

Research on the Influence of Tourists' Perceived Restorativeness of the Western Sichuan Music Linpan on Post-Visit Behavioral Intentions: The Mediating Effect of Place Attachment

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Abstract: Grounded in the “Cognitive-Affect-Behavior” (CAB) theoretical framework, this study constructs a multiple mediation model to systematically investigate the impact mechanism of tourists' restorative environment perception on post-visit behavioral intentions within rural tourism contexts. The empirical findings reveal: (1) The ecological and cultural attributes of the Linpan landscape demonstrate notable psychological resource restoration efficacy; (2) Place identity functions as the “emotional nexus” shaping tourists' behavioral intentions; (3) Mediation effect analysis identifies a “functional-affective transformation threshold” in the transmission of restorative effects.

Keywords: Perceived restorativeness; Place attachment; Post-visit behavioral intentions

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1. Introduction

1.1. Research background

Currently, rural tourism has not only become a crucial engine for implementing the rural revitalization strategy but, leveraging its natural ecological foundation, local cultural heritage, and slow-living characteristics, has increasingly evolved into a vital space for urban residents to alleviate stress and restore physical and mental balance. Notably, against the backdrop of deepening cultural and tourism integration, how to stimulate tourists' revisit intention and recommendation behavior by optimizing environmental perception quality has become a core issue for enhancing the quality and efficiency of rural tourism.

With the acceleration of urbanization and the ubiquity of digital technology in modern society, urban populations commonly face the dual predicaments of “attention overload” and “psychological resource depletion.” In this context, restorative environment theory has gradually emerged as a frontier area in environmental

psychology and tourism research. However, existing studies are largely confined to settings such as urban parks and natural landscapes, with a systematic understanding of the transmission mechanisms within the specific context of rural tourism yet to be formed ^[1].

This paper aims to reveal the functional relationships of different dimensions of place attachment in the transmission of restorative effects by constructing a multiple mediation model, thereby providing feasible solutions for product design and tourist behavior management in rural tourism destinations.

1.2. Research significance

First, by introducing the PRS-11 scale into Chinese rural tourism research, the study expands the explanatory boundaries of restorative environment theory within rural spatial contexts.

Second, by validating the chain mediation effect of place dependence and place identity, the research reveals the distinct roles of different dimensions of place attachment in the transmission process.

Third, based on the “cognitive-affective-behavioral” theoretical framework, it elucidates the formation mechanism of rural tourists’ behavioral intentions, providing theoretical support for rural tourism destination management and sustainable development.

2. Literature review and theoretical foundation

2.1. Perceived restorativeness of environments

In the mid-19th century, Frederick Law Olmsted, an expert in the American landscape design field, observed that residents experienced emotional regulation and stress buffering effects after prolonged exposure to natural environments, thus pioneering the concept of “restoration” ^[2]. Kaplan et al. (1989) further developed the Attention Restoration Theory (ART) based on this, positing that prolonged use of directed attention leads to fatigue, and natural environments possessing “restorative” qualities can facilitate the recovery of such attention ^[3].

In tourism research, Pasini et al. (2014) developed a simplified version of the perceived restorativeness scale, the RPS-11, comprising four dimensions: Fascination, Being-Away, Coherence, and Scope ^[4]. Therefore, this study adopts Pasini’s scale to measure tourists’ perceived restorativeness of environments.

2.2. Post-visit behavioral intentions

The concept of behavioral intention originated in behavioral science and social psychology and has gradually been applied in tourism research. Chew et al. (2014) defined tourists’ post-visit behavioral intentions as their inclination towards future actions at the conclusion of a trip, encompassing three dimensions: revisit intention, recommendation intention, and preference intention ^[5].

Scholars domestically and internationally have explored the influence of various factors on post-visit behavioral intentions across different tourism contexts. For instance, Pedro et al. (2019) found that tourism services exerted the strongest influence on tourists’ behavioral intentions ^[6]. Liu Li et al. (2011) found that Korean tourists’ satisfaction with Jiuhua Mountain positively influenced their revisit intention ^[7].

2.3. Theoretical foundation

The Cognitive-Affect-Behavior (CAB) model, initially proposed by Holbrook, is widely applied in environmental psychology and behavioral science to describe the process from consumer cognition to behavior ^[8]. The generation mechanism of post-visit behavioral intentions follows the progressive logic of cognitive development, exhibiting

characteristics of “person-place” emotional evolution in the vertical dimension ^[9]. Within this study’s framework, perceived restorativeness constitutes the cognitive dimension, representing the individual’s assessment system of the environment’s restorative efficacy; place attachment represents the affective dimension, characterizing the emotional bond formed between tourists and the setting; and post-visit behavioral intentions constitute the behavioral dimension, reflecting the individual’s behavioral tendencies in a specific context.

3. Research design

3.1. Research hypotheses

3.1.1. Perceived restorativeness and post-visit behavioral intentions

Current research directly linking perceived restorativeness and post-visit behavioral intentions is limited. However, recent studies suggest a significant relationship. For example, Pasanen et al. (2018) empirically demonstrated that tourists in restorative environments showed enhanced cognitive functions, with creativity and altruistic behavior exhibiting significant improvement ^[9]. Consequently, the following hypothesis is proposed:

H1: Perceived restorativeness has a significant positive impact on post-visit behavioral intentions.

3.1.2. Perceived restorativeness and place attachment

Accelerated urbanization has led to a diminishing sense of place, bringing the conflict in human-place relationships into sharper focus. Place attachment, describing the emotional bond between people and specific environments, was first proposed by Shumaker in 1983 ^[10]. This concept is often divided into two core dimensions: place dependence and place identity.

Post-2010, Chinese scholars began integrating place attachment into the research framework of perceived restorativeness ^[11]. Furthermore, as related research deepened, the relationship between the two has been partially confirmed by scholars ^[12]. Therefore, the following hypotheses are proposed:

H2: Perceived restorativeness has a significant positive impact on place dependence.

H3: Perceived restorativeness has a significant positive impact on place identity.

3.1.3. Place attachment and post-visit behavioral intentions

When a tourism setting forms deep functional and spiritual dependence with tourists, this emotional interaction constructs a mechanism of place identity, subsequently influencing the occurrence of behavioral intentions ^[13]. Previous research indicates that place attachment not only influences tourist loyalty and satisfaction, but findings from multiple scholars also show that place attachment stimulates individuals’ behavioral intentions to visit ^[9, 14–15]. Therefore, the following hypotheses are proposed:

H4: Place dependence has a significant positive impact on post-visit behavioral intentions.

H5: Place identity has a significant positive impact on post-visit behavioral intentions.

Place dependence reflects the rural tourists’ level of reliance on the material and non-material aspects of the destination. When rural tourists exhibit a high degree of dependence on a rural tourism destination, they tend to gain a deeper understanding and integration into the local social environment. This deeper connection influences their sense of identity with the place. Hence, this study also proposes:

H6: Place dependence has a significant positive impact on place identity.

3.1.4. Mediating effect of place attachment

The mediating effect of place attachment is a crucial topic in place theory research ^[16]. Current research has focused on the relationship between place attachment and perceived restorativeness, as well as post-visit behavioral intentions. Furthermore, research by multiple scholars has found that place attachment can directly, as an internal factor, positively influence tourists' behavioral intentions ^[9, 17]. Therefore, the following hypotheses are proposed:

H7: Place dependence plays a mediating role in the model.

H8: Place identity plays a mediating role in the model.

H9: Place dependence and place identity play a chain mediating role in the model.

3.2. Questionnaire design and data collection

Data was primarily collected through questionnaires comprising two parts. Part one measured core variables: Perceived restorativeness included 11 measurement items, mainly adapted from Pasini's (2014) Perceived Restorativeness Scale (RPS-11) ^[4]; Measurement of place attachment primarily drew on Zhang Hui's (2022) scale, comprising 8 items ^[18]; Measurement of post-visit behavioral intentions mainly utilized Huang Jie's (2022) scale, comprising 4 items ^[19]. Part two measured demographic information to examine individual characteristics across different populations, comprising 5 items.

4. Data analysis

4.1. Descriptive statistical analysis

Analysis showed that female respondents predominated (59.5%). In terms of age composition, young tourists aged 25–44 accounted for 60.10%. Regarding education, bachelor's and associate degrees constituted 63.0%. Occupations were mainly freelancers and enterprise employees (63.3%). Monthly income mostly ranged from 3001 to 9000 RMB (67.6%).

4.2. Reliability and validity analysis

Reliability was assessed using Cronbach's alpha coefficient. A coefficient greater than 0.7 indicates good questionnaire quality ^[19]. The coefficients for the latent variables in this study ranged from 0.73 to 0.93, indicating good reliability.

Following Wu Minglong's (2017) recommendations, the standardized factor loadings of the latent variable items were all above the reference standard, ranging from 0.73 to 0.95 ^[20]; Composite Reliability (CR) values ranged from 0.88 to 0.95, and Average Variance Extracted (AVE) ranged from 0.75 to 0.86, meeting reference standards and indicating good convergent validity. The square roots of the AVE values ranged from 0.86 to 0.93, all greater than the corresponding cross-variable correlation coefficients, indicating good discriminant validity.

4.3. Hypothesis testing

The model fit indices (CMIN/DF=2.99, RMSEA=0.08, IFI=0.92, TLI=0.91, CFI=0.92) all met the standards, indicating good model fit, allowing for hypothesis testing.

Hypotheses H1–H6 were tested first. Except for H4 ($P > 0.05$, not significant), all other hypotheses were significant.

To examine the mediating effects of place attachment (H7–H9), AMOS software was used for validation.

The results showed that the confidence intervals for H8 and H9 did not include the critical value 0, confirming the existence of indirect effects and supporting these hypotheses.

5. Conclusion and suggestions

5.1. Conclusions

This study primarily yields the following conclusions:

First, the Western Sichuan Music Linpan, characterized by its ecological and cultural attributes, demonstrates significant psychological resource restoration efficacy. It creates a favorable restorative environment for rural tourists, thereby fostering high levels of place attachment.

Second, place identity constitutes the “emotional nexus” shaping tourists’ behavioral intentions and decisions. This finding reveals that the behavioral intentions of rural tourists are essentially driven by symbolic value identification rather than simply fulfilling functional utility.

Third, a “functional-affective transformation threshold” exists in the transmission of restorative effects. The results indicate that the restorative effects can only be effectively translated into tourists’ behavioral intentions when the functional support provided by the Western Sichuan Music Linpan rural tourism environment reaches this critical point for emotional transformation.

5.2. Research limitations and future directions

Limited by the author’s capabilities, this study has the following shortcomings: First, the sample coverage is limited, unable to fully reflect perception differences among tourists of different age groups, income levels, or cultural backgrounds. Second, the depth of model testing is insufficient. Although this study examined the impact mechanism of perceived restorativeness on place attachment and post-visit behavioral intentions, it did not delve into specific sub-dimensions.

Disclosure statement

The authors declare no conflict of interest.

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