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# THE RELATIONSHIP BETWEEN TOURIST EXPERIENCE, PLACE ATTACHMENT, AND POST-VISIT INTENTIONS: AN APPLICATION OF S-O-R PARADIGM IN THE CONTEXT OF HANGZHOU, CHINA

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#### **Abstract**

A key challenge facing destination practitioners and policymakers is to sustain a competitive advantage and to ensure its destination's success and prosperity under the impact of globalisation. Evidence suggests that the tourist experience can enhance tourists' attachment and post-visit intention, which is an essential concept in travel and tourism study, as well as destination positioning. Still, there are limitations in the research concerning the relationship between these three factors. This study investigates the mediating effect of place attachment on the relationship between tourist experience and post-visit intention using Stimulus—Organism—Response (S-O-R) paradigm. The data were gathered from 213 respondents among the West Lake Heritage Site users in Hangzhou, China, using the self-administered questionnaires. According to statistical findings, tourist experience influences post-visit intention both directly and indirectly through the mediating role of place attachment. Drawing from these findings, practical information on design, marketing, and experiences for tourism destinations is offered.

*Keywords*: Tourist Experience, Place Attachment, Post-visit Intention, S-O-R Theory, Mediating effect, Hangzhou

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#### INTRODUCTION

Tourism is among the most vibrant industries in today's economy. The ongoing increase in international travellers is vital in driving worldwide economic growth (Ab Dulhamid et al., 2022). However, under the impact of globalisation, regions have led to cultural convergence and the gradual disappearance of local individuality and characteristics. Numerous types of tourism activities and tourist needs can be substituted. Therefore, destination practitioners and policymakers must sustain a competitive advantage. Tourism destinations are obliged to understand what the market demands. In the emerging experience economy, consumers no longer pursue consistent and high-level products or services but prefer unique experiences (Pine & Gilmore, 1998). To maintain a competitive advantage and succeed, tourist destinations must provide market demand experiences. Another critical factor for the success of tourist destinations is place attachment. It is a necessary construct that reflects the multi-faceted nature of the meaning tourists ascribe to physical environments. For many tourism destinations, tourists' post-visit intentions—such as the desire to return and share their experiences—constitute a valuable market segment. Previous research has established a positive correlation between tourist experience and place attachment (e.g., Wu et al., 2022) and between place attachment and post-visit intention (e.g., Sthapit et al., 2017). However, empirical research regarding the relationship among these three variables remains limited. This study adopts the S-O-R paradigm to explore how place attachment mediates the relationship between tourist experience and post-visit intention.

#### LITERATURE REVIEW

#### Stimulus-organism-response (S-O-R) Theory

The S-O-R model posits that environmental stimuli can influence an individual's cognitive and emotional responses, which subsequently lead to corresponding behavioural actions (Lee et al., 2011). According to this theory, stimuli (S) in various settings trigger changes in a person's internal or organismic state (O), which then prompts either approach or avoidance behaviour (R) in response to these stimuli (Şahin & Kılıçlar, 2023).

#### **Stimulus: Tourist experience**

A stimulus refers to environmental factors that trigger individuals' internal reactions to their surroundings. In the S-O-R theory, stimuli encompass both physical and sensory components. These external factors include various aspects such as visuals, sounds, tastes, or the overall ambiance. Stimuli represent all external influences on an organism (Şahin & Kılıçlar, 2023). The tourist experience is shaped by the act of visiting, learning, and enjoying activities in a setting away from home. Stamboulis and Skayannis (2003) described the tourist

experience as the interaction between tourists and sites, where sites serve as venues for experiences, and tourists act as participants. Consequently, tourist experiences provoke reactions from tourists, which can be seen as a "stimulus".

# **Organism: Place Attachment**

The "organism" encompasses a spectrum of elements, including attitude, emotion, feeling, affect, value, and consciousness (Jacoby, 2002). In this model, an individual's emotional states represent the internal processes and structures that mediate between external stimuli and final actions or responses. The term "attachment" emphasizes the emotional aspect, while "place" highlights the environmental settings to which people develop emotional and cultural ties (Altman & Low, 2012). Place attachment represents the positive connection or emotional bond between a person and a specific location (Williams & Vaske, 2003). It has been widely applied to study the connection between tourists and destinations. Therefore, place attachment is recognized as an "organism".

#### **Response: Post-visit Intention**

Within the S-O-R paradigm, the response is the outcome of the organism. In tourism studies, the response dimension often examines behavioural intention (Kucukergin et al., 2020), which can be viewed as the result of the environmental stimulus. In tourism research, post-visit intention typically refers to the willingness to return and recommend a destination (Yoon & Uysal, 2005). The rate at which tourists revisit significantly influences the total number of visitors and their purchase intentions. This study examines post-visit intention as it relates to the "response" dimension in the model.

# **Relationship Between Tourist Experience and Post-visit Intention**

Previous research has thoroughly tested the effect of tourist experience on postvisit intention. For example, empirical findings from De Nisco et al. (2015) demonstrate that a high-quality tourism experience can positively influence the revisit intention and their inclination to endorse a destination as a preferred travel choice.

#### **Relationship Between Tourist Experience and Place Attachment**

From a tourism perspective, the role of the tourist experience in shaping an emotional bond with destinations has been well substantiated. For instance, Wu et al. (2022) revealed a significant positive correlation between tourist experience and their attachment to mountain tourism. Similarly, Xiang and Mohamad (2023) confirmed this finding, highlighting a close interrelationship between tourist experience and place attachment.

# **Relationship Between Place Attachment and Post-visit Intention**

Prior studies have explored the effect of place attachment on tourists' behavioural intentions, like recommending and revisiting a destination. Sthapit et al. (2017) concluded that a strong positive connection between tourists and a place increases the likelihood of them sharing recommendations. Similarly, findings from Pandey and Sahu (2020) indicate that destination attachment is a key predictor of recommendation intentions. The proposed research framework is displayed in **Figure 1**.

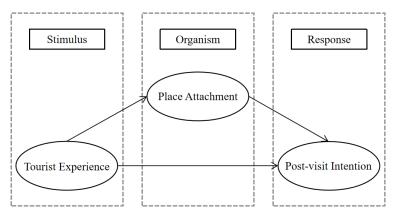


Figure 1: Conceptual Framework

Source: Authors

# RESEARCH METHODOLOGY

#### **Study Area**

This study focuses on the West Lake Heritage site in Hangzhou, China. Situated on the southern edge of the Yangtze River Delta and the Qiantang River Basin, Hangzhou is a prominent national scenic tourism city, as shown in Figure 2. The West Lake Cultural Landscape of Hangzhou was inscribed on the World Heritage List in 2011. Therefore, Hangzhou is an ideal location for exploring the interrelationship between tourist experience, satisfaction, and place attachment.

Bai Fan, Mohd Ismail Isa, & Badaruddin Mohamed The Relationship Between Tourist Experience, Place Attachment, and Post-visit Intentions: An Application of S-O-R Paradigm in the context of Hangzhou, China



**Figure 2:** The West Lake Heritage Site's Location. *Source: https://en.wikipedia.org/wiki/Yangtze\_Delta* 

#### **Research Instrument**

The questionnaire comprises four sections: (i) demographics, (ii) tourist experience, (iii) place attachment, and (iv) post-visit intention, featuring a total of 37 items. Except for the demographic questions, all other items were assessed using a 5-point Likert scale, ranging from 1 (strongly disagree) to 5 (strongly agree), with intermediate points being 2 (disagree), 3 (neither agree nor disagree), and 4 (agree).

Demographic information: According to Skare et al. (2023), tourists choose different attractions based on various factors, including sex, age, education, marital status, and annual income. Therefore, this section of the questionnaire includes questions about sex, age, education, marital status, monthly income, and occupation.

Tourist experience: As pioneers of the experiential economy, Pine and Gilmore (1998) categorized experiences into four types based on customer participation: entertainment, education, escapist, and aesthetic experiences. This "4E" scale has been extensively studied and validated in contexts such as rural tourism, wine tourism, gastronomic experiences, and heritage sites. Consequently, this study applies the four dimensions to measure tourist experience, with the 16 items from Minh et al. (2023).

Place attachment: Both conceptual and empirical studies have indicated that place attachment is generally characterized by two aspects: place dependence and place identity. Place dependence refers to functional attachment, involving a relationship with a setting that offers opportunities to meet specific needs (Ramkissoon et al., 2012). In contrast, place identity represents an emotional attachment. The 12 items used in this section are adapted from Isa (2020) and Han et al. (2023).

Post-visit Intention: The three items used to measure post-visit intention, including tourists' intentions to revisit and their likelihood of recommending the destination, are adopted from Azinuddin et al. (2022).

# **Quantitative Approach**

This study adopts a quantitative approach, utilizing a survey methodology with self-administered questionnaires for data collection. Correlation analysis and mediation model testing were conducted to analyse the relationships among the three factors. According to Fricker and Hengartner (2001), correlation is a statistical tool used to determine the strength of the relationship between two or more variables. In this research, Pearson Correlation Analysis was employed to assess the significance and interrelationship among the three variables.

# ANALYSIS AND FINDINGS

# **Demographic Characteristics**

Of the respondents, 57.7% are male, while 42.3% are female. Most respondents fall within the 26 to 35 age group, with 62.0% of them being unmarried. Additionally, 90.2% of respondents have attained higher education, specifically "university or college" (46.5%) or "postgraduate or higher" (43.7%). As shown in **Table 1**, the monthly income of respondents is reported in Chinese Yuan (CNY, ¥). The findings reveal that 21.1% of respondents earn less than ¥3,000 monthly, followed by income groups of ¥5,000-6,999 (18.3%), ¥7,000-8,999 (16.9%), and ¥3,000-4,999 (7.0%). In contrast, 36.6% earn more than ¥9,000. Respondents primarily consist of private sector employees (31.9%) and public sector employees (31.5%), with stay-at-home parents representing the smallest proportion.

**Table 1**: Sample Demographic Characteristics.

Characteristics	Classification	Number	Percentage (%)
Gender	Male	123	57.7
	Female	90	42.3
Age	< 18	3	1.4
	18 ~ 25	66	31.0
	26 ~ 35	105	49.3
	36 ~ 45	15	7.0
	46 ~ 60	21	9.9
	>60	3	1.4
Marital status	Unmarried	132	62.0
	Married	81	38.0
Education background	Middle school or lower	0	0
	High school	21	9.9
	University or college	99	46.5
	Postgraduate or higher	93	43.7

Bai Fan, Mohd Ismail Isa, & Badaruddin Mohamed The Relationship Between Tourist Experience, Place Attachment, and Post-visit Intentions: An Application of S-O-R Paradigm in the context of Hangzhou, China

Characteristics	Classification	Number	Percentage (%)
Monthly income (CNY)	< 3000	45	21.1
	3000 ~ 4999	15	7.0
	5000 ~ 6999	39	18.3
	7000 ~ 8999	36	16.9
	> 9000	78	36.6
Occupation	Students	25	11.7
	Stay-at-home parent	5	2.3
	Public sector employee	67	31.5
	Unemployed	6	2.8
	Self-employed	24	11.3
	Private sector employee	68	31.9
	Retired	2	0.9
	Others	16	7.5

Source: Authors

# **Descriptive Analysis**

According to **Table 2**, the mean scores for these variables ranged from 3.700 (Standard Deviation = 0.590) to 4.325 (Standard Deviation = 0.662). This indicates that most respondents rated these variables at three or above on a five-point scale, reflecting their importance to the respondents. Thus, tourist experience, place attachment, and post-visit intention are significant to the respondents.

 Table 2: Descriptive Statistics

	Min	Max	Mean	Stan. Dev. (SD)
Tourist Experience	1	5	3.700	.590
Place Attachment	1	5	3.844	.645
Post-visit Intention	2	5	4.315	.662

Source: Authors

# **Correlation Analysis**

The findings from the correlation analysis are detailed in **Table 3**. As suggested by Jia et al. (2018), a positive correlation coefficient signifies a positive correlation. The absolute value of the correlation coefficient lies between 0.8 and 1, showing a high correlation. The range of 0.5 to 0.8 suggests a moderate correlation, while 0.3 to 0.5 shows a weak correlation. Values from 0 to 0.3 suggest an extremely weak correlation, reflecting minimal or negligible relationships between variables. The analysis revealed a significant and strong positive correlation between tourist experience and place attachment, with a correlation coefficient of 0.690. The findings further show a substantial and robust positive correlation between place attachment and post-visit intention (correlation value is 0.779). Also, the correlation value between tourist experience and post-visit intention is 0.658, which is significant. Thus, it can be

concluded that the relationship between the independent variable (tourist experience), dependent variable (post-visit intention), and mediator (place attachment) is significant.

**Table 3:** Correlation Analysis

	Tourist experience	Place attachment	Post-visit Intention
Tourist experience	1		
Place attachment	.690**	1	
Post-visit Intention	.658**	.779**	1
**. Correlation is signif	ficant at the 0.01 level (2-	tailed).	

Source: Authors

# **Assessment of Structural Model**

Based on the criteria established by Hu and Bentler (1999), the measurement model demonstrates an acceptable level of fit (see **Table 4**). Cronbach's alpha for the examined constructs ranged from 0.882 to 0.948, surpassing the standard for sufficient internal consistency as recommended by Fornell and Larcker (1981). This indicates that the scales used in the questionnaire are reliable.

 Table 4: The Reliability of Tourist Experience, Place Attachment, and Post-visit

	michion.	
Dimensions	Cronbach's Alpha	Items
Tourist Experience	0.892	16
Place Attachment	0.911	12
Post-visit Intention	0.851	3
Total	0.948	31

Source: Authors

To examine the mediating effect of place attachment on the relationship between tourist experience and post-visit intention, this study uses Model 4 (Simple Mediation) in PROCESS, a versatile modelling tool developed by Hayes (2012) in SPSS. The results in **Table 5** show that the predicting role of tourist experience to post-visit intentions is significant (B=0.658, t=7.251, p <0.01). After incorporating place attachment as a mediator, the predictive effect remains significant (B = 0.230, t = 2.265, p <0.01). As such, the conclusion can be made that there is an optimistic prediction from tourist experience to place attachment (B=0.690, t=7.921, p <0.01), and place attachment positively predicts post-visit intention (B=0.620, t=6.115, p <0.01).

The Relationship Between Tourist Experience, Place Attachment, and Post-visit Intentions: An Application of S-O-R Paradigm in the context of Hangzhou, China

Table 5: The Test of Mediation Model.

Regression Equation (N=213)		Assessing fit		Significance of coefficients		
Outcome	Predict variable	R	$\mathbb{R}^2$	F	В	t
Post-visit intention	Tourist experience	0.796	0.634	58.849	0.658	7.251* *
Place attachment	Tourist experience	0.690	0.476	62.743	0.690	7.921* *
Post-visit intention	Tourist experience	0.796	0.634	58.850	0.230	2.265* *
	Place attachment				0.620	6.115* *
**. Correlation is significant at the 0.01 level.						

Comment at the 0.01 level.

The direct and indirect effects of tourist experience on post-visit intention range from 0.082 to 0.685 (greater than 0) within the bootstrap 95% confidence interval, as shown in **Table 6**. This indicates that tourist experience can not only predict post-visit intention directly but also predict it through the mediating effect of place attachment. Additionally, the direct and indirect effects account for 34.959% and 65.041% of the total effect, respectively.

Table 6: Total Effect, Direct Effect, and Indirect Effect.

	Size Effect	Boot SE	Boot LLCI	Boot ULCI	Relative response value (%)
Total effect	0.738	0.113	0.524	0.967	
Direct effect	0.258	0.097	0.082	0.468	34.959
Indirect effect	0.480	0.098	0.303	0.685	65.041

Source: Authors

#### CONCLUSION

The following conclusions emerge from the data analysis and rigorous testing procedures. The results indicate that, among the 213 participants, 57.7% were identified as male and 42.3% as female. The age group of 26-35 years was the most prevalent, comprising 49.3% of the respondents, and 62% were unmarried. 192 respondents held at least a bachelor's degree. The highest income group consisted of individuals earning over 9000 Chinese Yuan. The largest groups of respondents were those employed in the private sector (68) and the public sector (67). The descriptive analysis shows that tourist experience, place attachment, and post-visit intention are all significant to tourists, as the mean values for these factors all exceed three on a 5-point scale.

Empirical results of this study highlight the complex interplay among these variables. The findings show that the tourist experience positively impacts the formation of place attachment, which influences tourists' post-visit intention.

Additionally, the tourist experience has both direct and indirect effects on post-visit intention, providing a nuanced understanding of the dynamics shaping tourists' behavioural intentions after their visit. The direct effect, accounting for 34.959%, underscores the immediate influence of tourist experiences on post-visit intentions. The indirect effect, representing 65.041%, emphasizes the importance of place attachment as a mediating factor. The findings suggest that enhancing the overall tourist experience not only directly impacts post-visit intentions but also indirectly shapes them by fostering a strong sense of place attachment.

This comprehensive approach is essential for a more accurate understanding of visitor behaviour and for developing effective methods to promote sustainable tourism and positive destination outcomes. This study encourages future research to verify the relationships among tourist experience, place attachment, and post-visit intention using public participation GIS, webtext analysis, and other innovative techniques to provide additional perspectives.

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#### REFERENCES

- Ab Dulhamid, H., Isa, M. I., Mohamed, B., & Sazali, M. F. (2022). Motivational Factors in Influencing the International Tourist's Travel to Tourism Attractions in Penang. *Planning Malaysia*, 20. https://doi.org/10.1177/1356766716676300
- Altman, I., & Low, S. M. (Eds.). (2012). *Place attachment* (Vol. 12). Springer Science & Business Media.
- Azinuddin, M., Som, A. P. M., Saufi, S. A. M., Zarhari, N. A. A., Amin, W. A. A. W. M., & Shariffuddin, N. S. M. (2022). Investigating overtourism impacts, perceived man-made risk, and tourist revisit intention. *Planning Malaysia*, 20. https://doi.org/10.21837/pm.v20i22.1142
- De Nisco, A., Mainolfi, G., Marino, V., & Napolitano, M. R. (2015). Tourism satisfaction affects the general country image, destination image, and post-visit intentions. *Journal of Vacation Marketing*, 21(4), 305-317.https://doi.org/10.1177/1356766715577502
- Fornell, C., & Larcker, D. F. (1981). Evaluating structural equation models with unobservable variables and measurement error. Journal of marketing research, 18(1), 39-50. https://doi.org/10.1177/002224378101800312
- Fricker, R. D., & Hengartner, N. W. (2001). Environmental equity and the distribution of toxic release inventory and other environmentally undesirable sites in metropolitan New York City. *Environmental and Ecological Statistics*, 8, 33-52.
- Han, T. Y., Isa, M. I., & Marzbali, M. H. (2023). Influencing factors of neighbourhood attachment: A case study of Penang, Malaysia. *Planning Malaysia*, 21. https://doi.org/10.21837/pm.v21i28.1339

- Hayes, A. F. (2012). PROCESS: A versatile computational tool for observed variable mediation, moderation, and conditional process modelling [White paper]. Retrieved from http://www.afhayes.com/public/process2012.pdf
- Hu, L. T., & Bentler, P. M. (1999). Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. *Structural equation modelling: a multidisciplinary journal*, 6(1), 1-55. https://doi.org/10.1080/10705519909540118
- Isa, M. I. (2020). Evolution of Waterfront Development in Lumut City, Perak, Malaysia. PLANNING MALAYSIA, p. 18. https://doi.org/10.21837/pm.v18i13.778
- Jacoby, J. (2002). Stimulus-organism-response reconsidered: an evolutionary step in modelling (consumer) behavior. *Journal of consumer psychology*, *12*(1), 51-57. https://doi.org/10.1207/S15327663JCP1201\_05
- Jia, J. P., He, X. Q., Jin, Y. J. (2018). Statistics (7th ed.). China Renmin University Press. Kucukergin, K. G., Kucukergin, F. N., & Dedeoglu, B. B. (2020). An overview of the destination physical servicescape with SOR paradigm: The importance of prestige sensitivity. Asia Pacific Journal of Tourism Research, 25(5), 473-488. https://doi.org/10.1080/10941665.2020.1737160
- Lee, Y. K., Son, M. H., & Lee, D. J. (2011). Do emotions play a mediating role in the relationship between owner leadership styles and manager customer orientation, and performance in service environment? *International Journal of Hospitality Management*, 30(4), 942-952. https://doi.org/10.1016/j.ijhm.2011.02.002
- Minh, H. N., Rahman, S., & Thi, T. C. (2023). THE EFFECT OF TOURIST EXPECTATIONS AND TOURIST EXPERIENCES ON TOURIST SATISFACTION WITH HERITAGE ATTRIBUTES: A CASE STUDY OF HOI AN, VIETNAM. *PLANNING MALAYSIA*, 21. https://doi.org/10.21837/pm.v21i28.1337
- Pandey, A., & Sahu, R. (2020). Modeling the relationship between service quality, destination attachment and eWOM intention in heritage tourism. *International Journal of Tourism Cities*, 6(4), 769-784. https://doi.org/10.1108/IJTC-08-2019-0125
- Pine, B. J., & Gilmore, J. H. (1998). Welcome to the experience economy. Harvard Business Review Press. https://enlillebid.dk/mmd/wp-content/uploads/2012/03/Welcome-to-the-Experience-Economy-Pine-and-Gilmore.pdf
- Şahin, A., & Kılıçlar, A. (2023). The effect of tourists' gastronomic experience on emotional and cognitive evaluation: an application of SOR paradigm. *Journal of Hospitality and Tourism Insights*, 6(2), 595-612. https://doi.org/10.1108/JHTI-09-2021-0253
- Ramkissoon, H., Weiler, B., & Smith, L. D. G. (2012). Place attachment and proenvironmental behaviour in national parks: The development of a conceptual framework. *Journal of Sustainable tourism*, 20(2), 257-276. https://doi.org/10.1080/09669582.2011.602194
- Skare, M., Gavurova, B., Polishchuk, V., & Nawazish, M. (2023). A fuzzy model for evaluating the level of satisfaction of tourists regarding accommodation establishments according to social class on the example of V4 countries. *Technological Forecasting and Social Change*, 193, 122609.

- https://doi.org/10.1016/j.techfore.2023.122609
- Stamboulis, Y., & Skayannis, P. (2003). Innovation strategies and technology for experience-based tourism. *Tourism management*, 24(1), 35-43. https://doi.org/10.1016/S0261-5177(02)00047-X
- Sthapit, E., Björk, P., & Coudounaris, D. N. (2017). Emotions elicited by local food consumption, memories, place attachment and behavioural intentions. *Anatolia*, 28(3), 363-380. https://doi.org/10.1080/13032917.2017.1322111
- Williams, D. R., & Vaske, J. J. (2003). The measurement of place attachment: validity and generalizability of a psychometric approach. *Forest Science*, 49(6),830–840. https://doi.org/10.1093/forestscience/49.6.830
- Wu, D., Li, K., Ma, J., Wang, E., & Zhu, Y. (2022). How Does Tourist Experience Affect Environmentally Responsible Behavior? *Sustainability*, 14(2), 924. https://doi.org/10.3390/su14020924
- Xiang, T. H., & Mohamad, D. (2023). The effect of placemaking attributes on tourism experiences: a case study of Petaling Street in Malaysia. *Planning Malaysia*, 21. https://doi.org/10.21837/pm.v21i28.1336
- Yoon, Y., & Uysal, M. (2005). An examination of the effects of motivation and satisfaction on destination loyalty: a structural model. *Tourism management*, 26(1), 45-56. https://doi.org/10.1016/j.tourman.2003.08.016

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