Research on the Influential Mechanism of UCG on Travel Intention

Wenyan Lan and Ruobing Huang*

School of Management, Guangdong University of Education, Guangzhou, 510303, China

*Corresponding author's e-mail: 176724654@qq.com

Abstract. In contemporary times, social media serves as a crucial platform for the exchange of information. User-generated content (UGC) has emerged as a pivotal information source for prospective tourists seeking destination insights, significantly shaping their travel decision-making behavior. This study aims to elucidate the influence mechanism of UGC features on audience travel intentions, employing an influence model grounded in SOR theory with destination image perception as the mediating variable. A total of 316 questionnaires were gathered via survey, and data were analyzed using SPSS 26. The findings indicate that three key UGC features—professionalism, attractiveness, and interactivity—positively influence travel intentions. Moreover, cognitive and emotional perceptions of destination image mediate the relationship between UGC features and travel intentions.Based on the above research results, this paper provides suggestions for managers from the perspective of destination image shaping and communication.

Keywords: User-generated content, destination image perception, travel intentions.

1 Introduction

1.1 A Subsection Sample

Nowadays, social media has become an important platform for people to publish and exchange information. User-generated content (UGC) represents the collective body of content, ranging from textual material to interactive engagements, initiated by users within digital ecosystems. This content is autonomously published and circulated via the users' personal channels, fostering a communicative and expressive impact, whether it stands alone or integrates with additional contributions from various origins.[1] UGC has now become a significant source of destination information for potential travelers, and this information increasingly influences the decision-making behavior of the audience.[2] Compared to traditional advertising, user-generated content is more likely to gain consumers' trust[3] and thus increase their willingness to buy.[4] Currently, research on the influence of UGC on travel intentions mainly focuses on the nature of UGC, content characteristics, and forms of expression. Some studies have proven that UGC

C. Lin et al. (eds.), *Proceedings of the 2024 9th International Conference on Modern Management, Education and Social Sciences (MMET 2024)*, Advances in Social Science, Education and Humanities Research 880,
https://doi.org/10.2991/978-2-38476-309-2_93

significantly influences the audience's travel intentions,[5] but the number of related studies is limited, leaving much room for exploring the mechanisms behind its influence. Against this research backdrop, this paper will utilize the stimulus-organism-response(SOR) theory to explore the mechanisms by which UGC characteristics affect tourism intentions and propose specific measures for managers of tourist destinations to enhance the tourism intentions of potential tourists.

2 Theoretical Foundations and Research Hypotheses

2.1 Information Source Effect Model

The information source effect model suggests that the information source has expertise, credibility and attractiveness. Professionalism indicates that the information source can provide correct and effective knowledge with a certain degree of authority, which influences the audience through the psychological mechanism of obedience. Credibility indicates that the information source provides true and effective information, has credibility, and influences the audience through the internalized psychological mechanism. Attractiveness indicates the degree to which the source possesses the qualities desired by the audience, and influences the audience's behavior, attitude or emotion through the psychological mechanism of identification.[6]

This study will be based on the information source effect model, along which professionalism and attractiveness are used as the measurement dimensions of UGC. Secondly, compared with traditional information sources, UGC information sources can realize online information interaction and have obvious interactivity. Therefore, this paper takes professionalism, attractiveness and interactivity as the three dimensions of UGC in social media affecting travel intention.

2.2 The Stimulus-Organism-Response Theory

The Stimulus-Organism-Response (S-O-R) model, formulated by environmental psychologists Mehrabian and Russell, serves as a theoretical framework for examining the impact of diverse internal and external stimuli on an individual's cognitive and psychological reactions, as well as for predicting ensuing behavioral outcomes.[7] The S-O-R theory refers to an individual's exposure to external stimuli (S) triggering a certain cognitive response (O), which in turn produces either tendency or avoidance behaviors (R), and it is based on the evolution of the S-R model. Under the S-O-R theory, there are two types of behavioral patterns: approach and avoidance behaviors. Approach behavior encompasses actions such as lingering and exploration, representing positive stimuli. In contrast, avoidance behavior represents negative stimuli, which includes actions like rejection and fleeing.[8] The avoidance behaviors represent the reverse stimuli, including resistance and escape, etc.

The S-O-R theory has been widely used in the study of online user behavior, with the more mature applications being in the traditional shopping and e-commerce domains. Utilizing the framework of Stimulus-Organism-Response, a thorough model

was developed to examines how these factors may lead to a heightened sense of perceived uncertainty and ultimately trigger an impulsive purchasing desire among consumers.[9] .SOR modeling has also been used to explain user behavior on social networking sites. In summary, the SOR model provides an easy and structured way to study the effects of external environmental stimuli on users' virtual experience and intention to use behavior.

Based on the above analysis, this paper, based on the SOR theory, takes UGC in social media as external stimulus (S), destination image perception as organismic experience (O), and travel intention as behavioral response (R), and then explores the influence mechanism of UGC in social media on travel intention. According to the information source effect model and combining the characteristics of user-generated content, UGC characteristics are summarized in three dimensions, including professionalism, attractiveness and interactivity, and destination image perception includes cognitive image perception and emotional image perception.This study proposes the following research hypotheses, the research model is shown in Fig. 1:

H1a: UGC specialization exerts a significant positive impact on travel intention.

H1b: UGC attractiveness exerts a significant positive impact on travel intention.

H1c: UGC interactivity exerts a significant positive impact on travel intention.

H2a: Cognitive image perception mediates the relationship between UGC specialization and travel intention.

H2b: Cognitive image perception mediates the relationship between UGC attractiveness and travel intention.

H2c: Cognitive image perception mediates the relationship between UGC interactivity and travel intention.

H2d: Emotional image perception mediates the relationship between UGC specialization and travel intention.

H2e: Emotional image perception mediates the relationship between UGC attractiveness and travel intention.

H2f: Emotional image perception mediates the relationship between UGC interactivity and travel intention.

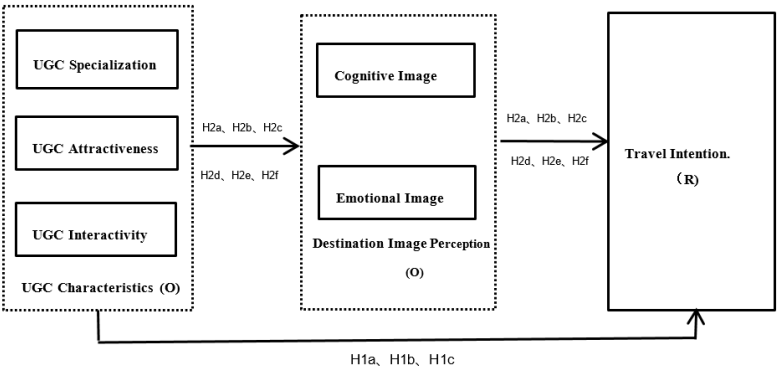

Fig. 1. Research model

3 Questionnaire Design and Collection

3.1 Questionnaire Design

This study takes Harbin culture and tourism out of the circle as an example to study the mechanism of the influence of UGC in social media on the willingness to travel, based on domestic and foreign scholars' mature scale and adjusted with the scenario of this study to get the research scale, before the questionnaire formally began, after briefly introducing the research content to the respondents, the subjects were asked to rely on the social media they had browsed in the past, the impression of the Harbin tourism information (not limited to the text, pictures, graphics and videos, etc.) to fill out the questionnaire.

In the selection of measurement topics, the more mature scales of previous authors were referred to from the aspects of similar research fields and similar research topics. For the measurement of user-generated content characteristics, we refer to the research of Ohanian et al.[10] For the measurement of user-generated content features, nine measurement items were designed with reference to Ohanian et al. For the measurement of destination image perception, six and six items were designed respectively with reference to Baloglu and McCleary.[11] The cognitive image perception and emotional image perception were divided into cognitive image perception and emotional image perception, and the cognitive image perception and emotional image perception were designed with 6 and 3 measurement items respectively according to Baloglu and McCleary.[11] For the measurement of willingness to travel, three items were designed based on the study of Prayag et al[12].

3.2 Data Collection

A Preliminary Survey was first conducted in order to revise and adjust the question items of this study. Large-sample data collection was conducted through the Questionnaire Star platform. A total of 364 questionnaires were retrieved, and 316 valid samples were finally obtained after eliminating invalid questionnaires, with an effective recovery rate of 86.81%. The recovered valid questionnaire data were statistically analyzed for the basic situation. In terms of gender distribution, men accounted for 41.1% and women accounted for 58.9%, which is an average gender ratio; in terms of age distribution, the majority of respondents were over 46 years old and accounted for 34.5% of the total sample, followed by 18-25 years old and accounted for 29.1%, and the lowest was 26-35 years old and accounted for 4.7%; in terms of education distribution, the majority of respondents were with college and bachelor's degree, which accounted for 31.0% and 43.7% respectively; and in terms of education distribution, the majority of respondents were with college and bachelor's degree, which accounted for 31.0% and 43.7% respectively. 31.0% and 43.7% respectively; in terms of daily social media usage, nearly two-thirds of the respondents use social media for more than one hour per day. The distribution of the respondent population is relatively even, and there is no situation in which one sample characteristic dominates significantly, so the sample is considered to be representative.

4 Data Analysis

4.1 Reliability and Validity Analysis

In order to better capture the statistical characteristics of the data, descriptive statistics were analyzed for each construct. The results show that the minimum and maximum values of the measured items of the nine dimensions involved in the questionnaire are within the range of 1 to 7, indicating that the variables have no constructing errors; their mean values range from 5.13 to 5.558, and all of them are more rational.The absolute values of skewness are all less than 2, and the absolute values of kurtosis are all less than 3,so the sample data conform to the normal distribution. According to the results of reliability analysis, the Cronbach's α value of each measure was greater than 0.7, indicating that the reliability of the scale was good. In addition, the total correlation of corrected items for each item was greater than 0.5, indicating that the correlation between the items in The measures was good. The average variance extracted (AVE) for each dimension was greater than 0.5, indicating that the scale has high convergent validity, and further comparing the open root sign value of the AVE of the dimensions with the Pearson's correlation coefficient (the correlation between dimensions), it was found that the open root sign value of the AVE of the dimensions was greater than the correlation coefficient of their constructs, and therefore the scale was considered to have average discriminant validity.

4.2 Hypothesis Testing

Regression analysis. In order to explore the effect of UGC in social media on travel intention, this study applies regression analysis to test the relationship between the dimensions. With UGC characteristics (professionalism, attractiveness and interactivity) as the independent variables and travel intention as the dependent variable, the results of the analysis are shown in Table 1 below.

Table 1. Regression analysis of impact effects

Model		Unstandardized coefficient		Standardized coefficient	t	P	R^2	F
		B	standard error	Beta				
travel intention	(Constant)	**0.54**	**0.153**		**3.538**	**0.000**	**0.775**	**357.36**
	Professionalism	**0.309**	**0.045**	**0.343**	**6.846**	**0.000**		
	Attraction	**0.311**	**0.056**	**0.303**	**5.557**	**0.000**		
	Interactivity	**0.281**	**0.052**	**0.293**	**5.376**	**0.000**		

As can be seen from Table 1, the standardized regression coefficients of UGC professionalism, attractiveness and interactivity on tourism intention are 0.343, 0.303 and 0.295, respectively, and the significance corresponding to each dimension is much less than 0.05, indicating that UGC professionalism, attractiveness and interactivity all have a significant positive effect on tourism intention. That is, the test of UGC professionalism, attractiveness and interactivity on the willingness to travel reaches significance, and the table hypotheses H1a, H1b and H1c are established.

Medium Effect Test for Destination Image Perception. In this study, with the help of SPSS 26 software, the Process plug-in is installed, and model 4 is used to do the mediation effect test, and the Bootstrap mediation effect analysis is used to test whether there is a mediation role in the image of the destination, and the mediation effect test results obtained are shown in Table 2. As can be seen from the results, the Boot confidence interval of each path does not contain 0, indicating that its mediating effect is significant, and the mediating effect of each path accounts for more than 50%. Therefore, there is a partial mediating role of destination cognitive image perception and emotional image perception between the three main UGC features and travel intention, and hypotheses H2a, H2b, H2c, H2d, H2e and H2f are valid.

Table 2. Results of the Mediation Effect Test for Destination Image Perception

The pathway from X to Y	LLCI	ULCI	aggregate effect	Mediation effect	direct effect
Specialization → cognitive perception → travel intention	0.3712	0.5236	0.7446	0.4487	0.2958
Attractiveness → cognitive perception → travel intention	0.4264	0.6304	0.8505	0.5318	0.3187
Interactivity → cognitive perception → travel intention	0.4110	0.6088	0.7909	0.5100	0.2809
Professionalism → emotional perception → travel intention	0.3408	0.4736	0.7446	0.4087	0.3359
Attraction → emotional perception → travel intention	0.3896	0.5535	0.8505	0.4708	0.3798
Interactivity → emotional perception → travel intention	0.3901	0.5689	0.7909	0.4800	0.3108

5 Conclusion and Discussion

5.1 Conclusion

This study aims to reveal the influence mechanism of UGC features in social media on audience's intention to travel, and constructs a model with destination image perception as a mediating variable. Based on the SOR theory, this study found the following important conclusions through a questionnaire survey of 316 social media users:

The professionalism of UGC significantly and positively influences the audience's intent to travel. The higher the level of professionalism, the richer the professional knowledge and experience regarding Harbin's tourist destinations, and the more knowledge the information recipients can acquire, thereby promoting the formation of their travel intent. The attractiveness of UGC also significantly and positively affects the audience's intent to travel. The stronger the appeal of user-generated content, the more pronounced the characteristics of Harbin's tourist attractions and the personal appeal of the information publisher, which can attract higher levels of attention from the information recipients, thus facilitating the formation of their travel intent. The interactivity of UGC significantly and positively impacts the audience's intent to travel. The greater the interactivity of user-generated content, the faster the speed of information exchange and the higher the degree of information response, which in turn influences the emergence of travel intent.

The impact of UGC characteristics on the intent to travel is mediated by the perception of the destination's cognitive image, and it serves as a partial mediation. Specifically, the three major characteristics of UGC on social media can indirectly influence

the willingness to travel by shaping the audience's cognitive image of the destination. As the professionalism of UGC increases, the content related to Harbin's tourism will be more comprehensive and detailed, providing more practical and reliable reference materials for the audience; the stronger the attractiveness of UGC, the more attention it can attract and the deeper impression it can leave on the audience; the more interactive the UGC is, the faster the audience can receive information about the destination. The cognitive image of Harbin's tourist spots displayed in user-generated content will foster a positive impression of Harbin among potential tourists, thereby influencing their willingness to travel.

UGC Features Positively Influence Travel Intention through Perceived Emotional Image of the Destination. The effect of UGC features on travel intentions is mediated, and partially mediated, by the perceived emotional image of the destination. Specifically, the three main features of UGC in social media can indirectly influence the audience's willingness to travel by shaping their affective image of the destination. When UGC has a higher degree of professionalism and attractiveness, it can more accurately convey the imagery and atmosphere of the destination, which triggers a more positive affective experience for tourists. On the other hand, the more interactive UGC is, it means that the audience is more easily persuaded because they are more deeply involved and thus more likely to have emotional resonance. The information about the Harbin tourist destination presented in user-generated content contributes to a favorable impression and emotional image perception of Harbin among potential tourists, which in turn influences the willingness to travel.

5.2 Practical Implications and Future Research

Tourism social media marketers should guide tourists in producing high-quality UGC. High-quality UGC is essential for shaping the image of a destination, aiding the audience in forming positive perceptions, thereby enhancing travel intentions. Such high-quality UGC typically possesses three characteristics: content professionalism, attractiveness, and interactivity.

Emphasizing the shaping and dissemination of the destination image is crucial for attracting tourists. To enhance travel intentions, destinations must strengthen their infrastructure, including improving transportation, environmental quality, recreational facilities, and supporting services, to ensure a comfortable and convenient experience for visitors. Additionally, leveraging cultural connotations by shaping the emotional image through affective stories and local history is essential, such as creating region-specific IP characters and cultural creative products to increase the appeal of tourism offerings. Relevant authorities should place high importance on and continuously advance these image-building efforts, combining wisdom and patience to solidify the hard foundation of urban tourism development, thereby promoting the sustainable growth of the tourism industry.

This study has two main limitations that should be addressed in future research. First, the entirely online questionnaire survey may have introduced measurement biases, despite the design being based on established scales and the exclusion of invalid responses. Future studies should incorporate experimental methods to corroborate and

supplement survey findings. Second, the study did not differentiate between various forms of UGC, such as text, images, and videos, which may have varying levels of acceptance among audiences and thus impact travel intentions. Future research should delve into how different forms of UGC affect audience perception and behavior.

References

1. Santos D B L M . The “so-called” UGC: an updated definition of user-generated content in the age of social media[J]. Online Information Review,2022,46(1), 95–113.
2. Xia Yuhui. Research on the influence of UGC on audience's rural tourism intention in social media [D]. Jiangxi University of Finance and Economics,2022.
3. Ashraf, M., Ismawati Jaafar, N., & Sulaiman, A. System vs. consumer-generated recommendations: Affective and social psychological effects on purchase intention[J]. Behaviour &Information Technology, 2019, 38(12): 1259-1272.
4. Mayrhofer, M., Matthes, J., Einwiller, S., et al. User generated content presenting brands on social media increases young adults’ purchase intention[J]. International Journal of Advertising, 2020, 39(1): 166-186.
5. XIONG Wei, HUANG Meijiao, CHEN Siyan. The effect of tourist-generated content characteristics on travel intention: The chain mediation of social comparison emotions[J]. Tourism Tribune, 2023, 38(2): 81-91.
6. Kelman H C. Processes of opinion change[J]. Public Opinion Quarterly,1961(1): 57-78.
7. Mehrabian, A., & Russell, J. A.An Approach to Environmental Psychology[M]. Cambridge: MIT Press, 1974: 24-30.
8. Xuedong L ,Yanda H ,Peng L . What drives impulsive travel intention in tourism live streaming? A chain mediation model based on SOR framework[J]. Journal of Travel & Tourism Marketing,2024,41(2).
9. Xia X Y ,Chae W S ,Xiang C Y . How social and media cues induce live streaming impulse buying? SOR model perspective[J]. Frontiers in Psychology,2024,15.
10. Ohanian R.Construction and Validation of a Scale to Measure Celebrity Endorser’s Perceived Expertise, Trustworthiness, and Attractiveness[J]. Journal of Advertising, 1990, 19(3): 39-52.
11. Baloglu S, McCleary K W. A model of destination image formation[J]. Annals of tourism research, 1999, 26(4): 868-897.
12. Prayag G, Hosany S, Muskat B, et al. Understanding the relationships between tourists’emotional experiences, perceived overall image, satisfaction, and intention to recommend[J]. Journal of travel research, 2017, 56(1): 41-54.