

# A Study on the Impacting Path Mechanism of User Behavior Habits for Tourism Social Website

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Along with the development of socialized media and self-help tourism, tourism industry has been going into tourism social times. Based on technology acceptance model, use and gratifications approach, and weighted and calculated needs theory, this study explored the impact of perceived popularity, perceived characteristics, and perceived need on the use of tourism social network site and being a member of it. This study also discussed the interaction of perceived popularity, perceived characteristics, and perceived need. The findings of this paper could be used to help the management operator pay attention to strengthen the function of tourism social network site in order to provide better information for users and satisfied the needs of users.

Keywords: social media times, tourism social website, behavior habit of user, weighted and calculated needs

# Background

## Rise of Web 2.0

The information technology, represented by the ever-changing Internet, has led the social production of new changes, created a new space for human life, expanded the new areas of national governance, and greatly improved the human understanding of our world (Xi, 2015). Web 2.0 is one of the popular concepts of Internet today. The background of Web 2.0 mainly comes from four aspects: One is the development of Internet becoming from quantitative change to qualitative change; the second is the growing demand of individualization and socialization of Internet users; third, the upgrading of a series of Internet technologies for Web 2.0 provides technical support; fourth, the Internet requires innovative models (Wang & Sun, 2007). Web 2.0 not only brings the changes of the social information environment and consumer information consumption patterns, but also brings changes on the network marketing from the shallow to the deep changes in the mode of marketing activities (Wang, 2012). The use of Web 2.0 could drive the framework of marketing for social capital by using the satisfactory theory (Barry & Gironda, 2019).

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## **Growth of Social Media**

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Andreas and Haenlein (2010) believe that social media are based on the cogitation and technology of Web 2.0 and based on the user creation and exchange of UGC (User Generated Content). The intervention of social media changed the way people spread information and consumption patterns of life (Cao, 2013). In the past 10 years, the use of social media in the United States and even the world is showing explosive growth. Foreign well-known social media mainly are Facebook, Twitter, YouTube, etc., and domestic well-known social media mainly are Facebook, Twitter, YouTube, etc., and domestic well-known social media mainly are Sina Weibo, Tencent QQ, Wechat, and so on. In recent years, the relationships between social media marketing, Web 2.0, as well as we media, quickly promote to set up new generation of social media such as we media (Cui, 2019).

## **Development of Tourism Social Network Site**

With the help of the popularization of mobile devices such as mobile phone and tablet PC and the strength of high-tech, tourism industry embraces Internet Web 2.0 and social media closely, which makes tourism e-commerce and online travel sites have been rapidly developed, makes the social network of tourism services products have been introduced. The tourism industry is entering the tourism social era (Xi, 2011). There are a wide range of travel websites, and travel sites can be categorized into different categories according to the different methods. Among them, the social-type tourism website does not sell tourism products directly. The main feature of this kind of site is its social function. On the one hand, searchers can know information about the tourist destination according to the strategies shared by other tourism social website users, and prepare for the coming travel in advance in order to obtain higher travel satisfaction experience; on the other hand, after the trip, these searchers may become the site's member and post their own travel experience on the site, in order to share with other users in this exchange community. The benefit and perception of social media by users have close relationship between public data of social media and comfortable degree for marketing talents, which greatly impact the comfort to marketing for advertisement (Jacobsona, Gruzdb, & Ángel, 2019). At present, the representatives of foreign travel social networking sites were Tripadvisor, etc.; mainly domestic are Lyping network, Qiongyou network.

Current research on online travel websites mainly focuses on the supply side, which studies the business model of the website itself, marketing strategy, and so on, but less to examine the user behavior of tourism sites and other characteristics. At the same time, the researches about the social network and user behavior habit are mostly unilateral study. Few researches combine these two aspects. Therefore, based on technology acceptance, usage satisfaction, and trade-off demand models, this study takes tourism social networking website as research object and investigates user's behavior habits such as popularity, perception degree, and demand degree in order to study tourism social networking sites for the users' needs of satisfaction and perception. The results of this study can provide a scientific and quantitative reference for the operation and management of the travel social networking sites in the social media age, so as to better serve the users of tourism social networking websites.

# **Literature Review**

Firstly, Chinese literature review. The first point is about the social media site's communication and user experience. Dong (2013) studied the interaction of social network users and analyzed the impact of social network carrier information. Chen (2013) believes that public opinion participation of the social network, the

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weight of the transmission link, and the number of individual contact information, etc., will affect the individual decision-making process in the information and diffusion. Liu (2013) believes that the users' motivation can affect their behavior and through the use of attitude and use willing can also affect the use of behavior indirectly. Xu (2011) found that the dependence and community communication of social networks will directly affect the purchase intention of tourists. Zhu (2013) discussed the number of social networking sites praise and ways of appeal impact consumers' purchasing intentions. The study result between we media and self-service tour showed that the impact of perceived value on tourism decision-making is significantly positive (Cui, 2019).

The second point is about the quality of tourism products and service experience. For example, Liu (2013) used factor analysis on the evaluation of tourism e-commerce sites. Chen (2013) used the Analytic Hierarchy Process (AHP) to explore the factors influencing the development of e-commerce in tourism websites. Li (2013) studied the quality of tourism e-commerce website factors and evaluation system from the site composition and website evaluation. According to the number of external connections and the number of outbound links, Fu and Ni (2013) established the evaluation system of tourism website service experience. Xiong and Ye (2011) set up the evaluation system of virtual tourism website by taking virtual tour products and services and website interface function as evaluation indexes. Wu and Jiang (2007) carried out a study focuses on the website publicity. The two dimensions during the process of using tourism website were perceived truth and emotional belief, which could be analyzed in different paragraphs by theoretical model (Chen, 2018) of tourism websites, product prices, and website personalization. On the basis of the target-value system model, Huang and Wu (2014) evaluated rural tourist attractions with independent websites. In the construction of setting up the theoretical process, the buying behavior of former day had significant impact on the behavior of the latter day while the historical customers had significantly impacted on future users (Cai, 2019).

Secondly, international literature review. The first point is about information technology and user perception for social media. Osatuyi (2013) studied the credibility of information producers when sharing information on social media sites based on social media technology. Kietzmann, Silvestre, McCarthy, and Pitt (2012) studied the relationship between social media and users' identity, status, relationship, conversations, groups, reputation, and sharing based on the functional types of cellular models. Ellahi and Bokhari (2013) explored and evaluated the quality of tourism social network site and its impact on users' perception. Xiang and Gretzel (2010) studied the potential relationship between social media and the search engines used by tourists. Grabowicz et al. (2012) analyzed the clustering of the most basic connections among Twitter users to verify the adaptability of the strong and weak theories to online social networks. Kwok and Yu (2013) examined the relationship between the type of social media information and Facebook's most popular hits and reviews. The marketing comfort could be constructed on the base of application in the social media with the theory of developing the private communication management (Jacobsona et al., 2019). The social capital for social media could be the most suitable framework by the thoughtful leading ability in the internet environment by choosing the forms of social media for new media (Barry & Gironda, 2019).

The second point is about information quality and marketing function for tourism website. Wang and DiPietro (2010) presented a conceptual model for evaluating the functional performance of hotels and travel sites, in order to assess their function. Woodside, Vicente, and Duque (2011) evaluated the advantages of tourism destination based on the ratio of the number of visitors to the number of residents to determine the usefulness of the destination marketing site. Lee, Cai, and O'Leary (2006) analyzed the information on the Internet which can promote and retain tourists through banners, graphic judgments, language expressions, and

other plans of official marketing tourism websites from 50 countries to attract tourists. Bastida and Huan (2014) compared the quality and usefulness of tourism websites in Hong Kong, Shanghai, Beijing, and Taipei. Ettemaa and Timmermans (2006) proposed the uncertainty and departure time selection model. This model evaluated the relationship between the variation of travel time and the quality of information based on the expected utility theory. Liu et al. (2020) adopted the empirical analysis research model to explore the impact of consumer's buying behavior on psychological distance in the large internet marketing activities. The study result showed that time distance had positive impact on buying decision-making of high-level product while social distance had negative impact on the users' buying decision-making.

Chinese and English literature reviews have the following similarities and differences in the research content and research methods:

The similarities in research contents are as follows: They both focused on information dissemination mode and information dissemination factors of social media; various types of case studies for tourism websites; tourism information systems and models; quality of tourism site and user experience. The differences are as follows: Foreign research mainly focuses on user experience, which involves various parts of the tourism system, including travel agencies, restaurants, and so on, while, Chinese research focuses on the enterprises side to explore B2C and C2C for tourism markets.

The similarities in research methods are as follows: They both combined literature analysis, empirical analysis, qualitative methods, and quantitative methods. The differences of research methods are as follows: Foreign researches pay more attention to the classical theory and theoretical models. They innovate on the concept, research theory, and research methods based on the existing theory. Chinese researches test and analysis existing theoretical model and evaluate related functions of the tourism website by using specific domestic tourism websites as examples.

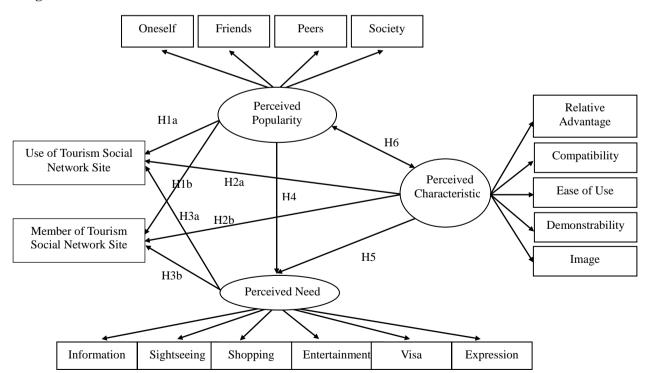
## **Theoretical Framework**

#### **Technology Acceptance Model**

Technology Acceptance Model (TAM) studied the acceptance of users for information systems. This model has gone through four stages. In the first stage, Fred, Bagozzi, and Warshaw (1989) proposed the Technology Adoption Model which uses rational behavioral theory to explain and predict users' adoption to information systems. In the second stage, Venkatesh and Davis (2000) proposed the Technology Acceptance Model 2 (TAM2), which focused on the social impact process and cognitive instrumental process. In the third stage, Venkatesh, Morris, Davis, and Davis (2003) proposed the Unified Theory of Acceptance and Use of Technology (UTAUT), which included the key factors such as utility expectation, exertion expectation, social influence, and promotion condition that affected on the use intention and use behavior. In the fourth stage, Bala (2008) proposed the Technology Acceptance Model 3 (TAM3), which indicated that perceived usefulness and perceived ease of use are determined by system characteristics, individual differences, community influences, and convenience conditions. Xia, Zhang, and Zhang (2017) enriched the methods of technology acceptance model by probing the mutual relationship between online experience and destination image of smart mobile phone. The study results showed that there was positive relationship between online experience and cognitive effectively image, which enlarge the study scope and theoretical range for destination mapping productions by recognizing the moving mobile technology. Kang and Namkung (2019) combine the technology model with probabilistic relational model so as to explore the decision-making for customers to buy online products, which showed that there were positive relationship between information quality, source reliability, and perceived useful, and perceived easily use.

#### **Use and Gratifications Approach**

The Use and Gratifications Approach examined the psychological and behavioral utility of mass communication by analyzing the audience's motivation for media engagement and how these contacts meet people's needs (Werner & James, 2006). This theoretical study is popular in the field of communication and gradually institutionalized through the use and satisfaction pathways in communication studies (Lu, 2011). The Use and Gratifications Approach can be divided into the following modes. First, the basic model, which considered audiences will select the media purposefully based on their past experience. Second, the Use of Satisfaction Theory-Rosen Glen Model, which distinguished the motivations, basic needs, and perceptions. Third, Expectation-Value Model of Pursuing and Attaining Media Satisfaction, which studied the relationship among the satisfaction, characteristic, behavior, and expectation of the social media object. Fourth, the Use of Cultural Media Model, which studied the relationship among cultural satisfaction, emotional type, social environment and personal habits. Abdallah (2018) forecast the main factors relating to advertisement of social media on the base of buying intention by using the extended unified technology acceptance model and using theory as well as the mutual function between mutual activities, information, and perceived quality. Dabbous and Barakat (2020) set up the empirical models so as impact on consumers' brand recognition and buying intentions by content quality and brand communities in the social media, which was to test AMOS software, which was to set up the empirical modes by applying the theories such as acceptance and function quotation and construction theory.



## Weighted and Calculated Needs

Figure 1. The theoretical model of users' behavior habits for social network websites.

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Based on the above research, this study presents the theoretical model framework of the user behavioral habits of the tourism social network sites (Figure 1). And we will test the following hypotheses.

Hypothesis 1a: The more popular an individual perceives the tourism social network site to be in the society, the more likely the person is to use it.

Hypothesis 1b: The more popular an individual perceives the tourism social network site to be in the society, the more likely the person is to become a member of it.

Hypothesis 2a: The more favorable an individual perceives the tourism social network site, the more likely the person is to use it.

Hypothesis 2b: The more favorable an individual perceives the tourism social network site, the more likely the person is to become a member of it.

Hypothesis 3a: The greater an individual perceives a need for the tourism social network site, the more likely the person is to use it.

Hypothesis 3b: The greater an individual perceives the need satisfaction for the tourism social network site, the more likely the person is to become a member of it.

Hypothesis 4: The perceived popularity for the tourism social network site has a significant impact on the perceived need for the tourism social network site.

Hypothesis 5: The perceived characteristics for the tourism social network site have a significant impact on the perceived need for the tourism social network site.

Hypothesis 6: The perceived popularity for the tourism social network site has a significant correlation with the perceived characteristics for the tourism social network site.

## Method

#### **Questionnaire Design**

This survey questionnaire was designed on the basis of literature review and in-depth interview and it was measured by Richter scale, which consisted of five parts. The questionnaire mainly contained five sections. The first section of the questionnaire was the motivation of the tourism social network site users. The second section of the questionnaire was about the perceived popularity for the tourism social network site. The third section was about the perceived characteristics. The fourth section was about the perceived need. The last section was sociodemographic information of respondents.

## **Sampling and Measurement**

The main survey was conducted in Shanghai and Sichuan Province. And 400 questionnaires were completed. Among these questionnaires, 358 are valid. The effective rate is 89.5%. The logistic regression analysis was used to study the use of tourism social network websites. This study constructed the structural equation model of tourism social networking websites users' behavioral habits. The model includes the following dimensions: perceived popularity in personal, family, friends, peers, and the whole society; perceived characteristics such as relative advantage, compatibility, ease of use, results demonstrability, and image; perceived need such as learning about tourism destination resource information, leisure and entertainment, expression of views, social relations, sharing of needs and meeting the needs of individual hobbies.

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# **Findings**

## **Demographics Descriptive Analysis**

Table 1

Demographics Descriptive Profile

Variable	Item	Frequency	Percentage	Variable	Item	Frequency	Percentage
Sex	Male	160	44.69%		$\leq 20$	22	6.15%
	Female	198	55.31%	Age	21-30	239	66.76%
	State-owned enterprises	29	8.10%		31-40	66	18.44%
	Foreign enterprise	7	1.96%		41-50	21	5.87%
	Private enterprises	38	10.61%		51-60	9	2.51%
	Civil servant	19	5.31%		> 60	1	0.28%
	Engineer	21	5.87%		Primary School and below	1	0.28%
	Staff	22	6.15%	Education	Junior High School	16	4.47%
	Teacher	19	5.31%		Senior High School	54	15.08%
	Student	153	42.74%		Bachelor	145	40.50%
	Waiter	21	5.87%		Master and above	142	39.66%
	Unemployed	4	1.12%		1	5	1.40%
	Military man	4	1.12%	Number of Family	2	17	4.75%
	Famer	10	2.79%		3	184	51.40%
	Worker	9	2.51%		4	95	26.54%
	Retiree	2	0.56%		$\geq$ 5	57	15.92%

# Regression Analysis on Users' Behavior Habits of Tourism Social Network Site

In order to avoid multi-collinearity in the subsequent analysis, the study combined the high-correlation items. Through the correlation analysis, this study combined the item "I often use travel social networking sites" and "Many of my relatives, friends, and acquaintances are using the travel social networking sites" into an item "The perceived popularity for tourism social network sites from family members" (Cronbach's  $\alpha = 0.836$ ). Combine the item "Many peers are using the travel social networking sites" and "Many people are using the travel social networking sites" and "Many people are using the travel social networking sites" and "Many people are using the travel social networking sites in the society" into an item "The perceived popularity for tourism social network sites from the whole society" (Cronbach's  $\alpha = 0.794$ ). The relative advantage, compatibility, ease of use, and results demonstrability were combined into one index, named relative advantage-compatibility-ease of use-results demonstrability (Cronbach's  $\alpha = 0.761$ ). The image was a separate variable. Combine learning resource need and information need into tourism social networking site internal perceived need (Cronbach's  $\alpha = 0.504$ ). Combine the needs of expression of views, sharing needs, and interpersonal relationships into tourism social networking site external perceived need (Cronbach's  $\alpha = 0.636$ ). The results of the analysis are shown in Table 2.

Test of Hypothesis 1a: The analysis showed that perceived popularity in the social environment significantly affected the use of tourism social networking sites. The more popular an individual perceives the tourism social network site to be in the society, the more likely the person is to use it. Therefore, Hypothesis 1a is basically supported.

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Test of Hypothesis 2a: The analysis showed that the relative advantage-ease of use, results demonstrability, and image had no significant influence on use of tourism social networking sites. Thus, Hypothesis 2a is not supported.

Test of Hypothesis 3a: The analysis showed that perceived need significantly affected the use of tourism social networking sites. The greater an individual perceives a need for the tourism social network site, the more likely the person is to use it. Thus, Hypothesis 3a is supported.

## Table 2

Independent variable	Measurement	Regression coefficient	Independent variable	Measurement	Regression coefficient
	Family members	0.01	Sex	-	0.34
Perceived popularity	Whole society	-0.41***	Age	-	-0.54
Perceived characteristics	Relative advantage-compatibility-ea se of use-results demonstrability	-0.23	Number of family	-	0.28
	Image	0.06		Junior High School and below	4.24
р <sup>.</sup> 1 1	Internal need	$0.16^{***}$	Education	Senior High School	$1.97^{*}$
Perceived need	External need	$0.10^{***}$		Bachelor	2.66
Constant	-	1.82		Master and above	-0.02*

Regression Analysis on the Use of Users' Behavior Habits of Tourism Social Network Site

*Note.* \*\*\* p < 0.01.

## Regression Analysis on the Degree of Users' Behavior Habits of Tourism Social Network Site

The study classified the users according to their degree that they use tourism social media sites. Depending on whether the users are willing to become a member of the tourism social network sites and whether they have shared their travel experience on the tourism social network sites, they are divided into three categories. They are potential members of the tourism social network site, continuous members of the travel social network sites, non-potential members of the tourism social network site. In this study, we tested Hypotheses 1b, 2b, and 3b by multivariate regression analysis. The results of the analysis are shown in Table 3.

Test of Hypothesis 1b: Among the two measures of perceived popularity for the tourism social network site, one of the measures has a significant impact on becoming a member of the tourism social network site. The perceived popularity for tourism social network sites from the whole society has a significant impact on becoming a member of the tourism social network site. Continuous members have the best sense of the perceived popularity. Following are the potential members and the non-potential members. The more popular an individual perceives the tourism social network site to be in the society, the more likely the person is to become a member of it. Thus, Hypothesis 1b is supported.

Test of Hypothesis 2b: The analysis found that the relative advantage-compatibility-ease of use-results demonstrability and image of tourism social network site do not have significant effect on whether to become members of the tourism social networking sites. Thus, Hypothesis 2b is not supported.

Test of Hypothesis 3b: Perceived need for tourism social network site has a significant impact on whether to become members of the tourism social networking sites. The greater an individual perceives a need for the tourism social network site, the more likely the person is to become a member of it. Thus, Hypothesis 3b is supported. Table 3

Independent variable	Continuous members vs. non-potential members	Potential members vs. non-potential members	
Perceived popularity			
Family members	-0.042	0.188	
Whole society	0.806***	0.311***	
Perceived characteristics			
Relative advantage-compatibility-ease of use-results demonstrability	-0.025	0.309	
Image	0.156	-0.034	
Perceived need			
Internal need	0.239***	0.098	
External need	$0.140^{***}$	$0.084^{***}$	
Sex	0.342	0.057	
Age	-0.538	-0.364	
Number of family	0.280	-0.167	
Education			
Junior High School and below	4.242	0.413	
Senior High School	1.969***	0.456	
Bachelor and above	2.658***	-0.106	
McFadden R2: 0.174, number of cases = 358			

Regression Analysis on the Degree of Users' Behavior Habits of Tourism Social Network Site

*Note.* \*\*\* p < 0.01.

# Model Path of User's Behavior Habits for Tourism Social Network Site

This study found that perceived popularity has a significant positive impact on the perceived need for the tourism social network site. Content compatibility and ease of use have an impact on the perceived need. And there is a significant correlation between perceived popularity and perceived characteristics. It should be noted that, although the impact of relative advantage, results demonstrability and image on the perceived need is not significant, it cannot be ignored (Table 4). Hypothesis 4, Hypothesis 5, and Hypothesis 6 are supported. Figure 2 shows the results of model path of user's behavior habits for tourism social network site.

Table 4

Structure Equation Model of User's Behavior Habits for Tourism Social Network Sites

Variable	Path	Variable	Standardized coefficient	р	Fitting indicators
Perceived popularity	$\leftarrow \rightarrow$	Relative advantage	0.306	***	
Perceived popularity	$\leftarrow \rightarrow$	Content compatibility	0.351	***	
Perceived popularity	$\leftarrow \rightarrow$	Ease of use	0.275	***	
Perceived popularity	$\longleftrightarrow$	, -	0.191	***	
Perceived popularity	$\longleftrightarrow$		0.373	***	$X^{2}/df = 4.185; GFI =$
Perceived need	$\leftarrow -$	Relative advantage	-0.06	0.540	0.854; AGFI = 0.795; CFI = 0.848; RMSEA
Perceived need $\leftarrow$		Content compatibility	0.17	***	= 0.094
Perceived need	<b>—</b> —	Ease of use	0.01	***	- 0.091
Perceived need	<b>—</b> —	Results demonstrability	0.18	0.350	
Perceived need	$\leftarrow -$	Image	-0.01	0.870	
Perceived need	←—	Perceived popularity	0.21	***	

*Note.* \*\*\* p < 0.01.

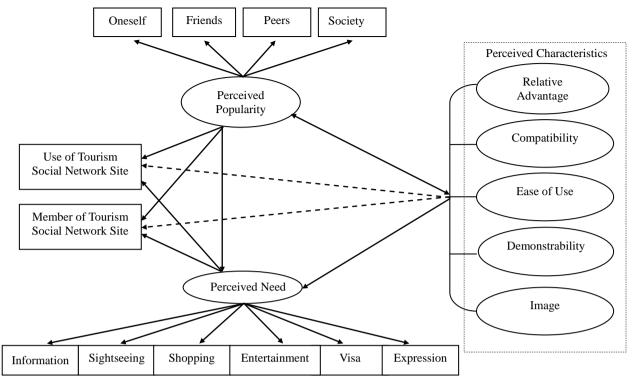


Figure 2. Results of model path of user's behavior habits for tourism social network site.

## **Conclusion and Discussion**

First, the analysis showed that perceived popularity and perceived need had a positive impact on the use of tourism social network site. This study explored the impact of perceived popularity, perceived characteristics, and perceived need on the use of tourism social network site. Through the regression analysis, it was found that perceived popularity in the social environment significantly affected the use of tourism social network sites. The relative advantage-ease of use, results demonstrability and image had no significant influence on use of tourism social networking sites. Perceived need significantly affected the use of tourism social networking sites

Second, the analysis showed that perceived popularity and perceived need had a positive impact on the adoption of tourism social network site. This study explored the impact of perceived popularity, perceived characteristics, and perceived need on the adoption of tourism social network site. Through the regression analysis, the more popular an individual perceives the tourism social network site to be in the society, the more likely the person is to become a member of it. The relative advantage-compatibility-ease of use-results demonstrability and image of tourism social network site do not have significant effect on whether to become members of the tourism social network sites. The greater an individual perceives a need for the tourism social network site, the more likely the person is to become a member of it.

Third, the perceived popularity and perceived characteristics for the tourism social network site have a significant impact on the perceived need for the tourism social network site. And there is a significant correlation between perceived popularity and perceived characteristics.

According to the findings and the development of the social media, the management operator should pay attention to strengthen the function of tourism social network site in order to provide better information for users and satisfy the needs of users. Management operator can improve as the following aspects: First, broaden the promotion. With the development of self-help tourism and the opening of social media data, operators should pay more attention to the promotion of tourism social network sites. For example, word of mouth, travel star, and tourism destination cooperation can help the promotion. What's more, the promotion should focus on the main users.

Second, optimize the experience. Users have evaluation on the tourism social network site when their first use of it, which has an important impact on the adoption of the tourism social network site. Therefore, compared with the traditional channels, the relative advantages, compatibility, ease of use, results demonstrability, and image of tourism social network site should be reflected well in users' experience.

Third, deepen the interaction. Users can get information about dining, accommodation, transportation, sightseeing, shopping, visa, and other related information. And they also can deliver their travel experiences, opinions, and other information in the form of words or pictures to the tourism social network site. In the social media age, the management of the tourism social network site should deepen the communication among the users so that they can generate new contents on the site. The tourism social network site should attract and retain users through the experience and content based on users' emotion.

Concerned with the sampling number, the sampling sites, and the development stages of the tourism social network site, the direct impact of the perceived characteristic for the use of tourism social network sites has not been confirmed yet. Future studies can sample at different level of economic location and in different time periods.

# References

- Abdallah, A. A. (2018). Investigating the impact of social media advertising features on customer purchase intention. International Journal of Information Management, 42(1), 65-77.
- Andreas, M. K., & Haenlein, M. (2010). Users of the world, unite! The challenges and opportunities of social media. *Business Horizons*, *64*(53), 59-68.
- Bala, V. H. (2008). Technology Acceptance Model 3 and a research agenda on interventions. Decision Sciences, 39(2), 273-315.
- Barry, J. M., & Gironda, J. T. (2019). Operationalizing thought leadership for online B2B marketing. *Industrial Marketing Management*, 81(1), 138-159.
- Bastida, U., & Huan, T. C. (2014). Performance evaluation of tourism websites' information quality of four global destination brands: Beijing, Hong Kong, Shanghai, and Taipei. *Journal of Business Research*, 67(3), 167-170.
- Cai, Y.-F. (2019). Forecasting study on the cluster user and choosing users' styles and features chosen by use classification feature (Master thesis, Huazhong Science and Technology University, 2019). (in Chinese)
- Cao, H.-D. (2013). Social media's information dissemination model. News Outpost, 12(4), 33-35. (in Chinese)
- Chen, J.-Q. (2013). A study on the core competence of tourism websites: A study based on analytic hierarchy process. *China Management Informationization*, *16*(6), 99-100. (in Chinese)
- Chen, X.-Y. (2018). An impact study on the behavior intention by travelers believing for online tourism website (Master thesis, Zhenzhou University, 2018). (in Chinese)
- Cheng, J.-J. (2013). Research on information transmission mode and topic trend prediction in social network (Dissertation, Beijing Jiaotong University, 2013). (in Chinese)
- Cui, C.-Y. (2019). The impact on self-help media decision-making by social media marketing on rural village (Thesis, Anhui Normal University, 2019). (in Chinese)
- Dabbous, A., & Barakat, K. A. (2020). Bridging the online offline gap: Assessing the impact of brands' social network content quality on brand awareness and purchase intention. *Journal of Retailing and Consumer Services*, 53(1), 96-101.
- Dong, M.-M. (2013). A study on the influence mechanism of social network on consumer brand attitude (Thesis, Hunan University, 2013). (in Chinese)
- Ellahi, A., & Bokhari, R. H. (2013). Key quality factors affecting users' perception of social networking websites. *Journal of Retailing and Consumer Services*, 20(11), 120-129.

- Ettema, D., & Timmermans, H. (2006). Costs of travel time uncertainty and benefits of travel time information: Conceptual model and numerical examples. *Transportation Research*, *14*(3), 335-350.
- Fred, D. D., Bagozzi, R. P., & Warshaw, P. R. (1989). User acceptance of computer technology: A comparison of two theoretical models. *Management Science*, 35(8), 982-1003.
- Fu, G., & Ni, D.-A. (2013). Study on comprehensive evaluation of tourism website based on principal component analysis. *China's Collective Economy*, 392(24), 49-51. (in Chinese)
- Grabowicz, P. A., Ramasco, J., Moro, E., Pujol, J. M., & Eguiluz, V. M. (2012). Social features of online networks: The strength of intermediary ties in online social media. *Plosone*, 7(1), 1-9.
- Hou, W.-W. (2013). Research on brand communication effect based on social network (Thesis, Xi'an University of Technology, 2013). (in Chinese)
- Huang, J., & Wu, J. (2014). Quantitative evaluation and analysis of China rural tourism website. *Territory & Natural Resources Study*, *148*(1), 57-60. (in Chinese)
- Jacobsona, J., Gruzdb, A., & Ángel, H. G. (2019). A social media marketing: Who is watching the watchers? *Journal of Retailing* and Consumer Services, 3(1), 969-989.
- Kang, J.-W., & Namkung, Y. (2019). The information quality and source credibility matter in customers' evaluation toward food O2O commerce. *International Journal of Hospitality Management*, 78(4), 189-198.
- Kietzmann, J. H., Silvestre, B. S., McCarthy, I. P., & Pitt, L. F. (2012). Unpacking the social media phenomenon: Towards a research agenda. *Journal of Public Affairs*, 12(2), 109-119.
- Kwok, L., & Yu, B. (2013). Spreading social media messages on Facebook: An analysis of restaurant business-to-consumer communications. *Cornell Hospitality Quarterly*, 54(11), 84-94.
- Lee, G., Cai, L. A., & O'Leary, J. T. (2006). An analysis of brand-building elements in the US state tourism websites. *Tourism Management*, 27(5), 815-827.
- Li, Z.-Q. (2013). Study on evaluation system of tourism e-commerce websites (Thesis, Hannan University, 2013). (in Chinese)
- Liu, B.-Y. (2004). Development, integration and utilization of tourism information communication resources. *Library Tribune*, 24(3), 66-61. (in Chinese)
- Liu, Q.-H., Zhang, X.-Y., Huang, S., Zhang, L.-Y., & Zhao, Y. (2020). Exploring consumers' buying behavior in a large online promotion activity: The role of psychological distance and involvement. *Journal of Theoretical and Applied Electronic Commerce Research*, 15(1), 66-80. (in Chinese)
- Liu, R. (2013). Evaluation of tourism e-commerce websites based on factor analysis and correspondence analysis. *E-Commerce*, 160(4), 33-34+39. (in Chinese)
- Liu, Z.-Y. (2013). Research on the motivation and behavior of mobile social network users (Thesis, Shanghai Normal University, 2013). (in Chinese)
- Lu, H. (2011). Use and satisfaction: A labeling theory. International Press, 196(2), 11-18. (in Chinese)
- Lu, Z., & Bai, C.-L. (2001). The performance and develop trend of tourism websites. *Earth Information Science*, 3(1), 63-66. (in Chinese)
- Lu, Z., Gui, L.-X., & Bai, C.-L. (2004). Evaluation and analysis of tourism website usage in Hebei Province. *Earth Information Science*, 6(1), 67-71. (in Chinese)
- McQuail, D., & Windahl, S. (2008). On the mass communication model (2nd ed.). (J.-H. Zhu, Trans.). Shanghai: Shanghai Translation Publishing House. (in Chinese)
- Osatuyi, B. (2013). Information sharing on social media sites. Computers in Human Behavior, 29(6), 2622-2631.
- Severin, W. J., & Tankard, J. W. (2006). *Communication theory-origin, method and application*. (Z.-Z. Guo, Trans.). Beijing: China Communication University Press. (in Chinese)
- Venkatesh, V., & Davis, F. D. (2000). A theoretical extension of the technology acceptance model: Four longitudinal field studies. *Management Science*, 46(2), 186-204.
- Venkatesh, V., Morris, M. G., Davis, G. B., & Davis, F. D. (2003). User acceptance of information technology: Toward a unified view. *MIS Quarterly*, 27(3), 425-478.
- Wang, G. Y., & DiPietro, R. B. (2010). Towards a functional model of website evaluation: A case study of casual dining restaurants. Worldwide Hospitality and Tourism Themes, 2(1), 68-85.
- Wang, L.-F. (2012). Research on the influence of marketing capability on enterprise's technology innovation under Web 2.0 mode. Journal of Hebei Normal University (Philosophy and Social Sciences Edition), 35(3), 136-139. (in Chinese)
- Wang, W.-J., & Sun, J. (2007). Research and application of Web 2.0. Information Science, 25(12), 1907-1913. (in Chinese)

- Werner, J. S., & James, W. T. (2006). *Origin, method and application of propagation theory* (5th ed.). (Z.-Z. Guo, Trans.). Beijing: China Media University Press. (in Chinese)
- Woodside, G., Vicente, R. M., & Duque M. (2011). Tourism's destination dominance and marketing website usefulness. International Journal of Contemporary Hospitality Management, 23(4), 552-564.
- Wu, J.-M., & Jiang, H. (2007). A study on the function and spatial impact of Chinese tourism websites. *Journal of Anhui Agricultural Sciences*, 35(4), 1139-1140. (in Chinese)
- Xi, J.-P. (December 16, 2015). Speech by Xi, J.-P. *Opening Ceremony of the Second World Internet Conference*. Retrieved from http://news.xinhuanet.com/politics/2015-12/16/c\_1117481089.htm (in Chinese)
- Xi, X. (2011). The social age of tourism. Market Watch (Advertisers), 700(12), 42-43. (in Chinese)
- Xia, M.-L., Zhang, Y., & Zhang, C. A. (2017). TAM-based approach to explore the effect of online experience on destination image: A smartphone user's perspective. *Journal of Destination Marketing & Management*, 8(1), 259-270.
- Xiang, Z., & Gretzel, U. (2010). Role of social media in online travel information search. Tourism Management, 31(2), 179-188.
- Xiong, W., & Ye, L.-W. (2011). Research on the function evaluation of virtual tourism website in China. *Human Geography*, *118*(2), 154-160. (in Chinese)
- Xu, H. (2011). A study on the influence of social network on the purchase intentions of tourists (Thesis, Zhejiang University, 2011). (in Chinese)
- Ying, H.-L. (2012). A study on the use and satisfaction of tourism websites (Dissertation, Shanghai International Studies University, 2012). (in Chinese)
- Zhang, J. (2003). A review of the development of material and functional factors of e-commerce in China. *Journal of Hebei Normal University (Natural Science Edition)*, 27(4), 418-426. (in Chinese)
- Zhang, W. (2005). Current situation and development direction of tourism e-commerce market. *Business Economics*, 137(5), 27-29+34. (in Chinese)
- Zhang, W.-H. (2008). Reflections on Chinese online tourism profit model. Business Modernization, 542(6), 262. (in Chinese)
- Zheng, Z.-Q. (2003). Discussion on the construction of Chinese tourism website. *Tropical Geography*, 23(2), 185-189. (in Chinese)
- Zhu, J. (2013). Literature review on China tourism e-business material and functional element development. *Journal of Hebei Normal University (Natural Science Edition)*, 27(4), 418-426. (in Chinese)
- Zhu, J.-H., & He, Z. (2002). Perceived characteristics, perceived needs, and perceived popularity: Adoption and use of the internet in China. *Communication Research*, 29(4), 466-495. (in Chinese)