

The Influence of Functional Attributes of Forest Wellness Tourism Destination on Tourists' Behavioral Intention Based on SOR Theory

Ding Jie^{1,2}

¹Linyi University, Linyi, Shandong, 276005, China

²Philippine Christian University, Manila, Philippine

Keywords: Forest wellness tourism; functional attributes; place attachment; satisfaction; behavioral intentions

Abstract: The functional attributes of tourist destinations are examined from the viewpoint of tourists in this paper, and a model between functional attributes, place attachment, satisfaction, and behavioral intention is built using the SOR theory. Relevant research hypotheses are also put forth. In order to evaluate the hypotheses, a total of 503 survey responses from the Mengshan Kanggu Forest Wellness Destination were utilized as samples. The survey responses were then examined for reliability, validity, correlation, and mediation impact using the SPSS and Mplus software. It was determined that visitors' behavioral intentions were significantly positively impacted by the functional attributes of the destination, and that place attachment and satisfaction mediated this relationship. In order to provide guidance for the sustainable development of forest wellness tourism destinations, recommendations are made regarding how to foster tourists' positive behavioral intents in terms of functional attributes, place attachment, and satisfaction.

1. Introduction

In the era of great health, the demand for wellness tourism is more vigorous. Investigation and research have revealed that the majority of individuals are currently in sub-healthy conditions (Yang, 2019). Forest wellness is a cutting-edge kind of tourism that will not only revitalize the country's tourism industry but also benefit the environment as a whole (Shin, 2011). In order to address people's requirements for a return to nature, relaxation and recreation, leisure, and health care, forest wellness tourism is a realistic need of the aging population and people's aspirations for a better life (Bayih, 2020). It is necessary to strengthen empirical research on forest wellness tourist destinations^[1]. Relevant studies have shown that the functional attributes have a significant impact on the experiential value of a tourist's service experience after the experience (Mai, 2019).

This study uses visitors to the forest wellness tourism destination as its research subjects, using the literature in the field as its foundation^[2]. It then builds a multidimensional measurement scale of the functional attributes of the destination, combines it with the SOR theory, and conducts research on the relationships between these factors and place attachment, satisfaction, and behavioral intentions^[3].

2. Study Design

2.1 Overview of the study destination

Mengshan Kanggu Forest Wellness Tourism Destination is a cutting-edge hot spring sanatorium and forest wellness health base that combines them into one innovative facility^[4]. It has outstanding qualities, exquisite technology, high-quality service, and diversified development^[5]. It also incorporates centralized medical diagnosis and treatment, rehabilitation medical treatment, convalescence health care, medical care integration, and health training. Mengshan Kanggu Forest wellness destination was suggested and declared by Linyi Forestry Bureau and was chosen from the list of pilot building units of national forest recreation bases that China Forestry Industry Federation released on December 19, 2022. The destination is situated in Linyi Mengshan Guimeng Scenic Area, China's AAAAA tourist attraction, which has been recognized by UNESCO as a World Geopark and is rated as China's first "Eco-Mountain," the National Forest Park, and the world's healthiest location. It has evolved into Linyi City's first of its kind business card^[6].

2.2 Research variables

Table 1: Functional Attributes of Destinations Measurement Scale

Variable	Dimensions	Indicators
Functional Attributes	destination resources	1. Diverse types of biological species and rich vegetation
		2. Fresh air, beautiful water scenery, abundant weather
		3. Suitable light intensity and good atmosphere
		4. Suitable temperature and humidity to maintain the water balance of the human body
		5. Aromatic odours from plants are refreshing, and the sounds of nature are very pleasing to the ear
		6. The quiet forest environment is relaxing.
	Total Environment	7. Good traffic conditions
		8. Safe overall security environment
		9. Water, electricity, communications, and other infrastructure is complete, can effectively play a function
		10. Reasonable layout of recreational facilities and other supporting facilities, barrier-free facilities in the scenic area
		11. Good service attitude of service personnel
	Development Status	12. Comprehensive and three-dimensional external publicity and marketing
		13. Having batch and customised recreation products to meet different needs
		14. Featured shopping places and basic shopping places for recreation tourism
		15. Possessing forest bathing, forest museums and other such special recreation tourism products
		16. Adequate number and good conditions of recreation-themed special accommodation and catering facilities

Functional attributes of tourist destinations. Cronjé(2020)notes that,competitiveness is an

important aspect when considering the development and promotion of a destination^[7]. A tourism destination is a territorial grouping within a given area that consists of infrastructure and service amenities for the tourism industry as well as tourist attractions (Wang, 2019). A standard dimension for assessing the functional attributes of forest wellness destinations has not yet been defined due to the dearth of empirical investigations on these topics^[8]. As a result, the research of Cai(2018) and Hao (2022) are referenced in this essay. Referencing the nationally published standards for forest wellness tourism demonstration, this study divides the functional attributes of the destination into the three dimensions of destination resources, total environment, and development stage. Table 1 lists the exact questions that were evaluated.

Place attachment. According to the viewpoints of micro-psychology and behavior, the emotional connection that visitors have with tourism destinations is a microcosm of the human-place interaction in those destinations (Huang, 2021).Place attachment has been studied across a wide range of research areas, including aspects of place attachment and authenticity (Ram,2016), loyalty and satisfaction (Hosany,2017).The positive association between place attachment and experience quality was shown by Long(2020) and colleagues using place attachment as an antecedent variable of tourism experience quality^[9].The two-dimensional structured scale developed by Williams(1989) is typically used to evaluate place attachment, and this can be seen in most research as well. It is well accepted, has through numerous validations, and has a high level of reliability^[10]. Due to the peculiarities of the case site, as stated in Table 2, the study likewise primarily uses the two-dimensional measurement scale.

Table 2: Place Attachment Measurement Scale

Variable	Dimensions	Indicators
Place Attachment	Place Dependence	1.I like this place better than other destinations of the same type
		2.This place fulfils my requirements better than other destinations in the same category
		3.I have had experiences in this destination that cannot be replaced by other destinations.
		4.I would like to stay here for a longer period of time.
	Place Identity	1. I strongly identify with this destination
		2.Visiting this destination has a special meaning for me
		3.This destination is unforgettable and often comes back to me.
		4.Visiting this destination gives me a sense of relaxation and inner peace.

Table 3: Satisfaction Measurement Scale

Variable	Indicators
Satisfaction	1.The trip met my expectations
	2.The time and money spent on this trip was worth it
	3.I would like to visit this destination again

Satisfaction. According to R. Eid (2015), whereas overall satisfaction is smoother and represents the visitors' opinion of the entire travel experience, satisfaction during the journey process changes in accordance with the travel experience.Yang (2018) used IPA analysis to examine the variables influencing the satisfaction with rural tourism catering services and built an evaluation system supported by 34 indicators for the service's three tiers and six components^[11]. Shi(2021) investigated how meaningful and immersion experiences impact visitor satisfaction in the context of tourist performing arts and came to the conclusion that both are beneficial to visitor satisfaction. Yoon's (2005) Tourist Satisfaction Survey scale, which is depicted in Table 3, is primarily used as

the basis for the question items used to gauge visitor satisfaction.

Behavioural Intentions. The idea of behavioral intention comes from attitude theory and is used to describe a user's propensity to want to engage in a specific behavior (Wang & Liu 2010)^[12]. Two of the most popular measures to gauge customers' future behavioral intentions are repeat purchases and good word-of-mouth advertising (Song, 2017). Regarding the measurement of behavioral intention, it is still based on the well-known scale that has been acknowledged by academics, and the questions are designed to measure the tourists' intention to return, pay, and recommend, among other things, and combined with the behavioral traits of the tourists in the forest recreation and tourism sites, as shown in Table 4.

Table 4: Behavioral Intentions Measurement Scale

Variable	Indicators
Behavioral Intentions	1. I will share my travelling experience on online platforms
	2. I am willing to consume more products and services in that place
	3. I will recommend the destination to people around me.
	4. I will prefer the destination if needed in the future
	5. I will also consider this destination first when there are similar destinations or products available
	6. When the price of this destination is higher than the average market price, I will also choose this destination

2.3 Research Models and Hypotheses

The Stimulus-Response hypothesis was first put forth by Woodworth (1929), who claimed that humans respond to stimuli in order to explain and analyze the influences of the environment on human behavior^[13]. Mehrabian and Russell (1974) introduced the internal cognitive and emotional activities, also known as the "organism" factor, from the perspective of environmental psychology. They then proposed the "Stimulus-Organism-Response" theory, or SOR theory for short. In recent years, researchers have used the SOR model to study a wider range of topics, including user experience, independent game search behavior, purchase intention behavior, and organizational learning behavior (Liang, 2017; Luo, 2021; Wang, 2021; Tu, 2017)^[14], as shown in Figure 1 below.

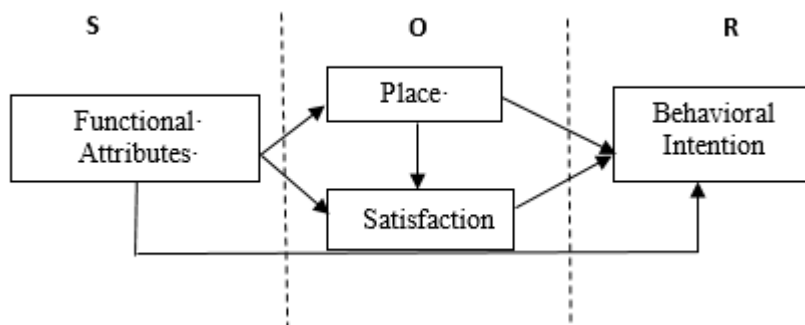


Figure 1: Conceptual framework

Behavior is constantly influenced by the reasons behind it, therefore understanding these reasons is essential to understanding consumer purchasing or decision-making behavior^[15]. These reasons may be cognitive or motivational factors, or they may be sparked by learning or instinct. Functional attributes of tourist destinations may attract visitors, and affective changes experienced while traveling are a reaction to perceptions, helping to shape visitor satisfaction and the decision of behavioral intentions. By using "place attachment" and "satisfaction," which serve as the

fundamental framework and structure for influencing tourists' behavioral intention, we further explore the process of organism action in SOR theory and gauge tourists' experiential cognition and emotional response to the functional attributes of forest recreation tourism destinations. It makes up the fundamental framework and structure that affects how tourists behave. In Fig1, the conceptual framework is displayed^[16].

The following research hypotheses are put out in light of the theoretical and conceptual framework of SOR.

H1: Functional attributes of forest wellness tourism destinations positively and significantly influence tourists' behavioral intention.

H2: Functional attributes of forest wellness tourism destinations positively and significantly influence place attachment.

H3: Place attachment positively and significantly influences tourists' behavioral intention.

H4: Functional attributes of forest wellness tourism destinations positively and significantly influence tourists' satisfaction.

H5: Satisfaction positively and significantly influences tourists' behavioral intention.

H6: Place attachment positively and significantly affects satisfaction.

H7: Place attachment mediates between destination functional attributes and behavioral intention.

H8: Satisfaction mediates between destination functional attributes and behavioral intention.

2.4 Data analysis methods

There were 4 steps in the analysis of the data for this study. First, SPSS 26.0 was used to perform an exploratory factor analysis of the 16 measured destination attribute items, using Principal Component Analysis and Maximum Variance Rotation to validate the three dimensions of functional attributes. Second, the paths connecting destination attributes, place attachment, satisfaction, and behavioral intentions were examined in order to evaluate hypotheses H1-H6^[17]. Finally, the mediating effects of place attachment and satisfaction were tested using MPLUS on the basis of structural model validation to confirm hypotheses H7-H8 and to further explore the variations in the effects of functional attributes of tourism destinations on tourists' behavioral intentions and the paths of action^[18].

3. Results and analyses

3.1 Descriptive statistical analyses

Out of 503 valid questionnaires, a particular sample was taken, and it was statistically analyzed according to the eight factors. According to the sample's gender distribution, 50.5% of travelers are female, which is in line with the development trend of the female tourist market heating up year after year (Han,2010). According to the age distribution, there are 195 tourists aged 18 to 28 who make up 38.8% of the sample size, which is the highest proportion of any age group^[19]. More than half of tourists spent less than RMB 500 per person in terms of spending per person, showing that there is still a lot of opportunity for growth in terms of consumer potential even though overall tourism locations do not have high levels of consumption^[20]. Students, corporate employees, and government/institution workers travel more frequently than other groups, with respective percentages of 26.6%, 22.1%, and 20.9%. This finding suggests that students have the time to travel, while corporate employees and government/institution workers take advantage of their weekends to go on trips with friends to unwind and relax^[21]. Travelers with a monthly income of RMB 5,001–10,000 made up the largest percentage of the population in terms of income composition, at 29.6%,

and they were the main demographic spending money on vacations. University degrees account for 68.2% of frequency shares, which indicates that people with higher levels of education have more money and leisure time and are more inclined to engage in these kinds of tourism activities. The source from the city where the destination is located and the source within the province are the main components of the destination's source, accounting for more than 90% of the source of tourists. This suggests that the destination should increase its popularity to draw tourists from outside the province and broaden the source. 45.5% of visitors stayed for less than one day, which means that tourism places need to take steps to increase visitor satisfaction and lengthen stay^[22].

3.2 Reliability

SPSS 26.0 software was used to analyze the test items' reliability. In general, a Cronbach's value of 0.7 or higher implies satisfactory internal consistency. According to Table 5, each of this questionnaire's measurement dimensions has a Cronbach's alpha coefficient that is greater than 0.9, demonstrating a high level of measurement reliability.

Table 5: Reliability tests for measurement dimensions

Variable	Dimension	Cronbach's α
Functional Attributes	Destination Resources	0.934
	Total Environment	0.917
	Development Status	0.925
Place Attachment	Place Dependence	0.908
	Place Identity	0.906
Satisfaction		0.918
Behavioral Intentions		0.931

3.3 Validity

To evaluate the KMO values of various scales, factor analysis was carried out using the SPSS26.0 program, primarily employing principal component analysis and Bartlett's spherical test. The questionnaire's overall validity is KMO = 0.972, and the significance index, Sig. = 0.000, is less than 0.01, showing strong validity.

Table 6: Validity analysis of dimensions

	Destination Resources	Total Environment	Development Status	Place Dependence	Place Identity	Satisfaction	Behavioral Intentions
Kaiser-Meyer-Olkin test	0.929	0.890	0.884	0.854	0.849	0.751	0.916
Bartlett's test of sphericity approximating chi-square	2365.960	1749.208	1892.859	1319.990	1285.958	1107.247	2365.809
Df	15	10	10	6	6	3	15
Sig	0.000	0.000	0.000	0.000	0.000	0.000	0.000

Three dimensions of functional attributes, two dimensions of place attachment, satisfaction, and behavioral intention were tested for validity respectively, and the results are shown in Table 6: Destination Resource Scale KMO=0.929, Overall Environment Scale KMO=0.890, Development Status Scale KMO=0.884, Place Dependence Scale KMO=0.854, Place Identity Scale KMO=0.849, Satisfaction Scale KMO=0.751, Behavioral Intention Scale KMO=0.916, Significance Indicator of

each variable Sig.=0.000, Significance Indicator <0.01, high validity.

3.4 Correlation analysis

Before doing the model test, the correlation between the variables should be assessed to determine whether there is a causal relationship between the variables. The test results are presented in Table 7, where the Pearson correlation coefficients for the variables of destination resources, total environment, status of development, place dependence, place identity, satisfaction, and behavioral intention in the overall model passed the 1% significance level, indicating that there is a significant correlation between all the variables in the conceptual model and that Hypotheses 1-6 are all true.

Table 7: Correlation test of research variables

Correlation							
	Destination Resources	Total Environment	Development Status	Place Dependence	Place Identity	Satisfaction	Behavioral Intentions
Destination Resources	1						
Total Environment	.812**	1					
Development Status	.684**	.825**	1				
Place Dependence	.671**	.756**	.842**	1			
Place Identity	.697**	.752**	.843**	.905**	1		
Satisfaction	.740**	.748**	.759**	.796**	.839**	1	
Behavioral Intentions	.631**	.718**	.783**	.835**	.814**	.757**	1

Note: ** indicates correlation at 0.01 level of significance (two-tailed test).

3.5 Mediating Effects

In order to further examine the hypotheses put forth in this study, this study employed the software Mplus to conduct the path analysis of the latent variables after the latent variables and the correlation test. This study performed the initial fitting of the structural model based on the created research model using the Mplus program, as shown in Figure 2 below.

According to the results of the model fit test, RMSEA= 0.000<0.05, CFI=1>0.9 and TLI=1>0.9, all of which met the evaluation criteria.

Using Mplus, the complete model fit test was performed, and every item passed. Through the steps of the Bootstrap technique, mediating effects were confirmed.



Figure 2: Model Paths for Functional Attributes, Place Attachment, Satisfaction, and Behavioural Intention

The indirect path coefficient of Destination Attributes→Place Attachment→Behavioral Intentions is significant, and neither the upper nor lower bounds of the confidence interval contain 0, as shown in Table 8. This indicates that place attachment mediates between functional attributes of the destination and behavioral intentions, and Hypothesis 7 is confirmed to be true. The decomposition of the mediating effect reveals that place attachment mediates 62.97% (0.585/0.929) of the total effect, meaning that 62.97% of the influence of the destination's functional attributes on the behavior intention works through and favorably influences place attachment^[23].

The indirect path coefficient of destination attributes→satisfaction→behavioral intention is significant, and none of the upper and lower bounds of the confidence interval contain 0, as shown in Table 8, the results of the analysis of the mediating effect of satisfaction. This confirms the validity of Hypothesis 8 and shows that satisfaction mediates between functional attributes of the destination and behavioral intention. The effect of place attachment on behavioral intentions is mediated through place attachment and is positively facilitated, but much less so than the mediating effect of place attachment, according to a decomposition of the mediating effect, which accounts for 8.18% (0.076/0.929) of the total effect.

Table 8: Mediating Effect Tests

Effect	Intermediate Path	Estimate	S.E.	confidence interval (math.)	
				Lower5 %	Upper 5%
Direct effect	functional attributes→behavioral intentions	0.203	0.093	0.063	0.372
Intermediate effect	functional attributes→place attachment→behavioral intentions	0.585	0.068	0.473	0.695
	functional attributes→satisfaction→behavioral intentions	0.076	0.040	0.014	0.145
	functional attributes→place attachment→satisfaction→behavioral intentions	0.065	0.029	0.014	0.110
total effect	functional attributes→behavioral intentions	0.929	0.054	0.830	1.011

4. Conclusion

(1) The scale's functional attributes for the forest wellness tourism destination were determined. The three dimensions of the destination's functional attributes—destination resources, total environment, and development status—passed the reliability and validity tests, demonstrating that the scale's dimensional split has some inherent logic.

(2) The relationship between the functional attributes of a destination and the tourists' behavioral intentions. The two mediating variables of place attachment and satisfaction play an important role in mediating the impact of destination attributes on visitors' behavioral intentions in addition to having a direct and significant impact on those intentions.

(3) Compared to satisfaction, place attachment plays a significantly bigger mediating impact. Place attachment in visitors has been shown to boost travel motivation in potential tourists, increase tourist satisfaction, and spark positive behavioral intentions.

5. Recommendations

5.1 Improve the functional attributes of the destination.

Managers of destinations should work to generate top-notch natural landscapes based on the forest's natural ecological environment, continuously construct and upgrade facilities for outdoor recreation, and design original activity programs to encourage tourists to participate fully. It's important to pay attention to the environment of wellness tourism as well as the destinations' ability to offer a wide range of services, both of which have an impact on the experience of visitors.

5.2 Reinforcement of place attachment.

In general, the higher the attachment to this destination, the more pronounced the behavioral tendencies. Operators of destinations for forest wellness must pay attention to the experiences of visitors and the feelings that their services and products elicit in them, and they must work to encourage visitors to adopt an enjoyment-oriented mindset through appropriate infrastructure and service encounters. Additionally, differentiating the tourist experience can begin with the ecological environment, cultural practices, production, and lifestyle, and continue through the experience to strengthen visitors' feelings of belonging and foster their love for the forest wellness destinations.

5.3 Enhancement of tourist satisfaction.

Analysis of the survey data shows that tourist satisfaction is also high in destinations where functional attributes are highly valued and high-quality, reasonably priced goods and services are essential. Operators of tourist destinations should increase service staff training, fundamentally alter service attitudes, awareness, and procedures, and hold frequent training sessions to raise service levels psychologically. Effective customer relationship management can lower business running costs, boost customer loyalty, and give a company a market edge by enhancing total customer happiness. To improve visitors' sense of presence and belonging, tourism service providers should pay particular attention to how visitors are observed, spoken to, and interacted with in order to communicate and interact with them effectively.

References

- [1] Bayih, B. E., & Singh, A. (2020). *Modeling domestic tourism: motivations, satisfaction and tourist behavioral intentions*. *Heliyon*, 6(9), e04839.
- [2] Cai Y, Yin HM, Yang Y, Yang D, & Ma Zuozhen. (2018). *Model construction and mechanism of factors influencing tourists' flow experience in heritage sites - A case study of Sri Lanka*. *Journal of Tourism*, 33(2), 10.
- [3] Cronjé D. F., & du Plessis, E. (2020). *A review on tourism destination competitiveness*. *Journal of Hospitality and Tourism Management*, 45, 256-265.
- [4] Eid, R., & El-Gohary, H. (2015). *The role of Islamic religiosity on the relationship between perceived value and tourist satisfaction*. *Tourism management*, 46, 477-488.
- [5] Han HL. (2010). *Sociological analysis of the rapid development of female tourism in China*. *Hebei Journal*, 170 (03): 154-158.
- [6] Hao M, & Zhang, CH. (2022). *Relationships among grassland tourism site attributes, perceived value, tourists' delight and revisit intention - A case study of Guanshan Grassland in Shaanxi*. *Grassland Science*, 39(9), 1953-1967.
- [7] Hosany, S., Prayag, G., Veen, R. V. D., Huang, S. S., & Deesilatham, S. (2017). *Mediating effects of place attachment and satisfaction on the relationship between tourists' emotions and intention to recommend*: SAGE Publications (8).
- [8] Huang JF, Lu L, & Song Y. (2011). *A new species of the genus Lepidoptera (Hymenoptera, Braconidae) from China. Theory and experience of human-land relations in tourism contexts from a micro perspective*. *Journal of Geography*, 76(10), 19.

- [9] Liang F, Li SW, & Sun R. (2017). *The impact of organisational learning on organisational innovation performance under the SOR perspective*. *Management Science*, 30(3), 12.
- [10] Long JZ, Duan HR, & He Y.(2020). *A study on the effects of tourism involvement and place attachment on tourists' satisfaction in the context of ancient towns - mediated by quality of experience*. *Journal of Tourism*, 4(4), 18.
- [11] Luo CHB, Liang H, & Zeng W. (2011).*A study on the influencing factors of consumers' purchase intention under live streaming with goods based on SOR model*. *Mall Modernisation* (16), 4.
- [12] Mai, K. N. , Pham, H. T. , Nguyen, K. N. T. , Nguyen, P. M. T. , & Nguyen, N. T.(2019).*The international tourists' destination satisfaction and developmental policy suggestions for ho chi minh city, vietnam*. *Routledge*(2).
- [13] Moon, H., & Han, H. (2018). *Destination attributes influencing Chinese travelers' perceptions of experience quality and intentions for island tourism: A case of Jeju Island*. *Tourism management perspectives*, 28, 71-82.
- [14] Ram, Y., Björk, P., & Weidenfeld, A. (2016). *Authenticity and place attachment of major visitor attractions*. *Tourism management*, 52, 110-122.
- [15] Shin, W. S. (2011). *The influence of interaction with forest on cognitive function*. *Scandinavian Journal of Forest Research*, 26(6), 595-598.
- [16] Shi S, Huang X, & Zhang, M(2021). *Is immersion enough? --A study of the effects of immersive experience and meaningful experience on tourist satisfaction in tourist performing arts*. *Journal of Tourism*, 36(9), 14.
- [17] Song, H. M., Kim, K. S., & Yim, B. H. (2017). *The mediating effect of place attachment on the relationship between golf tourism destination image and revisit intention*. *Asia Pacific Journal of Tourism Research*, 22(11), 1182-1193.
- [18] Tu, H.W., Xiong, L.Y., Huang, Y.M., & Guo, K.S. (2017). *The influence of destination image on tourists' behavioural intention - based on emotion evaluation theory*. *Journal of Tourism*, 32(2), 10.
- [19] Wang, Meng, & Lu, Zhangping. (2021). *A study on the influencing factors of users' independent game search behaviour based on SOR model*. *Research on Library and Intelligence* (1), 42-50.
- [20] Wang XX. (2019). *Research on the Impact of Developing Tourism Performing Arts on Tourism Destinations in Anhui*. *Management Insight* (22), 5.
- [21] Wang, Y. C. , Liu, C. R. , Huang, W. S. , & Chen, S. P. (2020). *Destination fascination and destination loyalty: subjective well-being and destination attachment as mediators*: Sage Publications(3).
- [22] Yang YF. *Research on Urban Tourism Development under the Perspective of Ecological Civilisation--Taking Xi'an City as an Example*. (Doctoral dissertation, Northwestern University, 2019).
- [23] 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.