			
Authenticity			0.697	0.902	0.855
	AU1*	0.812			

	AU2	0.847			
	AU3	0.867			
	AU4	0.811			
Health			0.718	0.911	0.869
	HE1*	0.852			
	HE2	0.864			
	HE3	0.856			
	HE4	0.818			
Memorability			0.814	0.898	0.773
	MEM1	0.914			
	MEM2	0.890			
Attachment			0.764	0.866	0.693
	ATT1	0.895			
	ATT2	0.853			
Social media sharing intention			0.765	0.951	0.938
	SMS1	0.816			
	SMS2	0.864			
	SMS3	0.899			
	SMS4	0.885			
	SMS5	0.903			
	SMS6	0.880			
WOM intention			1	1	1
	WOM1	1			

Table 5. Results of reliability and convergent validity analysis.

Fornell and Larcker criterion and HTMT

	1	2	3	4	5	6	7	8	9	10	11
(1) GC	**0.873**	0.755	0.509	0.517	0.449	0.692	0.725	0.729	0.638	0.598	0.565
(2) GE	0.669	**0.863**	0.610	0.571	0.500	0.789	0.833	0.770	0.761	0.597	0.633
(3) MI	0.452	0.541	**0.856**	0.856	0.723	0.649	0.614	0.741	0.785	0.745	0.516
(4) NOS	0.474	0.523	0.784	**0.892**	0.717	0.580	0.563	0.729	0.718	0.723	0.472
(5) FA	0.402	0.448	0.650	0.669	**0.865**	0.513	0.506	0.580	0.662	0.651	0.378
(6) AU	0.608	0.686	0.564	0.522	0.451	**0.835**	0.814	0.869	0.830	0.665	0.731
(7) HE	0.639	0.728	0.541	0.515	0.450	0.698	**0.847**	0.817	0.801	0.618	0.655
(8) MEM	0.609	0.632	0.612	0.622	0.487	0.700	0.663	**0.902**	0.864	0.767	0.782
(9) ATTA	0.503	0.598	0.618	0.584	0.528	0.640	0.623	0.632	**0.874**	0.785	0.760
(10) SMS	0.551	0.544	0.678	0.681	0.604	0.594	0.557	0.648	0.634	**0.875**	0.580
(11) WOM	0.535	0.595	0.487	0.458	0.395	0.657	0.607	0.681	0.637	0.561	**1.000**

Note: GC = Guanxi with companions; GE = Guanxi with employees; MI = Mianzi affirmation; NOS = Nostalgia; FA = Familiarity; AU = Authenticity; HE = Health; MEM = Memorability; ATTA = Attachment; SMS = Social media sharing intention; WOM = WOM intention. Fornell-Larcker criterion: diagonal elements are the square root of the AVEs, and the off-diagonal elements are the correlations between the construct; HTMT: the numbers above the diagonal are HTMT values

Source: Authors' own creation

Table 6. Results of discriminant validity analysis

Structural model assessment. Figure 4 presents the overall SEM results, including estimated path coefficients and the proportion of variance explained (R^2) by the independent variables. All R^2 values exceeded the 0.19 threshold, indicating satisfactory predictive accuracy (Hair et al., 2011). Results of mediation test are shown in Table 7.

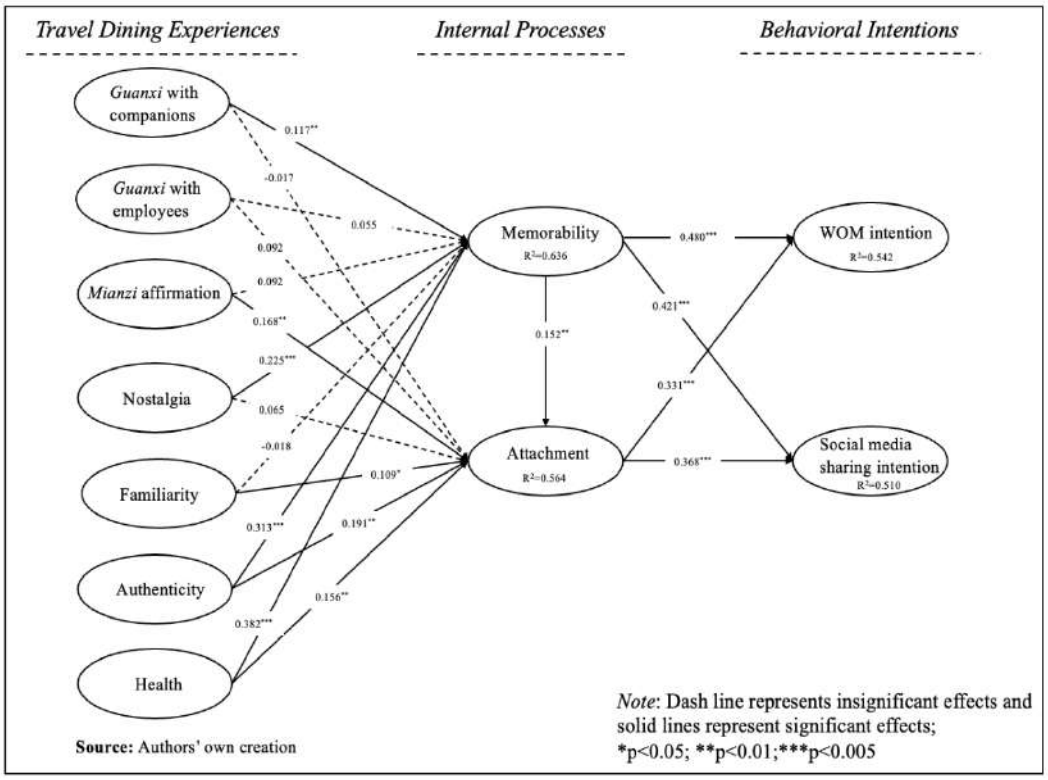

Figure 4. Result of the structural equation modeling.

	Mediation test					
	IV -> DV	IV -> MV	MV -> DV	IE	Sobel Z test	Mediation
GC -> MEM -> ATTA	-0.017	0.117**		0.018*	2.169*	YES
GE -> MEM -> ATTA	0.092	0.055		0.008	1.121	NO
MI -> MEM -> ATTA	0.168**	0.092		0.014	1.599	NO
NOS -> MEM -> ATTA	0.225***	0.225***	0.152**	0.034*	2.590**	YES
FA -> MEM -> ATTA	-0.018	-0.018		-0.003	-0.538	NO
AU -> MEM -> ATTA	0.313***	0.313***		0.048**	2.933**	YES
HE -> MEM -> ATTA	0.382***	0.382***		0.028*	2.482*	YES

Note: GC = Guanxi with companions; GE = Guanxi with employees; MI = Mianzi affirmation; NOS = Nostalgia; FA = Familiarity; AU = Authenticity; HE = Health; MEM = Memorability; ATTA = Attachment; SMS = Social media sharing intention; WOM = WOM intention. ***p < 0.001, **p < 0.01, *p < 0.05

Source: Authors' own creation

Table 7. Results of mediation analysis.

Multi-group analysis. A multigroup analysis (MGA) was conducted to examine whether the structural relationships differ across the five subjective-age groups. Based on the prevalence of a 10- to 14-year subjective age bias in Chinese seniors (Barak, 2009; current study), the sample was divided into five cohorts with 5-year intervals (Figure 5). Following the recommended procedure (Henseler et al., 2016), we assessed measurement invariance using the Measurement Invariance of Composites (MICOM) approach. The results confirmed that partial measurement invariance (i.e., configural and compositional invariance) was established for all constructs, thereby permitting valid multigroup comparisons. Subsequently, we applied the PLS-MGA non-parametric approach to test for group differences in path coefficients. The results are shown in Table 8.

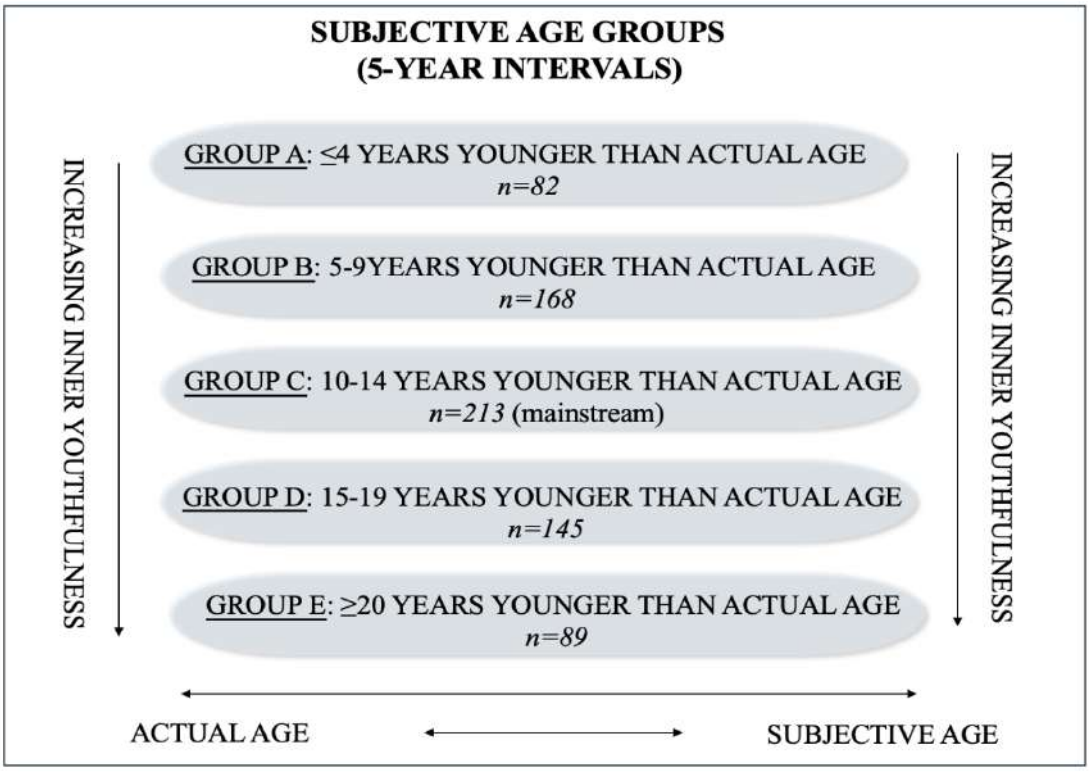

Figure 5. Five subjective age group.

Path	Group A	Group B	Group C	Group D	Group E
GC -> MEM	0.000	0.119	0.199	0.029	0.085
GC -> ATTA	-0.027	0.000	0.036	0.005	-0.100
GE -> MEM	0.086	0.182	0.023	0.019	0.086
GE -> ATTA	0.277	**-0.082^{E}**	0.086	-0.031	**0.277^{B}**
MI -> MEM	0.072	0.043	**0.256^{E}**	0.045	**-0.148^{C}**
MI -> ATTA	0.004	0.195	0.154	0.244	0.177
NOS -> MEM	0.238	0.220	0.101	0.300	0.376
NOS -> ATTA	0.087	0.105	**-0.095^{D}**	**0.268^{C}**	0.034
FA -> MEM	-0.044	-0.082	0.026	0.066	-0.060
FA -> ATTA	0.118	-0.005	**0.299^{D}**	**-0.049^{CE}**	**0.243^{D}**
AU -> MEM	0.176	0.372	**0.185^{D}**	**0.441^{C}**	0.443
AU -> ATTA	0.291	**0.434^{CD}**	**0.097^{B}**	**-0.059^{B}**	0.185
HE -> MEM	**0.509^{BCDE}**	**0.029^{A}**	**0.209^{A}**	**0.082^{A}**	**0.160^{A}**
HE -> ATTA	**0.024^{D}**	0.161	**0.091^{D}**	**0.368^{AC}**	0.027
MEM -> ATTA	0.125	0.110	0.237	0.177	0.125

Notes: GC = Guanxi with companions; GE = Guanxi with employees; MI = Mianzi affirmation; NOS = Nostalgia; FA = Familiarity; AU = Authenticity; HE = Health; MEM = Memorability; ATTA = Attachment; Bold values with the same superscripts across groups indicate significant differences in coefficients among those clusters

Source: Authors' own creation

Table 8. Results of Multi-group analysis

4. Discussion

4.1. Dimensions of travel dining experiences

The qualitative phase confirmed the relevance of Rosenbaum et al.'s (2007) tripartite framework—instrumental, social, and emotional needs—in the travel dining context. Importantly, this study moves beyond generic classifications of dining needs by culturally recalibrating these dimensions. It shows that Chinese seniors' dining needs are not merely functional and emotional but are embedded in Confucian social structures.

4.2. Relationship between travel dining experiences, internal processes, and behavioral intentions

Contrary to Rosenbaum et al.'s (2007) propositions, social needs did not uniformly predict attachment among Chinese seniors. Guanxi with employees had no significant effect on attachment, whereas guanxi with companions indirectly enhanced attachment through memorability, reflecting the family-centered nature of Chinese seniors' social interactions (Yang et al., 2022). Dining serves as a social ritual reinforcing emotional bonds (Yu et al., 2015). and shared memorable moments, rather than staff interactions, drive attachment. However, seniors who feel much younger exhibit greater openness to out-group interactions, transforming restaurants into socially meaningful places and facilitating attachment (Peluso et al., 2021).

Mianzi, concern for social status and connectedness, consistently guided behavior but had complex effects on memorability. Outward attention toward social monitoring reduces immersion and episodic encoding, particularly for seniors with a younger subjective age, who experience mianzi as social pressure. For mainstream seniors with a moderately younger subjective age, *mianzi* evokes pride (Qi, 2011), enhancing memorability. Across the sample,

successful mianzi maintenance directly fostered attachment by providing psychosocial comfort, aligning with attachment as a "safe haven", consistently normalizes Chinese tourist behavior (Debenedetti et al., 2014).

Nostalgia influences attachment indirectly via memorability. While reminiscing evokes positive affect, it can disengage attention from the present setting. When nostalgic experiences are encoded as memorable episodes, attachment strengthens. Subjective age moderates this effect: younger-feeling seniors assimilate nostalgic cues into current self-concepts, enhancing attachment, whereas mainstream seniors experience contrast effects, weakening attachment.

Familiarity positively influenced attachment but not memorability, likely due to high cultural proximity in domestic travel, which renders experiences schema-congruent and less distinctive. Authenticity, both directly and via memorability, strengthened attachment, with subjective age shaping the relative importance of familiarity versus authenticity. Mainstream seniors value familiar safety and authentic experiences as rewards for past hardships, whereas younger-feeling seniors pursue modernized or novel heritage experiences to align with contemporary self-concepts.

Finally, health had robust direct and indirect effects on attachment, reflecting its centrality to Chinese seniors' travel dining. Healthy dining mitigates anxiety and acts as a risk-reduction mechanism (Lin et al., 2022; Pan et al., 2025), reinforcing restaurants as secure bases that provide physical and psychological safety. This effect was consistent across subjective age groups, highlighting the cultural salience of health preservation.

5. Conclusion and Implications

5.1. Theoretical Implications

This study contributes to literature in three ways. First, this study fills a critical gap in tourism research by focusing on the demand-side perspective of Chinese senior travelers, an area previously overlooked (Huang et al., 2024). Chinese seniors tourists' dining experiences are normalized by not merely their demographics' characteristics, like nostalgia (Gu et al., 2021), but also cultural value. Culture does not just shape *what* seniors eat, but *how* they psychologically process and memorize those experiences.

Second, this study advances relational third-place theory by adding cultural elements and deepening its underlying mechanism by introducing memorability. We show that Chinese seniors interpret these needs through cultural lens, such as seeking *Mianzi* affirmation. Besides, we extend the theory by identifying memorability as the missing link. This proves that for Chinese seniors, attachment formation is an indirect process that relies on memory as a key filter.

Third, we respond to the challenge posed by Otoo et al. (2021) that senior tourists are now too diverse to be accurately defined by simple stereotypes (e.g., chronological age). To capture this complexity, we validate subjective age as a powerful psychological moderator shaping senior tourists' dining experiences, thereby addressing the gap identified by Li and Su (2025). We show that younger-feeling senior tourists are less constrained by traditional cultural norms and exhibit greater socialization, higher self-satisfaction, and stronger openness to modernized authenticity.

5.2. Practical Implication

First, since memorability bridges in-group *Guanxi* and *Mianzi* with attachment, restaurants could provide private dining areas to reduce noise and enable uninterrupted conversation. Staff should proactively identify special occasions (e.g., birthdays, reunions) and personalize the experience through decorations, commemorative photos, small celebrations, or souvenirs. Service training should also stress appropriate boundary management—employees should deliver prompt, respectful service without being intrusive, thereby affirming *mianzi* while avoiding social pressure. In marketing and service communication, explicit age-based labels (e.g., "elderly care menus" or "senior-specific menus") should be avoided, as they may alienate seniors with a younger subjective age. Positioning should instead emphasize inclusive hospitality and personalized comfort, for example by highlighting practices that consider all customers' health and well-being as part of corporate social responsibility initiatives (Liu et al., 2024).

Second, this study finds that familiarity strengthens emotional bonding by signaling comfort and safety. For overseas destinations, operators can reduce anxiety by institutionalizing culturally familiar comfort rituals, such as serving hot water upon seating and prioritizing hot dishes. Training frontline staff to use simple Chinese greetings and offering a small welcome beverage provide immediate symbolic cues of hospitality.

Third, the findings indicate that seniors with a younger subjective age particularly prefer modernized authenticity. Culinary teams may innovate by reimagining classic dishes with contemporary aesthetics—for example, styling dishes to resemble iconic landmarks or cultural motifs. In parallel, operators can integrate interactive cultural performances into the dining experience, encouraging guest participation to satisfy this cohort's heightened preference for engagement. To further enhance immersion, staff should employ cultural storytelling, with servers or chefs briefly introducing the origins of dishes or linking performances to culinary heritage.

Last, given the widespread digital adoption among Chinese senior tourists, marketers should use platforms like WeChat and TikTok as primary engagement hubs. Restaurants can share short, dynamic, and easily shareable videos showcasing cultural performances or innovative dishes. Campaigns should feature influencers whose enthusiastic and interactive communication styles resonate with seniors.

6. Limitations and Future Directions

This study is limited by its sole demand-side perspective, cross-sectional design, and Chinese-only context. Future research could integrate customer and provider perspectives, adopt longitudinal and on-site observational methods to capture dynamic dining experiences, and conduct cross-cultural or regional comparisons to test boundary conditions and extend understanding of senior tourists' dining behaviors.

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Dyadic Recall of a Shared Journey Enhances Social-Brain Synchrony and Collaboration

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Abstract

Memorable travel experiences play a crucial role in shaping tourists' attitudes towards destination, well-being, and social behaviors. However, little is known about the neural and behavioral underpinnings of the joint recall of shared travel experiences. Drawing on the theory of collective mind, this study investigated whether dyadic recalling of shared travel experiences facilitates interpersonal neural synchrony and subsequent collaborative performance. Using a fNIRS-based hyperscanning paradigm, dyads jointly recalled shared or non-shared travel experiences while their neural activity was simultaneously recorded. Collaborative performance was subsequently assessed using a joint Simon task. Behavioral results showed a smaller joint Simon effect following shared recall, indicating enhanced dyadic coordination. Preliminary neural findings further revealed higher interpersonal neural synchrony in the right temporoparietal junction (rTPJ) during shared journey recall compared to non-shared journey recall. Together, these results suggest that jointly recalling shared travel experiences promotes the emergence of a collective mind, characterized by aligned neural representations that support improved behavioral coordination. This study contributes novel neural evidence to tourism psychology and highlights the social value of shared travel memories.

Keywords: Shared travel experience, Collaboration, Inter-brain Neural Synchrony (INS), Joint-Simon task, hyper-scan fNIRS

1. Introduction

Travel is a dynamic process imbued with profound experiences and emotional memories - a journey of the body and mind. When people are on a trip, they often encounter moments worthy of lifelong remembrance. Such unforgettable travel experiences may arise from a cultural exchange, an immersion in natural beauty, a break from daily routines, or the joy of an interpersonal connection. They not only evoke a sense of delight and excitement but also often exert profound influences.

In tourism, understanding the factors of memorable travel experiences (MTEs) is essential, as those memorable experiences can offer in-the-moment pleasure and long-term well-being for travelers (Kim et al., 2022b; Lv et al., 2023; Tung & Ritchie, 2011) and boost the industry's economic incomes (Yin et al., 2017). Previous research on MTEs have systematically investigated its key components (Kim et al., 2012; Kim et al., 2022a), and how such memorable experiences can be created for consumers to improve quality of tourism services (Hosany et al., 2022). For example, memory-based evaluations have been shown to enhance place attachment (Sthapit et al., 2017), strengthen revisit intentions (Rasoolimanesh et al., 2021), and

increase intentions to share experiences with others (Myrick & Wojdynski, 2016; Wood et al., 2024). Having a memorable experience with wildlife also motivate pro-environmental behaviors by reinforcing emotional and moral connections to destinations (Ballantyne et al., 2011).

Interestingly, findings from recent research extended our understanding of tourism memories, moving beyond the tourism industry and tourist behaviors to explore their impact on individual well-being and mental health outcomes (Kim et al., 2022b; Lv et al., 2023). Moreover, memory activation has been linked to broader cognitive consequences, including enhanced cognitive flexibility and creative performance (Hu & Wan, 2024), suggesting that recalling diverse travel episodes can prime flexible thinking and novel ideation. However, current research mainly focuses on individual recall of travel experiences, with limited attention to the processes and outcomes of joint recalling shared travel experiences among travelers.

Moreover, traveling with partners involves joint exploration, emotional coherence, and self-disclosure. Joint recalling such shared experience often entails a negotiation (Wood et al., 2024), which can reveal implicit feelings and co-create more meaningful memories during the interaction. The malleability of travel memory has been demonstrated when exposed to different types of listener feedback (Tung et al., 2018). Specifically, when tourists receive specific rather than general responses from a listener, they tend to evaluate their positive perceptions of the destination more favorably. However, previous studies have primarily relied on written narratives, interviews, or questionnaires (Chandralal et al., 2015; Tung & Ritchie, 2011), which neglect the reciprocal nature of travel experience sharing. Although a recent study has revealed the dynamic process of joint recall using a self-recorded conversational approach, its research focus remains limited to the reason for memory adaptation (Wood et al., 2024). Therefore, evidence is lacking on whether joint recall of shared travel experiences promotes social bonding or neural synchrony between partners. Also, whether the joint recall of shared travel experiences between individuals influences their subsequent interpersonal behaviors remains unexamined.

To address the research gaps discussed above, this research aims to understand the neural dynamics underlying the process of recalling shared travel experiences and post-recall outcomes in their behavioural performance. Drawing on the theory of collective mind (Shteynberg et al., 2023), this research aims to address two research questions: (1) What are the neural bases of dyadic recall of shared travel experiences among travel companions? (2) Whether dyadic recalling shared travel experiences influences their collaborative performance? Accordingly, the research objectives are defined as follows:

1. To investigate the neural synchrony associated with dyadic recall of shared travel experiences among travel companions.
2. To examine whether dyadic recall of shared travel experiences enhances the joint performance in the collaborative task.

In this study, a dyadic recall paradigm combined with functional near-infrared spectroscopy (fNIRS) hyperscanning was adopted to investigate the neural mechanisms underlying the joint recall of travel experiences. Because fNIRS is robust to motion-related artifacts and supports natural experimental settings (Pan et al., 2017; Yang et al., 2021; Zhang et al., 2023; Zhou et al., 2021), it is particularly well suited for hyperscanning studies of real-time social interactions. This methodological advantage enables the examination of joint recall as it unfolds face-to-face communication, a key condition for the emergence of shared mental representations. Guided by the theory of collective mind, this approach allows for the

examination of how shared remembering aligns neural processes between interaction partners during naturalistic social exchange. To this end, each participant completed the experimental procedure twice, once while recalling a shared travel experience and once while recalling a non-shared travel experience. Each participant completed the experimental procedure twice, once recalling a shared travel experience and once recalling a non-shared travel experience, enabling within-dyad comparisons of neural synchrony and behavioral coordination across contexts. By integrating neural and behavioral measures, this study aims to provide novel insights into how shared travel memories contribute to collective cognitive processes and dyadic collaboration.

2. Methods

2.1 Participants

Data collection was conducted from June to September in 2025. Twenty-seven dyads of adult university students were recruited from Chengdu City in China. Participants have normal or corrected-to-normal vision and no history of mental illness or brain injury. All dyads are same-sex and non-romantic partners and must have undertaken a joint overnight trip within the past year. They were required to provide documented evidence of their shared travel (e.g., social media screenshots or travel photos together). Data from two dyads were excluded due to technical issues. Therefore, twenty-five dyads (N_{total} = 50) were included in the data analyses; see **Table 1** for more details.

Table 1. Details of participant dyads.

ID	Gender	P1-Age	P2-Age	Shared Travel Place	Trip time (1)	Individual Travel Place	Trip time (2)	Interval Between Sessions
101	Female	21	20	Yunnan, Kunming	Apr-25	P1 · Nanjing	Aug-24	3 days
102	Female	20	21	Sichuan, Jiuzhaigou	Nov-24	P2 · Aba Prefecture	Sep-24	3 days
104	Female	21	21	Guangxi, Nanning	Oct-24	P1 · Chongqing	Aug-24	9 days
105	Male	24	26	Sichuan, Jiuzhaigou	Oct-24	P1 · Guiyang	Apr-25	8 days
106	Female	25	25	Singapore	Mar-24	P2 · Changsha	Apr-24	2 days
107	Female	20	19	Hong Kong	Jun-24	P1 · Sanya	Nov-24	3 days
108	Female	20	20	Sichuan, Jiuzhaigou	May-25	P2 · Weihai	Jul-24	5 days
109	Female	22	23	Guangxi	Jul-24	P1 · Yunnan	Apr-25	3 days
110	Female	20	20	Guizhou	Apr-25	P2 · Nanjing	Apr-25	5 days
111	Female	25	24	Beijing	Apr-25	P2 · Kunming	Apr-25	5 days
112	Female	26	26	Guizhou	Sep-25	P2 · Xi'an	Mar-25	3 days
113	Female	21	21	Shaanxi, Xi'an	Jan-25	P2 · Sichuan	Mar-25	95 days
114	Female	20	19	Tokyo	Feb-25	P2 · Northeast China	Feb-25	4 days
116	Female	21	23	Yunnan, Dali	Jul-25	P2 · Chaozhou	Aug-25	4 days
117	Female	21	22	Sichuan, JiuZhaiGou	Jul-25	P1 · Aba Prefecture	Jul-25	7 days
119	Female	20	19	Sichuan, Leshan	May-25	P1 · Sichuan	Feb-25	10 days
120	Female	21	21	Western Sichuan, Ganzi	Feb-25	P2 · Hong Kong	May-25	7 days
121	Female	26	19	Chongqing	Feb-25	P2· Western Sichuan	May-25	7 days

122	Female	20	20	Guizhou & Chongqing	Feb-25	P1 · Suining	Jun-25	16 days
123	Female	20	19	Sichuan, Aba Prefecture	Apr-25	P1 · Japan	Jul-25	9 days
124	Female	19	20	Xianyang Mountain	May-25	P2 · Luoyang	Jul-25	5 days
125	Female	19	19	Sichuan, Leshan	Jan-24	P1 · Yunnan	Jul-25	7 days
126	Female	18	18	Henan, Luoyang	Jun-25	P2 · Qingdao	Aug-25	4 days
127	Female	20	20	Western Sichuan, Ganzi	Jun-25	P2 · Guangzhou	Aug-25	3 days
128	Female	25	23	Shaanxi, Xi'an	May-25	P1 · Zhuhai	Aug-25	3 days

Note: P1, P2: participant1, participant2.

2.2 Procedure and tasks

The study employed a within-subject design and a dyadic interaction approach. To compare the effects of different types of travel experiences, each participant completed the experimental procedure twice: once while recalling a shared travel experience and once while recalling a non-shared travel experience. The order of the two conditions was counterbalanced across participant dyads. Upon successful registration, details about dyads were collected, including (1) a scale of perceived social closeness to evaluate the subjective intimacy between partners, and (2) a report of the length of time they had known each other. Written informed consent was obtained from each participant before their first experimental session. All participants received monetary compensation for their participation.

After arrival for their first or second experiment, each dyad was instructed to complete a pre-test assessment of their baseline emotional arousal using the Positive and Negative Affect Scale (PANAS). Then, both participants were fitted with fNIRS caps, see **Figure 1** (a) for the hyper-scan fNIRS setting. During the experiment, each dyad was seated side by side facing a 23-inch monitor (Dell E2420H; resolution: 1920 × 1080). The viewing distance between participants and the monitor was maintained at around 60 cm.

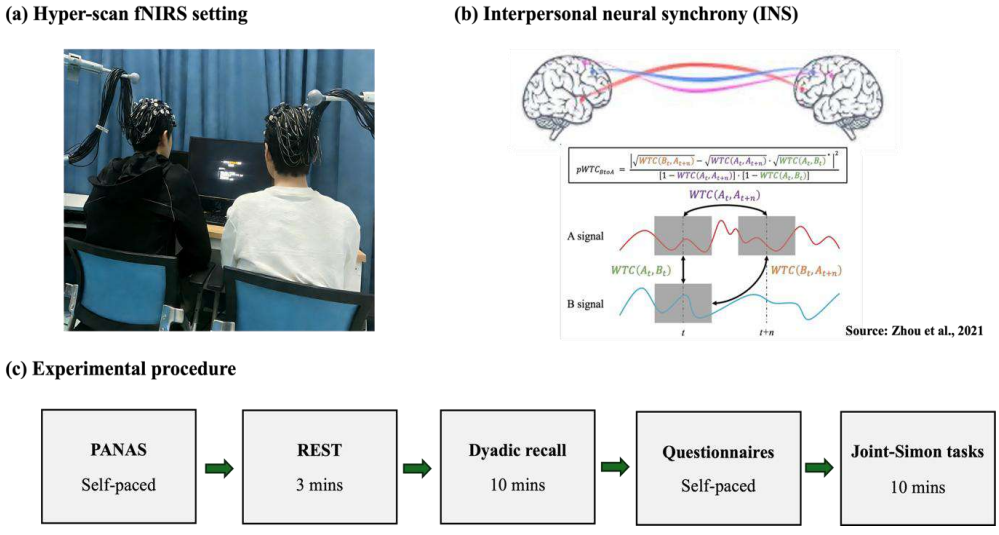

Figure 1. (a) hyper-scan fNIRS setting, (b) interpersonal neural synchrony (INS) and principle of partial wavelet transform coherence (pWTC), and (c) the experimental procedure

At the beginning, participants underwent a 3-min resting-state recording, during which they were instructed to remain still, relax, close their eyes, and avoid speaking so that a neural baseline could be obtained. Next, a dyadic-recall task lasting 10 minutes was performed, during which the two participants were asked to freely recall and discuss their past shared travel experiences. Throughout this recall session, their brain activities were recorded simultaneously using hyper-scan fNIRS, and their verbal interactions and facial expression are video-recorded for subsequent behavioral coding. After the recall task, participants were instructed to complete the PANAS for the post-experiment test of emotion arousal regarding the travel memory recall and the Travel Memory Scale (Kim et al., 2022a) to assess the quality and vividness of their travel memories. Later, the Joint-Simon task was completed by the dyad to measure the collaborative performances that were motivated by recalling shared or non-shared travel experiences, lasting approximately 10 minutes. Neural activity of both participants was recorded simultaneously using fNIRS throughout the task. This research design allowed us to integrate self-report measures with dyadic neural data to examine emotion, memory, and social connectedness during travel recall.

In the Joint Simon task, the target stimuli are red and green squares (6 × 6 cm), presented pseudo-randomly on the left or right side of the screen. Two participants were seated side by side. The participant seated on the left was instructed to respond to one assigned target color (red or green, counterbalanced across participants) by pressing the "Z" key with the right index finger, while ignoring the other color. The participant seated on the right was instructed to respond to the assigned target color by pressing the "M" key with the right index finger. The spatial correspondence between stimulus location and response key may be either congruent (e.g., the stimulus appears on the left/right side of the screen and the response key is located on the left/right side of the keyboard) or incongruent (e.g., the stimulus appears on the left/right side of the screen and the response key is located on the opposite side of the keyboard). Both congruent and incongruent conditions for two participants were exemplified in **Figure 2** (a).

Before the formal experiment, each pair of participants was required to achieve an accuracy rate of at least 90% during the practice trials. The formal experiment consists of two blocks, each containing 60 trials, resulting in a total of 120 trials. The order of conditions within each block was randomized. A 30-second rest interval was provided between blocks. Each trial began with an 800-ms fixation cross, followed by the presentation of the target stimulus for 1000 ms. Participants were instructed to respond as quickly and accurately as possible within the 1000-ms response window; responses exceeding this time limit were recorded as errors. The inter-trial interval (ITI) was pseudo-randomly varied among 7000ms, 8000ms, and 9000ms. The procedure of the Joint-Simon task was shown in **Figure 2** (c), which is consistent with studies using the fNIRS technique for brain signal measurements (Song et al., 2024; Yang et al., 2021).

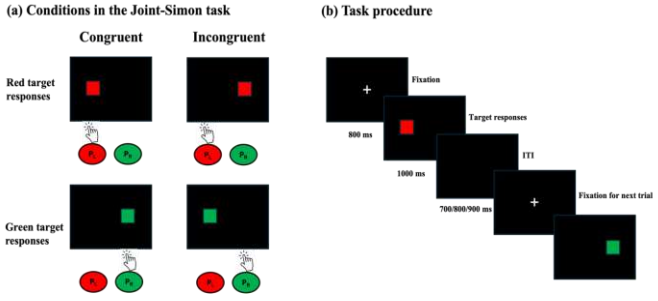

Figure 2. (a) Congruent and incongruent conditions and (b) the task procedure in each trial, of the Joint Simon task. Note: P_L refers to the participant on the left and P_R refers to the participant on the right.

2.3 Brain-imaging data acquisition

NIRS data were recorded throughout the experiment session using the NirSmartII-3000A system (Danyang Huichuang, Jiangsu, China) in continuous-wave mode, with a sampling rate of 21 Hz. The optode array consists of 22 emitters (light sources) and 15 detectors, forming 46 valid measurement channels. The mean distance between each emitter–detector pair is approximately 3 cm. Optode positioning was implemented using an international 10/20 system–compatible NIRS–EEG cap (EASYCAP, Herrsching, Germany). The optode configuration is shown in **Figure 3**.

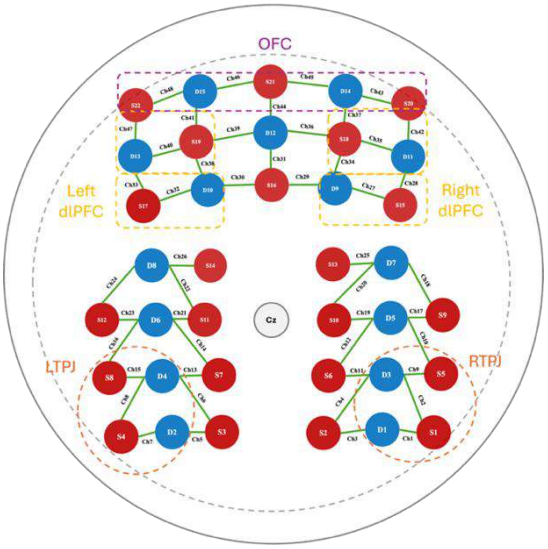

Figure 3. Overview of fNIRS channel placement based on the international 10/20 system.

Note: The detector: circle in blue; The lighter source: circle in red.

For each channel, the cortical region located beneath the midpoint between the corresponding source and detector will be defined as the primary brain region measured by that channel. Channel-wise cortical localization will be conducted by assigning a circular region centered on this midpoint. The Montreal Neurological Institute (MNI) coordinates of the channel midpoints will be calculated using the NFRI toolbox (http://brain.job.affrc.go.jp/tools/), and the corresponding brain regions will be identified using the adult Brodmann-Talairach brain atlas (Lancaster et al., 2000).

2.4 Data analyses

Behavioural data. Mean reaction times (RTs) for correct responses and accuracy (ACC) were used as behavioral indicators. To reduce the influence of outliers, trials with RTs more than ± 2.5 standard deviations from a participant's mean were excluded, following the criteria in inhibition control tasks (Song et al., 2024; Verbruggen & Logan, 2008). Two additional dyads were excluded because, given the simplicity of the task, an accuracy rate below 80% indicated insufficient engagement. In the end, data from 23 dyads were used for collaborative performance assessments.

A two-way mixed-design ANOVA was conducted separately for RT and ACC, with congruency (congruent vs. incongruent) and travel experience types (shared vs. non-shared) as within-subject factors. The Joint Simon effect (JSE) is computed as the difference between congruent and incongruent conditions (RT_incongruent - RT_congruent). Because incongruent

trials typically elicit greater cognitive conflict and demand stronger executive control (Song et al., 2024; Yang et al., 2021), a smaller JSE value indicates more efficient conflict resolution and thus better collaborative performance.

Brain-imaging data. For individual data preprocessing, we followed the standard pipeline in Homer3 (a MATLAB-based toolbox), consistent with previous research (Zhou et al., 2021). First, channels with low signal quality were excluded based on intensity range, signal-to-noise ratio, and source–detector distance. First, channels with poor signal quality were excluded based on multiple criteria, including light intensity range, signal-to-noise ratio (SNR), and source–detector distance. Subsequently, the remaining raw light intensity signals were converted into optical density (OD).

Motion artifacts were identified using a sliding-window approach that combined standard deviation–based and amplitude-based thresholds. Identified artifacts were primarily corrected using a wavelet-based motion correction method. To further remove physiological noise, frequency components above 0.7 Hz were excluded to avoid aliasing effects from high-frequency physiological signals such as cardiac activity, following previous studies (Tong et al., 2011; Zhou et al., 2021). Next, frequency components below 0.01 Hz were removed to eliminate very-low-frequency fluctuations. In addition, frequency bands within 0.15–0.30 Hz were excluded to reduce potential contamination from respiratory activity. After physiological noise removal, the OD signals were band-pass filtered to retain task-relevant low-frequency components.

Finally, the filtered OD data were transformed into concentration changes of oxygenated (HbO) and deoxygenated hemoglobin (HbR) using the modified Beer–Lambert law.

Inter-brain Neural Synchrony Analysis. To quantify inter-brain neural synchrony at the dyadic level, we employed partial wavelet transform coherence (pWTC), which has been recommended as a robust and reliable measure for hyperscanning data in social interaction contexts (Zhou et al., 2021). In general, wavelet coherence assesses the frequency-specific correlation between two time series after wavelet transformation. Importantly, it preserves temporal information, as the time window of the wavelet transform is adaptively adjusted for each frequency band. This property allows for more precise temporal alignment between neural signals and ongoing behavioral events. The pWTC further extends conventional wavelet coherence by statistically controlling for potential confounding variables, thereby providing a more specific estimate of task-related inter-brain coupling. The mathematical formulation and detailed implementation of pWTC are illustrated in **Figure 1**(b).

Given our focus on the social brain network, analyses were restricted to channels located over bilateral dorsolateral prefrontal cortex (dlPFC) and bilateral temporoparietal junction (TPJ). These regions have been consistently implicated in social cognition, mentalizing, and social bonding during interpersonal interactions (Cheng et al., 2024; Pan et al., 2017; Song et al., 2024). Therefore, the regions of interest (ROIs) in this study focused on the bilateral TPJ (left: Ch7, Ch8, and Ch15; right: Ch1, Ch2, and Ch9) and bilateral dlPFC (left: Ch32, Ch33, Ch38, Ch40, Ch41; right: Ch27, Ch28, Ch34, Ch35, Ch37), which corresponded to the following Brodmann areas: dlPFC (BA: 8, 9, 10, 46), and TPJ (BA: 39, 40). The details of fNIRS channel locations and their projected MNI coordinate are listed in the **Appendix table 1.**

3. Findings

3.1 Behavioral results

To test how shared travel experience influences collaborative performance. A two-way mixed ANOVA was performed for both RT and ACC separately, with congruency (congruent vs. incongruent) and travel experience types (shared vs. non-shared) as within-subject factors. Detailed statistics for RT, ACC, and the JSE are shown in **Table 2**.

Table 2. Descriptive statistics and Joint Simon Effect results.

Experimental group		Congruent	Incongruent	JSE
Shared travel experience	RT (ms)	441.95 ± 54.46	453.89 ± 54.65	11.94**
	ACC (%)	98.48 ± 1.50	97.83 ± 2.04	
Non-shared travel experience	RT (ms)	442.08 ± 41.22	465.92 ± 50.64	23.84***
	ACC (%)	97.83 2.53	97.61± 2.35	

Note: RT, reaction time; ACC, accuracy; JSE, Joint Somin Effect; $^{**}p < 0.01$, $^{***}p < 0.001$

ANOVA results of RTs showed a clear main effect of congruency, $F(1, 22) = 48.90$, $p < .001$, $\eta^2p = .69$, with slower responses on incongruent than on congruent trials (456 vs. 439 ms), indicating a significant JSE. The main effect of experience type was not significant, $F(1, 22) = 1.05$, $p = .316$, $\eta^2p = .05$. Importantly, the interaction between congruency and experience type was significant, $F(1, 22) = 5.39$, $p = .029$, $\eta^2p = .20$. Specifically, results from paired t-test further showed that the JSE effect was larger in non-shared trials (23 ms; 463 vs. 440 ms) than in shared trials (12 ms; 450 vs. 438 ms), paired $t(22) = 2.32$, $p = .030$, Cohen's $d = 0.22$, see **Figure 4**.

As for ANOVA results of ACC, no significant main effects or interactions were observed: experience type, $F(1, 22) = 0.95$, $p = .342$, $\eta^2p = .04$; congruency, $F(1, 22) = 0.90$, $p = .354$, $\eta^2p = .04$; experience type × congruency, $F(1, 22) = 0.46$, $p = .503$, $\eta^2p = .02$. Overall accuracy was very high across all conditions (all Ms > 98%).

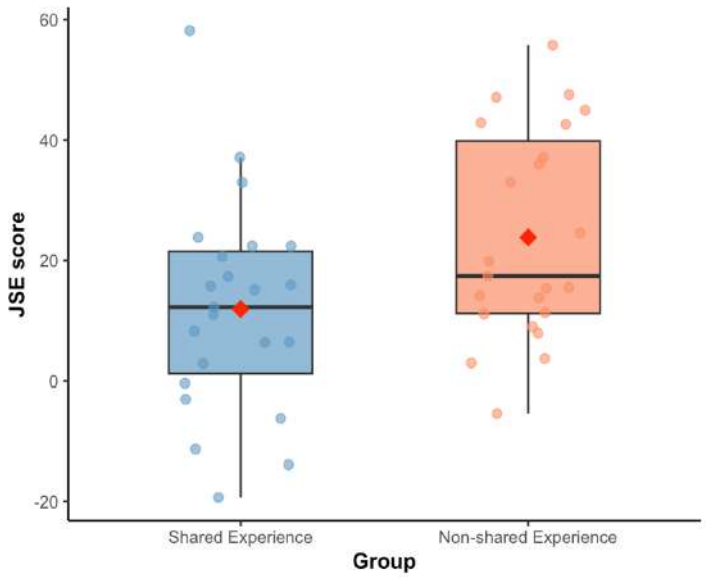

Figure 4. Paired t-test results of the JSE score

3.2 Brain imaging results.

The results presented here were based only on 10 paired dyads.

Our preliminary results showed that INS in the rTPJ was significantly higher in the shared than in the non-shared context. This effect was driven by a significant increase in INSpWTC at the dyads' rTPJ (Ch2) in the 0.4-0.6 Hz band, particularly when the brain activity of one participant recalling their travel experience lagged behind that of the listener by 4 s, compared with the non-shared travel condition, $t(9) = 5.221$, $p = 0.03$.

4. Discussions

Conclusions and contributions.

A smaller joint-Simon effect in the shared trials indicates better collaborative performance of dyads. Our preliminary hyperscanning results further showed that shared travel experiences recruited higher inter-brain neural synchrony in the rTPJ than non-shared experiences. Together, these findings suggest that shared travel experiences may promote more effective dyadic collaboration by enhancing interpersonal neural synchrony in the rTPJ, thereby facilitating the emergence of a collective mind, a shared representational state, that supports improved behavioral coordination between individuals.

Several important theoretical implications are contributed by this study. First, the inter-brain synchrony of recalling shared travel experience contributes to the literature by adding neural evidence. This study addresses a gap in tourism psychology by using hyper-scanning in dyadic recall to capture inter-brain synchrony, providing neural signals of joint recall of a shared travel experience. By integrating dyadic dialogue analysis, behavioral coding, and neural synchrony measurements, this methodological innovation offers practical guidance for future research on neural processes in complex social interactions. Second, this study considers dyadic recall of travel experiences as an active intervention with enduring psychological effects, linking tourism studies with psychological and behavioral benefits.

The practical implications of this study are significant. The findings provide a solid empirical basis for designing activities in contexts such as team-building programs, study tours, and parent-child or peer travel experiences. For example, dyadic reappraisal exercises could be incorporated to promote interpersonal connections. This approach not only optimizes the psychological value of tourism products but also offers a novel paradigm for experience-based interventions supporting both individual well-being and team performance.

Overall, this research offers significant theoretical, methodological, and practical contributions that address the identified research gaps and extend knowledge across multiple fields, including tourism studies, neuropsychology, and organizational behaviors.

Limitations and future directions.

Several limitations need to be mentioned. First, this study focuses exclusively on peer travel with friends, and future research could extend to family travel or other types of group travel. Second, we employed behavioral performance on the Joint-Simon task as an indicator of collaboration. Although this measure has the advantage of being objective and quantifiable, it is limited in ecological validity due to its reliance on button-press responses on the computer screen without real rewards. Future studies could adopt tasks with greater ecological validity and practical applicability to better capture collaborative processes in real-world contexts.

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Appendix table 1. Details of fNIRS channel locations

ROIs	channel locations	S-D connection	MNI coordinates			Brodmann area & Brain region overlap*
TPJ	1	S1-D1	54.409	-64.783	46.008	39 - Angular gyrus_part of Wernicke's area (0.93)
	2	S1-D3	57.326	-50.613	52.610	40 - Supramarginal gyrus_part of Wernicke's area (0.94)
	9	S5-D3	58.842	-34.745	55.587	40 - Supramarginal gyrus_part of Wernicke's area (0.58)

	7	S4-D2	-56.551	-65.807	41.416	39 - Angular gyrus_part of Wernicke's area (0.98)
	8	S4-D4	-60.064	-51.662	48.185	40 - Supramarginal gyrus_part of Wernicke's area (0.87)
	15	S8-D4	-61.023	-36.112	53.246	40 - Supramarginal gyrus_part of Wernicke's area (0.80)
dlPFC	27	S15-D9	27.941	36.190	51.771	9 - Dorsolateral prefrontal cortex (0.63)
	28	S15-D11	40.911	38.195	40.848	9 - Dorsolateral prefrontal cortex (0.61)
	34	S18-D9	20.671	51.992	41.577	9 - Dorsolateral prefrontal cortex (0.99)
	35	S18-D11	34.013	54.490	28.276	46 - Dorsolateral prefrontal cortex (0.98)
	37	S18-D14	25.353	67.045	16.732	10 - Frontopolar area (0.98)
	32	S17-D10	-26.076	38.326	51.464	9 - Dorsolateral prefrontal cortex (0.74)
	33	S17-D13	-40.826	40.093	39.480	9 - Dorsolateral prefrontal cortex (0.42)
	38	S19-D10	-19.552	53.107	40.967	9 - Dorsolateral prefrontal cortex (0.92)
	40	S19-D13	-33.794	55.006	27.903	46 - Dorsolateral prefrontal cortex (1)

Note: For brevity, only those brain regions that have a high spatial correspondence (overlap ≥ 0.42) with the sensor channels are listed.

Economic Impact of European Tourists in Mongolia

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Abstract

Since transitioning to a market economy, Mongolia has been attracting tourists from various countries worldwide, with its tourism sector developing based on the principles of free competition. Over the past 20 years, the government has repeatedly set the goal of welcoming 1 million tourists annually. However, as of 2024, the number has only reached 790,000. Within the sector, the debate continues: should government policies focus on promoting mass tourism or prioritize attracting a smaller number of high-spending tourists? Some researchers advocate for accepting "mass" tourists from neighboring countries to enhance the economic turnover of the tourism sector. Others argue for developing high-quality tourism by attracting a limited number of high-spending, special-interest tourists, thereby preserving Mongolia's pristine natural environment.

Since 2008, Mongolia has conducted studies on the expenditures of incoming tourists every two years. However, no comparative research has been conducted on Mongolia's tourism and economic revenues relative to other countries, nor has such information been published internationally. To address this gap, researchers compared the economic impact of European tourists visiting Mongolia with those from its main tourism markets: Russia, China, South Korea, and Japan. The study evaluated the total economic contributions of tourists in eight regions, calculating their direct, indirect, and induced effects. The results showed that, among the eight markets compared, tourists from Northern and Western Europe were the most beneficial for Mongolia's tourism sector.

Keywords: *European market*, *economic impact, economic turnover*

Background

Review of Literature: Mongolia has the potential to become a new and trending destination for international tourism, yet relatively little research has been conducted in the field (Chen Ching-Fu, 2010). Over the past two decades, rapid economic and social changes have significantly influenced the mindset and lifestyle of Mongolians, while the nomadic culture has remained largely intact (Szilágyi Zsolt, 2016). The vast steppes of Mongolia, with their herds of horses, traditional yurts, and nomadic way of life, have become the defining image of the region and a focal point of tourism marketing (Ralf Buckley, 2008) (Dallen J Timothy, 2009). The unique cultural image of Mongolia is further enriched by integrating pastoral livestock herding with cultural traditions, such as the eagle hunting practices of the Kazakh people in the Altai Mountains. Events like the Golden Eagle Festival, showcasing the falconry culture, are key attractions drawing European tourists to Mongolia (Soma & Sukhee, 2014). Recognizing the appeal of its natural landscapes and nomadic heritage, the Government of Mongolia

declared the slogan "Nomadic by Nature" in 2014, branding these elements as representative of the country. However, researchers have criticized the limited economic benefits of tourism for local herders, arguing that tourism companies restrict herders' participation in the industry (Jesse E Shircliff, 2020). While Mongolia shares similarities with Kyrgyzstan in terms of its reliance on natural beauty and nomadic cultural resources, rural tourism in Mongolia remains underdeveloped in remote areas, resulting in fewer tourists visiting these regions (Tom Baum, 2007).

Research on the economic and environmental impacts of tourism in Mongolia remains relatively scarce, with limited scholarly articles published at the international level. Relevant data are typically found in annual reports by the World Tourism Organization (UNWTO), reports on tourism competitiveness, or research reports issued by the Government of Mongolia. To present, most of the articles published in impact factor journals on the topic primarily focus on studies related to tourist satisfaction. For instance, Krishnamoorthy and Anand studied the satisfaction of tourists who traveled through tour operators between 2014 and 2019 (Anand Krishnamoorthy, 2021). Another study analyzed the development of Mongolia's tourism sector over the past decade, examining the demographic characteristics of tourists arriving by air from Europe, the United States, Japan, and the Asia-Pacific region (Larry Yu, 2006).

Additionally, a review of over 290 domestic academic journals, conference proceedings, and research reports revealed only a small number of studies directly related to this topic. These studies mainly mention the number of tourists from European countries without providing detailed economic data.

Introduction

It is essential to conduct detailed research on the economic impact and influence of tourism in Mongolia, focusing on specific regions and directions. However, current tourism studies in Mongolia remain overly general. The lack of comprehensive studies on tourist income and expenditure by country and region has made it unclear which countries have the most significant impact on Mongolia's tourism sector and which markets are the most influential. A review of the existing literature revealed that none of the research reports included concrete data on revenue generated from the European market.

Some researchers argue that Mongolia's tourism policy should focus on attracting tourists from developed countries with high economic returns. They believe that the number of tourists from European countries is relatively stable, and their economic impact is substantial, thus requiring increased promotion in the European market. On the other hand, some suggest that an increase in tourists from neighboring countries would have a more positive impact on economic circulation. However, there is a lack of research to either confirm or refute these contrasting perspectives. A thorough analysis of the current status of European tourists visiting Mongolia and an evaluation of the reality are crucial for shaping the country’s future policies, reducing risks in the tourism sector, and planning effective management strategies.

The authors aimed to confirm the hypothesis that "European tourists contribute more significantly to Mongolia's tourism economy compared to tourists from neighboring countries." To this end, the study focused on estimating the economic impact of tourists from European countries and comparing it with those from other regions.

Research methodology and data collection

The study utilized a combination of multiple methods, and the process is depicted in the following diagram.

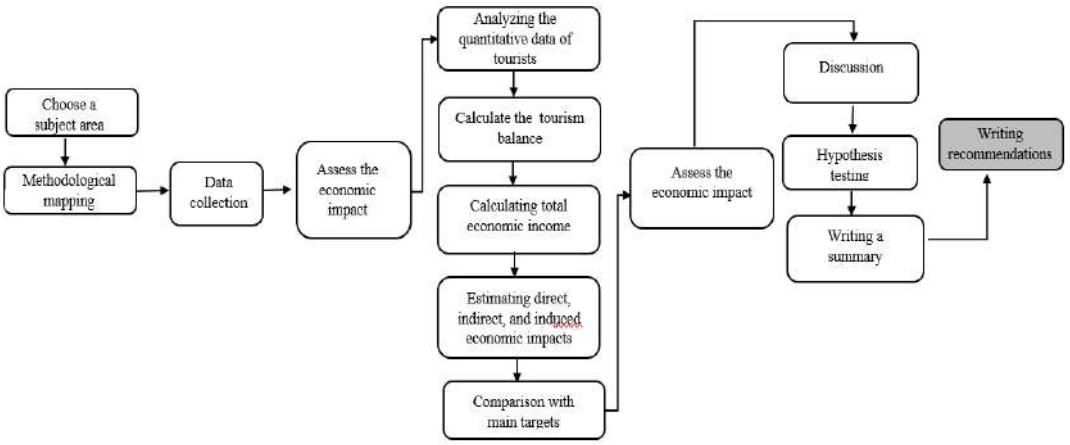

Figure-1. Methodology and research phase

***Data Collection**:* Statistical data were collected from the following sources:

- The General Authority for Border Protection classifies the travelers entering Mongolia into eight categories for tourism purposes, in line with the recommendations of the World Tourism Organization. This data is then forwarded to the National Statistics Office and the Government of Mongolia.
- The National Statistics Office, based on data received from the General Authority for Border Protection, classifies five categories under tourism, checks for errors, and publishes the information on the website www.1212.mn. Data on the number of people traveling to Mongolia and from Mongolia to European countries over the past 25 years were obtained from this website.
- The Bank of Mongolia and the Ministry of Environment and Tourism have conducted a "Tourist Expenditure Survey in Mongolia" every two years since 2002, with data from eight reports being utilized.
- Over 290 research reports and articles from tourism sector researchers' personal archives and databases were reviewed to collect necessary data.

Methodology: The study is used simple mathematical equations. Data from the National Statistics Office and the General Authority for Border Protection were analyzed to calculate the economic income.

- *Comparison of Numerical Growth:* The growth of tourist numbers was analyzed using mathematical equations, determining the increases and decreases. The inbound and outbound ratios were also calculated using the same method.
- *Direct Economic Impact:* To calculate economic income, formulas were used to estimate the revenue from package tours and backpackers.
- *Indirect Economic Impact:* A study previously conducted in Mongolia established the direct and indirect economic impacts using the "Input-Output Model." This model was used to calculate the economic turnover generated by each dollar spent by a tourist, utilizing the I and II multipliers.
- *Regional Comparison:* To compare the economic income and its impact from tourism, 51 countries in Europe (excluding Russia) were divided into four categories: Western,

Eastern, Southern, and Northern Europe. These were compared with the four countries that send the most tourists to Mongolia: Russia, China, Japan, and South Korea. The list of European countries was obtained from www.data.un.org, www.worlddata.info, and the list of countries used in Mongolia's border registration system, organized by region.

- *Comparison of Profitable Markets*: The profitability of selected eight markets was analyzed using the Boston Consulting Group (BCG) matrix.

Research results

Market Overview: Since 2008, the Mongolian government set a goal to reach 1 million foreign tourists (Parlament of Mongolia, 2016), (Parlament of Mongolia, 2020). since 2008, but has not been able to achieve this target so far. In 2024, approximately 790,000 tourists were welcomed. We have strong justification that the main reason for not achieving the goal is the "low number of tourists and the limited number of countries sending tourists." This can be supported by the following facts.

Initially, in 1999, Mongolia hosted 154.6 thousand tourists from 113 countries (National Statistics Office of Mongolia, 2024a). Of these, 37 countries sent more than 100 tourists, and 10 countries sent more than 1000 tourists (five were European countries). At that time, the number of tourists from the top 10 countries accounted for 91.9% of the total number of tourists. By 2009, 411,000 tourists arrived from 156 countries. Of these, 53 countries sent more than 100 tourists (22 were European countries), and 19 countries sent more than 1000 tourists (10 were European countries). The number of tourists from the top 10 countries still accounted for 91.5% of the total.

In the peak period of tourism before the pandemic in 2019, 576,000 tourists arrived from 170 countries. Of these, 74 countries sent more than 100 tourists, 27 were European, and 33 countries sent more than 1000 tourists, with 14 European countries. In 2023, 593,000 tourists came from 168 countries. Among them, 65 countries sent more than 100 tourists (26 were European countries), and 26 countries sent more than 1000 tourists (8 were European countries).

The Mongolian government considers that the tourism sector has fully recovered to pre-pandemic levels. While the total number of tourists exceeded the 2019 level, a breakdown by country shows that, as of 2023, the tourism sector of Mongolia has not yet reached pre-pandemic levels. For example, of the 170 countries sending tourists to Mongolia, 49 countries sent more tourists than in 2019, while 119 countries did not exceed the 2019 levels. These major source markets include 13 countries such as France, Germany, the United States, Australia, Italy, Japan, the Netherlands, the United Kingdom, and the United States. The percentage of European tourists in the above data is two times lower than it was before the pandemic. Additionally, the UK has been removed from the top 10 markets, while Belarus has been added, reflecting the impact of the war. This also highlights the vulnerability of Mongolia's tourism sector, as global geopolitics continues to have a strong influence even before the pandemic is fully over. Although Mongolia's tourism is expected to fully recover by 2025, it is likely that international geopolitics will still have an impact.

Over the past 25 years, the number of tourists from European countries has increased, but this is a natural growth following global tourism trends. However, compared to the total number of tourists arriving in Mongolia, the percentage of European tourists has decreased.

Tourist Growth: The number of tourists from European countries visiting Mongolia increased sharply in 2004, rising from 18,000 to 40,000. Over the next 12 years, the number of European tourists remained between 43,000 and 45,000; from 2016, it is exceeded 50,000, reaching 58,000 in 2019 just before the pandemic hit. During this period, 52-55% of the total European tourists came from 9 Western European countries, with 59% in 2006 being the highest point (National Statistics Office of Mongolia, 2024b).

However, the percentage of Northern European tourists has been steadily decreasing since 2000. In 2000, they made up 29% of total European tourists, dropping to 26.6% in 2005, 25.5% in 2010, 22% in 2015, and 17% in 2019. After the pandemic, its percentage fell further to 14.5%. The lowest percentage of European tourists came from 17 Southern European countries. In the peak tourism year before the pandemic, tourism from this region reached 13%, but it has become the slowest to recover post-pandemic. On the other hand, the number of tourists from Eastern Europe that is accounted for 9-13% of all European tourists before the pandemic, sharply increased after the pandemic, rising to 24-28%. This phenomenon is inevitably linked to the Russia-Ukraine war.

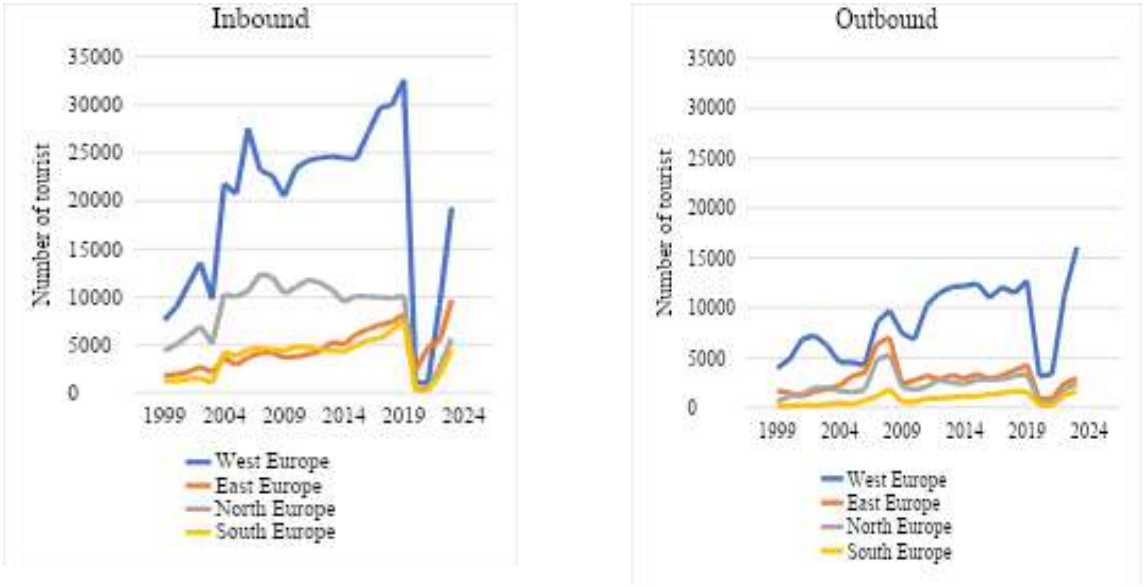

Figure 1. Growth in Tourist Numbers in Mongolia and European Markets

Inbound (National Statistics Office of Mongolia, 2024a)
Outbound (National Statistics Office of Mongolia, 2024c)

Mongolian tourists mostly prefer to travel to Western Europe. For many years, 60-70% of outbound tourists from Mongolia have chosen Western Europe, and this trend has not seen significant changes. While this can be explained by direct flights, the number of Mongolian tourists traveling to Northern Europe, where there are no direct flights, has increased, while the number of tourists traveling to Eastern Europe has decreased. Therefore, this may indicate that factors beyond direct flights, such as the travel preferences of Mongolian travelers and the channels through which they receive information, are influencing these choices. Based on the analysis of tourist growth, the next section attempts to determine the balance of tourism.

European Market Balance: When conducting market research, the first thing to examine is the ratio of inbound and outbound tourists. If the number of outbound tourists to a particular country is lower than the number of inbound tourists, that market is considered "active" or economically beneficial.

In the European market, the number of inbound tourists is greater than the number of outbound tourists, and most countries have a favorable balance. The number of tourists from European countries visiting Mongolia has been steadily increasing, and European tourists account for 10.2% of the total number of tourists. Out of the 44 countries that have sent more than 1,000 tourists, 17 are European countries. On the other hand, while the number of Mongolians traveling to Europe has increased in recent years, it still accounts for less than 2% of total outbound tourists. It is observed that tourists are increasingly traveling to countries with direct flights.

Table 1. The balance of key tourism markets for Mongolia

Indicators	Inbound (National Statistics Office of Mongolia, 2024a)				Outbound (National Statistics Office of Mongolia, 2024c)				Ratio
	1999	2009	2019	2023	1999	2009	2019	2023	
Number of tourists from/to European countries	15017	38967	58598	39258	6301	6362	21957	22978	Active
Number of European countries sending/receiving more than 1000 tourists	4	9	15	8	1	1	7	5	
Percentage of total inbound/outbound tourists from/to Mongolia	9.7%	9.5%	10.2%	6.6%	1.4%	0.7%	1.1%	1.7%	Active
Russian Federation	35.3%	26.2%	24.6%	35.7%	25.8%	14.9%	17.2%	18.8%	Active
China	35.9%	44.1%	29.2%	18.3%	69.1%	77.5%	70.6%	58.9%	Passive
Japan	7.6%	2.8%	4.2%	3.3%	0.4%	1.0%	1.1%	2.2%	Active
South Korea	3.3%	9.3%	17.5%	23.5%	2.4%	3.8%	4.3%	9.4%	Active

The number of inbound tourists from Russia is twice as high compared to outbound tourists. In contrast, the balance for Chinese tourists is inactive, with a negative figure. While 18.3% of total tourists come from China, 59% of Mongolian outbound tourists are traveling to China. This indicates an economically inefficient situation with a high outflow. As for South Korean tourists, tourism was inactive before 2005. However, since 2005, it has become active, and the number of South Korean tourists visiting Mongolia has continued to rise after the pandemic.

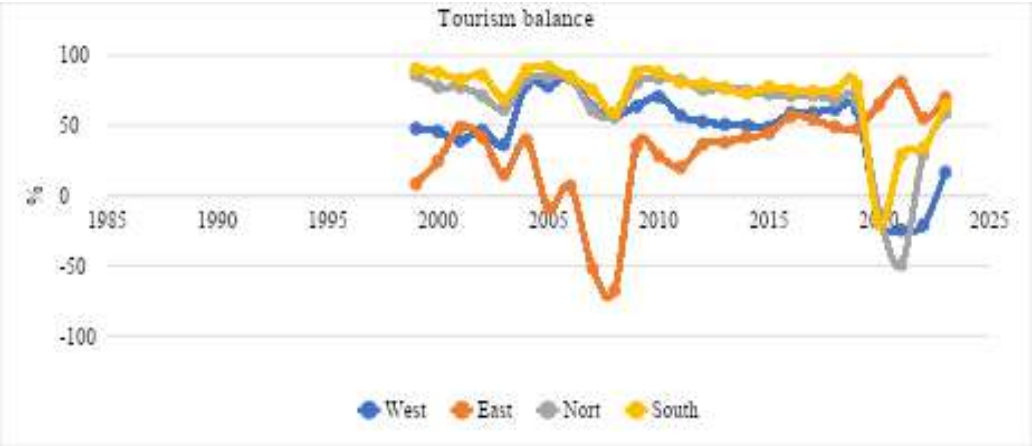

Figure 2. Mongolian tourism balance to European market

The market balance expressed in percentages provides a clearer view of the profitable markets. The chart above shows the percentage of outbound tourists in relation to inbound tourists.

In recent years, the number of Mongolian citizens traveling to Europe has increased, leading to a rise in outbound tourism. Additionally, the number of tourists coming from Europe has slightly decreased, resulting in a shift in the tourism balance. Overall, the inbound to outbound ratio is approximately 3:1. There was significant fluctuation in the years following the pandemic, so an analysis was done based on the data from before 2019. The greatest fluctuations occurred in Eastern European countries, which had a "negative" balance in 2007 and 2008. The most stable trend seems to be in the Southern European inbound tourist flow. However, while it was 90% in 1990, it dropped to 78% in 2019. Additionally, the percentage of inbound tourists from Northern Europe decreased from 77% in 2000 to 67% in 2019. The inbound tourist flow from Western Europe to Mongolia, compared to the outbound tourists heading to Western Europe, has been higher in recent years. In 2000, it was 46%, 78% in 2005, 70% in 2010, 49% in 2015, and 61% in 2019, indicating that this is the most profitable market.

Tourism Coverage: The amount of money spent by tourists visiting Mongolia was determined through survey research. This survey was conducted six times in total, in 2002, 2005, 2012, 2015, 2017, and 2019. The survey report detailed the number of days tourists from Mongolia's major tourism markets spent in the country and the amount of money they spent. For example, European tourists traveling to Mongolia on package tours typically spent the following amounts.

Table 2. The amount of money spent by tourists who arrived on package tours and the number of days spent

Year		2002 (MTA, 2002)		2005 (USAID, 2005)		2012 (MTA, 2012)		2015 (Central bank of Mongolia, 2015)		2017 (Central bank of Mongolia, 2017a)		2019 (Central bank of Mongolia, 2019)
№	Sample size	ND		995 sample		693 sample		994 sample		1211 sample		
	Name of the country	Cost	Days	Cost	Days	Cost	Days	Cost	Days	Cost	Days	It is not possible to collect tourist spending data by country from the survey report.
1	France	2037	14	2188	16	3357	15	1569	17	3430	12	
2	Germany	1738	15	1698	18	2069	16	2649	16	1473	12	
3	England	2341	16	1926	18	4963	20	2236	14	1609	10	
4	Italy	-	-	1764	17	3721	17	-	-	-	-	

5	EU countries	2134	15	1997	12	3428	14	2244	16	2437	12	
6	China	-	-	1652	10	2479	16	1622	13	1697	16	
7	Russia							1268	13	2013	11	
8	South Korea	925	9	1335	6	1024	5	1834	9	1136	6	
9	Japan	1910	7	1183	6	798	6	1591	11	2244	7	

Backpackers from Mongolia's main tourism markets typically travel for 6-18 days and spend the following amounts:

Table 3. Days and amounts spend by backpackers

Year		2002		2005		2012		2015		2017		2019
№	Sample size	832 sample		674 sample		2018 sample		994 sample		1211 sample		
	Name of the country	Cost	Days	Cost	Days	Cost	Days	Cost	Days	Cost	Days	It is not possible to collect tourist spending data by country from the survey report.
1	France	926	14	587	16	2054	22	1213	17	1145	12	
2	Germany	896	15	931	18	1612	22	1508	16	812	12	
3	England	1063	16	724	18	2446	18	1765	14	1114	10	
4	Italy	-	-	724	17	2719	23	-	-	-	-	
5	EU countries	827	15	593	14	1526	16	1249	16	1380	12	
6	China	-	-	370	10	1341	13	1688	13	874	16	
7	Russia							1186	13	1029	11	
8	South Korea	699	9	497	6	1362	11	1549	9	685	6	
9	Japan	668	7	438	6	1120	7	1369	11	1354	7	

To calculate the economic revenue, the following mathematical formula was used. The numbers above were substituted into the formula, and calculations were performed for each country, showing the total in millions of dollars.

The study classified the types of travel arrangements into "package tours" and "independent backpacker travelers" and calculated the spending and number of days spent by each group. However, the relationship between package tours and backpacker trips has not been examined in these studies. Upon reviewing other studies, the 2017 research showed that 12% of tourists visiting Mongolia used tour operators and chose package tours (Central Bank of Mongolia, 2017b), while in 2018, 22% chose package tours. Since there were no country-specific surveys in the above research, the results from the 2019 study were used (Central bank of Mongolia, 2019). This study showed that 69% of French tourists, 59% of German tourists, 37% of English tourists, 58% of tourists from other European Union countries, 44% of Chinese tourists, 18% of Russian tourists, 77% of South Korean tourists, and 47% of Japanese tourists chose package tours.

The revenue of package travelers can be calculated as follows (1).

$$Package\ income\ (\$) = \sum\left(\frac{(Expenditure_t * Spending\ days_t * \frac{Total\ tourist\ number * Ratio\ package}{100})}{10^6}\right)$$

Calculating the Income from Backpacker Tourists (2)

$$Backpackers\ \ income\ (\$) = \sum\left(\frac{(Expenditure_t * Spending\ days_t * \frac{Total\ tourist\ number * Ratio\ backpacker}{100})}{10^6}\right)$$

The following image shows the contribution of European tourists' package tours and backpacker trips to Mongolia's economy. In the peak years of tourism before the pandemic, European tourists generated a total revenue of 107.1 million USD, with 77.9 million USD from package tours and 29.2 million USD from backpackers. This accounted for 18% of Mongolia's total tourism revenue. The revenue from European tourists' package tours reached 83.8 million USD between 2006 and 2012, representing 25-30% of Mongolia's total tourism revenue. However, due to the economic crisis, the number of tourists and revenue began to decline after 2012. Although tourism began to recover in 2015, it had not reached the 2012 levels by 2019.

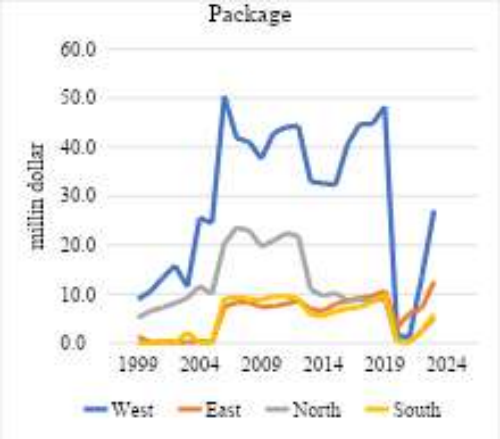

Figure 3. Total Economic Contribution of Package Tourists

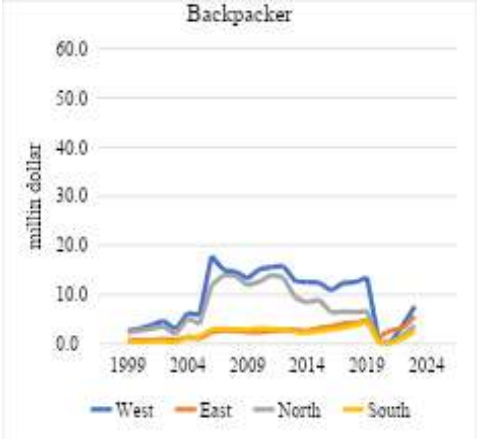

Figure 4. Total Economic Contribution of Backpacker Tourist

Breaking down the revenue from European tourists further, Western European tourists account for the largest percentage. Since 2006, the revenue from tourists choosing package tours has sharply increased, reaching 50 million USD, and until the pandemic years, they consistently contributed 41-48 million USD annually. Over the last 25 years, Western European tourists have accounted for 50-70% of the total European market revenue alone. However, the revenue and percentage of backpackers are relatively different. From 2006 to the pandemic years, backpackers contributed 23-35 million USD annually to Mongolia's economy, with annual fluctuations in growth. Over the last 20 years, Western European travelers contributed 43-50% of the backpacker revenue, followed by 23-40% from Northern European travelers, with the remaining percentage coming from Eastern and Southern European travelers. In the five years before the pandemic, the revenue from Northern European backpackers decreased by 5.8-9.8 million USD, while the revenue from Eastern European backpackers increased by 14-16 million USD annually, doubling during the same period.

Comparing the economic revenue of the European market to that of Mongolia's top 4 tourism markets—Russia, China, South Korea, and Japan—shows a different picture in terms of overall contributions. In the following chart, the revenue generated by tourists for Mongolia's economy is compared across eight markets. While the European market appears to rank in the bottom four, the comparison of the last 25 years reveals a different outcome. For instance, Chinese tourists have contributed the most revenue, bringing in 2.864 billion USD to Mongolia's tourism sector over the last 25 years. South Korean tourists contributed 1.532 billion USD, while Western European tourists contributed 731.9 million USD. However, the Chinese market has shown a negative balance, as previously noted. On the other hand, Northern European markets have contributed 283.8 million USD, placing ahead of Japan, which ranked fifth. Until

now, it was commonly believed that Japanese tourists contributed the highest and most beneficial revenue to Mongolia's tourism sector, but this is proven to be a misconception when looking at the data. When considering the average revenue over the last 25 years (including pandemic years), China has contributed an average of 114.6 million USD annually, Russia 61.3 million USD, Western Europe 29.3 million USD, South Korea 22.3 million USD, and Northern Europe 11.4 million USD.

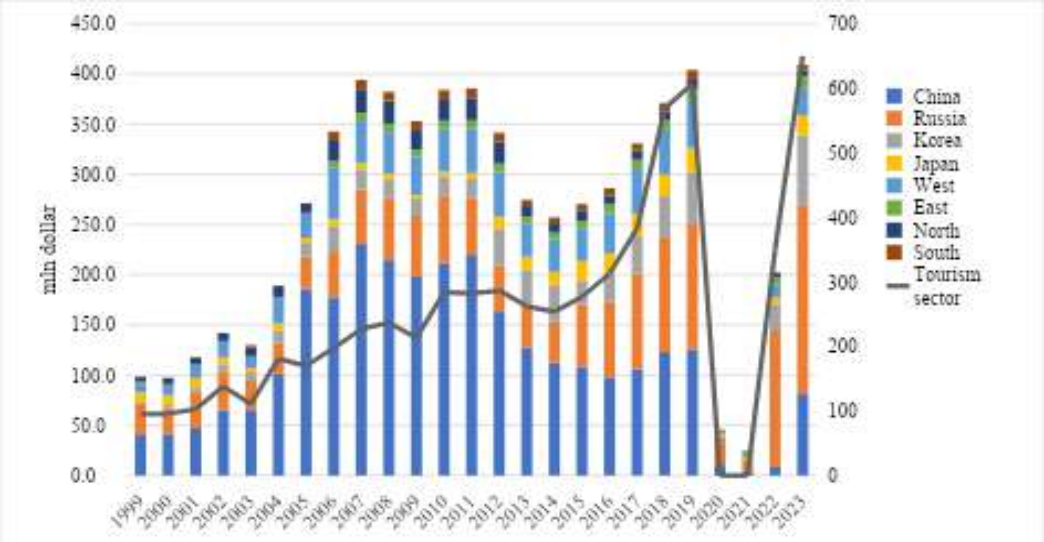

Figure 5. Comparison of Total Income from Market Countries with the Total Income of Mongolia's Tourism Sector

In the year 2000, the revenue from these 8 markets accounted for 83% of the total revenue of Mongolia's tourism sector, but by 2009, this had dropped to 47%, reaching the lowest level in its history. In most years, this percentage was over 60%, and after the pandemic, it was 78.9%. Looking at the European market alone, Western Europe accounts for an average of 17.1%, and Northern Europe accounts for 8.8%, meaning that the total European market contributes an average of 27.8% to Mongolia's tourism revenue. During years of declining tourist numbers and economic crises, the percentage of revenue from European tourists in Mongolia's total tourism revenue has increased due to the consistent number of European tourists. For example, in 2006, European tourists accounted for 61%, decreasing to 48% by 2009, and further dropping to 17.6% by 2019. In 2023, this figure only slightly recovered, reaching 10.8%.

Based on the total economic revenue, both indirect and induced effects have been calculated. A national-level study on the indirect and induced economic effects of Mongolia's tourism market was conducted in 2015. Since then, this study has not been updated. According to the study, every dollar spent by a tourist generates 0.11 dollars in indirect and 0.49 dollars in induced economic effects in the economy (Ulaanbaatar Tourism Department, 2015). Based on the methodology, calculations using the I and II multipliers produced the following results.

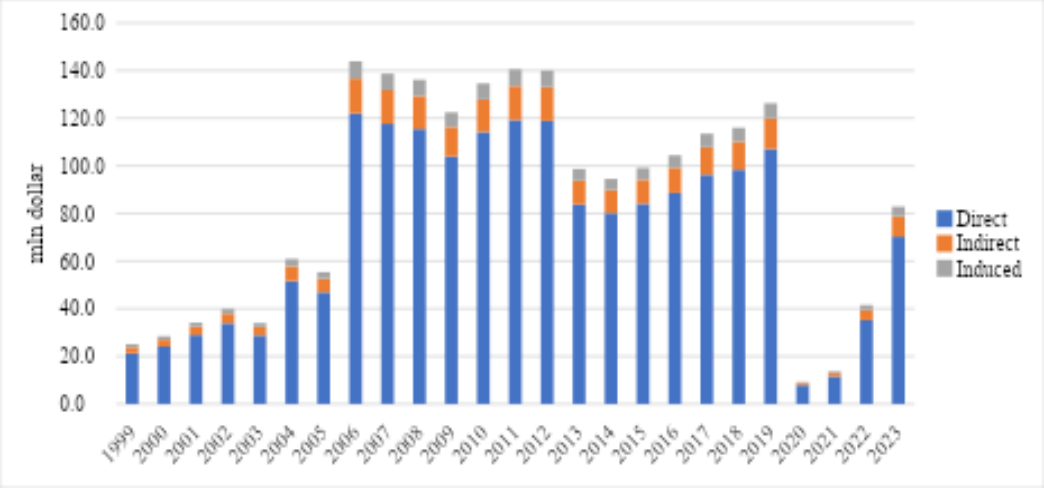

Figure 6. Direct and Indirect Economic Turnover in Mongolia's Tourism Sector (Total for the European Market)

The direct and indirect economic impact of European tourists' revenue sharply increased from 2006 onwards, with direct revenue reaching 122.1 million USD and the total economic turnover reaching 144 million USD. This figure remained stable until 2012, with total economic turnover exceeding 140 million USD annually. However, between 2013 and 2016, when the number of tourists declined, direct revenue fell to 83-88 million USD, and total economic turnover dropped to 94-104 million USD. In the years before the pandemic, from 2017 to 2019, the economic turnover increased to 113-126 million USD, but after the pandemic, in 2023, it only reached 82.9 million USD.

Discussion

Based on the above results, we can discuss which of the 8 markets are sustainable and profitable in the long run. To compare the results, we will look at the average cost expenditure per tourist over multiple years for Mongolia and compare this with the long-term growth of tourist numbers from each market. In terms of average spending, Northern European tourists spend the most, with an average of 2057 USD, followed by Western European tourists who spend 1920 USD. Chinese tourists from neighboring Mongolia spend 1022 USD, and Russian tourists spend 914 USD, while South Korean tourists spend the least at 697 USD.

While it is natural for neighboring countries to spend less due to geographic proximity, in recent years, the South Korean market, which ranks second in the number of tourists, spends the least, with 2.5-3 times less than European tourists. Mongolia has direct flights to five of these eight markets, and most Russian tourists travel by land. Chinese tourists, along with tourists from other markets, mostly travel by air. However, Japanese tourists, who spend 793 USD, belong to the category of low-spending tourists. Among the eight markets, Northern Europe, Western Europe, and China's neighboring market stand out as the most economically beneficial.

Additionally, it is necessary to evaluate the economic efficiency relative to the number of tourists from each market. This is important because the economic returns should remain high if the target market continues to show consistent growth in tourist numbers.

When comparing the growth in the number of tourists to Mongolia from each market, many countries show high volatility and instability.

According to the Boston Matrix analysis, the South Korean market is in the "star" position. Although the market's average growth is high, over time, growth is slowing down, and the market is likely to maintain its market share and become a "cash cow." Despite having direct and connecting flights to Mongolia for many years, the South Korean market has shown a negative growth rate over the last 25 years, ranking 9th. When compared to the long-term average growth, it appears to have an average growth rate of 109%. However, excluding the post-pandemic growth in 2022, the average growth rate is only 18%. This is not a characteristic of a financially beneficial market. A similar trend is observed in the Russian and Japanese markets. Excluding the pandemic years, the Russian market, with an average growth rate of 50.9%, saw growth drop to 4.3%, while the Japanese market, with an average growth rate of 76%, grew by only 10%, and the Chinese market, with an average growth of 42%, grew by just 5.8%. While the Russian and Japanese markets are currently in the "star" position, they are likely to shift to the "cash cow" position soon as growth slows. The Japanese market, in particular, showed high growth until 2000, then shifted to the "cash cow" position between 2005 and 2015. Post-pandemic high growth seems to have helped it maintain its "star" status for now, reflecting the instability of the tourist numbers in that market.

On the other hand, the Chinese market is in the "cash cow" position with a negative growth rate. Although the Chinese market holds a relatively high share in Mongolia's tourism sector, future market growth is expected to be low. Therefore, it may not be necessary to focus on this market in the future.

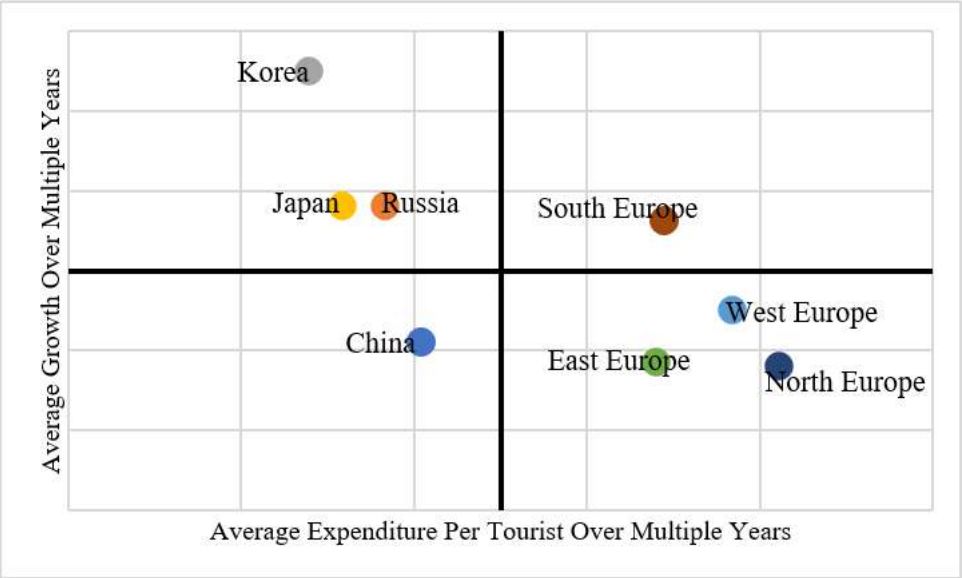

Figure 7. Comparison of Market Profitability According to the BCG Matrix

The situation in the European market is relatively different. For example, the Southern European market has an average growth rate of 72%, and excluding the pandemic years, this growth rate is 51%, making it the highest growing market. Southern Europe and Eastern Europe stand out as markets with stable long-term growth. Excluding the pandemic years, Eastern Europe has a 34% growth rate, while Southern Europe has a 51% long-term average growth rate. Among the four markets compared, three are in the "dog" position. As the number of tourists from Eastern and Northern Europe is declining, it suggests that no further investment or attention is needed in these markets.

On the other hand, the Western European market, which is in the "dog" position, shows a 16% long-term average growth rate, excluding the pandemic years. Additionally, the amount of money spent by each tourist is high. Before 2017, it was the most profitable market, as indicated by its "question mark" position in the calculations. Therefore, it can be concluded that Western Europe and Southern Europe could be the most profitable markets moving forward. Although the market percentage of these regions is small, their high growth rate makes them economically beneficial. Thus, measures should be taken to increase the market share of these regions.

Conclusion

In this study, we compared 8 tourism markets of Mongolia to identify the most profitable market for the country. To do so, we reviewed approximately 300 domestic research papers and reports, collecting relevant data. Based on the data and statistical information presented in these reports, we calculated the market overview of Mongolia's tourism sector, growth in tourist numbers, tourism balance, and direct and indirect economic income.

Mongolia's tourism market is expanding, with an increasing number of countries sending tourists each year. In 2009, more than 80% of inbound tourists came from 19 countries, but by 2019, this number had grown to 33 countries, indicating significant market expansion. Despite the pandemic, Mongolia recovered quickly, and by 2023, the number of tourists exceeded the 2019 level. However, the number of tourists from 119 countries still did not surpass the 2019 level, reflecting the ongoing impact of the pandemic and the direct influence of international geopolitical issues. Additionally, six of the most profitable European countries that send over 1,000 tourists annually have not yet returned to pre-pandemic levels, making them markets that the Mongolian government should prioritize in the coming years.

The growth in tourist numbers varies across markets. For neighboring countries, the number of tourists visiting Mongolia fluctuates significantly, while the growth of tourists from European markets remains relatively stable. In terms of inbound and outbound market ratios, seven of the eight markets have shown positive growth. Over the past 25 years, about 9% of the tourists visiting Mongolia came from European markets, while only 1.22% of Mongolian outbound tourists travel to Europe, which represents the greatest disparity, making Europe the most profitable market. The negative growth observed in the Chinese market indicates that the Mongolian government should focus on reducing the decline in this sector in the future.

The majority of tourists from key markets are arriving on package tours. Therefore, the economic income was calculated based on two types of travel: package tours and backpacker travel, and the total revenue was determined. The countries that send the most tourists in terms of total economic income are China, Russia, and South Korea. The average income generated over the past 25 years is as follows: China - 114.6 million USD, Russia - 61.3 million USD, Western Europe - 29.3 million USD, South Korea - 22.3 million USD, and Northern Europe - 11.4 million USD. It is a common trend that higher economic income corresponds with a greater number of tourists. Based on the number of tourists arriving over the past 25 years and the total income generated, the amount of money left by each tourist in Mongolia was calculated. The results showed that Chinese tourists leave 1022 USD, Russian tourists leave 914 USD, South Korean tourists leave 697 USD, Japanese tourists leave 793 USD, Western European tourists leave 1920 USD, Eastern European tourists leave 1700 USD, Northern European tourists leave 2057 USD, and Southern European tourists leave 1727 USD in Mongolia.

The income generated by tourists contributes to economic turnover in Mongolia, and the direct and indirect economic impacts of the European market were calculated. From 2006 to 2012, European tourists generated an average of 120 million USD in direct income for Mongolia, which led to a total economic turnover of approximately 140 million USD. However, in the 2013-2016 period, the direct income dropped to 83-88 million USD, and the total economic turnover fell to 94-104 million USD. Prior to the pandemic, there was a recovery, and the economic turnover increased to 113-126 million USD, but after the pandemic, in 2023, it reached only 82.9 million USD.

The findings of the study confirm the hypothesis that the European market could be the most profitable market for Mongolia. Among the 8 markets analyzed, the Western European market has been ranked second in terms of high return on investment over multiple years and third in terms of consistent growth, according to the calculations. This confirms it as the most effective market. The Northern and Southern European markets also have potential as profitable markets for Mongolia; however, the declining share of tourists and the decreasing number of arrivals in these regions indicate the need for attention in the future.

The results of this study suggest that the Government of Mongolia must take immediate actions to fully revive the European market and increase the number of incoming tourists. The Boston Matrix analysis has shown that measures should be taken to expand the Southern and Western European markets and increase their market share. Therefore, it is essential to develop a clear policy for the European market within the framework of the "Visit Mongolia Year" and work to quickly overcome the effects of the pandemic.

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Ecotourism and Its Impact on Community Livelihood and Tourist Resource Management-A Case in Nameri National Park of Assam (India)

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Abstract

This paper tries to emphasize ecotourism and its impact on livelihood and tourist resource management in the forest villages (fv) of Nameri National park in Assam, India. Ecotourism initiatives that have been introduced by Assam (Bhorelli) Angling and Conservation Association (ABACA), an organization established in the year 1956, started ecotourism activities in the park, benefiting the local populace in terms of income, improved infrastructure, employment opportunities, and exposure tours. The community's capacity to facilitate resource-related conflicts has improved following support from development institutions and facilities provided by the organization. An expanding community livelihood base is reducing local vulnerability to disasters and man-animal conflicts. The number of inhabitant wildlife species in the park has increased due to adequate protection and reduced frequency of livestock nearby villagers.

Despite the achievement, ecotourism resources in the park were threatened by encroachment. Lack of conservation efforts of the villagers, as the area frequented by wildlife is being lost, and man-elephant conflicts are intensified. Another problem is that the communities residing near the park is not successfully participating in ecotourism ventures, which is associated with inadequate management and negotiation skills in the Assam (Bhorelli) Angling and Conservation Association. It requires leadership and microenterprise management skills if earnings from ecotourism are to be effectively invested in alternative sources of livelihood, to address current and potential conflicts. There is also a need to build the community's capacity for the promotion of activities that complement ecotourism. Through the paper, the author tries to highlight such possibilities on the basis of an assessment of the potential ecotourism resources of the Nameri National Park during field experience gained in different parts of the study area.

Key Words: Nameri National Park, Local community, Ecotourism, Livelihood, and Tourist resource management

Emerging Asian Markets and Tourists for Antarctica: What Do We Know?

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Abstract

Tourism in the "Last Continent", Antarctica, has experienced continual growth since the 1990s, interrupted only by a couple of economic downturns and most recently by the COVID-19 pandemic. Indeed, Antarctic tourism has more than recovered since the pandemic, reaching the historic record of 122,072 visitors in the 2023-24 season (IAATO, 2024) before tapering off a little in the following season (IAATO, 2025). Growing Antarctic tourism is driven by a variety of forces, including improved accessibility of the continent, as well as increasing public interests in polar travel, which is sometimes considered as a partial result of the "last chance tourism" phenomenon (Liggett and Stewart, 2015; Lamphere et al., 2025).

Tourists interacting with the Antarctic environment have typically reported a memorable experience and high levels of satisfaction (Cajiao et al., 2023). However, growing visitation to pristine Antarctic environment has also raised concerns, especially when the tourist activities seem to be diversifying (Tejedo et al., 2024). Managing tourism in Antarctica, a global commons governed by the Antarctic Treaty System, presents unique challenges as tour operations are largely self-regulated by the industry led by the International Association of Antarctica Tour Operators (IAATO), while the Antarctic Treaty Consultative Parties provide limited regulatory oversight (Carey, 2020; Stewart & Liggett, 2025).

While Antarctic tourists have been dominated by North American and western European countries, there has been repeated suggestions that China and other Asia countries are emerging markets for Antarctic tourism (Carey, 2020; Research and Markets.com, 2025) and that the Antarctic tourist profiles are shifting "towards Asian markets" (Stewart & Liggett, 2025: p.315). However, published work that either confirms or contests these claims is essentially non-existent. This exploratory study therefore aims at starting to address this information gap by: 1) reviewing recent IAATO visitation statistics on Asian countries to identify whether there are trends and patterns, 2) reviewing the published literature to identify the extent to which Antarctic tourists from Asia have been studied.

We obtained IAATO visitation statistics by nationality from 2014-15 through 2024-25 seasons in December 2025. While the data are still being analyzed, we have identified that China, Japan, Taiwan, India and Singapore are the five countries/territories that have supplied most Asia tourists to Antarctica. Among them, China is showing the clearest emerging trend, growing from over 3,000 tourists in 2014-15 season to over 11,000 in 2024-25 season (i.e. 285% increase in 11 years). Collectively, the above countries/territories represent from 10% to as much as 18% of all Antarctic tourists globally, with exceptions of the COVID-impacted seasons (2020-21 to 2022-23) when significant travel restrictions were in place. We will provide a more complete summary of the trends and patterns at this conference.

Our initial literature searches suggest that there is a paucity of published work on Asian markets or Asian tourists for Antarctica. Only a few empirical studies on China tourists regarding their motivations (Cheung et al., 2019) or their Antarctic perceptions (Tin et al., 2016) have been published. Other authors assessed potential Asia markets (e.g., India, by Ravindra, 2018) or Antarctic tourism governance from Asian perspectives (Wu et al., 2022). There is little research on Antarctic tourism published in Asia-based international journals (Cloesen, 2007, as an exception) either, although Stewart et al. (2025) identified a notable number of Asian, mostly Chinese, co-authors in Antarctic tourism publications. We intend to present the latest updates on this body of literature at this conference.

An understanding of both Asian markets and tourists for Antarctica is important to inform future marketing and develop tailored education, programming and management strategy. Most importantly, integrating cultural understanding into learning and engagement experience will likely be more effective in instilling pro-environmental outcomes and ultimately ambassadorship among Asia tourists, contributing to the protection and sustainable future of Antarctica.

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ESG (Environmental, Social, and Governance) in Tourism

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Abstract

Environmental, social, and governance (ESG) principles have gained significant traction within the corporate sector as essential criteria for assessing non-financial risks and opportunities that influence long-term sustainability. In the tourism industry, an arena at a pivotal juncture, there is a pressing need to reconcile economic expansion with social responsibility, environmental stewardship, and robust governance. ESG frameworks offer a systematic and comprehensive approach for achieving this balance. Initially, tourism enterprises focused predominantly on environmental concerns, such as resource conservation, waste reduction, and energy efficiency. Over time, the ESG agenda expanded to include governance factors such as stakeholder accountability, ethical leadership, and organizational transparency as well as social dimension encompassing labor rights, equitable benefit distribution within local communities, and the preservation of cultural heritage.

Tourism, by its nature, is a significant consumer of natural resources, including water, energy, and land. The sector's infrastructure like hotels, resorts, and transportation network like places considerable pressure on local ecosystems. Nevertheless, ESG-driven strategies such as waste minimization, adoption of water-saving technologies, utilization of renewable energy, and sustainable construction practices have demonstrated positive outcomes in mitigating environmental impacts and improving resource efficiency. Despite these advances, tourism remains a substantial contributor to greenhouse gas emissions, primarily due to transportation and energy consumption associated with travel and accommodation.

The social aspect of ESG in tourism emphasizes inclusivity, gender equity, diversity, fair compensation, and the active involvement of local populations in tourism development. There is a strong focus on safeguarding cultural heritage and integrating it authentically into tourism offerings. Sound governance practices marked by transparent decision-making processes, stakeholder engagement, and anti-corruption measure are vital for maintaining integrity within the sector. ESG frameworks further stress the importance of comprehensive and accurate reporting of environmental and social impacts, along with upholding supply chain integrity. Given that millions of individuals worldwide depend on tourism-related employment, often characterized by precarious working conditions, strengthening labor rights and employee welfare is imperative. Stakeholder engagement must be central, acknowledging the interconnected roles of communities, private enterprises, governmental authorities, and investors. Compliance with international standards, such as those set by the Global Sustainable Tourism Council, enhances governance and accountability mechanisms.

Contemporary global shift ranging from changing consumer preferences and digital transformation to the escalating urgency of climate change continue to shape the relevance and implementation of ESG in tourism. Research indicates that younger generations are increasingly demanding sustainable and ethical tourism practices. Furthermore, emerging technologies, such as blockchain and smart tourism solutions, are enhancing transparency and traceability. International frameworks, like the United Nations Sustainable Development Goals and the Paris Climate Agreement, are accelerating the integration of ESG principles throughout

the sector. This article investigates a few case studies on embedding ESG principles as foundational elements within tourism operations and organizational identity is not merely advantageous but essential for ensuring the industry's continued relevance, resilience, and long-term sustainability.

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Exclusion in Agenda Setting: Stakeholder Dynamics and Nomadic Communities in Mongolia's Tourism Policy

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Abstract

Mongolia is among the world's few remaining nomadic nations, with a deep cultural identity shaped by centuries of pastoral mobility, land stewardship, and spiritual ties to nature. As tourism emerges as a rapidly expanding economic sector and a key driver of Mongolia's sustainable development agenda, the country's policies increasingly frame tourism as a strategic tool for economic diversification and cultural promotion. However, the voices, knowledge systems, and priorities of nomadic communities—who form the core of the national tourism brand—remain largely absent from tourism policymaking processes. This research examines how and why such exclusion occurs, identifies the structural and political dynamics involved, and explores how tourism policies move across agenda-setting stages in ways that reproduce or challenge marginalization. The analysis draws on Birkland's Levels of the Agenda, extending the framework by introducing the dynamic interplay of "advocate" and "blocker" groups during institutional and decision agenda transitions.

Mongolia's tourism sector has grown significantly in the last decade. Since tourism was elevated in 2016 as the second-most important economic priority after mining, international arrivals and revenue have risen markedly, with record figures in 2023. Surveys show that over 80% of foreign visitors come to experience Mongolia's unique nomadic lifestyle, pristine landscapes, and cultural heritage. International recognition—such as Lonely Planet naming Mongolia the world's top travel destination for 2024 further confirms the sector's potential. Yet this success relies overwhelmingly on rural, nomadic, and semi-nomadic communities who host visitors, preserve cultural practices, and maintain the landscapes that attract tourists. Despite this, policymaking has not adequately integrated their voices or needs.The problem centers on unequal stakeholder power in agenda setting. Although nomadic communities constitute 30–40% of the population, their perspectives rarely appear in institutional or decision-level tourism policies. Until 2023, national legislation did not legally recognize community-based tourism (CBT) or nomadic cultural tourism as formal components of the tourism industry.

This legislative omission reflects deeper governance issues: frequent ministry restructuring, weak inter-agency coordination, inadequate local-level representation mechanisms, and a tourism policy environment dominated by government agencies and private-sector groups. These structural issues lead to policy incoherence and exclude nomadic knowledge from shaping tourism futures.

The research gap emerges at the intersection of public policy, sustainable tourism, and indigenous rights. Existing literature on agenda-setting theory provides a comprehensive understanding of how issues gain political attention, but rarely addresses how marginalized groups attempt to enter formal policy stages. Tourism governance literature emphasizes community participation as a pillar of sustainability, yet evidence from many countries—including Mongolia—shows that participatory promises often translate into symbolic inclusion

rather than meaningful decision-making power. Studies on Mongolian tourism have explored inequality, political ecology, and resident perceptions, but few have directly examined how agenda-setting processes structure inclusion or exclusion across policy levels.

The central research question guiding this study is therefore: **How do stakeholder dynamics shape the exclusion of nomadic communities in Mongolia's tourism policy agenda-setting?**

To answer this question, the study pursues several aims: (1) identifying key stakeholders in agenda setting; (2) understanding mechanisms of exclusion; (3) analyzing power dynamics between advocate and blocker groups; (4) examining institutional transitions from agenda formation to decision adoption; and (5) proposing pathways for more inclusive policymaking.

Methodologically, the study employs a qualitative approach combining document analysis, stakeholder mapping, and semi-structured interviews. Major tourism policies between 2015 and 2025, including Vision 2050, the State Tourism Policy, the 10-Year Tourism Program, and the 2023 Tourism Law, were systematically reviewed. A stakeholder analysis identified government ministries, local authorities, tourism associations, private operators, NGOs, and nomadic groups.

Preliminary document analysis reveals limited references to nomadic participation, inconsistent framing of nomadic culture, and no mechanisms that guarantee representation. Interviews (ongoing) will deepen understanding of stakeholder interactions, institutional constraints, and power relations at play.

Preliminary findings from the policy review and stakeholder mapping reveal clear patterns of exclusion. Tourism policies often invoke nomadic culture symbolically—to market Mongolia internationally—yet policy processes themselves do not engage nomadic communities substantively. Stakeholder mapping highlights that powerful actors such as the Ministry of Environment and Tourism, the National Tourism Organization, and the private-sector–dominated Mongolian Tourism Association dominate the tourism agenda. These actors frequently function as "blockers," defending economic or political interests and resisting changes that would redistribute influence. By contrast, nomadic families, herder groups, local community leaders, and small NGOs function as "advocate" groups seeking recognition, participation, and culturally appropriate tourism models.

A key contribution of this research is a proposed extension to Birkland's Levels of the Agenda. While the original model outlines four stages of agenda progression, this study introduces a conceptual "add-on" zone that highlights the contestation between advocate and blocker groups in the transition between the institutional and decision agendas. This zone captures power struggles, negotiations, and resistance that shape whether marginalized issues advance or stall. In Mongolia, the inability of nomadic communities to move their interests into decision-making spaces reflects precisely this contested zone of influence. Including this dynamic contributes to agenda-setting theory by foregrounding the relational politics of inclusion/exclusion, particularly for indigenous and mobile populations.

In addition to conceptual contributions, the research offers significant empirical insights. Fragmented governance—evident in overlapping mandates, inconsistent policy revisions, and competing associations within the tourism sector—creates barriers to coherent and inclusive policymaking. Community-based tourism initiatives often impose rigid frameworks that conflict with nomadic mobility patterns. Furthermore, the absence of formal consultation

mechanisms means nomadic communities are engaged only at late implementation phases, if at all.

The study concludes that tourism development in Mongolia presents both opportunities and challenges. While tourism promises economic growth and cultural preservation, current stakeholder dynamics limit its potential to support inclusive and sustainable development. For tourism to contribute meaningfully to SDGs and national strategies, institutional reforms must embed participation, protect cultural rights, and recognize nomadic communities as active policy actors rather than passive beneficiaries. The findings call for integrated governance, clear consultation mechanisms, and formal recognition of nomadic stakeholders across all agenda- setting levels.

Expanding Organizational Support Theory: Customer-Initiated Support as a Predictor of Hospitality Employee Well-Being

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Abstract

This study highlights the pivotal role of human resource support systems in the hospitality industry and their impact on employee well-being and retention. Intentions to remain with an employer are significantly affected by quality of life and job satisfaction metrics, which the hospitality literature identifies as significant determinants of overall employee contentedness. The pandemic affected many industries, but among the most severely affected were hospitality,where workers faced altered food production protocols, schedule adjustments, altered guest interaction protocols, and increased takeout and delivery orders (Chen & Eyoun, 2021). While inherently stressful due to long hours, time pressures, customer demands, and pressure to meet or exceed sales goals and quality standards while creating satisfied guests (Hayes & Weathington, 2007), hospitality work has seen a resurgence of resilience during the COVID-19 pandemic. Occupational stress researchers agree that psychosocial resources are essential in stressful environments (Frone et al., 2020). Hobföll's (2001) Conservation of Resources theory (COR) expounded on this notion, arguing that social support can protect and preserve an individual's resources as a survival mechanism during challenging times. This study aims to explore the impact of workplace support systems, including those offered by the organization, supervisors, co-workers, and customers, on employee well-being, life satisfaction, and job satisfaction in the post-pandemic recovery period.

Despite the abundance of research on turnover in the hospitality industry, there is a need for more comprehensive studies beyond the traditional unidimensional lens. Published research has primarily investigated the intention to leave through the perspectives of job satisfaction or organizational commitment; however, a recent meta-analysis on voluntary turnover found that satisfaction and commitment are excellent predictors of turnover and further suggests the need for more complex predictor combinations in more thoughtful, theory-driven ways.

Leta and Chan (2021) argued that the hospitality industry is particularly vulnerable to the impacts of crises from a variety of perspectives stemming from "political instability, economic recession, and natural disasters" (p. 1), all of which affect daily operations and turnover. This particular event has heightened industry's need to revisit the dichotomy between support systems and customers' roles in hospitality workers' well-being. This study, with its innovative approach, seeks to fill this gap by providing a model that includes the additional predictor of customer interaction (i.e., customer-initiated support) to contextualize multi-level influences in the workplace that affect worker well-being (i.e., job and life satisfaction) and turnover intentions (i.e., intention to stay and career turnover).

Prior organizational support research has included support within the organization, conceptualized as organizational support, supervisor support, and coworker support; however, this perspective overlooks the value of interaction between the service provider and recipient. This customer-client interaction is a critical factor in a worker's well-being. Quick et al. (1997) proposed that clients provide an essential source of support within a service provider's social support network, and further investigation is needed. Conversely, the role of customer interactions has also been viewed negatively due to service providers' malevolent behavior. Further study of customers' impact on worker well-being may provide insight into understanding the importance of customer-provider social behavior and how customer interactions may affect turnover intentions.

Social relationships play an essential role during stressful work periods, either adding to the strain or serving as a reward (Maslach & Leiter, 2017). Understanding the influence of social networks during crisis periods, such as COVID-19, becomes essential to know how various support systems can help employees maintain a positive attitude while navigating unplanned and uncontrollable events (Park et al., 2021).

Research implications include contributions to literature by unraveling the strength of the determinants and introducing the groundbreaking concept that the customer is another influencing factor affecting hospitality employee job satisfaction and career-change intentions. This study further offers insight into the importance of work environment support during a crisis and its residual effects in the post-pandemic period. After surveying 337 hospitality employees, the findings suggest that customer-initiated support, in addition to the organization's human resource systems, plays a vital role in bolstering the well-being of hospitality workers and their job satisfaction. Further, feelings of life satisfaction may encourage career change, even when hospitality workers are satisfied with their jobs. Social and practical implications suggest that hospitality organizations focus on improving their policies and procedures to support employees on both an individual and group basis, thereby enhancing salient retention and career-change intentions.

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KEY THEORETICAL IMPLICATIONS:

1) Expanded Organizational Support Theory (OST):
   This study broadens OST by incorporating multiple support sources—organization, supervisor, coworker, and customer—highlighting that employees perceive and respond to different support sources in distinct ways. While OST traditionally focuses on organizational support, this study validates the inclusion of coworker and customer support as important contributors to employee outcomes.
2) Differential Impact of Support Types:

- POS and PSS significantly influence job satisfaction, aligning with social exchange theory where support fosters reciprocity.

- PCWS contributes to life satisfaction but not job satisfaction, suggesting that peer relationships enhance broader well-being.

- PCIS (customer support) improves job satisfaction but not life satisfaction, illustrating that external support plays a nuanced but important role in service-driven environments.

3) Support and Well-Being Relationship Validated: The findings support the bottom-up approach to well-being, showing that job satisfaction leads to life satisfaction, and both in turn affect retention and turnover intentions.
4) Retention vs. Turnover: Not a Binary:
   The study supports Cho et al.'s (2009) claim that intention to stay and intention to leave are not direct opposites. Interestingly, higher life satisfaction was associated with higher career turnover intentions, implying that satisfied individuals may feel more empowered to seek better career alternatives post-crisis.
5) Integration of Crisis Context:
   The inclusion of COVID-19 as a crisis backdrop enriches attachment theory and conservation of resources theory by demonstrating how support systems buffer stress and influence career and organizational attachment during uncertain times.
6) Mediating Role of Life Satisfaction:
   Life satisfaction mediates the effect of job satisfaction on both intention to stay and career turnover, reinforcing its central role in understanding employee behavior and decision-making.

Exploring Special Interest Tourism Opportunities in the Mongolian Gobi's Mars-Like Environment

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Abstract

Mongolia's economy remains heavily dependent on the mining sector, which accounts for approximately 90% of export revenues and 25–35% of government tax income. Such a highly concentrated structure poses risks to long-term economic stability, underscoring the need to diversify the economy and develop new sources of revenue. One promising direction is the expansion of special interest tourism. Since the 1980s, global tourism trends have shifted from mass tourism toward experience-based and niche tourism, and numerous studies indicate that the special interest tourism segment is expected to continue growing in the coming decades. In Mongolia, 50–60% of international visitors arrive only during the summer months (June–September), highlighting the country's strong seasonality and the need to develop year-round tourism products. Although recent government initiatives and promotional efforts have increased international arrivals, the country still faces constraints in infrastructure, logistics, and local carrying capacity. These limitations create risks commonly associated with mass tourism, including ecological pressure, environmental degradation, and socio-economic imbalance in host communities. Under such conditions, Mongolia has the opportunity to distinguish itself on the global market by focusing not on tourism volume, but on high-value, experience-centered special interest tourism. Developing space-themed tourism—particularly experiences that simulate Mars-like environments—represents one such opportunity in the Gobi Desert. Because commercial space tourism remains extremely expensive and inaccessible to the general public, Earth-based "Mars-analog" environments offer a more affordable and low-risk alternative. This study examines the potential for Mars-themed special interest tourism in the Mongolian Gobi by analyzing global tourism trends, the behavior and motivations of adventure- and space-oriented travelers, and the region's climatic, geographic, geopolitical, and economic conditions. Comparative and resource-based analytical methods were employed. The Mongolian Aerospace Research and Science Association (MARSA) is currently developing the MARS-V project in the Gobi, which aims to establish a Mars-analog base and offer two types of tourism experiences: the experience-taker and science-taker programs. The project's feasibility study was used as a core reference for this research. Findings reveal that several areas of the Gobi—particularly Nemegt Valley and Khermen Tsav—possess unique geological features highly suitable for constructing a Mars-like simulation base and developing specialized, high-value tourism products targeted at small groups of visitors. Such tourism not only minimizes ecological impact and supports cultural and environmental preservation but also provides visitors with a distinctive combination of science, challenge, and adventure. Moreover, the Gobi's Mars-like landscapes, Mongolia's stable geopolitical environment, and the global rise in adventure- and experience-oriented tourism collectively indicate strong potential for establishing a Mars-analog special interest tourism sector in the region.

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From Authenticity to Syntheticity: Regrounding the Real in a Multi-Reality Tourism Context

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Abstract

Authenticity has long been a central concept in tourism studies, explaining how tourists evaluate what is considered "real" through objective, subjective, postmodern, and post-postmodern authenticity (Canavan & McCamley, 2021; Wang, 1999). However, tourism experiences increasingly unfold within multi-reality environments where physical settings, digital systems, and imagined memories coexist and interact. In such contexts, a single ontological reality is no longer sufficient to explain how "the real" is produced and perceived. For instance, an AI-enhanced travel photograph may simultaneously maintain its material reference (objective), evoke personal emotions (subjective), and display algorithmic stylization (post-postmodern), making it challenging to interpret through any single authenticity lens (Miao & Yang, 2023; Zheng et al., 2022). Emerging post-digital and psychologically intensified tourism experiences—ranging from AI-generated travel memories to spatial

computing encounters and non-technological surreal moments such as déjà vu—produce forms of realness that challenge the stabilizing assumptions inherent in existing authenticity frameworks (Christou et al., 2025; Tussyadiah et al., 2018). Multi-reality environments thus call for a systematic re-examination of how authenticity is conceptualized in tourism experiences. This study responds to these shifts by revisiting authenticity theory and proposing syntheticity as a dynamic experiential state of realness in tourism contexts.

Traditional frameworks tend to treat authenticity as a relatively static cognitive state anchored in a singular reality, overlooking the distinctive experiential qualities that emerge when tourists navigate multiple, coexisting realities. Building on Jaakkola's (2020) theory adaptation approach, this conceptual research reexamines authenticity through the lens of surrealist ontology and multi-reality environments. We introduce syntheticity as a dynamic experiential state when authenticity's immanent potentials are released, arising from the interplay of multiple realities and culminating in an intensified, go-beyond-real sense of the surreal. Methodologically, this conceptual study integrates systematic reviews of tourism authenticity, technology-mediated, and psychologically intensified phenomena, following Hirschheim's (2008) principles of assimilation and combination. This research advances the authenticity literature by illuminating a multi-reality environment blending the physical and the digital destabilizes singular notions of reality and its corresponding types of authenticity, creating conditions where the disclosure of the reality's immanent potential gives rise to a state of more-than-real we label as syntheticity.

In this research, we propose that realness in multi-reality environments is activated from an initially static condition into a dynamic, emergent experiential state. For example, tourists may simultaneously inhabit a physical heritage site, an augmented reality-enhanced reconstruction of its past, and a digitally simulated future version on their mobile screens. In this case, the context for the tourists becomes a synthetic multi-reality. Similarly, immersive night tours and fantasy-themed attractions weave fictional narratives into real landscapes. Through these overlapping layers, the boundaries between material space, virtual augmentation, and imaginative storytelling become increasingly porous (de Almeida & Boavida-Portugal, 2025). Building on these observations, we propose a framework for understanding how fixed authenticity can be actively engaged in multi-reality environments. In these settings, tourists interact with overlapping layers of physical, digital, and imagined realities, allowing the hidden potentials of a site or experience to emerge.

Within this framework, we identify two key boundary conditions that guide when the latent potentials of authentic experiences can be revealed: referential fidelity and aesthetic–narrative coherence. Referential fidelity preserves clear connections to perceptual and material reality (Bonfert et al., 2025), while aesthetic–narrative coherence maintains the sense-making logic that keeps experiences understandable and emotionally engaging (Scroggins, 2023). When these conditions are met, the latent potentials of authenticity can emerge in perceptually and emotionally meaningful ways. Specifically, these emergent tendencies can take on three experiential dispositions of syntheticity. Marvelous reveals latent symbolic or unconscious meanings, heightening reality when environments resonate with internal symbolic templates, such as through AI-enhanced imagery or immersive overlays (Breton, 1924; Gremels & Strom, 2022). Serendipity emerges from unexpected yet meaningful intersections of imagined and actual realities, producing contingent experiences that feel more "authentic" through personal interpretation (Merton & Barber, 2011). Uncanny renders the familiar perceptually strange without losing recognizability, renewing attention and amplifying reality (Windsor, 2019).

Together, these dispositions capture how synthetic realness produces experiences in which "the unreal feels real" and "the real feels unreal."

The study advances tourism theory by proposing an ontological shift from authenticity as a stabilizing property within a single reality to syntheticity as a dynamic condition of multi-reality experience. It further extends surrealist perspectives in tourism research by theorizing syntheticity as a higher-order transformation of surreality, offering a novel framework for understanding realness in the post-digital and psychologically intensified tourism contexts. Practically, it provides actionable insights for designing, interpreting, and evaluating tourism experiences in which physical, digital, and imaginal realities converge, reshaping what tourists perceive and value as "real".

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From Cue to Imagination: The Pathway of Sensory Imagery in Shaping Product Perception and Behavior

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Abstract

Research on sensory marketing finds that sensory cues in advertisement can shaped corresponding sensory experience through mental simulation, which in turn influences consumers' attitude and behavior. This study examines the effect of kinesthetic cues on kinesthetic imagery in the context of skiing, and the mediation of product evaluation between imagery and behavioral intention through an online within-subjects experiment. The results show that kinesthetic positively influence kinesthetic imagery, including vividness and elaboration; product evaluation partially mediates the relationship between kinesthetic imagery (vividness and elaboration) and behavioral intentions. Theoretically, this study extends research on tourism sensory imagery by focusing on kinesthetic experiences. Practically, the findings suggest that kinesthetic cues can be used by tourism marketers to influence tourists' behavioral intentions.

Keywords: kinesthetic cues; sensory imagery; behavioral intention

1. Introduction

Tourism activities are fundamentally multisensory, with movement and bodily interaction playing a key role in shaping perceptions and engagement. In advertisement marketing, images and videos showing movements or interactive content can enhance the perception of products or experiences without any direct physical contact (Elder & Krishna, 2012; Palmiero et al., 2019). The significance of kinesthetic cues in tourism activities has been verified by scholars (Li et al., 2023). However, the way kinesthetic cues influence the vividness of kinesthetic imagery in tourism marketing has not been explored.

Mental imagery refer to a mental experience characterized by sensory representations manifested within the mind and generated without the presence of actual external stimuli, and plays a crucial role in shaping product evaluation and behavioral intention (Di-Clemente et al., 2025; Kim et al., 2021). Accordingly, examining the role of kinesthetic cues in enhancing kinesthetic imagery represents an important yet underexplored issue in tourism marketing research.

In addition, previous research has examined the mediation of mental imagery between sensory cues and behavior (Burns et al., 1993). This research focused on the relationship between sensory cues and imagery, while paying less paid attention to downstream evaluative processes. For example, product evaluation, an important influencing factor on behavior, has rarely been incorporated in to the imagery-behavior framework. Clarifying these pathways is especially relevant for marketing and tourism contexts, where mediated experiences constrain direct sensory engagement and heighten consumers' reliance on mentally constructed imagery and evaluative judgments (Elder et al., 2017; Gan et al., 2023).

Building on the imagery theory and sensory marketing theory, this study investigates whether kinesthetic cues enhance kinesthetic imagery and how kinesthetic imagery affects product evaluation and behavioral intention. This study aims to provide guidance and suggestions for tourism marketing from the perspective of consumer psychology, especially for experiences that involve bodily participation or interactive engagement.

2. Literature Review

Humans receive sensory data from both within and between modalities, which serve as the foundation for perceptual judgments and motor actions (Krishna, 2012; Scarfe, 2022). These sensory data are processed as sensory cues, which refer to information perceived through sensory channels (e.g., visual, auditory, haptic) that shape individuals' perception and behavior(Krishna, 2012; Scarfe, 2022). Sensory cues can be categorized into different modalities, including visual cues (e.g., color), olfactory cues (e.g., aroma), gustatory cues (e.g., flavor), haptic cues (e.g., texture), and auditory cues (e.g., music) and kinesthetic cues (Compeau et al., 1998; Krishna & Elder, 2021). In sensory marketing, consumer can simulate experiences in the absence of corresponding sensory cues (Haase et al., 2020; Krishna, 2012).

Based on imagery theory, mental imagery refers to the simulation and experience of sensory content in the mind (Elder & Krishna, 2022; Wu & Chen, 2024), which means that seeing with the mind's eye. Scholars have found that, in addition to sight, people can also perceive through auditory, gustatory, haptic, and other senses, forming sensory imagery such as auditory imagery (Hubbard, 2018), olfactory imagery (Fantin et al., 2020), motor imagery and more(Elder et al., 2017; Haase et al., 2020; Van Caenegem et al., 2024), all of which Nanay refers to as mental imagery (Nanay, 2017).

Empirical evidence suggests that sensory cues could enhances mental imagery. For instance, advertisements can stimulate consumers' imagery through vivid visual and linguistic cues (MacInnis & Price, 1987). In online shopping-related research, haptic cues of production transmitted in the form of images and text descriptions will lead customers to generate higher haptic imagery compared to the absence of haptic cues (Silva et al., 2021). Kinesthetic cues can also be conveyed through visual depictions of motion, images suggesting manipulation of objects, or instructions that imply bodily engagement (Elder & Krishna, 2012, 2022). When an object is oriented toward an individual's dominant hand, such as in a pasta advertisement where a fork is positioned on the right side of the plate, it enhances the perception of interaction with the object, specifically evoking kinesthetic imagery (Elder & Krishna, 2012, 2022). Accordingly, it is hypothesized that:

H1: Tourists will report higher kinesthetic imagery when kinesthetic cues are present, compared to when they are absent.

The concept of mental imagery includes two dimensions: vividness and elaboration (Zheng et al., 2022). Vividness describes how clear, intense and sharp kinesthetic imagery is, while elaboration reflects the degree to which individuals mentally expand and enrich imagery by integrating one's cognition beyond the presented stimulus (Babin & Burns, 1998; MacInnis & Price, 1987). Accordingly, it is hypothesized that:

H1a: Tourists will report higher kinesthetic imagery vividness when kinesthetic cues are present, compared to when they are absent.

H1b: Tourists will report higher kinesthetic imagery elaboration when kinesthetic cues are present, compared to when they are absent.

Sensory imagery may affect behavioral intention, alongside its cognitive and affective influences (Kim et al., 2021). Research indicates that imagery influences intention and timing of purchases by offering positive sensory and emotional experiences (MacInnis & Price, 1987). Visual depiction of product displays in advertisements can also evoke mental imagery of interaction with the product, which further influences purchase intentions (Elder & Krishna, 2012). Advertisements can use visual cues to evoke haptic and gustatory imagery, helping to improve consumers' attitudes toward both the advertisement and the product (Haase et al., 2020). These attitudes, in turn, influence consumers' behavioral intention (Ajzen, 1991). Accordingly, it is hypothesized that:

H2: Kinesthetic imagery positively influences behavioral intention.

H2a: Kinesthetic imagery vividness positively influences behavioral intention.

H2b: Kinesthetic imagery elaboration positively influences behavioral intention.

Although mental imagery can directly influence individuals' responses, its influence on behavioral intention appears to operate indirectly through attitude or evaluation. Mental imagery enables individuals to simulate interaction with the destination or product, and this mental simulation enhances the experiential realism and embodied engagement (Elder & Krishna, 2012, 2022). These simulated experiences inform individuals' evaluations, such as perceived attractiveness, quality, and overall favorability of the destination (Kim et al., 2021; MacInnis & Price, 1987). Product evaluation plays a crucial role in behavioral intention, more favorable evaluations increase individuals' willingness to engage in the behavior (Ajzen, 1991). Accordingly, product evaluation is expected to mediate the relationship between mental imagery and behavioral intention.

Specifically, imagery vividness enhances the clarity and sensory richness of the imagined experience, while elaboration reflects the extent to which individuals cognitively expand and integrate the imagery with existing knowledge structures (Bone & Ellen, 1992; Elder & Krishna, 2012). Both imagery characteristics strengthen the diagnostic value of the mental simulation, making the imagined experience more informative for evaluation. As a result, vividness and elaboration contributes to more favorable product evaluation, which subsequently increases behavioral intention.

H3: Product evaluation mediate the relationship between kinesthetic imagery and behavioral intention.

H3a: Product evaluation vividness mediate the relationship between kinesthetic imagery and behavioral intention.

H3b: Product evaluation elaboration mediate the relationship between kinesthetic imagery and behavioral intention.

3. Methodology

This study employed a within-subjects experimental design, kinesthetic cues-absent and kinesthetic cues-present. The study created two versions of skiing images as stimuli, one is a simple version with only skiing scenes and skateboard, and the other is an enhanced version

with a person skiing. After viewing image, participants are required to complete a questionnaire that includes items such as sensory imagery, product evaluation, and behavioral intention, as well as a manipulation test and an attention check. The order in which the two images are presented is random. After completing all trials, participants provided demographic information.

The final sample consisted of 92 participants, including 45 males (48.9%) and 47 females (51.1%). Participants were primarily young adults, with the majority aged 26–35 years (n = 42, 45.7%), followed by those aged 18–25 years (n = 33, 35.9%), 36–45 years (n = 15, 16.3%), and a small proportion aged 46–65 years (n = 1, 2.2%). Regarding educational background, most participants held a bachelor's degree (n = 66, 71.7%), followed by associate degrees (n = 13, 14.1%) and master's degrees (n = 11, 12.0%), while a small number had a high school education or below (n = 2, 2.2%).

This study selected two constructs, vividness and elaboration, to assess participants' kinesthetic imagery. All items were rated using a Likert 7-point scale (1=strongly disagree, 7=strongly agree) (Babin & Burns, 1998; Park, 2006; Walters et al., 2007). Product evaluation and behavioral intention were measured using single item utilizing a 7-point scale (Liu et al., 2023; Spangenberg et al., 1996). Regarding the manipulation check of kinesthetic cues, participants were asked to rate the extent to which the image was perceived as containing sensory cues rather than purely visual content (Jiang et al., 2024). Participants in the sensory cue-present condition reported significantly greater perceived cue presence ($M = 4.53$, $SD = 0.67$) than those in the cue-absent condition ($M = 2.90$, $SD = 1.51$), $t(125.75) = 9.49$, $p < 0.001$, Cohen's $d = 1.40$, confirming the success of the cue manipulation.

4. Results

For the hypothesis 1, this study separately verified the effect of sensory cues on the vividness and elaboration of kinesthetic imagery through independent samples t-test. For imagery vividness, participants in the cue-present condition ($M = 6.14$, $SD = 0.65$) reported significantly higher vividness than those in the cue-absent condition ($M = 4.43$, $SD = 1.77$), $t(115.28) = 8.70$, $p < .001$, Cohen's $d = 1.282$. Similarly, kinesthetic imagery elaboration was significantly higher in the cue-present condition ($M = 6.16$, $SD = 0.85$) compared to the cue-absent condition ($M = 5.08$, $SD = 1.50$), $t(143.65) = 6.05$, $p < .001$, Cohen's $d = 0.893$. Consequently, hypothesis 1a and 1b are fully supported, indicating that sensory cues have significant positive import on vividness and elaboration.

This study use PROCESS Model 4 to test the impart of kinesthetic imagery vividness on behavioral intention with product evaluation as intermediary variable. The results show that the kinesthetic imagery vividness has a direct positively impact on behavioral intention ($b = 0.163$, $SE = 0.053$, $t = 3.068$, $p = 0.0025$), supporting hypothesis H2a. In addition, vividness significantly influenced product evaluation ($b = 0.637$, $SE = 0.040$, $t = 15.866$, $p < 0.001$), which in turn positively predicted behavioral intention ($b = 0.806$, $SE = 0.063$, $t = 12.709$, $p < 0.001$). The indirect effect of vividness on behavioral intention via product evaluation was significant (effect = 0.513, BootSE = 0.051), providing support for H3a. The results show that product evaluation has partial mediation between kinesthetic imagery vividness and behavioral intention.

This study examined the mediation of product evaluation between kinesthetic imagery elaboration and behavioral intention through the PROCESS Model 4. The results show that the kinesthetic imagery elaboration has a direct positively impact on behavioral intention (b =

0.309, SE = 0.065, t = 4.775, p < 0.001), supporting hypothesis H2b. Furthermore, elaboration strongly predicted product evaluation (b = 0.788, SE = 0.045, t = 17.660, p < 0.001), which again significantly predicted behavioral intention (b = 0.706, SE = 0.065, t = 10.793, p < 0.001). The indirect effect through product evaluation was also significant (effect = 0.556, BootSE = 0.064), supporting H3b. The results show that product evaluation has partial mediating effect between sensory image elaboration and behavioral intention.

5. Discussion

Using experimental data, this study examined the formation and effect of kinesthetic imagery. First, the results show that kinesthetic cues positively influence kinesthetic imagery. Participants reported higher imagery vividness and elaboration in the kinesthetic cues-present condition than in the kinesthetic cues-absent condition. This aligns with imagery theory, which suggest that mental simulation can be triggered by corresponding sensory cues through the visual channel (Elder & Krishna, 2012; Nanay, 2017). In the context of social media, such cues appear particularly important in facilitating the construction of imagined experiences.

Second, the findings demonstrate that sensory imagery, including vividness and elaboration, could positively influence behavioral intention. This result aligns with prior research suggesting mental imagery enhances experiential involvement (MacInnis & Price, 1987). Furthermore, research indicates imagery increases behavioral intention by allowing individuals to mentally "pre-experience" consumption or travel (Kim et al., 2021).

Third, product evaluation partially mediates the relationship between sensory imagery and behavioral intention. For both vividness and elaboration, imagery significantly improved product evaluation, which in turn positively influences behavioral intention. At the same time, the direct effects of kinesthetic imagery remained significant. This pattern indicates two complementary pathways, a direct experiential route and an indirect evaluative route.

This study offers several practical implications for tourism communications. First, the empirical findings indicate that incorporating kinesthetic cues into images and videos can effectively enhance consumers' kinesthetic imagery. Even in the absence of direct physical interaction, cues implying movement, bodily engagement, or action can facilitate a simulated kinesthetic experience. This highlights the value of emphasizing embodied experiences in tourism marketing rather than relying solely on visual aesthetics. Second, the results indicate that the influence of sensory imagery on behavioral intention is partly mediated through product evaluation. This implies that sensory cues are more effectiveness when they improve consumers' overall evaluative judgments, rather than directly triggering behavior. Sensory cues design support positive evaluations, and then translate into stronger behavioral intention.

This study has several limitations. First, focusing on kinesthetic cues limits generalizability, and future research may examine other sensory modalities or multisensory imagery. Second, the use of self-reported measures may not capture implicit imagery responses, and future research could use physiological indicators. Finally, individual imagery abilities and prior experience deserve further investigation.

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From Destination Brand Identity to Tourist Loyalty: The Sequential Mediating Roles of Perceived Quality and Satisfaction

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Abstract

In an increasingly competitive global tourism marketplace, destinations must move beyond image-centric branding toward more holistic and identity-driven strategies. Destination brand identity (DBI) provides a structured framework through which tourists recognise, interpret, and evaluate destinations, ultimately shaping post-visit behavioural outcomes such as revisit intention and positive word-of-mouth (Tsaur et al., 2016). This shift is particularly relevant for rapidly transforming destinations such as Saudi Arabia, where tourism development ambitions, national branding narratives, and international perceptions are evolving simultaneously (Alsedrah, 2021; Ekiz et al., 2017; Karolak & Michael, 2024). Recent branding research further suggests that loyalty formation is rarely immediate but instead emerges through layered cognitive and affective processes involving destination personality, sustainability perceptions, and memorable experiences (Cavalcante et al., 2025; Elalfy et al., 2025).

Despite growing interest in DBI and destination brand equity, empirical research remains limited regarding how DBI dimensions translate into destination loyalty through sequential psychological mechanisms, particularly in emerging tourism contexts (Pongoh & Mandagi, 2025). However, much of the existing literature remains fragmented, examining isolated branding dimensions or direct effects on loyalty, thereby offering limited insight into the sequential mechanisms through which destination brand identity is translated into sustained behavioural outcomes (Csapó & Kusumaningrum, 2025). Addressing this gap, the present study examines whether key DBI dimensions - destination image, personality, awareness, culture, and special attributes - influence destination loyalty through the sequential mediating roles of perceived destination quality and destination satisfaction.

Conceptual framework:

The proposed model follows a process logic consistent with stimulus–organism–response theory (Qiu et al., 2023). DBI dimensions function as external stimuli that shape tourists' internal evaluations, beginning with cognitive assessment (perceived destination quality) and followed by affective evaluation (destination satisfaction), which in turn drive behavioural responses (destination loyalty). Satisfaction is conceptualised as a post-consumption affective judgment resulting from perceived performance relative to expectations, consistent with expectancy disconfirmation theory (Oliver, 1997). Contemporary destination branding

research increasingly emphasises mediated and sequential pathways, arguing that brand-related antecedents influence loyalty primarily through evaluative mechanisms rather than through direct effects (Sobaih et al., 2025).

This perspective aligns with destination brand equity models that conceptualise loyalty as the outcome of layered cognitive and affective evaluations rather than immediate behavioural reactions (Tasci & Back, 2025; Qiu et al., 2025) and with evidence that contextual factors such as age and visit frequency may further condition these relationships (Elalfy et al., 2025). Accordingly, the study proposes that destination image, personality, awareness, culture, and special attributes positively influence perceived destination quality, and that destination quality and destination satisfaction sequentially mediate the effects of DBI dimensions on destination loyalty (Ekiz et al., 2017). This framework is further supported by research highlighting the foundational role of awareness, associations, and image in destination brand equity formation (Pradnyandari et al., 2025) and by holistic "brand gestalt" perspectives that emphasise indirect pathways to loyalty (Pongoh & Mandagi, 2025). Recent trend analyses also point to a growing methodological shift toward integrative, mechanism-focused destination branding models (Csapó & Kusumaningrum, 2025).

Methodology:

Saudi Arabia provides a particularly relevant research context due to its dual positioning as the holiest destination in Islam and as an emerging tourism destination undergoing rapid brand transformation. Under Vision 2030 (Government of Saudi Arabia, 2016), the country has prioritised tourism-led economic diversification through large-scale destination branding initiatives including global sports events, mega-projects, and sustainability-oriented developments making it an appropriate setting to assess whether such branding efforts translate into perceived quality, satisfaction, and loyalty (Ekiz et al., 2017; Alsedrah, 2021). A quantitative research design was employed. Data were collected from tourists who had completed their destination experience using convenience sampling at the King Abdulaziz International Airport departure hall during summer 2024. A professional research team administered paper-and-pen questionnaires on-site asking respondents to reflect on their full destination experience (Alshehri, 2025). The airport departure context is appropriate for capturing holistic post-trip evaluations, as respondents are able to reflect on their full destination experience (Alsedrah, 2021). The 1200 questionnaires were printed however final sample consisted of 925 respondents, resulting % 77.08 as the response rate).

Measurement items were adapted from established destination branding and tourist behaviour scales (Karolak & Michael, 2024), with DBI operationalisation anchored in the scale development framework of Tsaur et al. (2016). Data analysis followed established multivariate procedures (Hair et al., 2019). Confirmatory factor analysis (CFA) was conducted to assess the measurement model, and items with low standardised loadings were removed to improve construct validity. The refined measurement model demonstrated acceptable fit ($\chi^2 = 2736$, df = 791, $p < .001$; CFI = 0.854; TLI = 0.841; RMSEA = 0.050; SRMR = 0.052). Reliability was supported through Cronbach's alpha and composite reliability values ranging from 0.65 to 0.83, while discriminant validity was confirmed using the heterotrait–monotrait ratio, with all values below the conservative threshold of 0.85. Structural equation modelling and bootstrapped serial mediation analyses were used to test the hypothesised direct and sequential indirect effects (see Appendices below for the detailed results).

Findings:

All DBI dimensions exerted significant positive effects on perceived destination quality. Destination image showed the strongest influence ($\beta = 0.696$, $p < 0.001$), followed by destination culture ($\beta = 0.482$), special attributes ($\beta = 0.441$), destination awareness ($\beta = 0.426$), and destination personality ($\beta = 0.418$). More importantly, serial mediation analysis confirmed that destination quality and destination satisfaction jointly and sequentially mediated the relationships between each DBI dimension and destination loyalty. All indirect effects were positive and statistically significant. These findings demonstrate that DBI influences loyalty primarily through cognitive and affective evaluations rather than through direct, unmediated pathways, reinforcing contemporary mediated perspectives on destination loyalty formation (Elalfy et al., 2025; Sobaih et al., 2025). Notably, the consistent significance of all sequential indirect paths highlights the robustness of the proposed process model across multiple destination brand identity dimensions.

Discussion and Conclusion:

This study confirms that destination brand identity operates through a sequential evaluation process rather than exerting direct effects on loyalty. Destination image, culture, personality, awareness, and special attributes shape tourists' perceptions of destination quality, which subsequently influence satisfaction and, ultimately, loyalty intentions. These findings reinforce expectancy–disconfirmation theory by demonstrating that satisfaction emerges from tourists' evaluations of perceived performance relative to expectations (Oliver, 1997). They also support contemporary destination branding research that conceptualises loyalty as the outcome of mediated cognitive–affective processes rather than immediate behavioural responses (Tasci & Back, 2025).

By empirically validating a DBI → quality → satisfaction → loyalty pathway in an emerging tourism destination context, the study advances understanding of how identity-based perceptions are translated into sustainable behavioural outcomes. The prominence of destination image and culture suggests that symbolic representations must be continuously validated through experiential authenticity to sustain quality perceptions and satisfaction.

Implications:

From a theoretical perspective, the study extends destination branding and brand equity literature by integrating multiple DBI dimensions into a single, sequential mediation framework. This responds directly to recent calls for more mechanism-focused and process-oriented models in destination branding research (Csapó & Kusumaningrum, 2025). The findings underscore the pivotal role of perceived quality and satisfaction as bridging constructs between destination identity and loyalty, thereby strengthening the explanatory power of DBI frameworks.

Practically, the results indicate that destination marketing organisations should move beyond symbolic branding and promotional messaging alone. Investments in destination brand identity must be prioritised alongside tangible improvements in service quality and visitor experience. In the context of Saudi Arabia, strengthening culturally grounded identity cues and distinctive destination attributes must be accompanied by consistent service delivery to ensure that projected brand promises are confirmed in practice (Alsedrah, 2021; Ekiz et al., 2017). Digital and social media communication strategies can further amplify destination brand identity, but their effectiveness depends on alignment with authentic on-ground performance and visitor experiences (Alshehri, 2025).

Limitations and Future Research Directions:

Despite its contributions, this study has limitations. Data were collected using convenience sampling at a single airport departure site, which may limit the generalisability of the findings. In addition, the cross-sectional design restricts the ability to capture changes in perceptions, satisfaction, and loyalty over time. Future research should employ longitudinal designs to examine how destination brand identity evaluations and loyalty intentions evolve across multiple visits. Multi-site or cross-destination sampling would enhance external validity and allow comparative analysis. Future studies may also incorporate moderating variables such as age, cultural background, visit frequency, or travel purpose to refine understanding of how different tourist segments process destination brand identity cues (Elalfy et al., 2025). Finally, integrating relational constructs such as brand trust or emotional attachment may further enrich explanations of destination loyalty formation (Sobaih et al., 2025). Despite these limitations, the large sample size and rigorous analytical approach provide confidence in the stability of the reported relationships.

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Appendices:

Table 1. Reliability of Study Constructs

Construct	Cronbach alpha	CR
IMG	.836	.83
QUAL	.786	.77
PERS	.652	.65
AWAR	.712	.72
CULT	.720	.72
SPEC	.782	.77
DSAT	.742	.74
DLOY	.832	.83

Notes: IMG = Destination Image, QUAL = Destination Quality, PERS = Destination Personality, AWAR = Destination Awareness, CULT = Destination Culture, SPEC = Destination Special, DSAT = Destination Satisfaction, DLOY = Destination Loyalty, CR= Composite Reliability. **Source:** Author's work.

Table 2. Heterotrait–Monotrait Ratio (HTMT)

	IMG	QUAL	PERS	AWAR	CULT	SPEC	DSAT	DLOY
IMG	—	0.600	0.450	0.417	0.452	0.453	0.402	0.411

	IMG	QUAL	PERS	AWAR	CULT	SPEC	DSAT	DLOY
QUAL	0.600	—	0.422	0.411	0.433	0.405	0.338	0.326
PERS	0.450	0.422	—	0.518	0.481	0.458	0.431	0.398
AWAR	0.417	0.411	0.518	—	0.551	0.437	0.337	0.355
CULT	0.452	0.433	0.481	0.551	—	0.566	0.411	0.380
SPEC	0.453	0.405	0.458	0.437	0.566	—	0.560	0.531
DSAT	0.402	0.338	0.431	0.337	0.411	0.560	—	0.703
DLOY	0.411	0.326	0.398	0.355	0.380	0.531	0.703	—

Notes: All HTMT values are below the recommended thresholds of 0.85 and 0.90, indicating that discriminant validity is satisfactorily established among all constructs.

Table 3. Hypotheses Testing – Direct Effects

Hypotheses	***β***	***p*-Value**	**Decision**
Direct effects			
H_1: IMG → QUAL	0.696	<0.001	Supported
H_2: PERS → QUAL	0.418	<0.001	Supported
H_3: AWAR → QUAL	0.426	<0.001	Supported
H_4: CULT → QUAL	0.482	<0.001	Supported
H_5: SPEC → QUAL	0.441	<0.001	Supported

Table 4. Hypotheses Testing – Serial Mediation Effects

Hypotheses	**Effect**	**SE**	**LLCI**	**ULCI**	**Decision**
Indirect effects					
H_6: IMG → QUAL → DSAT → DLOY	0.072	.018	.0365	.1101	Supported
H_7: PERS → QUAL → DSAT → DLOY	0.055	.011	.0344	.0784	Supported
H_8: AWAR → QUAL → DSAT → DLOY	0.071	.012	.0483	.0990	Supported
H_9: CULT → QUAL → DSAT → DLOY	0.066	.013	.0414	.0947	Supported
H_{10}: SPEC → QUAL → DSAT → DLOY	0.037	.009	.0206	.0571	Supported

From Nudging to Boosting: How Message Communication Advances Restaurant Food Waste Reduction – A Systematic Literature Review

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Abstract

Food waste reduction has increasingly gained global attention, with the food service sector contributing approximately 28% of global food waste (United Nations Environment Programme, 2024). Despite its substantial impact, research on food waste in restaurants remains limited, especially with respect to small and medium-sized enterprises (Organisation for Economic Co-operation and Development, 2021). Moreover, plate waste is of particular concern, as it represents a primary source of restaurant food waste, is highly avoidable, and has received less scholarly attention than other types of food waste (Dolnicar, 2021; Kaman et al., 2024).

Among various interventions for food waste reduction, message communication is widely regarded as a low-cost but powerful intervention strategy at both macro and micro levels, and its application in restaurant settings has gained growing attention (Dai & Gong, 2024). At the macro level, targeted message communication, such as publicity campaigns of public policy initiatives, has been widely employed to guide and influence public behavioral habits (Caso et al., 2023; Long et al., 2022). At the micro level, restaurants utilize message communication to achieve multiple objectives, such as image improvement and cause-related marketing, among others (Connelly et al., 2011, 2025; Song et al., 2025).

Although existing studies acknowledge the importance of message communication in reducing restaurant food waste (Mansoor et al., 2025), most of them predominantly adopt a one-way "sender → message → receiver" logic, overlooking its dynamic and interactive nature (Chen et al., 2024; Leong et al., 2024). In particular, message communication in the restaurant plate waste reduction context focuses on mitigating customer behavior in the post-kitchen stage. Recent research has increasingly emphasized the subjective agency of customers as active information recipients rather than passive message targets (Hertwig et al., 2025; Zhang et al., 2020). This shift reflects a broader transition in the literature from nudging-oriented toward boosting-oriented strategies. However, this theoretical transition has not yet been systematically examined in the context of restaurant food waste reduction message communication.

To address these gaps, this study will systematically examine the shift from nudging-oriented to boosting-oriented message communication approaches in restaurant food waste reduction practices and seek to answer the following research questions: What message communication approaches are adopted in restaurant food waste reduction practices? How do these message communication approaches influence restaurant food waste reduction outcomes?

Drawing on signaling theory, restaurant food waste reduction message communication is conceptualized as a dynamic signaling loop involving the signaler, the signal, the receiver,

feedback, and the signaler's subsequent response. Building on this perspective, the study aims to develop an integrated framework of restaurant food waste reduction message communication. Methodologically, a systematic literature review is conducted following the PRISMA 2020 guidelines. The synthesized findings are interpreted through the integrated lens of signaling theory and the nudging and boosting framework. In particular, the study examines the shift from nudging-oriented to boosting-oriented message communication approaches and their implications for restaurant food waste reduction practices. Theoretically, this research extends signaling theory to the food waste management field, shedding new light on future research. Practically, this thesis provides actionable insights for restaurant operators, policymakers, and sustainability practitioners.

Keywords: Food waste reduction, Message communication, Signaling theory, Systematic literature review, Nudging, Boosting

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From Readiness to Recovery: Operationalizing Destination Resilience Through Multi-Level Business Continuity Governance in Asia-Pacific Tourism

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Abstract

Tourism crisis management literature identifies four critical phases—Preparedness, Response, Recovery, and Resilience—yet significant implementation gaps persist in the Preparedness and Recovery phases across Asia-Pacific destinations. While individual hospitality enterprises increasingly adopt ISO 22301 Business Continuity Management Systems (BCMS), systematic destination-level readiness frameworks remain underfunded and inadequately coordinated with organizational-level plans.

The 2024 European Travel Commission (ETC) Crisis Management Checklist and the Asia-Pacific Economic Cooperation (APEC) 2023 Handbook underscore this coordination deficit: organizations with robust BCMS may still experience severe disruption when destination-level governance infrastructure proves incoherent or resource-constrained. Drawing on post-COVID recovery patterns (2020–2025) and contemporary crisis preparedness assessments, this research identifies coordination failure between organizational and destination-level resilience as the primary barrier to sustainable tourism recovery in the region. Through mixed-methods comparative case study analysis across four Asia-Pacific tourism destinations (Hong Kong, Jeju/Korea, Singapore, Da Nang/Vietnam), this research examines how organizational-level ISO 22301 BCMS can be integrated with destination-level crisis management governance to create nested, multi-level resilience.

Anticipated findings reveal a three-tier readiness maturity model distinguishing destination resilience capacity: High-Coordination, Moderate-Coordination, and Low-Coordination destinations. The research advances multi-level governance theory by proposing an operationalizable Destination Readiness Maturity Framework and provides Asia-Pacific tourism authorities with a replicable model for moving beyond reactive crisis response to proactive, coordinated resilience culture.

Keywords: Tourism Crisis Management, Business Continuity Management Systems (BCMS), Destination Resilience, Institutional Coordination, Multi-level Governance

Introduction and Background

Tourism crisis management literature identifies four critical phases—Preparedness, Response, Recovery, and Resilience (APEC, 2023)—yet significant implementation gaps persist in the Preparedness and Recovery phases across Asia-Pacific destinations. While individual hospitality enterprises increasingly adopt ISO 22301 Business Continuity Management Systems (BCMS; International Organization for Standardization, 2019), systematic destination-level readiness frameworks remain underfunded and inadequately coordinated with

organizational-level plans. The 2024 European Travel Commission Crisis Management Checklist and the Asia-Pacific Economic Cooperation 2023 Handbook underscore this coordination deficit: organizations with robust BCMS may still experience severe disruption when destination-level governance infrastructure proves incoherent or resource-constrained (ETC, 2024). Drawing on post-COVID recovery patterns (2020–2025) and contemporary crisis preparedness assessments, this research identifies coordination failure between organizational and destination-level resilience as the primary barrier to sustainable tourism recovery in the region.

Research Questions

How can organizational-level ISO 22301 BCMS be effectively integrated with destination-level crisis management governance to create nested, multi-level resilience?

What institutional mechanisms, incentive structures, funding frameworks, and governance architectures are necessary to operationalize this integration and bridge the readiness-recovery implementation gap?

Methodology

Mixed-methods comparative case study analysis will be conducted across four Asia-Pacific tourism destinations (Hong Kong, Jeju/Korea, Singapore, Da Nang/Vietnam) representing varying crisis exposure profiles, recovery stages, and governance models. Data collection methods include the following:

- Destination-level policy analysis: Systematic review of 20+ official crisis management plans, destination management organization (DMO) governance protocols, and funding allocations (2020–2025)
- Organizational surveys (n = 70+): MICE (Meetings, Incentives, Conferences, and Exhibitions), hospitality, and cruise sector operators assessing BCMS adoption maturity, testing frequency, and inter-organizational coordination
- Stakeholder interviews (n = 50+): government tourism agencies, DMOs, industry associations, and ISO 22301-certified operators exploring governance perceptions and resource constraints
- Crisis simulation assessment: Evaluating readiness protocols and cross-organizational communication effectiveness

Anticipated Findings

Analysis will reveal a three-tier readiness maturity model distinguishing destination resilience capacity:

1. High-Coordination destinations demonstrate mandated baseline BCMS compliance for major operators, shared multi-stakeholder testing protocols and joint scenario exercises, dedicated pre-crisis funding mechanisms separate from emergency budgets, and formalized inter-agency coordination structures.

2. Moderate-Coordination destinations possess organizational BCMS and sectoral guidelines but lack integrated destination governance, inter-organizational testing, and dedicated pre-crisis funding.

3. Low-Coordination (Reaction-Dependent) destinations exhibit organizational BCMS adoption in large enterprises but fragmentation across recovery phases, minimal inter-organizational coordination, and reactive-only funding.

Key finding: Destination resilience capacity correlates more strongly with governance structure than individual organizational preparedness.

Theoretical Contribution

This research advances multi-level governance theory by proposing an operationalizable Destination Readiness Maturity Framework that translates abstract resilience concepts into nested institutional arrangements. It bridges organizational crisis management literature and destination governance literature, directly addressing the documented implementation gap between policy recommendations (ETC, 2024; APEC, 2023) and actual stakeholder coordination. The framework identifies four critical institutional levers: (1) compliance mandates and incentives; (2) coordinated testing protocols; (3) dedicated funding mechanisms; and (4) formal inter-agency structures.

Practical Contribution

The framework provides Asia-Pacific tourism authorities and DMOs with a replicable model for moving beyond reactive crisis response to proactive, coordinated resilience culture. It specifies resource requirements, governance structures, and stakeholder roles necessary for destination-level preparedness—directly applicable to current policy design challenges in Hong Kong, Korea, and Southeast Asia. Findings illuminate why destinations with similar organizational BCMS adoption exhibit divergent recovery trajectories, offering evidence-based guidance for institutional design.

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Green Islands Policy and Plan in Action: Koh Tao as a Case Study for Sustainable Tourism Transitions

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Abstract

Small island destinations face increasing pressures from tourism growth, environmental degradation, and climate change, while remaining highly dependent on fragile terrestrial and marine ecosystems (Baldacchino, 2006; OECD, 2020). Sustainable island policy literature emphasizes that islands require context-specific governance arrangements due to spatial constraints, ecological sensitivity, and economic dependence on tourism and natural resources (Hall, 2011; Gössling et al., 2009). This paper examines Koh Tao, Thailand, as a case study for developing and operationalizing a Green Islands Policy and Plan in Action aligned with sustainable tourism principles and international sustainability frameworks (UNEP & UNWTO, 2005; GSTC, 2022).

Koh Tao is globally recognized for its coral reefs and marine-based tourism, which constitute both its primary economic asset and its most vulnerable resource base. Consistent with the Tourism Area Life Cycle (TALC) model (Butler, 1980), the island exhibits characteristics of a mature destination facing mounting pressures on infrastructure, environmental quality, and governance capacity. Addressing these pressures requires integrated planning approaches that connect environmental management, infrastructure investment, and institutional coordination (Bramwell & Lane, 2011).

Methods

The study employs a mixed qualitative–quantitative approach. Primary data were collected through a structured questionnaire survey administered to key tourism stakeholders (N = 500), including international and domestic visitors, local residents, tourism operators, and representatives of relevant government organizations. Descriptive statistics (mean and standard deviation) were used to assess levels of agreement regarding priority actions for developing Koh Tao as a Green Island for sustainable tourism. These data were complemented by stakeholder mapping and document review to contextualize governance roles and implementation challenges.

Results

Survey results indicate consistently high levels of agreement across all proposed development dimensions, with mean scores ranging from 3.94 to 4.25, reflecting strong stakeholder consensus on the necessity of transitioning Koh Tao toward a Green Island model. Governance and institutional collaboration emerged as the most critical priorities, supporting existing research that identifies governance capacity as a determinant of sustainable tourism outcomes on islands (Hall, 2011; Bramwell & Lane, 2011). The highest-rated issue was the creation of cooperation or partnerships among government agencies, private sector actors, communities, and civil society (Mean = 4.25, S.D. = 0.817), followed by the establishment of continuous monitoring and evaluation systems for tourism management (Mean = 4.24, S.D. = 0.831).

Environmental priorities further align with coastal and island tourism literature emphasizing pollution control and ecosystem protection as prerequisites for destination resilience (Davenport & Davenport, 2006; Gössling et al., 2009). Wastewater management from tourism businesses and residential areas emerged as the most urgent environmental concern, highlighting direct linkages between land-based activities and marine ecosystem health. Waste management, plastic reduction, coral reef protection, freshwater security, and energy efficiency all received high levels of agreement, indicating broad awareness of cumulative environmental pressures commonly observed in island destinations (OECD, 2020).

Social dimensions—including workforce development, participatory decision-making, and cultural preservation—were also strongly supported. These findings are consistent with previous studies showing that local perceptions and social capacity are critical indicators of destination sustainability and long-term acceptance of tourism development (Diedrich & García-Buades, 2009).

Discussion and Implications

Recent sustainable tourism scholarship increasingly emphasizes island resilience, climate adaptation, and transformative governance rather than incremental environmental management alone (Becken & Hughey, 2013; Espiner et al., 2017; Scheyvens et al., 2023). In island contexts, tourism sustainability is now understood as a dynamic socio-ecological transition that must integrate climate risk, carrying capacity, infrastructure limits, and institutional coordination (OECD, 2020; Scott et al., 2019).

The findings from Koh Tao align with this contemporary shift. Stakeholders prioritized governance capacity, cross-sector coordination, and continuous monitoring over isolated environmental projects, reflecting current calls for systems-based and adaptive policy approaches in island tourism destinations (Hall & Williams, 2008; Scheyvens & Biddulph, 2018). The strong emphasis on waste and wastewater management and pollution control underscores the growing recognition that climate resilience and ecosystem protection in islands are inseparable from core infrastructure investment and regulatory enforcement (Scott et al., 2019; Gössling et al., 2021).

Furthermore, the importance placed on shared understanding, data exchange, and stakeholder participation supports emerging sustainable tourism paradigms that frame destinations as learning systems, requiring iterative policy adjustment, transparent decision-making, and long-term collaboration across scales of governance (Bramwell et al., 2017; Hall et al., 2020). In this regard, the Green Islands Policy and Plan in Action proposed for Koh Tao reflects contemporary island sustainability thinking by combining empirical stakeholder priorities with

adaptive governance principles, rather than relying solely on prescriptive environmental standards.

These insights contribute to the evolving discourse on sustainable tourism in small island destinations by demonstrating how quantitative stakeholder evidence can inform policy pathways that are both locally grounded and theoretically robust. Koh Tao illustrates how island tourism transitions can move beyond symbolic sustainability initiatives toward integrated governance models capable of addressing environmental limits, climate pressures, and socio-economic dependencies simultaneously.

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Hotel Design Factors and Guest Satisfaction: Evidence from an Emerging Hospitality Market

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Abstract

Hotel design has become an increasingly important determinant of guest experience in contemporary hospitality settings, particularly in emerging tourism markets where experiential differentiation is critical and where hotels increasingly function as primary experiential touchpoints for visitors. Drawing on servicescape theory, the stimulus–organism–response (S–O–R) paradigm, and a holistic design perspective, this study examines how key hotel design factors influence guest satisfaction and subsequent behavioral intentions (Kirima et al., 2017). Specifically, the study investigates the effects of social design, public design, room design, and perceived servicescape on guest satisfaction, and the impact of satisfaction on willingness to suggest and intention to revisit.

A quantitative research design was employed, and data were collected from 925 hotel guests in Saudi Arabia using a structured questionnaire. Confirmatory factor analysis and structural equation modelling were applied to test the proposed relationships. The results indicate that all examined hotel design factors exert significant positive effects on guest satisfaction, with perceived servicescape emerging as the strongest predictor. Guest satisfaction, in turn, significantly influences both willingness to suggest and intention to revisit, highlighting its central role in translating design perceptions into behavioral outcomes.

The findings demonstrate that hotel design functions not merely as an aesthetic or functional feature, but as a strategic experiential stimulus shaping satisfaction and post-stay behaviors. The study contributes to hospitality and tourism literature by empirically validating a process-based model of design-driven satisfaction in an emerging hospitality market. Practical implications suggest that hotel managers should adopt a holistic design strategy that integrates social, spatial, and environmental elements to enhance guest satisfaction and foster favorable behavioral intentions.

Keywords: Hotel design, Servicescape, Guest satisfaction, Willingness to suggest, Revisit intention

Introduction and Theoretical Background

In an increasingly experience-driven hospitality environment, hotel design has emerged as a critical determinant of guests' evaluations, satisfaction, and behavioral intentions (Odetoye et al., 2025; Shinegi & Widjaja, 2022). Beyond functional accommodation, hotels increasingly operate as experiential spaces where physical, social, and symbolic design elements jointly shape guests' perceptions of service quality and overall satisfaction (Zemke et al., 2018). This is particularly relevant in emerging tourism markets, where hotel environments often serve as primary touchpoints through which visitors form impressions of both service standards and destination competitiveness (Ali et al., 2023; Kirima et al., 2017; Ekiz et al., 2017).

The influence of hotel design on guest experience is conceptually grounded in servicescape theory, which posits that physical surroundings act as environmental cues influencing customers' cognitive, emotional, and behavioral responses (Ariffin et al., 2013; Bitner, 1992). Complementing this perspective, the stimulus–organism–response (S–O–R) paradigm explains

how design-related stimuli affect internal evaluations, which subsequently shape behavioral outcomes such as satisfaction and loyalty intentions (Asyraff et al., 2023). In addition, Gestalt theory highlights that guests experience hotel environments holistically, suggesting that the combined configuration of social spaces, public areas, and room design is more influential than isolated design attributes (Wang et al., 2024).

While prior hospitality research has demonstrated that atmospheric and design factors influence guest satisfaction and behavioral intentions (Countryman & Jang, 2006; Wakefield & Blodgett, 1996), empirical evidence remains limited regarding how distinct hotel design dimensions jointly contribute to satisfaction in rapidly developing hospitality contexts (Odetoye et al., 2025; Kirima et al., 2017). Addressing this gap, the present study examines the effects of key hotel design factors - social elements, public design, room design, and perceived servicescape - on guest satisfaction, and subsequently on willingness to suggest and intention to revisit (Shinegi & Widjaja, 2022). By doing so, the study moves beyond unidimensional treatments of hotel design and empirically tests a holistic, process-based model linking design perceptions to satisfaction and post-stay behavioral intentions.

Methodology

Saudi Arabia provides a relevant empirical setting for this study due to the rapid growth and diversification of its tourism and hospitality sector under Vision 2030, which has positioned hotels as key experiential touchpoints for both domestic and international visitors (Government of Saudi Arabia, 2016). As the country continues to expand its accommodation supply and enhance service quality to meet rising tourism demand, understanding how hotel design influences guest satisfaction and post-stay behavioral intentions becomes particularly timely and important (Karolak & Michael, 2024; Ekiz et al., 2017; Alsedrah, 2021).

A quantitative research design was employed to test the proposed relationships between hotel design factors, guest satisfaction, willingness to suggest, and intention to revisit. Data were collected from hotel guests in Saudi Arabia during summer 2024 using convenience sampling. A total of 1,100 questionnaires were distributed, and 900 usable responses were returned, resulting in a response rate of 81.8%. Data collection was conducted by a professional research team using paper-and-pen questionnaires administered on-site. Respondents were asked to reflect on their recent hotel stay and overall experience, enabling the capture of holistic post-consumption evaluations.

Measurement items for hotel design factors, guest satisfaction, willingness to suggest (WSUG), and intention to revisit were adapted from established hospitality and servicescape studies to ensure content validity. All constructs were measured using multi-item Likert-type scales. Data analysis followed established procedures recommended for structural equation modelling (SEM). Confirmatory factor analysis (CFA) was conducted to assess the measurement model, followed by SEM to test the hypothesized relationships among design factors, satisfaction, and behavioral intentions (Hair et al., 2019).

Findings

The results indicate that hotel design factors exert a significant influence on guest satisfaction. Social design elements demonstrate a strong positive effect on guest satisfaction ($\beta = 0.583$, $p < 0.001$), underscoring the importance of social interactions and the presence of service personnel in shaping guest experiences. Public design features also positively influence

satisfaction ($\beta = 0.513$, $p < 0.001$), highlighting the role of spatial layout, navigability, and shared areas in guest evaluations.

Room design emerges as another significant predictor of satisfaction ($\beta = 0.529$, $p < 0.001$), confirming that private spaces remain central to guests' overall assessments. Among the design-related constructs, perceived servicescape exerts the strongest direct effect on guest satisfaction ($\beta = 0.605$, $p < 0.001$), indicating the importance of guests' holistic evaluations of the physical environment.

Guest satisfaction, in turn, significantly influences behavioral intentions. Satisfaction positively affects willingness to suggest improvements or recommendations to the hotel ($\beta = 0.415$, $p < 0.001$) and has an even stronger impact on intention to revisit ($\beta = 0.578$, $p < 0.001$). These findings confirm that hotel design factors influence post-stay behaviors primarily through satisfaction-based evaluative mechanisms (see Appendices below for the detailed results).

Discussion and Conclusions

This study examined how hotel design factors influence guest satisfaction and subsequent behavioral intentions in an emerging hospitality market. The findings confirm that hotel design operates as a strategic experiential stimulus, rather than a purely aesthetic or functional attribute. Social design, public design, room design, and perceived servicescape all exert significant positive effects on guest satisfaction, supporting servicescape theory and the stimulus–organism–response (S–O–R) paradigm (Asyraff et al., 2023).

Among the design-related constructs, perceived servicescape emerged as the strongest predictor of satisfaction, highlighting the importance of guests' holistic evaluations of the physical and social environment. This result reinforces Gestalt-based perspectives, which argue that guests experience hotel environments as integrated configurations rather than as isolated design elements (Wang et al., 2024). The strong effects of room design and public design further suggest that both private and shared spaces play critical roles in shaping satisfaction, while social design underscores the importance of interactional and human elements embedded within the physical environment (Shinegi & Widjaja, 2022; Bitner, 1992).

Guest satisfaction was also found to significantly influence willingness to suggest and intention to revisit, confirming its central role as a post-consumption evaluative outcome. These findings support prior hospitality research demonstrating that satisfaction serves as a key mechanism through which experiential and environmental cues are translated into favorable behavioral intentions. Overall, the study provides empirical evidence that hotel design influences guest behavior primarily through satisfaction-based evaluative processes, rather than through direct effects alone. These findings have important implications for both hospitality scholarship and hotel design practice.

Implications

Academic Implications

From an academic perspective, this study contributes to hospitality and tourism literature by empirically validating a process-based model linking hotel design factors to guest satisfaction and behavioral intentions. By integrating servicescape theory, the S–O–R framework, and a holistic design perspective, the study advances understanding of how physical and social design elements jointly shape guest experiences (Ali et al., 2023). The findings extend existing

servicescape research by demonstrating that multiple design dimensions operate simultaneously to influence satisfaction in an emerging hospitality context (Line et al., 2018; Wakefield & Blodgett, 1996). This supports recent calls for more integrative, experience-centric models in hospitality design research (Ariffin et al., 2023).

Moreover, the study refines prior design-focused research by explicitly distinguishing between social, public, and room design, rather than treating hotel design as a unidimensional construct (Ali et al., 2023). This multidimensional approach offers a more nuanced understanding of how different design domains contribute to satisfaction and provides a foundation for future theory development in experiential hospitality research.

Industry Implications

For industry practitioners, the findings highlight the strategic importance of hotel design in enhancing guest satisfaction and encouraging favorable post-stay behaviors (Kirima et al., 2017). Hotel managers should view design decisions not merely as capital investments or branding tools, but as critical components of the guest experience that directly influence satisfaction and loyalty-related outcomes. The strong effect of perceived servicescape suggests that coherence, ambiance, and overall environmental quality should be prioritized alongside individual design features. This includes aligning architectural layout, interior aesthetics, and social interaction spaces to deliver a consistent experiential narrative (Karolak & Michael, 2024).

The significance of social design also indicates that physical environments should be designed to facilitate positive interactions between guests and staff, as well as among guests themselves (Zemke et al., 2018). In emerging hospitality markets such as Saudi Arabia, where hotels often serve as primary experiential touchpoints for visitors, adopting a holistic and guest-centered design strategy can enhance satisfaction, stimulate willingness to suggest, and increase revisit intentions (Ekiz et al., 2017).

Limitations and Future Research Directions

Despite its contributions, this study has several limitations. First, data were collected using a cross-sectional design, which restricts the ability to capture changes in guest perceptions and satisfaction over time. Second, the use of convenience sampling within a single national context may limit the generalizability of the findings to other hospitality markets or cultural settings. Despite these limitations, the large sample size and strong measurement properties enhance confidence in the robustness of the findings (Hair et al., 2019).

Future research should employ longitudinal designs to examine how hotel design perceptions and satisfaction evolve across multiple stays (Zemke et al., 2017). Comparative studies across different countries, hotel categories, or cultural contexts would further enhance external validity. Additionally, future research could examine the mediating or moderating roles of variables such as perceived value, emotional responses, or guest characteristics. Integrating objective design measures or experimental approaches may also provide deeper insight into causal relationships between hotel design and guest experience outcomes (Odetoye et al., 2025).

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Appendices:

Table 1. Reliability and Validity

Construct	Cronbach alpha	AVE
SOC	.905	0.66
PDES	.827	0.61
RDES	.845	0.64
SCAPE	.935	0.54
CAAI	.928	0.56
PVAL	.838	0.64
WSUG	.912	0.63
INT	.886	0.72
GSAT	.848	0.65

Notes: AVE= Average Variance Extracted, SOC = Social, PDES = Public Design, RDES = Room Design, SCAPE = Perceived Servicescape, CAAI = Competitive Advantage in Architectural Innovation, PVAL = Perceived Value, WSUG = Willingness to Suggest, INT = Intention to Revisit, GSAT = Guest Satisfaction. **Source:** Author's work.

Table 2. Heterotrait–Monotrait Ratio (HTMT)

	SOC	PDES	RDES	SCAPE	CAAI	GSAT	INT	PVAL	WSUG
SOC	—	0.661	0.618	0.652	0.487	0.583	0.479	0.481	0.344
PDES		—	0.704	0.605	0.461	0.513	0.387	0.446	0.313
RDES			—	0.675	0.508	0.529	0.384	0.474	0.323
SCAPE				—	0.542	0.605	0.479	0.569	0.360
CAAI					—	0.579	0.342	0.419	0.464
GSAT						—	0.578	0.484	0.415

	SOC	PDES	RDES	SCAPE	CAAI	GSAT	INT	PVAL	WSUG
INT							—	0.422	0.452
PVAL								—	0.227
WSUG									—

Notes: All HTMT values are below the conservative threshold of 0.85, indicating adequate discriminant validity among the constructs.

Table 3. Hypotheses Testing – Direct Effects

Hypotheses	***β***	***p*-Value**	**Decision**
Direct effects			
H_1: SOC → GSAT	0.583	<0.001	Supported
H_2: PDES → GSAT	0.513	<0.001	Supported
H_3: RDES → GSAT	0.529	<0.001	Supported
H_4: SCAPE → GSAT	0.605	<0.001	Supported
H_5: GSAT → WSUG	0.415	<0.001	Supported
H_6: GSAT → INT	0.578	<0.001	Supported

Notes: β = Beta coefficient **Source:** Author's work.

How Persistent is Tourism Demand in a Landlocked Transition Economy? Evidence from Mongolia

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Abstract

This study analyzes inbound tourism demand in Mongolia from a persistence perspective, viewing tourism demand not as a short-term outcome but as a process in which past demand carries forward over time. Moving beyond level-based approaches, the analysis focuses on the roles of common persistence, adjacency structure, and structural and conditional factors in shaping tourism demand dynamics in a landlocked transition economy. Using an unbalanced panel dataset of 79 origin countries over the period 1999–2025, the study estimates a dynamic tourism demand model centered on lagged tourist arrivals. The results show strong and stable common persistence across all model specifications, indicating a high degree of dependence on past tourism flows. In contrast, adjacency persistence associated with neighboring countries (China and Russia) is not statistically significant. Extended models further reveal that persistence is selectively reinforced under specific conditions. Cultural and historical continuity, captured by former Soviet bloc countries, significantly strengthens persistence, whereas economic grouping (OECD membership) does not. Among conditional factors, visa facilitation policies significantly enhance persistence, while the presence of direct flight connections does not systematically affect the persistence mechanism. Overall, the findings suggest that Mongolia's tourism demand structure is not locked into neighbor-centered dependence but remains adjustable, highlighting the importance of institutional and relational conditions in sustaining tourism demand in landlocked transition economies.

Keywords: Mongolia, Tourism Persistence, Self-Reinforcing Process, Panel Analysis

1. Introduction

As a representative landlocked country, Mongolia has no maritime access, and international tourism mobility is structurally constrained by heavy reliance on air transportation and limited overland routes (Prideaux, 2000; Khadaroo & Seetanah, 2008). In the case of land transportation, international travel has been largely confined to routes transiting through China and Russia, with both the scope and frequency remaining limited. Reflecting these constraints, China and Russia together accounted for approximately 70–80 percent of Mongolia's inbound international tourism in the early 1990s, indicating a highly concentrated tourism demand structure centered on neighboring countries.

Air transportation exhibits similar limitations. Mongolia's international aviation infrastructure is highly centralized in the capital city, Ulaanbaatar, and the number of international airports remains extremely limited. International flight routes have been operated for only a small number of origin countries, implying that tourism demand is more likely to accumulate gradually around accessible markets rather than emerge simultaneously from a wide range of countries (Khadaroo & Seetanah, 2007).

These spatial constraints have been further reinforced by Mongolia's historical and institutional context. As a transition economy that became fully open to the international community following the systemic transformation of 1992, the institutional foundations supporting the tourism industry—including tourism-related laws, private-sector experience, and international tourism networks—developed only gradually (World Bank, 2018). The expansion of external economic relations and international connectivity likewise proceeded in a stepwise manner. Such conditions are conducive to path-dependent dynamics, in which tourism demand expands incrementally by relying on already established demand and relational networks rather than being rapidly restructured (Arthur, 1989; David, 1985; Martin & Sunley, 2006).

Against this background, the purpose of this study is to examine international tourism demand in Mongolia from a persistence perspective. Existing tourism demand studies have primarily focused on explaining the level of tourist arrivals by examining economic and social determinants such as income, distance, exchange rates, and cultural characteristics (Crouch, 1994; Lim, 1997; Song & Li, 2008; Song, Witt & Li, 2008). While such level-based approaches remain essential for understanding tourism demand outcomes, they are limited in capturing how tourism demand is maintained and reproduced over time under strong structural constraints.

For a landlocked and transition economy such as Mongolia, tourism demand cannot be readily interpreted as a static outcome at a given point in time. Rather than asking how many tourists arrive in a given year, the more relevant question concerns how persistently tourism demand from specific origin markets is reproduced over time. Once demand from particular origin countries is formed, its continued presence depends on whether it can be repeatedly sustained under constraints related to geography, accessibility, infrastructure, and institutional environments. Accordingly, this study conceptualizes Mongolia's tourism demand as a path-dependent and persistent process and examines how strongly previously established tourism demand is carried forward into subsequent periods. Specifically, the analysis focuses on how the strength of demand persistence varies according to common demand dynamics, geographic adjacency, structural accessibility conditions, and time-varying institutional or policy environments (Garín-Muñoz & Montero-Martín, 2007; Song et al., 2011; Yang & Wong, 2012).

2. Analytical Frame

This study starts from the perspective that tourism demand in landlocked countries is not determined by short-term shocks or one-off factors, but is structurally formed by persistence, whereby past tourism demand shapes current tourism demand.

To address this objective, tourism demand is conceptualized not as a static outcome measured solely by the level of tourist arrivals, but as a dynamic self-reinforcing process in which current demand is shaped by demand in the previous period. Specifically, tourist inflows from a given origin country are assumed to be reinforced by the number of tourists from that country in the previous year. The strength of this reinforcement, however, is expected to vary systematically depending on geographic adjacency, structural conditions, and time-varying policy and accessibility environments. Within this framework, tourism demand persistence is explained through four analytically distinct persistence factors.

First, common factors capture a baseline self-reinforcing mechanism that operates uniformly across all origin countries, reflecting a general tendency for past tourism flows to influence current demand regardless of country-specific characteristics (Crouch, 1994; Lim, 1997; Song, Witt, & Li, 2008). Second, adjacency factors refer to additional persistence effects associated with geographic proximity (Khadaroo & Seetanah, 2008; Prideaux, 2000; McCallum, 1995; Yang, & Wong, 2012). For neighboring countries, repeated interactions and lower mobility barriers are expected to strengthen the continuity of tourism demand, reflecting a core structural feature of tourism markets in landlocked countries. Third, structural factors represent long-term, time-invariant conditions between countries—such as geographic distance, historical ties, and structural accessibility—that condition how smoothly past tourism demand is transmitted to the present (Arthur, 1989; David, 1985; Martin & Sunley, 2006). These factors do not determine the level of tourism demand directly, but shape the strength of the persistence mechanism itself. Fourth, conditional factors capture adjustments in demand persistence arising from time-varying institutional, policy, or accessibility conditions (Song & Lin, 2010; Yang, Zhang & Chen, 2019). These factors may temporarily strengthen or weaken the transmission of past demand without fundamentally altering the underlying adjacency-based structure.

The empirical analysis of this study is conducted through panel models. A panel model refers to a method that analyzes heterogeneity and dynamic changes that are difficult to identify through cross-sectional or time-series analysis alone, by using a data structure that simultaneously observes multiple units of analysis (countries) over time (Baltagi, 2021; Hsiao, 2007). In particular, panel models are suitable for analyzing tourism demand across countries in that they allow the identification of time-varying effects while controlling for country-specific characteristics that exist uniquely for each country but are not observed. In this context, the model used in this study is consistent with a perspective that views tourism demand not as an outcome variable at a single point in time, but as a dynamic process in which past demand is transferred to current demand.

From a general panel-analysis perspective, country-level tourism demand is influenced by country-specific characteristics that are not observed and persist over long periods of time, such as geographic location, historical relationships, cultural affinity, and the level of tourism infrastructure. Cross-sectional analysis or simple time-series analysis has difficulty adequately controlling for such heterogeneity, but panel models allow the analysis to focus on within-country variation over time by removing country-specific time-invariant characteristics through country fixed effects (μ_i). Meanwhile, exogenous shocks that commonly affect all countries in a given year also have important effects on tourism demand (Baltagi, 2021). Global economic fluctuations, changes in the international mobility environment, and adjustments in

Mongolia's tourism-related policies may affect overall tourism demand regardless of differences between countries in specific years. To control for these effects, this study includes year fixed effects (λ_t) to prevent such year-specific common shocks from being confounded in the estimation results (Baltagi, 2021). In this way, a panel model that includes both country fixed effects and year fixed effects makes it possible to more clearly identify dynamic changes in tourism demand and its persistence mechanisms after removing the effects of time-invariant cross-country structures and year-specific common factors.

The analytical framework of this study applies this general panel approach in an extended manner. That is, the purpose of this study is not to estimate how structural differences between countries determine the level of tourism demand, but to examine how the strength of persistence—through which past tourism demand is transferred to current tourism demand—varies according to country-specific conditions. Accordingly, adjacency (Adj_i), structural factors (S_i), and conditional factors (C_{it}) are all included in the model as interaction terms with the number of tourists in the previous year. Structural factors (S_i) refer to long-term national characteristics that do not change over time (time-invariant), such as economic and cultural conditions, while conditional factors (C_{it}) reflect time-varying factors such as changes in policy, institutions, and accessibility. Through this specification, by using interactions with lagged tourist arrivals, the effects of these characteristics on the self-reinforcement process of tourism demand can be identified even in a fixed-effects model. In other words, rather than asking "which country has more tourists," this study analyzes "in which countries past tourism demand is more strongly carried over into current tourism demand."

In sum, the panel model used in this study sets tourism demand as a self-reinforcing and path-dependent process and provides an analytical framework for identifying how this process unfolds heterogeneously depending on adjacency, structural conditions, and policy and physical conditions. The analytical model used in this study is presented below, and the composition of variables included in the model and their detailed measurement methods are explained in the following section.

$$\ln Arr_{it} = \underbrace{\rho \ln Arr_{i,t-1}}_{\text{Common persistence}} + \underbrace{\theta_A \left(\ln Arr_{i,t-1} \times Adj_i^* \right)}_{\text{Adjacency persistence}} + \underbrace{\boldsymbol{\beta}' \left(\ln Arr_{i,t-1} \times \mathbf{S}_i \right)}_{\text{Structural pathways}} + \underbrace{\boldsymbol{\gamma}' \left(\ln Arr_{i,t-1} \times \mathbf{C}_{it} \right)}_{\text{Conditional pathways}} + \mu_i + \lambda_t + \varepsilon_{it}$$

Where

- $ln\, Arr_{it}$: logged international tourist arrivals from country $i$in year t
- $ln\, Arr_{i,t-1}$: lagged tourist arrivals (persistence term)
- Adj_i^*: adjacency countries
- S_i: time-invariant structural factors
- C_{it}: time-varying conditional factors
- μ_i: country fixed effects
- λ_t: year fixed effects
- ε_{it}: error term

3. Variable and Data

3.1. Variable and Measurement

The dependent variable of this study is the number of inbound foreign tourists to Mongolia. Specifically, the dependent variable is defined as the number of international tourists from origin country *i* who visited Mongolia in year *t*. Considering that the distribution of tourist arrivals is right-skewed, the natural logarithm of this variable is used in the analysis ($\ln Arri,t$). To measure the persistence of self-reinforcement, the number of tourists in the previous year ($\ln Arri,t$) is used. This operationalizes, in econometric terms, the analytical framework that tourism demand possesses persistence whereby it is self-reinforced by past tourism flows. Lagged tourist arrivals reflect basic self-reinforcing effects encompassing repeat visits, the accumulation of destination awareness, and the continuity of tourism networks. In this study, the analysis focuses on how all pathway factors amplify or weaken the effect of lagged tourist arrivals.

Adjacency persistence is implemented through an interaction term between lagged tourist arrivals and an adjacency dummy. The adjacency dummy (Adj*_i) takes a value of 1 for countries that are geographically adjacent to Mongolia—China and Russia—and 0 for all other countries. This specification reflects the particular condition that Mongolia is a landlocked country surrounded by China and Russia, and is intended to distinguish large neighboring-country effects from general adjacency effects. Through this setup, the study tests whether the extent to which lagged tourist arrivals are carried over into current tourism demand is systematically greater for neighboring countries than for non-neighboring countries.

Structural pathways capture the effects of time-invariant structural factors across countries on the persistence of tourism demand. In this study, these structural factors are constructed as dummy variables and included in the model through interaction terms with lagged tourist arrivals. Specifically, the economic distance dummy (Econ_OECD) is defined as 1 if the origin country is a member of the OECD and 0 otherwise, serving as a proxy for economic disparities and differences in purchasing power across countries. In addition, the cultural distance dummy (Cult_USSR) is defined as 1 if the origin country is not a former Soviet Union country and 0 otherwise, reflecting historical and cultural continuity and proximity with Mongolia.

The selection of these structural factors is grounded in standard demand theory and the literature on tourism demand. From an economic perspective, income levels and purchasing power are key determinants of discretionary consumption such as tourism and, over the long run, influence both the likelihood of tourism participation and the persistence of repeat visits. Meanwhile, cultural proximity facilitates tourism flows by lowering information search costs and psychological barriers through similarities in language, history, and lifestyle. This study focuses on the idea that such economic and cultural structures do not directly determine the absolute size of tourism demand, but rather function as background conditions that govern how effectively past tourism demand is transferred into the present. Accordingly, structural variables are interpreted as conditions that constrain or relax the strength of tourism demand persistence.

Conditional pathways refer to the effects of time-varying policy, institutional, and physical accessibility factors on the persistence of tourism demand. In this study, these are constructed as dummy variables that interact with lagged tourist arrivals on a year-by-year basis. Specifically, the direct flight dummy (Direct_Flight) takes a value of 1 if a direct flight between the origin country and Mongolia exists in a given year, while the visa policy dummy (Policy_Visa) is defined as 1 for countries that have concluded a mutual visa exemption agreement with Mongolia.

The selection of conditional factors is based on the central role of accessibility and policy environments in tourism demand studies. Direct air connections function as physical infrastructure that directly reduce travel time and costs, thereby alleviating constraints on tourism mobility, while visa liberalization lowers administrative and psychological barriers and reduces uncertainty in the tourism decision-making process. These factors are distinguished as conditional because, unlike long-term fixed structures between countries, they vary over time in response to policy decisions or institutional changes.

This study emphasizes that such conditional factors do not directly determine the absolute level of tourism demand, but rather play a role in adjusting and amplifying the process through which existing tourism demand is transferred into current demand—that is, the self-reinforcing mechanism of tourism demand. Accordingly, conditional pathways are interpreted as mechanisms that may loosen a tourism demand structure centered on neighboring countries and provide an opportunity for diversification through the expansion of tourism demand toward non-neighboring countries.

3.2 Data and Description

This study analyzes Mongolia's international tourism demand over the period from 1999 to 2025 using data provided by the National Statistical Office of Mongolia. The data used in the analysis consist of annual inbound tourist arrivals by country of origin, and are constructed in the form of panel data in order to track the scale and changes in tourist inflows from each country over a long time horizon.

The countries included in the analysis comprise those for which tourist inflows to Mongolia were observed during the study period, resulting in a final sample of 79 origin countries. Since not all countries are observed for the entire period, the panel dataset used in this study has an unbalanced structure covering 79 countries over the period 1999–2025. This data structure reflects the dynamic nature of Mongolia's international tourism market, in which long-term growth trends coexist with country-specific patterns of entry, expansion, and contraction. The conceptual definitions, measurement methods, and data sources of the explanatory variables included in the analysis are summarized in the following section.

Table X. Variable Definitions and Data Sources

Category	Concept	Variable name	Definition	Measurement	Data source
Dependent variable	Logged tourist arrivals	ln_Arr	International tourist arrivals from origin country i to Mongolia in year t	$Arr_{i,t}$	National Statistical Office of Mongolia
Common persistence	Lagged tourist arrivals	L_ln_Arr	International tourist arrivals from origin country i to Mongolia in year t-1	$Arr_{i,t-1}$	National Statistical Office of Mongolia
Adjacency persistence	Adjacent countries	Adj	Geographically adjacent countries to Mongolia excluding China and Russia	Adjacent = 1, otherwise = 0	Authors' construction
Structural pathways	Economic distance	Econ_OECD	Indicator for OECD membership of the origin country	OECD member = 1, non-member = 0	OECD

	Cultural distance	Cult_USSR	Indicator for former Soviet Union membership of the origin country	Former USSR = 1, otherwise = 0	Historical–geopolitical classification
Conditional pathways	Direct flight availability	Direct_Flight	Existence of a direct flight between origin country and Mongolia in year t	Direct flight = 1, otherwise = 0	Airline schedule data
	Visa-free	Policy_Visa	Existence of a reciprocal visa-free agreement with Mongolia in year t	Visa-free = 1, otherwise = 0	Ministry of Foreign Affairs

Descriptive Statistics

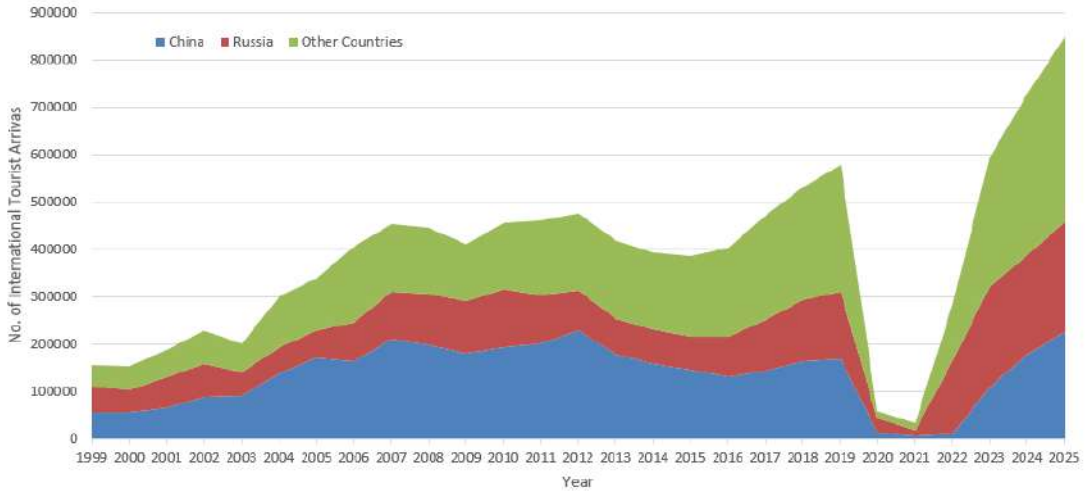
Variable	Obs	Mean	Std. dev.	Min	Max
ln_Arr	2,098	5.71	2.22	0.00	12.36
L_ln_Arr					
Adj	2,133	0.03	0.16	0.00	1.00
Direct_Flight	2,133	0.06	0.24	0.00	1.00
Econ_Distance	2,133	0.46	0.50	0.00	1.00
Cult_USSR	2,133	0.15	0.36	0.00	1.00
Policy_Visa	2,133	0.15	0.36	0.00	1.00

3.3. Overview of International Tourist Arrivals to Mongolia

Mongolia's inbound international tourist arrivals increased from 154,936 in 1999 to 847,170 in 2025, representing an approximately 5.5-fold expansion over the entire study period. This corresponds to a relatively high average annual growth rate of about 6.8 percent. During 2020–2021, international tourist arrivals temporarily declined sharply due to global travel restrictions associated with the COVID-19 pandemic. However, the market entered a rapid recovery phase thereafter, and since 2022 inbound tourist arrivals have exceeded pre-pandemic levels and continued to exhibit a sustained upward trend.

Throughout most of the study period, neighboring countries—China and Russia—have constituted the core of Mongolia's inbound tourism demand. In 1999, out of a total of 154,936 inbound tourists, 110,280 originated from China and Russia, accounting for approximately 71.2 percent of total arrivals. This high share of neighboring-country tourists persisted through the mid-2000s, shaping a tourism market structure strongly centered on adjacent countries. Since the 2010s, however, while the absolute number of tourists from China and Russia has continued to increase alongside rapid growth in total arrivals, their relative share of total inbound tourism has shown a gradual declining trend. For example, in 2019, tourists from China and Russia numbered 310,225 out of a total of 577,300 arrivals, representing approximately 53.7 percent. In 2025, this figure reached 458,708 out of 847,170 total arrivals, corresponding to about 54.1

percent.



4.Analysis and Results

4.1. Baseline Results on Common and Adjacent Persistence in Tourism Demand

Table X reports the estimation results of the baseline persistence models for Mongolia's inbound tourism demand. The analysis is based on an unbalanced panel consisting of 2,004 observations across 79 countries over the period 1999–2025. Both specifications exhibit a high level of explanatory power, with overall R-squared values of 0.8405 and 0.8418, respectively, indicating that the models explain a substantial share of the variation in inbound tourist arrivals. The joint significance of the regressors is confirmed by the F-statistics ($F = 1202.12$ and 630.82, respectively), suggesting that the models are statistically well specified.

Column (1) presents the baseline model capturing common persistence in tourism demand. The coefficient on the lagged dependent variable, L_ln_tourist, is positive and highly significant (0.608, $p < 0.01$), indicating strong intertemporal persistence in inbound tourism to Mongolia. Quantitatively, this implies that a 1% increase in tourist arrivals in the previous year is associated with approximately a 0.61% increase in the current year, reflecting substantial inertia in overall tourism demand. This result suggests that Mongolia's inbound tourism exhibits a stable demand structure in which past arrival levels play a dominant role in shaping current outcomes, irrespective of country-specific characteristics.

Column (2) extends the baseline specification by introducing an interaction term between lagged tourist arrivals and an adjacency dummy, capturing whether neighboring countries exhibit an additional self-reinforcing mechanism beyond the common persistence effect. While the coefficient on L_ln_tourist remains unchanged in magnitude and statistical significance (0.608, $p < 0.01$), the interaction term L_ln_tourist × Adj is positive but statistically insignificant (0.040). This indicates that, although neighboring countries such as China and Russia account for a large share of total arrivals in absolute terms, their demand does not display an additional persistence effect relative to non-neighboring countries once overall demand inertia is controlled for.

Taken together, the results suggest that Mongolia's inbound tourism demand is characterized by common persistence, while there is limited evidence of a structurally distinct, self-reinforcing mechanism specific to neighboring countries. Although neighboring markets

remain quantitatively important, their demand does not appear to be statistically locked into a path-dependent structure that mechanically amplifies past arrivals.

This interpretation is consistent with the descriptive evidence indicating a gradual decline in the relative share of neighboring countries. However, it should be emphasized that the empirical results do not provide statistically sufficient grounds to conclude that self-reinforcing effects in neighboring markets have weakened in a definitive sense. Rather, the findings are better understood as indicating the absence of strong statistical support for such mechanisms at the current stage.

Taken together, these patterns suggest that Mongolia's tourism demand structure may be in a transitional phase, rather than exhibiting a stable and robust dependence on neighboring-country demand dynamics.

Panel Fixed Effects Results on Common and Adjacency Persistence of Tourism Demand

	Common persistence	Adjacency persistence
L_ln_tourist	0.608*** (0.017)	0.608*** (0.018)
L_ln_tourist* Adj		0.040 (0.069)
Constant	2.303** (0.100)	2.290*** (0.098)
Country Fixed	Yes	Yes
Time Fixed	Yes	Yes
Number of obs	2,004	2,004
Number of groups	79	79
Overall R-square	0.8405	0.8418
F-Value	1202.12	630.82***

Note: 1) *$p < 0.1$, **$p < 0.05$, ***$p < 0.01$. 2) the values in the parentheses are robust standard errors

4.2. Extended Model Results with Structural and Conditional Factors

In this section, an extended model is estimated by adding structural and conditional moderators to the baseline specification. The results show that overall model fit remains broadly comparable to that of the baseline model. The overall R-squared ranges between 0.785 and 0.841, and the F-statistics are 383.27–448.64, all of which are statistically significant at the 1% level. This indicates that the inclusion of additional interaction terms does not materially alter the explanatory power of the model, and suggests that the core structure of tourism demand identified in the baseline model is largely preserved in the extended specification.

Across all models, the coefficient on lagged tourist arrivals is large, positive, and highly statistically significant. The estimated coefficient on L_ln_tourist lies within a very narrow range of 0.591–0.595 ($p < 0.01$), indicating that Mongolia's inbound tourism demand exhibits strong and stable common persistence. By contrast, the estimated coefficients for L_ln_tourist × Adj (−0.127, 0.045, −0.059) are inconsistent in both sign and magnitude, and are associated with relatively large standard errors (0.085–0.103). Accordingly, as in the baseline model, neighbor-specific self-reinforcing effects are not statistically identified in the extended model.

Turning first to structural factors, differences based on economic group classification do not appear pronounced. The coefficients on L_ln_tourist × Econ_OECD are very small (−0.014 to −0.019) and statistically insignificant, indicating limited evidence of structural differences in demand persistence between OECD and non-OECD countries once common persistence is controlled for. In contrast, cultural and historical linkages exhibit a statistically significant moderating effect. The coefficients on L_ln_tourist × Cult_USSR are positive and statistically significant—0.181 ($p < 0.01$) and 0.104 ($p < 0.01$)—suggesting that, for former Soviet Union countries, past tourism demand carries over into current demand more strongly.

Next, considering conditional factors, the interaction between lagged tourist arrivals and the presence of direct flights is not statistically significant. The estimated coefficients on L_ln_tourist × Direct Flight are small and negative (−0.022, −0.008), indicating that the existence of direct flight connections does not meaningfully alter the persistence mechanism of inbound tourism demand. In other words, while direct flights may affect the absolute level of tourist arrivals, they do not appear to systematically strengthen the process through which past demand translates into current demand. By contrast, the coefficients on L_ln_tourist × Policy_Visa are positive and statistically significant—0.042 and 0.039 ($p < 0.05$)—suggesting that visa facilitation policies increase the degree to which past tourist arrivals carry over into current demand by approximately 4 percentage points. This indicates that visa policies operate not by mechanically generating tourism demand, but by reducing institutional frictions and enabling accumulated demand to be more effectively maintained and transmitted over time.

Extended Panel Fixed Effects Results: Structural and Conditional Persistence Channels

	With Structural and Conditional Factors		
L_ln_tourist	0.595*** (0.026)	0.593*** (0.017)	0.591*** (0.030)
L_ln_tourist* Adj	-0.127 (0.085)	0.045 (0.096_	-0.059 (0.103)
L_ln_tourist*Econ_OECD	-0.014 (0.023)		-0.019 (0.033)
L_ln_tourist*Cult_USSR	0.181*** (0.059)		0.104*** (0.046)
L_ln_tourist* Direct_Flight		-0.022 (0.029)	-0.008 (0.029)
L_ln_tourist*Policy_Visa		0.042** (0.017)	0.039** (0.017)
Constant	2.342*** (0.074)	2.308*** (0.076)	2.344*** (0.075)
Country Fixed	Yes	Yes	Yes
Time Fixed	Yes	Yes	Yes
Number of obs	2004	2004	2004
Number of groups	79	79	79
Overall R-square	0.785	0.841	0.813
F-Value	448.64***	384.92***	383.27***

Note: 1) *$p < 0.1$, **$p < 0.05$, ***$p < 0.01$. 2) the values in the parentheses are robust standard errors

5. Conclusion

5.1. Summary of Findings

This study analyzes international tourism demand in Mongolia from a **persistence** perspective, taking into account the structural constraints and market formation process of Mongolia as a landlocked transition economy. Rather than viewing tourism demand as the outcome of short-term fluctuations or one-off shocks, the analysis emphasizes the extent to which past tourism demand is carried forward into the present. By shifting the focus beyond explaining the absolute level of tourist arrivals to examining the conditions under which already-formed demand is maintained, accumulated, and transmitted to subsequent stages, this study is distinguished from conventional tourism demand research.

Guided by this perspective, the study constructs an unbalanced panel dataset covering 79 origin countries over the period 1999–2025 and estimates a self-reinforcing tourism demand model in which lagged tourist arrivals serve as the key explanatory variable.

The empirical results indicate that Mongolia's inbound tourism demand exhibits strong and stable common persistence across all model specifications. The coefficient on lagged tourist arrivals is large, positive, and statistically significant in both the baseline and extended models, implying that Mongolia's tourism demand follows a dynamic structure that is highly dependent on past tourism flows. In contrast, adjacency persistence associated with China and Russia is not statistically identified in either the baseline or extended specifications.

The extended models incorporating structural and conditional factors further reveal that tourism demand persistence does not operate uniformly across all countries, but is selectively reinforced under specific conditions. While economic grouping (OECD membership) does not generate statistically significant differences in persistence, the degree to which past tourism demand translates into current demand is significantly stronger for countries of the former Soviet bloc. Among conditional factors, visa facilitation policies significantly strengthen tourism demand persistence, whereas the presence of direct flight connections does not emerge as a factor that systematically alters the persistence structure.

5.2 Discussion and Implication

The empirical results of this study raise several important issues for understanding Mongolia's tourism demand.

First, the core characteristic of Mongolia's tourism demand lies in processes, rather than in levels. Growth in tourist arrivals does not primarily reflect sharp fluctuations driven by short-term factors, but rather emerges as the outcome of a self-reinforcing process in which repeat visits, accumulated experience, and destination awareness gradually build over time. This suggests that tourism demand should be analyzed not merely in terms of "how many tourists arrive," but from the perspective of "under what conditions tourism demand is sustained and carried forward." These findings imply that Mongolia's tourism policy should move beyond short-term inflow expansion or one-off event–based strategies and instead focus on strengthening demand continuity and repeat visitation based on already established markets.

Second, although neighboring countries remain quantitatively important, it is difficult to conclude that they form an automatically self-reinforcing, path-dependent demand structure. The lack of statistically significant adjacency persistence suggests that dependence on neighboring countries may not be a natural or inevitable outcome, but rather one that is maintained and adjusted through policy, institutional arrangements, and broader market

conditions. This interpretation implies that the neighbor-centered tourism demand structure is not locked in, but instead retains a degree of flexibility and potential for adjustment.

This interpretation is partially consistent with patterns observed in the descriptive statistics. Over the study period, the relative share of tourists from neighboring countries in Mongolia's inbound tourism gradually declined. While such changes in market share alone are insufficient to conclusively identify a structural transformation—and short-term fluctuations or exogenous shocks cannot be ruled out—the absence of statistically identifiable adjacency persistence, when considered alongside these descriptive trends, provides suggestive evidence that Mongolia's tourism demand structure may be entering a transitional phase characterized by adjustment and reconfiguration, rather than remaining fixed in neighbor-country dependence. This implies that strategies centered on neighboring markets should not be treated as immutable assumptions, but rather as components that can be gradually recalibrated through policy and institutional design.

Third, tourism demand persistence appears to be more strongly reinforced by cultural and historical continuity than by geographic proximity. The higher persistence observed among former Soviet bloc countries indicates that familiarity grounded in shared language, historical experience, and lifestyles plays an important role in sustaining repeat visits and tourism networks. This suggests that, in tourism markets, relationships with "familiar" countries may matter more for demand persistence than relationships with merely "nearby" countries, and supports the potential of medium- to long-term tourism strategies that leverage cultural linkages.

Fourth, among conditional factors, institutional conditions play a more prominent role than physical accessibility. While direct flight connections may influence the absolute level of tourist arrivals, in Mongolia's case their effect on the persistence mechanism appears limited. Given that the number of direct international routes is small and that many tourists enter Mongolia via third countries, the presence of a direct flight does not function as a clear-cut determinant of travel convenience. This reflects the structural characteristics of Mongolia's tourism market, where direct connectivity alone is insufficient to systematically alter demand persistence.

By contrast, visa facilitation policies significantly strengthen the transmission of past tourism demand into current demand by reducing administrative and psychological frictions. This suggests that Mongolia's tourism demand persistence is shaped more strongly by institutional environments that encourage repeat visitation and demand accumulation than by physical infrastructure such as air routes. While this does not diminish the importance of infrastructure development, it implies that for a landlocked transition economy like Mongolia, policies that lower institutional barriers and reinforce existing demand continuity may serve as more immediate and effective tools.

Taken together, these findings suggest that Mongolia's tourism market is not settled into a single equilibrium, but is instead situated in a transitional stage in which new demand compositions and persistence pathways are being formed and adjusted on the basis of existing structures. Accordingly, tourism policy and strategy in Mongolia should gradually evolve beyond short-term inflow expansion or fixed reliance on specific markets, toward managing and shaping the processes through which tourism demand is sustained and accumulated over time.

5.3 Conclusion

This study conceptualizes Mongolia's international tourism demand as a self-reinforcing and path-dependent process, and empirically examines how the persistence mechanism operates heterogeneously depending on adjacency, structural conditions, and policy and accessibility factors. The results indicate that Mongolia's tourism demand is characterized by strong common persistence as a baseline structure, while geographic adjacency does not function as an automatic self-reinforcing pathway. Instead, persistence is selectively strengthened by cultural continuity and institutional conditions.

These findings suggest that Mongolia's tourism policy should move beyond an exclusive focus on short-term inflow expansion or physical infrastructure development, and place greater emphasis on fostering institutional environments that promote repeat visitation and experience accumulation. In particular, institutional measures such as visa facilitation can help ease reliance on neighboring markets and provide a practical foundation for expanding tourism demand toward non-adjacent countries.

Finally, this study focuses on identifying the average persistence mechanism underlying Mongolia's inbound tourism market, with the aim of characterizing its overall structure and path-dependent dynamics. By employing a panel model with country fixed effects and year fixed effects, and by incorporating structural and conditional factors as interaction terms, the analysis controls for time-invariant country characteristics and common temporal shocks, while capturing key dimensions of heterogeneity.

Nevertheless, the scope of interpretation is limited in that the analysis emphasizes the operation of persistence and its moderating factors at the average level, rather than directly tracing fine-grained country- or time-specific heterogeneity in persistence dynamics. Future research could extend this framework by examining differences by travel purpose (e.g., leisure, business, visiting friends and relatives), the impact of structural breaks such as the COVID-19 pandemic on persistence mechanisms, and qualitative changes in tourism demand. Such extensions would allow for a more nuanced, multi-layered understanding of the dynamic structure of tourism markets in landlocked countries.

In addition, this study deliberately adopts a parsimonious variable structure in order to focus on identifying the core persistence mechanism and its key moderators, rather than constructing a comprehensive level-based tourism demand model. Future studies could expand this approach by incorporating additional factors such as macroeconomic conditions, qualitative differences in tourism infrastructure, digital information accessibility, and cross-country image or risk perceptions. Such extensions would complement the persistence-centered analytical framework proposed in this study and contribute to a broader understanding of heterogeneous tourism demand pathways in landlocked economies.

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How To Apologize? The Effect of Hotel Service Robot Tone on Customer Failure Tolerance

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Abstract

As intelligent technologies become increasingly embedded in hospitality operations, service robots play a growing role in shaping customer experiences. These technologies enhance operational efficiency while also introducing new challenges related to service reliability and recovery. Existing hospitality research has largely emphasized robotic appearance and successful service encounters (Jia et al., 2021; Yoganathan et al., 2021). Comparatively little attention has been directed toward vocal characteristics, particularly in service failure contexts. This omission limits understanding of how auditory cues influence customer evaluations when service performance falls short.

Voice characteristics function as salient social signals in human–robot interaction and exert a meaningful influence on users' psychological responses and behavioral intentions (Kühne et al., 2020). Sound symbolism theory provides a useful framework for interpreting these effects. Prior studies demonstrate consistent associations between pitch and social meaning. High-pitched voices are commonly linked to warmth, friendliness, and approachability, whereas low-pitched voices signal competence, authority, and reliability (Shinohara & Kawahara, 2010; Vainio et al., 2024).

Perceptions of voice pitch are further shaped by voice gender. Lower-pitched male voices tend to be evaluated as more mature and authoritative, while higher-pitched female voices are perceived as more emotionally expressive and socially engaging (Zuckerman et al., 1995). These gender-based associations extend to service robots. Prior evidence indicates that voice gender and pitch jointly influence perceived robot personality and capability in service interactions (Klüber et al., 2025). Despite these insights, little is known about how these vocal cues operate in service failure situations.

In service recovery contexts, perceived sincerity represents a critical mechanism linking recovery efforts to customer responses. Sincere apologies and explanations increase customer tolerance and reduce negative reactions following service failures. Vocal design may play a central role in shaping sincerity perceptions during robot-mediated recovery encounters.

Affective evaluation theory suggests that customers' emotional appraisals of vocal cues directly inform subsequent attitudes and behavioral intentions (Kemper, 1981). Integrating this perspective with sound symbolism theory allows for a more comprehensive understanding of how robotic voice characteristics influence service failure tolerance.

Drawing on affective evaluation theory and sound symbolism theory, this study investigates the interactive effects of hotel service robot voice gender and voice pitch on customer failure tolerance. Perceived sincerity is examined as a mediating mechanism. Figure 1 presents the proposed research model.

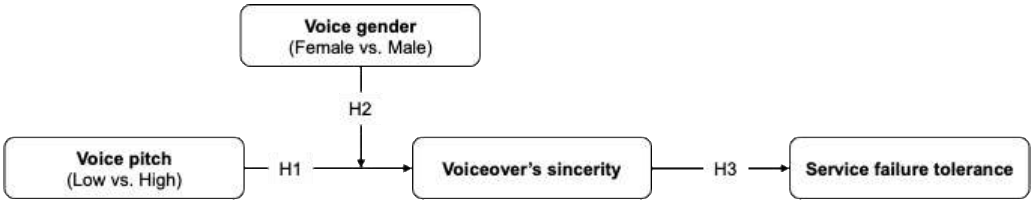

Figure 1. Proposed research model

A mixed between-within experimental design was employed, manipulating voice gender (male vs. female) and voice pitch (high vs. low). Participants were exposed to a simulated hotel service failure scenario involving a service robot. Professional speech synthesis technology generated standardized voice stimuli to ensure consistency across experimental conditions. A total of 200 participants were recruited through social media platforms and completed an online questionnaire.

Multivariate analysis of variance and regression analyses revealed significant interaction effects between voice gender and pitch. No significant main effects emerged for voice gender or voice pitch on perceived sincerity. However, their interaction was highly significant ($F = 894.532$, $p < 0.001$). The effect of pitch on sincerity perception depended entirely on voice gender. A similar pattern was observed for customer failure tolerance. Neither voice gender nor pitch produced significant main effects. Their interaction effect was substantial and statistically significant ($F = 636.000$, $p < 0.001$).

The results indicate that specific gender–pitch combinations operate synergistically. High-pitched female voices and low-pitched male voices elicited higher levels of perceived sincerity. These configurations aligned with established sound symbolism associations. Higher pitch in female voices conveyed warmth and empathy, while lower pitch in male voices signaled competence and reliability. Increased perceived sincerity, in turn, enhanced customer tolerance of service failures.

This study contributes to hospitality and human–robot interaction literature by extending affective evaluation theory and sound symbolism theory to service failure contexts. The findings clarify how congruence between voice gender and pitch shapes sincerity perceptions and customer tolerance. From a managerial perspective, the results offer actionable guidance for hotel service robot voice design. Assigning higher pitch to female voices and lower pitch to male voices can improve service recovery outcomes. More broadly, the study provides design principles relevant to automated service systems, with implications for customer satisfaction and long-term relationship quality in technology-driven hospitality environments.

Keywords: Service robots, Voice characteristics, Customer failure tolerance, Perceived sincerity, Human-robot interaction

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Imperfectly Perfect: How Strategic Robot Service Imperfections Foster Customer Citizenship Behavior

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Abstract

Challenging the pursuit of service perfection, this research investigates whether strategic imperfection—deliberate, non-critical flaws—can foster authentic engagement. Drawing on cognitive appraisal theory, we propose a robot's imperfect yet effortful service enhances perceived authenticity, which elicits customer empathy, ultimately promoting customer citizenship behaviors (CCB). We use three scenario-based experiments to support this serial mediation path and test the boundaries of task type and robot embodiment. This study provides the psychological mechanism whereby "strategic imperfection" stimulates perceived authenticity and customer empathy, offering a novel theoretical perspective and empirical foundation for the design of interactive robot services, thereby guiding the service industry in balancing efficiency with human emotional connections during digital transformation.

Keywords: Service robots; service imperfection; perceived authenticity; empathy; customer citizenship behavior

1. Introduction

The integration of service robots and artificial intelligence (AI) into the hospitality and tourism sector has become an irreversible trend, fundamentally altering service delivery landscapes (Law et al., 2023). These technologies are lauded for their operational efficiency, consistency, and ability to handle routine tasks. However, their proliferation has surfaced a significant paradox: the very pursuit of flawless, standardized performance often results in service encounters perceived as impersonal, lacking in warmth, and devoid of the "human touch" traditionally central to hospitality. This creates a critical challenge for an industry where creating emotional connections and memorable experiences is paramount.

This tension between robotic efficiency and human-centric warmth invites a re-examination of long-held assumptions about service perfection. Traditionally, hospitality management has emphasized error-free, seamless service as the ideal. Yet, emerging research in marketing and

services suggests that perfectly polished performances can sometimes feel inauthentic (Anninou et al., 2024; Lee et al., 2025). For instance, Anninou et al. (2024) conceptualized service imperfection—distinct from outright service failure—as minor to moderate deviations from an ideal script that do not breach core promises. Their work, alongside others, indicates that such imperfections, when displayed by human employees (e.g., a novice server's earnest but slightly clumsy effort), can enhance perceived authenticity and foster deeper customer interaction. This notion of "strategic imperfection" has gained traction in digital marketing, where deliberately designed, subtle flaws in avatar endorsers or virtual influencers are used to boost perceptions of genuineness (Lv et al., 2023; Penttinen, 2025; Sorosrungruang et al., 2024).

Despite these insights, the concept remains unexplored in the context of human-robot interaction within service settings. Therefore, this research pioneers introduces the emerging perspective of "strategic imperfection" into the traditionally "perfect service"-oriented field of hotel management, aiming to explore how the imperfections of robots influence customer responses and the boundary conditions of these effects. Guided by cognitive appraisal theory (Lazarus, 1991), we argue customers cognitively evaluate such imperfections. When they attribute them to a robot's inherent "genuine" effort rather than malfunction, they perceive higher authenticity. This appraisal, in turn, elicits empathy—a specific emotional response. Following the empathy-altruism hypothesis (Batson, 1987), this empathy is proposed to motivate prosocial customer citizenship behavior (CCB), such as helping the robot, providing feedback, or spreading positive word-of-mouth.

2. Methods

This research employs a scenario-based experimental design across three sequential studies. The scenario method is chosen for its high internal validity, allowing for precise manipulation of the independent variables (e.g., robot imperfection level, task type) and control of extraneous factors in the complex context of human-robot service encounters. Carefully crafted textual simulations replicate realistic service interactions in hospitality settings (e.g., hotel concierge). For all studies, we recruit participants via a mainstream online platform in China (i.e., Credamo), screened for relevance, and randomly assigned to conditions.

Study 1 tests the main and mediation model. Using a 3 (Imperfection Level: Low/Medium/High) x 2 (Perceived Effort: Low/High) between-subjects design, participants were randomly assigned to watch one of six scenarios. Following the scenario, participants completed measures for perceived authenticity, state empathy, and CCB, along with manipulation checks and covariates. Study 2 and Study 3 will be conducted subsequently. Study 2 introduces the boundary condition of Task Type (Utilitarian vs. Hedonic) and Study 3 examines the boundary condition of Robot Embodiment (High vs. Low Anthropomorphism).

3. Preliminary Results

Study 1 collected 240 valid responses, which were analyzed using ANOVA and PROCESS. Simple effect analysis confirmed that, under the high-effort condition, the medium imperfection level elicited significantly stronger CCB ($M = 5.40$) compared to both low ($M = 4.85$, $p = .012$) and high ($M = 4.30$, $p < .001$) imperfection levels, demonstrating an inverted-U pattern. Subsequently, a moderated serial mediation analysis using PROCESS Macro Model 21 (with 5,000 bootstrap samples) was conducted with imperfection level (dummy-coded, medium vs. low as the focal comparison), perceived effort as the moderator, authenticity and empathy as serial mediators, and customer CCB as the dependent variable. In support of our

core hypothesis, the analysis revealed a significant positive conditional indirect effect for the medium imperfection (vs. low) under high-effort conditions via the sequential path of authenticity → empathy (β = 0.22, 95% CI [0.15, 0.30]). This key serial mediation path was non-significant under low-effort conditions (95% CI [-0.05, 0.07]). The results confirm that a robot's moderately imperfect performance, when perceived as high in effort, enhances perceived authenticity, which in turn fosters customer empathy, ultimately leading to greater willingness to perform CCB.

4. Discussion and Implications

This research makes several key contributions. Theoretically, it pioneers the application of strategic imperfection concepts to hospitality, using Cognitive Appraisal Theory to mechanistically explain how customers interpret robotic service imperfections (as signals of effort/authenticity) and the Empathy-Altruism Hypothesis to explain why this leads to prosocial CCB. It establishes critical boundary conditions (Task Type, Anthropomorphism), delineating when such strategies are effective. Practically, it provides service managers and robot designers with actionable insights: strategically embedding effort-signaling, moderate imperfections in humanoid robots used for hedonic, relational tasks can transform cold efficiency into warm engagement, fostering customer cooperation and advocacy.

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Indigenous Cultural Storytelling on TikTok and Its Power to Shape Malaysian Tourism

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Abstract

This study examines how the Indigenous community in Malaysia is represented on TikTok, one of the country's fastest growing platforms for short video creation and cultural expression. While digital media has increased the visibility of minority groups, it has also raised concerns related to stereotyping, misrepresentation, and digital literacy gaps. This research applies a qualitative content analysis to a purposive sample of TikTok videos featuring Indigenous creators and content tagged with Indigenous related hashtags. The analysis focuses on three key dimensions cultural representation, narrative construction, and audience engagement patterns. Guided by new media theories including participatory culture and mediated representation, the study explores how Indigenous individuals negotiate identity, express cultural heritage, and challenge mainstream narratives through digital storytelling. Findings reveal a growing presence of Indigenous creators who utilise TikTok to share traditional practices, promote language preservation, and respond to social misconceptions. However, some content by non Indigenous users reinforces outdated cultural stereotypes or frames the community through a lens of exoticism. The study also highlights digital literacy challenges affecting content quality, visibility, and creator influence. While TikTok provides opportunities for self representation, structural inequalities in access and media skills still shape how Indigenous culture is portrayed and consumed online.This research contributes to new media communication scholarship by demonstrating how short form video platforms act as spaces for cultural negotiation among marginalised groups. It also offers insights for policymakers, educators, and journalists seeking to support ethical and empowering digital participation for the Indigenous community.

Keywords: Indigenous communities; TikTok; cultural representation; digital literacy; new media journalism

Integrating Lean Management Principles into Restaurant Entrepreneurship Education: A Cross-Cultural Study of Filipino Students in the ICAM Strasbourg Summer Program

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Abstract

The food and beverage (F&B) industry continues to face increasing pressure from rising operational costs, limited resources, sustainability concerns, and strong competition. Because of these challenges, restaurant entrepreneurship education needs to go beyond basic business concepts and focus more on how restaurants actually operate. Aspiring food entrepreneurs must learn how to manage people, processes, and resources efficiently while still delivering quality food and meaningful customer experiences. Lean management offers a way to reduce waste, improve workflows, and create more value in service settings, and recent studies suggest growing interest in applying lean concepts in hospitality and foodservice, although their use in education and small enterprises remains limited (Perdomo-Verdecia et al., 2022).

This study explores how lean management principles can be introduced into restaurant entrepreneurship education through an international academic collaboration between ICAM Strasbourg in France and the Bachelor of Science in Restaurant Entrepreneurship (BSREnt) program in the Philippines. The research focuses on Filipino students who participated in the ICAM Strasbourg summer program and were introduced to lean and operations management concepts within a European academic environment. The study aims to understand how this exposure influenced students' views on efficiency, waste reduction, sustainability, and decision-making in food enterprise contexts.

The collaboration between ICAM faculty and Filipino faculty provided students with an opportunity to see how management tools commonly used in engineering and operations can be applied to foodservice settings. This type of cross-cultural learning has been shown to support more meaningful and practice-based entrepreneurship education by helping students connect theory with real-world applications (Aboalhool et al., 2024).

A qualitative research design was used to capture students' learning experiences and reflections. Participants included BSREnt students from Ateneo de Manila University who joined the ICAM program, as well as selected faculty members from both institutions who served as key informants. Data were collected through reflective journals, semi-structured interviews conducted after the program, focus group discussions (FGDs), and a review of course documents and student outputs, such as operational plans and business proposals.

The data were analyzed using thematic analysis to identify recurring patterns across the different sources. Themes were grouped into three areas: students' understanding and use of lean management concepts, changes in entrepreneurial thinking, and the influence of cross-cultural learning experiences. Using multiple data sources helped strengthen the credibility of the findings, and ethical guidelines were followed throughout the study.

The findings suggest that exposure to lean management helped students develop a clearer understanding of efficiency and waste in restaurant operations. Students became more aware of different forms of waste, such as excess movement, long waiting times, and inefficient workflows. Lean tools such as value stream mapping and continuous improvement helped students visualize processes and identify areas for improvement. Rather than viewing lean management as rigid or overly technical, students described it as a practical and flexible approach that could be adapted to small food businesses and startup ventures.

Learning about lean management also influenced students' entrepreneurial thinking. Students reported being more careful and reflective when planning menus, estimating costs, organizing kitchen layouts, and managing staff. Lean principles encouraged them to think more critically about feasibility, sustainability, and customer value. These observations are consistent with recent research showing that experiential and operations-focused learning can strengthen entrepreneurial competence in higher education (Salinas-Navarro et al., 2024).

The international and cross-cultural nature of the ICAM Strasbourg program played an important role in shaping students' learning. Comparing European and Philippine approaches to foodservice operations helped students recognize that lean principles need to be adapted to local culture, scale, and context rather than applied in a fixed way. Students learned to balance structured operational thinking with the flexibility and relational practices common in Philippine food businesses.

Overall, this study highlights the value of integrating lean management into restaurant entrepreneurship education through experiential and cross-cultural learning. It contributes to current discussions on hospitality and entrepreneurship education by showing how lean principles can be applied in foodservice contexts and adapted across cultures. The findings support the development of practice-oriented and globally informed curricula that prepare future restaurant entrepreneurs to build efficient, sustainable, and competitive food enterprises.

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Islamic Tourism Reimagined 4.0: A Community-Powered Digital Storytelling Model Grounded in Maqasid al-Shariah and Experiential Learning

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Abstract

Islamic Tourism 4.0 marks a transformative shift in global tourism, expanding beyond halal compliance and religious site visitation toward value-driven experiences that integrate spirituality, culture, community empowerment and technological innovation. Although Islamic tourism is rapidly growing across Muslim and non-Muslim countries, much of its current practice remains fragmented, with limited incorporation of reflective learning, ethical narratives and meaningful community participation. This paper proposes a Community-Integrated Digital Storytelling Framework (CIDSF) grounded in Maqasid al-Shariah and Experiential Learning Theory (ELT) to advance Islamic tourism as a holistic, spiritually conscious and socially sustainable sector. The framework is informed by a mixed-method research design that examined visitor learning behaviour, interpretive challenges and digital inclusivity needs across selected Islamic tourism destinations. Quantitative data were collected through structured surveys administered to visitors, while qualitative insights were obtained through semi-structured interviews with tourism practitioners, community representatives and digital storytelling experts. Document analysis of existing interpretive materials and site artefacts further supported the triangulation of findings. Collectively, these methods revealed gaps in current interpretation practices, strong visitor demand for technology-enhanced learning, and opportunities for community engagement in narrative development. Building on these findings, the CIDSF outlines four integrated dimensions: (1) Maqasid-guided ethical foundations for tourism design; (2) an experiential learning cycle that supports spiritual, cultural and educational engagement; (3) immersive and interactive digital storytelling tools that enhance destination interpretation; and (4) community integration that positions local actors as co-creators and beneficiaries of tourism value. By conceptualising the Islamic tourism industry as a holistic ecosystem rooted in faith, ethics and community engagement, the CIDSF delivers a scalable model for advancing Islamic Tourism 4.0 with integrity, innovation and inclusivity. This study demonstrates how Maqasid-based digital storytelling can translate Islamic values into meaningful, contemporary tourism practices across the global Islamic tourism landscape.

Keywords: Islamic Tourism Transformation, Maqasid-Driven Tourism Framework, Digital Storytelling Innovation, Experiential Learning Integration, Community-Empowered Tourism Design

Learncations as an Emerging Educational Tourism Model: Conceptual Foundations and Strategic Implications in South Korea

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Abstract

Educational tourism has evolved significantly in recent decades, progressing from traditional study-oriented travel to increasingly experiential and immersive forms of learning abroad. Early definitions framed educational tourism as travel motivated by study, instruction or skill development, often situated within cultural tourism (Gibson, 1998; Ritchie, 2003). Over time, scholarship expanded beyond this instructional focus and emphasized experiential and transformative learning, highlighting the role of international contexts in shaping students' values, worldviews and global competencies (Crabtree, 2008; Pitman et al., 2010). More recent approaches underscore immersion, interaction with local communities and the simultaneous integration of learning and leisure, situating educational tourism within broader trends of non-formal learning and personal development (Stoner et al., 2014; Sie et al., 2016).

Contemporary perspectives further incorporate place-based and destination-embedded learning, recognizing the role of local identity, culture and territorial characteristics in shaping educational outcomes. These views position educational tourism as both an experiential and socio-cultural process that contributes to the development of destinations and enriches visitors' learning experiences (Franco et al., 2022). As a result, the field now encompasses diverse formats that integrate academic content, cultural immersion, recreation and transformative experiences.

Despite this conceptual evolution, new hybrid modalities have emerged in practice but remain unaddressed in academic literature. One of the most recent examples is the *learncation*, a term combining *learn* and *vacation* and increasingly used by tourism institutions and universities in South Korea. The Korea Tourism Organization (KTO) and regional governments such as Jeju

have adopted the term to describe programs that blend structured learning, cultural immersion and rest within destination-specific environments. Learncations appear in official documents, media coverage and promotional campaigns, where they are presented as an emerging trend that extends beyond conventional sightseeing by integrating educational objectives with relaxation and meaningful engagement with place.

However, *learncation* is absent from indexed academic literature, and lacks a formal definition, theoretical foundation and typology that would allow it to be positioned within the historical development of educational tourism. This gap is particularly notable because learncations combine elements from experiential learning, place-based education, cultural immersion and wellness, and align closely with contemporary strategies of internationalization, destination branding and cultural soft power. In the Korean context, learncations are part of a broader policy effort to leverage the Korean Wave (*Hallyu*) and enhance the country's attractiveness to international students and young travelers, consistent with the logic of soft power as articulated by Nye (2004).

The present study aims to conceptualize *learncation* as a formal modality within educational tourism by systematically analyzing its components, characteristics and strategic functions. The study adopts a qualitative, interpretivist case study design, consistent with approaches emphasizing meaning construction through discourse and institutional narratives. Two complementary corpora were analyzed through qualitative content analysis using QCAmap: (1) documentation from the Korea Tourism Organization describing learncation programs, and (2) national media articles that present learncation as a trend, highlight program structures and emphasize partnerships with universities and regional governments. The institutional corpus was coded inductively to identify emerging dimensions of the concept, while the media corpus was coded deductively using a predefined category system focusing on definition, experiential activities, program structure, marketing language, demand and soft power dynamics.

Preliminary findings show a strong convergence between institutional and media interpretations of *learncation* as a hybrid model of "learning + vacation". KTO presents learncations as experience-based programs combining learning with relaxation and extended stays, while media narratives expand this definition by framing learncations as integrated learning models that prioritize immersion, cultural understanding and personal growth. Media coverage emphasizes the possibility of earning academic credits in partnership with institutions such as K-Arts and Jeju-based universities, supporting the idea that learncations blur the boundaries between academic mobility, educational tourism and leisure-based travel.

This hybridization distinguishes learncations from earlier forms of educational tourism. While previous models integrated learning and leisure implicitly, learncations make this combination explicit and central to the product strategy. Moreover, learncations differ from traditional academic mobility programs because they are designed and promoted by DMOs, positioning them as instruments of destination management and territorial marketing (Pike & Page, 2014). This strategic positioning connects learncations to Korea's broader goal of leveraging culture, tourism and education to strengthen national reputation and attract long-term international engagement.

The study's preliminary results suggest that learncation can be understood as a new stage in the evolution of educational tourism: a modality that integrates structured learning, experiential activities, cultural immersion, wellness and destination branding within a single framework. Conceptualizing learncation in this way contributes theoretically by expanding existing

typologies of educational tourism and offering a new hybrid category aligned with contemporary socio-cultural and territorial dynamics. Practically, the findings provide insights for DMOs, policymakers and higher education institutions seeking to design innovative tourism–education products aimed at attracting international students and enhancing destination competitiveness.

As a work in progress, this study presents the initial stages of conceptualization and analysis. Ongoing research will develop a comprehensive definition and conceptual model of learncation and further examine its implications for educational tourism and destination management.

Keywords: learncation; educational tourism; experiential learning; place-based education; destination marketing; soft power.

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Leveraging Robot-Assisted Digital Storytelling to Improve Tourism Safety Learning for Older Adults: A Protection Motivation Theory Perspective

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Introduction

As global demographic trends shift toward an aging society, the leisure and well-being of older adults have become an increasingly important research focus. By 2025 individuals aged 65 and above accounted for over 20% of Taiwan's population, officially marking its transition into a super-aged society. Tourism has emerged as a major leisure activity for older adults, contributing to physical activity, psychological well-being, and social engagement (Qiao et al., 2022). However, tourism also entails considerable safety risks, including health emergencies and environmental adaptation challenges. Prior research indicates that older adults are particularly vulnerable to such risks due to age-related physical decline, chronic health conditions, and insufficient pre-travel preparation, yet their participation in tourism safety education remains low (Wyler et al., 2022).

Current tourism safety education for older adults primarily relies on lecture-based instruction or printed materials. Such one-way approaches often lack interactivity and contextualization, making it difficult for learners experiencing age- related cognitive decline to transfer abstract knowledge into real life problem-solving (Lin, 2020). Accordingly, there is a pressing need for interactive, situational instructional strategies tailored to older adults' learning characteristics.

Digital Storytelling (DST) has been recognized as an effective method for contextualizing learning through narrative and multimedia integration. However, conventional DST is typically screen based and largely passive, offering limited interaction and adaptive feedback (Chang et al., 2023). With advances in artificial intelligence, social robots have emerged as potential companions capable of reducing anxiety (Roberts-Yates & Silvera-Tawil, 2019), fostering motivation (Hong et al., 2016), and facilitating interactive learning experiences (Liang & Hwang, 2023).

Building on these developments, this study proposes a robot-assisted digital storytelling (RA-DST) learning model for tourism safety education among older adults. Grounded in protection motivation theory (PMT) and extended through a novel behavioral internalization phase, the proposed model aims to investigate the differences between RA-DST and conventional DST (C-DST) in terms of older adults' learning achievement, learning motivation, problem-solving tendency, and learning enjoyment.

Literature review

DST integrates multimedia elements within narrative structures to support experiential learning and meaning making (Hsieh & Lee, 2023). For older adults, the multimodal nature may help reduce cognitive load and support the comprehension of abstract concepts (Yang, 2012). Nevertheless, conventional DST is often experienced passively through screen-based media (Chang et al., 2023; Laing & Hwang, 2023).

Robot-Assisted Learning (RAL) employs social robots as tutors or learning peers. Unlike screen-based agents, robots possess physical embodiment, gestures, and gaze behaviors that capture attention and elicit social responses (Essien & Parbanath, 2024). Prior studies in language learning and healthcare education (Hsieh & Lee, 2023; Chang et al., 2023) indicate that robot-assisted digital storytelling enhances engagement, reduces anxiety, and improves learning outcomes. However, its application to tourism safety education for older adults remains limited.

Theoretical framework

This study applies PMT to instructional design, organizing RA-DST content around threat appraisal (severity and vulnerability) and coping appraisal (action effectiveness and self effectiveness) (Wang et al., 2019). To extend PMT, a behavioral internalization phase is introduced, in which robots guide learners through simulated scenarios to translate motivational appraisals into actionable problem-solving.

Methodology

This study will be conducted at a senior university in New Taipei City, Taiwan, involving approximately 70 older adults (aged 60–75). Using a quasi-experimental design, two intact classes will be randomly assigned to an experimental group (RA-DST) or a control group (C-DST) over a four-week intervention (3 hours per week).

A mixed-methods design will be employed, combining achievement tests, questionnaire, and semi-structured interviews. Quantitative data will be analyzed using ANCOVA and independent-samples t-tests, while qualitative data will be subjected to thematic analysis. The outcomes of the study extend protection motivation theory, provide empirical evidence of robot-assisted learning for older adults, and propose a scalable model to enhance tourism safety literacy.

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Looking But Not Seeing? An Eye-Tracking Study of Visual Attention to Eco-Labels in Hotel Booking

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1. Introduction

Tourism is a carbon-intensive industry, necessitating a shift toward sustainable practices in the hospitality sector. While many hotels have implemented voluntary green practices and certifications (e.g., energy-efficient systems and towel and linen reuse policies), these initiatives are often insufficiently communicated during the online booking process (Assaker & O'Connor, 2023). This lack of visibility stems from the unobservable nature of sustainability attributes, creating an information asymmetry on Online Travel Agency (OTA) platforms. According to signaling theory (Spence, 1973), eco-labels serve as vital marketing signals intended to convey a company's environmental credentials and reduce consumer knowledge gaps (Middleton & Hawkins, 1998). However, the efficacy of these signals is fundamentally contingent upon whether they are noticed by consumers during the booking journey (Donato & Adıgüzel, 2022). Despite the importance of visual attention, current research has primarily focused on the indirect effects of label design on attitudes rather than directly examining how specific elements capture and sustain attention in a competitive digital environment (Bengart & Vogt, 2023).

Based on the dual attention theory (Orquin & Mueller Loose, 2013), this study seeks to bridge the gap between eco-label design and consumer cognition for the online hotel booking context by addressing three key objectives. First, it investigates the extent to which consumers notice and process existing eco-labels during their search process. Second, the study seeks to identify which specific hotel attributes dominate consumer attention and drive decision-making when choosing accommodations online. Finally, the research explores how eco-labels can be redesigned and repositioned to better capture consumer attention and influence their ultimate choice.

2. Methods

A methodological triangulation approach was employed, combining physiological eye-tracking data with qualitative cognitive insights. The research involved an eye-tracking

experiment conducted on an authentic OTA interface to explore natural browsing behaviors and information search strategies. 28 Participants were recruited based on their experience in booking leisure accommodations online within the past six months. A screen-based eye tracker (Smart Eye AI-X, 60 Hz) was used to capture detailed eye movements, including saccades and fixations, as participants performed a mock booking task without time constraints. Immediately following the task, a retrospective think-aloud (RTA) interview was conducted, where participants viewed their own gaze recordings and commented on their thought process. Data were analyzed using aggregated heat maps, Area of Interest (AOI) metrics (e.g., Time to First Fixation (TTFF), Dwell Time), and thematic coding of interview transcripts.

3. Results

The results demonstrate a pronounced primacy effect, with the first few hotel listings capturing the majority of user attention while intensity decreases rapidly during scrolling (Fig. 1). This suggests that listing position is a more significant driver of visibility than individual hotel attributes. Analysis of individual hotel listings reveals that attention is dominated by a "triad" of hotel images, hotel names, and locations. As shown in the AOI Attention Quadrant (Fig. 2), these three elements are classified as "Fast & Deep" attractors, receiving the earliest and most sustained attention from all participants. Hotel images serve as the primary visual gateway, boasting the fastest entry time (TTFF = 5,121 ms) and 100% participant coverage. Location information follows closely as a core early evaluation feature, while hotel names act as a highly accessible anchor for identification. In contrast, current eco-labels on platforms like Booking.com were found to be largely invisible, often relegated to low-attention zones at the bottom of filter menus. Eye-tracking metrics indicated that these labels have low salience and are rarely fixated upon, largely failing to trigger bottom-up (stimulus-driven) attention.

Fig. 1. Aggregated Heat Map of All Participants

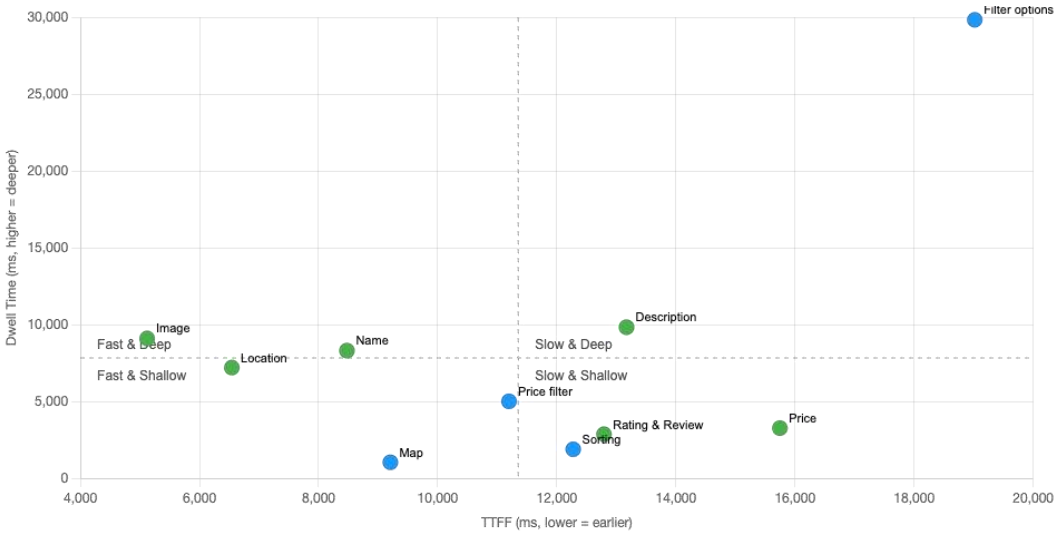

Fig 2. AOI Quadrant: TTFF vs Dwell Time

Note: X-axis = TTFF (ms, lower = earlier). Y-axis = Dwell Time (ms, higher = deeper). Vertical & horizontal lines = averages.

Qualitative data reveal that while top-down (goal-driven) attention dominates the users' search for convenience and quality of hotels, bottom-up attention (stimulus-driven) is required to interrupt this path and introduce sustainability as a factor. However, eco-labels currently fail to connect with either mechanism effectively. Sustainability information remains in a blind spot because it lacks the physical prominence to capture involuntary attention (*"I don't think I've ever noticed it... the word seems very small, and there are no highlights in the filter list")* and is not yet integrated into most consumers' core decision-making (top-down) frameworks (*"It doesn't influence my final decision." "I would consider it an added bonus... but it is not the primary factor."*).

4. Conclusion and Discussion

The findings show that eco-labels failed to play the expected signaling role. Activating bottom-up attention (stimulus-driven) of eco-labels is more promising in interrupting consumers' search path and introducing sustainability. Theoretically, this study extends dual attention theory to the hospitality context by mapping the dynamic interaction between target-driven and stimulus-driven cognitive processes during online booking and developing eco-labeling strategies grounded in these pathways. Additionally, we offer practical implications for the development of visually attractive eco-labels in the hospitality industry. To effectively activate bottom-up (stimulus-driven) attention, eco-labels must move from low-salience text areas into "Fast & Deep" zones dominated by images or "Slow & Deep" zones like primary filters. OTAs should embed eco-badges directly onto high-attention elements such as hotel photos (visual gateway) or place sustainability filters at the top of the search column. Further research could explore how to redesign labels to enhance physical salience—through color, iconography, and strategic placement—which is essential to win the competition for visual attention.

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Modeling Value Co-Creation through Multi-Destination Cruises: China-Japan-Korea Itinerary and Mongolia Extension as a Strategic Platform

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Abstract

Since the pandemic, the global cruise industry has improved rapidly. More emerging destinations are available on cruise itineraries after 2021. Many companies are shifting from traditional port-oriented, ship-oriented models to multi-distance experiences. These trips include coastal cities and inland destinations. Viking Cruises offer multi-country itineraries that have pre-and-post cruise extensions. Multi destination tours are more popular than single country trips. This study investigates Viking Cruising "China–Japan–Korea Three Country Itinerary and Mongolia Extension." It considers the unique value of the Mongolia segment as a single product. The study uses consumer choice theory (random utility Maximization) and value chain and value co-creation theories. This explains why multi destination cruise products become popular. These are not travel packages. They serve as an active container for co-creating and diffusion of systemic value between the tourists, cruise lines and destinations. The paper develops and presents a Cruise Multi Destination Product Driven Model of Value Co Creation and Diffusion.

Using a single case analysis, the study shows that these tours have the largest number of tourist experience over limited times by implementing multi destination designs. The research also explores how cruise lines use these routes as a means to promote new destinations in the global tourism industry. Product bundling turns linear supply chains into interactive networks. This increases customer satisfaction, increases corporate competitiveness, and benefits the local economy.

By combining random utility maximization and value Co creation theory, the work provides practical recommendations. It improves the cruise experience and aids the development of new destinations. Areas where culture and resources are rich are included such as Mongolia. The work provides a new conceptual framework and helpful guidance. It demonstrates how the Asian Paradigm uses the region's multiple landforms and proximity to develop premium tourism products. This promotes sustainable, collaborative regional development and innovation.

Keywords: Cruise Tourism, Multi-Destination Products Value Co-Creation, Mongolia Tourism, Random Utility Maximization

1. Introduction

Most people took trips around the world from 21.3 million in 2013 to 28.5 million in 2018. It is in 2019 that it is more than 30 million (Cruise Lines International Association, 2020a). Cruise tourism provides local economies a big boost.Brito 2021. For some time the whole cruise has been the main part of the experience. Nowadays people refer to the whole trip as "travel package", which includes services on board and on land (Pallis 2015). There are two things you should be included in a great cruise experience. 1) Some improved facilities of the onboard,

like fun, new foods, new dinner, and good planned itineraries (Chua et al., 2017). 2) Some of the services on land, like cruise terminal, reception, shopping, security, and a shore visit. After 2000, researchers started to want to know about how happy cruise passengers were and how much fun they had at their destinations (McKee and Chase 2003; Pallis 2015) Because more people want to be in the world, cruise lines are doing business to serve their customers. Today most cruise lines around the globe offer only two types of products: one is voyage tourism which focuses on experiences on board the ship, and the other is destination tourism which includes experiences on the shore. In destination tourism, people take cruises from one region to another. Most people will spend more time and money than they spend on land. The markets are more and more interested in visiting China. There is a lot of new places to go, and older and younger people will come back to learn. DiPietro & Peterson 2017. However, in the post-pandemic era, because there are very few mature cruise sites, and as a result cruise companies are resuming full operations, this "multi-destination" model poses some challenges, namely: too many people at popular ports are less enjoyable and too many passengers after a trip is busy (Ilori et al. 2022). This market innovators are going from the "port-centric radial tour" to "destination deep extension experiences." It is obvious how to increase the volume of trips by using fixed dates and fairly similar itineraries.

It is in this spirit of highly connected industry and challenges that we identify our major research question. Mongolia is a place where nomadic culture thrives and there are no natural spaces. For "post-cruise extension tours" it is a very different place and very similar place. It has a wonderful grassland and a deep nomadic tradition of people that makes it a "ocean-inland" experience when taking into account the sea-urban environments at major East Asian cruise homeports (Tianjin, Tokyo and Hong Kong). Our preliminary observations, which include Viking Cruises' China-Japan-Korea & Mongolia Pre-Post Extension product line, show that making Mongolia an extension destination can not only help cruise companies bring more people together and put less pressure on the popular places but also help them stand out from the competition and meet the customers' need for deep, meaningful experiences.

(Viking Announces New Mongolia Extension For China Voyages Starting in 2024-2024-04-11-viking-announces-new-mongolia-extension-for-china-voyages-starting-in-2024)

This new way of doing things not only provides a business case study, but also shows what "The Asian Paradigm in Hospitality and Tourism" is about. It shows how combining cruise and inland city extension experiences with pairing mature and new destinations can produce deep value beyond sightseeing models. Asia's diversity in geographic density, cultural diversity and growing consumer market make it a good venue to test this "multi-destination deep integration" technique. We want to study how cruise products, as a growing gateway for Asian culture, shift value relationships among tourists, enterprises, and destinations.

However, a theory gap remains. Studies on buyer behavior (such as the Random Utility Maximization theory) help explain how tourists choose products that maximize their experience (Kunnumkal, 2014; Oh & Shah, 2014). Other research studies the cruise industry, using value chain and co-creation theories (Zhang et al., 2009; Sun et al., 2019). These two areas rarely connect in current studies. We know why tourists select certain products and how the industry works, but we lack a clear framework to show how tourists' choices influence the industry through the design of multi-destination cruises—especially in places like Mongolia.

This research intends to close this gap. The main question is: How can multi-destination cruise products help create and share value among tourists, cruise lines, and new destinations? To answer this question, this study examines Viking Cruises' "China-Japan-Korea + Mongolia"

itinerary as a case and develops a new Cruise Multi-Destination Product-Driven Model of Value Co-Creation and Diffusion.

This paper is organized as follows. Part Two reviews the cruise supply chain, consumer choice theory, and value co-creation. It also points out gaps between these theories. Part Three introduces the new model. Part Four explains the case study method. The paper ends with the main findings and hands-on recommendations.

2. Literature Review

2.1 Cruise and Extension

Cruising lets people visit many places on one trip. After 2020, COVID-19 halted business and caused losses. The industry is now recovering and faces emerging challenges and prospects.

Cruise tourism includes cruise lines, shore excursion companies, and travelers. Tourists often go to islands and cultural sites with their suppliers. Because of crowds at tourist attractions and pressure from cruise companies, classic tours have changed into "deep extension" experiences. Some of these are "pre-cruise extensions," where tourists go to cities before the cruise, and "post-cruise extensions," where they go to inland or remote areas after the cruise ends.

The "extension tour" model lets you go on cruises that last longer and go to more places. It keeps guests longer, spreads out crowds, and gives them more unique experiences. This new way of doing things is good for cruise lines, destinations, and tourists.

As it has been reported, tourists will rather buy a “good price for their “expected experience” for medium- to short-haul cruises and the largest trip tourists spend is 20 days. Take a 14-day cruise for example. In many cases, it takes longer than a day in a port cruise to rest and adjust after the cruise. Viking Cruises` China-Japan-Korea cruise + Mongolia land tour product is an example of how they can “preserve high diversity, a good complementarity, and low perceived risk” in their tourism experience. Using the cruise model to handle the complexity and cost perception of cross-border trips makes tourists pay more for more, compared to single-destination products. This is an accurate description of the “utility maximization theory” which comes from buyer behavior studies in a specific tourism context.

2.2 Random Utility Maximization Model

The random utility maximization (RUM) model is derived from discrete choice theory. The idea here is that decision makers evaluate the “perceived utility” of all alternative choices and choose the choice with the highest utility (McFadden 1975; Ben-Akiva et al. 1985). The model divides utility into systematic utility (existence variables) and random utility (sources that are not observable), for which choice probabilities can be statistically characterized (Hensher 1994). Recently, RUM has been widely employed not only in transportation and consumer choices (Guevara & Ben- Akiva 2010; Hess et al 2018), but also in tourism research to analyze activities such as destination choices and bundle preferences (Viney et al 2002; Chorus et al 2013). Putting RUM in the context of “long-haul cruise tourism” which is a high-involvement decision, has many effects: For remote tourists who are spending a lot of time and money, their decision is usually what they could get the most “pinnacle utility“ out of their entire trip while staying in their budget. This may not only be the case when evaluating qualities of one destination, but also if evaluating overall value of combinations of multiple destinations (e.g., itinerary design Kunnumkal 2014). Multi-country cruise products can be considered as

“experience portfolio assets” and their design should match the rational decisions of how they should minimize their entire vacation time (Oh & Shah 2014). So, those who want to get the best out of a trip with a set budget should choose a multi-country product instead of a single destinations. Cruise companies also help tourists get the worst off their trips by implementing scientifically designed itinerary combinations, which can make their products more competitive and keep the customer returning (Gan and Liu 2024). However, there is a great theoretical difference in the literature today. On the one hand, the research stream interested in the RUM model looks in the ”black box” in individual decision making at the micro level to explain and predict consumer choice behavior (Oh and Shah 2014; Kunn Kumkal2014). On the other hand, tourism studies look in on the ‘black box of individual decision-making at the large level” (Oh& Shah 2014).

This conceptual "fragmentation" results in a significant research constraint: We understand how tourists make decisions (micro-foundation) and know how the industry values things (meso-form), but we don't have a clear way to explain how the first affects and changes the second through a specific, operational "productization" mechanism. In other words, the logical reasoning of individual tourists trying to get the most out of their trip is not connected to the short-term plans of cruise companies trying to get an edge over their competitors or new destinations trying to find ways to grow. The essential "transformer" or "coupler" between them—the "multi-destination cruise product" as a strategic design—has not been adequately examined or elucidated regarding its theoretical significance and operational mechanism.

There is a significant theoretical transition from elucidating how individual tourists rationally select multi-country cruise products to comprehending how this decision-making behavior invigorates and reshapes the value-creation dynamics of the entire cruise tourism ecosystem. (Torres, 2026) The RUM model accurately depicts the micro-foundations of demand-side decision-making, specifically how tourists seek to optimize experiential utility within constraints (Kunnumkal, 2014). A successful multi-destination cruise product, on the other hand, is much more than just a way to meet existing demand. In essence, it is a strategic design that creatively and actively brings together different tourist preferences with scattered destination resources. This creates new market demand, changes the value chain in the industry, and activates the growth potential of destinations (Gan & Liu, 2024).

This requires a conceptual model that is not only of people's choice, and can explain multi-party relationships and systems and how multi-destination cruise products are the principal source of value co-creation and diffusion. We develop this model for a cruise in tourism and hospitality which assumes that a cruise itinerary is a multi-stop tour and not only a tour of different destinations. It always links tourists' desire for a better trip (micro-foundation) to cruise company's use of their resources (meso-driver) and modular expansions for new destinations (macro-impact) via careful “experience portfolios.” This starts a trend of value creation benefiting tourists, businesses and destinations at the same time. A literature survey of value creation for tourism and tourism in hospitality. The details of the main idea and how the model works.

2.3 Cruise Multi-Destination Product-Driven Model of Value Co-Creation and Diffusion: A Conceptual Definition

The model described above gives a general picture, but when viewed for Asia, its mechanisms have more impact. Asian experiences are often highly oriented towards community experiences, cultural richness, and spirituality, compared to the individualistic, utility maximizing approach prevalent in western cultures. The industrial networks, especially East

Asia, tend to take relational trust and long-term cooperation into account and it may make the interactive behaviors of value co-creation more flexible and integrated. This study of the China-Japan-Korea + Mongolia itinerary illustrates the novel hybrid of the service standards and efficiency of existing cruise markets (representing modern Asian industrial cooperation) and the nomadic culture of Mongolia, represent traditional Asian cultural richness. Hence, the model proposed in this paper is intrinsically motivated by the dual emphasis of Asian paradigms on "experience integration" and "relational value creation", as a "value integration platform". The Cruise Multi-Destination Product Driven Model of Value Co-Creation and Diffusion shows how the design and commercialization of integrated multi-destination cruise itineraries is a key mechanism to initiate, coordinate and maximize value for all major players in the cruise tourism environment. This model states that the multi-Destinations cruise package is more than a product to be consumed; it is also an active source of value. It goes beyond a simple supplier-customer transaction, a model that illustrates how value is mixed (co-created) with the cruise line, the tourist, and the communities at the destination, as well as shared (distributed and multiplied) throughout the network. The model is implemented in three main ways that combine to form a coherent mechanism for turning the product design into a systemic output.

Tourists: maximizing utility through optimized experience portfolios.

This modelling incorporates the micro-foundations of consumer choice theory and in particular Random Utility Maximization. It suggests that the global-destinations package can solve a constrained optimization problem for the far-from and interested tourists. The product gets the highest perceived experiential utility per unit of fixed cost (time and money) by creating destinations close and unravelling, and it gives travelers more variety of travel choices.

Cruise lines: resourceful and competitive. This model is used by the cruise line as a company- and value-integrator. The company has a unique mixture of destinations that are hard to duplicate. It has margin over its product (higher yield per cabin than single-destination trips) and makes it hard for competitors to copy it, makes more use of the ship's assets in a wider variety of markets, and allows the company to negotiate with anyone in its supply chain from ports to shore excursion providers.

New destination: a catalytic development by Modular Value Chain Integration. This model can lead the emerging/other popular destinations (e.g., Mongolia) to grow. A destination can be part of a well-known, global tour, instead of requiring huge amounts of money to develop its own tourism infrastructure and market itself internationally. It gives you a lot of customers, and you can get in a few people. Even a brief visit came with a big impact: it saved time, was a way of enabling future independent travel and it could encourage local businesses to invest in customized services for cruise tourists that will drive a new tourism period. (Rashid et al., 2025).

This model essentially provides a systemic view of how a particular product innovation (multi-destinations cruise) shifts conventional industry relationships. It transforms a straight supply chain into a dynamic network for value co-creation, with the product itself as the engine that drives benefits for tourists, business and destinations.

3. Methodology

3.1 Research Design: Single Case Study.

The idea of this work is to study the complex and incomplete mechanism of “how multi-destination cruise products play a value co-creation role to maximize system value” and develop a middle-level perspective. Thus, a qualitative case study design is best used as a baseline study method and thus, a deep systematic investigation is more suitable.The design used here is an “embedded single-case study design”, for three reasons. First, this case (Viking’s China-Japan-Korea (CJK) Itinerary) is representative of an ideal practical case study of the “Multi-Destination Product Driven Value Co-Creation Model.” It combines known cruise destinations (CK) with a future inland destination (Mongolia) in exactly what the three main ideas of this model are, “experience portfolio optimization, ”strategic leverage”; and “modular embedding”. It thus provides a very rich and representative experimental framework for conceptual investigation and development. Second, analysis and systematicity: With the embedded design, a researcher can analyze more than one unit at a single level of the entire case framework (Viker's East Asia) with other actors (tours, businesses and destinations) and interaction (the whole case background), without repeating the same case. This provides an extremely rich and realistic empirical explanation of the whole chain of value cocreation.Third, Data accessibility, The study is the expert in the case organization, and therefore this allows the researcher to get elusive internal decision-making data, financial performance data and customer feedback, which is empirical rigorous and internal**.**

The main units of analysis are:

The Holistic Case: Viking Cruises' strategy for multi-destination products in East Asia.

• Embedded Unit 1 (Product/Consumer Level): The "CJK Itinerary" product bundle. The analytical emphasis is on the design logic that facilitates tourists' "experiential utility maximization" and on empirically evaluating the efficacy of its value proposition by juxtaposing market data (e.g., booking rates, pricing, customer profiles, satisfaction scores) with that of a control product, such as a "Single-China Itinerary."

• Embedded Unit 2 (Firm Strategy Level): Viking Cruises' job as a "value integrator." The analysis looks at design choices, pricing policies, financial results (like the rate of occupancy on voyages), and where this product line fits into the company's overall competitive strategy to see if it really is a "strategic lever."

• Embedded Unit 3 (Destination Level): The sub-case of Mongolia as a "modularly embedded" destination. The analysis focuses on alterations in tourism economic indicators (e.g., revenue from cruise passenger flows, associated service investments), socio-cultural ramifications, and qualitative evidence of destination marketing impacts prior to and subsequent to its incorporation in the itinerary, in order to evaluate its "catalytic development" effect.

3.2 Gathering Data: Method of triangulation

This study will use data triangulation to make sure the results are reliable and trustworthy. This means getting data from different sources and types to check each other's work.

Quantitative Data: Internal Operational Data: historical and real-time booking data, passenger demographics, cabin category distribution, and pricing history for the "CJK Itinerary" and control itineraries (e.g., "Single-China Itinerary").

- Financial and Performance Data: Using publicly available financial data to look at income statements, cost structures, return on investment, and other important performance indicators for the product lines in question.
- Customer Feedback Data: Collecting standardized customer satisfaction survey scores, Net Promoter Scores (NPS), and written comments after a trip in a systematic way.

Qualitative Documents: Internal Strategic Documents, such as product development briefs, market analysis reports, and agreements with destination travel agencies on how to plan their trips.

Marketing and Communication Materials: Analyzing brochures, official website descriptions, promotional videos, and social media content that are aimed at the "CJK Itinerary" to figure out what value story they tell to the market.

In-depth Interviews: o Internal Informants: Semi-structured interviews with Viking Cruises' East Asia regional product managers, itinerary planners, marketing directors, and financial analysts, focusing on product conceptualization, choices and deliberations, challenges, and assessment reviews.

o External Partners: Interviews with important Mongolian partners, such as officials from the tourism department, heads of ground service agencies, managers of major cultural attractions, and representatives from affected communities, to get their point of view on the cooperation experience, its benefits, and its challenges.

3.3 Analyzing the Data Plan:

The analysis of the data will follow the usual case study process, using pattern-matching and explanation-building strategies to compare real-world data with the theoretical model over and over again.

1. Organizing the data and doing a first screening: Cleaning and doing descriptive statistics on all the quantitative data that was collected; writing down word for word what was said in interviews; summarizing and archiving documents.

2. Analysis within the case:

Embedded Unit 1 (Product/Consumer): Use a comparative study to find out how the "CJK Itinerary" and control itineraries differ in important market indicators. Analyze customer comments thematically to identify fundamental perceptions related to "experience portfolio," "cultural diversity," and "journey value."

Embedded Unit 2 (Firm Strategy), look at the profit model, strategic positioning, and how this product line helps Viking compete better in the region based on financial data and interview content. Find specific steps for integrating and coordinating value from internal documents.

Embedded Unit 3 (Destination-Mongolia), make sure to organize changes in Mongolian tourism statistics (like the number of cruise visitors and seasonal changes) before and after the itinerary is embedded. Do a detailed qualitative analysis of interviews and reports from Mongolian partners to find specific examples of the catalytic effect, such as economic injection, capacity building, brand enhancement, and so on.

3. Cross-Unit Integration and Model Analysis. Once we are finished analyzing the embedded units, the cross-case analysis will be carried out to see how the results of the three units relation to each other. For example, how does high customers' satisfaction affect a company's performance? How can the design of the company's products directly affect the growth of Mongolia's service sector? This will test and improve the three interlocking mechanisms suggested by the theory and maybe show unexpected relationships.

4. Theory saturation and conclusion formulation. The data collection will stop when extra data fails to provide novel conceptual ideas.5. Cruise Multi-Destination Product Driven Model of Value Co-Creation and Diffusion, which will be improved and shown, along with an explanation of what it is and what it means in practice.

Expected Contributions and Significance

This work will address the challenges in post-pandemic cruise industry innovation and new destinations by developing and testing the "Cruise Multi-Destination Product-Driven Model of Value Co-Creation and Diffusion." Our proposal is that this work will lead to contributions at the following levels using the concepts and the case study.

The essential theoretical interest of this work lies in its novel combination of microeconomics random utility maximization theory and meso-level value chain theory and value co-creation theory. We will explore the "multi-destination cruise product" by studying how individual tourists' rational choice behavior are generated by corporate policies and, eventually, developed as a global force driving the development of the whole tourism ecosystem, even for emerging destinations. We shall explore the so-called "black box" connecting "purchaser choices" to "industrial and regional development results", by introducing a new dynamic model that provides insight into how value flows through complex tourism systems.

We will also study how the "multi-destination cruise product" operates as a business model from the point of view of cruise ships as mere transportation or resort facilities.We will illustrate using the example of Viking Cruises, that the cruise company can be seen as a "value integrator" by designing its itineraries to make the cruise industry more attractive to the tourists, better competitive, and provide power to popular destinations that would be beneficial for the cruise companies to develop product and to produce environmentally sustainable solutions.

We believe our paper is relevant on practical grounds for inland destinations such as Mongolia, a country that has a unique culture, but is still missing a key building block for traditional tourism development, and we believe that such destinations can be "modular embedded" in the global high-end tourism value chain.

We conclude that success is not in an attempt to focus on big infrastructure development, but in finding a "co-existential relation" between one's cultural and resource assets and existing mature cruise offerings, where low barriers and visibility are accessible to encourage rapid growth (Tran, Trong Thanh et al., 2025).This fact is relevant to planning tourism policies and industry planning in Mongolia and other such destinations.

Overall, the work will not only play a pivotal role in tourism management, consumers and regional development theory, but also in providing practical, empirical inputs to cruise company product innovation and planning for a new destination such as a destination such that Mongolia. Future work will further follow the methodological development and validation of our proposal.

Finally, in this paper (on cruise tours) we found one way for Asia to develop high-end tourism services: for the very broad range of cultures and relatively close geographic location, China can produce experience portfolios that are “color close” and work together to meet the requirement of “diversity in unity”. Second, for the industry, China doesn't need a “lapse model” of highly concentrated large scale, infrastructure driven growth, and can catalyze growth by “modularizing” themselves into existing regional or global tourism value chains quickly and gaining access to high-value tourists. Third, the value co-creation model we have shown stresses mutual respect between many partners. This is similar to the Asian business model of networks, harmony, and long term mutual benefit. Therefore, in the future, Asian tourism should focus more on creating new product platforms that link different cultures and business ecosystems, and the inherent diversity of nature in this region will become long term competitive.

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Motivations for Volunteering in Chinese Buddhist Temples at Different Life Stages: A Qualitative Study Based on Push-Pull Theory

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Abstract

In recent years, volunteer tourism at Chinese Buddhist temples has been thriving, attracting volunteers at different stages of their life cycle to participate. Based on the push-pull theory, this study aims to explore the motivations of volunteers at different life cycles for participating in volunteer tourism at Chinese Buddhist temples. A total of 52 samples were collected on the Douyin platform using purposive sampling, snowball sampling, and theoretical sampling for thematic analysis. The research results show that volunteers' participation motivations are closely related to the core tasks of their life cycle, and the push-pull motivations cover five themes: escaping from reality, pursuing the value of life, seeking socialization, healing environment, and material security. These results provide insights for temple management in project design and temple administration to fit in with volunteers at different life cycles.

Keywords: motivation, temple volunteer, Chinese Buddhist temples, family life cycle, push and pull factors

1. Introduction

Volunteer tourism, as a type of holiday that combines leisure activities with volunteering or unpaid work on specific projects at destinations, has gradually become an increasingly prominent tourism phenomenon worldwide (Avolio *et al.*, 2024; Wearing *et al.*, 2017). Among many forms of volunteer tourism, spiritual volunteer tourism, based on specific beliefs, has gradually attracted attention, with *temple volunteer tourism* being a standout among them (Wearing & McGehee, 2013). Participant travel to religious places such as Buddhist temples, where they support the daily operation and cultural affairs by contributing unpaid work (Xin, 2016). This can not only bring economic benefits and cultural dissemination but also promote the internalization and spread of regional culture through immersive experiences (Li, 2019).

To further understand the temple volunteer tourism phenomenon, this study focuses on Chinese Buddhist temples with the following considerations. Firstly, modern Chinese Buddhism advocates the concept of Humanistic Buddhism and emphasizes benefiting all living beings, which is highly consistent with the spirit of volunteering (Krause, 2024). Secondly, Chinese people, who are in a period of rapid modernization and social transformation, are facing increasing pressure and uncertainty, which in turn has generated a strong desire for inner peace and spiritual belonging (Sun & Ryder, 2016). This gives the Chinese context prominent epochal and cultural representativeness, which might serve as a representative context for other Asian countries with similar cultures.

In recent years, Chinese Buddhist temple volunteer activities have attracted extensive participation from individuals at different stages of their life cycles (hereafter LC) , breaking

the stereotype that participants are mainly elderly believers (Lin, 2023). Many college students and young people regard temple volunteer activities as a way to relieve stress and temporarily break away from their daily routines (Morning News, 2024). Some middle-aged participants associate it with family well-being (Guangzhou Federation of Trade Unions, 2023). Another group mostly consists of the retired or empty-nest elderly, and most of them have a long-term belief foundation (Yi, 2024). This trend highlights the diversification and younger age of the participating entities in Chinese Buddhist temple volunteering.

Some scholars believe when individuals transition from singlehood to marriage, raising children, becoming empty nesters, and/or finally retiring, they will adjust their volunteer behaviour based on their own living conditions and status, influencing their current volunteer motivations (Haski-Leventhal et al., 2016). However, current research on temple volunteer tourism, although covering different directions, such as the composition of volunteers, their daily lives, and management (Mei, 2023; Tan, 2018), lacks a clear explanation of the demographic characteristics and participation motivations of volunteers at different LC . It is crucial to fill this gap as only by deeply understanding the differentiated motivations of volunteers at different LC can temples design volunteer programmes that better meet diverse needs, thereby enhancing the sustainability of temple volunteer tourism (Yamashita *et al*., 2019).

To address this research gap, this study introduces push-pull theory as the core theoretical perspective. This theory suggests that tourists are motivated by both internal and external factors (Gürer & Kural, 2024). *Push motivation* elements are internal forces related to psychological demands that motivate people to travel, while *pull motivation* elements are external influences that draw visitors' destination choice (Komppula & Suni, 2013). The push-pull theory has been applied to the study of tourism motivation in various contexts and specific tourist groups (Gürer & Kural, 2024), but there is still a lack of research on volunteer tourists in the context of temples.

This study utilizes secondary online data from the Douyin platform for qualitative thematic analysis to collect research data (Lin *et al.,* 2024), for the following reasons: Firstly, Douyin is a core platform where Chinese people share their life and travel experiences and it covers a wide range of age groups (Ng & Indran, 2022). Secondly, the samples include graphic posts, short videos, tags, personal profiles and comments published by temple volunteers at different life stages on Douyin that explicitly mention their personal experiences of participating in volunteer activities at Chinese Buddhist temples. Through thematic analysis of this data, this study aims to answer the following research questions:

1. What are the demographic characteristics of temple volunteers at different life cycles who come to practice volunteer activities in Chinese Buddhist temples, based on online data from the Douyin platform?

2. From the perspective of push-pull theory, what are the motivations among temple volunteers at different life cycles who come to practice volunteer activities in Chinese Buddhist temples, based on online data from the Douyin platform?

By exploring these issues, this study aims to make the following contributions. Theoretically, deepen the understanding of the motivations for temple volunteer tourism by integrating the LC perspective and the push-pull theory. Practically, the research conclusions can provide a direct basis for temples and relevant departments to optimize volunteer management, thereby enhancing service experience and the sustainability of projects.

2. Literature Review

2.1 Life cycles of tourists

The LC concept which originated from sociology, is used to explain the behavioural differences of individuals due to changes in age and role, and was later widely applied to tourism research (Zimmerman, 1982). Among numerous models, the Family Life Cycle (FLC) model that combines population and socioeconomic variables is widely applied (Hong *et al*., 2005). The model assumes that tourism behaviour patterns depend not only on age, but also on multiple factors such as marital status, family size, employment, and income (Collins & Tisdell, 2002). Considering the common phenomena of intergenerational cohabitation and delayed nest-leaving in Chinese society, this study simplifies FLC into five stages for discussion, including *single*, *newly married*, *full nest*, *empty nest*, and *older single* (Li, 2020).

As shown in Table 1, there are differences in marital status, economic status, demographic characteristics, and family structure across different life cycles, and these differences affect people's motivation to participate in tourism activities (Ingkadijaya, 2018). Young people who are *single* are usually busy with their studies and hope to achieve personal growth through traveling, paying more attention to interpreting the significance of travel experiences (Habibah *et al,* 2015). The freshness and financial freedom in the *early stages of marriage* will lead to a period of "sweet travel" (Fakfare *et al*., 2020). As young couples start *having children*, their travel time, resources, and activities will be restricted (Voigt & Laing, 2010). After their children *leave home* and they have divorced or their spouse has *died,* elderly people tend to try new experiences when traveling, because the perception of age and remaining lifespan will affect travel motivation and intention (Huber, 2019).

Table 1. Common demographic characteristics for each life cycle.

Stage	Typical Age	Family Structure	Key Demographic Characteristics and Life Priorities
Stage 1: Single	18-35	Solo or with parents	● Early career, flexible time, self-focused. ● Self-development, social life, stress management.
Stage 2: Newly Married	25-40	Couple, no children.	● Stable finances, coordinating shared time. ● Relationship building, future planning.
Stage 3: Full Nest	30-55	Couple with children	● High pressure on time and finances, child centric. ● Parenting, career, family well-being.
Stage 4: Empty Nest	50-65	Couple, children left	● Increased time and resources, role transition. ● Personal interests, new pursuits, social contribution.
Stage 5: Older Single	65 and above	Living alone, widowed or divorced	● Ample leisure time, need for health/support. ● Health, social connection, life reflection.

(Source from: Lawson, 1988; Seo et al., 2024)

2.2 Push-Pull theory in understanding tourist motivations

Motivation is the intrinsic force that drives an individual to take action to meet their needs (Schmidt *et al.*, 2024). In the field of tourism, this concept becomes the desire that drives people to participate in certain tourism activities (Khalilzadeh *et al.*, 2024). Among numerous motivation theories, the push-pull theory constructs a two-tier motivation system consisting of

internal push forces and external pull forces (Dann, 1977). This theory emphasizes that *push factors* are intangible and intrinsic personal desires, such as escape from life and work, physical and mental health, new experience and knowledge; while *pull factors* are the visible and invisible attractions of the destination perceived by individuals, such as city image, historical culture and custom, natural scenery (Duong *et al*., 2023). The combined effect of push and pull forces stimulates tourists' interest in traveling. Table 2 summarises the common push and pull factors that influence tourist motivations.

Table 2. Main push factors and pull factors

Motivation	Factors	Sources
Push factors	● Escape from life and work ● Physical and mental health ● New experience and knowledge ● Prestige ● Novelty ● Leisure ● Socialization and emotional communication	Komppula & Suni (2013)
Pull factors	● City image ● Historical culture and custom ● Natural scenery ● Hospitality and local foods ● Entertainments and shopping ● Transportation and accommodation ● Marketing image ● Tourist spots, infrastructure, activities, and climate	Fieger et al. (2019); Leung & Handler (2025)

Studies have shown that the combination of push and pull motivation of tourists varies depending on destination and groups (Chan *et al*., 2018). On the one hand, push factors can be defined as inner desires caused by intrinsic wishes or imbalance and vary in different destinations (Uysal & Hagan, 1994). Conversely, the pull factor is closely related to destination attributes and the tangible resources, perceptions, and expectations of tourists towards the destination, which deserve further investigation (Uysal & Hagan, 1994). On the other hand, Maghrifani (2024) claimed that age has an influence on tourists' travel motivations. Also, Ingkadijaya (2018) found that tourists' age, income, and life stage have significant effects on travel motivation and selection of activities. Since social demographic characteristics and LC are deemed important to tourists' motivations, they are therefore considered in this study.

3. Methodology

3.1 Research design and data collection process

This study adopts a constructivist paradigm (Matteucci & Gnoth, 2017) to understand the motivations of volunteer tourists in Chinese Buddhist temples. Therefore, the inductive qualitative research method has been used to collect public user-generated content on the Douyin platform as the data source, and captures the participation motivations of volunteers in different LC through thematic analysis (Lookingbill, 2022).

The data for this study mainly comes from video content and its accompanying text on the Douyin platform, including personal profiles, video titles, copywriting, tags, and comments. Instead of mining data, researchers chose to manually collect Douyin videos to better capture non-verbal scenes in the videos, including expression, tone, and activity scenes, and convert them into text annotations for analysis (Prastya, 2023; Zhang *et al*., 2025). Subsequently, the

researchers screened the collected data, retaining only samples that could clearly describe an individual's life cycle and volunteer service experiences.

To ensure that the collected data can fully answer the research questions, this study employs a variety of sampling methods. Firstly, purposeful sampling was conducted by searching for keywords related to "temple volunteer", "taking kids to do volunteer work", and "retired life at temples" to initially identify relevant posts and users from different life cycles (Bouncken *et al*., 2025). Secondly, snowball sampling was adopted. Other relevant creators were identified by examining the comment sections and fan lists of the videos posted by the initial samples (Naderifar *et al.*, 2017). Finally, based on the initially emerging theoretical insights, the search terms were consciously adjusted (Conlon *et al.,* 2020), and targeted supplementary sampling was conducted until theoretical saturation was reached (Hennink & Kaiser, 2022).

3.2 Data analysis process and data validity

This study adopts thematic analysis to manually code the transcribed texts. To do so, the researchers transcribed the collected video content into text word-by-word and recorded it on a spreadsheet along with other collected data (Fuchs, 2023). Firstly, the transcribed text was split into separately coded paragraphs and *open coding* was conducted to identify meaningful and potentially relevant text segments (Wicks, 2017). Secondly, *axial coding* was adopted to relate and aggregate initial codes into more abstract categories and themes (Lochmiller, 2021). Finally, through iterative comparison and team discussions, selective coding helped to refine and define core themes of this research.

We utilized an array of techniques to warrant trustworthiness (Elo *et al.*, 2014). Firstly, triangulation of data sources is conducted by analysing multiple posts from the same user, video content and text descriptions, as well as their comment interactions with others. Secondly, we also provided detailed and rich descriptions, directly quoting the transcribed text. Last but not least, we regularly discussed the coding scheme and preliminary themes with other members of the research team, and accepted questions and challenges to enhance the objectivity of the analysis process.

4. Findings and discussion

52 valid samples related to volunteer activities in Chinese Buddhist temples based on Douyin platform have been collected. These samples can be divided into five LC stages through the respondents' self-descriptions and personal profiles. It can be seen that the sample distribution in each cycle is basically balanced, and the number of single young people is slightly more than that in other life cycles. However, the gender ratio is slightly unbalanced, with the number of female samples in each life cycle being higher than that of male samples. Most of them are from relatively developed cities along the southern coast. Table 3 shows their demographic information.

Table 3. Demographic information of samples.

Life cycle	Number of samples	Sample number	Age range	Gender	Place of residence
Single	15	S01-S15	18-29	Male: 4 Female: 11	Zhejiang: 4; Guangdong: 3; Beijing: 2; Shanghai: 1; Shandong: 1; Hainan: 1; Henan: 1; Sichuan: 1; Liaoning: 1
Newly married	9	NM01-NM09	30-36	Male: 2 Female: 7	Guangdong: 3; Zhejiang: 2; Guangxi: 2; Heilongjiang: 1; Hunan: 1;

Full nest	11	FN01-FN11	34-45	Male: 2 Female: 9	Shandong: 3; Zhejiang: 2; Jiangsu: 1; Shanghai: 1; Beijing: 1; Hunan: 1; Shanxi: 1; Guangdong: 1
Empty nest	9	EN01-EN09	55-69	Male: 1 Female: 8	Fujian: 2; Jiangsu: 2; Jiangxi: 2; Henan: 1; Guangdong: 1; Heilongjiang: 1
Older single	8	OS01-OS07	60-93	Male: 1 Female: 7	Sichuan: 2; Fujian: 2; Zhejiang: 1; Shandong: 1; Xinjiang:1; Jiangsu: 1

4.1 Demographic characteristics of temple volunteers at different life cycles

4.1.1 Single

The findings showed that the age of Chinese Buddhist temple volunteers in the single stage are concentrated between 18 and 30 years old, which is a critical development period for completing education, entering the workplace, and exploring intimate relationships. First, they generally have a good education, like S15 who graduated from Chongqing University; and have work experience in cities, as S01 who was the former product manager of a major factory. Second, their narrative subjects mostly revolve around themselves, focusing more on personal identity construction, spiritual healing, and learning/growth, which is consistent with the core developmental task of establishing a stable self-identity in early adulthood (Aktu & Ilhan, 2017). For example, a woman from Guangdong (S01) who had just resigned shared that, "*I really wanted to go to a quiet place to let myself stop, so going to a temple became my first choice*". Last but not least, their relationships with their original families also show significant differences. Although most volunteers in the single stage can make completely independent decisions, some samples are still influenced by their parents (S10) and this may even trigger intergenerational conflics due to personal choices (S09), this reflects the characteristic of being in a semi-independent transitional state (Reifman et al., 2007).

4.1.2 Newly married

During the newly married stage, the narrative subject of volunteer couples at Chinese Buddhist temples gradually shifts from "individuals" to "couples," and their social identity in participating in volunteer programmes is undergoing a transformation. Compared with the single stage, their individual behaviours will be considered and negotiated within the marital relationship, and they are going through a period of adjustment from being independent individuals to living together. To summarise, temple volunteer activities are usually regarded as beautiful shared memories, and family responsibilities have not yet become the focus of life. It reflects the construction process of *relational identity* in the early stage of establishing an intimate relationship (Fakfare *et al.*, 2020).

4.1.3 Full nest

The age of volunteers in Chinese Buddhist temples during the *full nest* stage is mainly between 34 and 45 years old, and family responsibilities and child-rearing have become the focus of their lives. Firstly, this stage is a period when the family structure is the most complete, including the family structure of the parent-child combination and/or three generations of grandparents, parents, and grandchildren. Decision-making is usually conducted through joint family consultation. Common ways of participating in volunteer activities are mothers taking their children to participate and the whole family participating together. Secondly, compared with the previous stage, parent-child interaction has become the focus of attention in this stage.

Tags such as "*post-80s mother*" and "*mother of two children*" frequently appear, highlighting the high participation of the role of *mother*. They try to combine temple volunteer activities with the responsibilities of mothers, and temples are shaped as good parenting spaces with the colour of intergenerational transmission (Gross, 2020).

4.1.4 Empty nest

Volunteers in the empty-nest stage are mainly retired individuals, and they have basically been relieved from the pressure of raising their children. Most of them have stable pensions and living security, which makes it possible for them to choose to participate in voluntary activities far from home. Volunteers at this stage exhibit the characteristics of long-term commitment and permanent residence, and their volunteer work at the temple has become part of their daily lives. Many of the samples expressed the willingness of *do not want to leave* and *continue doing this work here forever*.

4.1.5 Older single

Volunteers in Chinese Buddhist temples in the older single stage usually have a stable source of income, have relatively low material needs, and value spiritual life. Most of them live in temples for a long time and have almost become members of the temple community. For example, an 82-year-old woman from Shandong shared,

> My husband passed away more than 20 years ago. After he died, I came to the temple to work as a volunteer. I have been a volunteer here for more than ten years. I don't ask for money, just feel that I can do some good deeds.

4.2 Motivations of temple volunteers: A push-pull analysis at different life cycles

By coding the collected data, we found that various themes emerged. Through the induction of these themes, they were eventually refined into five themes: escape, pursuit, seek, healing, and material security. Among them, the first three themes belonged to the push factors, and the last two themes attract people to participate in volunteer activities at Chinese Buddhist temples.

4.2.1 Push factors: The internal drives

4.2.1.1 Escaping the current negative state

Volunteers at various life cycles have reported that they are dissatisfied with their current situation, but *the objects* they want to escape from are different, which confirmed the situational dependence of the push factors (Hu *et al.*, 2024). The core of negative states in the *single stage* is workplace involution and survival anxiety, with pressure stemming from a fast-paced life, high-intensity work, and unceasing competition. A girl from Henan who has been volunteering at a temple for seven months said that, "*It's quite difficult to find a job in society now. Many people suffer from depression and all kinds of problems, and they can't find a way out*". Both the *new married* and *full nest stage* show an escape from family responsibilities. The push factors in new married stage present two different characteristics: avoiding the realistic pressure brought by the "spouse" role and hoping to maintain one's own independent space outside of marriage. The full nest stage mainly stems from career development, child-rearing, and domestic chores.

Both *empty nest* and *older single* try to escape an empty and meaningless life. The push factors for empty nesters comes from the almost simultaneous loss of both family and job roles. For older singles, the push factor stems from the huge emotional gap caused by the death of a spouse and the loss of social roles due to the loosening of family ties. Volunteer activities in temples can help the elderly cope with feelings of loneliness and find a sense of belonging in their later lives (Mazumdar & Mazumdar, 2004).

4.2.1.2 Pursuing the value and meaning of life

The second theme emerging from the research data is the pursuit of life's value and meaning. This theme also appears universally across different life cycles, and its core is the active pursuit of a positive state of life and self-confirmation (Dezutter *et al.*, 2014). In the *single stage,* young people face a critical period for personal development. They are eager to achieve personal growth through various activities and experiences. Volunteers in this stage generally report that they have gained a deeper level of cognitive improvement (S02), this echoes the core characteristic of early adulthood, which is to maximize exploration and possibilities (Layland *et al.,* 2018). The meaning pursued in the *newly married* and *full nest* stages is usually related to the family, and the phrase "*praying for the family*" (NM02, FN01) appears many times in the text. In addition, the full nest stage also regards volunteer activities as an important field for teaching by words and deeds. Temples have become a platform for strengthening family unity and achieving intergenerational inheritance (Gillespie, 2022).

Both the *empty nest stage* and the *older single stage* face the collapse of social roles, the decline of physical fitness, and the ultimate issue of life. Therefore, their pursuits all point to spiritual belonging, new life roles, and face death calmly. The empty nest stage is more about seeking old-age security for themselves, while the elderly single stage overcomes the fear of death while realizing the value of life in old age by participating in sending off the deceased (Mcleod, 2008).

4.2.1.3 Seeking socialization and emotional communication

The third theme is about socialization and emotional communication. For those in the *single* and *newly married* stages, sincere and pure interpersonal relationships are particularly rare. Almost every sample shows the patient guidance of masters, the enthusiastic help of senior fellow disciples, and the friendly interactions within the community (Ammerman, 2020). Similarly, such spiritual communication with masters and senior fellow disciples enables volunteers in the *full nest* stage to temporarily escape from household chores and achieve personal spiritual enhancement. For volunteers in the *empty nest* and *elderly single* stages, the compassion and care from masters makes them re-experience the warmth of home and gain new emotional support and social belonging (Carstensen, 2021).

4.2.2 Pull factors: The external drives of the Chinese Buddhist temple

4.2.2.1 Healing sacred space

The first theme in the pull factors stems from the special spatial environment of the temple. Almost all samples indicated that they were attracted by the temple's peaceful atmosphere and beautiful natural landscapes. For the *single* and *newly married* stages, this attraction is prominently reflected in the slow-paced environment different from daily life, the solemn and serene atmosphere, and the vibrant natural scenes. A 29-year-old woman from Zhejiang shared

that "*being away from the hustle and bustle of the secular world, you can feel that the whole person calms down from the inside out*".

In addition to these, the *full nest* stage also emphasized the temple's historical and cultural heritage, where children can experience the charm of traditional culture while participating in volunteer activities. For the *empty nest* and *elderly single* stages, this healing sacred space meets their health needs. A retired woman from Hainan shared that "*I was full of illnesses before coming here, but now my health is getting better and better, and I have benefited a lot.*" The temple space has been endowed with different meanings by volunteers at various stages of life, going beyond its inherent religious functions (Becker & Dhingra, 2001).

4.2.2.2 Low-cost and high-quality material guarantee

The last theme emerging from the research data is about material guarantee. Temples usually provide volunteers with free accommodation and meals. For those in the *single* stage, most of them are still in school or just starting their careers, with limited disposable income. Temples offer them a space with free accommodation and meals where they can experience special cultural activities and receive healing. For the *newly married* and *full nest* stages, temples become destinations for family travel experiences, and vegetarian meals are their first choice for healthy eating. For the *empty nest* and *elderly single* stages, after retirement, they need to find security for their old age (Kohli, 2007). The good accommodation and dining environment of temples is repeatedly emphasized in the discourse of this stage and becomes the final destination they seek for themselves.

4.2.3 Combinations of push and pull motivations in different life cycles

The findings indicate that the push and pull motivations for volunteers' participation change as their life cycle progresses. Furthermore, push and pull factors do not exist independently; they form different push-pull combinations under the influence of adjustment tasks in different life cycles, collectively determining the participation of volunteers in Chinese Buddhist temples. During this process, temples are regarded by participants in different life cycles as fields of different nature, which match their core tasks.

5. Conclusion

Based on the push-pull theory, this study explores the motivations of volunteers in different life cycles to participate in volunteer activities at Chinese Buddhist temples through thematic analysis of data collected from Douyin. The two research objectives have been reached. Firstly, in terms of *demographic characteristics*, volunteers in different life cycles exhibit different family structures, life priorities, and role identities. From self-growth in the *single* stage to the building of spousal relationships in the *newly married* stage, then to family responsibilities and child-rearing in the *full nest* stage, followed by social roles and elderly care in the *empty nest* stage, and finally to the value and sense of belonging in life in the *elderly single* stage. These demographic characteristics prove that the life cycle is crucial for understanding the behaviour of volunteers in Chinese Buddhist temples.

Secondly, in terms of participation motivation, five push-pull themes are identified, and different push-pull combinations can be formed according to different life cycles. Among the push factors, *escaping from reality*, *pursuing the value of life* and *seeking socialization* are

prevalent in each stage, but the objects of escape and the goals pursued vary. Among the pull factors, *healing environment* and *material security* constitute different levels of attraction for different life cycles.

This study produced two major theoretical contributions. At first, it introduced the life cycle perspective into the research on volunteers in Chinese Buddhist temples allows us to go beyond simple classifications based solely on age and gender and better analyse their composition from within the volunteer group. Second, the push-pull theory has been widely applied in the field of tourism but is insufficiently applied in temple volunteer tourism. This study shows that push-pull factors are highly context-dependent and will change with the alteration of the life cycle. The core factor influencing this change are the core tasks of different life cycles. It is confirmed that the interpretation of motivations must be combined with the specific life cycle.

The findings provide several management implications for temple administrators and management. Firstly, it is crucial to arrange customized activities for different groups. For singles, developing in-depth experience and study programmes that align with their growth motivations is necessary. For newly married and those in the full nest stage, attention should be paid to building activities involving family participation. Empty nesters and elderly singles need simple and fulfilling activities to help them regain the meaning of life. *Secondly*, efforts should be made to further enhance the unique appeal of the temple in terms of environment, accommodation, catering, and interpersonal relationships. Conscious maintenance of the temple's sacred and tranquil spatial atmosphere is important, and the pure interpersonal relationships among masters and fellow practitioners can be developed into stable communities to create a sense of belonging for volunteers and ensure the sustainability of activities.

This study has several limitations, which provide directions for future research. First, the data comes from secondary data on Douyin, and the lack of face-to-face communication may restrict the acquisition and exploration of deep-seated motivations. Second, the collected samples are mainly from females, which may make it difficult to fully demonstrate the motivations of male volunteers and lead to results bias. In addition, the simplified life cycle model used in this study fails to cover all family structures, such as DINK (double income, no kids) families and divorced families. Future research should consider more diverse and larger samples, adopt a more refined life cycle model, and combine mixed methods to understand this phenomenon, so as to more comprehensively understand the participation motivations of volunteers in Chinese Buddhist temples across different life cycles.

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Narrative Chronotopes in Social Media from Her Economic Perspective: A Multimodal Analysis of a Chinese Tourism Vlogger's Identity Performance on Douyin

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Abstract

Amid the new media wave, the "her-economy" is poised for takeoff, with female consumer power reshaping the market landscape(Zhang, 2024). According to Ctrip's "2024Women's Travel Spending Insights Report," female travelers accounted for 65%of all travel bookings, with their per capita spending exceeding that of men by 10%. Notably, women aged 50 and above saw an astonishing 206% growth in their booking volume. The "Her economy" has extended into the tourism sector, with "Her travel" gaining increasing attention. Current research on short-video creators primarily focuses on how factors like physical attractiveness and professional competence influence fan behavioral intentions (Yousaf, 2022), with few studies investigating creators' narrative identities. This paper extends the theoretical perspective to the concept of chrono topes (Bakhtin, 1981). Chrono topes is not only a linguistic phenomenon but also a multimodal one(Ennis, 2019; Perrino, 2015). Based on this, we propose a cross-scalar, multimodal, and interaction-based framework for analyzing temporal identity positioning within social media narratives.

Keywords: Female tourism; Chrono topes; BER Topic analysis; Her economy.

Methodology

We collected travel Influencer Su Min's 100 most-liked vlogs posted on Douyin—spanning a five-year period from her first Douyin upload (September 2020) to the data collection point (December 2025). This study employs a mixed-methods design. First, based on the chronotypes theory, BER Topic thematic modeling is applied to the travel vlog texts of the research subject, Su Min. This process identifies identity themes that manifest across temporal dimensions, thereby summarizing her multiple identities. Second, multimodal analysis is conducted on her videos, subtitles, audio, and visual cues according to these multiple identities, examining her cross-linguistic creativity.

Findings

Based on the BER Topic thematic clustering results, we summarize Su Min's three-stage identity construction journey: evolving from an early "awakened escapee" to a mid-stage "practical adventurer," and ultimately maturing into a "community-oriented travel KOL."As shown in Figure 1, the thematic evolution results reveal a dynamic deepening of her identity. From 2020 to 2021, Su Min's video content focused on "life experiences" and "RVtravel"; From 2022 to 2023, cultural consumption elements like "Disney" gradually integrated into her content. By 2024-2025, niche experiences such as "glider flights" and innovative formats like

"photo-text storytelling" emerged, showcasing an evolutionary trajectory from basic travel to immersive experiences and from singular narratives to multifaceted expressions.

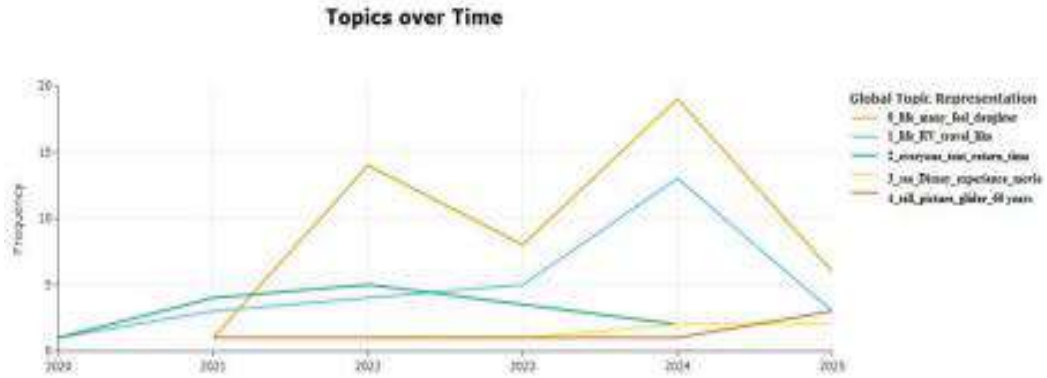

Figure 1 the thematic evolution results

Conclusion

These findings deepen our understanding of identity construction in the social media era and provide concrete pathways for tourism marketing practices. They not only advance the multidimensional dynamic theory of identity construction, refine the KOL ecosystem theoretical framework, and offer empirical support for the multimodal theory of creative reinterpretation, but also effectively promote precise segmentation of the female tourism market. This approach activates the silver economy and female consumer power while optimizing destination marketing strategies.

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Negotiating Mobility, Reimagining Futures: Chinese Youth and the Transformative Potential of Travel

A Critical Autoethnography of Transcultural Journeying between Asia and Europe

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1. Thematic Positioning: Tourism as a Site of Learning, Critique, and Self-Becoming

This paper positions tourism not merely as leisure or consumption, but as a deliberate, reflective practice of cross-cultural engagement through which young Chinese travelers negotiate identity, cultivate ethical sensibilities, and reimagine their futures. Set against the backdrop of rising Asian mobility and the global repositioning of China's youth, this study examines how travel—particularly deep, prolonged, and socially engaged travel—becomes a formative site for critical tourism practice, where the tourist transforms into an interpreter, a learner, and an ethical agent. By integrating my experiences across three continents—from volunteering in Nepal and Indonesia to studying in South Korea and Germany, and traveling extensively through Europe and China—I explore how tourism can transcend sightseeing to become a mode of cultural translation, political awareness, and self-reconstruction.

2. Core Tourism Research Questions

1. How does long-term, multi-destination travel across Europe enable young Chinese travelers to move beyond "checklist tourism" and develop a critical tourism gaze—one that questions heritage representation, power dynamics in destination marketing, and the politics of memory?
2. In what ways do pre-travel experiences in humanitarian and development contexts (e.g., UNHCR, IOM) shape the ethical orientation of Chinese youth toward "responsible tourism," community engagement, and sustainability while traveling?
3. How can linguistic and semiotic literacy enhance the depth of tourism encounters, allowing travelers to decode hidden narratives in urban landscapes, museums, and heritage sites—and how does this, in turn, inform their understanding of tourism as a form of cultural dialogue rather than consumption?
4. How does travel become a space of future-imagining for Chinese youth caught between domestic pressures (e.g., *neijuan*) and global opportunities, influencing their decisions about where to live, work, and belong?

3. Tourism-Focused Analysis Framework

3.1 Tourism as Critical Pedagogy

My journey illustrates how travel functions as an informal curriculum. For instance, visiting Vienna's Hofburg Palace prompted reflections not only on Habsburg history but also on how imperial narratives are curated for tourists—and how similar processes occur in China's own heritage tourism (e.g., the Forbidden City, terracotta warriors). This comparative lens turns

tourism into a critical learning process about how nations stage their pasts for present-day audiences.

3.2 The Volunteer-Tourist Continuum

My work in post-disaster Nepal and refugee-hosting Indonesia created an ethical baseline that reshaped my touristic encounters in Europe. Walking through Rome, I found myself considering not just ancient monuments but also contemporary migration flows and urban inclusivity. This reflects a growing trend among Chinese youth: the integration of volunteer tourism (*voluntourism*) with longer-term ethical travel, where the lines between "helper" and "visitor" blur, fostering a more accountable form of mobility.

3.3 Linguistic Landscapes as Tourism Texts

As a linguistics graduate, I approached European cities as multimodal texts. In Prague, bilingual street signs (Czech/English) revealed tensions between localization and globalization; in Tallinn, the interplay of Estonian, Russian, and tourist English mapped political histories onto everyday tourism. This literacy enabled me to engage in semiotic tourism—reading destinations as layered cultural productions, a skill rarely highlighted in mainstream tourism research but essential for deepening cross-cultural understanding.

3.4 Tourism and Future Geographies

For many Chinese youth, European travel is not escape but exploration of possible futures. My time in Copenhagen's consciously sustainable communities or Berlin's creative hubs prompted direct comparisons with Chinese megacities. This represents a form of prospective tourism—where travel is used to scout, compare, and mentally map out life paths, making tourism a laboratory for future personal and professional development.

4. Methodological Innovation: Autoethnography as Tourism Research

This study employs critical autoethnography not merely as self-reflection but as a method to capture the inner dimensions of tourist experience often absent from surveys or interviews. By pairing personal narratives with visual diaries, social media archives, and field notes from over 30 destinations, I construct a thick description of tourist becoming—how a traveler's consciousness evolves through encounters with difference, discomfort, and discovery. This approach humanizes tourism research, centering the voice of a young Chinese traveler as both subject and analyst.

5. Contribution to Tourism Scholarship and the "Asian Paradigm"

This paper offers three key contributions to tourism studies and the theme of *The Asian Paradigm in Hospitality and Tourism*:

- Reconceptualizing Chinese Outbound Tourism: Moving beyond stereotypes of shopping-focused group tours, I present a model of the reflexive, ethically oriented, politically aware Chinese youth traveler—a growing demographic seeking meaning, not just souvenirs.

- Linking Tourism and Transnational Citizenship: I demonstrate how tourism can serve as apprenticeship for global citizenship, where young travelers develop critical skills (cultural translation, ethical judgment, adaptive resilience) that prepare them for roles in an interconnected world.

- Tourism as Identity Work: I argue that for Chinese youth, tourism is increasingly a project of the self—a space to experiment with identities, negotiate between Chinese and global frames of reference, and articulate new forms of belonging beyond the nation-state.

6. Conclusion: Toward a Transformative Tourism Praxis

This study concludes that tourism, when approached with intentionality and critical reflection, holds transformative potential for young Chinese travelers. It is not merely a break from everyday life but a crucible for growth, insight, and future-planning. By sharing my journey, I call for tourism educators, industry professionals, and policymakers to recognize and support this deeper, more engaged form of travel—one that nurtures not only economic revenue but also cross-cultural competence, ethical awareness, and generational resilience. In an era of global uncertainty and digital saturation, the need for tourists who are thinkers, and travels that are transformations, has never been greater.

Nomadic Rhythm and the Asian Paradigm: A New Theoretical Approach to Hospitality and Tourism

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Abstract

The rapid expansion of digital technologies and continuous connectivity has profoundly reshaped everyday human life, disrupting attention, sleep patterns, emotional regulation, and biological rhythms. A growing body of empirical research associates excessive digital engagement with technostress, attentional fragmentation, sleep disturbances, and psychosomatic imbalance (McEwen, 1998; Tarafdar, 2019). In response, Digital Detox Tourism has emerged as a fast-growing segment within wellness tourism, offering temporary relief through reduced technology use and restorative environments. However, dominant interpretations of digital detox remain largely grounded in Western, technology-centric paradigms that conceptualize detoxification as short-term disconnection, individual self-control, or behavioral correction. Such approaches often overlook deeper cultural, temporal, and relational dimensions of well-being, particularly within Asian and indigenous contexts.

Aligned with the theme of the 15th Asia Tourism Forum, *"The Asian Paradigm in Hospitality and Tourism,"* this study argues that Digital Detox Tourism can be more coherently understood through an Asian paradigm grounded in cyclical temporality, relational hospitality, and rhythm-based living. Many Asian philosophies and indigenous knowledge systems conceptualize well-being not as episodic recovery from stress, but as a continuous process of balance and harmony between humans, nature, and everyday practices. Within this epistemological framework, the paper introduces **Nomadic Rhythm**, derived from the traditional Mongolian nomadic lifestyle, as a culturally embedded psychosomatic regulation mechanism and proposes it as a transferable theoretical framework for Digital Detox Tourism in Asian hospitality scholarship.

Existing literature commonly defines digital detox as the conscious disengagement from digital media to restore attention, emotional balance, and mental health (Syvertsen & Enli , 2019; Lee, Oh, Park, Kim, & Cho, 2023).Empirical studies primarily assess detox outcomes through indicators such as anxiety reduction, improved sleep quality, attentional restoration, and physiological regulation (Li, Pearce, & Low, 2018; Gong, Schroeder, & Plaisance, 2023). While these studies provide valuable insights, their outcome-oriented perspective tends to frame digital detox as a temporary intervention rather than a sustained reorganization of everyday life rhythms. Similarly, wellness tourism research on slow tourism, silence tourism, and nature-based tourism emphasizes deceleration, sensory awareness, and embodied experience (Kaplan & Kaplan, 1989), yet remains largely situated within Western urban-industrial contexts, with limited theoretical engagement with Asian and Central Asian cultural epistemologies.

To address these conceptual gaps, this study adopts a **process-oriented ontology**, viewing well-being as a dynamic, relational phenomenon emerging from continuous interactions

between body, mind, environment, and cultural practice (Engel, 1977). From a phenomenological perspective, Digital Detox Tourism is not defined merely by the absence of technology, but by lived experiences of altered temporality, bodily awareness, attentional stability, and sensory reconnection. Slowed perception of time, heightened bodily awareness, and emotional regulation are interpreted as manifestations of rhythm-based recalibration rather than simple technological abstinence.

Methodology

Methodologically, this study employs a **conceptual and theoretical research design** based on systematic literature synthesis, comparative cultural analysis, and interdisciplinary framework development. Key bodies of literature from digital well-being, psychosomatic health, wellness tourism, and Asian philosophy are critically reviewed and synthesized to construct the Nomadic Rhythm framework. Mongolian nomadic practices are analyzed as an epistemological reference point rather than an ethnographic case, allowing theoretical abstraction and transferability across Asian hospitality contexts. This approach positions the study within interpretive and phenomenological traditions in tourism research.

Within this theoretical positioning, Nomadic Rhythm is conceptualized as an integrated spatiotemporal system composed of cyclical movement, seasonal adaptation, repetitive daily practices, silence, and synchronized interaction with natural light and landscape. In Mongolian nomadic culture, everyday life is structured around environmental rhythms rather than clock-based productivity, fostering alignment between biological, psychological, and ecological processes. Repetitive physical movement and environmental predictability reduce sympathetic nervous system activation while supporting parasympathetic recovery. Exposure to natural light cycles and quiet environments facilitates circadian regulation, emotional stability, and attentional restoration. Crucially, this study reframes nomadic rhythm not as a cultural backdrop but as an active psychosomatic mechanism capable of accelerating rhythm realignment in digitally fatigued individuals.

Contributions and Implications

The study makes three primary theoretical contributions. First, it reconceptualizes Digital Detox Tourism from an outcome-based intervention to a rhythm-based process of lived experience. Second, it positions rhythm as a central analytical mechanism in psychosomatic well-being and tourism research. Third, it frames Mongolian nomadic rhythm as a transferable Asian paradigm rather than a localized cultural illustration.

From a practical perspective, the proposed framework offers Asian destinations—particularly those with indigenous, rural, and nature-based tourism assets—a culturally grounded strategy for wellness tourism development. By positioning Mongolia as an active laboratory for rhythm-based digital detox experiences, the study advances Asian tourism scholarship and provides a foundation for future empirical research, product design, and policy development within the region.

Keywords: Asian paradigm; Digital detox tourism; Nomadic rhythm; Psychosomatic well-being; Wellness tourism

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Opportunities For the Development of Hunting Tourism in Mongolia

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Abstract

Mongolia's vast territory, pristine nature, and diverse wildlife and ecosystem provide the foundation for the development of hunting tourism. Hunting tourism, when properly organized and monitored, has many benefits, including environmental protection, balancing herd numbers, and increasing local income. However, the sector has not yet been sufficiently developed in Mongolia due to the outdated legal framework, incomplete wildlife resource assessment system, and insufficient local participation. The purpose of this study is to identify opportunities for sustainable and efficient development of hunting tourism in Mongolia.

Keywords: Hunting Tourism, Environmental Protection, Wildlife, Animal

Outbound Tourism Flows of Mongolia (2020-2025): An Evaluation Using Leiper's Tourism System Index

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Abstract

Tourism is increasingly conceptualized as a systemic phenomenon rather than a singular event. Neil Leiper's seminal model (1979), later refined in 1990, established tourism science by framing tourism as a system composed of tourists, geographical factors, and the tourism industry. This framework has been widely applied in global research and education.

This study applies Leiper's Tourism System Index to Mongolia, analyzing outbound and inbound tourism flows using official statistics from 2025. The origin, transit, and destination components of the model are employed to evaluate Mongolia's position within international tourism.

As of December 25, 2025, Mongolia received 846,103 foreign tourists (NSO, Ulsiin khileer orson gadaad zorchigchid umnukh onii un ueus 80.8 mayanga buyu 32.7 khuviar uschee, 2024), while 3,498,718 (Publishes annual tourism statistics, including number of outbound travelers and total expenditure abroad., 2025)Mongolian citizens traveled abroad, indicating a strong imbalance between inbound and outbound flows. The origin index was calculated at 1, reflecting high outbound mobility. The Zamiin-Uud border crossing accounted for 1.1 million travelers (33.1%) (NSO, Mongol ulsiin khileer nevtersen zorchigh, teevriin kheregsel, 2024 onii taniltsuulga, 2025), underscoring the concentration of outbound flows through specific transit points.

Findings demonstrate that Mongolia currently functions predominantly as a tourist-generating (expenditure) country, with outbound tourism exerting a negative impact on the national balance of payment. To mitigate this imbalance, Mongolia must strengthen its destination component by diversifying tourism products, enhancing infrastructure, and expanding international market reach. Strategic interventions are essential for Mongolia to transition from a net exporter of tourists to a competitive tourism economy capable of generating sustainable income.

Keywords: Tourism system, Leiper's model, Mongolia, outbound tourism, inbound tourism, origin index, balance of payments

Background

Tourism has long been recognized as a dynamic system that integrates demand, supply, and geographical dimensions. The seminal work of Australian scholar Neil Leiper (1979; revised 1990) established the Tourism System Model, which conceptualizes tourism as a set of

interrelated components rather than isolated events. His framework—comprising tourists (demand), geographical elements (origin, transit, destination), and the tourism industry (supply)—has become foundational in global tourism research and education.

Within this model, the measurement of tourist flows is essential for understanding the economic impact of tourism on a nation's balance of payments. Outbound expenditures occur when citizens travel abroad, while inbound revenues are generated when foreign tourists visit the country. Applying Leiper's index allows researchers to quantify these flows systematically, linking population ratios, border crossings, and destination choices to financial outcomes.

For Mongolia, outbound tourism has expanded dramatically between 2020 and 2025, with flows increasing nearly tenfold. Statistical evidence shows that outbound travelers consistently outnumber inbound foreign tourists, positioning Mongolia as a tourist-generating country in the international tourism system. This imbalance highlights both the strength of domestic demand for international travel and the relative weakness of Mongolia's inbound tourism sector.

I. Leiper's Tourism System Model

N.Leiper conceptualized tourism activities as being structured around essential geographical factors.The model consists of three fundamental elements:

I. Tourists (Demand side). -Individuals who travel for leisure, business, or other purposes.
II. Geographical Elements (Spatial dimensions)- The physical environment and locations involved in tourism flows. There are 3 Geographical Components:

1. Tourist Generating Region (Origin)- The place where tourists come from.
2. Transit Route Region (Transit)- The routes and spaces tourists pass through to reach their destination.
3. Tourist Destination Region (Destination)- The place where tourist travel to and engage in tourism activities.

III. Tourism Industry (Supply side)- Organizations, services, and infrastructure that facilitate tourism. (N.Galiimaa, 2013, p. 23)

Within this framework, a country's role in international tourism is determined by whether it primarily functions as a tourist-generating (expenditure) country or a tourist-receiving (income-generating) country.

The network of businesses and organizations engaged in producing tourism products constitutes the third element of N.Leiper's tourism system model. Through this model, it becomes possible to illustrate how various industries interconnect and interact, which explains why Leiper's framework has gained widespread recognition and application globally.

All elements of Leiper's system are closely interrelated, making the model not only useful for identifying tourism products but also for demonstrating the interactions and impacts within the tourism sector. The model reveals that two of its core elements exhibit opposing characteristics. For instance, the demand generated by tourist-producing regions is often unpredictable, abstract, and unstable. Meanwhile, tourist destination regions partially satisfy this demand but remain highly vulnerable, as they depend heavily on investment and infrastructure development (N.Galiimaa, 2013, p. 25).

By conceptualizing tourism as a dynamic system, Leiper's model provided researchers and policymakers with a more comprehensive understanding of tourism flows and offered a framework for more effective planning.

In this study, the author applies Leiper's model to evaluate the outbound tourism flows of Mongolian citizens and their economic implications within a systemic context. Outbound travel from Mongolia has increased significantly in recent years, as evidenced by the following statistical data.

II. Outbound travel of Mongolian citizens (2020-2025 years)

The analysis of outbound tourism flows from Mongolia between 2020 and 2025 reveals a sharp and sustained increase in international mobility. Statistical evidence indicates that the number of Mongolian citizens traveling abroad grew nearly tenfold during this period, with outbound trips reaching approximately 3.5 million in 2025 (Gadaad ruu ayalsan Mongol irgediin too,uls,saraar, 2026). This growth underscores the rising demand for international travel among Mongolian citizens.

Table 1. Number of Mongolians traveling Abroad

Year	Number of Mongolians traveling Abroad	Notes
2020	~268,930	Sharp decline due to the COVID-19 pandemic
2021	~121,188	Borders partially reopened
2022	~324,467	Travel started to recover
2023	~1,382,097	Strong rebound after the pandemic
2024	~3,498,718	Peak growth, boosted by visa-free destinations
2025	~3,500.000+	Stable at a high level

Source: (Gadaad ruu ayalsan Mongol irgediin too,uls,saraar, 2026)

Table 2. Inbound tourists in Mongolia

Year	Number of foreign tourists
1990	no
2000	154.000 Datosmacro.com
2010	121.647 CEIC Data
2020	69.900 Knoema+1
2021	39200 gateway.1212 mn
2022	290400 https://english.news.cn/asiapacific/2023011
2023	644100 1212mn
2024	809900 Intellect-group.mn/post/ayalal- juulchlaliin- salbart- khurungu- oruulalm- khiikh-uu-
2025	846103 1212mn
Sources: data gathered from above mentioned sources	

A comparison of the two statistical tables demonstrates that the number of Mongolian citizens traveling abroad, whether for short- or long-term purposes, consistently exceeds the number of

foreign tourists entering Mongolia. Between 2020 and 2025, outbound travel by Mongolian citizens increased tenfold, reflecting a sharp rise in international mobility.

In 2024, the number of outbound Mongolian travelers was 3.7 times greater than the number of inbound foreign tourists, marking the peak of this imbalance (Ayalal Juulchlal 2024, 2025). In 2025, this ratio remained stable, confirming Mongolia's position as a tourist-generating country within the international tourism system. (Gadaad ruu ayalsan Mongol irgediin too,uls,saraar, 2026)

Contrary to concerns frequently raised in the media that outbound tourism reflects a permanent exodus of the economically active population, the data demonstrate otherwise. In 2023, 95.6% of outbound travelers returned within 30 days, confirming that the majority of Mongolians traveling abroad are short-term tourists rather than labor migrants. This distinction is critical, as it highlights the recreational and leisure-driven nature of outbound flows rather than long-term migration (Council, 2024).

Table 3. Comparative Statistics

Indicator	Mongolian Citizens Traveling Abroad	Foreign Tourists Visiting Mongolia	
2023 Fugures	~2 million trips (duplicated count)	~644,000 tourists	Outbound travel by Mongolians is about 3 times higher than inbound tourists
Purpose Structure	67.6% for tourism, remainder for work, study, permanent residence	Majority from China, Russia, South Korea	Outbound demand is diverse, inbound sources are concentrated
Duration	95.6% stayed less than 30 days abroad	88.9% stayed less than 30 days in Mongolia	Both flows are short-term, indicating limited long-stay tourism
Growth	Outbound tourism trips increased 3.2 times compared to previous year	Inbound tourists doubled (2.1 times growth) compared to previous year	Outbound growth outpaces inbound, showing imbalance

Source: (J.Bulganaa, 2025)

Although the ratio stabilized in 2025, the persistence of such disparity confirms Mongolia's position as **a** tourist-generating (expenditure) country rather than a tourist-receiving (income-generating) country within Leiper's Tourism System framework.

This negative balance highlights two critical implications:

- **Economic impact:** Outbound tourism expenditures significantly outweigh inbound revenues, exerting pressure on Mongolia's balance of payments.
- **Structural weakness:** The tourism industry remains underdeveloped in terms of attracting foreign visitors, despite strong domestic demand for international travel.

It is essential to measure tourism flows in order to demonstrate the impact of tourism activities on Mongolia's balance of payments. Since the balance of payments is reflected in the country's

financial accounts, the outflow and inflow of money are inseparably linked to the movement of tourists. Outbound expenditures occur when citizens travel abroad, while inbound revenues are generated when foreign tourists visit Mongolia.

To illustrate this relationship, the outbound flows of Mongolian citizens have been measured using Leiper's Tourism System Index. This framework enables the systematic analysis of tourism movements by linking financial outcomes to the geographical dimensions of tourism. Specifically, the model evaluates flows through three components:

1. Origin – tourists departing from Mongolia.
2. Transit – border crossings and routes through which citizens exit the country.
3. Destination – the countries visited by Mongolian tourists.

By applying Leiper's index, the study provides a structured means of quantifying outbound tourism and assessing its implications for Mongolia's balance of payments. This approach highlights the direct connection between tourist mobility and financial flows, thereby offering policymakers a valuable tool for understanding and managing the economic impact of tourism.

III. Data Sources

Statistical data were drawn from official national records and secondary sources covering the period 2020–2025. Key indicators include:

- Population of Mongolia: 3.5 million
- Outbound travelers (duplicated count): 3.5 million in 2025 (Gadaad ruu ayalsan Mongol irgediin too,uls,saraar, 2026)
- Border crossing statistics: Concentration of flows through the Zamiin-Uud gateway, accounting for 33.1% of outbound travelers.
- Inbound tourism figures: 846,103 foreign tourists (Gadaad ruu ayalsan Mongol irgediin too,uls,saraar, 2026) in 2025, used for comparative analysis.

The origin weight was calculated as the ratio of outbound travelers to total population:

Origin Index=3.5 million /3.5 million=1

This exceptionally high value indicates that Mongolia functions predominantly as a tourist-generating country.

By applying Leiper's method, it becomes possible to compare and analyze tourist flows based on actual statistical data, thereby illustrating the relationship between countries, border crossings, and population ratios.

Leiper's index expresses the relative share of total travel flows at each border crossing as a value between 0 and 1:

$L_i = p_i/100 = N_i/N_{total}$

L_i = Leiper's index for border crossing

p_i = percentage share of total flows at crossing

N_i = number of travelers through crossing

N_{total}=total outbound travelers

Since the sum of all percentages equals 100%, the sum of all indices equals 1:

$\sum Li=1$ Thus the number of travelers at each crossing can be calculated as:

$N_i=L_i \times N_{total}$

$$Pi=Ni / Ntotal \times 100$$

Zamiin-Uud Border Crossing: p=33.1% → L=0.331

N_{total}=3.5.million → N≈0.331 x3.50.0 ≈1.158.5 million

Chinggis Khaan International Airport: p=27.4% → L=0.274

N_{total}=3.50.0million →N≈0.274 x3.50.0 ≈959,0

Table 4. Number of travelers by Leiper's index

Border crossing	**Share (%)**	**Travelers (N)**	**Index**
Zamiin-Uud	33.1%	~1,158.5	~0.331
Chinggis Khaan International Airport	27.4%	~959.0	~0.274
Other crossings (combined)	39.5%	~1.917.0	~0.395
Total	**100%**	**3.500.000**	**1.000**

Source: (NSO, Mongol ulsiin khileer nevtersen zorchigh, teevriin kheregsel, 2024 onii taniltsuulga, 2025)

This table and explanation show how Leiper's index can be used to quantify and compare outbound flows by border crossing, linking percentages to actual traveler numbers.

Table 5. Outbound tourism by destination country (Leiper's Index application)

Destination of Mongolian travelers	**(%)**	**Number (thousand)**	**Index**
China	41.0%	~1,431.0	0.410
RF	18.5%	~645.7	0.186
South Korea	14.2%	~495.6	0.142
Japan	6.8%	~237.3	0.068
Other countries	15%	~690.4	0.194
Нийт	**100**	**3,500.0**	**1.000**

Source: (NSO, Mongol ulsiin khileer nevtersen zorchigh, teevriin kheregsel, 2024 onii taniltsuulga, 2025)

Using Leiper's index, the outbound flow of Mongolian citizens traveling to China via the ZamiinUud border crossing can be calculated as follows:

Origin weight:1

Transit flow (Zamiin-Uud):0.33

Destination flow (China): 0.41

Индекс=1 x 0.33 x 0.41 = 0.1353→ 13.53%

This result indicates that 13.53 percent of all Mongolian travelers in 2025 crossed through Zamiin-Uud to reach China. Such high proportion of outbound flows directed toward China demonstrates the strong regional orientation of Mongolian tourism demand. While the receiving country (China) benefits from positive inflows of tourism expenditure, Mongolia experiences a negative balance, as significant amounts of money are spent abroad rather than retained domestically (Vietnamiig zorikh mongolchuudiin too I ulirald umnukh onii un uyes 52 khuviar uschee, 2025).

Mongolia's index (1) shows that outbound travel is significant relative to its population size. It is comparable to Russia and higher than India or Vietnam, meaning Mongolians travel abroad more actively than many Asian peers. With an Outbound Tourism Index of 1, Mongolia is positioned a medium-to-high level compared to other countries. It is higher than many developing nations, but still lower than global leaders such as Germany, the United States, and China, whose indices often exceed 1.5-2.0. (Publishes annual tourism statistics, including number of outbound travelers and total expenditure abroad., 2025)

Table 6. Outbound vs Inbound Tourism Expenditure (2020-2025)

Year	Outbound Spending (Mongolians abroad)	Inbound Revenue (Foreign tourists in Mongolia)
2020	≈ $150 million	≈ $100 million
2021	≈ $250 million	≈ $120 million
2022	≈ $500 million	≈ $250 million
2023	≈ $900 million	≈ $400 million
2024	≈ $1.2 billion	≈ $489 million

Sources: (Publishes annual tourism statistics, including number of outbound travelers and total expenditure abroad., 2025), (Tourism and migration statistics, 2025)

Due Mongolians spend more abroad than foreign tourists spend in Mongolia. In 2024, the average spending per Mongolian outbound traveler abroad was about $340-360 USD. Compared to inbound tourists in Mongolia (average spending $578USD per visitors), Mongolians spend less per person abroad, but the total outbound spending is much larger because of the higher of travelers. (Publishes annual tourism statistics, including number of outbound travelers and total expenditure abroad., 2025)

In2024, outbound spending of Mongolian tourists reached about $1.2 billion, while inbound revenue was only $489 million. In the other words, Mongolia's tourism balance of payments shows a deficit of $600-700 million annually. From Leiper's perspective, Mongolia functions as a tourist-generating country, with outbound flows exerting pressure on its national accounts while simultaneously contributing positively to the economies of destination countries.

IV. Household Savings vs. Consumers behavior in tourism in Mongolia

In 2020 the average monthly household income of Mongolian citizens was 1.400.000 MNT (approximately 393 USD), and by 2024 it had increased to 2.200.000 MNT (approximately 618 USD). (Mongol Ulsiin urkhiin sariin dundaj orlogo, tugrik (1997-2024), 2025) Last 5 years household income rose by about 200.000 MNT each year, which equals roughly55-60USD annually at current rates. (Mongol Ulsiin urkhiin sariin dundaj orlogo, tugrik (1997-2024), 2025) In USD terms, Mongolian household income is still relatively modest compared to global averages, but the upward trend shows improving living standards.

In mainstream tourism theory, household savings are considered the decisive factor enabling international travel. Savings provide a stable financial base, allowing families to allocate resources for leisure or educational trips without jeopardizing daily consumption.

However**,** Mongolian consumers behavior diverges from this model**.** Several socio-economic and cultural factors reduce the importance of savings in shaping travel decisions:

Credit and Loans: Many households rely on bank loans, credit cards, or installment plans offered by travel agencies rather than accumulated savings.

Seasonal Income Flows: Earnings from livestock, small businesses, or trade are often seasonal. Instead of being stored as savings, income is spent directly on travel when cash flow is high.

Cultural Aspirations: Travel abroad is perceived as marker of social status and personal achievement. Families prioritize travel even without substantial savings, sometimes sacrificing other expenditures.

External Support: Remittances from relatives working overseas sending additional resources that substitute for savings.

V. Why Mongolians travel abroad despite modest incomes? (Push factors)

1. Education and Healthcare needs
- A large share of outbound spending is tied to studying abroad and medical treatment**.** Families prioritize these expenses even if incomes are modest, often using savings, loans, or remittances.
2. Lifestyle and Aspirations
- Rising middle-class aspirations push households to allocate resources for leisure travel, shopping, and cultural experiences abroad.
- Travel is seen as a status symbol, and many Mongolians save specifically for overseas trips.
3. Access to flights and connectivity

- The reopening of flights, especially from China post-pandemic, made outbound travel more accessible and affordable.

- Global tourism rebounded strongly in 2024, with international spending up 33.1% worldwide, which also influenced Mongolia's outbound numbers (Council, 2024, p. 15)

Outbound travel rising despite low incomes reflects prioritization of long term-goals (education, health) and social aspirations over short-term financial comfort. It's less about disposable income and more about strategic spending choices and global integration.

Conclusion

The application of Leiper's Tourism System Index to Mongolia's outbound tourism flows reveals a persistent negative balance in international tourism. Outbound travel by Mongolian citizens far exceeds inbound arrivals, with 2024 marking the peak imbalance when outbound flows were 3.7 times greater than inbound tourism. Although the ratio stabilized in 2025, Mongolia's role as a tourist-generating country remains evident.

We include next key findings:

- **High origin index (1):** Nearly the entire population is represented in outbound flows, underscoring strong demand for international mobility.
- **Transit concentration:** Border crossings such as Zamiin-Uud (33.1%) and Chinggis Khaan International Airport (27.4%) dominate outbound flows, reflecting limited diversification of routes.
- **Regional dependence:** Destinations are concentrated in neighboring countries—China, Russia, and South Korea—accounting for the majority of outbound travel.
- **Economic implications:** Outbound expenditures contribute positively to the economies of destination countries but negatively affect Mongolia's balance of payments, as domestic revenues from inbound tourism remain comparatively low.

In conclusion, Mongolia's tourism system is characterized by strong outbound demand but weak inbound attraction, resulting in a structural imbalance. While this reflects the growing aspirations of Mongolian citizens to engage in international travel, it also underscores the urgent need to strengthen the domestic tourism industry, diversify inbound markets, and develop sustainable strategies to balance the country's role within the global tourism system.

Recommendation

I. Strengthening inbound tourism development

- Invest in infrastructure, hospitality services, and destination branding to attract foreign visitors.
- Diversify tourism products (eco-tourism, cultural heritage, adventure tourism) to broaden appeal.

II. Promote domestic tourism alternatives

- Encourage Mongolian citizens to travel within the country by improving accessibility and affordability of domestic destinations.
- Develop campaigns that highlight the cultural and natural richness of Mongolia as a substitute for outbound travel.

III. Diversify outbound travel patterns

- Facilitate travel agreements and partnerships with a wider range of countries to reduce dependence on a few regional destinations.
- Support balanced mobility by encouraging educational, cultural, and business exchanges beyond the immediate region.

IV. Integrate tourism into economic planning

- Recognize tourism's role in the balance of payments and incorporate it into broader economic strategies.
- Monitor outbound and inbound flows systematically using Leiper's index to inform evidence-based policy decisions

- By addressing the imbalance between outbound and inbound tourism, Mongolia can transform its role in the international tourism system from a tourist-generating country into a more balanced participant. Strategic investment, diversification, and policy integration will be essential to harness tourism's potential as a driver of sustainable economic growth.

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Place Making and Cultural Capital in Luxury Hospitality: A Multimodal Website Analysis

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Abstract

Purpose –

This study investigates digital media communication by luxury hotels in Southeast Asia. The focus is on the convergence of luxury hospitality and destination culture and how these two main elements are present or absent in the placemaking of the hotel. This novel research distinguishes distance between luxury hotels' efforts to promote the elixir level of service and the extent to which destination culture is leveraged. This research is guided by the concepts of placemaking and Bourdieu's cultural capital in the assessment of the convergence of destination culture and luxury hospitality in the digital media.

Design/methodology/approach –

The research was conducted based on 3 hotels for each of the 4 Southeast Asian countries of Thailand, Singapore, Cambodia and Indonesia. A multi-modal content analysis method approach was adopted by extracting the texts, images, and video clips available to public on the hotel website for qualitative analysis. These were then rated on a Likert scale of 1-5 on the extent to which the website contents embed destination's culture into the messaging. Translating the Likert scale into a quantitative evaluation, we were able to assess the convergence and divergence between destination culture and luxury hotel leverage.

Findings –

The study found that hotels located in emerging destinations of Southeast Asia had more direct embeddedness of culture in their presentation and as distinct selling point. The study found that destinations that extol global luxury and service hospitality had the tangible or hardware of the destination's architectural vibe and heritage flavor but lacked the software of destination's everyday cultural practices. Where there was a lack of destination cultural embeddedness, this was compensated by the language of high-end service expectations.

Research limitations/implications –

The sample size was limited to 3 luxury hotels in each destination. The selection focused on international brands regardless of their origins. Though some hotels in our selection had roots in the destination with a stronger cultural embeddedness, the overall data on average was not

significantly skewed as a result. Perhaps future research in this area can segregate the hotels with local origins and international origins; and sort out contemporary ownerships as well which might also have an impact on the way the hotel carries itself as an ambassador of the destination.

Originality/value –

The significance of this contribution is demonstrated in how placemaking by luxury hotels can often be independent of the destination in which it is located. The cultural aspect of the destination need not necessarily be the focus of the hotels, where their first concern is the customer with the best and high-end experience. Luxury hotels that make an effort to merge the destination's culture with the hotel services represent a large majority of the luxury hotels surveyed in this study. The use of cultural capital by luxury hotels in placemaking provides an insight into marketing, positioning, and their projection of where the value of the hotel sits in the range of services and ambience the guests can expect. Research indicates that culture in hospitality is no longer just about presenting or promoting a destination to entice guests; instead, it has evolved from being a marketing supplement to an integral part of the service itself.

Keywords: Luxury Hotel, Destination Culture, Placemaking, website analysis, Cultural capital, Southeast Asia

Potential for Ecotourism Development in the Industrial City of Oskemen (Kazakhstan)

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Introduction

Oskemen is a major industrial centre in East Kazakhstan, shaped by metallurgical production and the associated environmental burden. Prolonged industrial activity has resulted in accumulated environmental pressures: ambient air pollutant concentrations frequently exceed the guideline levels recommended by the World Health Organization [1], while the Irtysh and Ulba rivers receive substantial loads of heavy metals and other toxic substances from metallurgical operations [2]. At the same time, the city exhibits an acute deficit of urban green space -approximately 8 m² per resident compared with the recommended 50 m² [3], i.e., about five to six times below the benchmark. This situation undermines environmental resilience and residents' quality of life. In a post-industrial context, the city faces the need for new development pathways, and ecotourism represents one promising direction. The relevance of this study lies in identifying solutions that combine urban ecological restoration with the advancement of sustainable tourism. This agenda aligns with contemporary sustainable

development thinking and broader global trends towards integrating environmental protection measures into the tourism sector, particularly within the Asian context.

Aim of the study

This study aims to assess the potential for ecotourism development in the urban environment of the industrial city of Oskemen. The study includes an analysis of the urban environment, a survey of residents, and the development of project proposals.

Methodology

The study employs a mixed-methods design combining quantitative and qualitative analytical approaches [4]. First, a spatial - environmental assessment was conducted using GIS tools and environmental monitoring data to evaluate local conditions, including air pollution and the distribution of urban green infrastructure. Air-quality indicators were benchmarked against international standards (e.g., WHO guideline values for PM2.5) and national maximum permissible concentrations, while data on green spaces were obtained from municipal statistical reports. Second, a pilot sociological survey of approximately 80 residents (including university students and other city residents) was carried out to examine recreational behaviour, environmental attitudes, and perceptions of urban ecotourism. The questionnaire covered park visitation frequency, willingness to participate in environmental activities, and support for urban greening initiatives. Third, economic appraisal and modelling were undertaken, including a cost - benefit analysis of a prospective ecotourism intervention (e.g., an urban ecopark concept), scenario-based visitation estimates, visitor-flow modelling, and 3D visualisation of proposed green spaces [4]. Additionally, expert consultations with local ecologists and tourism specialists were incorporated to qualitatively assess the feasibility of proposed measures. This comprehensive approach allowed for an integrated assessment of the city's environmental conditions, social demand for ecotourism, and the economic viability of ecotourism development.

Results

The findings confirm the initial assumption that the city faces a challenging environmental situation, while also identifying positive opportunities for ecotourism development.

1) Oskemen's environment is severely degraded [4]. Air pollutants (e.g. PM2.5) are ~3–4× above WHO limits [4], and green space per capita is over 5× below recommended levels [4]. Major metallurgical plants release heavy metals into air and water [2]. These factors threaten ecotourism (undermining the city's image and posing health risks) and require urgent action.

However, open data suggest over 270,000 existing trees in the city and plans for 10,000+ additional saplings. The "Taza Qazaqstan" campaign will plant 500 trees (380 conifers near the Oskemen Hydropower Plant, 120 by volunteers). Kazzinc, TMK, and UMZ each plan ~15,000 plantings (timelines and sites under negotiation).

2) Surveys show >90% of residents regularly use parks [4] and ~86% would participate in environmental activities (tree planting, eco-events) [4]. Most support establishing new ecotourism facilities (e.g. large urban ecoparks) as a means to improve the city [4]. This clear demand for urban greening suggests community engagement is both a prerequisite and a potential driver of eco-projects.

3) Opportunity analysis suggests ecotourism is a viable development path. The proposed "MAZE" urban ecopark (labyrinth design) combines recreation with ecological rehabilitation and environmental education [4]. Financial appraisal finds it viable: projected visitor numbers could allow medium-term cost recovery [4], possibly achieving payback within a few years if interest grows. Anticipated impacts are multi-dimensional: environmental (improved air quality, urban greening, restoration), social (health, awareness, inclusive spaces, community cohesion), and economic (new jobs, tourism revenue) [4]. These results underscore Oskemen's substantial potential for sustainable urban tourism, contingent on innovative eco-projects being implemented. Overall, these results indicate substantial potential for sustainable urban tourism in post-industrial Oskemen, contingent upon the implementation of innovative eco-projects.

Conclusions.

The study demonstrates that, even in a heavily industrialised city shaped by the legacy of Soviet-era industrialisation, ecotourism development is feasible when pursued through an integrated approach. Oskemen has a degree of potential to transition towards greater urban sustainability: the availability of natural resources in its surroundings, historically established urban functions, and strong public interest together create enabling conditions for change. However, realising this potential requires addressing several constraints. Key challenges include reducing technogenic pollution (through upgrading industrial emission-control systems and strengthening transport emission management), closing the deficit in urban green space (via the development and implementation of a long-term greening programme [3] and the provision of maintenance to improve sapling survival rates [4]), and securing institutional support for ecotourism initiatives. Without systematic action in these areas, urban ecotourism may face limitations related to environmental carrying capacity and scepticism among potential visitors. Nevertheless, the findings are encouraging: with active engagement from local authorities, businesses, and the community, Oskemen could develop a successful model of urban ecotourism. Such a model would support sustainable urban development by linking nature conservation with hospitality and a new economic niche.

Scientific and practical contribution. The results contribute to sustainable tourism scholarship by illustrating how ecotourism principles can be applied not only in protected natural areas but also within industrial urban settings. Practically, the study offers recommendations for local authorities and stakeholders, ranging from the design of a comprehensive urban greening programme to mechanisms for mobilising community participation and developing infrastructure for environmentally responsible visitors. The empirical evidence and analysis presented here can inform the planning of similar initiatives in other post-industrial regions. Overall, the study contributes to the understanding of the "Asian paradigm" in hospitality and tourism through the lens of sustainable development, demonstrating how economic, social, and environmental objectives can be aligned at the city scale.

Keywords: ecotourism, sustainable development, urban environment, post-industrial city, green infrastructure.

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Redefining Luxury: ESG Integration in the Hospitality Industry for Eco-Conscious Young Generations

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Abstract

Environmental, social, and governance (ESG) principles are increasingly being integrated into the strategic core of hospitality businesses, shaping operations through carbon footprint reduction, diversity and inclusion initiatives, and transparent, ethical decision-making. These practices are not only driven by regulatory and corporate imperatives but also by the preferences of younger, environmentally conscious consumers whose choices are reshaping the industry's approach to sustainability. Research consistently demonstrates that this generation prioritizes environmental and social considerations in their consumption decisions and is often willing to pay a premium for eco-friendly travel experiences. At the same time, they exhibit distinctive preferences for authenticity and uniqueness, perceiving luxury less as a status symbol and more as a lifestyle expression.

The importance of sustainability in the hospitality industry is well-documented (i.e. Jones et al., 2016; Kim, Barber, & Kim, 2018). Hotels and resorts have embraced a wide range of environmental, social, and economic initiatives to reduce their carbon footprint, conserve resources, and promote ethical business practices (Shen, Qian, & Shen., 2020; Pereira et al., 2021). This shift towards "going green" has been driven by a combination of factors, including stricter environmental regulations, the desire to enhance corporate social responsibility, and the recognition that sustainable practices can lead to cost savings and market different (Gonzales, 2023; Pereira et al., 2021; Singal, 2013).

Within the luxury hotel sector, this evolving consumer orientation presents a critical challenge: how to reconcile ESG-driven practices with the maintenance of traditional standards of luxury. This study investigates the impact of ESG implementation on younger consumers' perceptions of luxury value and their intentions to purchase luxury hospitality experiences. Study 1 employs qualitative methods to identify and categorize ESG practices currently adopted by luxury hotels. Building on these insights, Study 2 utilizes a measurement model to examine the mediating role of perceived luxury value in the relationship between ESG practices and purchase intentions.

One of the key drivers of this sustainability movement within the hospitality industry is the rise of eco-conscious young generations. These younger consumers, often referred to as millennials and Gen Z, are increasingly concerned about the environmental impact of their choices and are more likely to patronize businesses that demonstrate a strong commitment to sustainability. As a result, hospitality companies are stepping up their efforts to implement environmentally-friendly practices, such as the adoption of renewable energy sources, the reduction of waste, and the use of sustainable building materials and supplies (Jones et al., 2016; Gonzales, 2023). For example, a recent study on the sustainability practices of a luxury hotel in Arrábida Natural Park, Portugal, found that the hotel had implemented a range of eco-friendly initiatives,

including the use of renewable energy sources, water conservation measures, and the adoption of sustainable purchasing policies (Pereira et al., 2021).

By bridging sustainability and luxury consumption research, this research contributes to a deeper understanding of how ESG principles influence consumer value perceptions in the hospitality industry. The findings aim to inform both academic discourse and managerial practice, offering guidance on how luxury hotels can strategically align ESG initiatives with the expectations of a new generation of travelers.

By redefining luxury through the application of ESG principles, the hospitality industry is adapting to the shifting preferences of younger, environmentally conscious clients. The luxury industry's transition to sustainable luxury, which lessens adverse environmental effects and boosts social good, is essential to its long-term viability. What is unclear, though, is how this sustainable luxury may be characterized and promoted to younger generations, and how each ESG practice affects their perception of luxury.

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Reframing Tourism Study Programs in the Age of Artificial Intelligence: An Asian Pedagogical Perspective from Six Indonesian Universities

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Abstract

Artificial Intelligence (AI) is rapidly transforming the global tourism and hospitality industry, reshaping service delivery, destination marketing, experience design, and operational decision-making (Mattila et al., 2025; Gretzel, 2025). In Asia, where digital acceleration traverses with diverse socio-cultural and institutional realities, tourism study programs face increasing pressure to revisit their pedagogical models and graduate competencies while preserving the human-centered essence of hospitality. This study examines how tourism study programs in Indonesia, representing a dynamic emerging tourism economy, respond to AI-driven digital transformation through curriculum reform and pedagogical innovation.

Using a qualitative multi-site case study approach, this research draws on in-depth interviews with academic leaders and curriculum managers from six tourism study programs: Universitas Gunadarma, Institut Pariwisata Trisakti, Universitas Indonesia, BINUS University, Universitas Bunda Mulia, and Universitas Pancasila. Importantly, all six institutions share a common pedagogical stance: AI is a powerful tool for enhancing efficiency, creativity, analytics, and service optimization. However, it cannot replace the human touch, emotional intelligence, and cultural sensitivity that define tourism and hospitality experiences, as emphasized in recent tourism education studies (Altun et al., 2024). Thematic analysis reveals four central dimensions: (1) the repositioning of AI from a supplementary tool to a core professional competency; (2) the embedding of AI-related content through data science, digital tourism, smart tourism, and virtual reality based learning; (3) uneven digital infrastructure readiness, particularly for VR/AR technologies, licensed analytical platforms, and industry-grade data access; and (4) significant variation in lecturer capacity and institutional upskilling strategies.

The findings indicate that Indonesian tourism study programs are undergoing a profound pedagogical transition toward data-driven, AI-augmented learning ecosystems, while deliberately maintaining human-centered hospitality values. This transformation reflects an emerging Asian model of tourism education that seeks to harmonize technological innovation, ethical awareness, service culture, and strong industry relevance. This study contributes to regional debates on digital transformation and pedagogical innovation in Asian tourism education. It offers strategic insights for curriculum reform, institutional capacity building, and future-ready workforce development.

Keywords: Artificial intelligence; digital transformation; tourism education; tourism study programs; Indonesia

Rethinking Overtourism in Asian Heritage: A Tourists' Nostalgia Perspective

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Abstract

Overtourism has increased significantly year over year, especially in the Asian region. Many scholars have pointed to 'overtourism' in a negative light (Frey & Briviba, 2020). This perception of 'overtourism' has led to a homogeneity of issues-to-solutions in academic and practitioner communities, mainly focusing on addressing the issue of destination resource scarcity. However, acknowledging prior scholars' research on 'overtourism', this study adopts a novel nostalgia perspective to appeal to an understanding of 'overtourism' in the context of natural heritage. Borrowing from Mihalic (2020) and the World Tourism Organization (UNWTO) theory, the term 'overtourism', herein, refers to 'the phenomenon of exceeding destination capacity, which in turn leads to unintended impacts. Yet, those impacts were from residents and the destination standpoint. There is a lack of overtourism research from tourists' perspectives. Given this, this study focuses on tourists' motivation to make the journey, such as nostalgia (Sedikides & Wildschut, 2023). In the subsequent discussion, we will focus on the understanding of overtourism in the context of tourists' nostalgic tourism motivation, exploring it primarily from three dimensions:

1. Tourists' nostalgic emotion as tourism motivation: what is tourists' perception towards the overtourism destination?

2. Why the underestimate of the emotion factor in overtourism?

3. In this case, what is the possibility of relations between tourists and residents?

To date, nostalgia in the tourism area is often associated with tourists' motivation to visit a tourist memo-related destination. Nostalgia has long stood as an integral concept in the fields of tourism and heritage (Earl & Hall, 2023). Nostalgia was first coined in a medical condition by Swiss physician Johannes Hofer (1688/1934), referring to the psychological and physiological responses to past events when evoking memories. Bhogal et al. (2024) also demonstrated that nostalgia impact on tourists' behavioral intention when tourists have memorable tourism experiences. In the tourism field, nostalgia reflects tourists' emotional connection from the memory to reality in the destination.

The relationship between overtourism and nostalgia raises fundamental questions for practitioners and academics. There is a lack of research on pointing concepts such as 'emotions or 'affection' in nostalgic overtourism, beyond economic development. In turn, tourists' over-visits to specific destinations stem from emotions toward features/elements of the destination. These emotions may be those evoked by individuals past experiences, which in turn contribute to the formation of shared identification with the destination. Based on this shared identification, the destination holds a level of affection that surpasses its reasonable emotional

capacity—an issue that specifically manifests as overtourism. In addition, experiences of the past may stem from collective memory (such as history), the migration of historical residents that turns these places into tourist destinations, or the projection of elements involved in literary and film works into reality, etc.

In the context of nostalgic overtourism, it has emerged as an increasingly prevalent form of tourism, enabling individuals to connect with the past and immerse themselves in cultural and historical narratives (i.e., Bhogal et al., 2024). It links heritage—defined as a means of envisioning the past aligned with present-day values—to visits to locations tied to collective historical values. Heritage tourism sites generally fall into two frequently overlapping categories: natural sites and those related to human culture and history (Gordon, 2022). The emotions inherent in the history that destinations embody and record simultaneously exert an influence on tourists, strengthening their nostalgic spirit. Given this, tourists forge a shared emotional bond—namely, emotional solidarity. For instance, the Chinese people frequently visit war hero memorial sites. Or out of a fondness for specific landscapes—such as mountains, rivers, lakes, and seas—people travel to places with distinct scenic features. Thus, overtourism reflects that tourists with strong empathy toward the past and the destination engage in tourism activities, ultimately building tourism destination resilience. This provides a new psycho-emotional perspective for understanding overtourism. Thereby, it helps subsequent policymaking of tourism development and promotes a neutral understanding of overtourism, rather than perceiving it as the only negative issue.

This study adopts a qualitative thematic research method. Researchers conduct web scraping of online review content about well-known heritage scenic spots in China to collect data. The collected textual data is then subjected to inductive sentiment analysis to conclude attributions.

The conclusions drawn from this study will provide innovative thinking in overtourism. Furthermore, by incorporating emotional factors into the discourse of overtourism, this study aims to reduce the excessive negative framing of the concept. It also seeks opportunities to provide research insights for developing sustainable destinations in the context of overtourism (i.e., Fontanari & Traskevich, 2023). Finally, in future research, the exploration of overtourism can be extended to the domain of destination resilience—for instance, investigating the positive impact of overtourism on enhancing destination resilience (i.e., Cheung & Li, 2019).

Keywords: Overtourism, Nostalgia, Heritage Tourism

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Seeing Sustainability in Future: How AI-Generated Images Nudge Tourists Toward Low-Carbon Transport

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Abstract

Transportation underpins all forms of tourism mobility, yet it remains the sector's largest source of emissions as it enables movement between destinations (Gössling et al., 2020). Growing sustainability concerns have made reducing transport-related emissions a central focus in mitigating the environmental impact of tourism. Although prior research highlights improvements in infrastructure, pricing, and multimodal systems, there is a lack of knowledge about how persuasive visual communication influences tourists' transport choices. This gap matters because travel decisions are often made in unfamiliar contexts and strongly shaped by situational cues. Against this backdrop, this study examines whether image-based communication can encourage tourists to select lower-emission mobility options.

This study introduces a novel perspective by examining the role of artificial intelligence–generated images in shaping tourists' future-oriented decision-making. Specifically, we draw on episodic future thinking (EFT) and self-projection theory to understand how visual cues trigger mental simulations of future travel scenarios and influence sustainable transport behavior (Buckner & Carroll, 2007; Elder & Krishna, 2012). EFT refers to individuals' capacity to vividly pre-experience future events, while self-projection theory explains how people mentally place themselves into future contexts (Atance et al., 2001; Gifford & Comeau, 2011). These theory suggest that visual prompts can enhance the salience of long-term outcomes and self-relevant consequences, thereby motivating pro-environmental action.

To test this premise, we designed a micro-longitudinal online experiment using a between-group design with one manipulated factor: gain-oriented versus loss-oriented AI-generated imagery (Figure 1). Participants (N = 205) were exposed to AI-generated visuals that either highlighted the positive outcomes of choosing public transport (e.g., serenity, scenery, social value) or emphasized the environmental losses from continued reliance on high-emission modes (e.g., smog, congestion, ecological damage). Through a scenario-based survey, we

assessed changes in participants' willingness to use sustainable transport, mediated by perceived inspiration and perceived fear.

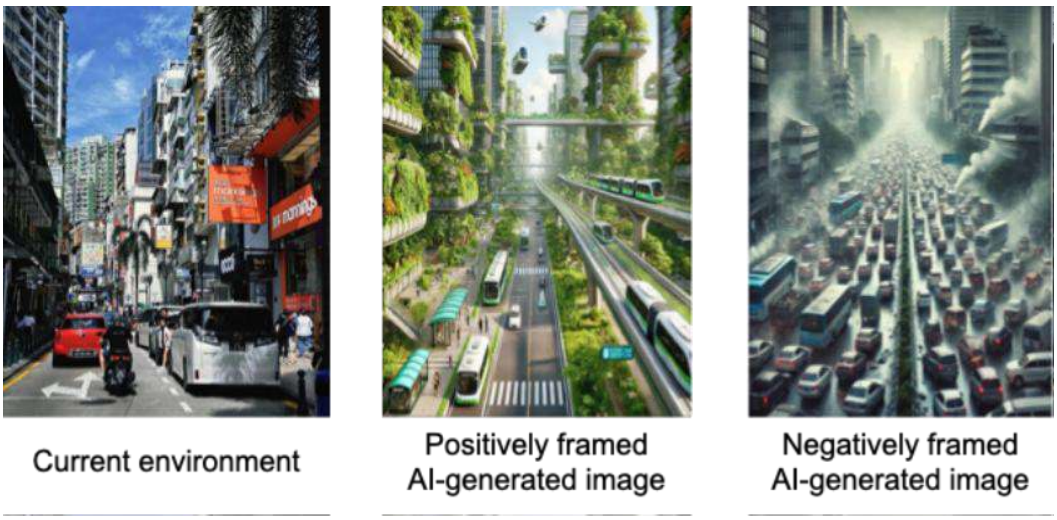

Figure 1. Experimental stimuli

The findings reveal a clear asymmetry in response: only gain-framed AI-generated imagery significantly increased tourists' willingness to adopt sustainable transport options. While loss-oriented images elevated fear, this emotional response did not lead to stronger behavioral intention. The differential outcome suggests that forward-looking, positively valanced imagery is more effective at activating episodic future thinking and promoting motivational clarity. In contrast, fear-based visuals may evoke aversion or defensiveness, limiting their persuasive power.

From a theoretical standpoint, the study contributes to the tourism literature by introducing EFT and self-projection theory as complementary mechanisms that explain how digital visuals can prime sustainable behavioral intentions (Karl et al., 2023). By illustrating how gain-framed imagery facilitates vivid, self-relevant future simulations, we provide a cognitive-affective account of how travelers translate abstract sustainability concerns into concrete transport decisions (Metze, 2020; Yu et al., 2024). The findings also suggest that affective pathways (e.g., inspiration) are more potent than defensive mechanisms (e.g., fear) when the goal is to stimulate behavior aligned with long-term values and collective outcomes.

Practically, this research offers actionable guidance for tourism destinations and marketers. It suggests that AI-generated visuals can serve as low-cost, scalable tools to influence tourist behavior, providing they are designed to evoke vivid, hopeful visions of future experiences. Instead of focusing on fear appeals, communicators should emphasize the emotional and experiential gains associated with sustainable transport, such as scenic immersion, mindfulness, and social well-being. Incorporating these themes into destination campaigns could accelerate behavioral shifts toward low-carbon mobility (Chintalapati & Pandey, 2022).

Keywords: AI-generated images; Sustainable transportation; Tourist decision-making; Episodic future thinking; Visual persuasion; Environmental sustainability

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Service Robots in Hotels: Usage Intensity and Heterogeneous Effects on Operational Performance

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Abstract

With the accelerated digital transformation of the service industry, service robots have evolved from experimental technologies into an integral component of daily operations in the hotel sector (Wang et al., 2022). In contrast to industrial robots, whose productivity effects in manufacturing have been extensively documented (Acemoglu et al., 2020; Li, 2025), the economic consequences of service robots remain underexplored empirically (Reis et al., 2020). This gap is particularly salient in the hotel industry, where service delivery heavily relies on interpersonal interaction and experiential quality, raising fundamental questions about whether and how automation can enhance operational performance (Shin & Jeong, 2020).

This study examines the impact of service robot usage on hotel operational performance using comprehensive data from China's hotel industry. Departing from the dominant focus in the literature on whether firms adopt robots, we emphasize how intensively robots are used in daily operations. Leveraging monthly panel data covering hotels across multiple provinces and operational formats, we assess the effects of robot usage frequency on key performance indicators, including occupancy rate, average daily rate, and revenue per available room, while controlling for time and regional fixed effects.

Our findings reveal a robust and positive relationship between service robot usage frequency and hotel performance. Hotels that deploy robots more frequently experience significantly higher occupancy rates, average daily rate, and revenue per available room. These results suggest that service robots generate economic value not only by improving operational efficiency through task automation and service supplementation, but also by enhancing customer experience and service consistency in high-frequency service environments. This discovery is consistent with the conclusion of the industrial sector that "robots enhance productivity" (Li & Zhou, 2024).

We further uncover substantial heterogeneity in the performance effects of service robots across hotel characteristics. First, the marginal benefits of robot usage are significantly stronger for younger hotels, indicating that automation technologies play a particularly important role in facilitating differentiation during early stages of brand development. Second, location-based heterogeneity shows that robot usage leads to simultaneous improvements in occupancy, pricing, and revenue for urban hotels, whereas for non-urban hotels, the benefits are largely confined to higher occupancy, with limited price effects. This pattern suggests that spatial market conditions constrain the translation of technological adoption into price premiums. Third, hotels operating under chain affiliation and those with larger scales are better positioned to convert robot usage into sustained revenue and pricing gains, highlighting the importance of organizational capabilities and economies of scale in realizing the returns to service automation (Bloom et al., 2017).

This study makes three primary contributions. First, by shifting the analytical focus from robot adoption to usage intensity, it provides new empirical evidence on how service automation embeds into routine service processes. Second, it documents systematic heterogeneity in the economic effects of service robots across hotel life cycles, locations, and organizational forms, enriching the literature on hospitality innovation and service operations. Third, the findings offer actionable insights for hotel managers regarding robot investment and deployment strategies tailored to their development stage and market environment.

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Short Videos in Tourism and Hospitality Research: A Systematic Review and Future Directions

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Abstract

Short videos have become essential to digital content consumption and creation, especially within tourism and hospitality. Travelers increasingly seek short video content posted by others before making travel decisions. This study adopts a systematic review approach to examine academic research on tourism- and hospitality-related short videos published between 2016 and 2025, focusing on thematic areas, methodological applications, and theoretical foundations. The 78 peer-reviewed articles analyzed fall into three primary themes: (1) tourist behavior and the use of short videos; (2) destination image formation and stakeholder perspectives; and (3) social media technology adoption. Analytical approaches have evolved from descriptive content analyses and cross-sectional surveys to more advanced quantitative, experimental, and mixed-method designs. Platforms examined include primary global and region-specific services (e.g., TikTok, YouTube Shorts, Instagram Reels), though comparative studies remain limited. Theoretical development has been dominated by behavioral models, with insufficient integration of interdisciplinary perspectives from fields such as communication, cultural studies, and media research. A conceptual framework is proposed to present a holistic overview of the progress, limitations, and future directions for short video research in tourism and hospitality.

Keywords: Short videos; Tourism and hospitality; Systematic review; Destination marketing; Digital consumer behavior

Introduction

Short videos, typically lasting from 15 seconds to a few minutes and often created on mobile devices, have emerged as one of the most prominent forms of digital media in recent years. Their appeal lies in the ability to convey messages rapidly through the combined use of motion, sound, and narrative, producing content that is both engaging and memorable (Kim, Xiang, & Fesenmaier, 2015). Technological advances and widespread smartphone adoption have transformed the processes of capturing, editing, and distributing video content, leading to exponential growth in its creation and consumption (Song et al., 2021). Social media platforms (e.g., TikTok, YouTube Shorts, Instagram Reels) have evolved from entertainment-focused spaces into significant venues for marketing and branding, attracting vast audiences and influencing purchasing behaviors across industries. The global short video market, valued at

USD 1.17 billion in 2020, is projected to grow to USD 3.35 billion by 2027 (Hengzhou Bozhi, 2021), signaling its increasing commercial relevance.

In tourism and hospitality, the popularity of short videos has intensified since 2016, reflecting their capacity to deliver immersive and persuasive messages (Liao et al., 2020). Compared with static images or written text, short videos are more effective in capturing audience attention, particularly in an environment where average attention spans have declined markedly (Kang, Shin & Huang, 2022; Gavilanes, Flatten & Brettel, 2018). The audiovisual richness of short video content facilitates efficient communication and fosters emotional connections between content creators and viewers. This capacity positions short videos as powerful promotional tools for destinations, hospitality services, and related experiences. They influence various stages of the tourist decision-making process by evoking travel memories, inspiring future trips, enhancing destination images, and reducing perceived risks (Nguyen et al., 2025; Tussyadiah & Fesenmaier, 2009). User-generated videos highlight personal experiences, authenticity, and peer influence, while destination marketing organization (DMO)-produced videos convey consistent branding and strategic messaging. Influencers, celebrities, and niche creators have increasingly adopted short video platforms to engage audiences and shape perceptions of destinations (Le & Hancer, 2021; Zhu et al., 2023). Collectively, these developments indicate that short videos function not merely as promotional media but also as co-creators of tourism experiences within a broader digital ecosystem.

Despite rising research interest, studies on short video use in tourism and hospitality remain fragmented. Some have examined psychological processes (e.g., memory enhancement, emotional engagement), while others have focused on behavioral outcomes (e.g., travel intention, destination choice). However, literature lacks integrative reviews that consolidate findings across contexts, theoretical frameworks, and methodological approaches. Previous reviews in related fields, such as health communication, have emphasized the need for broader conceptual definitions, methodological diversity, and cross-cultural perspectives (Zhu, Liu, & Zhang, 2023). In tourism, Polat et al. (2023) observed that although research contexts are becoming more diverse, theoretical development remains limited. This study addresses these gaps by systematically reviewing short video research in tourism and hospitality. It is guided by four central questions: (1) What thematic areas have been most extensively examined, and which emerging topics remain underexplored? (2) What theoretical perspectives have been applied in the existing body of research? (3) How are research contexts and methodologies (e.g., data collection strategies, analytical techniques) distributed across the literature? (4) How can future research agendas address conceptual, contextual, and methodological limitations? The objectives are threefold: (1) to map theoretical lenses, methodological approaches, and research contexts, (2) to synthesize thematic findings, and (3) to identify gaps that can inform future inquiries. By integrating and analyzing existing scholarship, this review provides researchers and practitioners with a comprehensive understanding of the strategic role of short videos, offering insights for their practical application in an increasingly competitive and digitally mediated tourism and hospitality environment.

Methodology

This study employed a systematic quantitative literature review to identify, synthesize, and analyze scholarly work on short videos within tourism and hospitality contexts. The procedure followed the recommended stages for systematic reviews in leading tourism and hospitality journals, which have proven effective in producing reliable and logically structured results (Marasco et al., 2018; Petticrew & Roberts, 2008). The review was conducted according to the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA). This

framework provided clear guidance for the literature selection process and for documenting each stage from the initial identification of studies to the final inclusion of articles in the synthesis.

The process began by defining the research objectives and establishing a comprehensive set of keywords and databases. Searches were conducted in Scopus and Web of Science, both of which are widely utilized in tourism and hospitality research (e.g., Law et al., 2018; Leung et al., 2013). Keywords included "short video," "vlog," "tourism," "hospitality," "travel," and "destination." Boolean connectors AND and OR were applied to combine terms. To broaden coverage, variations related to the research context (e.g., "destination," "travel," "vlog") were searched in the title, keyword, and abstract fields. The initial search yielded 5,195 records as of April 5, 2025.

Rayyan, an online systematic review management tool, was used to facilitate the initial screening of titles and abstracts through a semi-automated process. Duplicate entries across the two databases were removed through cross-checking. The screening stage applied specific exclusion criteria. Only full-length, peer-reviewed journal articles written in English were considered. Studies had to focus on short videos within a tourism or hospitality context at the tourist, business, or destination level. Titles and abstracts were reviewed first, and when further clarification was needed, full texts were examined. Articles that did not have a clear tourism or hospitality orientation (e.g., those centered on sports events or unrelated industries) were omitted. This process reduced the dataset to 535 articles.

During the inclusion stage, the remaining articles were examined in full to determine their eligibility for synthesis. Reference lists were cross-checked to identify any relevant papers that may have been missed in the initial search. This iterative process yielded a final set of 78 articles for review.

Two analytical approaches were applied to these articles. First, a bibliometric keyword co-occurrence analysis was conducted using VOSviewer, which is frequently applied in tourism research for mapping thematic structures over time (e.g., Kim & So, 2022). From the pool of 564 extracted keywords, 31 met the minimum threshold of three occurrences. The output revealed three thematic clusters: tourist behavior and applications of short video, destination image and stakeholder attitudes, and social media and technology acceptance. Second, thematic content analysis was undertaken to assign each article to one of these clusters. The research team read each article's title, keywords, abstract, and full text independently to confirm cluster allocation. Differences in assignment were discussed among team members to reach consensus, which addressed potential biases that might arise from linguistic background or interpretation (Blomstervik & Olsen, 2022). The thematic categorization also involved documenting methodological approaches, theoretical frameworks, and principal findings for articles within each cluster. This combined approach enabled both a quantitative mapping of the research domain and a qualitative synthesis of its intellectual foundations and thematic evolution.

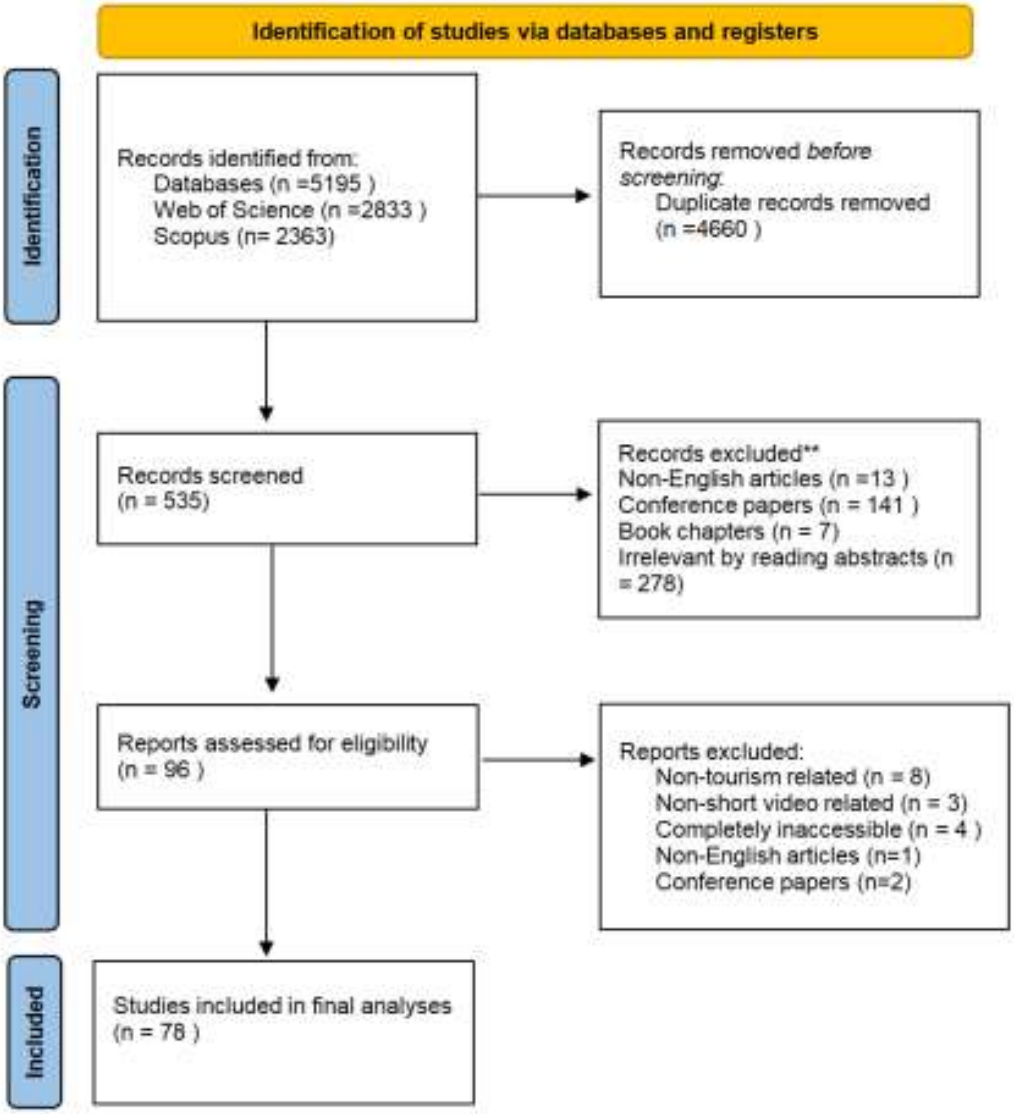

Figure 1. The PRISMA Flowchart

Findings

The bibliometric and thematic analyses revealed several notable trends in literature. The publication timeline shows that research on short videos in tourism began to emerge after 2009, coinciding with the establishment and expansion of major social media platforms (e.g., Facebook in 2004, Flickr in 2005, Instagram in 2010, TikTok in 2016). The number of publications increased steadily over the following decade, with a particularly marked rise after 2020 and a significant surge in 2022. This growth can be attributed to two primary factors. First, the rapid development of social media platforms has enhanced accessibility, usability, and content diversity, creating a vast pool of visual material for academic study. Second, advancements in mobile technologies have simplified the process of creating and sharing videos while enabling researchers to apply automated and scalable techniques for analyzing unstructured visual data.

In terms of research focus, short videos studied in the reviewed literature can be grouped into three categories according to their creators. The first category is UGC, which encompasses videos created by individual tourists that depict personal experiences and authentic perspectives. This category was the most frequently examined, appearing in 29 studies (37%).

UGC covers a broad spectrum of tourism and hospitality sectors and is often valued for its perceived credibility and relatability. The second category consists of videos produced by DMOs, which are strategically crafted to promote destinations and tourism products. Twelve articles (15%) examined this type of video, reflecting the importance of official marketing content in shaping destination image and influencing tourist decisions. The third emerging category is AI-generated short videos, which represented only one study (3%) in the dataset. Although still scarce in number, these works signal growing scholarly interest in the role of artificial intelligence tools in content creation. Notably, 35 articles (45%) did not provide explicit information about the type of short video under examination, indicating a need for more precise classification in future research.

Keyword co-occurrence analysis provided further insight into the thematic structure of the literature (Figure 2). Three major clusters were identified. The first cluster, tourist behavior and applications of short video, includes concepts such as travel intention, behavior, impact, and experience. Studies in this cluster frequently examine how short videos influence decision-making processes, enhance travel experiences, and facilitate information sharing. The second cluster, destination image and stakeholder attitude, encompasses terms including satisfaction, engagement, destination image, and quality. This body of work focuses on how short videos shape both cognitive and affective evaluations of destinations and how stakeholders perceive and respond to such content. The third cluster, social media and technology acceptance, is associated with terms such as technology, acceptance, social media, and TikTok. Research in this cluster investigates the adoption of short video platforms, user engagement patterns, and the technological and social factors driving content creation and consumption.

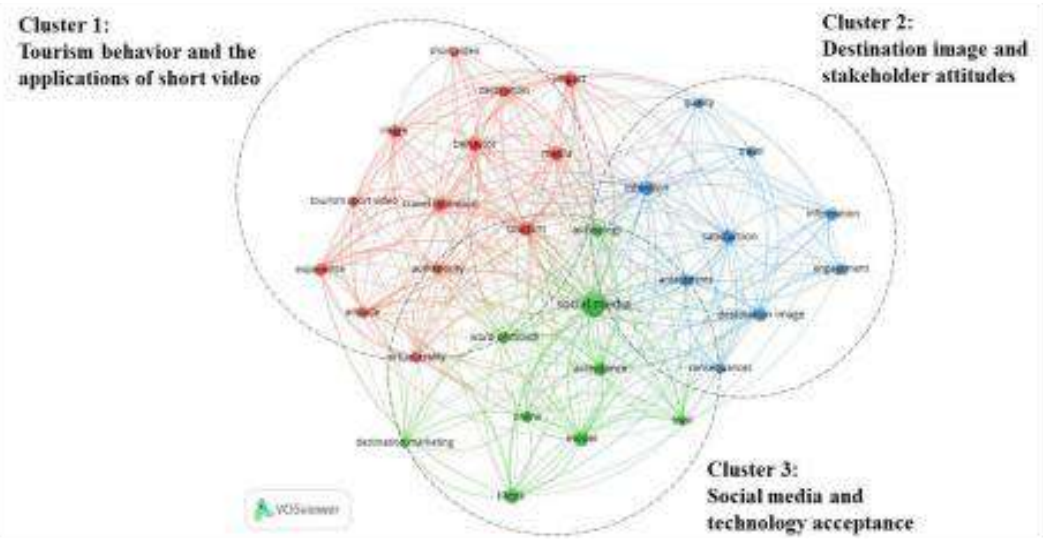

Figure 2. The Visualizations of Keyword Co-occurrence Analysis

The prominence of keywords including “social media,” “intention,” “destination image,” “satisfaction,” and “behavior” reflects core themes in the field and indicates the strong alignment between academic focus areas and current industry practices. These thematic clusters provide an organized understanding of how short video research in tourism and hospitality has evolved over time and reveal the distribution of attention across behavioral, promotional, and technological dimensions. They also highlight areas where scholarship

remains limited, particularly regarding AI-generated content, cross-platform comparisons, and longitudinal investigations of content impacts.

Discussion

According to the thematic analysis, the literature on short videos in tourism and hospitality spans three primary thematic clusters. The first cluster concerns antecedents, focusing on tourists' behavioral responses, experiential motivations, and factors influencing short video creation and sharing. The second cluster reflects descriptive and exploratory perspectives, including the portrayal and perception of destination image, the attitudes of various stakeholders toward short video content, and the adoption of emerging social media technologies. The third cluster addresses consequences, particularly the influence of short videos on decision-making, trust formation, and engagement with destinations or tourism products. Research on tourist behavior and applications accounted for the largest share in this review, followed closely by studies on destination image and stakeholder attitudes. Technology acceptance and social media adoption formed a smaller but growing portion of the literature, signaling increased attention to the role of platforms in mediating communication between creators and audiences.

Within this thematic landscape, studies on UGC dominate. This emphasis underscores the importance of authenticity, peer influence, and participatory storytelling in shaping tourism communication. UGC reflects a wider shift toward co-created marketing environments, where travelers act simultaneously as consumers and producers of destination narratives. Its organic reach, emotional resonance, and perceived trustworthiness make it a potent medium for influencing perceptions and behaviors. In contrast, research on DMO-generated videos remains limited. Professionally produced content often integrates consistent visual identities, controlled messaging, and targeted campaigns, essential for sustaining brand coherence. Further exploration of this category is needed to understand how institutional strategies interact with and potentially complement grassroots narratives.

The role of AI-generated short videos is still largely absent from the literature. Although their presence in tourism promotion is nascent, their influence is likely to accelerate as content creation tools become more accessible and sophisticated. These technologies enable rapid production, message personalization, and novel stylistic experimentation. However, they also introduce concerns about authenticity, transparency, and the risk of misinformation. Addressing these issues requires theoretically grounded research examining technological mediation's implications and developing ethical guidelines for tourism communication.

From a methodological perspective, earlier studies were often cross-sectional and descriptive, relying on single-context surveys or limited content analyses. While these approaches offered foundational insights, they could not capture longitudinal changes or establish causal relationships. Over time, more advanced methods have been introduced, including experimental designs and mixed-method approaches, which combine qualitative depth with quantitative rigor. Nevertheless, the overall proportion of such studies remains small. Cross-platform comparison is another notable gap, despite clear differences in audience demographics, content presentation, and algorithmic recommendations between platforms (e.g., TikTok, YouTube Shorts, Instagram Reels). Without platform-specific differentiation, there is a risk of overgeneralizing findings and overlooking unique dynamics that could enhance theoretical precision and practical application.

Theoretically, much existing research relies on behavioral and psychological models, including the Theory of Planned Behavior, the Stimulus–Organism–Response framework, and the Technology Acceptance Model. While these have offered valuable explanatory frameworks, they cannot fully account for the cultural, visual, and socio-technical complexity of short video communication in tourism. Engagement with theories from communication studies, cultural analysis, and visual media research remains limited. More integrative approaches could enrich conceptual understanding by connecting narrative structures, symbolic meaning, and cross-cultural interpretations of short video content.

Overall, the current body of research reflects significant progress in mapping thematic areas and identifying influential mechanisms in short video communication. However, greater theoretical diversity, methodological expansion, and responsiveness to technological change will be essential for advancing the field. Strengthening empirical investigations with clearly defined theoretical frameworks and incorporating cross-disciplinary knowledge from psychology, communication, and media studies could deepen the academic contribution of this growing research area.

Conclusion and Future Research Agenda

This review systematically synthesizes scholarly work on short videos in tourism and hospitality, integrating thematic developments, theoretical applications, and methodological trends. The analysis identified three dominant thematic areas: tourist behavior and applications of short videos, destination image and stakeholder attitudes, and social media adoption with related technological factors. These themes highlight the dual role of short videos as both tools of personal expression and strategic instruments in tourism marketing.

Meanwhile, literature remains anchored in a narrow range of theoretical models, methods, and comparative platform studies. These limitations form the basis for a forward-looking research agenda to advance conceptual and methodological development in the field. Future work should widen its theoretical lens by integrating interdisciplinary frameworks that explain narrative influence, symbolic meaning, and cross-cultural variation. Methodological diversification is equally important, encouraging longitudinal designs, experimental approaches, and cross-platform comparisons to capture both causal mechanisms and contextual nuances. Table 1 presents a structured blueprint that organizes these research opportunities by methodological and theoretical dimensions. By pursuing these directions, future scholarships can deepen understanding of how short videos operate within tourism ecosystems and generate actionable insights for practitioners seeking to optimize content strategies, strengthen audience engagement, and maintain authenticity in an increasingly dynamic digital environment.

Table1. A Blueprint for Short Video Studies in Tourism and Hospitality

Research Direction	Key Issues to Address	Recommended Research Ideas
1. Expanding Geographic Scope	Current research is concentrated in a small number of regions, particularly East Asia, limiting the generalizability of findings across different cultural,	• Conduct cross-cultural comparative studies in varied socio-cultural, linguistic, and economic contexts. • Apply mixed method designs to capture region-specific

Research Direction	Key Issues to Address	Recommended Research Ideas
	linguistic, and regulatory settings.	applications and contextual influences.
2. Comparative Platform Analysis	Existing scholarship disproportionately focuses on TikTok, with insufficient attention to other platforms. These limits understanding of platform-specific content formats, audience demographics, and algorithmic effects.	• Undertake comparative studies across major and regional platforms. • Conduct content analyses and ethnographic observations to examine engagement patterns. • Investigate algorithmic influences on content exposure, audience interaction, and trust formation.
3. Algorithmically Generated Short Videos	Limited research examines content created through automated generation tools, with unresolved concerns regarding authenticity, originality, transparency, and ethical implications in tourism communication.	• Implement experimental studies comparing audience responses to algorithmically generated and human-produced videos. • Conduct large-scale surveys assessing perceptions of trust, credibility, and authenticity. • Carry out qualitative interviews with content creators and marketers to explore strategic uses and ethical considerations.
4. Methodological Diversification	A heavy reliance on cross-sectional surveys and descriptive designs constrains causal inference and the ability to assess longitudinal changes in audience attitudes and behaviors.	• Employ longitudinal panel designs and randomized controlled experiments to establish cause–effect relationships. • Integrate neuroscientific and psychophysiological measures (e.g., eye-tracking, EEG, facial coding) to capture non-conscious emotional and cognitive responses.

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Silent Signals in the Asian Paradigm: Investigating Employer Brand Communication in the Hotel Industry

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Introduction

As the Asia-Pacific region undergoes a robust tourism resurgence (PATA, 2025), it leads global hotel development while paradoxically facing a severe talent crisis (WTTC, 2025). This study focuses on five key cities: Hong Kong, Singapore, Bangkok, Kuala Lumpur, and Ho Chi Minh City, selected for their active market growth and expanding hotel development pipelines. Employer Branding, centred on the Employer Value Proposition (EVP), has emerged as a strategic imperative for organizational differentiation and talent attraction (Gehrels, 2019; Hughes & Rog, 2008). Despite hotel managers' assertions of possessing employer value proposition (EVP), these internal voices often become distorted when translated into external digital signals. This study aims to examine signals communication by comparing managers' intended EVP with the projected EVP conveyed through official hotel digital channels. The findings aim to provide an understanding of the EVP communication within the competitive Asian Paradigm of hospitality employment.

Literature Review

Building on the Signalling Theory (Spence, 1973), this study explained EVPs as signals that communicate organizational attributes and benefits, helping job seekers evaluate and infer (Vinayak et al., 2017). Within the hospitality industry, employer branding has been widely adopted as a response to persistent labour shortages, with EVP serving as the core promise underpinning employer brand communication (Binu Raj, 2021). Prior studies have predominantly examined the content and dimensions of EVP (e.g. Berthon et al., 2005; Kilson et al., 2023) or adopted a single lens, either the employer or the job seeker (e.g. Kilson et al., 2023; Lo et al., 2025).

However, existing research has paid limited attention to how internally articulated EVP intentions held by management are translated into externally projected digital signals. This process is particularly important in contemporary recruitment contexts, where official websites and online job platforms function as primary signalling interfaces between employers and potential applicants. Addressing this overlooked process, the present study examines EVP communication across five Asia-Pacific cities by comparing managers' intended EVP with EVP conveyed through official digital recruitment channels.

Methodology

A qualitative, comparative design was adopted to explore how employer value propositions (EVPs) are articulated and communicated across digital channels in five Asia-Pacific cities. The study population comprised hotel managers involved in recruitment or employer branding–related functions. The primary interview data collection across all five cities has been completed (N=47). For the digital communication component, content analysis is currently underway, with initial analysis completed for eight representative hotel websites in Hong

Kong. The comprehensive findings covering all five cities are expected to be finalized by March 2026 and will be presented at the conference. All data were analysed using thematic analysis to identify, analyse, and report patterns across the qualitative datasets.

Preliminary Findings

From the managerial perspective across five cities, 8 dominant EVP dimensions emerged: *Economic Value, Development Value, Emotional Value, Social Value, Reputation Value, Flexibility Value, Management Value, and Empowerment Value*. For Hotel Website (HK), the dimensions identified were *Economic Value, Development Value, Emotional Value, Social Diversity, Task Value, and Flexibility Value*.

A comparison reveals a significant silent signal in digital recruitment communication. While managers possess clear narratives regarding Management Value and Empowerment Value, these are absent on corporate websites. Instead, digital platforms prioritize Social Diversity and standardized corporate narratives. This suggests that hotel websites function as interpretive spaces where managerial intent is reframed, leading to a communication misalignment between what the organization offers and what is publicly projected.

Furthermore, specific details concerning Economic Value and internal policies are consistently omitted. Two strategic motivations emerged for this lack of explicitness. First, managers expressed concerns regarding competitive intelligence, opting for generic descriptions to prevent rivals from benchmarking or replicating their specific benefit structures. This defensive stance directly contributes to the homogenization of digital signals across the industry. Second, employers intentionally maintain strategic ambiguity to preserve negotiation space during the interpersonal recruitment stage. By withholding specific details online, managers retain the flexibility to tailor value propositions to high-potential candidates during interviews. Consequently, the digital channel functions as a symbolic gatekeeper rather than an explicit information source, reinforcing the gap between internal intent and external projection.

Conclusion

This study contributes to the hospitality employer branding literature by highlighting the overlooked process through which employer value propositions (EVPs) are translated from internal managerial intentions into external digital communication in the Asian context. While existing research largely focuses on EVP content, this study shows that hotels tend to communicate implicitly rather than explicitly through official digital channels. These findings suggest that EVP communication functions as a selective and interpretive signalling process rather than a direct transmission of managerial intent. Recognizing and addressing this communicative gap is essential for enhancing the effectiveness of digital employer branding in increasingly competitive Asia-Pacific labour markets.

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Smart Tourism Readiness in Protected Areas: A Tri-Pillar Assessment of Capacity Alignment

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Abstract

Background and Problem Statement

Smart tourism–the use of ICTs, IoT applications, and data analytics in destination management–can support visitor management and evidence-informed planning (Buhalis & Amaranggana, 2015). In protected areas, however, implementation is shaped by connectivity constraints, conservation mandates, and fragmented governance, which complicate technology-led interventions and may intensify pressure on sensitive sites (Mangold et al., 2024). Systematic reviews indicate that smart tourism research has concentrated on urban or technologically mature destinations, while evidence from nature-based contexts remains limited (Rodrigues et al., 2023; Wu et al., 2024). Infrastructure availability, stakeholder uptake, and institutional arrangements are often examined as loosely connected conditions rather than interdependent capacities.

This creates a gap for protected areas: partial digital capacity–such as mobile connectivity in core zones–may coexist with limited coordination and uneven stakeholder readiness, reducing the feasibility of deploying digital tools without spatially displacing visitor pressure. This gap is salient in Central Asia, where policy ambitions for data-driven planning outpace local implementation capacity (Dauletkhanova et al., 2025).

The Imantau–Shalkar resort area within Kokshetau National Park (Kazakhstan) provides a case where high natural attractiveness and increasing demand intersect with uneven digital and institutional conditions. The study examines whether readiness for smart tourism in protected areas is best understood as capacity alignment rather than presence of individual components.

Research Questions (RQs)

Smart tourism readiness is conceptualised as multi-dimensional capability requiring alignment across spatial, social, and institutional domains. The study addresses:

RQ1: How do accessibility, land use, and connectivity patterns condition the feasibility of smart tourism services?

RQ2: How do visitors, residents, and tourism enterprises differ in digital access, technology use, and perceived benefits and risks?

RQ3: To what extent do governance arrangements enable coordinated implementation, and what gaps hinder transition from policy intent to practice?

Conceptual Framework

Readiness is operationalised through a tri-pillar framework: (1) spatial–digital capacity (connectivity, accessibility, service feasibility); (2) stakeholder adoption capacity (access, literacy, perceived usefulness, concerns); and (3) institutional orchestration capacity (coordination mechanisms, standards, implementation pathways). Readiness is substantive when these capacities are sufficiently aligned to allow digital services to extend beyond core zones without generating unmanaged displacement of visitor pressure.

Methodology

A mixed-methods design integrated spatial analysis, stakeholder survey, and institutional document analysis. Spatial analysis combined Copernicus satellite imagery with national geospatial datasets (QazGeo) to map tourism assets, transport networks, and digital infrastructure (Šoltésová et al., 2025). Field verification assessed connectivity-dependent service feasibility at 47 georeferenced points across core and peripheral areas.

The stakeholder survey administered a structured questionnaire to residents (n=32), tourism enterprises (n=24), and visitors (n=27), totalling 83 respondents. Purposive sampling ensured representation across stakeholder categories. The instrument was adapted from the Technology Readiness Index (Parasuraman & Colby, 2015) and pilot-tested; it measured digital access, use patterns, perceived benefits, and barriers. Data were collected between June and August 2025.

Institutional analysis reviewed policy documents, including the Concept for the Development of the Tourism Industry of the Republic of Kazakhstan for 2023–2029, examining implementation instruments and coordination arrangements. Ethical approval was obtained from the host institution; participation was voluntary and anonymised.

Results

Findings indicate moderate but structurally uneven readiness, characterised by a centre–periphery pattern and implementation gap between national ambitions and local coordination.

Spatial readiness. Core areas around Lakes Imantau and Shalkar exhibit adequate infrastructure and reliable mobile connectivity for entry-level services. Peripheral trails and smaller settlements show constrained feasibility; 38% of verification points lacked stable mobile signal. Visitor pressure concentrates along accessible lakeshore corridors, while proximate attractions remain underutilised, suggesting information asymmetries contribute to uneven spatial use.

Social readiness. Stakeholders expressed cautious support for practical digital services linked to safety, navigation, and visitor information. Visitors and tourism enterprises demonstrated higher adoption willingness (71% reporting interest), whereas residents reported lower readiness, associated with limited digital skills and concerns that digitalisation may compromise tranquillity. Financial constraints further limit adoption capacity among small providers.

Institutional readiness. Despite priority designation in national strategy, implementation remains fragmented. Gaps include weak coordination between park management and local authorities, limited standardisation of digital content, and unclear pathways linking national initiatives to protected-area operations. Digital initiatives operate as pilots rather than integrated destination management instruments.

Contribution

The study advances a capacity-alignment perspective on smart tourism readiness in protected areas. It demonstrates that readiness cannot be inferred from hotspot connectivity or stakeholder interest alone but depends on alignment of spatial feasibility, stakeholder adoption, and institutional orchestration. By applying this framework to a Central Asian protected area, the study extends empirical evidence beyond commonly examined urban contexts and contributes to debates on sustainable digital transformation in conservation-sensitive destinations. The framework offers a transferable template for protected areas in resource-constrained regions pursuing smart tourism development consistent with sustainability objectives.

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Smart Tourism Technologies Makes Senior Feeling Better Perspective of Perceptual Tourism Equity

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INTRODUCTION

With the advent of cutting-edge technologies, destinations are inevitably adopting smart tourism technologies (STT)(Weaver & Moyle, 2019), which will become the key infrastructure for obtaining relevant information and providing personalized/interactive services to achieve better tourism experiences (Azis, Amin, Chan & Aprilia, 2020). Huang et al. (2017) suggested that smart tourism technologies must encompass all forms of online tourism applications and information sources, such as online travel agencies, personal blogs, public websites, social media, and smartphones. In other studies, scholars have also included smart tourism systems like smart cards, cloud computing, and radio frequency identification (RFID) (Gretzel et al., 2015; Huang et al., 2017; Jeong & Shin, 2019).

The focus of this study is on the elderly population, defined as those aged 60 and above, which constitutes *"a new and profitable market opportunity for the tourism industry due to the unstoppable aging of the world's population"* (Losada Sánchez N, 2018). According to data from the Ministry of Culture and Tourism of China, domestic tourist visits reached 6 billion in 2019, of which senior tourists accounted for 20%. In 2021, the population aged 60 and above in China had exceeded 267.36 million. This group is expected to spend hundreds of billions of yuan on tourism, with a growth rate as high as 23% (Everbright Securities, 2020). The "silver economy" is increasingly becoming a focal point in the development of the tourism industry. Due to their specific physiological and psychological characteristics, the elderly have long been considered to be at an information disadvantage in the development of smart tourism and are regarded as digital immigrants. In fact, studies have shown that STT is significantly integrated into the tourism process of senior tourists, mainly during the pre-trip and on-trip stages. For

example, they compare information, make reservations, and purchase accommodation and transportation on the Internet (official websites, travel platforms, etc.) (Irene et al., 2019).

STT has been proven to positively influence memorable tourism experiences and tourists' well-being by providing specific tools, products, and services (Femenia Serra &Ivars Baidal, 2018; Simeon et al., 2017; Jeong & Shin, 2019; Lee et al., 2018; Azis Amin et al., 2020; Elshaer & Marzouk, 2022). Furthermore, Xia Wenting (2020) demonstrated through empirical analysis that the use of Internet technology tools significantly enhances tourism equity and perceived value for senior tourists.

“Reducing social exclusion and promoting social equity” is one of the missions of tourism development (International Office of Social Tourism, 2017), which emphasizes the equity of tourism development for special groups (Zhang Ji, 2017). Focusing on tourism research, although scholars have begun to pay attention to the perceived equity of different subjects and have divided the tourism process into interactional, procedural, outcome, and distributive equity, and proposed cognitive dimensions such as attitudes, perceived behavioral control, and self-identity for tourist behavior (Tae-sook Lee et al., 2018; Yu Soi & Nomina, 2011), studies specifically highlighting senior tourists as the research subject and exploring the dimensions of tourism equity perception with the characteristics of this group are still rare and have not yet reached a consensus.

Based on this, the study selects senior tourists with experience in using STT for in-depth semi-structured interviews to analyze the dimensions of perceived tourism equity for this group. Innovatively, this study breaks away from a single research perspective and combines the comprehensive perspective of “subjective self-perceived equity” and “objective self-perceived equity” for an in-depth analysis. The objective self (ME) refers to the individual's objective reconstruction of their self-efficacy (ability) to complete tourism decisions and tasks through interactions with STT during the trip, such as ticket reservations and tourism information inquiries. The subjective self (I) refers to the genuine subjective emotional responses that individuals experience while using STT during their travels.

Memorable tourism experiences (MTE) are selectively created by individual tourists based on how they evaluate their travel experiences (Kim et al., 2012; Tsai, 2016; Tung & Ritchie, 2011). Not all tourism experiences automatically transform into memorable ones, as travel experiences are subject to uncontrollable influences from various aspects (Farber and Hall, 2007; Knobloch et al., 2017) and are also subjectively interpreted by tourists in terms of the travel process and destination (Zhang et al., 2018). The importance of MTE for tourists' future decision-making has been repeatedly emphasized (Kim & Chen, 2019; Seyfi et al., 2019). Therefore, transforming staged experiential products into personal experiences remains a challenging task for the tourism industry. This study categorizes the dimensions of MTE into “hedonism”, “meaningful” and “local culture” (J.H.Kime & McCormick, 2012). Based on the research context and the usage of STT, a questionnaire survey method is employed to further elucidate how the perceived tourism equity of the senior tourist influences the formation of MTE.

Literature highlighting the digital use of senior tourists often limits itself to discussing the barriers and high usage thresholds that this disadvantaged group faces with STT, which are seen as “inequitable” phenomenon that hinder the formation of positive tourism experiences. However, what aspects of tourism equity do the elderly perceive in the context of STT APPs? Do these perceptions of tourism equity affect their tourism experiences? These important questions remain unanswered. This study aims to explore in-depth how STT interactions in the

tourism context influence the composition of perceived tourism equity among senior tourists and their impact on MTE by combining the comprehensive analytical perspectives of the “subjective self” (I)and the “objective self” (ME). A mixed-methods approach, combining qualitative and quantitative research, is employed to construct and validate this relational model, thereby enhancing public understanding of this group and providing a theoretical foundation for the development of accessible tourism.

METHOD

This study first employs grounded theory to construct the dimensions of senior tourists' tourism equity perception. Subsequently, it builds and validates a relationship model between senior tourists' tourism equity perception and memorable tourism experiences (MTE) by combining interview content and relevant literature.

FINDINGS AND DISCUSSION

The findings indicate that: (1) In the context of using smart tourism technologies (STT), the dimensions of senior tourists' tourism equity perception include perceived equity of the technological environment, perceived equity of technological interaction, perceived equity of technological functions, and perceived equity of technological security; (2) The quantitative research results show that perceived equity of technological interaction, functions, and security have a significant positive impact on senior tourists' MTE, while perceived equity of the technological environment does not have a significant impact. Compared with existing studies, this paper reveals one of the pathways through which STT promotes the formation of tourism equity perception. It is of great significance for understanding the impact of STT use on shaping positive tourism experiences for senior tourists.

Theoretical Significance

First, it extends the application of perceived fairness theory in the context of smart tourism. The integration of smart technology and the tourism industry is becoming increasingly close, and the dimensions of perceived equity among different stakeholders need new interpretations within the specific context of smart tourism. Through empirical research, this study explores the structure of tourists' perceived equity in the context of smart tourism, expanding the research context of perceived equity and contributing to the relevant literature.

Second, this study investigates the dimensions of perceived tourism fairness among elderly tourists in the context of smart tourism. Despite the growing size of the elderly tourist group, which is becoming an important part of the tourism market, few previous studies have focused on the fairness perception of elderly tourists during the travel process, especially in the digital age of contemporary tourism development. Based on this, this study employs qualitative research methods based on grounded theory to explore and categorize the structural dimensions of perceived tourism fairness among elderly tourists in the context of smart tourism. This includes a dual perspective of “subjective self (I)-perceived equity” and “objective self(ME)-perceived equity”. subjective self (I)-perceived equity comprises perceived equity of the technological environment and perceived equity of the technological interaction, while objective self (ME)-perceived equity includes perceived equity of the technological functions and perceived equity of the technological security.

Practical Significance

This study scientifically reveals the structural dimensions of perceived tourism fairness among elderly tourists in the context of smart tourism. It helps tourism-related enterprises understand the specific travel needs of the elderly tourist group and provides a scientific basis for the development of the relevant tourism market. Under the influence of modern information technology, the tourism industry is gradually evolving from a traditional to a smart model, with concepts such as smart scenic spots and smart hotels emerging. Elderly tourists, who are in a relatively disadvantaged position in terms of information, deserve attention. As an important part of the tourism hospitality industry, the overall development status of the elderly tourist group can also reflect the essence of social harmony. This study can provide references for governments and societies to improve the development status of the elderly tourist group.

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Some Results of Organizing Work-Based Training in The Tourism Program

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Abstract

For students, work-based learning is a training aimed at deepening theoretical knowledge and skills acquired through classroom instruction by connecting them with practical activities. It aims to develop the ability to observe, search, and process information, and to obtain specific information and professional orientation relevant to the goals and challenges within their field. This learning activity is designed to acquire and master the skills necessary for employment, as well as the skills required in workplaces. (MONGWBL, 2023)

Tourism students studying at domestic universities, who participate in research, attend an average of 122.8 credit hours of classes over a period of 4 years, with the share of practice accounting for 5.94% of the total credits. On the other hand, a student majoring in 'Nature Tourism' collects 9.91% of the total (124 cr) credit hours through practical training, which is an advantage compared to similar programs at other universities. 54% of the organizations offering industrial internships are placement service organizations, particularly tourist camps, and the majority of complaints from students who have worked in such camps. Therefore, when working with tourist camps within the framework of work-based learning, it is advisable to ensure that the contract specifies the exact matching of student working hours and to adhere to labor laws, specifically allowing for one day off per week. In addition, trainees' understanding of each other's expectations and focusing on meeting them is the main factor in increasing the effectiveness of the work-based learning. Therefore, internship institutions need to focus on providing students with professional orientation and the ability to connect academic knowledge with practice, rather than simply viewing them as a workforce.

The satisfaction of students and graduates who have participated in work-based learning is very good at 87.3 percent. Also, 84 percent of graduates are working in their professions after graduating from university, and businesses and organizations attach great importance to this project. Therefore, some of the supported organizations continue to employ students who have participated in work-based training as full-time employees after graduating from university.

Status Inflation, Entitled Elites, and the Algorithm Paradox: Can AI Rescue Hotel Frontline Employees from Role Stress?

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1. Introduction

China has evolved into one of the most hyper-competitive hospitality markets globally. To capture market share, international hotel chains (e.g., Marriott, Hilton, Accor) have aggressively expanded their loyalty programs through strategies such as 'status matching' and 'fast-track challenges.' While effective in customer acquisition(Gubíniová et al., 2023), this strategy has precipitated a rapid phenomenon of "Elite Status Inflation" (Jiang & Wen, 2020). Consequently, the surge in elite members has led to heightened expectations for room upgrades and personalized privileges, often accompanied by a strong sense of "Customer Entitlement" and sensitivity to distributive fairness.

In the context of the 'High Service Orientation' prevalent in the Chinese hospitality industry (Tang & Tsaur, 2016), frontline employees face significant structural pressure. The mismatch between limited resources (e.g., suite inventory) and inflated demands forces employees to engage in intensive emotional labor and pressure, serving as a primary antecedent of burnout. To mitigate this bottleneck, hotel headquarters are increasingly deploying AI-driven Room Assignment Systems, intending for AI to utilize objective data to enhance efficiency and serve as an objective shield for employees and effectively keep the fairness.

However, the effectiveness of this intervention remains contested. The core conflict lies in the fundamental opposition between the AI's Algorithmic Logic (pursuing standardized, rule-based fairness) and the members' Privilege Logic (expecting exception-based preferential treatment). This conflict places frontline staff in an impossible dilemma: they are deprived of the ability to flexibly adjust membership benefits by the system yet still have to bear the responsibility of appeasing angry customers. Therefore, this study aims to explore whether, in the context of elite membership inflation, AI-based room allocation systems are a protective factor that reduces employee stress or become a new source of hindering stress.

2. Theoretical Framework

This study draws on the Job Demands–Resources (JD-R) Model and Technostress Theory. In this context, job demands refer to the psychological pressure created by managing elite members. Prior work shows that higher status often increases entitlement, leading to stronger reactions and negotiation when expectations are unmet. These situations raise emotional labor demands and add pressure to staff from the front desk, guest relationship, and executive lounge departments.

AI creates further trends. Although technology is often viewed as a resource, recent studies show that it can also generate stress (Tu et al., 2023). When customers reject AI arrangements and insist on human judgment to secure their own profits, the fixed rules of AI systems may

put hotel employees in a double bind (Leung &Loo, 2020). Staff must follow system logic yet still handle customer dissatisfaction, making AI both a potential support and a possible source of hindering stress.

3. Method

This study uses a quantitative, cross-sectional survey targeting frontline employees from the front desk, guest relations, and executive lounge departments in international five-star hotels across Tier-1 Chinese cities. The survey includes measures designed to distinguish stress caused by elite-member entitlement from stress associated with general work demands. The model examines how customer entitlement influences service quality through role stress and emotional exhaustion, and tests whether the perceived role of AI—helpful or rigid—moderates these effects.

To improve internal validity, general workload and customer incivility are included as control variables. Structural Equation Modeling (SEM) will be conducted to test the direct, mediating, and moderated mediation relationships and to determine whether AI reduces or intensifies employee stress.

4. Expected Findings

The study is expected to reveal a clear pattern in how elite-member dynamics shape employee outcomes. Higher concentrations of elite members are likely to predict stronger customer entitlement, which in turn is expected to be a significant statistical driver of role stress and emotional exhaustion among frontline staff (H1). This stress is likely to reduce service quality and raise the risk of service sabotage (H2). AI may play a dual role: when viewed as helpful, it can weaken the link between entitlement and stress (H3a). However, when customers reject AI decisions, the system's rigidity may intensify employee stress, as staff must handle conflicts without the ability to adjust algorithmic outcomes (H3b).

5. Conclusion and Implications

This study underscores that elite status inflation not only reshapes customer expectations but also places substantial psychological pressure on frontline employees, which is a perspective often overlooked in loyalty program and AI research. By distinguishing entitlement-driven stress from general work demands, the study fills an important empirical gap and explains how these pressures may degrade service quality. The findings are expected to show that AI serves as a conditional resource: it can buffer stress when viewed as fair but may intensify it when customers reject algorithmic decisions, and employees lack discretion. These insights advance an employee-centered understanding of AI and loyalty programs and suggest that hotels should clarify upgrade rules, enhance AI transparency, and provide stronger front-line support.

Keywords: Loyalty Programs; Customer Entitlement; China; Algorithm Aversion; Frontline Employee Stress; AI-driven Room Assignment

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Study on the Spatial Pattern and Influencing Factors of Industrial Tourism in Northeast China

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Abstract

This study focuses on the spatial distribution pattern and influencing factors of industrial tourism in Northeast China. As an old industrial base in China, Northeast China possesses rich industrial heritage resources. The research employs methods such as literature review, nearest neighbor index, kernel density estimation, and spatial autocorrelation analysis to analyze 83 national and provincial-level industrial tourism demonstration bases.

The results indicate:

First, in terms of spatial distribution characteristics, industrial tourism bases in Northeast China are generally unevenly distributed, primarily concentrated in the central and southern regions, showing a clustering trend along a "northeast-southwest" axis, with hotspot areas formed in the southeast. However, the overall distribution exhibits a discrete pattern.

Secondly, in terms of development models and structures, current development is primarily based on museum and creative industrial park models. The number of national industrial tourism demonstration bases is relatively small, and the industrial categories are mainly concentrated in manufacturing.

Third, in terms of influencing factors, the spatial pattern is mainly influenced by factors such as tourism market size, tourism industry development level, social public service level, and resource linkage.

At last, the author suggests that by optimizing the allocation of tourism resources and increasing employment opportunities, industrial tourism can promote economic prosperity in Northeast China. The research findings can provide a scientific basis for gaining an in-depth understanding of the current situation of industrial tourism in Northeast China, optimizing the overall layout, and formulating development strategies, thereby contributing to the revitalization of Northeast China.

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Sustainable and Regenerative Tourism Research in Malaysia: A Scientific Perspective Through Bibliometric Analysis

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Abstract

Sustainable and regenerative tourism have become increasingly important in Malaysia's destination development strategies as the country focuses on environmental protection and community wellbeing. However, the overall structure, development, and main themes of research in this area have not been fully examined. This study carries out a bibliometric analysis of Scopus-indexed publications from 2000 to 2024 using VOS viewer for science mapping and keyword co-occurrence visualization. The purpose is to identify key research trends, major thematic areas, scholarly linkages, and emerging topics in Malaysia's sustainability-related tourism research. The mapping results identify four main research clusters such as ecotourism, biodiversity conservation, and natural resource protection, community-based tourism and local empowerment, sustainable destination planning, governance, and visitor management, and emerging regenerative tourism and circular economy approaches. The findings show a clear shift from ecotourism-focused studies in the early 2000s toward broader sustainability frameworks after 2015, followed by the early rise of regenerative tourism topics after 2020. Overall, the study highlights a research landscape moving toward resilience, community wellbeing, and post-growth tourism models. The results point to the need for stronger interdisciplinary collaboration and closer links between research and policy to support the country's transition toward sustainable and regenerative tourism development.

Keywords: sustainable tourism; regenerative tourism; review; bibliometric analysis; tourism development

Sustainable Management of the Chinese Folk-Religion Temple Culture in Macao

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Abstract

Due to the importance of temple culture preservation in enriching visitor experience and destination image, this study aims to explore challenges in the inheritance of the Chinese folk-religion temple culture and discuss solutions for its sustainable management. Macao, with a large number of folk-religion temples built in the Ming and Qing periods, has been chosen as the context to understand the research gap. The findings revealed that there are two major reasons holding back the sustainable management of temple development in Macao: (1) unsustainable temple-keeper service practices from temple management; and (2) the local government's insufficient support for temple culture preservation. Under the guidelines of the twin concepts of sustainability and resilience for heritage site development and management, specific solutions are discussed.

Keywords: sustainability, resilience, Chinese folk-religion temple, temple culture preservation, sustainable cultural tourism, Macao

Introduction

There are two major types of temples serving Chinese communities in places like Mainland China, Malaysia, Singapore, Vietnam, Taiwan Region, Hong Kong SAR, and Macao SAR (Goossaert & Fang, 2009; Yan et al., 2020). The first type is the monastic temple operated by formal religious groups, such as resident clergy (Chew, 2014; Lai, 2017; Wong et al., 2013). Due to their resident clergy role, tourists/visitors have a certain level of distance from them (Foard, 1982). This has prevented further communication in the information brokering process during temple visits (DeVito, 1998; Hargie et al., 1994). The second type is the Chinese folk-religion temple, normally managed by a temple committee, with daily affairs handled by temple-keepers who do not usually live on site and might not necessarily believe in the religion. Some major services performed by a temple-keeper normally include daily cleaning, patrolling the temple area, incense services, assisting in religious worship rituals, etc. (Cohen & Jaw, 1977; Ly & Tan, 2023). Despite their personal religious beliefs and working status (e.g., full-time or part-time), temple-keepers tend to be the only persons that tourists/visitors would have direct contact with during temple visits. Therefore, Ly and Tan (2023) argue that the temple-keeper community plays an important role in influencing visitor experience and sustaining temple culture.

Among these two types of temples in Chinese societies, the folk-religion temple often provides a more off-the-beaten-track place for tourists/visitors who want to dive deeper into local culture. They are attractive to tourists/visitors who search for more authentic, back-of-house cultural experiences (McKercher, 2020; Richards, 2018). Unfortunately, scholars (e.g., Lupu et al., 2019; Ly & Tan, 2023; Tirca et al., 2010) argue that there are reasons leading to cracks in the inheritance of temple culture, but knowledge about factors affecting it is particularly limited. In order to enrich visitor experience in religious tourism and preserve temple culture, there is a need to conduct research to explore the reasons leading to such cracks in the inheritance of Chinese folk-religion temple culture.

To sustainable cultural tourism in the post-COVID-19 period, Smith and Ripp (2020) suggest a guideline which focuses on twin concepts of sustainability and resilience for heritage site development and management. These two concepts could feature prominently in post-COVID-19 recovery thinking on international, national, and regional levels. They often offer the ability to pull an industry from crisis and encourage the sustainable use of resources. In fact, the concepts of sustainability and resilience are two sides of the same coin. Spacey (2016) argues that sustainability reduces environmental impact, preserves traditions, and improves a community's quality of life, while resilience focuses on designing things to withstand physical, social, and economic shocks and pressures. Taking the twin concepts further, Ripp and Rodwell (2016) believe that they could bring a sustainable practice to cultural tourism development. This paper, therefore, applies the concepts of sustainability and resilience as a guideline to study reasons for and ease cracks in the inheritance of temple culture in the Chinese folk-religion temples.

Macao was chosen to be the case context to study the research gap for the following reasons. At first, the city has more than 50 temples built during the Ming, Qing, and Republic of China periods (Lee, 2019) while only the Ming and Qing ones have reached the centennial heritage level (Cultural Heritage of Macao, 2025), and belong to the type of Chinese folk-religion temples, which serve as good research objects for this paper. Secondly, the researchers have found that there are different temple-keeper management statuses when conducting a temple preservation research project in Macao, which might lead to sustainable management and service delivery issues in temple culture. Under this circumstance, the qualitative research done by interviewing related stakeholders from the temple management's point of view (i.e., temple association managers/directors and temple keepers) aimed to (1) explore potential reasons leading to such cracks in the inheritance of the Chinese folk-religion temple culture; and (2) suggest methods to ease sustainable management in the Chinese folk-religion temple culture for the local government, under the guidance of the twin concepts of sustainability and resilience.

Literature Review

Sustainability and resilience in cultural tourism

According to the United Nations World Tourism Organization (UN Tourism, 2018), cultural tourism is a type of tourism activity in which the tourist/visitor's vital motivation is to learn, discover, experience, and consume the tangible and/or intangible cultural attractions in a tourism destination, including landscapes, buildings, collections, the arts, identity, traditions, and language. The European Commission (2023) has considered that the key objective of sustainable cultural tourism is to safeguard proper preservation practices along with authentic interpretation that supports the local economy. To do so, sustainable cultural tourism should

place cultural heritage and local communities at the centre of decision-making processes. Therefore, it is important to include the perspective of local communities when it comes to a discussion of sustainable cultural tourism for local heritage sites.

Smith and Ripp (2020) suggest a new way to reach sustainable cultural tourism which involves the concepts of sustainability and resilience in a dynamic process. These two concepts are like brother and sister, but still different in character. On the one hand, *sustainability* is to create and maintain the conditions under which humans and nature can exist in productive harmony, thereby enabling the fulfilment of the environmental, social, and economic requirements to support present and future generations (EPA, 2022). It focuses on management and development plans, and management mechanisms. On the other hand, *resilience* is the ability of a system to respond to situational changes and negative factors without changing its essential state (Ripp & Lukat, 2017). The implementation of resilience emphasises new governance models, changes in attitude and values, empowering communities, prioritisation of cross-cutting topics, initiatives, and developments (Ripp & Rodwell, 2016). Scholars argue that people have put too much consideration on sustainability when thinking about cultural heritage and tourism. However, resilience is at the core of the United Nations' work on disaster risk and crisis prevention, which could lead to sustainability (United Nations, 2015).

Chinese folk-religion temples in Macao

Among those targeted temples built during the Ming and Qing periods (Lee, 2019), based on ownership and resources, they can be divided into three types. Type 1 is with an active full-time temple-keeper to take care of daily affairs. Type 2 has only a part-time or volunteer helper, while Type 3 has an inactive full-time temple-keeper. As the extent of empowerment towards temple-keepers to interact with tourists/visitors varies (Ly & Tan, 2023), the services offered are different (see Table 1). Type 1 seems to offer the most services among the three groups. With the willingness to serve (or not) temple-keepers themselves when tourists/visitors come to a temple site, the standards of temple-keepers in the city are divergent if tourists/visitors encounter dissimilar types of temples. This unstable fluctuation in services provided could create incentives that might damage the visitor experience (Packer & Ballantyne, 2016) and even influence destination image (Hart & Rosenberger, 2004; Shehab & Som, 2020). Therefore, there is a need for local government and temple management to find a way to sustain and standardize such temple-keeping services.

Table 1. Services of temple-keepers in Macao's Chinese folk-religion temples

	Service			
	Daily cleaning (sweeping the floor, gatekeeping)	Temple area patrolling (fire, safety, and security)	Incense offering	Religious worship rituals (worshiping god rituals, oracle slips interpretation)
Type 1	Yes	Yes	Yes	Yes
Type 2	Yes	Yes	No	No
Type 3	Yes	Yes	Yes	No

Methodology

To study reasons and ease cracks in the inheritance of temple culture in the three different types of the Chinese folk-religion temples in Macao, data were collected using the following

qualitative methods. At first, the research team reviewed relevant literature on temple-keeper management. Unfortunately, this research topic has been understudied (e.g., Cohen & Jaw, 1977; Ly & Tan, 2023). Secondly, field visits were done to select and observe different types of temples in Macao to understand their daily managerial and operational-related issues (Hennink et al., 2020). Non-participation observation focused on the interaction between temple-keepers and tourists/visitors (Mays & Pope, 1995). Finally, the relevant stakeholders participating in different levels of temple-keeper management work were recruited for in-depth interviews. These included the temple committee's directors/managers, full-time/part-time temple-keepers, and/or volunteer helpers to understand their behaviours and perceptions regarding sustainable management of temple culture issues.

The data collection period was from January to June 2021. In total, 20 temples were contacted (i.e., nine for Type 1; eight for Type 2; three for Type 3), and 27 interviews were conducted, with the following major questions: (1) What is your assessment of the current management and preservation of the temple? (2) What is the current operational status of the temple keeper service? and (3) What has been done to sustain the inheritance of temple culture? The researchers stopped the respondent recruitment process when the data reached theoretical saturation status (Glaser & Strauss, 1967). The interviews were carried out in the temples in Cantonese and lasted for thirty to fifty minutes. Interviews were recorded, transcribed, and translated into English verbatim for data analysis. Data shows that most respondents were quite senior, with both men and women averaging over 50 years old. Furthermore, most of them had long-term experience as temple keepers and/or were involved in temple management.

In the light of the exploratory nature of this research, the conventional content analysis method has been used to guide the data analysis (Hsieh & Shannon, 2005). The data analysis process started right after the data was collected. In order to obtain the codes, categories, and/or themes, the research team went through the reflective process multiple times for the initialing of codes (Hennink et al., 2020). The researchers have closely read and annotated all interview transcripts. During the data analysis, the texts were reviewed, and concepts were highlighted to generate the in-depth reasons leading to the inheritance issues of temple culture. To verify the validity and reliability of data analysis, apart from the abovementioned methods in the data collection process (i.e., documentation, non-participant observation, and in-depth interviews), the team also showed the findings to the interviewees for member verification (Lincoln & Guba, 1985).

Findings and Discussion

Unsustainable practices and temple-keeper services from temple management

The data showed that the unsustainable practices of temple-keeping services can be elaborated and explained by the following aspects. First is due to the inconsistency of temple ownership. Among the three types of temples in Macao, the majority of them are owned by a temple committee (called *zhi li hui* in Chinese), such as the case of Na Tcha Ancient Temple by Calcada das Verdades, which has been owned and operated by the Associação do Templo da Calçada das Verdades de Macau (Imprensa Oficial, 2017). According to the sharing of one temple director who has served in the temple for more than 30 years, there are a few temples owned by the private sector, which might be inherited from their ancestors, for example, the Temple of Kuan Iam in Taipa. Also, there are some owned by the local government, like Fok Tak Temple of Rua do Teatro (Cultural Heritage of Macau, 2023). Diversity of ownership makes it very difficult for the local government to set up a common policy and operate temple-

keeper services on a standardized model which applies to all. In fact, it is up to the owners of temples to offer different kinds of temple-keeper services which explains why there are three types of temples existing in Macao (see Table 1).

Secondly, temple owners have inconsistent interpretations of the importance of temple-keeper services regarding the spread and preservation of temple culture. Scholars (Lupu et al., 2019; Tirca et al., 2019) suggest that the presence of on-site temple-keepers represents a sign of authenticity in temple culture and could improve visitor experience and destination image. Fortunately, most of the Type 1 temples are practicing under this philosophy and offered most of the temple-keeper services in town. However, most of Type 2 temple management have decided to offer limited temple-keeper services on their sites by using part-timers or volunteers. They have reached a common agreement to explain their decisions for such practice: (1) lack of budget to hire manpower to guard a small temple with few visitors, and (2) could not find a replacement candidate when the former temple-keeper retired or passed away. In Type 3 temples, although they have a full-time temple-keeper, the management have limited their interaction with visitors, and asked temple-keepers to consider themselves more as cleaners and security guards. While talking with a temple keeper working for 20 years in the temple at Taipa and asking him to share the history of the site, the authors were surprised by his statement, "*I am only sweeping the floor here, I don't know about the history of the temple*". If nothing has changed in the temple-keeper services practise in Types 2 and 3 temples, it is reasonable to assume that this is one of the major reasons for the crack in the inheritance of temple-keeper services, due to the large number of temples belonging to these two groups.

Local government's short-sighted approach to temple culture preservation

Most respondents raised concerns about the local government's preservation vision. They claimed that the local government is only interested in preserving the listed tangible temple relics. An association manager of a temple in Coloane explained:

> Although the government claimed that they will help us in temple culture preservation, they now only preserve the things with historical value, like those cultural relics. If you step outside of the temple gate and asked the government to help in preserving those temple stuff, like incense burner, stone lions in front of the temple. Because this is not within the scope of cultural relics, they don't care.

It seems that the current government's approach to preservation is very rigid and limited to tangible relics inside the four walls of a temple. Moreover, temple management claimed that when they want to upgrade some old facilities (like the lighting or ventilation system) and/or introduce some new management systems to modernise the temple appearance to attract younger generations, there is a "*no*" response from the local government side. Afraid of violating different laws and regulations, the local government departments would delay the application again and again. There is no denying the fact that local government has assisted with the maintenance of the temple conditions to support present and future generations (EPA, 2022). Unfortunately, it does not fit with the situational changes that the modern temple culture needs. Their work was too bureaucratic and not resilient enough for future sustainable development, especially lacking communication with the local community for adaptive management (Ripp & Rodwell, 2016). One temple keeper working in a temple in the Macao peninsula shared that, "*Temples in Taiwan did a great job in balancing preservation and modernization. They have applied new technologies to attract younger people, like letting tourists draw divination sticks via mobile apps. I wish Macao had done the same*."

Conclusion

This study aims to explore reasons leading to such cracks in the inheritance of Chinese folk-religion temple culture and suggest methods to ease sustainable management issues on-site, using the Chinese folk-religion temples in Macao as a case study. The research findings revealed that there are two key reasons holding back the sustainable management of temple culture in Macao. First is the lack of an effective and official temple-keeper service system. The current practice of the temple-keeper service is governed by the ownership of the sites and the alternative interpretation of temple management towards the offering of temple-keeper services. In other words, the current temple-keeper service system works on a "voluntary" basis. When those temple keepers in Type 1 temples retire or pass away, a loss of temple-keeper culture in Macao's temples is foreseen. So far, nothing has been discussed or communicated regarding the future of the temple-keeper services and community. Due to this severe preservation issue, the research team calls for communication among different stakeholders involved in the temple-keeper services and community to develop a sustainable approach that works for all parties (Smith & Ripp, 2020).

Secondly, the sustainable management concept of local government toward temple culture preservation is narrowly focused on tangible heritage relics. However, temple culture preservation should embrace more than this (United Nations, 2015). Some respondents suggested that the local government should consider the holistic nature of temple culture management, which should involve those intangible heritage relics, the balance between preservation and modernisation and so on. The research team suggests that the local government should have an open and flexible attitude towards temple culture management, especially the involvement and empowerment of the local community in the temple management business (Ripp & Rodwell, 2016). The findings of this study can shine a light for other Chinese folk-religion temples in different regions/countries, who have encountered similar issues in sustainable management and preservation of temple culture. Considering these unresolvable issues of the case study, the research team is calling for the broader study of temple culture preservation in different places for a full understanding of the phenomenon.

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Sustaining Novelty: A Longitudinal Study on Evolving Customer Experience with Hotel Contactless Services

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Keywords: Hotel Contactless Services; customer experience; adoption; habituation

Abstract

Introduction

The landscape of contactless services has undergone a significant transformation in recent years, driven by rapid technological advancement. Around 2019, the adoption of such innovations in the hotel industry—including digital keys, service robots, smart speakers, and drones—lagged behind sectors like airports, retail, and banking, with many practitioners in China maintaining a wait-and-see attitude(Liu et al., 2019). Nevertheless, a majority of hoteliers at the time anticipated implementing these services within the following five years. The outbreak of COVID-19 at the end of 2019, however, abruptly accelerated this trajectory, compelling both the hospitality industry and consumers to adapt to an environment where contactless interactions were prioritized for disease prevention(Choe et al., 2021). From a long-term perspective, it is crucial for researchers to provide fresh insights and practical implications on how the hospitality and tourism industry can best leverage contactless services to deliver enhanced experiences that align with evolving customer needs and expectations(Gursoy and Chi, 2020). This directive remains especially pertinent in the current post-pandemic context, where contactless services have become increasingly institutionalized(Wu et al., 2024).

Research on consumer experience with contactless services has predominantly employed cross-sectional designs, focusing on areas such as responses to service anthropomorphism and perceptions of AI-driven interfaces at the time of observation (Jung-Eun Yoo & Chon, 2010; Law et al., 2023). While valuable, such studiess o using a cross-sectional design assumed the effect of consumer experience as time invariant or fixed, ignoring that tourism is a temporal social phenomenon and consumer experience changes over time (Bradley & Sparks, 2011). This limitation hinders the identification of dynamic market characteristics and the development of informed technology strategies(Shi et al., 2022; Ye et al., 2023).

To address this gap, the present study adopts a longitudinal design to examine how tourists' perceptions of contactless services have evolved across two time points over a five-year period. Building on the experiential framework proposed by Liu and Hung (2021), it investigates changes

Methodology

Repeated cross-sectional data based on questionnaire surveys that captured tourists' experience were used: hotel guests' experience for contactless services and human services are investigated through comparisons between two tourist surveys conducted across two time points over a five-year period.

During the formal data collection, each participant was given a small amount of financial reward as compensation. For period 1, a total of 594 data was retained for data analysis. For period 2, 616 samples were analysed statistically.

Findings

Independent-samples t-tests comparing customer experience across two periods revealed general stability in affective, cognitive, actional, and social dimensions (all *p* > .05). A significant increase was found for fresh experience, with its mean score rising from 5.760 (SD = 1.070) in Period 1 to 5.894 (SD = 1.116) in Period 2 (*t* = -2.137, *p* = .033). This indicates that the perceived novelty of contactless services positively evolved over time, while other experiential facets remained stable.

The significant increase in fresh experience may stem from: 1) Service Evolution (continuous upgrades in features/interfaces renewing perceived innovation); 2) User Adaptation (increased guest familiarity shifting focus from utility to experiential engagement); 3) Contextual Shift (normalization as a hallmark of modern hospitality, enhancing its novel appeal).

Table 1. Results of independent-samples t-tests: Customer experience with hotel contactless services (Period 1 vs Period 2)

Customer experience (Period 1 vs Period 2)	Period 1 : *N*=594		Period 2: *N*=616		t-value	Sig.	Mean difference
	Mean	SD	Mean	SD			
Affective experience	5.354	1.134	5.421	1.044	-1.083	0.279	-0.068
Cognitive experience	5.182	1.130	5.293	1.113	-1.723	0.085	-0.111
Actional experience	5.328	0.986	5.389	1.062	-1.032	0.302	-0.061
Social experience	5.070	1.052	5.047	1.174	0.35	0.726	0.022
Fresh experience	5.760	1.070	5.894	1.116	-2.137	0.033*	-0.134

Notes. ***p < 0.001; **p < 0.01; *p < 0.05

Conclusion

These findings suggest that well-implemented contactless services are capable of sustaining, rather than diminishing, perceived novelty over time. This contributes to a more nuanced understanding of the longitudinal evolution of customer experience in hotel settings, extending the research perspective from a static cross-section to temporal dynamics. The results also offer practical implications for customer experience management in the hospitality industry.

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The "Gray Gap" in Digital Service Adoption: Evidence from Older Adults' Use of Online Food Delivery Systems

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Introduction

Online food delivery systems (OFDS) act as intermediaries connecting restaurants and consumers (Li & Wang, 2025; Seghezzi et al., 2021). The global OFDS market has expanded rapidly, growing from approximately USD 90 billion in 2018 to USD 294 billion in 2021, with projections exceeding USD 466 billion by 2026. Türkiye has followed this global trend, with early platforms such as YemekSepeti later joined by Getir and Trendyol. During the COVID-19 pandemic, online food purchasing habits in Türkiye increased substantially, reinforcing the growing dominance of OFDS within everyday consumption practices.

Despite this rapid growth, OFDS research has largely focused on younger, technologically proficient users (Gunden et al., 2020), resulting in inclusivity concerns. Existing studies tend to overlook the unique characteristics of information technology adoption among older adults, whose motivations and constraints differ due to factors such as declining physical ability, technology anxiety, and social preferences. While OFDS offer benefits for older adults—such as continued access to food, autonomy, and the ability to order independently—the key antecedents shaping their adoption intentions remain insufficiently understood.

This study addresses this gap by examining older adults' intentions to use OFDS through an integrated framework combining the Technology Acceptance Model (TAM) (Davis, 1989) and the Capabilities Approach (CA). While TAM emphasizes perceived usefulness and perceived ease of use as primary determinants of system adoption, it has been criticized for insufficiently accounting for social, emotional, and value-based factors, particularly among aging populations (Chen & Chan, 2014a; Yap et al., 2023). The CA, rooted in Nussbaum's (2000) work, shifts attention from task efficiency toward individuals' ability to achieve outcomes they personally value, such as autonomy, independence, and social connection (Haenssgen & Ariana, 2018).

Integrating CA with TAM allows OFDS adoption to be conceptualized not merely as a functional decision but as a potential empowerment mechanism. Older adults may adopt technologies not because of the tasks they perform, but because such technologies enable valued ways of living, including independent living and continued participation in daily life. By applying this integrated framework to test specific hypotheses, the study contributes to the growing body of research on digital service adoption among older adults and responds to calls for more inclusive technology design.

Theoretical Background

Capabilities Approach

The Capabilities Approach focuses on individuals' abilities to achieve valued states of being and doing, rather than on improvements in task performance alone. When integrated with technology adoption theories, CA offers a broader understanding of how psychological, physical, and social factors influence technology use among older adults. Recent research has demonstrated the value of this integration in the e-grocery context, showing that capabilities related to physical condition, independent living, and social needs significantly shape older adults' adoption decisions (Yap et al., 2023).

Building on this work, the present study examines how capabilities such as physical condition, independent living capacity, and preference for human contact influence older adults' intentions to use OFDS. This perspective enables a more holistic understanding of adoption behavior that extends beyond system functionality.

Technology Acceptance Model

TAM proposes that perceived usefulness (PU) and perceived ease of use (PEOU) are key predictors of users' behavioral intentions toward information systems (Davis, 1989). Over time, TAM has been extended to incorporate additional constructs relevant to emerging technologies, including technology anxiety, trust, and demographic variables (Gunden et al., 2020; Ma et al., 2022).

For older adults, TAM has evolved into the Senior Technology Acceptance Model (STAM), which incorporates age-related physical, psychological, and social factors (Chen & Chan, 2014b). While prior studies have applied TAM and STAM to contexts such as mobile payments and e-grocery services (Lwoga & Lwogam, 2017) research integrating these models with CA in the OFDS context remains limited. This study addresses this gap by extending TAM with capability-based and psychological constructs relevant to older adults.

Hypotheses Development

Physical Condition

Age-related physical decline can make traditional food purchasing and dining activities challenging. Prior studies indicate that reduced mobility increases the likelihood of online purchasing and preference for digital alternatives such as e-grocery services. OFDS may similarly serve as an accessible alternative to dining out for older adults facing physical limitations.

H1: *Physical condition has a positive effect on older adults' intention to use online food delivery systems.*

Independent Living Capabilities

CA emphasizes autonomy and independent living as intrinsic values. Prior research shows that older adults are more likely to adopt technologies perceived to enhance their capacity for independent living (Hwang et al., 2024; Yap et al., 2022). OFDS may support independent living by enabling food access without reliance on physical mobility.

H2: *Perceived independent living capabilities provided by OFDS positively affect older adults' intention to use OFDS.*

Preference for Human Contact

Continuity theory suggests that older adults prefer maintaining familiar routines and social interactions (Atchley, 1989). While OFDS reduce physical interaction, they may conflict with older adults' preference for in-person socialization.

H3: *Preference for human contact has a negative effect on older adults' intention to use OFDS.*

Technology Anxiety
Technology anxiety reflects fear or discomfort associated with technology use and is particularly salient among older adults (Meuter et al., 2003). Such anxiety can undermine self-efficacy and reduce adoption intentions.

H4: *Technology anxiety has a negative effect on older adults' intention to use OFDS.*

Information Disclosure
Concerns about privacy, security, and fraud are prominent in online environments, especially among older consumers (Heart & Kalderon, 2013). In OFDS contexts, uncertainty regarding personal data usage may reduce adoption intentions.

H5: *Concerns about information disclosure negatively affect older adults' intention to use OFDS.*

Consumer Distrust
Trust has been identified as a key determinant of online purchasing behavior. Older adults, in particular, may exhibit higher levels of distrust toward digital platforms, reducing their intention to engage with OFDS.

H6: *Consumer distrust in OFDS has a negative effect on older adults' intention to use OFDS.*

Perceived Usefulness
PU reflects the extent to which users believe a system enhances task performance. Prior research shows that PU strongly influences older adults' adoption of online and assistive technologies.

H7: *Perceived usefulness of OFDS positively affects older adults' intention to use OFDS.*

Perceived Ease of Use
PEOU reflects the perceived effort required to use a system. User-friendly interfaces have been shown to increase older adults' adoption of online services.

H8: *Perceived ease of use of OFDS positively affects older adults' intention to use OFDS.*

Digital Literacy
Digital literacy refers to individuals' ability to effectively use digital technologies. Higher digital literacy enhances confidence, perceived usefulness, and ease of use, thereby influencing adoption intentions.

H9a: *Digital literacy positively affects older adults' perceived ease of use of OFDS.*
H9b: *Digital literacy positively affects older adults' perceived usefulness of OFDS.*

Methodology
The target population consists of older adults with prior online purchasing experience. A sample size of approximately 500 respondents is planned, in line with methodological

recommendations by Hair et al. (2009). Data will be collected through collaboration with a marketing research firm. Confirmatory factor analysis (CFA) and structural equation modeling (SEM) will be used to validate the measurement model and test the proposed hypotheses.

Expected Outcomes

This study is expected to make significant theoretical and empirical contributions by identifying technological, psychological, and capability-based factors influencing older adults' adoption of OFDS. By integrating TAM with the Capabilities Approach, the research advances existing technology adoption frameworks and provides a more inclusive understanding of digital service use among aging populations. Practically, the findings may inform OFDS providers, restaurants, and policymakers seeking to reduce adoption barriers and design more age-inclusive digital services. This study represents one of the early empirical investigations of OFDS adoption among older adults.

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The Aesthetic Journey Through Life: Tourist Experiences of Chinese Gen-X Career Women

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Abstract

Tourism is fundamentally an aesthetic practice, yet the gendered dimensions of its aesthetic experience, particularly from the subject's perspective, remain underexplored. Existing research predominantly focuses on the production and consumption of aesthetic destinations, overlooking how tourists, especially women, construct personal meaning and cultivate aesthetic subjectivity through travel. This gap is particularly salient for Chinese Gen-X career women (born 1965-1979), a cohort navigated profound socio-economic transitions and evolving gender norms, whose aesthetic pursuits in tourism are both significant and under-theorized. Addressing this, our study investigates the dynamic development of tourism aesthetic experiences among these women across the life course.

Adopting an integrated theoretical framework combining feminist geography and aesthetic anthropology, we employ life aesthetics as our analytical lens. This framework allows us to trace the interplay between personal biography, gendered identity, and aesthetic evolution. Methodologically, we utilize life-history narrative interviews alongside biographical research methods. Data were collected through in-depth interviews with 30 Chinese Gen-X career women, supplemented by personal travel photographs and records, to construct rich, longitudinal accounts of their aesthetic journeys.

Our findings reveal tourism aesthetics as an experientially accumulated competence, evolving through three distinct, life-stage-contingent phases. In young adulthood, aesthetics is primarily scenographic, centered on the appreciation and harmonious presentation of the self (body image and temperament) within touristic landscapes, fulfilling a need for biological and personal identity expression. During motherhood, aesthetics transforms into a narrative and relational mode. It is characterized by intergenerational negotiation and co-creation within the family, where travel becomes a medium for aesthetic education and the forging of shared familial stories, thereby enriching social and maternal identities. In middle adulthood, aesthetics deepens into a spiritual and immersive engagement. With greater autonomy, women seek profound integration with travel environments, deriving aesthetic meaning from life reflections, emotional resonance with places, and the appreciation of everyday beauty, thus achieving spiritual fulfillment.

The development across these stages is triggered by a synergistic interplay of three factors: evolving aesthetic affections tied to changing interpersonal relationships (peers, family, self), the accumulation of travel experience that hones aesthetic discernment, and improved conditions for travel participation (economic, temporal, infrastructural).

This study makes key theoretical contributions. First, it shifts the focus from destination-centric aesthetics to the tourist as an active, meaning-making subject, highlighting self-appreciation as integral to aesthetic judgment. Second, it provides a critical, life-course temporal perspective on female aesthetic development, challenging static or conflict-oriented Western feminist paradigms by revealing a more nuanced, culturally situated process of aesthetic cultivation rooted in relationality and self-growth. Third, it empirically demonstrates how tourism serves as a pivotal arena for the continuous construction and expression of femininity—from youthful elegance, to caring devotion, to resilient openness—through aesthetic practice. Practically, the research suggests the need for the tourism industry to design life-stage-sensitive experiences to suit aesthetic pursuits of tourists at different life stages.

Key Words: Chinese Gen-X Career Women; Female Tourists; Tourism Aesthetics; Life Aesthetics Theory

1. Introduction

In the contemporary aesthetic era, aesthetics is recognized as vital for human advancement (Simpson, 2012; Pan, 2021). Tourism, inherently aligned with life's aesthetic aims, is fundamentally motivated by the pursuit of beauty, particularly for women (Zhu & Cao, 2023; Jin & Zhang, 2023). Tourist aesthetics involve a range of psychological responses that shape experiences and views, with landscape constituting both a physical and a "spiritual" construct (Liu et al., 2014; Wu, 2021). However, research remains predominantly focused on aesthetic production and consumption, leaving the subjective aesthetic experiences and meanings of tourists themselves underexplored.

Femininity encompasses socially constituted aesthetic practices and ideals (Energici et al., 2021). Tourism offers a salient space for gender and aesthetic expression, yet female aesthetic experiences within it are not fully addressed (Jin & Zhang, 2023). China's Gen-X career women (born 1965-1979), a "transition era" cohort, present a compelling context. They navigate evolving social norms, and their consumption is markedly aesthetic (BCG CCI, 2023). As many approach retirement, their growing travel desires related to leisure and wellness necessitate deeper understanding from both market and social perspectives (Li et al., 2024; Trip.com, 2024).

This study adopts feminist geographical and anthropological aesthetic perspectives, integrated through the framework of life aesthetics. This framework illuminates the construction of women's identities over time and the impact of changing social circumstances (Li et al., 2024; Huber et al., 2017). Using life-history narrative interviews, the research aims to: 1) identify stages in the tourist aesthetic experiences of Chinese Gen-X career women; 2) ascertain the triggers and mechanisms of change in these experiences; and 3) discuss their derived meanings. The study thereby enhances understanding of female travelers across the lifespan and contributes to discourse on tourist aesthetic experience in femininity and life progression.

2. Literature Review

2.1 Tourist aesthetic experience

Aesthetic experience concerns the relationship between subject and object (Sirois, 2008). In tourism, the pursuit of beauty is a primary motivator, with aesthetic experiences comprising sensory, affective, perceptual, and cognitive dimensions (Nieminen et al., 2011). These experiences are shaped by broader socio-cultural aesthetic systems and individual factors like

life history and aesthetic competence (Zhao, 2020; Wu & Long, 2009). Research has explored the psychological mechanisms, elements (e.g., perception, imagination), and developmental phases of tourist aesthetics (Zhang & Chen, 2001; Ivanova et al., 2024). However, existing studies predominantly focus on the appreciation of external environments or objects, neglecting the *subjective involvement, creative agency, and personal meaning-making* of the tourist as an aesthetic subject. The role of individual subjectivity in aesthetic production and interpretation remains under-explored.

2.2 Feminine aesthetics and femininity

Femininity is constituted through socially embedded aesthetic practices and ideals (Energici et al., 2021). The aesthetic dimension is central to women's historical reclaiming of subjective agency and self-creation (Brand & Devereaux, 2003). Tourism provides a salient space for such expression. Studies note that women's travel is often characterized by a heightened sensitivity to emotional and relational beauty, cultural nuances, and service/safety aspects, differentiating it from generalized tourist behavior (Ziarek, 2012; Jin & Zhang, 2023). Yet, while the distinctiveness of "female experience" in travel is acknowledged, research has not sufficiently engaged with its specific aesthetic character. *The qualities that constitute a "feminine aesthetics" in tourism—its sensory-affective patterns, symbolic meanings, and links to gendered identity—are under-examined.* Consequently, discussions on gender in tourism often remain at the level of general behavioral difference rather than delving into deeper aesthetic perspectives and subjectivities.

2.3 Theoretical underpinnings: Life aesthetics

Life aesthetics theory posits that aesthetic experience is integral to validating and enhancing life's value, addressing biological (survival and continuity), social (fulfillment of relational and societal values), and spiritual (pursuit of meaning and personal growth) dimensions of human existence (Dowling, 2010; Feng, 2013). It views life as a dynamic, creative process where aesthetic engagement contributes to personal growth and spiritual connection (Lin & Yuan, 2003; Simpson, 2012). From this perspective, tourism is not merely a leisure activity but a form of life praxis, where aesthetic experiences are intertwined with an individual's ongoing life narrative and quest for meaning (Pan, 2012). This framework is particularly apt for studying aesthetic evolution over time, as it foregrounds how subjective aesthetic capacities and pursuits are shaped by, and respond to, the totality of one's lived experience. It thus provides a robust theoretical lens to address the identified gaps, enabling an investigation into how women's tourist aesthetic experiences are dynamically constructed, how they reflect and inform femininity, and what meanings they hold across different phases of life.

3. Methodology

3.1 Research target

A generational perspective offers value for policymaking and marketing. Formative socio-economic and technological contexts shape cohorts' values, beliefs, and behaviors (Reisenwitz & Fowler, 2019; Gardiner & Kwek, 2017). In Chinese tourism research, Gen-X (born 1965-1979) (Yang & Lau, 2015) remains understudied compared to other cohorts (Delbosc & Nakanishi, 2017; Olsson et al., 2020; Li et al., 2024). This "transition era" generation experienced China's shift to a market economy and clashes between Eastern and Western

aesthetics (Wang et al., 2020). Existing studies often overlook such demographic nuances across life stages (Zhang et al., 2024; Su et al., 2024).

3.2 Data collection

Life-history narratives, a retrospective longitudinal method, were employed to collect detailed individual histories through in-depth interviews, suitable for exploring complex, abstract themes like evolving tourism aesthetics (Huber et al., 2017). Theoretical sampling guided participant selection via Chinese social platforms (Xiaohongshu, Douyin) and snowball sampling, focusing on individuals with extensive travel experiences across life stages. From December 2023 to March 2024, 30 effective interviews (30-60 minutes each) were conducted face-to-face, supplemented with travel images and records. Transcripts totaling approximately 302,615 words were produced within 24 hours post-interview.

Code	Age	Residence	Education	Occupation	Family situation	Family income (¥)
1-Z	46	Guangdong	Master	Business owner	Married with child	20-100w
2-B	45	Hunan	Bachelor	Photographer	Single	10-35w
3-M	55	Hubei	Bachelor	SOE middle leader	Married with child	25-50w
4-L	46	Tianjin	Associate	MNC middle leader	Married with children	15-45w
5-Z	54	Hebei	Associate	SOE staff	Married with child	10-40w
6-B	55	Beijing	Bachelor	SOE staff	Married with child	15-55w
7-C	53	Hebei	Bachelor	Bank middle leader	Married with child	15-40w
8-L	47	Tianjin	Bachelor	Sales representative	Divorced with child	15-35w
9-L	45	Tianjin	Master	Senior manager	Divorced with child	20-50w
10-K	46	Jilin	Bachelor	Senior manager	Married with child	20-55w
11-Z	45	Shaanxi	Bachelor	Self-employed	Single	10-30w
12-G	49	Tianjin	Master	SOE middle leader	Married with children	25-45w
13-H	45	Shanghai	Master	MNC employee	Married	20-40w
14-R	55	Beijing	Doctor	Professor	Married with children	15-50w
15-R	52	Hebei	Bachelor	SOE staff	Divorced with child	10-40w
16-B	45	Shanxi	Bachelor	SOE staff	Married with child	10-40w
17-D	46	Shandong	Bachelor	Self-employed	Married with child	10-35w
18-S	45	Shanghai	Bachelor	MNC middle leader	Married with children	20-50w
19-X	45	Shandong	Master	Engineer	Married	25-55w
20-L	56	Hebei	Bachelor	Government officer	Married with child	10-45w
21-Z	52	Hebei	Bachelor	SOE staff	Married with child	15-45w
22-M	51	Henan	Bachelor	Middle school teacher	Divorced with child	10-40w
23-S	46	Jiangsu	Doctor	Engineer	Married	25-85w
24-F	59	Gansu	Bachelor	SOE staff	Married with child	10-30w
25-F	45	Zhejiang	Bachelor	Senior manager	Married with child	20-70w
26-Z	50	Yunnan	Associate	Hospitality	Single	10-25w
27-S	48	Guangxi	Bachelor	SOE staff	Married with children	10-35w
28-Z	48	Sichuan	Master	Senior manager	Married with children	15-50w
29-D	51	Xinjiang	Associate	Government officer	Married with children	10-30w
30-A	47	Xinjiang	Associate	Business owner	Married with children	8-35w

Note: SOE (State-owned enterprise); MNC (Multi-national corporation)

3.3 Data analysis

Analysis proceeded in two stages. First, a case-study analysis using life trajectory diagrams was conducted concurrently with data collection. These diagrams visually plot individual travel timelines, marking key life events, aesthetic shifts, and historical context to identify turning points and influencing factors (Feng et al., 2023). Second, a comprehensive textual analysis applied grounded theory's three-level coding (open, axial, selective) to systematically analyze transcript data, a method established in tourism experience research (Miao & Xie, 2021).

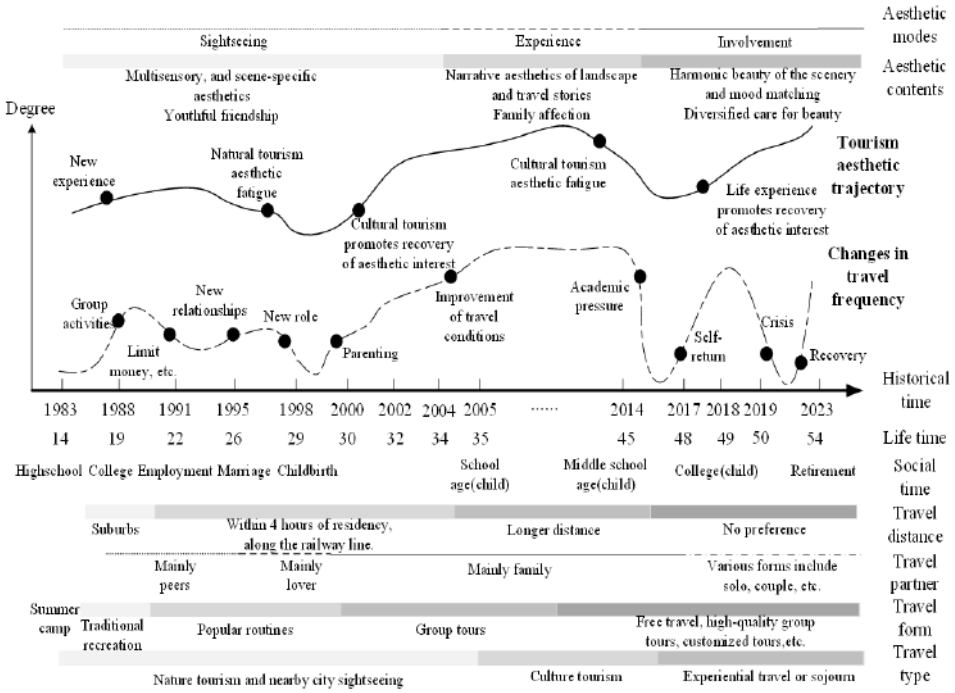

Figure1. Example of travel aesthetic trajectory diagram and work notes with 3-M

Table 2. Example of this coding process

Original Text	Open Coding	Axial Coding
"We mostly started traveling only after college[1], and some had business trips after starting work[2]…During college, it was fashionable to travel with classmates[3], and I followed the trend[4]" (3-M)	a At college（1） b Just Started Working（2） c With classmates（3） d Trendy（4） e With friends（5） f: Before marriage (6) g: During school (7) h: When Young (8) i: Sightseeing (9) j: With girls (10) k: Short trips (11) l: Natural scenery (12) m: Colleagues (13) n: Nature walks (14) o: Aesthetic sense (15)	A Youth Period（abfgh） B Peer Companionship（cejm） C Traditional Recreation（nk） D Aesthetic Mode of Travel（di） E Awakening of Aesthetic Awareness（o）
"During college, travel was mostly with friends or classmates[5]. Before marriage, it was about visiting classmates[6]… When we were young, we had little money[7] and rarely traveled as we understand it today" (5-Z)		
"We didn't have money to travel when we were young and didn't know how. It was mostly superficial sightseeing[9]" (14-R)		
"In college, I often traveled with close friends or classmates[10]… Our trips were simple due to lack of money and transportation, usually biking or taking trains to nearby cities and returning the same day[11]. We mostly enjoyed natural landscapes[12]" (22-M)		
"After starting work, we had some business travel opportunities with colleagues[13]. Young travel was mostly outings and nature walks[14]…We enjoy natural beauty[15]" (16-B)		

4. Findings

4.1 Life stages and aesthetic experiences of Chinese Gen-X career women

The tourism aesthetic experiences of Chinese Gen-X career women are profoundly shaped by and articulated through distinct life stages, each marked by evolving social expectations, industry developments, and personal growth. Their journeys reveal a dynamic interplay between self, family, society, and the tourism landscape.

Young adulthood: Biological Aesthetics and the Embodied Self

The young adulthood of Gen-X women, situated in the 1980s and 1990s, coincided with the nascent stage of mass tourism in China and a period of significant social transition regarding gender norms. During this era, the promotion of gender equality progressed, fostering a recognition of distinct gender temperaments (Welter, 2023). However, this period was also marked by the rapid expansion of the beauty industry, which some scholars critically interpreted as reinforcing the male gaze and objectifying women (Xu & Feiner, 2007). Ideals of feminine beauty emphasized "the right to be beautiful" and sartorial freedom, reflecting a burgeoning yet commercially mediated aesthetic consciousness (Ma, 2025).

The tourism industry of this time prioritized economic promotion, with aesthetic functions receiving low priority in development. Consumption patterns were characterized by what Zhang and Chen (2001) termed "generalized aesthetics"—a superficial pursuit of enjoyment and relaxation with limited historical, logical, or artistic depth. As respondent 14-R recalled, "*We did not have much money when we were young. In college, just the mention of travel seemed trendy. I guess I followed the crowd without any aesthetic awareness; it was just about having fun*." This indicates an initially unconscious engagement with tourism aesthetics.

Within this context, the tourism aesthetic experiences of young Gen-X women originated from a process of self-aestheticization. Their understanding of aesthetics was expressed through deliberate choices in attire, cosmetics, and mannerisms, carefully aligned with their perception of the tourism environment's atmospheric qualities. The female body served as a pivotal aesthetic object, not in pursuit of Western standards like slimness, but rather the beauty of body imagery and its harmonious integration with scenic backdrops. This practice carried ritual significance, marking life transitions. For instance, 3-M described purchasing a cheongsam for a mountain resort trip to celebrate graduation, where "*The classical elegance of the garden scenery, combined with the image of a young woman—characterized by graceful long hair and poised demeanor, etc.—perfectly encapsulated the tender and intellectual beauty we aspired to at that time*" (Figure 2(1)). And R-14 recounted, "*Near graduation, my roommate and I traversed a mountain path. She taught me how to weave a little rabbit from foxtail grass for the last time. The atmosphere was unadulterated and carefree, encapsulating the serene beauty of the youthful lives of girls like us.*" (Figure 2(2)). Another commemorated the start of her career with a pink suit and camera amidst a matching sea of flowers, noting how it "*mirrored our expectations for a new life stage*" (5-Z, Figure 2(3)). These moments reveal an aesthetic process focused on scenographic appreciation and the expression of personal physical image and temperament. The feminine aesthetics of this stage are thus defined by expressions of youthful body image in conscious congruence with tourism settings, fostering a femininity perceived as tender, intellectual, elegant, and youthful.

Figure 2. Examples of respondents' photos, from left to right: 3-M (1), 14-R (2), 5-Z (3)

Motherhood: Narrative Aesthetics and Intergenerational Interaction

Entering motherhood in the 2000s and 2010s, Gen-X women encountered a societal backdrop of conflicting role expectations, often summarized by the adage "a good marriage is better than a good job," emphasizing the ideals of the virtuous wife and good mother (Ma, 2025). Simultaneously, the tourism industry matured, with transportation infrastructure improving dramatically and travel becoming ubiquitous. Standardization of services was prevalent, yet the educational and learning values of tourism began to gain recognition (Zhang & Zhu, 2011).

For these women, motherhood was perceived not merely as an expected social role but as a profound personal life experience. Consequently, their tourism aesthetics evolved to centre on intergenerational interaction and negotiation within the family unit. Travel became closely tied to children's growth stages, with aesthetic activities adapting to juvenile preferences. This often expanded mothers' own aesthetic domains, as one respondent shared regarding her son's love for animals: "*I previously held an aversion to zoos, but he let me realized zoos can be regarded as an aesthetically pleasing [experience]*" (22-M). The peak of family tourism occurred during children's primary school years, laden with mothers' aesthetic education expectations. The resulting aesthetic negotiation gave rise to rich narrative aesthetics, where love served as the principal theme. These narratives were meticulously documented in detailed travelogues and photographs, forming an essential aesthetic category. 3-M reflected on balancing aesthetic needs during a trip with her daughter: "*In Dalian, we'd hoped to introduce her to cultural sites, but she wasn't interested, so we switched to a relaxing nature trip instead. Looking back, the travelogue still brings back feelings of ease and happiness* (Figure 3 (top)). *The sea, the beach, and most importantly, her happy smile—not just the beautiful scenery, but the beautiful stories we created together*".

Mothers engaged comprehensively and actively in their children's aesthetic education. Respondent 22-M detailed a process of guiding her son's interest in museums: "*Initially, my son had no interest but he realized this affected our communication during travel, so he started bringing up topics from his limited knowledge. I took the opportunity to tell him interesting*

stories, gradually sparking his interest. As he learned more, he wanted to see things firsthand. Eventually, he started asking questions, and I encouraged him to research and discuss with me. We began buying museum souvenirs and creating travel journals (Figure3 (bottom)), *recording interesting content and reflections. This became his favorite part. Now, he often suggests trips, and he does the talking while I listen. His active thinking and diverse interests also inspire me to learn more*" (22-M). Whether through educational "museum tours" deemed essential for supplementing school learning (12-G) or adventurous nature trips exploring geological formations (7-C), family tourism became a leisurely cultural aesthetic activity. The feminine aesthetics of this stage are embodied in family travelogues overflowing with love and innocence, reflecting a femininity characterized as caring, understanding, coordinating, and devoted.

Figure 3. Examples of respondents' parent-child travelogues, from 3-M (top) and 22-M (bottom)

Middle adulthood: Spiritual Aesthetics and Life Resonance

In middle adulthood, from around 2015 onward, Gen-X career women navigated a social landscape with stronger feminist voices and more intense gender debates, accentuating female subjectivity and challenging stereotypes—a phenomenon akin to a "Midlife Rebellion: A Delayed Awakening of Selfhood" (Ma, 2025). The tourism industry concurrently shifted towards experiential aesthetics, driven by culture-tourism integration that offered more space for quality, diverse, and personalized consumption. Travel increasingly became a lifestyle and integral part of everyday aesthetics (Liu & Zhang, 2014).

With greater autonomy over time and financial resources, often approaching or entering retirement, these women sought a more complete and profound engagement with travel. Respondent 7-C expressed a typical sentiment: "*After retirement, I have more time, but many places I visit might be for the last time. I plan my trips to include cities, cuisine, mountains, water, and culture, leaving no regrets.*" A marked shift was observed in their photographic records: landscape images predominated over personal portraits. This was not due to dissatisfaction with aging bodies but stemmed from enhanced perceptive abilities, allowing a deeper focus on the tourism aesthetic field itself.

These ladies actively bring a deep emotional intensity to their journeys, searching for a connection between their own feelings and the places or experiences they come across. As a result, a unique aesthetic and emotional ecology is created. One side of this is nostalgic travels that bring back memories of family vacations and earlier times. "*Every year as a child, we would come to the mountain resort to enjoy the snow. After a long illness, this was my first time back. As I walked here, the sun came out, and the warmth and tranquility of the sunlight brought back the serene and vibrant beauty of those times with my family*" (22-M, Figure 4(1)).

These women have a greater number of life transitions as they become older, particularly family conflicts and the loss of loved ones. Such tragic events significantly impact their travel experiences, leading to a profound resonance with the aesthetics of life. "*After my father passed away, I went alone to Suzhou and Hangzhou to clear my mind. At Tiger Hill, the path at the mountain gate was covered with golden ginkgo leaves, and there were red leaves on the mountain. The mix of red, green, and yellow leaves represented different life stages, exuding a vibrant energy. It made me realize that each life has its own beauty and fate, which was both poignant and comforting*" (3-M, Figure4(2)). Another respondent shared, "*That winter, I felt exhausted. At the Great Buddha Temple, I saw a plum blossom, elegant and resilient. Whether it was sunlight or Buddha's light shining on it, I felt a sudden warmth. Such subtle beauty can only be appreciated after experiencing much in life*" (15-R, Figure 4(3)).

Their diverse range of aesthetic interests is also reflected in this stage's artistic endeavors. They have a strong interest in urban cultural tourism, which enables them to identify their own aesthetic stance and way of living as well as the aesthetics of daily life. "*Citywalks make me realize that an important aspect of travel aesthetics is discovering the beauty we habitually overlook in daily life, such as a mother and child basking in the sun, elderly people playing chess at dusk, or a flower arrangement by a window. This helps me regain my dulled sense of beauty*" (24-F). In tandem with the move to retirement, respondents expressed a strong desire to pursue a life of sojourn.

In general, as these travelers progress to a stage of life characterised by greater autonomy over their time and financial resources, their aesthetic considerations in relation to travel become increasingly sophisticated. Aesthetic motivation thus becomes a fundamental psychological factor driving their travel activities, forming highly personalized aesthetic expectations. Through profound engagement and integration with the aesthetic environment of their travels, they attain a profound sense of spiritual fulfilment. The feminine aesthetics of this final stage are captured in vibrant records of the beauty of life and living, culminating in a femininity that is composed, independent, resilient, and open-minded.

Figure 4. Examples of respondents' photos, from left to right: 22-M (1), 3-M (2), 15-R (3)

4.2 The triggers of development of tourist aesthetic experiences

The aesthetic development of Gen-X career women is primarily driven by the accumulation of experience, shaped by three interconnected factors: aesthetic affections, travel experiences, and conditions for travel participation.

Trigger 1: Aesthetic Affections

Affections are central to their travel experiences, with the interpersonal context defining the emotional core of each life stage. In youth, aesthetics were tied to peer camaraderie, as traveling was simply "*about having fun with close friends*" (17-D). Motherhood shifted the focus to family bonds, where affection from mother-child interactions provided deep motivation. One respondent noted the joy of seeing the world through her son's photographic perspective, which was both "*beautiful and touching*" (22-M). In adulthood, aesthetic emotions became more reflective, resonating with personal life experiences, such as finding that "*discovering beauty is a process that takes time and life experience*" (3-M).

Trigger 2: Travel Experiences

The accumulation of travel experience itself enhances aesthetic capacity. Increased travel hones skills and builds psychological security, forming a foundation for deeper engagement: "*With more experience, I'm less fearful... so that I can enjoy the beauty better*" (3-M). Over time, diverse experiences refine personal travel habits and aesthetic preferences, moving from general sightseeing in youth to highly individualized styles in adulthood.

Trigger 3: Conditions for Travel Participation

Improved conditions—including infrastructure, economic resources, and time availability—directly enable and enrich aesthetic experiences. As one participant stated, "*Only when basic needs... are met can you appreciate beauty*" (6-B). Greater economic means and free time allow for more planned, immersive travel, facilitating deeper aesthetic appreciation. These improved conditions collectively provide the practical foundation for the continuous development and sophistication of tourism aesthetics.

5. Discussion and conclusions

This study traces the cultivation of "aesthetic women" through tourism, revealing a three-stage evolution of aesthetic appreciation among Chinese Gen-X career women, as shown in Figure 5: from a scenographic focus on bodily image in youth, to a narrative mode centered on intergenerational dialogue during motherhood, and finally to a spiritual, immersive engagement in middle adulthood. This dynamic process, visualized in the aesthetic trajectory diagrams and supported by personal imagery, is propelled by the interplay of aesthetic affections, accumulated travel experience, and improved travel conditions.

Theoretically, this research contributes a nuanced, temperate view of female aesthetic subjectivity that contrasts with Western-centric studies emphasizing conflict with the male gaze (Small, 2016). It complements destination-focused aesthetics research (Kirillova & Lehto, 2015) by restoring the tourist-as-creator perspective, where self-appreciation is integral to judgment. Furthermore, by applying a life aesthetic framework (Feng, 2013), it provides a crucial temporal perspective, showcasing aesthetics as an empirically accumulated competence that evolves with life roles, thereby addressing gaps noted in stage-specific analyses of women's travel (Gibson et al., 2012).

Practically, the findings suggest tourism aesthetics is a guided, progressive learning process. Industry practitioners should design experiences that adapt to life-stage-specific aesthetic needs—fostering interactive, narrative-rich family tourism and creating immersive, spiritually resonant spaces for mature travelers—to better align services with tourists' pursuit of high-quality life experiences.

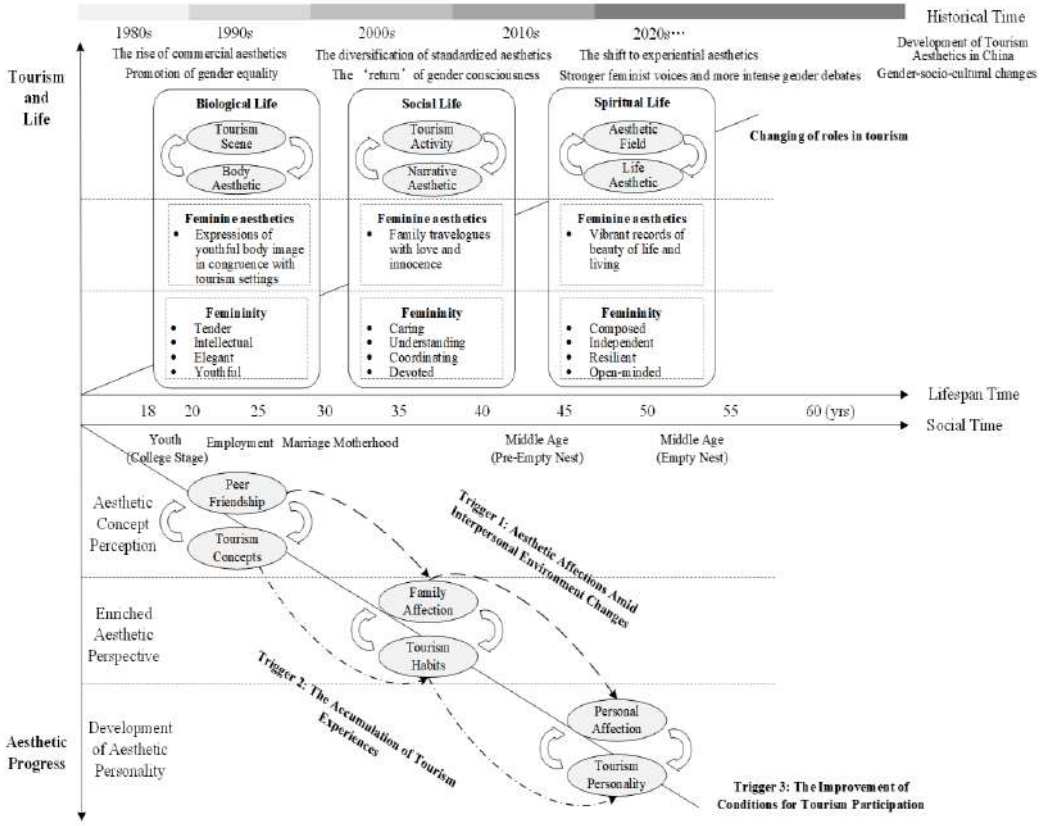

Figure 5. Changes of tourism aesthetic characteristics among Chinese Gen-X career women

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The Cost of Sustainability in Tourism Development: An Interdisciplinary Study on The Sustainable Development of Yurt Camps in Mongolia

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Abstract

The findings presented are based on a feasibility study conducted in the summer of 2022 in cooperation between Mongolian and German universities on the topic "Sustainable Tourism Planning in Mongolian Yurt Camps". The study focused primarily on two questions: What measures can be taken to improve sustainability and service standards in tourist camps in the Mongolian steppe, and under what conditions are small and medium-sized camp companies able to implement the necessary measures?

The results show that measures such as decentralized solar energy, gray water treatment, and dry toilets are technically feasible, but require investment, expertise, and ongoing maintenance that exceed the capacities of most yurt camps. Sustainability is therefore less a technological challenge than a socio-technical and governance-related one, requiring coordinated support from authorities, educational institutions, tour operators, and development organizations. The study concludes with practical recommendations for policy making, management strategies, and capacity-building approaches that aim to reconcile sustainability goals with the operational realities of small rural tourism businesses.

The Development of Tourist Ger Camps in Mongolia and National Distinctiveness

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Abstract

Keywords: Tourist ger camp, Mongolian ger, national distinctiveness, destination image, sustainable tourism

Introduction

Rationale and significance:

The tourism sector of Mongolia has become one of the leading sectors of the national economy, making a significant contribution to regional development, job creation, and the growth of foreign currency earnings. Mongolia has strong potential to distinguish itself in the international tourism market through its pristine natural environment, nomadic culture, and traditional lifestyle. The competitiveness of a tourist destination is not limited solely to natural and cultural resources but is directly linked to how these resources are transformed into tourism products and experiences. In this context, traditional national dwellings serve as an expression of destination image and national distinctiveness.

The primary accommodation facility in Mongolia's tourism regions and destinations is the tourist ger camp—accommodation facilities based on the traditional Mongolian ger (a circular, portable felt dwelling used by nomadic pastoralists). The Mongolian ger embodies nomadic culture, aesthetic philosophy, and environmentally adaptive architectural solutions, and is therefore regarded as the cultural face of Mongolia's tourism and a key expression of national image. However, in recent years, as the number of tourist ger camps has increased rapidly, uneven infrastructure development, inconsistencies in standards, and growing environmental impacts have become apparent. These trends risk weakening the cultural characteristics expressed through the Mongolian ger and may negatively affect destination competitiveness.

Therefore, there is a clear need to examine the development of tourist ger camps not only from the perspective of engineering infrastructure, but also in relation to national distinctiveness, cultural image, and sustainable tourism principles.

Research Objectives

The objective of this study is to examine the development status of tourist ger camps in Mongolia, with particular focus on national distinctiveness and cultural image.

Within the framework of the study, the following objectives were identified:

- To clarify the characteristics, cultural heritage, historical use, innovations, and the role of the Mongolian ger in shaping national distinctiveness within tourist ger camps;
- To examine the concept of tourist camps and the development status of tourist ger camps in Mongolia;
- To analyze infrastructure conditions, sustainable development challenges, and good practices in tourist ger camps

Review of the Literature

The origins and evolution of the *ger*, a defining feature of nomadic civilizations in Asia and Africa, as well as its early structural forms and design variations, have been examined by a wide range of scholars, architects, travelers, and historians. These include early historical figures such as Sima Qian (146–84 BCE), Plano Carpini (1246), and William of Rubruck (1253), as well as modern researchers and practitioners such as A. Róna-Tas (1959), Bill Coperthwaite (1960), Dan Frank Kuehn (*Mongolian Cloud Houses: How to Make a Yurt and Live Comfortably*), David Pearson, D. Maidar (1976), D. Narankhüü, and B. Myagmarbayar (2007). In addition, the use of nationally distinctive dwellings in tourism has been widely studied in regions such as Africa, Scandinavia, and Yakutia, where traditional housing forms have been adapted for tourism purposes.

International research emphasizes that destination distinctiveness plays a significant role in influencing tourists' destination choice, satisfaction, and revisit intention, and that accommodation facilities are among the key elements shaping destination image (Platov, 2021; Descarten, 2023). Studies further identify tourism infrastructure as a critical pillar of sustainable tourism, highlighting water supply, energy provision, solid waste, and wastewater management as core indicators due to their environmental impacts (www.untourism.int, 2018). The World Economic Forum has similarly identified tourism infrastructure as a key determinant of national competitiveness, describing decentralized regional infrastructure in developing countries as an "inevitable policy challenge" (World Economic Forum, 2019).

In the Mongolian context, detailed academic research on the engineering infrastructure of tourist ger camps remains limited. One of the few relevant studies, *Analysis of the Conditions of the Subprogram for Regional Tourism Development: Findings from the Accommodation Sector*, examined a sample of 100 tourist ger camps, focusing on energy sources and sanitation facilities and comparing results across economic regions (N. Sarangarav, 2019). Since that study, it remains unclear whether comparable research has been conducted, and comprehensive studies on the current conditions of tourist ger camps continue to be scarce.

Research Methodology

The study employed questionnaire surveys, quantitative research methods, statistical analysis,

and comparative analysis. Data collection was conducted through printed questionnaires and online surveys administered via Google Forms. Surveys were distributed during major industry events including Tourism Week 2025, B2B meetings between tour operators and tourist ger camps, professional training sessions organized by tourism associations, and ITM 2025. Statistical data were processed using SPSS version 24 to ensure reliability.

A total of 230 organizations participated in the survey, of which 191 valid responses were consolidated and analyzed. The survey sample represents 28.6% of the population of tourist ger camps and resorts operating in Mongolia, with a stratification level of 86.4% and a confidence level of 95% (Z = 1.96), indicating statistically reliable and valid results.

Novelty and Significance of the Study

The novelty of this study lies in the fact that it covers more than 30% of all tourist camps operating in Mongolia, thereby constituting a survey with a high level of representativeness of the population. In addition, the study clarifies current development trends and infrastructure conditions of tourist ger camps at the national level. The research findings have practical significance for the formulation of development policies, standards, green financing mechanisms, and tourism strategies based on national image in relation to tourist ger camps

1. The Mongolian Ger as The Core Image and National Distinctiveness of Tourist Ger Camps in Mongolia

Today, the Mongols are among the few peoples in the world who continue to preserve nomadic civilization in its classical form, and one of the most remarkable cultural values created by nomadic Mongols is the *ger* (S. Nina, 2022).

Archaeological evidence from the Khemcheg culture burial sites in the Mongolian Altai region, dating back more than 4,000 years to the Early Bronze Age, as well as stone enclosures with red ochre wall patterns found in the Okunev culture burial sites of Southern Siberia, has been identified. Some scholars interpret these findings as evidence that *ger*-type dwellings were already in use at that time (Ch. Munkhbayar, 2010).

Ger-type dwellings began to serve as the principal residential shelter of nomadic peoples in the early first millennium BCE. According to a source dating to 629 BCE, the Northern Di and Zhong peoples lived in ger-type dwellings, indicating that the *ger* had already assumed a form closely resembling its present structure (Sükhbaatar G., 1980).

The Mongolian *ger* (traditional yurt) is a unique architectural and interior creation that reflects Mongolians' aesthetic sensibilities, everyday life, and traditional decorative culture. This cultural heritage extends beyond its function as a dwelling and conveys multilayered cultural meanings and values (Baimandulatu; Oyun-Erdene Baasan, 2025).

Ralf Buckley, a researcher at Griffith University in Australia, noted that "the cultural landscape of the Mongolian steppes consists of four main elements: grasslands, livestock, horses, and the Mongolian *ger*" (Ralf Buckley, Claudia Ollenburg, Linsheng Zhong, 2008).

The Mongolian *ger* was inscribed on UNESCO's Representative List of the Intangible Cultural Heritage of Humanity in 2013. It is a dwelling well adapted to the mobile lifestyle of nomadic herders, being lightweight for transportation and compact and efficient to assemble and dismantle.

The traditional craftsmanship of the *ger*, encompassing multiple forms of artisanal skills, as well as the rituals and ceremonies intrinsically linked to the spatial organization of the *ger*, embody the nomadic cultural lifestyle and the distinctive characteristics of the Mongolian people, carrying significant cultural value.

Beyond Mongolia, *ger*-making traditions have been maintained with local variations among Mongolian ethnic groups in Inner Mongolia Autonomous Region and Qinghai Province of China, as well as among Mongolian communities in Buryatia and Kalmykia in the Russian Federation, and among the ancestors of Kyrgyz and Kazakh peoples (www.ncch.gov.mn, 2024).

In Mongolia, *ger*-based lodgings were first established near mineral springs in the 1940s for domestic tourism purposes, while the first tourist camp designed specifically for international visitors was established in 1962. Since that time, the Mongolian *ger* has remained the primary accommodation unit of tourist ger camps, to the extent that tourist ger camps have become inconceivable without it. In recent years, alongside traditional *ger*, there has been a growing tendency to introduce compact *ger* incorporating modern innovations and inspired by ancient Mongolian forms. Beyond Mongolia, the Mongolian *ger* is also used in the tourism and hospitality sectors in countries such as the United States, Australia, Switzerland, Sweden, Denmark, and the Czech Republic (S. Nina, 2022). In addition to direct use, *ger*-inspired architectural designs have been widely adopted to create *ger*-shaped accommodations for tourism and other purposes (www.yurtinfo.org, 2025).

Tourist accommodation significantly influences tourists' enjoyment and satisfaction and is often perceived by visitors as a "second home" (Descarten, 2023). In Mongolia, one of the most memorable experiences reported by tourists has been staying overnight in a Mongolian *ger* (Ministry of Environment and Tourism,2011). Accordingly, the Mongolian *ger* and tourist ger camps play a crucial role in enhancing tourist satisfaction at destinations.

Contemporary tourism research identifies destination distinctiveness as one of the key factors determining destination competitiveness, tourist choice, satisfaction, and revisit intention. Destination distinctiveness is understood as the combined effect of natural environment, cultural heritage, lifestyle, architecture, and service characteristics (Platov, 2021).

Destination image is generally considered to be formed through three stages: pre-travel perceptions, on-site experiences, and post-travel impressions. Accommodation facilities, their spatial environment, and architectural form play an important role in shaping this image (Descarten, 2023). Consequently, there is a growing theoretical perspective that views tourist accommodation not merely as a service facility, but as "spatial content" that communicates destination distinctiveness and cultural messages.

Tourist accommodation not only ensures comfort and safety for visitors but also serves as a key component expressing the cultural characteristics of a destination (Adey, P., 2024). Tourism infrastructure should therefore be understood not solely as a set of physical facilities, but as a system that transmits socio-cultural meaning.

The use of traditional, nationally distinctive accommodation in tourism is a widespread global practice. Examples such as traditional thatched dwellings in Africa, Yakut log-hut camps, and Scandinavian eco-lodges demonstrate how natural and cultural distinctiveness can be successfully embedded in tourist experiences (Bolormaa, 2005).

National Geographic identified 55 of the world's most distinctive lodges across 30 countries on seven continents in its list of "Unique Lodges of the World." Among these, four lodges are located in Asia, including the Gobi Three Camel Lodge in Mongolia (National Geographic, 2014).

A common finding across these studies is that when traditional architectural forms are effectively combined with modern comfort and engineering infrastructure solutions, tourist satisfaction and destination competitiveness increase significantly.

2. CONCEPT OF THE TOURIST GER CAMP

In Mongolia's tourism destinations, the primary accommodation facility for receiving and accommodating tourists is the tourist ger camp. The first tourist ger camps were established in 1962 in Terelj and Ömnögovi, where ten gers were erected, forming the initial foundation of tourist ger camps. In 1968, camps capable of accommodating 50 guests in ger units and serving meals to 70 guests simultaneously were established in both Ömnögovi and Terelj (Sh. Nergüi, 2014). From this period onward, the Russian terms *"tur baza"* and *"turisticheskii baza"* were directly adopted into Mongolian usage, eventually becoming standardized as the term "tourist ger camp."

One of the earliest establishments that may be described as a tourist camp was founded in 1894 on the Isle of Man in England for children from Liverpool. By 1938, approximately 150 holiday camps were operating in the United Kingdom (Billy Butlin, 1982). In the Soviet Union, the first tourist camps began to be established in the mid-1930s; for example, the "Chusovaya" tourist camp in the Ural region was founded in 1934 and continues to operate to the present day (www.chusovaya.ru, 2025). In the United States, accommodation facilities known as tourist camps and tourist courts, designed primarily for automobile travelers, were widely developed between the 1930s and the 1960s (encyclopediaofarkansas.net, 2025).

In Western countries, accommodation facilities referred to as holiday camps or tourist camps initially operated in forms similar to resorts, children's camps, or spa facilities. Over the course of their development, particularly from the mid-1930s onward, they gradually evolved to acquire characteristics comparable to those of contemporary resorts.

In Mongolia, facilities similar to holiday camps, intended primarily for domestic recreation, began to be established from the 1940s onward, often located near mineral springs. These facilities mainly served domestic tourists (Sh. Tseren, 1966). However, at that time,

accommodation facilities for international tourists were limited, infrastructure was underdeveloped, and the sector was in its early stages. Consequently, foreign tourists were occasionally accommodated in domestic recreation facilities (Sh. Nergüi, 2014).

The concept of the tourist ger camp has been translated into English in various forms, including *tourist camp*, *gher/ger camp*, *tourist ger camp*, and *yurt camp* (S. Amarjargal, 2011). In Mongolia's legal and regulatory documents and standards, the term "tourist ger camp" is defined as follows:

1. A tourist ger camp is defined as a tourism service organization that provides accommodation, food and beverage, and additional services, and that is established based on natural, historical, and cultural resources (MNS 6043, 2019).

2. A resort complex is defined as "a permanently operating facility established based on natural resources, providing accommodation, food, and additional services, and consisting of a combined form of accommodation types" (MNS 5824, *Types of Tourism Accommodation and General Requirements*, 2007).

At the national level, 143 tourist ger camps were operating in Mongolia in 2004, increasing to 327 in 2010, of which 79 were classified as "flower-rated" camps (Ministry of Environment and Tourism, 2010). As of 2024, a total of 667 tourist ger camps and recreation facilities are in operation nationwide (Ministry of Culture, Sports, Tourism and Youth, 2024). In recent years, as basic infrastructure in tourism destinations has improved, a noticeable increase has been observed in the number of tourist ger camps, particularly resort-type facilities, alongside improvements in their infrastructure.

As of 2020, approximately 342,409 households in Mongolia were living in Mongolian gers (Khoroo, 2020). Assuming an average of 25 gers per camp, approximately 17,000 gers are currently used within the country's 667 tourist ger camps (Ministry of Culture, Sports, Tourism and Youth, 2024). In addition, more than 2,800 gers are operated by local residents providing guest accommodation services, bringing the total number of gers used as tourist accommodation to approximately 20,000 nationwide. The majority of these are Khalkha-type gers, while Kazakh gers are commonly used in Bayan-Ölgii Province. In tourist accommodation, five-wall gers are most commonly used, whereas larger gers with six to eight walls or more are typically utilized as restaurant facilities.

3. RESEARCH RESULTS

3.1. General Information on Participating Organizations

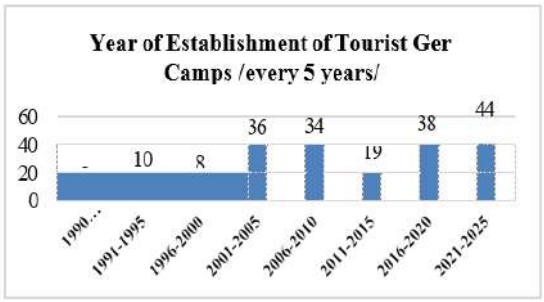
From February to November 2025, the research team conducted a survey using both printed questionnaires and online questionnaires distributed via Google Forms. A total of 230 organizations participated in the survey, of which 191 valid responses were consolidated and analyzed. The survey sample represents 28.6% of the population, with a stratification level (geographical representativeness) of 86.4% and a confidence level of 95% (Z = 1.96), yielding a margin of error of ME = 1.96 × 0.0302 = 0.0591, or ±5–6%. Therefore, the survey can be considered statistically reliable and valid.

The research aimed to include tourist *ger* camps—accommodation facilities based on the traditional Mongolian *ger* (a circular, portable felt dwelling used by nomadic pastoralists)—from all 21 provinces

of Mongolia, with particular emphasis on those located in major tourist destinations. Tourist ger camps from Ulaanbaatar city and 18 provinces participated in the survey, representing 28.6% of the 667 tourist ger camps and resorts operating nationwide (Ministry of Culture, Sports, Tourism and Youth, 2024).

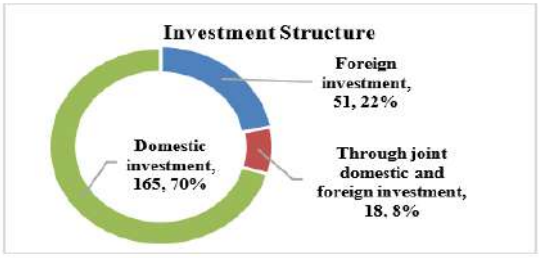
Figure 1. Location of Tourist Ger Camps Included in the Survey

Figure2.Year of Establishment of Tourist Ger Camps



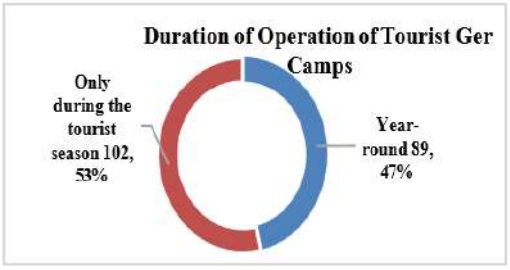
As shown in Figure 2, the highest number of tourist ger camps were established during the periods 2001–2010 and 2016–2025. In particular, significant investment in tourist ger camps occurred after the COVID-19 pandemic, resulting in the establishment of numerous new camps and resorts. These newly established facilities account for 23% of the 191 surveyed organizations.

Figure3.Duration of Operation of Tourist Ger Camps



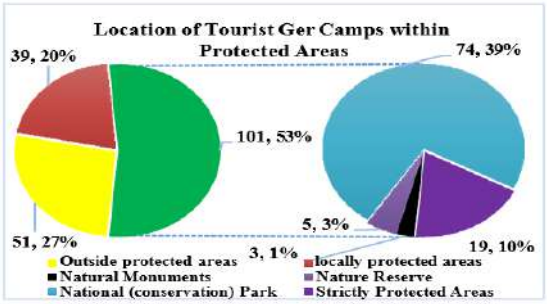
The results indicate that 53% of tourist ger camps operate only during the tourist season, while the remaining 47% operate year-round. For year-round tourist ger camps, infrastructure issues such as energy supply, heating, and water and wastewater systems are of particular importance.

Figure 4. Investment Structure of Tourist Ger Camps



Among the surveyed tourist ger camps, the majority (165 camps) were established with domestic investment. Fifty-one camps (22%) were established with foreign investment, while 8% were established through joint domestic and foreign investment.

Figure 5. Location of Tourist Ger Camps within Protected Areas



In terms of location, 53% of tourist ger camps operate within nationally protected areas, while 20% operate within locally protected areas. This indicates that 73% of the surveyed camps are located in areas with some form of protection. Of these, 74 camps are located in natural complex protected areas, representing the largest share. Meanwhile, 27% of tourist ger camps operate outside protected areas.

Figure 6. Location of Tourist Ger Camps by Natural Zone

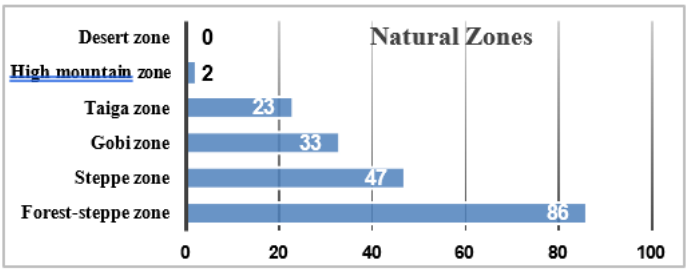


Figure 7. Number of Tourists Hosted by Tourist Ger Camps in 2024

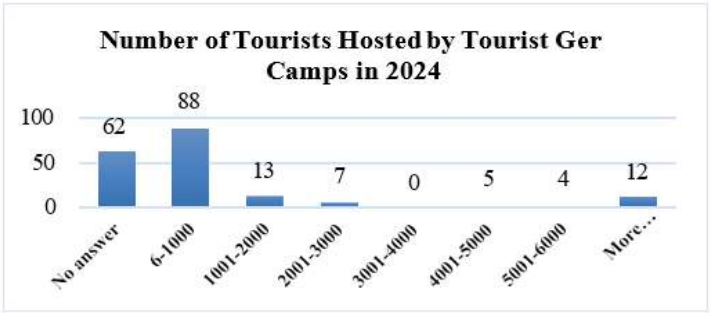
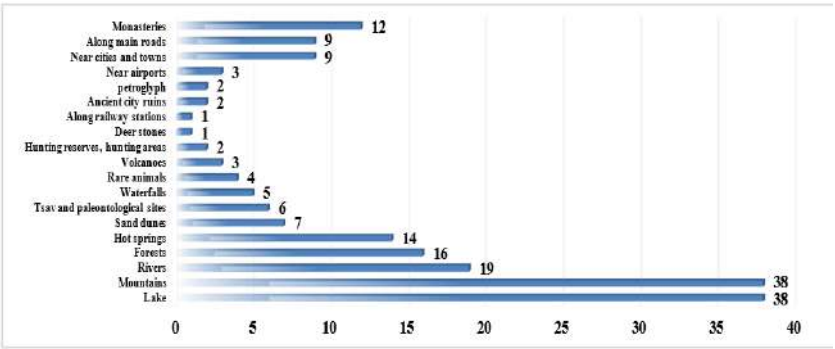


Figure 8. Key Resources Utilized by Tourist Ger Camps



4.2. Accommodation Conditions of Tourist Ger Camps

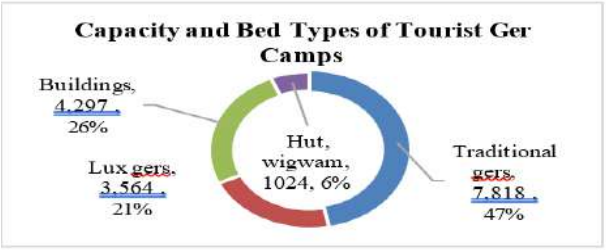
Accommodation services constitute the core component of tourist ger camp operations. Providing comfortable lodging facilities supported by adequate basic infrastructure is therefore a fundamental requirement.

The 191 tourist ger camps included in the survey collectively provide accommodation in 4,903 units, including traditional “Mongolian ger” (ger), luxury “ger” equipped with private toilets and showers, lodges, cabins, and conical or summer houses.

Figure 9. Types of Accommodation Facilities in Tourist Ger Camps

Of these accommodation units, 75% (3,653 units) consist of traditional "Mongolian ger" and luxury "ger", demonstrating that "ger"-based accommodation remains the primary lodging option.

Figure 10. Capacity and Bed Types of Tourist Ger Camps

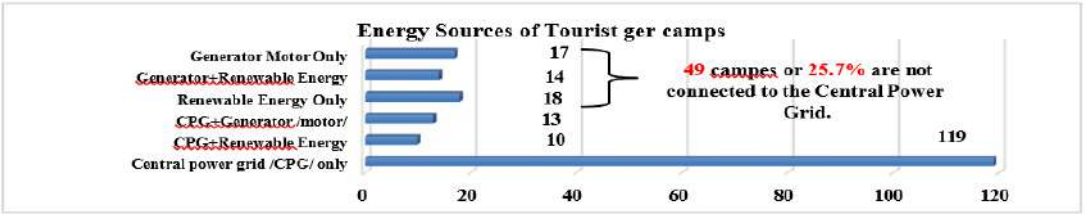


The surveyed 191 organizations collectively offer a total capacity of 16,703 bed-nights, accounting for 37.6% of the total accommodation capacity of tourist ger camps in Mongolia. This indicates a high level of representativeness of the survey sample.

The subsequent section presents findings related to infrastructure conditions, including energy supply, heating, water supply, and wastewater management. A reliable energy source is one of the most critical infrastructure requirements for tourist ger camps, which are typically located far from centralized settlements. While grid electricity is the most reliable and cost-effective source, 25.7% of the surveyed camps are not connected to the central power grid. Among these, 16.2% rely on generators and renewable energy sources.

Furthermore, 9.4% of tourist ger camps reported relying exclusively on renewable energy sources, such as solar and wind power. Although this demonstrates the importance of renewable energy in remote areas, it also highlights the necessity of ensuring reliability through hybrid energy systems.

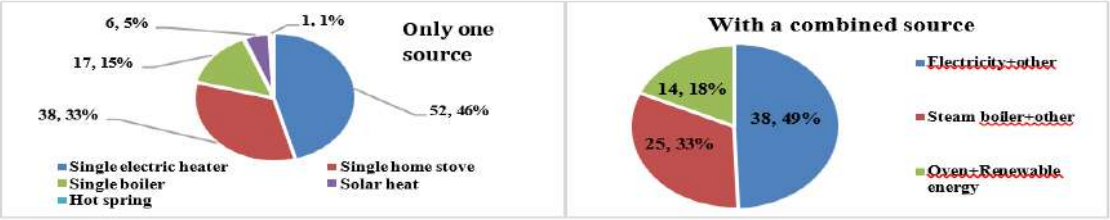
Figure 11. Energy Sources of Tourist Ger Camps



Given Mongolia's four-season climate, heating is a critical issue for tourist ger camps. For year-round operations and camps located in northern latitudes, maintaining adequate indoor

temperatures in guest ger and restaurant facilities during spring and autumn poses significant challenges.

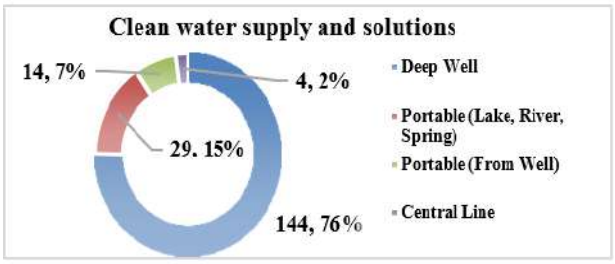
Regarding geographical distribution, 17.2% of surveyed tourist ger camps are located in the Gobi region, 24.6% in the steppe zone, and the remaining 58.1% in forest-steppe, high



mountain, and taiga regions. Seventy-eight camps reported using hybrid heating systems that combine boilers, electric heating, ger stoves, and central heating networks.

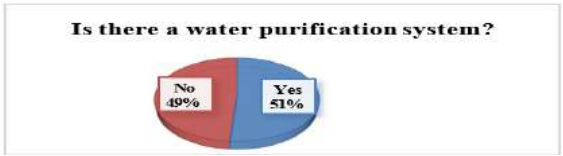
In contrast, 114 camps (60%) rely on a single heating source. Among these, 46% use electric heaters exclusively, while 33% rely on traditional ger stoves for heating.

Figure 12. Heating Sources of Tourist Ger Camps
Figure 13. Clean Water Supply of Tourist Ger Camps sources due to the lack of on-site wells.



Seventy-six percent of tourist ger camps obtain clean water from deep wells, while only 2% are connected to centralized water supply systems. However, 15% (29 camps) rely on surface water sources such as lakes and rivers for drinking water, which presents significant health risks. An additional 7% transport water from external sources due to the lack of on-site wells.

Figure 14. Water Purification Systems in Tourist Ger Camps



Although many camps source water from deep wells, only 97 camps (51%) reported having water purification systems for drinking water.

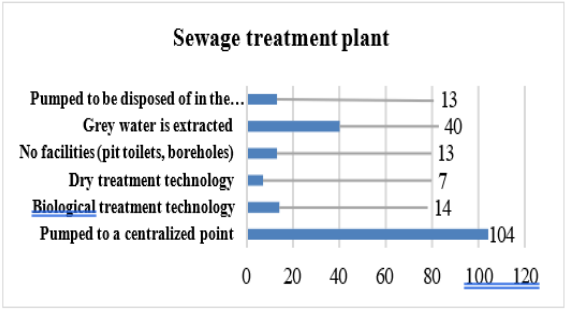


Figure 15. Wastewater Treatment Facilities of Tourist Ger Camps

The majority of tourist ger camps (54.5%, or 104 camps) transport wastewater using vacuum trucks to centralized treatment facilities. These camps are typically located near urban settlements. Regarding wastewater treatment technologies, 7 camps reported using dry treatment systems, 14 camps use biological treatment

technologies, and 40 camps reported producing greywater, collectively accounting for 32% (61 camps) of the total.

However, 13.6% of tourist ger camps reported that they do not treat wastewater and continue to discharge wastewater directly into the natural environment. While 17% reported reusing treated greywater, 83% indicated that they do not generate greywater, corroborating previous findings.

Table 1. Selected Practices for Reducing Water Consumption in Tourist Ger Camps

Water conservation practices	**Response frequency**
Promoting water-saving behavior among guests through awareness and guidance	17
Installation of sensor-based water-saving mixers and faucets	16
Reuse of greywater for irrigation of green areas	15
Implementation of time-based restrictions on hot and cold water supply	13
Rainwater harvesting and storage for landscape irrigation	4
Installation of dry-technology bio-toilets in luxury gers	3
Eco-camp practices, including limited hot towel service	2
Luxury gers equipped with bucket-based bathing solutions to reduce water consumption	1

The most frequently reported practices include providing water-saving guidance to guests and installing sensor-based faucets. Other practices include limiting water use by time schedules andreducing shower pressure. Although less common, innovative practices such as providing hot towel services and reusing greywater for toilet flushing were also identified.

Conclusion

1. The Mongolian *ger* is a unique cultural heritage inscribed on UNESCO's lists, representing more than 4,000 years of Central Asian nomadic civilization. It embodies cultural traditions, nomadic lifestyles, architectural knowledge, spiritual values, worldviews, and national distinctiveness that have been continuously practiced from ancient times to the present.
2. Since the 1940s, when the Mongolian *ger* began to be used for spa and recreational purposes, and particularly since 1962, when it was adopted to accommodate international tourists, it has evolved into the primary accommodation unit of tourism destinations under the designation of the tourist ger camp. To date, approximately 20,000 Mongolian gers are used nationwide for tourism accommodation purposes.
3. In Mongolia's tourism sector, the *ger* is widely used not only as accommodation within tourist ger camps and resorts, but also as a multifunctional service space. These uses include nomadic lifestyle experience tours, *ger* construction demonstrations, mobile nomadic activities, community-based tourism and nomad homestays, cultural and tourism events, exhibition and information centers (tourist information centers), *ger* restaurants, *ger*-based spa and wellness facilities, *ger* museums, and souvenir shops.

4. Surveys of tourists visiting Mongolia indicate that staying overnight in a Mongolian *ger* is consistently identified as one of the five most memorable travel experiences. This suggests that the Mongolian *ger* is not merely an accommodation facility, but a core experiential element through which tourists directly engage with nomadic culture. Accordingly, it functions as a key symbol of Mongolia's tourism sector and a central expression of national distinctiveness within tourist ger camps.
5. The findings of this study indicate that 49% of the accommodation capacity of the surveyed tourist ger camps consists of traditional Mongolian gers, while 26% comprises compact gers and ger-shaped luxury accommodations inspired by innovative interpretations of thirteenth–fourteenth-century Mongolian designs. This demonstrates that cultural distinctiveness plays a significant role in shaping tourist experiences.
6. Tourist ger camps in Mongolia are primarily concentrated in and around Ulaanbaatar, Khövsgöl, Kharkhorin, the Gobi region, and the Khangai mountain areas, particularly in lake basins, river valleys, hot spring zones, sand dune areas, and sites of paleontological significance. Since 2021, following the COVID-19 pandemic, investment in tourist ger camps has increased markedly, leading to the establishment of new camps and resorts, expanded capacity, and a gradual reduction in seasonality.
7. Although domestic investment predominates in the development of tourist ger camps and engineering infrastructure has improved, significant disparities remain across destinations. Differences in standards and environmental impacts indicate that many camps do not yet fully meet sustainable development requirements. These shortcomings pose potential risks to tourist satisfaction and the long-term competitiveness of destinations.
8. The results of the study also reveal the emergence of good practices aligned with sustainable development policies, including more efficient water use and the introduction of environmentally friendly wastewater management solutions in some tourist ger camps. These practices demonstrate positive progress toward sustainability within the sector.

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The Impact of Tourism Interpretation on Tourist Involvement and Perceived Authenticity: The Case of Dazu Rock Carvings

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Abstract

A tourism destination's interpretation program not only transmits scientific information to visitors but also strengthens emotional connection between tourists and heritage resources. Related studies have shown that high-quality tourism interpretation can enhance tourists' involvement and affect their perceived authenticity (Zhang, Zheng & Rui, 2023). It is the purpose of this study at Dazu Rock Carving to empirically test the relationship between interpretation, tourist involvement, and perceived authenticity. The four research hypotheses are:

H1: tourism interpretation has a positive effect on tourism involvement

H2: tourism interpretation has a positive effect on perceived authenticity

H3: tourist involvement has a positive effect on perceived authenticity

H4: tourist involvement plays a mediating role between tourism interpretation and perceived authenticity

The interpretation in this study refers to a service method that links tourist attractions and tourists through a specific medium, allowing tourists to have a deeper understanding of the natural and cultural information in the scenic area. This medium can be an interpreter, a commentary sign, or a mobile terminal. Based on the SERVQUAL model (Saleh & Ryan,1991) and the actual situation of the interpretation service at the Dazu Rock Carvings, a tourism interpretation evaluation scale with six dimensions of reliability, responsiveness, tangibility, empathy, assurance and education is designed Tourist involvement is measured by tourists spending money and time to experience tourism interpretation voluntarily in order to obtain more information, intellectual satisfaction, and a sense of pleasure. According to the Enduring Involvement Scale(Williams, Patterson & Roggenbuck, 1992), tourism involvement includes three dimensions: attraction, self-expression and centrality. Perceived authenticity is a subjective judgment of tourists on whether the natural landscape and cultural characteristics of a scenic spot maintains its authenticity after experiencing an interpretation program.

The researcher collected 403 valid sample cases through an online questionnaires survey about Dazu Rock Carvings, a world cultural heritage. The four hypotheses were verified by linear regression analysis. The results show that: (1) The six dimensions of tourism interpretation have significant positive correlation with tourist involvement, and tourism interpretation has a positive impact on tourism involvement ($p=0.000<0.01$); (2) The six dimensions of tourism interpretation have significant positive correlation with perceived authenticity, and tourism interpretation has a positive impact on perceived authenticity ($p=0.000<0.01$); (3) The three dimensions of tourist involvement are significantly and positively correlated with perceived authenticity, and tourist involvement has a positive impact on perceived authenticity

($p=0.000<0.01$); (4) Tourist involvement plays a significant mediating effect between tourism interpretation and perceived authenticity.

Results of the study show that heritage interpretation is a valuable part of tourism by encouraging tourist involvement and promoting authenticity. For this reason, quality interpretation is indispensable.

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The Improbability of Touristic Authenticity

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Abstract

Because Asia is richly endowed with historical traditions and for future cultural sustainability, authenticity deserves special attention. Authenticity factors according to UNESCO World Heritage Convention are material, form and design, technique, and function. Besides heritage tourism, spiritual tourism and culinary tourism also require authentic experiences.

Given the extensive discourse, the idea of authenticity remains fluid. The tourist is said to seek authentic experiences in a postmodern pilgrimage, characterized by immersion, intensity, and commitment (MacCannell, 1976). Yet authenticity itself defies definition: that authenticity is always somewhere else, while staged authenticity is the best that the tourist can approach.

Aristotle likewise takes a circumventive act. His theory of four causes explains how a thing comes to be: the material cause concerns physical substances in the making of the thing; the formal cause is the design and appearance; the efficient cause speaks about the craftsman's art and skill; and the final cause is the production purpose. The causes are preconditions to a thing's completion, from which the work of time and change shapes a shadowy idea of authenticity. As we track the pre-existence causes and chase the elsewhere-ness, it is the purpose of this study to illustrate that authenticity in tourism is unrealistic and undesirable based on philosophical reasoning.

The unreality of authenticity is examined in two ways. In his Metaphysics, Aristotle postulates non-being as falsity (incorrect proposition), privation (absence of essence), and potentiality (before actualization). Tourism authenticity is questionable because a site that undergoes change and restoration no longer retains the absolute origin. When erosion and damage befall, or modification and additions arise to a being, the resulting thing/site is a non-being. That something is and is not the same thing is a self-contradiction. A statement like a restored section of the Great Wall "is original" is a compromise (falsity), its functionality or purpose no longer defense (privation), and once completed (actualized), the potential of being something other than Great Wall ends. Once a thing is caused and comes to be, changes are inevitable. Authenticity and change are logically paradoxical. Because the metaphysical being precludes relativity, e.g., "relatively authentic" is dubious. Aristotle avoids authenticity and focuses on causes instead, and his non-being is our first justification of the unreality of authenticity.

As heritage sites are set in historical and cultural contexts, they carry meaningful stories to their visitors. The site and the audience each is a half of the narration. A second authenticity unreality is detected in this reciprocity. Existential authenticity as that which involves corporeal and emotional consciousness and a return to true self (Wang, 1999). A heritage site being an instigating agent of existential authenticity requires a visitor-to-site congruence. The self is validated in the encounter with the site, particularly in the meaning projected by the site

(e.g., the Great Wall symbolizes threat and resolution). A truth (e.g., the Great Wall signifies cultural conflict) is thereafter valid to the visitor. According to Merleau-Ponty (1945/2013), the human body, space, and time co-construct a sense of being. Reality, on the other hand, is a lived-in experience relating to personal and social identities such as gender, race and economics. Because the visitor is a being of a body, space, and time, while the heritage site belongs to a different situational reality, a phenomenological self-to-site congruence is unlikely due to the separation. For example, it is unrealistic to existentially authenticate the Great Wall's hard labor or the warrior's death, especially in tourism settings. This is the pretense reasoning: despite the tourist's desire to feel the reality of toil and killing, existential authenticity is unrealistic.

Assuming that authenticity was possible, there are three reasons that it is undesirable. The first is the elitist argument. In Horwitz's (1998) writing about American Civil War reenactment, authenticity of a participant's equipment, speech, and performance is a virtue. "Farb" (far from being authentic) is derogatory and a vice. Authenticity is an obsession of dedicated reenactors. Their investments in time, money, and learning define the hard-core. Extreme authenticity is an elitist ethos of the few.

The second is the pretext argument. Authenticity can be elitist to the extent that it also displays one's privilege, as in the case of colonial gaze: tourist from a dominant culture (the colonizer) demands authenticity in the destination (the colonized), making authenticity a one-sided perspective based on power imbalance, superior identity, and self-aggrandization. Implied in the authenticity pretext is Plog's (1991) allocentric travelers seeking adventure outside the tourism environmental bubbe (Cohen, 1972). It is a quest for self-authenticity (Varger & Guignon, 2023) toward enlightenment and fulfillment. This is particularly conspicuous in Asian heritage tourism relating to Taoist hermits, Hindu ascetics, and Japanese Wabi Sabi aesthetics. In prioritizing a destination's museum-grade authenticity, often in primitive conditions, overlooked is the local social and economic realities and developmental needs, and criticized is staged authenticity. The discriminating and self-eminent sentiments make authenticity dangerous and undesirable to the host community.

Cost is another foe of authenticity maintenance and the third argument. Tanizaki Junichiro (1933/1977) writes about building an old-style Japanese house for its beauty and mystery. The expense for modeling traditional features makes the project prohibitive. Excessive investment in heritage authenticity is likewise unaffordable or comes at the expense of other priorities.

Given the unreality and undesirability positions, touristic authenticity appears to be an improbable virtue. Pragmatic accommodation such as interpretation to highlight heritage meanings is as important as material preservation. Through interpretation, tourists attain understanding, appreciation, and action (e.g., protection; Tilden, 1957/2007). For Asia's tourism development, owning an indigenous narrative is critical, and, in good faith, the improbability of authenticity should be critically spoken.

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The Mediating Effect of Employee-AI Collaboration on The Relationship Between AI Awareness and Thriving at Work

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1. Introduction

Nowadays, AI has been widely used in the workplace, and the relationship between AI and employee has attracted more attention. Based on social cognition theory, this study propose a theoretical framework of AI awareness, employee-AI collaboration, promotion focus, and thriving at work. The study aims to examine how AI awareness affects thriving at work, as well as the mediating role of employee-AI collaboration and the moderating role of promotion focus in this process.

2. Research Methodology

A total of 543 valid questionnaires were collected based on questionnaire survey, and the data were analyzed using SPSS and Mplus software to test the relationship between the variables.

3. Results

The findings indicate that (1) AI awareness has a significant positive effect on thriving at work, including its learning and vitality dimensions. (2) There is a positive relationship between AI awareness and employee-AI collaboration. (3) Employee-AI collaboration has a significant positive effect on thriving at work, including its learning and vitality; (4) Employee-AI collaboration mediates the relationship between AI awareness and thriving at work, as well as between AI cognition and the learning and vitality dimensions. (5) Promotion focus positively moderates the effect of AI awareness on employee-AI collaboration. (6) Promotion focus positively moderates the indirect effect of AI cognition on thriving at work through employee-AI collaboration, and it also positively moderates the indirect effects of AI perceptions on the learning and vitality dimensions through employee-AI collaboration.

4. Theoretical and Practical Implications

This study makes dual theoretical contributions: （1） It extends AI research in human resource management by adopting positive functional perspectives to investigate strategic integration mechanisms that optimize employee-AI collaboration within organizational ecosystems. （2） It advances the antecedent research on thriving at work through introducing employee-AI collaboration as a novel mediating variable and promotion focus as a critical moderating variable, thereby delineating mechanistic pathways and boundary conditions for thriving in AI-augmented work environments. These findings may combined to shed insights

for organizational stakeholders to enhance AI system literacy, foster symbiotic employee-AI ecosystems, and advance digital-intellectual transformation initiatives through evidence-based management practices.

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The Location and Size of Chinatowns: A Preliminary Analysis

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Abstract

Unlike other settlements in space, Chinatown is a cultural enclave, and hence cultural distance is instrumental in determining its behavior. This study thus examines how the geographic location and size of Chinatowns are affected by cultural distance between the host country and China. We collected data, with AI assistance, of 130 Chinatowns in the world, and analyzed 120 Chinatowns which met our study requirements. We found that the effects of cultural distances are highly consistent and robust in explaining location and size of Chinatowns from different angles. Cultural distances appear to dominate geographic distance in affecting the size of Chinatowns in a nonlinear way. Notwithstanding the rejection of conventional geographic principles, the study result supports our hypothesis that cultural distances shift the competition between Chinatowns and other business districts from geographic dimension to cultural dimension.

Keywords: geographic distance, cultural distance, location choice, differentiation, Chinatown

The Misguiding Art of Seeing: The Case of Hong Kong and Singapore

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Abstract

Hong Kong and Singapore are similar in geographical attributes, economic prosperity, and a British colonial history. Both are important global destinations aided by a flag carrier airline ranking among the world's best. Airlines use attractive graphic designs to promote a destination. With a media and an audience, an inviting message is essential. The message is two-fold: visual contents and cultural contexts. It was the purpose of this study to examine the graphic contents and interpret the contextual narratives of Hong Kong's and Singapore's airline poster art.

Seeing is both a sensation and an outlook. The mind weaves together visual information, intellectual understanding, and emotional provocation into a perspective, i.e., a constructed lifeworld. But sights can be scripted with a selectivity filter. To entice looking, tourism media contrives a hedonistic and romantic sphere, resulting in a cosmeticized destination lifeworld. For this reason, we hypothesized that travel poster art is inadvertently tinted.

Methods

Creative hermeneutics (Fu, 1976) is a deliberate interpretation method. Its elucidation is creative because past knowledge, e.g., a philosophical writing, is set in a present context, so that each generation of scholar creates a new understanding. A modified creative hermeneutic approach was adopted for this study to interpret images rather than texts. Its first step was a graphic content analysis (Bell, 2012) to illustrate the posters' visual elements. This was followed by steps 2: what do the posters intend to signify? 3: what could they reflect? 4: what should they acknowledge? and 5: what must they admit? The posters' lifeworld is drawn out through the process, i.e., their meaning making is exposed.

Results

In step 1 (the illustrated), 52 Hong Kong and 16 Singapore vintage airline posters were curated. The contents were organized into themes (landscape, objects, people), coded according to variables and values, and quantitatively counted by frequencies and percentages.

Step 2 (the intended) was a qualitative critique of the graphic contents in two ways: the nescient intuition and the ironic deliberation. In the nescient view, the posters have recognizability, desirability, and relatability that qualify for a good corporate visual identity (Petty, 2023). Recognizability and desirability come from artistic design, so the audience is attentive and interested, their eyes linger. The images also intended to show cramped urban landscapes (74%) and frenzied streets (26%). There are coolies (39%) and women (55%) in exotic slim fit clothing (Cheongsam, sarong, 38%). They move around in outdated transportation vehicles (rickshaws, 9%; Junk boats, 49%).

Step 3 (the reflected) was where the ironic deliberation takes issue with relatability. Graphic art has intentionality, i.e., to illustrate a lifeworld, but the intentionality is audience determined, because media delivers audience desires. Relatability is a media and audience collaboration to co-define a destination's perceived reality. This reality is colored to suit tourists' cultural values. The posters' reliability value embodies colonial gaze, male gaze, and medical gaze of Hong Kong and Singapore. If the audience is Western travelers, the images will have a Western narrative. When the narrative is Orientalism, the destination will be an exotic Orient.

Said's (1978) Orientalism is a criticism of media's distorted and dismissive description of Asia. Step 4 (the acknowledged) showed that the posters borrow a page out of the Orientalism playbook: that Asia is sensual and exotic. It must be acknowledged that a slice of Orientalism is chosen to appease Western imagination. Although romantic, the posters suppress the complexity of Asia's place, people, and culture, therefore misguiding the audience.

In step 5 (the admitted), the posters' Otherness (Levinas, 1972/2006) implication was detected. The Other is strange, inferior and treacherous. Western modernization is their hope; discrimination, exploitation and annexation are therefore legitimized. The Other is needed for the West's self-identity. The Self (tourist) seeks to verify their cultural knowledge (Orientalism) and expects the Other (locals) to conform to their views. Hong Kong and Singapore in the posters appear backward, irrational, and subservient. This insidious obsession of the Oriental Other must be admitted.

By "returning to the phenomena," Merleau-Ponty (1945/2010) calls us to personally experience situational reality and allow it to change us, as opposed to understanding the world in a superficial way. To do so, tourists should consider bracketing: to sense the encounter, suspend judgment, question media's ideologies, and resist conformist impressions, so that the experience is a return to the destination's lifeworld rather than the tourist's fantasy world.

Tourism is fundamentally a phenomenon of difference about people and places, yet by personalizing the destination's lifeworld, tourists and hosts are different and equal. Levinas (2006) says that true personal freedom and self-affirmation are actualized through responsibility and justice. This truth is in seeing selfness and Otherness as one: there is a unity of all-of-us without a binary us-and-them.

This sensibility begins with the marketer's art of seeing. Evocative Orientalism and Otherness shades are avoidable. Merleau-Ponty (2010) says that the cane is more than a tool. It is integral to the blindman's body in the world. The tourist is a blindman, destination posters are their cane. That the cane is not misleading is of tourism ethics. The cane maker, i.e., graphic designers, should be careful about ideological influences.

If the West's cavalier attitudes toward the Orient come from wealth, the newly developed Asian countries are equally capable of being bold, their tourists recycling Orientalism gaze in an opposite order, treating global south destinations as the Other. It is also imaginable that the rising Asia someday overpowers the West, when Western destinations are regarded as subordinate. What remains true is that tourism media does not misguide the tourists.

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The Role of Psychological and Physical Distance in Shaping Tourists' Interest in Mongolia

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Abstract

This study investigates the interplay between psychological and physical distance in shaping Chinese tourists' interest in Mongolia, a destination geographically close but perceived as psychologically distant due to cultural unfamiliarity, harsh climatic imagery, and infrastructure concerns. The research is crucial for understanding how these perceptions influence travel decisions and for developing effective tourism strategies. Previous studies have shown that psychological distance often mediates the relationship between physical distance and tourism interest, with social influences playing a moderating role. This study proposes an exploratory sequential mixed-methods design, beginning with a qualitative exploration of tourist narratives from social media platforms like Xiaohongshu and WeChat, followed by quantitative validation through a large-scale survey. The qualitative phase uses a systematic process that combines human expertise with large language models (LLMs) through an LLM-in-the-loop framework. The quantitative phase employs structural equation modeling to test the proposed relationships and moderating effects. The main contributions of this study include providing a comprehensive framework for understanding the complex interplay between psychological and physical distance in tourism, highlighting the role of social influences in reducing perceived distance, and offering practical insights for tourism marketers aiming to attract Chinese tourists to Mongolia. Encouraging preliminary findings indicate that social media narratives often frame Mongolia as "remote," "empty," or "challenging," which amplifies emotional and hypothetical distance. However, these narratives also reveal opportunities for strategic interventions to reshape perceptions and enhance travel appeal.

Keywords: Social Impact Theory, Psychological Distance, Physical Distance, Tourism Management

1. Introduction

Mongolia, a region known for its rich nomadic heritage, breathtaking landscapes, and unique cultural experiences, holds significant potential for attracting international tourists seeking cultural and adventure tourism. Despite its allure, this region remains underexplored by key markets, such as Chinese outbound travelers, who represent one of the fastest-growing segments in global tourism (Times, 2024). While destinations like Southeast Asia and Europe continue to attract millions of Chinese tourists annually, Mongolia struggles to capture this market due to various barriers, including limited media representation, safety concerns, and cultural unfamiliarity. These challenges highlight the need to address both psychological and physical distance to unlock the tourism potential of the region (Kantarcı et al., n.d.).

In tourism research, the distance decay model emphasizes that physical distance, as measured by geographic proximity typically influences travel decisions, with nearer destinations being more appealing due to lower travel costs and time. However, this model alone cannot fully explain tourist behavior in cases where psychological distance plays a dominant role. Psychological distance, which includes dimensions such as cultural, social, temporal, and cognitive distance, often overrides physical proximity when perceived barriers are high (Zhang et al., 2020). For example, despite being geographically close, Chinese tourists may perceive Mongolia as culturally distant, which significantly reduces their willingness to visit

The decision-making process for tourists is shaped by a combination of physical distance, which is often measured by geographic proximity, and psychological distance, encompassing factors such as cultural, social, and emotional gaps. Recent studies emphasize that while physical distance is a foundational determinant of travel behavior, psychological distance can serve as a significant moderator, either amplifying or mitigating the effects of geographic proximity. For example, Chinese tourists may view Mongolia as culturally distant despite its geographic closeness, creating a disconnect between the region's potential and its actual appeal as a tourist destination (Kantarcı et al., n.d.; Lee et al., 2012).

Social impact theory offers a valuable framework for understanding how perceptions of psychological distance are shaped through social influences, particularly in the context of tourism research. Developed by (Latané, 1981), this theory posits that individuals are influenced by the presence and actions of others, with the degree of influence determined by three primary factors: immediacy, strength, and number of social sources. These factors interact to shape individuals' perceptions and decision-making processes, including how they perceive psychological distance to a destination. In the context of tourism, these factors can either reduce psychological barriers or reinforce them, depending on how destinations are portrayed in the media and perceived by peer networks.

To get insight into how psychological and physical distance is shaping tourists' interest in Mongolia, the following three research objectives are proposed:

- **To examine the interaction between psychological and physical distance in shaping tourist destination choices.**

This objective aims to explore the dynamic relationship between psychological and physical distance, particularly in cases where perceived barriers diminish the appeal of geographically close destinations, such as how psychological barriers (e.g., cultural, social, temporal, and hypothetical distance) override or amplify the effects of physical proximity.

- **To investigate the role of social impact theory in moderating the effects of psychological and physical distance on tourism decisions.**

This objective focuses on understanding how social influences, as explained by social impact theory, can reduce psychological distance and enhance the attractiveness of destinations. For example, by analyzing the influence of immediacy, strength, and the number of social sources (e.g., peer recommendations, social media content, and cultural familiarity), which creates strong and credible social sources, coupled with the immediacy of social media content, can mitigate perceived cultural unfamiliarity and increase destination appeal.

- **To develop and empirically test a refined distance decay model that integrates psychological distance and social impact theory, providing a comprehensive framework for understanding and addressing barriers to tourism decision-making.**

This objective aims to contribute to the theoretical development of tourism research by incorporating psychological dimensions into the traditional distance decay model, while also highlighting the moderating role of social impact theory. This will help identify strategies to reduce psychological barriers and enhance destination appeal, particularly for less familiar or emerging destinations such as Mongolia.

2. Literature Review

Distance effects on tourists' destination interest are multidimensional and highly contingent rather than universal. Physical and economic distances consistently suppress tourism demand by increasing travel costs and barriers, yet cultural and climate distances enhance destination appeal by providing novelty and experiential otherness. Social and temporal distances demonstrate context-dependent effects: negative correlations with travel intention emerged in pandemic contexts where perceived safety concerns dominated, while social proximity (reviewer similarity) enhanced interest in online review contexts (Qin et al., 2025). Psychological distance measured as aggregate constructs across multiple dimensions often shows no effect, but disaggregating into specific distance types reveals opposing effects that cancel when combined. Terror management theory explains pandemic-induced shifts, with mortality salience simultaneously increasing attraction to culturally distant destinations (as distal defense enabling self-growth) while decreasing tolerance for social and temporal distance (as proximal risk avoidance).

Distance-interest relationships exhibit nonlinearity and segment heterogeneity that preclude simple generalizations. Optimal cultural proximity levels exist beyond which further distance reduces appeal, and tourists demonstrate fundamentally different distance preference patterns—proximate, distant, intermediate, and mixed—based on demographics and psychographics. Subjective distance perceptions through time, cost, and cultural difference scales diverge from objective spatial measurements, explaining why studies using revealed preference data find strong physical distance effects while stated intention surveys sometimes find none. The evidence indicates distance shapes interest through multiple mechanisms—construal level processes affecting abstract versus concrete thinking, cognitive distance accuracy influencing feasibility assessments, and safety perceptions mediating threat-related distances—but these mechanisms activate differentially across distance types, tourist segments, external threat contexts, and measurement approaches. Universal claims about whether distance increases or decreases destination interest are unsupportable; instead, researchers must specify which distance dimension, measurement approach, tourist segment, and contextual factors apply to their findings.

Research on tourism mobility has long established distance as a primary explanatory factor in shaping destination choice, most notably through the distance-decay model, which posits that tourism demand decreases as physical distance from the source market increases due to rising travel cost, time, and effort (Chen et al., 2024; Shoval et al., 2020). Across the extracted dataset of 60 empirical studies, distance is predominantly operationalized using objective physical indicators (e.g., geographic distance, travel time, cost proxies) alongside subjective psychological distance measures, encompassing cultural unfamiliarity, perceived risk,

emotional detachment, and hypothetical distance. Importantly, these studies consistently treat pre-visit tourist interest, intention, or consideration set inclusion rather than actual visitation as the primary outcome variable, reflecting the recognition that distance exerts its strongest influence during the early decision-making and evaluation stages of travel planning. Within this literature, psychological distance increasingly emerges as a more powerful predictor of pre-visit interest than physical distance, particularly for nature-based, sparsely populated, or culturally unfamiliar destinations. This pattern is highly relevant to the Mongolian tourism context, where geographic proximity to key Chinese source markets contrasts sharply with persistent perceptions of remoteness, harsh environments, and low accessibility, reinforcing distance-related deterrence even before concrete trip planning begins.

Theoretically, the extracted studies converge on construal level theory and social impact theory as key mechanisms explaining why physical distance alone is insufficient to account for tourists' interest patterns. Construal level theory explains how greater psychological distance leads tourists to process destinations at higher levels of abstraction, focusing on generalized images rather than concrete, actionable details, which in turn suppresses destination interest and intention. Within the reviewed studies, psychological distance frequently mediates the relationship between physical distance and tourism interest, while social influence variables—such as source credibility, immediacy of information, and the number of social sources—moderate this relationship by reducing perceived distance and flattening distance-decay effects.

3. Methodology

To achieve our research objectives, we employed an exploratory sequential mixed-methods design. The framework is shown in Figure 1. We began with a qualitative exploration, following it up by quantitative validation. This two-phased design was chosen because it allowed for an initial in-depth exploration of measuring the effects of both psychological and physical distance on tourist behavior, as well as testing the moderating role of social impact theory. A qualitative analysis of social media narratives will be analysed, including the identified values, their core dimensions, and the proposed inter-relationships, then directly inform the development of our quantitative survey instrument and the hypotheses for the subsequent validation phase.

The first phase focused on analyzing narratives shared by tourists on social media platforms to identify key topics influencing tourist choices. Using Chinese tourists as a case, data were collected from Weibo and Xiaohongshu over an entire year, including major holiday events like Chinese New Year and Golden Week (Yang et al., 2023). The analysis used a systematic process that combined human expertise with large language models (LLMs) through an LLM-in-the-loop framework (Chen et al., 2025). This approach increased efficiency but required careful human oversight to mitigate risks such as overfitting linguistic patterns or misinterpreting culturally specific nuances, which are critical in a culturally rich context like Chinese tourism (Chen et al., 2022b).

The analysis began with open coding, where LLMs generated initial codes from the data. These codes were meticulously reviewed and refined by three doctoral researchers with expertise in tourism to ensure accuracy, relevance, and alignment with research objectives. During axial coding, human coders organized the validated initial codes into broader themes, identifying relationships through in-depth deliberation for thematic coherence. In the selective coding stage, LLMs assisted in generating links between themes and consumption values, which were

again critically reviewed and refined by human experts to ensure cultural appropriateness and research alignment. To ensure reliability, human coders validated all LLM-generated annotations, and regular meetings were conducted to resolve discrepancies and refine the coding framework. This iterative approach, combining computational power with human expertise, minimized risks and ensured robust thematic analysis (Calderón-Fajardo et al., 2024; Chen et al., 2022a).

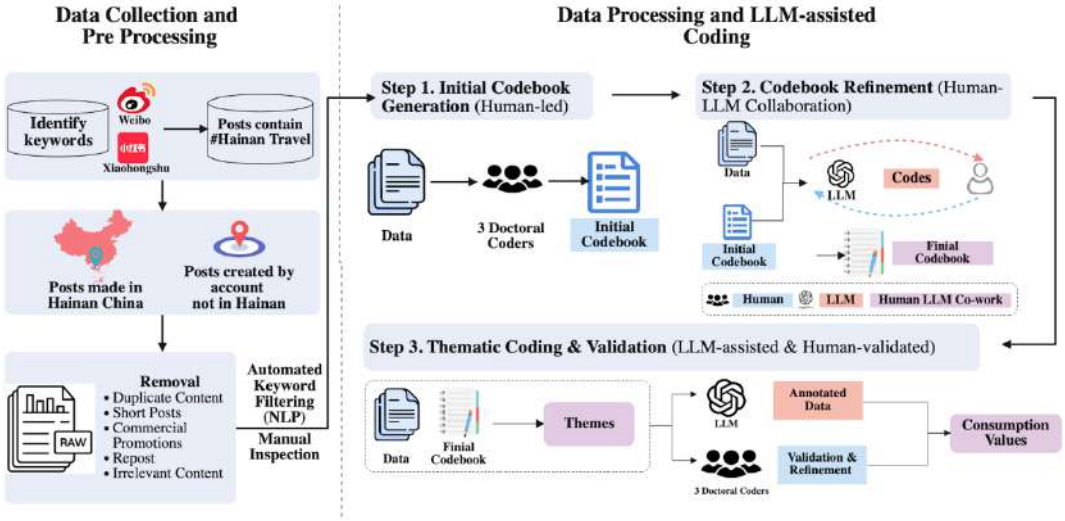

Figure 1. Framework workflow of data processing and analysis

In the second phase, survey data were collected to test and validate the theoretical framework conceptualized from the qualitative insights. This phase included both open-ended qualitative questions and quantitative measures to triangulate findings from the first phase, offering insights across a broader context and timeframe. The survey design focused on empirically testing proposed relationships between psychological and physical distance, the moderating role of social impact theory, and identified consumption values. Multi-item scales were employed to measure constructs like psychological and physical distance, with dimensions such as cultural unfamiliarity, perceived risks, and emotional detachment. Items related to social impact theory, such as trust in peer recommendations, immediacy of social interactions, and the number of social influences, were also included.

To ensure generalizability, stratified random sampling was used to target diverse demographic groups of Chinese tourists, capturing a wide range of psychological and physical distance perceptions. Structural equation modeling (SEM) was applied to analyze the relationships between psychological and physical distance, social influences, and tourist behavior. SEM allowed for testing the moderating role of social impact theory and examining interaction effects. For example, the study explored whether strong social influences reduced psychological distance more effectively for geographically close destinations compared to distant ones.

The qualitative and quantitative phases were carefully integrated. Themes and relationships identified in the qualitative phase directly informed the hypotheses for the quantitative phase. Triangulation and cross-referencing of results ensured consistency and provided a comprehensive understanding of the research problem. Iterative refinement was also employed, with findings from the quantitative phase used to adjust and validate the qualitative coding framework. This cyclical approach strengthened the overall reliability and validity of the study.

The methodology ensures a rigorous and comprehensive process for exploring the interplay of psychological and physical distance and the moderating role of social impact theory. By combining qualitative insights with quantitative validation, the study contributes to both theoretical advancements and practical applications for tourism management and destination marketing in the context of Chinese tourism.

4. Preliminary Outcomes

The study is expected to demonstrate that psychological distance plays a more decisive role than physical distance in shaping Chinese tourists' interest in Mongolia, despite Mongolia's close geographic proximity to China. Survey and narrative evidence are likely to show that Mongolia is frequently perceived as psychologically distant due to limited destination knowledge, unfamiliar nomadic lifestyles, harsh climatic imagery, and concerns related to infrastructure, comfort, and travel convenience. These perceptions are expected to significantly suppress travel interest and intention, even when objective travel distance, time, and cost are relatively low. In line with an extended distance decay model, psychological distance is anticipated to exert a strong negative direct effect on destination interest; while also moderating the influence of physical distance, such that geographic closeness alone is insufficient to generate travel appeal when cultural unfamiliarity and perceived risk remain high. Qualitative social media narratives are expected to reinforce this pattern, revealing that Mongolia is often framed as "remote," "empty," or "challenging," which amplifies emotional and hypothetical distance and keeps the destination at an abstract, aspirational level rather than a concrete travel choice.

At the same time, the findings are expected to show that social impact theory significantly weakens psychological distance and reshapes distance decay effects in the context of Mongolia. Exposure to high-immediacy and high-strength social sources such as trusted peers, influencers with prior Mongolia travel experience, and vivid real-time content on platforms like Xiaohongshu is likely to reduce perceived cultural and emotional distance and increase destination interest. Structural equation modeling is expected to reveal that immediacy, strength, and the number of social sources not only have direct positive effects on travel intention but also moderate the negative interaction between psychological and physical distance, effectively flattening the distance decay curve. In practical terms, when Chinese tourists encounter frequent, credible, and emotionally engaging representations of Mongolia (e.g., grassland lifestyles, wildlife encounters, and outdoor freedom), the deterrent effects of unfamiliarity and perceived hardship diminish substantially. These results would support a refined theoretical model in which Mongolia's tourism appeal is not constrained by geography, but rather by socially constructed perceptions that can be strategically altered through targeted social influence mechanisms.

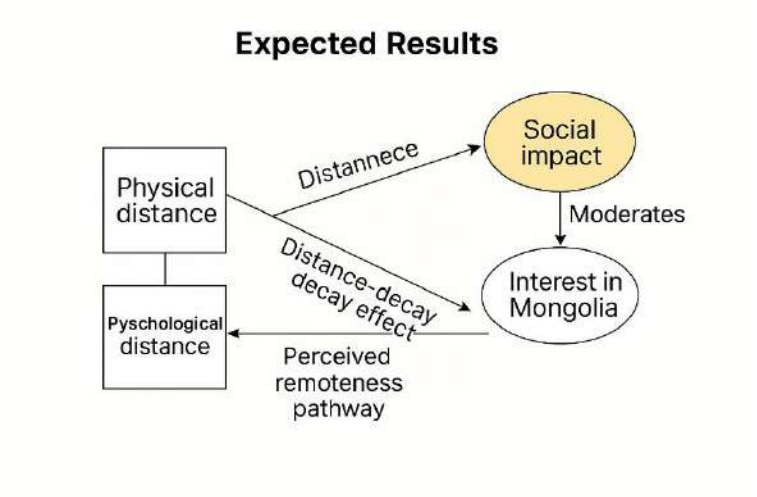

Figure 2. Expected Model to test.

As shown in Figure 2, we expect to understand relationships among physical distance, psychological distance, social impact, and tourists' interest in Mongolia. Physical distance is assumed to exert a classic distance-decay effect on destination interest, but its influence is partially transmitted through a perceived remoteness pathway, whereby greater geographic separation increases psychological distance. Psychological distance—reflecting cultural unfamiliarity, emotional detachment, and perceived risk—is expected to function as the primary psychological barrier suppressing interest in Mongolia, even when objective travel distance is relatively short. Social impact, operationalized through the immediacy, strength, and number of social sources, is positioned as a moderating force that attenuates the negative influence of distance on destination interest. Under conditions of strong social impact, the constraining effects of both physical and psychological distance are expected to weaken, effectively flattening the distance-decay relationship and enhancing tourists' interest in Mongolia.

5. Conclusion

The study on the role of psychological and physical distance in shaping tourists' interest in Mongolia provides several key insights. The research is looking into how psychological distance, encompassing factors such as cultural unfamiliarity, perceived risk, and emotional detachment, plays a more decisive role than physical distance in influencing Chinese tourists' interest in Mongolia despite Mongolia's close geographic proximity to China. The study highlights that Mongolia is often perceived as psychologically distant due to limited destination knowledge, unfamiliar nomadic lifestyles, harsh climatic imagery, and concerns related to infrastructure, comfort, and travel convenience. These perceptions significantly suppress travel interest and intention, even when objective travel distance, time, and cost are relatively low.

The research also emphasizes the importance of social impact theory in moderating the effects of psychological and physical distance on tourism decisions. Social influence mechanisms, such as source credibility, immediacy of information, and the number of social sources, can reduce perceived distance and flatten distance-decay effects. This suggests that targeted social influence strategies could be effective in enhancing Mongolia's tourism appeal.

Encouraging preliminary findings indicate that social media narratives often frame Mongolia as "remote," "empty," or "challenging," which amplifies emotional and hypothetical distance. However, these narratives also reveal opportunities for strategic interventions to reshape perceptions and enhance travel appeal. The study's expected outcomes support a refined theoretical model where Mongolia's tourism appeal is not constrained by geography but by socially constructed perceptions that can be strategically altered. This model underscores the potential for leveraging social influence to overcome psychological barriers and attract more Chinese tourists to Mongolia.

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The Role of the Hospitality Industry in Mongolia's Transitional Economy: An Input-Output Analysis of Economic Contribution and Structural Position

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Abstract

This study examines the economic contribution and structural role of the hospitality industry in Mongolia, a transitional economy, using input-output (I-O) analysis. The hospitality industry is analyzed under both narrow and broad definitions, and 35×35 I-O tables for 2000, 2010, and 2022 are employed to capture changes in inter-industry linkages over time. The results indicate that the hospitality industry experienced rapid quantitative growth after 2000, while its share in total economic output remained relatively stable, suggesting that it has become structurally embedded in the economy. Production- and value-added-induced effects indicate that the hospitality industry generates spillovers comparable to or exceeding those of Mongolia's core mining sector, particularly in household income creation. Forward-backward linkage analysis reveals that narrowly defined hospitality functions primarily as a demand-inducing sector with strong backward linkages, whereas broadly defined hospitality exhibits stronger forward linkages, reflecting its role as a connective and intermediary industry. Overall, the findings highlight the hospitality industry's structural importance in supporting inter-industry linkages and economic diversification in Mongolia's transitional economy.

Keywords: Mongolia Economy, Input-Output Analysis, Transitional Economy, Hospitality Industry

Introduction

Mongolia has undergone rapid economic growth since its transition from a socialist planned system to a market-based economy in the early 1990s. However, growth has become increasingly concentrated in the mining sector, particularly since the mid-2000s, when foreign direct investment and resource expansion drove high growth while reinforcing resource dependence. This structure has heightened vulnerability to commodity price fluctuations, increased macroeconomic volatility, and intensified industrial concentration.

Although economic diversification has been widely emphasized, research has largely focused on macroeconomic management and mining governance, with limited attention to inter-industry linkages and the structural roles of non-resource sectors (Dagys et al., 2024). In this context, the tourism and hospitality industry presents a promising alternative. Globally, the sector contributes around 10% of GDP and employment, reflecting strong demand-driven growth and extensive linkages with other industries such as accommodation, transport, trade, and agriculture (WTTC, 2024). Compared to capital-intensive sectors, it requires relatively lower fixed investment and can effectively utilize existing resources, making it suitable for developing economies like Mongolia.

Despite its potential, empirical analyses of tourism and hospitality within Mongolia's production structure remain scarce, particularly in comparison with the mining sector. This study addresses this gap by applying input-output (I-O) analysis to estimate the production, value-added, and employment effects of the hospitality industry, compare them with mining, and evaluate its structural role through inter-industry linkages, thereby assessing its viability as a diversification pathway.

Mongolia's Economic Structure and the Context for Tourism and Hospitality Development

Mongolia's economy has experienced a rapid and substantial structural transformation

following its transition from a centrally planned socialist economy to a market-oriented system in the early 1990s. Market-oriented reforms-encompassing price liberalization, privatization, and external economic liberalization-fundamentally reconfigured the country's growth trajectory. Consequently, economic expansion has become progressively concentrated within the resource sector, particularly since the mid-2000s when large-scale mining development and substantial foreign direct investment inflows precipitated accelerated growth (World Bank, 2018).

A salient characteristic of Mongolia's growth trajectory is its pronounced dependence upon natural resources. Mining, particularly copper, coal, and gold extraction, constitutes a substantial proportion of gross domestic product, exports, and fiscal revenues. This dependence has rendered aggregate economic performance acutely vulnerable to global commodity price volatility (Dagys et al., 2024). While the resource-led growth paradigm has facilitated periods of rapid expansion, it has concurrently engendered significant structural vulnerabilities, including heightened macroeconomic volatility, susceptibility to external shocks, and intensified industrial concentration (World Bank, 2020).

From an industrial perspective, Mongolia exhibits a dualistic economic structure wherein a mining-dominated primary sector coexists with an expanding tertiary sector. Mining assumes a dominant role in production and exports yet generates comparatively limited employment and exhibits attenuated domestic inter-industry linkages (Tsenguun et al., 2021). Conversely, tertiary sectors-including wholesale and retail trade, transportation, and accommodation and food services-account for a substantial proportion of employment and domestic demand, notwithstanding relatively modest productivity and value-added levels (ADB, 2020). This divergence has engendered a structural disjuncture between sectors that drive economic growth and those that generate employment.

These structural features are closely linked to patterns of inter-industry linkages. Notwithstanding its magnitude, the mining sector relies minimally on domestic intermediate inputs, thereby constraining its spillover effects on the broader economy. Tertiary industries, by contrast, depend on inputs from diverse upstream sectors and consequently have greater potential to induce demand throughout the production system. This asymmetry has circumscribed the diffusion of mining-led growth across the economic system.

Within this context, tourism and hospitality emerge as particularly salient sectors. Mongolia acceded to the World Tourism Organization in 1991, and since the mid-1990s the government has systematically promoted tourism development through national policy frameworks, thereby establishing a supportive institutional framework. Consequently, international tourist arrivals have exhibited steady growth. grown steadily. Over the past two decades, inbound tourism increased by 2.2, reaching 727.7 thousand visitors in 2024. Russia, China, and the Republic of Korea accounted for 77.5 percent of total arrivals (National Statistical Office of Mongolia, 2025). Tourism revenues have expanded 5.5 times over the past decade, reaching 2.2 trillion MNT in 2024, highlighting the sector's growing economic importance.

As components of the tertiary economy, tourism and hospitality demonstrate diminished dependence upon external commodity cycles and exhibit pronounced backward linkages with agriculture, food processing, transportation, retail trade, utilities, and business services. These labour-intensive and regionally embedded characteristics make the sector well-suited to addressing Mongolia's challenges of employment generation and economic diversification. However, assessing the sector's role requires more than evaluating size or growth; it depends on the degree to which tourism and hospitality are structurally integrated into the domestic economy and how their expansion generates production, value-added, and employment effects

across industries.

Accordingly, this study employs I-O analysis to examine the inter-industry linkages and structural position of the hospitality industry in Mongolia, with a focus on backward and forward linkages, to assess its potential contribution to more balanced and resilient economic development.

Method

3.1 Analytical Methods

To achieve the research objectives, this study employs input–output (I-O) analysis to examine the economic contribution and structural position of the hospitality industry in Mongolia. Specifically, the I-O framework is used to quantify production- and value-added-induced effects and to evaluate forward and backward industrial linkages (Leontief, 1936). By applying this approach, the study goes beyond direct effects and provides a structural interpretation of how the hospitality industry interacts with other sectors within Mongolia's transitional economy.

I-O analysis offers a quantitative framework for examining interdependencies among industries and tracing how changes in final demand propagate through the production system. In the I-O table, rows represent output allocation between intermediate and final demand, while columns represent input structures composed of inter-industry purchases and value added. Based on the identity that total output equals total input for each industry, the framework enables consistent estimation of direct and indirect effects and assessment of industrial linkages (Leontief, 1936; Rasmussen, 1956).

The basic identity is:

$$X = AX + Y$$

where X is the total output vector, A is the input coefficient matrix, and Y is the final demand vector. Rearranging yields:

$$(I - A)X = Y \quad \Longrightarrow \quad X = (I - A)^{-1}Y$$

Here, $(I - A)^{-1}$ is the Leontief inverse, which captures both direct and indirect effects of final demand on total output across industries.

Production-Induced Multipliers

The output-induced multiplier of industry (j) measures the total increase in production throughout the economy when the final demand for industry (j) rises by one unit:

$$m_j^X = \sum_{i=1}^{n} \quad L_{ij}$$

where $L = (I - A)^{-1}$

Value Added Multipliers

The value-added-induced multiplier incorporates the value-added coefficients of each industry. The value-added coefficient for industry (i) is:

$$v_i = \frac{VA_i}{X_i}$$

Letting (v) denote the vector of coefficients, the multiplier for industry (j) is:

$$m_j^{VA} = \sum_{i=1}^{n} \quad v_i L_{ij} = v^T L_{:j}$$

This represents the total direct and indirect value added generated by one unit increase in final demand for industry (j).

Forward and Backward Linkages

Using the Leontief inverse, the relative structural position of industries can be assessed by forward and backward linkages. Backward linkage (demand-pull effect) can be expressed as follows.

$$BL_j = \sum_{i=1}^{n} \quad L_{ij}, \quad BLI_j = \frac{BL_j}{\underline{BL}}$$

Indicates the extent to which industry (j)'s final demand stimulates production in other sectors.

Forward linkage (supply-driven effect) can be expressed as follows.

$$FL_i = \sum_{j=1}^{n} \quad L_{ij}, \quad FLI_i = \frac{FL_i}{\underline{FL}}$$

Indicates the importance of industry (i) as a supplier to other industries' production processes.

3.2 Data and Measurement of the Hospitality Industry

This study applies input–output (I-O) analysis to estimate the economic contribution and structural linkages of Mongolia's hospitality industry, using 35×35 I-O tables compiled by the Asian Development Bank. While these tables provide a consistent macro-level representation of inter-industry transactions, their aggregated structure limits the identification of detailed service sub-sectors, particularly for tourism-related activities.

To address this limitation, the hospitality industry is defined in two ways. The narrow definition includes core sectors such as accommodation and food services, while the broad definition extends to related industries, including transport, wholesale and retail trade, and arts and cultural services. This broader approach effectively incorporates 29 of the 35 industries, allowing the analysis to capture wider indirect and spillover effects while remaining consistent with the I-O framework.

This dual-definition strategy provides lower and upper bounds for estimating economic contributions and enables a more nuanced interpretation of the industry's structural role. Rather than treating sectoral aggregation as a constraint, the study integrates it into the analytical design.

To examine structural changes over time, the analysis focuses on three benchmark years—2000, 2010, and 2022—representing the post-transition phase, the resource-driven growth

period, and the recent stage of economic adjustment, respectively. Overall, the use of harmonized ADB I-O tables and dual analytical frameworks offers a robust basis for evaluating both the economic contribution and structural positioning of the hospitality industry.

Analysis and Results

4.1 The Input-Output Structure of the Hospitality Industry in Mongolia

Between 2000 and 2022, Mongolia's hospitality industry expanded rapidly under both definitions. Under the narrow definition, total output increased from 33.4 million USD to 524.8 million USD (15.7-fold), while under the broad definition it rose from 357.4 million USD to 6,344.1 million USD (17.8-fold). Despite this growth, its share of total output remained stable, with the broad definition declining only slightly from 9.3% to 9.1%, indicating expansion in line with overall economic growth.

From a production-structure perspective, hospitality exhibits distinct characteristics. Under the narrow definition, intermediate inputs accounted for 74.2% and value added 25.8% in 2000, reflecting strong dependence on upstream industries alongside meaningful income generation. Under the broad definition, intermediate inputs increased from 54.6% in 2010 to 59.1% in 2022, while value added declined from 45.4% to 40.9%, reflecting the growing inclusion of transport and related sectors.

Overall, hospitality functions as a demand-inducing sector with strong inter-industry linkages, while still generating a relatively high share of value added, highlighting its role in connecting and stimulating diverse economic activities.

Table 1 here

4.2 The Production- and Value Added-Induced Multipliers of the Hospitality Industry in Mongolia

Table 2 shows that the production-induced multiplier for narrow hospitality ranges from 1.67 to 1.91 between 2000 and 2022 (1.687 in 2000, 1.908 in 2010, and 1.670 in 2022), indicating stable and relatively strong spillover effects. In terms of value added, the multiplier remains highly stable at around 0.71–0.73, suggesting a consistent contribution to income generation across periods.

For broad hospitality, the value-added multiplier varies more widely, from 0.69 to 0.78 (0.695 in 2000, 0.777 in 2010, and 0.692 in 2022), and remains slightly lower than that of narrow hospitality. This reflects the broader aggregation of related industries, implying that results should be interpreted in light of the definitional scope.

Table 2 here

Mining is Mongolia's core foundation industry, dominating exports, fiscal revenues, and overall economic growth. Using mining as a benchmark helps clarify the relative industrial significance of hospitality.

As shown in Table 3, mining's production-induced multiplier ranges from 1.38 to 1.44, while narrow hospitality records substantially higher values of 1.67 to 1.91. Broad hospitality also shows multipliers of 1.45-1.59, indicating production spillovers comparable to or exceeding those of mining, even at the lower bound.

A similar pattern appears for value-added-induced effects. Mining's multipliers range from 0.64 to 0.75, whereas narrow hospitality remains stable at 0.71-0.73, and broad hospitality

ranges from 0.69 to 0.78. These results suggest that hospitality has stronger inter-industry linkages than mining, allowing its production and income effects to diffuse more widely across the economy.

Overall, while mining is a resource-based, highly concentrated industry with relatively weak linkages, hospitality, under both narrow and broad definitions, emerges as a high-linkage, household-income-generating sector. Despite its smaller absolute scale, hospitality plays a more significant structural role in terms of economy-wide spillovers.

Table 3 here

4.3 Structural Positioning of the Hospitality Industry Based on Forward and Backward Effects

Forward and backward effects indicate how an industry is integrated into the economy. Forward effects measure its role as a supplier to other sectors, while backward effects reflect its demand for inputs.

For narrow hospitality (Figure 1), forward effects remain around or below the average, whereas backward effects are consistently above average. This suggests that narrow hospitality functions primarily as a demand-generating sector, stimulating production and employment through strong backward linkages rather than acting as a key supplier.

In contrast, broad hospitality (Figure 2) shows a more balanced structure. Forward effects increase significantly, with several industries exceeding the average, indicating a growing role as an intermediate supplier across sectors such as transport, trade, and cultural services. Backward effects remain around the average, implying continued but less dominant input dependence.

Overall, narrow hospitality is mainly consumption-driven, while broad hospitality evolves into a hybrid, connective sector with both demand-inducing and forward-linkage functions.

Figure 1 here
Figure 2 here

Conclusion

This study contributes to the literature by providing one of the first structural, I-O-based assessments of the hospitality industry in Mongolia. Nevertheless, several limitations should be acknowledged. First, the analysis is constrained by data availability and the level of industrial aggregation in existing I-O tables, which limits the precision with which tourism and hospitality activities can be identified. It remains difficult to draw a clear distinction between the narrowly defined hospitality industry and its broader conceptual scope, as tourism- and hospitality-related activities are dispersed across multiple sectors in official statistics. Second, the static nature of the I-O framework does not capture dynamic adjustments over time, structural change, or regional heterogeneity within Mongolia. These limitations suggest caution in interpreting the results as long-term equilibrium outcomes.

Addressing these challenges requires the development of more refined statistical frameworks. Establishing tourism and hospitality satellite accounts, along with more detailed sectoral classifications, would allow clearer delineation of industry boundaries and a more accurate assessment of economic impacts. Such improvements would support more evidence-based and scientifically grounded policy decision-making by enabling policymakers to better evaluate the trade-offs and complementarities between resource-based and service-based development

strategies. Future research could extend the present analysis by incorporating regional I-O tables, dynamic modelling approaches, or firm-level data to deepen understanding of the long-term role of tourism and hospitality in Mongolia's economic transformation.

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Table 1 Input-Output Structure of the Hospitality Industry, 2000-2022 (million USD)

		2000			2010			2022		
		Total	Narrow	Broad	Total	Narrow	Broad	Total	Narrow	Broad
Intermediate Input Total	Domestic	2,105.56	24.69	118.12	13,204.88	97.15	1,062.90	36,606.49	219.37	2,339.27
	Import	620.84	5.31	78.45	3674.58	28.35	399.80	13,964.05	92.72	1,409.31
	subtotal (a)	2,726.39	30.00	196.57	16,879.46	125.49	1,462.71	50,570.54	312.09	3,748.58
Value-Added	Value Added at Basic Prices	1,009.76	10.00	152.72	6,453.80	38.78	1,127.32	16,535.39	190.48	2,310.51
	Others	104.96	0.42	8.05	698.20	9.22	89.43	2,348.06	22.20	285.03
	subtotal (b)	1,114.71	10.42	160.77	7,152.00	48.00	1,216.74	18,883.45	212.69	2,594.54
Total Input (a+b)		**3,841.11**	**33.42**	**357.35**	**24,031.46**	**173.50**	**2,679.45**	**69,453.99**	**524.77**	**6,344.12**
Intermediate Demand	Intermediate Demand (a)	2,105.56	12.84	71.92	13,204.88	59.48	830.34	36,606.49	142.88	1,630.83
Final Demand	Household	843.61	15.38	148.20	3,919.71	55.52	1,271.02	9,940.71	243.71	3,520.15
	Government	174.03	4.32	39.37	882.51	0.43	1.11	2,580.52	2.09	2.09
	Export	440.70	0.68	86.91	2,954.96	57.17	417.64	12,930.88	134.87	1,003.24
	Others	277.21	0.19	10.95	3,069.40	0.90	159.34	7,395.38	1.23	187.80
	subtotal (b)	1,735.55	20.57	285.43	10,826.58	114.02	1,849.11	32,847.50	381.89	4,713.28
Total Demand (a+b)		**3,841.11**	**33.42**	**357.35**	**24,031.46**	**173.50**	**2,679.45**	**69,453.99**	**524.77**	**6,344.12**

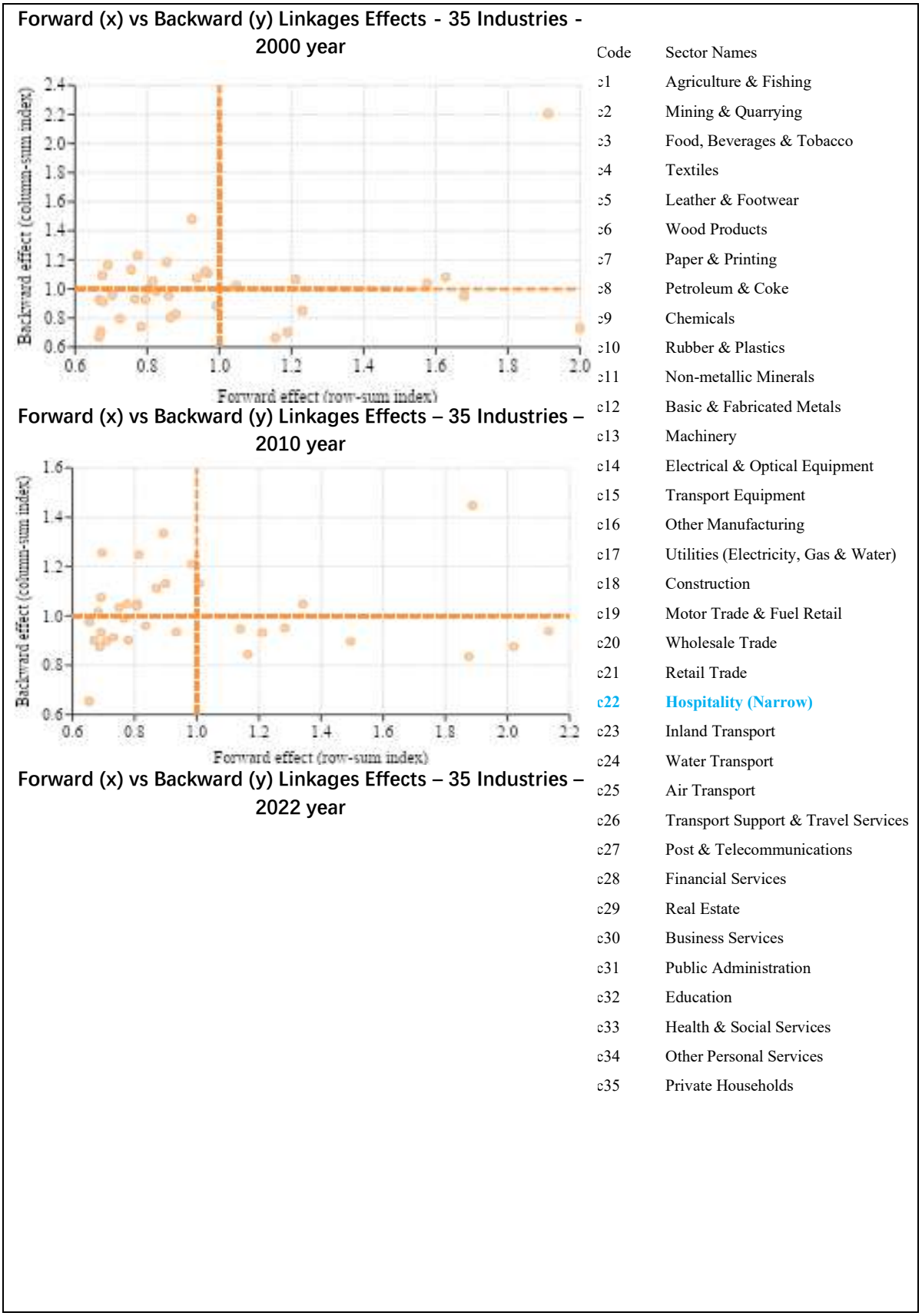
Table 2. Production- and Value Added-Induced Multipliers of the Hospitality Industry (Narrow vs. Broad Definition), 2000-2022

	2000		2010		2022	
	Narrow	Broad	Narrow	Broad	Narrow	Broad
Production-Induced Multiplier	1.687	1.449	1.908	1.588	1.670	1.511
Value Added-Induced Multiplier	0.728	0.695	0.729	0.777	0.710	0.692

Table 3. Positioning of the Hospitality Industry Based on Induced Effects, Comparison with Mining, 2000-2022

Industry / Definition	Production-Induced Effect (Range)	Value Added-Induced Effect (Range)
Mining and Quarrying	1.38 - 1.44	0.64 - 0.75
Hospitality (Narrow)	1.67 - 1.91	0.71 - 0.73
Hospitality (Broad)	1.45 - 1.59	0.69 - 0.78

Figure 1. Structural Positioning of the Hospitality Industry (Narrow Definition): Changes in Forward–Backward Effects, 2000-2022 (Production induced)



Code	Sector Names
c1	Agriculture & Fishing
c2	Mining & Quarrying
c3	Food, Beverages & Tobacco
c4	Textiles
c5	Leather & Footwear
c6	Wood Products
c7	Paper & Printing
c8	Petroleum & Coke
c9	Chemicals
c10	Rubber & Plastics
c11	Non-metallic Minerals
c12	Basic & Fabricated Metals
c13	Machinery
c14	Electrical & Optical Equipment
c15	Transport Equipment
c16	Other Manufacturing
c17	Utilities (Electricity, Gas & Water)
c18	Construction
c19	Motor Trade & Fuel Retail
c20	Wholesale Trade
c21	Retail Trade
c22	**Hospitality (Narrow)**
c23	Inland Transport
c24	Water Transport
c25	Air Transport
c26	Transport Support & Travel Services
c27	Post & Telecommunications
c28	Financial Services
c29	Real Estate
c30	Business Services
c31	Public Administration
c32	Education
c33	Health & Social Services
c34	Other Personal Services
c35	Private Households

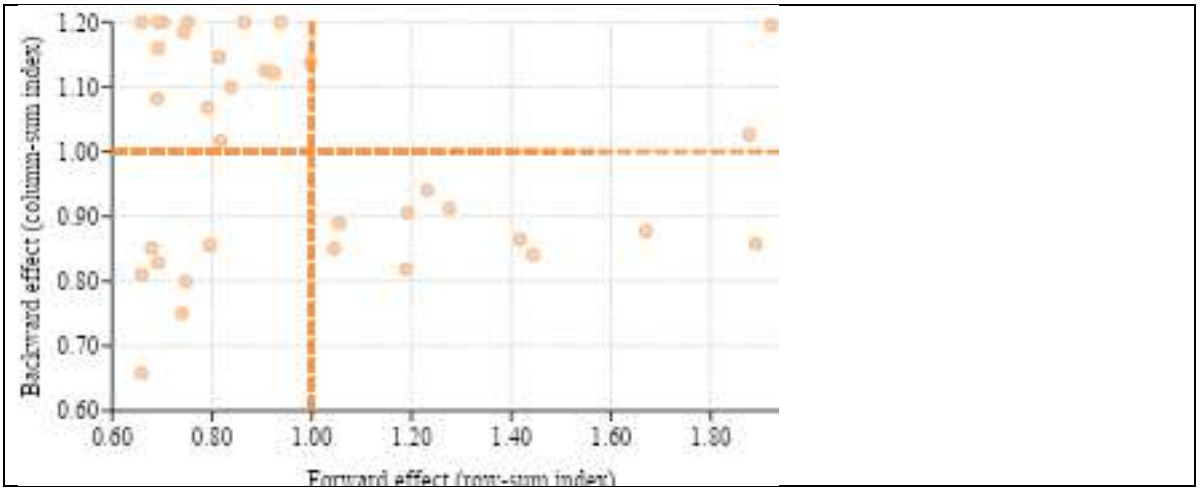
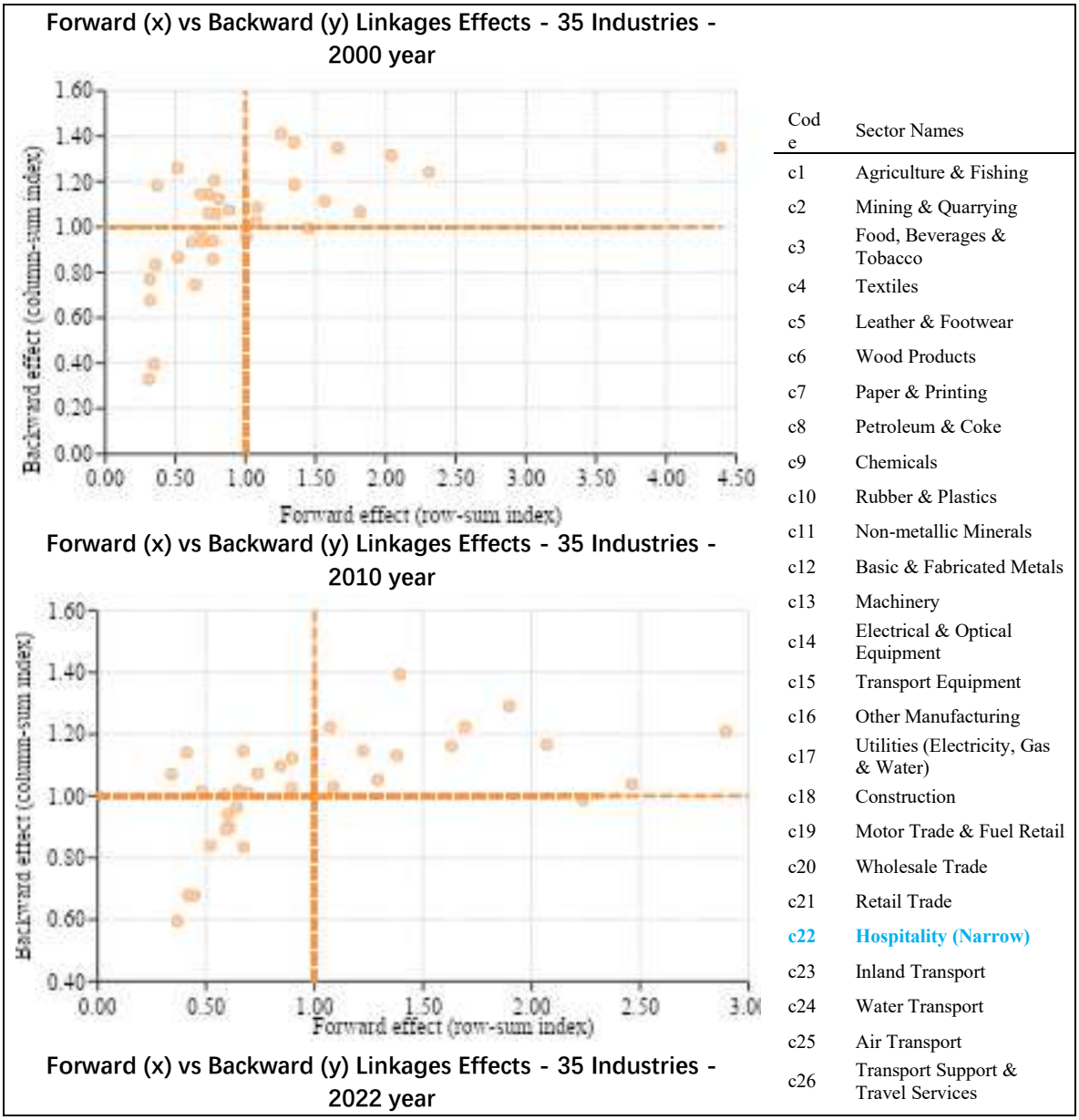
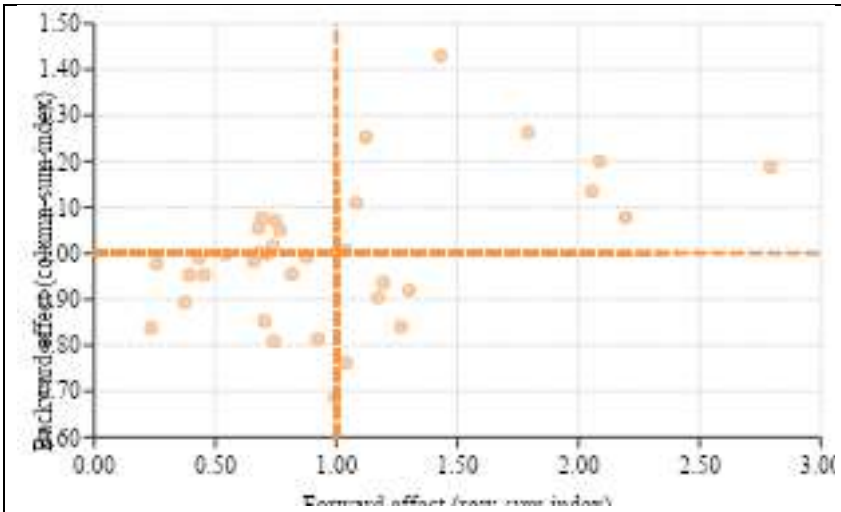


Figure 2. Structural Positioning of the Hospitality Industry (Narrow Definition): Changes in Forward Backward Effects, 2000-2022 (Value added induced)

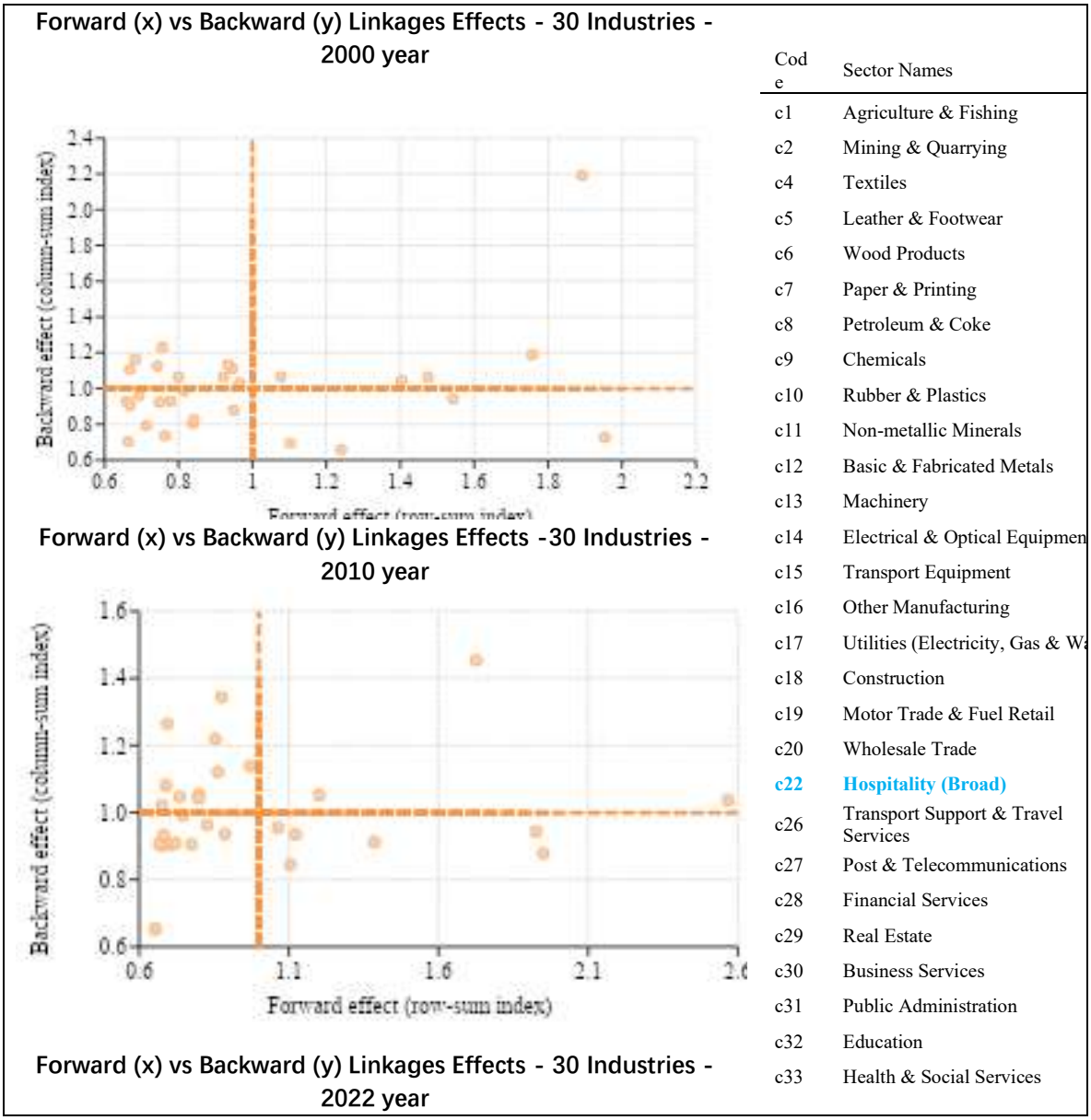


Code	Sector Names
c1	Agriculture & Fishing
c2	Mining & Quarrying
c3	Food, Beverages & Tobacco
c4	Textiles
c5	Leather & Footwear
c6	Wood Products
c7	Paper & Printing
c8	Petroleum & Coke
c9	Chemicals
c10	Rubber & Plastics
c11	Non-metallic Minerals
c12	Basic & Fabricated Metals
c13	Machinery
c14	Electrical & Optical Equipment
c15	Transport Equipment
c16	Other Manufacturing
c17	Utilities (Electricity, Gas & Water)
c18	Construction
c19	Motor Trade & Fuel Retail
c20	Wholesale Trade
c21	Retail Trade
c22	**Hospitality (Narrow)**
c23	Inland Transport
c24	Water Transport
c25	Air Transport
c26	Transport Support & Travel Services



c27	Post & Telecommunications
c28	Financial Services
c29	Real Estate
c30	Business Services
c31	Public Administration
c32	Education
c33	Health & Social Services
c34	Other Personal Services
c35	Private Households

Figure 3. Structural Positioning of the Hospitality Industry (Broad Definition): Changes in Forward-Backward Effects, 2000-2022 (Production induced)



Code	Sector Names
c1	Agriculture & Fishing
c2	Mining & Quarrying
c4	Textiles
c5	Leather & Footwear
c6	Wood Products
c7	Paper & Printing
c8	Petroleum & Coke
c9	Chemicals
c10	Rubber & Plastics
c11	Non-metallic Minerals
c12	Basic & Fabricated Metals
c13	Machinery
c14	Electrical & Optical Equipmen
c15	Transport Equipment
c16	Other Manufacturing
c17	Utilities (Electricity, Gas & W
c18	Construction
c19	Motor Trade & Fuel Retail
c20	Wholesale Trade
c22	**Hospitality (Broad)**
c26	Transport Support & Travel Services
c27	Post & Telecommunications
c28	Financial Services
c29	Real Estate
c30	Business Services
c31	Public Administration
c32	Education
c33	Health & Social Services

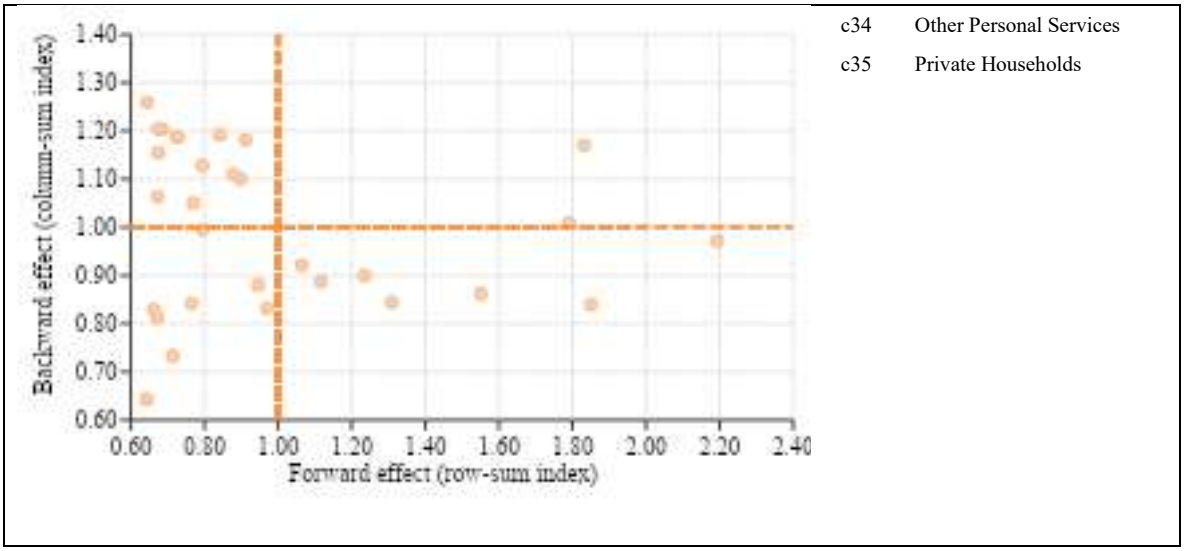
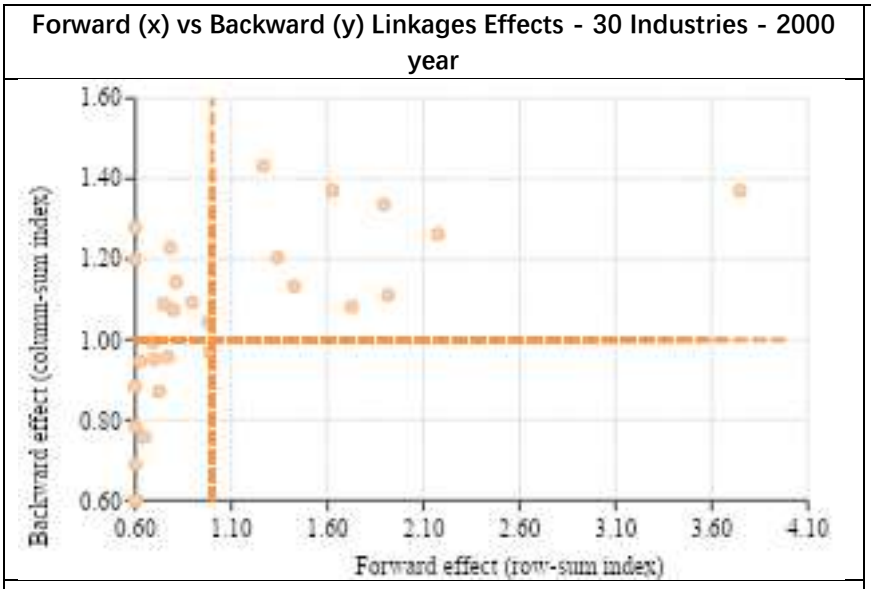
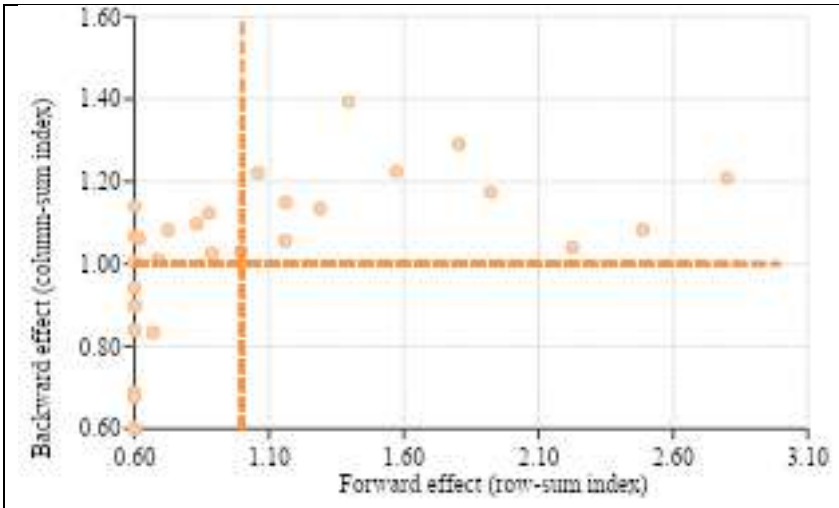


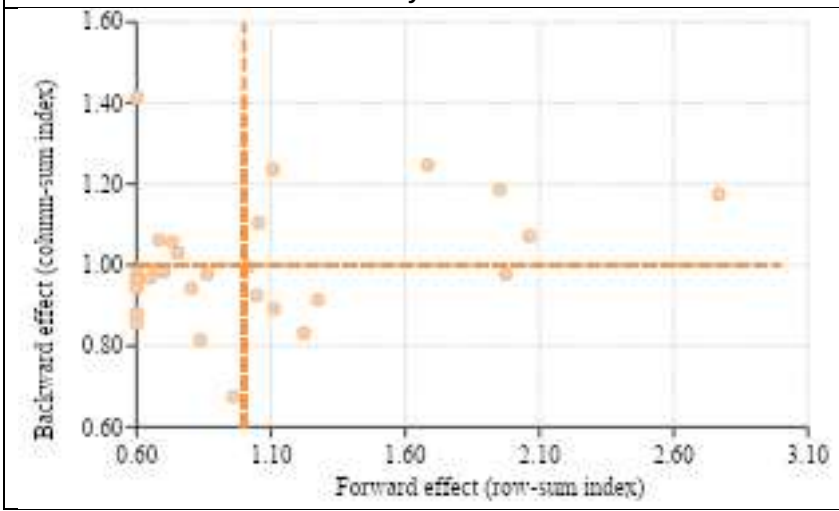
Figure 4. Structural Positioning of the Hospitality Industry (Broad Definition): Changes in Forward–Backward Effects, 2000-2022 (Value added induced)



Code	Sector Names
c1	Agriculture & Fishing
c2	Mining & Quarrying
c4	Textiles
c5	Leather & Footwear
c6	Wood Products
7	Paper & Printing
c8	Petroleum & Coke
c9	Chemicals
c10	Rubber & Plastics
c11	Non-metallic Minerals
c12	Basic & Fabricated Metals
c13	Machinery
c14	Electrical & Optical Equipment
c15	Transport Equipment



Forward (x) vs Backward (y) Linkages Effects - 30 Industries - 2022 year



c16	Other Manufacturing
c17	Utilities (Electricity, Gas & Water)
c18	Construction
c19	Motor Trade & Fuel Retail
c20	Wholesale Trade
c22	**Hospitality (Broad)**
c26	Transport Support & Travel Services
c27	Post & Telecommunications
c28	Financial Services
c29	Real Estate
c30	Business Services
c31	Public Administration
c32	Education
c33	Health & Social Services
c34	Other Personal Services
c35	Private Households

The Tyranny of Tourist Numbers: Advocating for a Holistic Paradigm in Destination Success Measurement

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Abstract

For decades, the global tourism industry and the governments that steward destinations have relied almost exclusively on two primary metrics to gauge success: visitor arrivals and tourism expenditure (Rosselló-Nadal & He, 2019; PATAmPOWER, 2026). This duo metrics—while providing easily comparable, high-level economic snapshots—fosters an oversimplified narrative of progress. It equates more tourists and more spending with unambiguously positive outcomes, obscuring the multidimensional and sometimes contradictory realities on the ground. This paper argues that this conventional paradigm is not only inadequate but also potentially disadvantageous to the long-term equity of tourism development. We posit that the ultimate indicator of a destination's success is found not only in the ledger of a hotel chain, but also in the well-being and endorsement of its host community, for it is their home, their land, and their culture that form the core product of tourism.

The prevailing obsession with arrivals and spending, enshrined in national accounts and marketing campaigns, creates a "tyranny of numbers" that prioritizes scale over substance. It fails to distinguish between high-yield and low-yield tourism and overlooks the distribution of economic benefits within the community. Crucially, it externalizes the costs borne by residents: the congestion of public spaces, the inflation of housing and living costs, the strain on infrastructure, and the commodification of daily life. By treating the destination purely as a marketplace, this model neglects its role as a lived-in habitat and a repository of intangible heritage.

Therefore, we advocate for a radical recalibration of destination success metrics. True performance measurement must transcend the narrow economism to holistically assess a destination's health across four interdependent pillars: Economic Gain, Socio-Cultural Integrity, Environmental Resilience, and Community Sentiment. First, **Economic Gain** must be redefined beyond gross expenditure to include measures of net economic benefit: local employment quality, entrepreneurial opportunities for residents, supply chain localization, and the retention of tourism revenue within the community. Second, performance must account for the **Preservation of Culture and Heritage**. Metrics should assess whether tourism acts as a catalyst for the revitalization of traditions and arts. Success here is measured by the enhancement of cultural vitality, not its erosion or distortion for tourist consumption.

Third, the **Enhancement of the Natural Environment** is non-negotiable. Tourism's performance must be evaluated against its footprint, using indicators of resource consumption (water, energy), waste management, biodiversity protection, and the contribution of tourism revenues to conservation efforts. A destination must not degrade its natural capital in pursuit of higher arrivals.

The most critical pillar is the fourth: **Community Sentiment and Social License to Operate**. Tourism does not occur in a vacuum; it is enacted upon and within a social fabric. How

residents feel about tourism—their perceptions of its benefits versus its burdens, and their level of embrace or resentment—is a fundamental determinant of destination success. A community that feels overrun, disenfranchised, or culturally disrespected is not a "successful" destination, regardless of record-breaking arrivals. Resident sentiment directly impacts the tourist experience through service quality, safety, and the authenticity of encounters, and can manifest in overt opposition, straining social cohesion. It is a government's fundamental duty to steward tourism in a way that respects and prioritizes the well-being of its citizens. A place with happy, supportive inhabitants is inherently more resilient, authentic, and ultimately more attractive to discerning visitors.

This paper proposes a comprehensive research study to operationalize the holistic vision of destination success and develop a Composite Destination Index, which moves beyond simplistic statistics to provide a diagnostic tool that balances the interests of visitors and the community. The Composite Destination Index would be constructed through a mixed-methods approach:

1. Quantitative Assessment: Administered to residents to capture standardized data on perceptions of economic impact, cultural effects, environmental pressures, and overall quality of life. Tourometer, for example, provides a viable way to measure and analyze residents' sentiments towards tourism (Yang & Hsu, 2025).

2. Qualitative Engagements: In-depth focus groups, interviews, and online reviews to uncover nuanced narratives and tourist satisfaction that numbers alone cannot reveal. Tourist Satisfaction Index, for example, is a large language model-based tourist satisfaction model gauging the satisfaction of tourists towards a destination (Research & Innovation Office, 2025).

3. Objective Pillar Indicators: Integrated data on economic leakage, employment patterns, environmental carrying capacity metrics, conservation investment, and cultural asset inventories together could give a more accurate reading of how well tourist spending benefits a destination and how well tourism contributes to the nourishment of culture and heritage (Srhoj & Mikulic, 2025).

The resultant Composite Destination Index generates a balanced scorecard for destinations, highlighting strengths, vulnerabilities, and trade-offs. It would empower policymakers, planners, and industry stakeholders to make informed decisions that avoid overtourism, promote equitable distribution of benefits, invest in cultural and environmental stewardship, and, above all, secure the social license to operate from the host community.

A destination is a complex socio-ecological system. A thriving tourism sector is one that enriches its host community economically, fortifies its cultural heritage, regenerates its natural environment, and enjoys the genuine welcome of its people. This paper offers a pathway to transcend traditional metrics, aligning tourism development with the principles of sustainable and regenerative development. By ensuring that the community's happiness and well-being are central to the definition of destination success, we pave the way for a more resilient, ethical, and truly prosperous future for global tourism - one where destinations thrive not just as places to visit, but also as places to live.

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Declaration

I acknowledge the use of DeepSeek-V3.2 to generate output for drafting the abstract. I entered the following prompt on 19 January 2026:

"Draft an abstract to argue that (1) measuring visitor arrivals and spending is inadequate in measuring the performance of tourism in a destination, and (2) it is equally important to measure the impact of visitors on a destination's economic gain, preservation of culture and heritage, and enhancement of the natural environment. In addition, we should also care about the destination's community: how they feel about visitors and how much they embrace tourism. It is important to respect the sentiment of the community. After all, it is their home, their land, and their culture. Therefore we need a measure which reflects all of the above. We propose a study to develop a destination index which indicates how successful it is, not just to visitors but to the local community as well. It is a government's duty to ensure that the community is happy with the visitors coming to their place. A place with happy inhabitants will attract more visitors. we need to balance the interest of visitors and the community." The output was adapted and modified for this abstract with the title "The Tyranny of Tourist Numbers: Advocating for a Holistic Paradigm in Destination Success Measurement."

Tourism Homogeneity in Heritage Destinations: Conceptualization and Impacts

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Abstract

The global economic forces, such as deindustrialisation and the increasing importance of the service sector in economy, has shaped the development of tourism. There is a trend in destination development that products and services are becoming monolithic due to standardization and homogeneity. Studies have long before pointed out that tourist hot places such as waterfront zones and marketplaces globally convey a similar atmosphere of constructed local 'difference' and uniqueness (Chang et al 1996). Despite claims of distinctiveness by destination marketing, tourists increasingly experience homogeneity which exemplifies in information formation and distribution patterns, tourist attraction construction and configuration, image building, and tourist merchandising. Homogenisation of tourist destinations increases destination competition and influences tourists' capacity in choosing destinations, resulting in significant variations of visiting numbers to these destinations (Ding & Ma, 2018).

Tourism homogeneity may associate with dependency on local distinctiveness or resource constraints. For example, small island tourism manifests economic and cultural homogenisation due to paradoxes related to geographical peripherality, monocultures, and economic marginality (Weaver, 2017). Heritage tourism, tourists visiting destinations of specialised heritage themes or heritage enhancement, can be vulnerable to homogeneity due to likewise dependency and constraints. For example, urban regeneration in many Chinese cities has involved converting historic city centres into pedestrian streets dominated by retail, dining, and entertainment functions. Notwithstanding variations in architectural and subcultural heritage, these districts tend to display homogenised operational models, degrees of commercialization, and sameness in merchandise, resulting in tourism homogeneity.

Heritage tourism experiences have been researched, with exemplar studies covering how heritage tourism reconstruct and communicate national identity and pride (e.g., Park, 2010), and how customer homogeneity impact satisfaction in tourism services (Wu, 2007). Homogeneity of tourists and its impacts have also been explored. For example, a study has explored how perceived demographic heterogeneity vs homogeneity influence their sense of

social anomie and subsequently impact environmentally sustainable behaviour in tourism (Cai et al 2025).

Despite growing awareness of homogeneity, studies that treat it as a central theme remain rare in the literature. To address this gap, this study examines homogeneity in a heritage tourism destination, with the aims of conceptualising homogeneity and exploring its effects on tourists' experiences, satisfaction, and behavioural intentions. Samarkand—a historic city in Uzbekistan and a UNESCO World Heritage Site—is adopted as the case study. The research investigates whether, how, and under what conditions tourists become aware of, experience, and respond to homogeneity, and how such perceptions shape their overall experience, satisfaction, and future behavioural intentions. The study adopts a qualitative research design, employing semi-structured interviews and participatory observation as the primary methods of data collection. The expected outcomes will advance scholarly understanding of tourism homogeneity and its impacts from tourists' perspectives, while also offering practical implications for destination marketing and management aimed at improving tourism development and enhancing visitor experiences.

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Tourist Expectations, Destination Image: Effects on Perceived Value and Satisfaction of South Korean Tourists Visiting Mongolia

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Abstract

The aim of this study is to investigate the relationship between expectation and satisfaction of South Korean tourists visiting Mongolia. International tourists' expectations of destination, tourist satisfaction, and revisit intentions are crucial for effective destination marketing and destination competitiveness. A survey method with a questionnaire tool was administered to collect data from 432 South Korean tourists on package and individual tours to Mongolia between June and October 2025. The conceptual model was developed, including pre and post-destination images, tourist expectation, satisfaction, and revisit intentions on the basis of existing theoretical research in tourism marketing. A seven-point Likert scale including 48 destination attributes was used to measure the expectation of South Korean tourists. The basic hypothesis of the research is that there is a statistically significant relationship between expectations, satisfactions, and destination involvement and revisit intentions of South Korean tourists in Mongolia. The results indicated that the expectation had a significant effect on overall satisfaction. There seems to be a significant relationship observed between the satisfaction of tourists and destination loyalty. The implications of the findings for the destination organization, tour operators, and recommendations for future research were discussed.

Key Words: Tourist expectation, Destination Image, Tourist Satisfaction, Perceived Value, Revisit intentions

Introduction

Creating a favorable image for tourists in the markets could support strengthening the destination's competitiveness. Thus, destination image seems an important attribute that can influence a tourist's decision-making process. Tourism destinations regularly compete for the images held in the mind of potential tourists. Therefore, destination marketers dedicate significant time and effort to create a positive destination image to encourage tourists to visit their destinations. The strong competition in the tourism industry and maintain a favorable image to achieve tourist satisfaction, particularly the likelihood to visit and recommend the destinations to others (Casali et al., 2020; Albayrak et al., 2018; Pike & Page, 2014). To compete in the global tourist market, it is necessary to provide a positive yet distinctive destination image (Casali et al., 2020). The destination image is a mental picture that derives from a set of perceptions, impressions from various information sources (Beerli & Martin, 2004). Tourist satisfaction has received a considerable amount of attention in tourism literature. Satisfaction is defined as the customer's evaluation of the product and service they received (Kotler & Armstrong, 2020). One of the crucial elements of destination marketing is

tourist satisfaction, since it has an influence on destination choice and behavioral intention (Kanwel et al.,2019; Yoon & Uysal, 2005). Therefore, it seems vital to study the concept of destination image and its relationship with tourist satisfaction to determine tourists' behavioral intentions to revisit and recommend to others (Bigné et al., 2001; Yoon & Uysal, 2005, Wang & Hsu, 2010). From the tourist's perspective, the destination image plays an important role in the decision-making, a potential tourist's information search, selection of the destination, satisfaction, and revisit intention (Afshardoost & Eshaghi, 2020). Furthermore, the destination image is argued to be the main determinant in predicting the perceived destination image, satisfaction, and intention to participate in future activities (Xia et al., 2018).

Mongolia is in East Asia with an area of 1.566 million sq. km and 3.6 million inhabitants. Mongolia has a profound mixture of landscapes from high mountains to deserts, a pristine environment, and a unique nomadic way of life. Similar to the emerging destinations, Mongolia is attempting to enhance its tourism competitiveness. However, there is a lack of research on the assessment of tourists' expectations of Mongolia's destination image, tourist satisfaction, and revisit intentions. Most of the tourism literature on destination image research has focused on well-established destinations, and very little research exists regarding tourism in Mongolia. To maintain a position on the global tourism market in times of growing competition among destinations, it is essential to understand Mongolia's destination image in Korean tourists, which the latter reflect on tourist satisfaction, revisit intention, destination involvement, and tourists' expectations.

Methodology

Locations and procedure

Sampling-The questionnaire was the main tool for collecting primary data from Korean tourists who visited Mongolia between June and October 2025. The paper-based, self-completing questionnaire in Korean was delivered to the respondents. The random sampling technique was applied to collect data from the target market. Researchers approached each tenth of tourists and asked them to participate in the survey. Pilot testing was carried out before actual sampling and corrections were made. The total data sample included 432 questionnaires. The data were analyzed by using SPSS 26.0 statistical software program and produced descriptive and inferential statistics.

Results

The respondents' demographic profile is presented in Table 1. Out of 432 respondents, 204 (47.3%) were male, and 228 (52.7%) were female. There were slight variations in age distribution: 20.8 percent were aged 18–24, while the age group of 25–34 accounted for 25.2 percent. The age group of 35–44 accounted for the least share of 9 percent, followed by the age group of 45-54 (10.4%). The largest share of study participants was from the age group of 55 years or older (34.5%). Regarding travel preferences, the majority of the participants (49.1 %) travelled with colleagues, friends, and relatives, followed by those who travelled with their spouse (20.3%), and travelers as part of a tour group accounted for 15.4 percent. Those who had travelled as club members accounted for only 1.9 percent.

Table 1. Demographic characteristics of the respondents (N=410)

Characteristics	Categories	Number	% of sample
Gender	Male	204	47.3
	Female	228	52.7
	Others	-	-
Age	18-24 years old	90	20.8
	25-34 years old	109	25.2
	35-44 years old	39	9.0
	45-54 years old	45	10.4
	55-64 years old	97	22.5
	Over the 65s	52	12
Traveling with	Alone	26	6.0
	Partner/spouse	88	20.3
	Partner/spouse/children	24	5.5
	children	8	1.9
	colleagues/friends/relatives	212	49.1
	part of tour group	65	15.4
	club members	8	1.9

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Traditional Knowledge and Geographical Indication as a Means of Promoting Craft Tourism –A Case of Muga Silk in Assam (India)

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Abstract

Geographical Indications (GI) is one of the tools of Intellectual Property Rights (IPR) that protects name of a good as originating in the territory of a WTO member country, a region or locality in that territory, where a given quality, reputation or other characteristics of the good is essentially attributable to its geographical origin.

Muga Silk has been and continues to be an integral part of Assamese life and tradition. Assam is literally a 'Silk country' and silk culture is deep-rooted in the rural life and culture of Assamese people where Muga silk *(Antheraea assamensis)* is grown. There are 100 per cent of India's Muga silk production is originated in Assam and hence Assam silk occupies a unique position in the sericulture map of the world. Considering the ecological conditions, food plant distribution, presence of eco-types and species of diverse nature in co-existence, it is speculated that this region is home of origin of Muga (*Antheraea assamensis)*. Muga cloth has 85.8 per cent absorption capacity of ultra-violet ray of sunlight. Muga, the unique golden-yellow silk of Assam was granted the Geographical Indication (GI) registration in 2007. The present research will be highlighted the geo-environmental condition, craft tourism prospect of Muga silk as well as its contribution on livelihood generation in the Brahmaputra valley of Assam.

This paper tries to emphasize the possibility of craft tourism in Muga rearing areas of Assam, so that the host communities can earn their livelihood from tourism ventures.

Key words: Muga silk, traditional knowledge, geo-ecology, craft tourism and livelihood

Travel with Pets: The Constraints and Challenges

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Introduction

In recent decades, the relationship between humans and their companion animals has undergone a profound transformation. Pets are no longer viewed as property or working animals but as beloved family members. Along with the pets' "humanization" phenomenon, pet care industry has witnessed a large and continuous increase. The global pet care market was estimated at USD 150.67 billion in 2021 and is forecast to rise to USD 236.16 billion by 2030, reflecting a compound annual growth rate of 5.1% over 2022–2030 (Grand View Research, 2021).

As the emotional bond between owners and pets strengthens, the desire to include these "furry children" in all aspects of life, particularly leisure and travel, has intensified. Many owners prefer not to leave their pets at home or to a "pet" hotel while they are out of town for a holiday. For them, travel is not only a personal break but also a shared experience with their "furry children". Hence, there is a rising demand for "pet-inclusive" tourism and hospitality services. This results in an surging market for pet-friendly accommodation, transport options, and destination facilities.

However, the tourism and hospitality industry has not fully adapted to this demand. Although some hotels, airlines, and attractions have introduced "pet-friendly" rules, the overall system is often fragmented. Travelers may face inconsistent policies across transport modes, unclear entry rules at attractions, limited choices of truly suitable accommodation. These gaps create frustration for travelers and also reduce the economic benefits that destinations and businesses could gain from this growing customer segment.

From an academic perspective, tourism research on animals exists, but systematic work that focuses on pets as travel companions and maps the main challenges across the whole travel journey is still limited. Therefore, this study aims to systemtically explores the challenges and difficulties faced by pet owners when traveling with their pets. By identifying key pain points and how owners deal with them, the paper aims to contribute both theoretical and practical insights for creating a more genuinely pet-friendly tourism environment through better policy design and service improvement.

Literature review

Pet economy and the rise of pet-inclusive travel

The rise of pet tourism needs to be understood within the wider growth of the "pet economy." Nowadays, pets have shifted from being mainly functional animals to being treated as companion family members. This change supports higher and more diverse spending, including premium food, healthcare, grooming, insurance, and lifestyle services. High ownership levels also provide a stable demand base for pet-related services. The American Pet Products Association (APPA) reported that total spending in the U.S. pet industry rose to $152 billion

in 2024, indicating continued growth and resilience (American Pet Products Association [APPA], 2025).

In China, the pet economy has expanded quickly alongside urbanization and lifestyle changes. The White Paper on China's Pet Industry reports that China's urban dog-and-cat consumption market reached RMB 312.6 billion in 2025 (up 4.1% from 2024) and is expected to continue increasing, reaching RMB 405.0 billion by 2028 (Petdata.cn, 2026). In the tourism context, the same report indicates strong travel-related demand: about 71% of pet owners reported willingness/interest in traveling with pets (Petdata.cn, 2026). This market trend indicates that pet tourism is more than a minor niche. Rather, it is a segment with great potential to grow.

As more owners treat pets as part of the family, many prefer to include pets in leisure activities and holidays. This demand is visible in both destination marketing and hospitality offerings. For example, studies focusing on destination choice and visit intention show that pet owners evaluate destinations based on whether facilities and the physical environment support traveling with pets (Han et al, 2025), and that "green environment" features can be particularly important for pet owners (Quan et. al., 2024). While demand is growing rapidly, the market is not fully prepared. Many owners still encounter unclear rules and inconsistent services. This points to a gap between rising demand and service readiness, which becomes even clearer in the academic literature.

Current studies in pet tourism

The growth of the pet tourism also drawn great attention from academia. Existing pet tourism research has grown in recent years, but the field is still developing and tends to be fragmented. First, one stream of studies aims to explain why owners travel with pets and how motivations shape behavioral intention. For example, Hidalgo-Fernandez et al. (2023) used a large sample of dog owners in Spain and found that motivations are closely connected to owner–pet attachment and influence trip planning and destination assessment. Tang et al. (2022) developed and validated a motivation scale for Chinese pet owners and identified multiple dimensions (e.g., pet attachment, perceived benefits for pets, novelty, prestige, socialization), further segmenting owners into different clusters. Related work in Chile also shows that attitudes, perceived benefits, novelty, and prestige can influence intention to travel with pets and willingness to pay more (Veas-González et al., 2025). While many studies focus on intention, fewer examine the lived experience across the travel process. Chan and Tung (2023) explicitly explore pre-travel, on-site, and post-travel stages in an urban staycation context. Their findings highlight that lack of reliable information is a key pre-travel problem, while transportation issues and policy inconsistencies become central constraints during the trip. This process view is useful for identifying where friction happens, but the evidence base is still limited and often context-specific. Another stream of studies connects pet tourism to experience value and wellbeing outcomes. Wei et al. (2023), drawing on social exchange theory and value co-creation theory, show that human–pet interaction can enhance travel intention and quality of life through emotional and social value, and that effects differ by attachment level. This line of work helps explain why pet tourism matters beyond consumption, but it often focuses on positive outcomes and psychological mechanisms rather than concrete service barriers.

Existing literatures provide strong coverage of motivations, intention models, and service design. However, there is still a lack of comprehensive research that maps the full set of challenges owners face when traveling with pets across the end-to-end journey (planning,

transport, accommodation, attractions, dining, unexpected situations). This shows the need for more research based on real travel experiences.

Methodology

This study adopted a qualitative research design to explore the challenges and difficulties faced by pet owners when traveling with their pets. A qualitative approach allows participants to describe their real experiences in their own words, capture unexpected issues, and provide detailed explanations of how and why problems occur, which is difficult to achieve through structured surveys.

Participants were recruited through purposive and snowball sampling via personal networks and online platforms. To ensure relevance to the research purpose, the inclusion criteria were: (1) aged 18 years or above; (2) currently owning at least one pet; and (3) having traveled with a pet within the past 18 months. In total, 6 semi-structured interviews were conducted. All interviews took place via WeChat, which was chosen for its accessibility and familiarity to participants. With participants' consent, interviews were audio-recorded to ensure accuracy and to support careful analysis.

Data analysis followed a qualitative content analysis approach. Recordings were transcribed, and the transcripts were examined iteratively by the three authors. Open coding was used as the first step to break the data into meaningful units and generate initial codes closely grounded in participants' language. Codes were then compared across interviews and grouped into higher-level categories to identify patterns in reported challenges, coping strategies, and service gaps. This process supported the development of key themes that reflect common barriers in the pet travel journey.

Findings

Six recurring challenges shaping pet-inclusive travel. Themes reflect constraints across the end-to-end journey (planning, transport, accommodation, and on-site activities) and highlight a consistent gap between formal access (whether pets are permitted) and practical usability (whether travel is predictable, affordable, socially acceptable, and welfare-compatible).

Transport constraints

Participants consistently claimed that transportation is the key barrier shaping all later travel decisions. Restrictions on public transit limited basic feasibility, and ride-hailing was often unpredictable because drivers could refuse service even in the last minute. As a result, itineraries were fragile: even when a ride seemed confirmed (e.g., a car had been booked), the trip could still be disrupted at pickup.

As one participant noted, "Even after I have successfully hailed a car, the driver may arrive and then say they cannot take us because we have a pet" (Interviewee 1). Another emphasized repeated refusals across modes, concluding that "public transport therefore becomes the key bottleneck" (Interviewee 6). Overall, these accounts show that access to transport acts as a "gatekeeper" for pet travel: it limits where people can go and increases the time and stress involved.

Ambiguous policies

Another common challenge was unclear rules and inconsistent enforcement. Participants said it was hard to confirm pet policies online, and signs on-site were often missing or unclear. More importantly, staff sometimes set aside the rules and made decisions case by case. One participant summarized this situation as "the owner decides" (Interviewee 2), which means the owner of the property can decide whether they let the pets in on the spot. The practical result was the transfer of uncertainty risk to pet owners, who responded by developing compensatory behaviors such as repeated phone verification and avoidance of uncertain venues: "If I cannot verify whether a policy allows pets, I will abandon that venue" (Interviewee 2). Policy instability also appeared temporally, with venues changing rules without notice (Interviewee 5). These patterns indicate that unpredictability is a key mechanism reducing travel confidence.

"Pet-friendly" accommodation

Accommodation was an area where "pet-friendly" labels often did not match what happened in practice. Participants said that truly pet-welcoming hotels were hard to find, and that rules and fees varied widely. One interviewee noted, "when I called eight hotels, perhaps only one genuinely allowed pets" (Interviewee 2). Others felt that "pet-friendly" was sometimes used mainly for marketing, which is "pet-friendly in name only" (Interviewee 1). Participants also reported extra restrictions or costs that appeared late, such as cleaning fees or even being told after arrival that pets were not allowed: "after check-in they say pets are strictly prohibited; or… they add extra cleaning fees" (Interviewee 6). Overall, the problem was not only whether pets could stay, but whether the terms were clear, fair, and consistent enough to avoid conflict.

"No-entry/no-alternative" dilemma

Participants said that parks, scenic sites, and restaurants often do not allow pets, which makes it hard to plan activities (Interviewee 4). This was not just a matter of being told "you can't enter." It became a safety and welfare problem when there was nowhere suitable to leave the pet for a short time. For example, one participant changed restaurants because "we could not leave the cat outside alone" (Interviewee 1). Another pointed to clear bans in public leisure spaces (Interviewee 6). This suggests the main issue is not only restrictive rules, but also the lack of supporting facilities - such as safe waiting areas or short-term pet care - that would allow people to participate more easily.

Social attitudes towards pets

Participants said the challenges were not only about formal rules, but also about how other people react to pets. They mentioned negative attitudes about hygiene and shedding, and that some people avoid dogs out of fear. This added stress and limited where they felt comfortable going with their pets. One participant said they were often turned away because people saw pets as "unhygienic" or worried about shedding (Interviewee 1). Another said some people view dogs as "trouble" or a "risk" (Interviewee 2). Overall, these stories show that pet travel depends partly on social acceptance. When acceptance is low, even places that technically allow pets may still feel difficult to use.

Animal welfare and safety

Finally, participants talked about the pet's stress and safety in unfamiliar places. Cats were seen as especially sensitive, sometimes refusing to eat or drink, or having toileting problems that required extra supplies and planning (Interviewee 1). Others described pets becoming so afraid that they would freeze and not move (Interviewee 3). Participants also worried about pets eating

unsafe things in public areas, such as trash or poison bait (Interviewee 5). Overall, these accounts show that pet-friendly travel is not only about whether pets are allowed. It also depends on the animal's wellbeing and on reducing risks during the trip.

Discussion

The findings show that pet-inclusive tourism is not only shaped by whether individual businesses allow pets, but also by whether the wider travel journey is practically workable. While "pet-friendly" services are in greater demand, a pet-friendly travel environment remains unprepared, uncertain, and unevenly implemented (Ying et al., 2021). This study further highlights that these constraints are not isolated problems. They are connected across the whole travel process.

This study has several theoretical contributions. First, this study is to understand pet-friendliness as a journey-based service condition, rather than a simple facility-level attribute. Previous studies have begun to examine pet tourism across different travel stages, including pre-travel planning, on-site experience, and post-travel reflection (Chan & Tung, 2023). Building on this process view, the present study shows that the pet travel experience depends on the continuity of the whole journey. A destination, hotel, or attraction may formally allow pets, but the trip can still be disrupted if transport is unavailable, rules are unclear, or entry policies are inconsistently applied. This finding also connects with tourism experience design research, which suggests that tourism experiences are structured through a series of connected moments and touchpoints rather than through one single encounter (Stienmetz et al., 2021). In pet tourism, these touchpoints are especially fragile because the traveler must consider not only personal convenience but also the pet's safety, comfort, and social acceptability.

Second, this study explores the distinction between formal access and practical usability in pet-inclusive tourism. Many tourism and hospitality providers use the label "pet-friendly," but the findings show that this label may not guarantee a smooth or usable experience. For example, participants reported unclear hotel policies, sudden additional fees, changing rules, and uncertainty over whether pets would truly be accepted on arrival. Similar problems appeared in transport and attractions, where pets may be technically allowed in some situations but difficult to manage in practice. This suggests that pet-friendly tourism should not be assessed only by whether pets are permitted. It should also consider whether the rules are transparent, stable, affordable, and easy to follow. This point is consistent with the idea of an "accessibility chain," where access depends on the connection between different stages and services rather than one isolated facility (López-del-Pino et al., 2026). For pet owners, a broken link in this chain may affect the whole journey.

Third, this research also contributes to frame pet-inclusive tourism as part of a wider destination service ecosystem. The findings show that the pet travel experience is shaped by many players in the tourism industry, including hotels, transport providers, ride-hailing drivers, attraction managers, restaurant staff, other tourists, and local residents. Therefore, pet tourism cannot be improved only by individual hotels adding pet rooms or individual attractions changing entry rules. It requires coordination across the destination system. This supports service ecosystem thinking, which emphasizes that tourism experiences are produced through interactions among multiple service actors rather than by one provider alone (Gao et al., 2022). It also connects with hospitality service design research, which argues that pet-friendly hospitality should be designed more carefully around the needs of pet owners, other guests, staff, and the animals themselves (Buhalis & Chan, 2023). The present study adds that service design should not stop

at accommodation. It should extend across transport, public spaces, dining areas, attractions, and emergency arrangements.

Last but not least, multispecies nature of the pet tourism experience is highlighted in this study. Earlier research has noted that pets are increasingly treated as family members, but tourism systems often still exclude them or treat them as a problem to be managed (Carr & Cohen, 2009). The present findings support this view, but also add that the pet is not simply a companion or symbolic family member. The animal's body, emotion, and welfare directly shape the travel experience. Participants described pets becoming stressed, refusing to eat or drink, freezing in unfamiliar environments, or being exposed to safety risks in public areas. Therefore, the owner's tourism experience is closely tied to the animal's condition. This supports the idea of multispecies tourism, where tourism experiences are formed through relationships between humans and non-human animals (Dashper, 2020). In this study, pet tourism is better understood as a co-experience between humans and animals, rather than a human-centered leisure activity with a pet merely added to the trip.

These findings also have practical implications. First, transport is a key barrier and should be treated as a basic condition for pet-inclusive tourism. Ride-hailing platforms and local transport operators could introduce clearer pet-related rules, pet-friendly ride options, standardized carrier requirements, and driver training. Without reliable transport, other pet-friendly services may become difficult to use. Second, hotels and destinations should move beyond general "pet-friendly" labels and provide detailed, stable, and transparent information. This includes pet size limits, room types, cleaning fees, deposit rules, public area restrictions, and emergency contacts. Third, attractions, restaurants, and commercial areas should consider the "no-entry/no-alternative" problem. If pets are not allowed inside, destinations may still support pet owners by offering shaded waiting spaces, pet relief areas, temporary pet care, or partnerships with nearby pet service providers. Last but not least, pet-inclusive service design should also consider the concerns of non-pet owners. Participants' experiences show that social attitudes, fear of dogs, hygiene concerns, and public acceptance can affect whether pet owners feel comfortable using a space. Therefore, pet tourism development should not simply favor pet owners, but should balance the needs of pet owners, pets, other tourists, employees, and local communities. Clear zoning, hygiene rules, staff communication, and animal welfare guidelines may help reduce conflict. Overall, this study suggests that genuinely pet-friendly tourism requires more than permission. It requires a coordinated, reliable, and welfare-sensitive service system that allows both humans and animals to travel with greater confidence.

Limitation

This study has several limitations. First, the dataset comprises only six interviews, which supports depth of interpretation but might be insufficient for a holistic understanding of the phenomenon. The themes should therefore be read as analytically suggestive rather than statistically generalizable. Second, participants were likely drawn from relatively experienced or motivated pet owners, introducing potential self-selection bias and possibly overemphasizing high-involvement travel practices and problem sensitivity. Third, the study does not systematically differentiate experiences by pet type, size, temperament, or health status, nor by trip purpose, seasonality, or destination tier-factors that likely shape constraints and coping strategies.

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Understanding How Physical and Cultural Distances Shape Visitor Experiences at Tourist Attractions Through Image Attributes

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1. Introduction

In tourism, "attractions" refer to any resources, whether they are manmade or natural, that are solely developed for the purpose of attracting tourists (Hu & Wall, 2005). There are a variety of these sites, including theme parks, museums, galleries, natural gardens, wildlife habitats, religious sites, and heritage sites (Leask, 2010). In order to stimulate demand for a destination, tourist attractions should address a wide range of tourist needs (McKercher, 2017). For this reason, effective management of tourist attractions is crucial to tourism success. Developing strategies and implementing practices to enhance visitors' experiences and satisfaction is an important priority for destination management organizations (DMOs) and visitor attraction managers (VAMs) in order to increase loyalty, attract new visitors, and maintain a sustainable income (Faerber et al., 2021; Leask, 2016). There has been extensive research on tourists' perceptions and satisfaction with attractions (Faerber et al., 2021). However, most of the literature treats tourists as homogeneous groups. The reality is that visitors come from a wide variety of countries and backgrounds, each with varying distances from the host country.

In fact, two distance concepts may be used to differentiate tourists, namely physical distance and cultural distance. A physical distance refers to the distance between two different countries geographically (Håkanson & Ambos, 2010). As stated in the distance decay theory, people must travel a minimum distance in order to feel sufficiently removed from home (McKercher & Lew, 2003), but the demand for travel decreases as the distance increases (McKercher et al., 2008; McKercher & Mak, 2019). For visitors traveling long distances, it may be beneficial to focus on iconic "must-see" landmarks that are both historically significant and offer the opportunity for great photographs. Short-haul visitors, on the other hand, may just wish to take a break from their daily routine and have a more hedonistic focus. Cultural distance is another concept that may explain visitors' different perceptions of attractions, and it measures how one country's values, beliefs, and attitudes differ from another's (Hofstede, 2001). It has been

suggested by Hofstede (n.d.) that countries can be distinguished based on six cultural dimensions: power distance, uncertainty avoidance, individualism versus collectivism, masculinity versus femininity, long-term versus short-term orientation, indulgence versus restraint.

Tourists traveling from different physical and cultural distances have different needs and therefore may focus on different aspects of a tourist attraction. By answering the overarching question: "How do physical and cultural distance shape visitor experiences at tourist attractions?", this study seeks to fill this gap through the use of tourist-generated images on an online review platform for tourist attractions. Digital communication has enabled visitors to take pictures at attractions and share their reviews online in both textual and pictorial formats. Compared to textual review contents, review images convey rich and vivid information (Li et al., 2022; S.-B. Yang et al., 2017). It is also noteworthy that people who post online reviews come from different backgrounds, speak different languages, and are located at different distances from one another, making them an appropriate source of data for the current study. As a result, this study adopts a data mining approach on tourist review platforms and applies image recognition on pictures posted by tourists from different countries to investigate how physical and cultural distance affect tourists' interactions and experiences with attractions.

2. Literature review

2.1 The impact of cultural and physical distance on tourists' behavior

Tourism is particularly sensitive to distance, as a significant number of studies have validated the impact of distance on tourism demand. (A. Liu et al., 2021; Manosuthi et al., 2020; McKercher & Mak, 2019; Wong et al., 2021; F. X. Yang et al., 2023; Y. Yang et al., 2023). Distances from a tourism perspective may take different forms, including geographical/physical distances, cultural distances, economic distances, political distances, and social distances (Y. Yang et al., 2023). However, the existing literature suggests that cultural and physical distances are highly related to tourist behavior and destination choice. Physical distance can be defined as the distance between two countries geographically (Håkanson & Ambos, 2010), and cultural distance describes the differences between the values, beliefs, and attitudes of two countries (Hofstede, 2001). It has been suggested that visitors from culturally distant backgrounds may be more attracted to distinct cultural experiences, so they may focus more on cultural cues and elements of an attraction (Ahn & McKercher, 2015). In support of this, Stepchenkova et al. (2014) demonstrated that tourists from different cultures view Russia differently as a destination. American tourists, for example, showed a greater interest in the buildings and architectures of Russia than Korean tourists. In addition, a study conducted by Jackman et al. (2020) revealed that the length of stay in Barbados was found to be significantly longer for travelers who were traveling from more distant countries than those who were traveling from closer countries. Similarly, visitors from culturally distant countries tend to stay longer in Barbados than tourists from culturally similar countries.

Although some studies may indicate a positive impact of cultural and physical distance on tourists, existing research is largely inconsistent. There are some circumstances when it may appeal to tourists (Lord et al., 2008), while there are others when it may represent risks and unfamiliarity, driving tourists away (Lepp & Gibson, 2003). Across countries, Huang and Cho (2025) found positive, negative, concave, and convex relationships between cultural distance and destination choice. Similarly, Fan et al. (2023) concluded that there is a "contact elastic" relationship between perceived cultural distance and travel attitude, stating that they appear to be coexist paradoxically. Likewise, Bi and Gu (2019) also addressed the level of cultural

distance exerts bidirectional influences on tourists' intentions to visit a destination, by inducing their perception of novelty and risk. Conflicting findings were further supported by Le Hong and Hsu (2024) and H. Liu et al. (2018), the authors found that behavioral intentions and people's choice of international destinations were not affected by perceived cultural distance.

Despite ambiguous results of existing research, there is evidence that distances have an impact on tourists. There is a lack of empirical evidence regarding how visitors with varying physical and cultural distances will approach attractions. Furthermore, physical and cultural distances have been considered separately in existing studies. Their joint effects have rarely been explored. Further research is required to investigate how physical and cultural distances individually and jointly affect tourists' interactions with attractions (McKercher & Lew, 2003). To fulfill this purpose, the present study explores tourists' experiences at attractions through their posting behavior, particularly on user-generated images.

2.2 The use of tourist-generated images in tourism research

Tourists and destination marketers alike have used photographs in the tourism economy for a long time to promote tourism destinations (Balomenou & Garrod, 2019). People can use photos to communicate more easily, since many lack the verbal skills to relate their experiences, but they can take a picture showing the location of the experience and elaborate on it afterwards (Balomenou & Garrod, 2019). In order to gain a deeper understanding of tourists' experiences, it is increasingly important to analyze actual travel photographs taken by tourists, since these images are often used to illustrate the experiences and activities of tourists (Park & Kim, 2018). The development of digital technology and social networks has expanded the available sources of tourist image data. Tourist photographs taken at a destination can be acquired more easily via online photo-sharing websites (Park & Kim, 2018). For instance, Qian et al. (2025) collected 9,819 user-generated photographs online to reveal tourists' perception of red tourism through the lens of destination image. In addition, Xu et al. (2023) discovered that the physical attractiveness of tourists' selfies on social media affects the effectiveness of destination marketing. This is why a recent review of image analytics in tourism research conducted by Zhan et al. (2024) highlighted the need for conducting future research that looks at the characteristics of user-generated images coming from different cultural backgrounds. As this study explores how tourist interactions with attractions are affected by physical and cultural distances through the use of tourist-generated images online, two research questions have been developed:

RQ1: How do the images captured by tourists differ based on their cultural and physical distances from the destination?

RQ2: How do cultural and physical distances interact to influence image attributes?

3. Methodology and results

There are three major steps involved in the overall research design. The process begins with the collection of data, followed by the application of image object recognition to the collected data. In addition, an image attribute framework was developed based on the objects recognized by the images. Finally, based on the tourist's country of origin, physical and cultural distances were calculated between each country, and further analysis was conducted to investigate the differences and address the research questions.

3.1 Data collection

Macao was selected as the data source location due to its unique position as a global city within China. Travelers from around the world have been traveling to Macao in recent decades and sharing their experiences online, which is viewed as an effective means of examining physical and cultural distances among tourists. Furthermore, Macao is recognized by UNESCO as a heritage center, preserving a wide variety of historical sites and attracting tourists from around the world. Ruins of St Paul, a tourist attraction that is very well known in Macao, was chosen as the site for this study. Initially, a total of 3919 tourist reviews were collected from the webpage of Ruins of St Paul on Tripadvisor between 2011 and 2024. After selecting the reviews that included user-generated images, a total of 968 images were obtained. In addition, the reviews with images were classified according to the tourist's country of origin, and each image was analyzed using an artificial intelligence technology called image object recognition by calling an API from the company Everypixel Labs (https://labs.everypixel.com/). The image object recognition technology will recognize the objects in each image and produce a description of the objects. Following the recognition of objects from the 968 images, the results were further categorized according to the image attribute framework developed in this research.

3.2 Development of image attribute framework

The image attributes were developed through a comprehensive review of existing literature focusing on visual analysis of travel photos, destination images, and tourist attractions (Kim & Stepchenkova, 2015; Kirilenko et al., 2019; Pan et al., 2014). This resulted in the identification of seven image attributes, as presented in Table 1. They represent a broad range of elements that tourists may capture in their photographs and post in their online reviews, reflecting various aspects of their experiences at the tourist attractions. They include activities, culture, history, and art, infrastructure and architecture, nature, place and space, political and economic, and social environment.

Table 1. Image attributes

Image attributes adopted	**Pan et al. (2014)**	**Kirilenko et al. (2019)**	**Kim & Stepchenkova (2015)**
Activities	Tourism leisure and recreation		Activities (leisure, outdoor and sports, way of life)
Culture, history, and art	Culture, history, and art	Heritage	Heritage (arts and culture, history, food and things)
Infrastructure and architecture	General infrastructure		Transportation and infrastructure Architecture
Nature	Natural resources Natural environment	Nature	Nature landscape
Place and space	Atmosphere of the place	Excitement	Place (urban area or rural area)
Political and economic	Political and economic factors		State power
Social environment	Social environment		People (single, group, few random, crowd)

The words obtained through the process of object recognition were categorized into the seven image attributes, as shown in Table 2. This classification process revealed a fair distribution of recognized objects across various image attributes. However, the analysis revealed that no words correspond to two of the image attributes: Nature, and Political and Economic attributes.

Table 2. Categorization of detected objects in image attributes (frequency)

Activities	Culture, history, & art	Infrastructure & architecture	Social environment	Space & time
Walking (361)	Church (247)	Building (743)	People (833)	Front (239)
Standing (276)	Statue (55)	Street (337)	Group (260)	Side (148)
Shows (95)	Sign (54)	Clock (310)	Man (198)	Night (80)
Sitting (49)		City (307)	Person (86)	Background (45)
		Stairs (116)	Crowd (84)	Skyline (34)
		Tower (90)	Woman (73)	
		Wall (74)	Crowded (52)	
		Steps (39)	Couple (38)	

Physical distance was measured using an online distance calculator (https://www.distance.to/) determining the distance between Macao and each source country. Cultural distance was obtained based on the six cultural dimensions proposed by Hofstede and colleagues (Hofstede, 1980; Hofstede et al., 2010), including power distance, uncertainty avoidance, long-term orientation, masculinity, individualism, and indulgence. Data for each source country were obtained from Hofstede's website (https://geerthofstede.com/landing-page/). Since the cultural dimensions scores for Macao were not available, those of Hong Kong were used as a proxy due to their geographical proximity and similar background. The cultural distance index was then computed using the formula developed by Kogut and Singh (1988) and later modified by Ahn and McKercher (2015):

$$CD_j = \sum_{i=1}^{n} \frac{(I_{ij} - I_{iM})^2 / V_i}{n}$$

where CD_j = the cultural distance for the *j*th country from Macao;

I_{ij} = the Hofstede's score for the *i*th cultural dimension and *j*th country;

I_{iM} = the Hofstede's score for the *i*th cultural dimension and Macao (using Hong Kong's scores);

V_i = the variance of the index for the *i*th dimension;

n = the number of cultural dimensions.

A higher score on this index indicates a larger cultural distance between the source country and Macao. The 46 countries in the sample were plotted based on their respective values of cultural and physical distances in Figure 1. Based on the average physical distance (M=7504 km) and cultural distance (M=2.04), the countries were categorized based on their physical and cultural distances from Macao into four groups: (1) low in both physical and cultural distances (e.g., India, Malaysia, and Thailand), (2) low in physical distance and high in cultural distance (e.g., Japan, Australia), (3) high in physical distance and low in cultural distance (e.g., Fiji, Italy, and

Spain), and (4) high in both physical and cultural distances (e.g., Canada, Mexico, and United States).

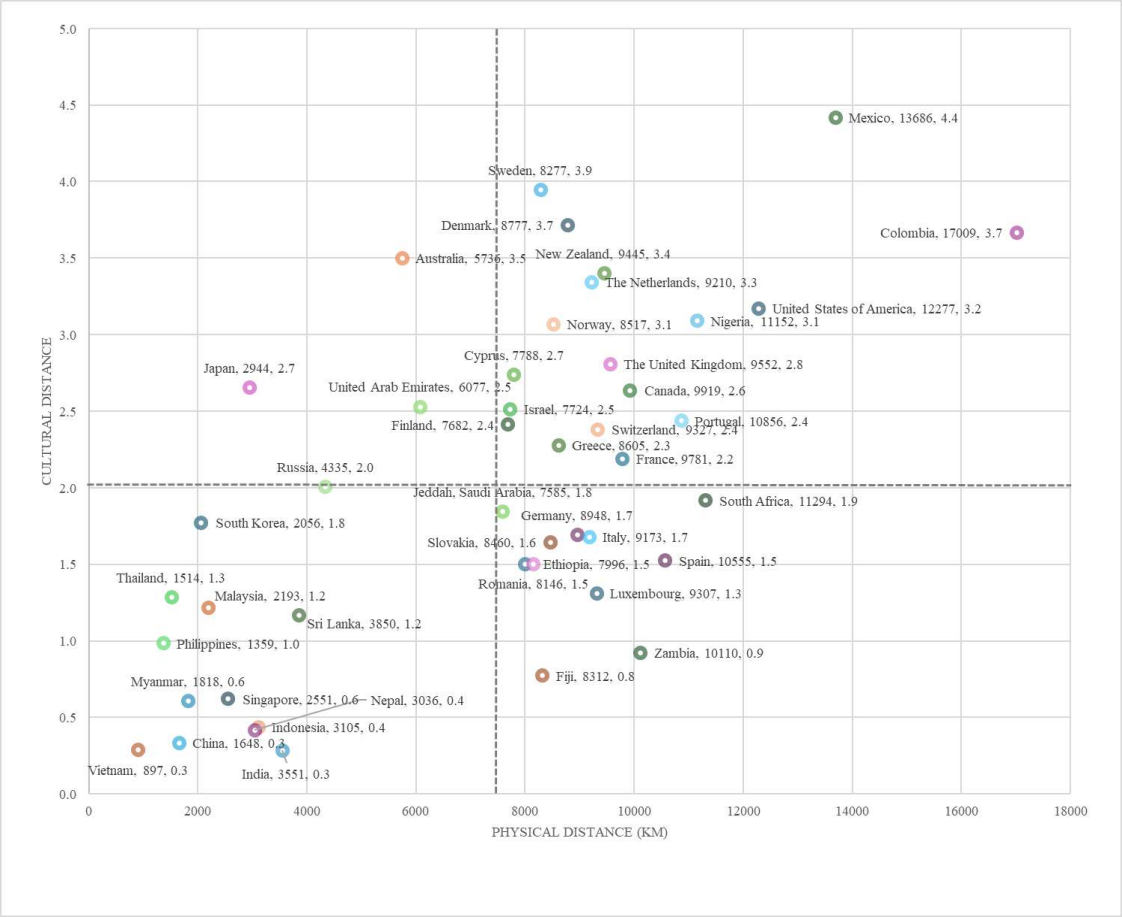

Figure 1. Distribution of countries based on physical and cultural distances from Macao

A Multivariate Analysis of Variance (MANOVA) was conducted to examine the main and interactive effects of cultural distance and physical distance on tourists' online posting behaviors. We used dummy coded variables for cultural distance (low vs. high) and physical distance (low vs. high) as the fixed factors. The outcome variables include five image aspects: activities, culture, history, and art, infrastructure and architecture, space and time, and social environment.

The results showed significant main effects of cultural distance on two image aspects: infrastructure and architecture ($F=4.353$, $p=0.037$) and culture, history, and art ($F=10.514$, $p=0.001$). Tourists from countries with high cultural distance posted more frequently about infrastructure and architecture ($M=2.422$) than those from countries with low cultural distance ($M=1.876$). Similarly, tourists with high cultural distance ($M=0.672$) shared more cultural, historical, and art-related content than with low cultural distance ($M=0.273$). Interestingly, cultural distance did not significantly affect posting behaviors related to the other image aspect: social environment ($F=0.408$, $p>0.05$), space and time ($F=0.130$, $p>0.05$), and activities ($F=0.262$, $p>0.05$).

On the other hand, the results showed that physical distance does not play any effects on any of the five image aspects: social environment ($F=0.003$, $p>0.05$), space and time ($F=0.002$,

p>0.05), infrastructure and architecture (F=1.536, p>0.05), activity (F=0.052, p>0.05), and culture, history, and art (F=0.616, p>0.05). This suggests that physical distance does not play influence the image elements posted by tourists.

The MANOVA results also revealed significant interaction effect of cultural and physical distances on infrastructure and architecture aspect (F=5.141, p=0.024). We then performed a pairwise comparison to further analyze the interaction effects. As shown in Figure 2, the effect of cultural distance on the frequency of posting about infrastructure and architecture elements was stronger when physical distance is low than when it is high. Specifically, among tourists from physically close countries, those with high cultural distances posted significantly more about infrastructure and architecture (M=2.514) compared to those with low cultural distance (M=1.575). For tourists from physically distant countries, cultural distance played a less prominent role (M_highCD=2.331, M_lowCD=2.177).

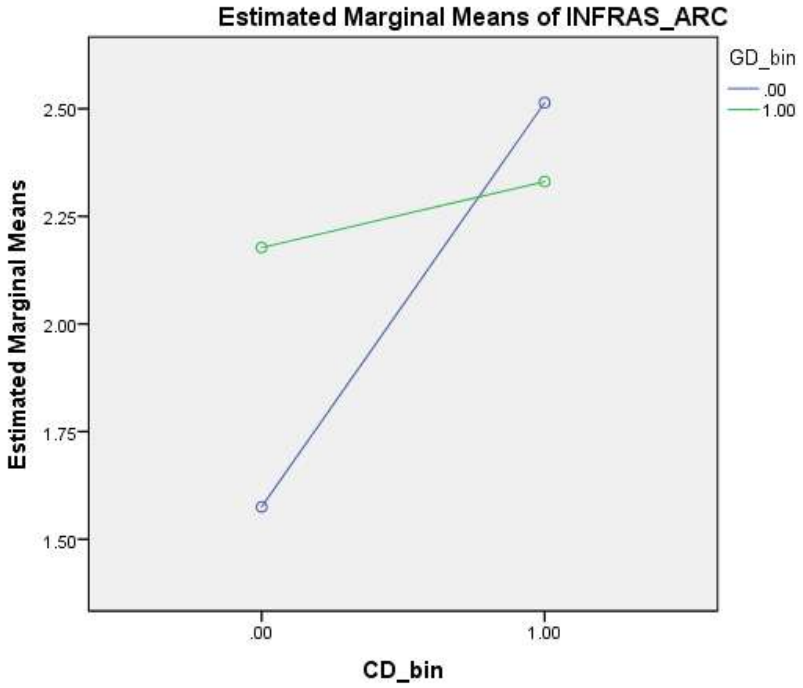

Figure 2. The effect of cultural distance on the frequency of posting infrastructures and architectures

4. Discussion and conclusion

In order to examine how physical and cultural distance affect tourists' interactions with attractions, this study applied data mining on tourism review platforms and applied image recognition to pictures posted by tourists from different countries. The findings of this study related to the effects of distinctive and combined effects of physical and cultural distances contribute to the knowledge of visitor segmentation and attraction management. Instead of segmenting visitors based on their source market, physical and cultural distances may be important dimensions to consider when characterizing tourists. As a result of this study, the method of segmenting tourists into four groups has been demonstrated: tourists with low physical and cultural distances, tourists with low physical distances and high cultural distances, tourists with high physical distances and low cultural distances, and tourists with high physical and cultural distances (See Figure 1).

In addition, the results of this study showed that infrastructure and architecture are more frequently discussed by tourists with high cultural distance than by tourists from countries with low cultural distance. In a similar way, tourists from high cultural distances shared more cultural, historical, and art-related content than those from low cultural distances. In contrast, none of the five image attributes are affected by physical distance. The tourists' images don't appear to be affected by physical distance. This study has also shown that cultural and physical distances interact to influence tourists' picture posting behaviors. Even if the tourists come from geographically proximate places, those with high cultural distances posted more frequently about infrastructure and architecture than those with low cultural distance. Understanding the relationship between visitors' physical and cultural distances and their perceptions of attractions is important for attraction management practices. This knowledge on visitor dynamics provides insights for DMOs and VAMs to more effectively position and promote their tourism products in physically or culturally proximate and distant target markets (Kim & Stepchenkova, 2015). Practitioners can tailor their marketing messages and specify attraction attributes accordingly to enhance visitor engagement and satisfaction. To attract tourists from culturally distant places, DMOs and VAMs should highlight key aspects including infrastructure, architecture, cultural, historical, and art in promotional materials. Furthermore, to cater the interests of this group of tourists, VAMs should consider offering our guiding services with in-depth cultural and historical information about the attractions through various media, such as audio guides and interactive displays.

5. Limitations

The study has a few limitations. The first limitation of this study is that only one tourist attraction was chosen as the study context, future studies can explore other types of tourist attractions to enhance generalizability and verify the findings of this study. Additionally, since Hofstede's framework is the basis for the study of cultural distance, other frameworks for measuring cultural distance could be explored and compared with those in the present study. Finally, the current study collected data from only one online source, but future studies may explore other online platforms to enrich the collection of data.

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Understanding The Drivers of Destination Competitiveness: An Integrated Model from an Emerging Economy

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1. The study context

Tourism plays an increasingly important role in the economic expansion of developing countries, as it is a major source of foreign exchange and an essential component of export diversification. Previously excluded from the world's major tourism flows, the developing world has become the main growth area of tourism. The number of international overnight visitors to developing countries has more than doubled over the last 15 years and almost quadrupled over the last 25 years. Tourism is widely recognized as a strategic instrument for economic development in emerging and developing economies, particularly in countries characterized by strong territorial disparities and uneven regional growth. However, developing countries have not yet fully exploited their tourism potential (Sanches-Pereira et al., 2017). The ability of tourism to generate lasting socioeconomic benefits depends not only on the presence of attractive resources but also on the institutional, managerial, and productive conditions that shape how tourism systems function.

The study's empirical context is Mexico, a large emerging economy with extraordinary tourism potential and one of the world's most internationally recognized destinations. Tourism is the country's largest service export and a major source of foreign exchange. Historically, Mexican tourism policy has positioned the sector as a tool to reduce regional inequalities and stimulate economic growth in peripheral areas. Nevertheless, previous research has highlighted persistent structural weaknesses, including limited backward linkages with local productive sectors, particularly agriculture and small-scale enterprises, as well as a tourism model strongly oriented toward enclave development and externally driven promotional narratives. These characteristics raise important questions regarding the mechanisms through which destination competitiveness is constructed and sustained over time.

2. Theoretical framework

Building on the Ritchie and Crouch (2000) model of destination competitiveness, this study develops and empirically tests an integrated model that emphasizes the interdependence between core tourism resources and the supporting structural conditions that underpin their performance. The conceptual framework distinguishes between value-creating components that directly transfer benefits to tourists—namely, core tourism resources, tourism services, and general infrastructure—and a set of enabling factors that condition their effectiveness. Behind them lies a complex system of prerequisites that can constrain or amplify the competitiveness of destinations. These include sustainable tourism planning, destination management, tourism business ecosystem, and institutional quality, which together form the structural foundation of destination competitiveness. This concept is based on the "value fan" configuration proposed by Flagestad and Hope (2001), drawing on Porter's (1980) "value chain" model as a reference.

Within this framework, “institutional quality” constitutes the base layer of the system, shaping the functioning of public–private cooperation. “Sustainable tourism planning” encompasses strategies that guide the destination's long-term development trajectory, whereas “destination management” focuses on coordinating and regulating its components in the short term. The “tourism business ecosystem”, in turn, reflects the structure, capacity, and managerial quality of the local tourism industry. Together, these elements form the operational environment through which tourism resources are transformed into competitive outcomes, shaping the destination’s ability to generate economic value while maintaining balance over time.

3. Methodology

To explore the relationships among the proposed constructs, the study employs a quantitative approach grounded in expert perceptions. Data were collected via a comprehensive online survey distributed to a wide range of tourism stakeholders in Mexico, including hotel managers, tourism scholars, travel agency managers, tour guides, and public-sector tourism officials. A total of 392 valid questionnaires were received. Respondents were asked to rate on a 5-point Likert scale attributes of destination competitiveness adapted from Goffi, Cucculelli, and Masiero (2019).

Eight research hypotheses were empirically examined using structural equation modelling (SEM) in AMOS, thereby enabling the estimation of multiple causal relationships among the proposed constructs. Prior to testing the structural relationships, a confirmatory factor analysis (CFA) was conducted to assess the reliability and validity of the measurement model.

4. Results and Discussion

Institutional quality exerts a significant and positive influence on sustainable tourism planning, confirming its foundational role in shaping long-term strategic orientations. In turn, sustainable tourism planning significantly affects both destination management and the tourism business ecosystem, highlighting its central function in translating institutional conditions into operational mechanisms. Destination management shows a direct and positive effect on core resources, indicating that short-term managerial actions play a key role in enhancing the attractiveness and performance of destination assets. At the same time, the tourism business ecosystem significantly contributes to the quality of tourism services, underscoring the importance of private-sector capacity in value creation. Sustainable tourism planning also directly influences general infrastructure, suggesting that long-term planning frameworks extend beyond tourism-specific domains. Finally, the significant cross-effects between destination management and tourism services, as well as between the tourism business ecosystem and core resources, reveal important interdependencies among destination components, reinforcing the systemic nature of competitiveness development.

By empirically validating a layered model of destination competitiveness, this study contributes to the tourism literature in three main ways. First, it moves beyond linear interpretations of competitiveness by emphasizing the interdependence between value-creating and enabling components. Second, it provides evidence from a large emerging economy, offering insights into how structural conditions influence tourism outcomes in developing contexts. Third, it reinforces the importance of institutional quality and local business capacity as fundamental prerequisites for achieving balanced and resilient tourism development.

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Unruly Behavior on Airline Operations: Its Implications for Airlines and Tourism Safety Protocols

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Abstract

Travelers are commonly assumed to inherently understand how to behave, even in aviation contexts and during journeys. However, in complex aviation settings, travelers may not fully understand the expectations or the consequences of their actions. Unruly behaviors among travelers on board can significantly impact the in-flight operations and even pose risks to aviation safety. According to IATA (International Air Transportation Association, 2024), based on the 24,500 incident reports from over 50 airline operators, there was 1 unruly behavior incident for every 480 flights in 2023, even though ICAO (International Civil Aviation Organization, 2014) urged the states to ratify the Montreal Protocol 2014 that countries jurisdictional gaps are removed for unruly behavior passengers to pursue criminal prosecutions. Although many airlines are tending to zero tolerance, unruly behavior problems are occurring at overseas airports, where the local police may not have jurisdiction to deal with incidents that occur onboard foreign-registered aircraft. Therefore, preventing incidents from happening and managing the passengers effectively are becoming more crucial.

Aims of the Study

The aim of this research is to deepen understanding of the factors that lead to unruly behaviours among the travellers on board the flights. Furthermore, at aviation perspectives, examining the unruly behaviours can assist with practical applications on informing airlines and even regulatory bodies on how to improve the communication strategies that ultimately enhance passenger awareness and compliance on safety protocols.

Literature Review

"A passenger who fails to respect the rules of conduct at an airport or on board an aircraft or to follow the instructions of the airport staff or crew members and thereby disturbs the good order and discipline at an airport or on board the aircraft," as identified in Annex 17 in the Chicago Convention on International Civil Aviation Security Safeguarding International Civil Aviation Against Acts of Unlawful Interference, defines a disruptive passenger (ICAO, n.d.). Unruly passengers are one of the top 3 concerns of cabin crew (Colehan, 2016). Phan, Tran, Huynh, Huynh, & Ho (2023) identified the three most bothersome behaviours were threats, causing panic; aggression, public disturbance; and sanitary violations. Wang, Yuen, Shi, & Ma (2020) revealed that passengers' safety behaviour is positively influenced by their safety awareness and affected by their attitude, norms, and behavioural control. However, a disruptive passenger may not see his behaviour as a threat to aviation safety (Bell, 2022). Cabin safety knowledge will affect the airline passenger behaviour and correlate to their attitude; however, there are discrepancies in the consistency of passengers' safety behaviour knowledge (Chang & Liao, 2009). Besides, literature remains about the dimensions of the Safety Management System to convey messages within management and airline operations of the crews (Hsu., Li, & Chen,

2010); thus, it is vital to uncover information of stakeholders regarding unruly and disruptive behaviour of passengers.

Methodology

A comprehensive content analysis of information provided by ICAO, IATA, civil aviation authorities, tourism boards, and airlines regarding unruly behavior and travellers' expectations onboard the flights will be studied. Content analysis is selected to study the messages issued by different stakeholders and compare various regulatory bodies and airlines about unruly behaviors to assess the effectiveness of the consistency of their messaging.

By systematically examining how the information is disseminated to the travelers, authors aim to uncover further insights into unruly behavior, highlighting what not to do and promoting acceptable conduct for a safer and more enjoyable flight experience for all the passengers.

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Weaving Local Roots into Global Canopies: Rethinking Nature-Based Tourism in Sri Lanka through the Asian Lens of Local Action and Global Vision

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Abstract

For over a hundred years, the delicate balance between human desire and nature's resilience has been a topic of both admiration and concern. As human footprints deepen in pristine landscapes under the banner of tourism and recreation, ecological tremors ripple across the natural world. Sri Lanka, a verdant jewel nestled in the Indian Ocean, has become a microcosm for this global paradox rich in biodiversity, yet increasingly exposed to the pressures of nature-based tourism. This study breathes life into the skeletal literature of recreational ecology as it pertains to the island nation, weaving together global scholarship with local relevance in a manner rarely attempted. We embark on a journey through Sri Lanka's national parks, forest trails, mountains, and coastal stretches, where hiking boots, camping tents, roaring engines, and eager wildlife watchers converge often unaware of the ecological conversations their presence initiates. This research is a clarion call not only to observe but also to understand and anticipate the ecological repercussions of recreational tourism in Sri Lanka. It bridges a global gap in literature by rooting recreational ecology in the specific environmental, cultural, and managerial context of the Global South, particularly South Asia. The study envisions sustainable nature-based tourism not merely as a theoretical construct, but as a practical necessity that blends conservation with commerce, education with experience, and global theory with local wisdom. The study was guided by three core objectives (i)To identify and synthesize the known and potential ecological impacts arising from key recreational activities in natural areas across Sri Lanka namely hiking, camping, motorized tourism, and wildlife observation.(ii)To assess the depth and breadth of existing recreational ecology research as applicable to the Sri Lankan context.(iii) To propose a future-oriented, context-sensitive research agenda supported by a novel conceptual model, enabling better management and policy development for sustainable tourism. Employing a rigorous literature review methodology, this study distills findings from global and regional sources, critically examines grey literature and unpublished reports, and incorporates interdisciplinary insights. The methodological backbone involves mapping recreational impacts to ecosystem fragility using comparative and evaluative techniques. We present a conceptual model rooted in systems thinking that elucidates the complex relationships among visitors, ecological thresholds, recreational practices, and managerial interventions. The study reveals a conspicuous void in peer-reviewed research focusing on Sri Lanka's recreational ecology. What exists is scattered, mostly un-indexed, or buried within institutional archives and consultant reports. Nevertheless, by harnessing global findings and juxtaposing them with the Sri Lankan scenario, this study offers illuminating insights into the country's recreational hotspots and their vulnerabilities. Among the chief culprits of ecological stress are unregulated hiking paths, improperly managed camping sites, poorly guided wildlife safaris, and unmonitored motorized access to natural areas. These activities often leave behind more than footprints they erode soil, disturb fauna, fragment habitats, and introduce pollutants.

A pivotal contribution of this study is its proposed conceptual model, which functions like a compass for policymakers and researchers alike. This model unpacks the intricate interdependencies between tourism pressures and ecological responses, while highlighting the role of data-driven management, stakeholder collaboration, and adaptive planning. Though designed with Sri Lanka in focus, the model's theoretical scaffolding renders it transferable across similarly positioned developing nations. While this study provides a robust conceptual and theoretical foundation, it is limited by the scarcity of localized empirical data. Much of the analysis is inferential, reliant on extrapolations from international studies. However, this limitation underscores the urgent need for Sri Lanka and its regional neighbors to invest in dedicated, locally-led research programs. This study acts as both a springboard and a blueprint for such future work. This research marks a seminal turning point for recreational ecology in the Sri Lankan context. It offers original value by being the first of its kind to frame a research agenda tailored to the region's ecological, socio-political, and economic realities. The conceptual model crafted here is an intellectual lighthouse guiding the ships of policy, practice, and pedagogy safely through the foggy seas of uncertainty and fragmentation. Moreover, by establishing a rare synthesis between international knowledge and domestic application, the study advocates for a "think globally, act locally" philosophy reimagined for the tourism conservation nexus. To ensure that nature-based tourism does not consume the very nature it seeks to celebrate, several pivotal actions are proposed:(i)Establishing an interwoven tapestry of partnerships among government planning agencies, academic institutions (local and international), tourism operators, and community custodians of nature is essential. This network should operate as a knowledge ecosystem—sharing data, harmonizing practices, and collectively interpreting ecological signals. Policy should mandate cross-sectoral advisory boards for recreational planning. (ii) Guided by our review and supported by the model presented, Sri Lanka must invest in locally grounded empirical studies that span various ecosystems (wetlands, forests, montane regions, coasts). Hiking and water-based activities should be top priorities, considering their increasing popularity and potential for ecosystem disruption. Research funding should be allocated by government and donor agencies to incentivize interdisciplinary, community-inclusive studies. (iii) A glaring gap exists in experimental recreational ecology. Sri Lanka has the opportunity to be a pioneer in the region by leading studies that evaluate how specific variables—such as group size, minimum approach distances in wildlife watching, or vehicle density—affect ecosystem health. These experiments can inform evidence-based guidelines for visitor management, including temporal zoning, capacity limits, and behavior codes. The existing legal framework must evolve to integrate principles of recreational ecology. (iv) Environmental Impact Assessments (EIAs) for tourism projects should include recreation-specific indicators. Additionally, tourism certification schemes must evaluate and reward operators based on their ecological mindfulness, offering incentives for sustainable practices. (v) Empower local communities through ecotourism training and citizen science programs that make them stewards of their own environments. Include recreational ecology in tourism and hospitality curricula to shape the next generation of nature-conscious professionals.(vi) This study, while rich in theoretical insight, was constrained by the absence of primary data. Its conclusions, therefore, are directional rather than diagnostic. Future research must deploy longitudinal field studies, geospatial analysis, and participatory research designs to build a stronger empirical foundation. Moreover, exploring the socio-cultural dimensions of recreational impact such as indigenous perceptions of nature use or visitor behavior psychology remains an open field.

This study is not just a mirror held up to current practices it is a window to what could be. As Sri Lanka and its South Asian peers stand at the crossroads of tourism expansion and ecological preservation, the choices made today will echo in the biodiversity of tomorrow. Recreational

ecology must evolve from an academic afterthought into a mainstream policy imperative. In this transition, this research offers both map and compass—charting the journey toward a more balanced, beautiful, and biodiverse future.

Keywords: Biodiversity, Conceptual Model, Ecological Impacts, Nature-Based Tourism, Recreational Ecology

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‘Wheels Of Meaning’: Exploring the Intersection of Spiritual and Adventure Dimensions of Motorcycle Journeys in Ladakh, India

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Abstract

Motorcycle travel is increasingly recognized as a distinctive form of adventure tourism, attracting those seeking freedom, challenge, and deeper connections with landscapes. Because riders are fully immersed in motion, riding becomes the experience rather than simply a way to reach a place (Sykes & Kelly, 2014). For many, motorcycling involves exhilaration, risk, and escape from routine, placing it firmly within adventure tourism (Ramírez-Hurtado et al., 2022). Riders also move through difficult terrain and shifting climates, making journeys physically demanding yet rich in sensory intensity and close engagement with place (Cater, 2017; Ertaş & Aktaş, 2022). This value is often tied to endurance, uncertainty, self-testing, and the satisfaction of completing challenging routes (Ramírez-Hurtado et al., 2024).

Over the last few decades, motorcycle travel in Ladakh has become a particularly popular and desirable riding experience in the Himalayas, with riders often referring to Ladakh as the “Mecca” of motorcycling. Each year, they travel to this high-altitude region to navigate vast landscapes and demanding roads, often aiming to cross iconic mountain passes such as Khardung La and Umling La. These journeys are shaped by cold temperatures, thin air, long distances, and rough terrain. Prior research has also suggested that motorcycle journeys can carry embodied and existential dimensions, where physical effort and meaning-making may be closely linked (Colarič-Jakše & Ambrož, 2015). This embodied experience can intersect with pilgrimage, associated with ritual, hardship and transformation (Collins-Kreiner, 2016). Despite this growing popularity, we still know little about how riders make sense of these experiences, especially when adventure overlaps with deeper personal or spiritual meanings. This paper, therefore, asks: how do motorcycle journeys, often framed as adventure travel, also become spaces where spiritual or pilgrimage-like meanings may emerge?

To explore this question, the paper uses the concept of “motorcycle pilgrimage” as a lens for examining how adventure and spirituality may overlap in Ladakh, where sacred landscapes are encountered through everyday movement. The term “motorcycle pilgrimage” is widely associated with and was popularized in academic work by Jill Dubisch and Raymond Michalowski through their ethnographic research on the “Run for the Wall” ride, an annual motorcycle journey from California to the Vietnam Veterans Memorial in Washington, D.C. Their work shows how motorcycling can take on ritual qualities and shared purpose, becoming linked to reflection and collective memory (Dubisch & Michalowski, 2001).

Ladakh offers a compelling setting for this inquiry. Its high-altitude routes demand endurance and skill, supporting its reputation as a renowned riding destination (Kumari & Chugh, 2024). At the same time, the region is shaped by cultural and spiritual landscapes encountered along the road, including monasteries, prayer flags, stupas, and memorial sites. Riders move

through these settings as part of ordinary travel, not only through planned "site visits", making Ladakh well-suited for exploring how meaning can form through the journey itself. In contemporary travel, where ideas of the sacred are often more fluid, journeys are increasingly shaped by overlapping spiritual, personal, and experiential motivations, which can blur sacred and secular boundaries (Polus et al., 2022).

Therefore, the term motorcycle pilgrimage in this paper is not meant to imply that riders are necessarily religious, or that they are intentionally visiting sacred sites, or that Ladakh functions only as a spiritual tourism landscape. Instead, it provides a careful way to explore how riders describe meaning, change, and significance on the road, particularly when their experiences do not fit neatly into categories such as "adventure tourist" or "pilgrim".

Empirically, this paper draws on an ongoing qualitative study based on 25 online semi-structured interviews with riders who have undertaken motorcycle journeys in Ladakh within the last year. Participants are recruited through Facebook motorcycling communities and through the co-investigator's professional networks as a former motorcycle guide with strong links to Indian rider groups and tour operators. Interviews are expected to be completed by March. The study examines how riders articulate their motivations, how they narrate challenge and endurance, and how they interpret moments of reflection, reverence, connection, or personal change during and after the journey.

Conceptually, this paper positions motorcycle pilgrimage as a lens for understanding adventure mobilities that carry pilgrimage-like qualities, developing an interdisciplinary framing across adventure tourism, pilgrimage studies, and cultural geography. While focused on Ladakh, this perspective shifts attention from destination-based meaning to the act of riding as a site of meaning-making (Dubisch & Winkelman, 2014). By foregrounding rider sense-making, the study shows how meaning emerges through movement in the Himalayas and wider (Asian) contexts, contributing to efforts to move beyond rigid divisions between "adventure" and "pilgrimage" and to recognize distinct Asian ways of understanding mobility and meaningful experience.

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