Tourism Management and Technology Economy (2024)
Clausius Scientific Press, Canada

DOI: 10.23977/tmte.2024.070312
ISSN 2616-2199 Vol. 7 Num. 3

# *Research on the Impact of Short Food Videos on Consumer Travel Intentions: The Mediating Role of Destination Image*

**Yao Yao**

*University of Sydney, Sydney, Australia*
*yaoyao_2513@163.com*

***Keywords:*** Food tourism; Food-related short videos; Travel intentions; Destination image; SOR model

***Abstract:*** Based on destination image theory and the Stimulus-Organism-Response (SOR) model, this study employs structural equation modeling to examine the impact of food-related short videos on destination image and travel intentions. The findings reveal: First, the uniqueness of food culture, perceived authenticity, perceived interestingness, perceived interactivity, opinion leaders, and sense of presence presented in food-related short videos significantly and positively influence both cognitive and affective destination images. Among these factors, opinion leaders have the most substantial impact on potential tourists' cognitive and affective perceptions of the destination. Second, the aforementioned elements in food-related short videos significantly and positively influence travel intentions, with opinion leaders and sense of presence playing crucial roles in shaping consumers' travel intentions. Third, cognitive and affective images mediate the relationship between food-related short videos and travel intentions. These videos can indirectly influence travel intentions by altering potential tourists' perceptions of the destination's cognitive and affective images, thereby facilitating the transformation of potential tourists into actual tourists. Based on these findings, the following recommendations are proposed: emphasize authenticity and atmosphere in short video content; integrate local characteristics and culture into food-related short videos; enhance interactive experiences in short videos; strengthen collaboration with short video opinion leaders; regularly monitor audience feedback to grasp market trends; and pay attention to and mitigate negative word-of-mouth.

## 1. Introduction

"Food is paramount to the people" is a Chinese saying that reflects the growing trend of individuals traveling to cities for culinary experiences. The unique cuisine and distinctive culture of tourist destinations have gradually become integral components of their attractiveness. With the increasing popularity of food-related variety shows, documentaries, and "online mukbangs," local culinary specialties have emerged as a focal point for tourists, often serving as a primary motivation for travel. This is largely due to tourists' desire to experience the "authentic" life and culture of local residents. Statistics indicate that 92.3% of respondents research food options before or during their trips, while 93.1% partake in local cuisine during their travels. Even for business trips, 76.8% of travelers allocate time to explore local food offerings[1]. Evidently, cuisine is an indispensable part of the tourist

experience at a destination, possessing a strong appeal to travelers and becoming a crucial pull factor in destination marketing. Consequently, the development of food tourism has garnered widespread attention in academic circles. Domestic and international scholars have explored various aspects of the relationship between food and tourism, primarily focusing on food tourism resource development, food image perception, food tourism motivation, and food tourism satisfaction. However, few studies have examined the impact of food-related short videos on social media platforms on consumers' travel intentions. In the new media era, the fragmented and focused nature of short videos allows for quick and vivid presentations of tourist destination images. These videos can effectively stimulate consumers' curiosity and desire for exploration, generating strong interest and longing for destinations, thereby enhancing visitors' intentions to travel. Currently, short video marketing for tourist destinations has become a crucial means of increasing visitor numbers. As research deepens, studies on the influence of short videos on travel intentions have begun to emerge. Clarifying the relationship between short videos and travel intentions is beneficial for the further development of tourist destinations. Therefore, this study attempts to conduct empirical research linking food-related short videos with tourism, based on the Stimulus-Organism-Response (SOR) theory. Through questionnaire surveys and introducing destination image as a mediator, this research explores consumers' key focus points regarding food-related short videos and their impact on consumers' travel intentions. The aim is to provide a theoretical foundation and methodological reference for precise marketing in the tourism industry.

## 2. Literature Review and Research Hypothesis

### 2.1 S-O-R Model

The Stimulus-Organism-Response (S-O-R) model is a human cognitive behavior model that evolved from the initial S-R theory established by John Watson. In 1974, Mehrabian and Russell supplemented and modified the model, adding the "organism" component to the S-R model, thus proposing the Stimulus-Organism-Response model[2]. Stimulus (S) refers to external factors that can influence an individual's internal state, such as environment, culture, evaluation, and communication. Organism (O) describes the internal cognitive responses (thought processes, viewpoints, and ideas) and affective responses (psychological emotions and emotional evaluations) of an individual after receiving external stimuli. Response (R) is a crucial component of this theory, typically viewed as an individual's behavioral response or final decision, with two behavioral intentions: approach (staying, exploring, etc.) and avoidance (abandoning, leaving, etc.)[3].The S-O-R model was initially introduced to consumer behavior research from a psychological perspective. However, it has recently been widely applied in studies related to tourist behavior and travel experiences. For instance, Baber et al. applied the SOR theory to research on tourism destination marketing from a social media perspective, examining the impact of reputation, destination image, and social media marketing on tourists' travel intentions[4]. Liu Mingxue et al., based on the S-O-R theoretical model, constructed a structural equation model to explore the influence of Guangxi's tourism short videos on tourists' travel intentions[5].Drawing on existing empirical research findings, this study applies the S-O-R theoretical model, using food-related short videos as external stimuli (S), consumers' perception of destination image after watching food-related short videos as the organism (O), and consumers' travel intentions as the final response (R). This approach is used to explore the impact of food-related short videos on destination image and, subsequently, on consumers' travel intentions.

### 2.2 Destination Image

Destination image has been a key focus of domestic and international scholars for over 40 years,

as it largely dictates the competitiveness of tourist destinations. Since the 1970s, numerous definitions of destination image have emerged, yet no universally accepted definition has been established among scholars worldwide. The concept of destination image originated from the Western term "image." Hunt, a foreign scholar, first proposed the concept of destination image, defining it as the impression of a non-residential place held by an individual or group[6]. Gunn categorized destination image into organic and induced images based on whether image promoters directly intervene in the image formation process[7]. Fakey and Crompton expanded on Gunn's theory, introducing the concept of complex image, further developing the theoretical model of "organic image - induced image - complex image"[8].Gartner, based on attitude theory, proposed a "three-dimensional structure" of destination image comprising cognitive, affective, and conative components[9]. In 1999, Baloglu and McCleary, addressing academic criticism of the conative image, suggested that destination image includes cognitive and affective evaluation processes, ultimately forming an overall perception of the destination image. They proposed the concept of overall image to replace the conative image, thus forming a "new three-dimensional structure" of destination image consisting of cognitive, affective, and overall images. This view has been accepted by many scholars, such as Afshardoost, who used meta-analysis to comprehensively analyze how destination image influences tourists' behavioral intentions, verifying that cognitive and affective images positively influence the overall image[10].Domestic scholars' research on destination image started later compared to the West. The first systematic discussion of destination image appeared in Li Leilei's 2006 book, "Tourism Destination Image Planning: Theory and Practice." She proposed that destination image design directly determines the development direction of the tourism industry, significantly impacting the economic, social, and environmental development of tourist destinations, propelling the modern tourism industry into an "image-oriented" era[11]. Subsequently, more scholars such as Wu Bihu, Zhang Jianzhong, Guo Lufang, Deng Mingyan, Li Jie, and Liao Weihua began to explore the connotation and extension of destination image. For example, Jiang Jinbo et al., using Xi'an as a research subject respectively, confirmed that both cognitive and affective images positively influence the overall image[12]. In general, domestic scholars widely recognize that destination image is based on two core elements: cognitive image and affective image, which together form the overall image of the destination.

Given existing research, this study adopts the "new three-dimensional structure" of destination image proposed by Baloglu and McCleary, selecting cognitive image and affective image as two dimensions to measure consumers' perception of destination image. The following hypothesis is proposed:

H1: Destination cognitive image positively influences destination affective image.

### 2.3 The Impact of Food-Related Short Videos on Destination Image and Travel Intentions

With the rise of new media, food has leveraged the popularity of short videos, gaining new vitality due to its unique appeal. As a media form that combines visual, gustatory, and emotional elements, food-related short videos attract attention, stimulate appetite, and evoke emotional resonance by showcasing enticing food imagery. This process fosters a favorable impression of the destination and ultimately ignites potential tourists' desire for the location.

Food serves as a "cultural reference point," encapsulating information about its place of origin, including production methods, culture, and geography, thus symbolizing local culture. The close connection between destinations and cuisine exists because each culinary item carries corresponding cultural connotations. Short videos present the unique food culture of a destination, reflecting its cultural heritage and quality of life. This not only piques viewers' interest but also enhances their perception of the destination's image. For instance, Jin Ziyue, using Chinese food videos as an

example, explored the crucial role of cultural experience value (cultural novelty and cultural uniqueness) in shaping food impressions, which in turn influences overseas viewers' travel intentions[13]. Based on previous empirical studies, this research proposes the following hypotheses:

H2: The uniqueness of food culture positively influences the cognitive image of the destination.

H3: The uniqueness of food culture positively influences the affective image of the destination.

H4: The uniqueness of food culture positively influences travel intentions.

H5: The cognitive image of the destination mediates the relationship between the uniqueness of food culture and travel intentions.

H6: The affective image of the destination mediates the relationship between the uniqueness of food culture and travel intentions.

Regarding authenticity, previous studies have shown that potential tourists seek experiences of local identity and authenticity. Consequently, some scholars have incorporated perceived authenticity into tourism research. In the field of food tourism, Björk P et al. argue that food experience seekers approach culinary experiences with a sincere attitude and thus greatly value food authenticity, which influences their subsequent behavioral intentions[14]. Robinson, through empirical research, demonstrated that authenticity is an indispensable component of food tourism research[15]. Therefore, this study proposes the following hypotheses:

H7: Perceived authenticity positively influences the cognitive image of the destination.

H8: Perceived authenticity positively influences the affective image of the destination.

H9: Perceived authenticity positively influences travel intentions.

H10: The cognitive image of the destination mediates the relationship between perceived authenticity and travel intentions.

H11: The affective image of the destination mediates the relationship between perceived authenticity and travel intentions.

Numerous studies have found that the perceived enjoyment or positive emotions generated during various activities such as shopping, sightseeing, viewing, and photography can influence subsequent behavior. For instance, interestingness can lead to immersive experiences, pleasant atmospheres can affect users' emotional arousal, and enjoyment can promote consumer shopping behavior. Liu Jie, using Xi'an as a research subject, explored how the entertainment value of tourism short videos influences potential tourists' perception of destination image, thereby enhancing travel intentions[16]. Based on these findings, this study proposes the following hypotheses:

H12: Perceived interestingness positively influences the cognitive image of the destination.

H13: Perceived interestingness positively influences the affective image of the destination.

H14: Perceived interestingness positively influences travel intentions.

H15: The cognitive image of the destination mediates the relationship between perceived interestingness and travel intentions.

H16: The affective image of the destination mediates the relationship between perceived interestingness and travel intentions.

The interactivity of short videos refers to the communication between viewers and creators through likes, comments, and shares. Many scholars have confirmed that interactivity directly or indirectly influences tourists' behavioral intentions. In the field of food tourism, Lin Yuan studied food documentaries and noted that encouraging viewers to express their opinions while watching food documentaries can generate more emotional attachment, leading to a positive impression of the tourism destination. It was also pointed out that perceived interactivity influences travel attitudes through flow experience, thereby positively affecting travel intentions[17]. Based on this analysis, this study proposes the following hypotheses:

H17: Perceived interactivity positively influences the cognitive image of the destination.

H18: Perceived interactivity positively influences the affective image of the destination.

H19: Perceived interactivity positively influences travel intentions.

H20: The cognitive image of the destination mediates the relationship between perceived interactivity and travel intentions.

H21: The affective image of the destination mediates the relationship between perceived interactivity and travel intentions.

On short video platforms, users with a large number of followers and influence are referred to as opinion leaders. In the tourism field, the descriptions and recommendations of tourism destinations conveyed by opinion leaders through various means may influence potential tourists' perception of destination image and travel intentions as presented in short videos. Gao Haixia and Ying Yangshen empirically analyzed that the higher the user's trust in opinion leaders, the greater the influence of the content shared by opinion leaders on their perceived value[18]. Zhang Di, focusing on "internet celebrities" as opinion leaders, studied the relationship between short videos and tourism destination decision-making[19]. Guan Tingdan, using Harbin as an example, proved that the trustworthiness of opinion leaders in Douyin short videos positively influences potential tourists' perception of the destination's cognitive and affective images, further affecting their travel intentions[20]. Through literature review, this study proposes the following hypotheses:

H22: Opinion leaders positively influence the cognitive image of the destination.

H23: Opinion leaders positively influence the affective image of the destination.

H24: Opinion leaders positively influence travel intentions.

H25: The cognitive image of the destination mediates the relationship between opinion leaders and travel intentions.

H26: The affective image of the destination mediates the relationship between opinion leaders and travel intentions.

In food videos, the sense of presence is a comprehensive sensory experience that creates a unique dining environment through visual and auditory elements, making viewers feel as if they are personally present at the scene. The creation of this sense of presence not only enhances viewers' anticipation of the food but also increases their curiosity about the culture and geographical location, making the viewing experience more attractive and engaging. For example, Zhao Mengyuan, using restaurant exploration food short videos as an example, demonstrated that the ambiance of food (such as authentic dining environments) positively influences viewers' perception of city image, thereby enhancing their travel intentions[21]. In light of this, this study proposes the following hypotheses:

H27: Sense of presence positively influences the cognitive image of the destination.

H28: Sense of presence positively influences the affective image of the destination.

H29: Sense of presence positively influences travel intentions.

H30: The cognitive image of the destination mediates the relationship between sense of presence and travel intentions.

H31: The affective image of the destination mediates the relationship between sense of presence and travel intentions.

## 2.4 The Relationship between Destination Image and Travel Intentions

Travel intention refers to consumers' propensity to visit a particular tourism destination, typically influenced by various factors. Numerous academic studies have clearly indicated that destination image has a significant impact on tourists' travel intentions. Goodrich posited that a place's attractiveness is proportional to people's positive impressions of it; in other words, the more positive the perception, the higher the likelihood of that location being chosen as a travel destination[22]. L ü Xin conducted a comparative study on travel decision-making among young tourists from China and France. The results showed that despite different research contexts, both studies reached the same

conclusion: there is a positive correlation between tourism destination image and tourists' travel intentions [23]. Based on existing research, this study proposes the following hypotheses:

H32: The cognitive image of the destination positively influences travel intentions.

H33: The affective image of the destination positively influences travel intentions.

Overall, based on the theoretical foundations and research hypotheses proposed above, and integrating the SOR theoretical model and destination image theory, this study constructs an initial model of the influence mechanism of food-related short videos on consumers' travel intentions, as shown in Figure 1.

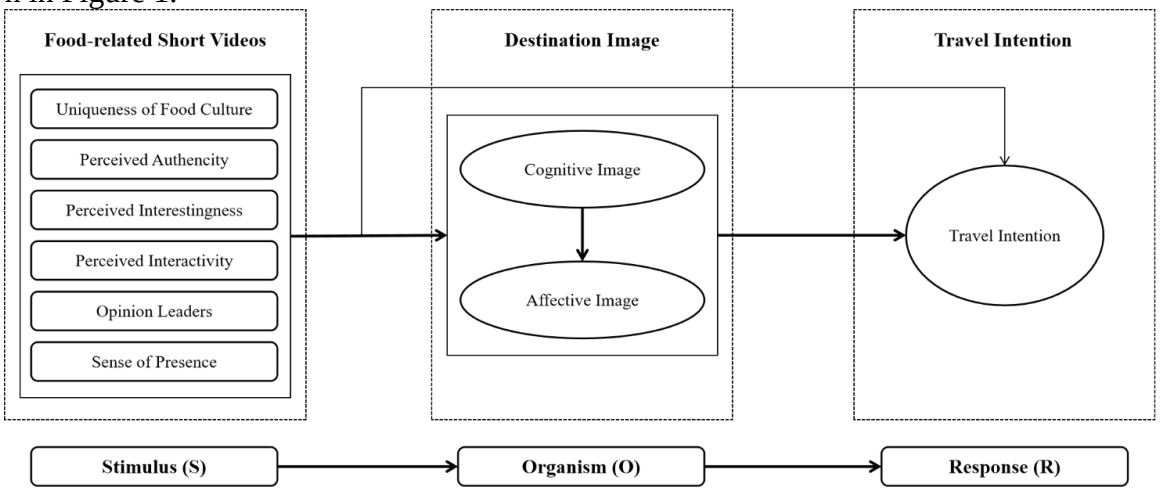


Figure 1: Conceptual Framework

## 3. Methodology

### 3.1 Questionnaire Design

This study primarily draws upon validated scales from existing literature, modifying them to suit the research context, thereby forming the measurement tool for this study. The questionnaire is divided into five main parts: introduction, demographic scale, food short video scale, destination image scale, and travel intention scale. The first part is an introduction guiding respondents to complete the questionnaire. The second part collects demographic information, including gender, age, education level, occupation, and monthly income. The third part measures aspects of food short videos, with scales adapted from various sources: Food taste:(Wiertz [24]),Cultural uniqueness (Testa [25]),Perceived authenticity(Zhang[26]),Perceived interestingness(Ducoffe R H[27]),Perceived interactivity(Chose, Dou, Brayetal[28]),Opinion leaders(Mayer RC[29]),Sense of presence(Zhao Mengyuan[21]).The fourth part measures destination image, setting up two dimensions: cognitive image and affective image, primarily drawing from the research of Liu Li[30]. The fifth part measures travel intentions, with scale items adapted from Zhao Mengyuan[21] studies on travel intention measurement. All measurement items in the questionnaire employ a 5-point Likert scale, ranging from 1 to 5 to represent "strongly disagree" to "strongly agree." To further enhance the scientific rigor of the questionnaire, upon completion of its design, it was submitted to experts in the tourism industry and new media operations for review. This ensures the accuracy of all item statements. Modifications were made based on expert opinions before the questionnaire was distributed.

### 3.2 Data Collection

This study primarily employs a questionnaire survey method to collect data. During the survey

process, respondents were guided to recall their most recent experience of watching food-related short videos before completing the questionnaire. To ensure the reliability and accuracy of the scales, a pilot study was conducted with 50 randomly selected participants prior to the formal research. This pilot study aimed to identify any ambiguities or unclear items in the questionnaire and to gather suggestions from respondents. The formal questionnaire was then formulated based on modifications from the pilot study. Given the advantages of online research, such as speed, efficiency, and broad coverage, the formal survey was conducted using the online survey platform "Wenjuanxing". Data collection took place from December 2023 to March 2024 through "Wenjuanxing", employing a combination of random sampling and snowball sampling methods. A total of 506 questionnaires were collected. After eliminating incomplete questionnaires, those with significant deviations, obvious patterns, or excessively short completion times, 450 valid questionnaires were obtained, resulting in an effective recovery rate of 88.93%.

## 4. Results Analysis

### 4.1 Sample Analysis

Analysis of the sample's demographic characteristics revealed the following: Gender: 59.2% of participants were female, and 40.8% were male. Age structure: The 18-25 age group accounted for the highest proportion at 55.24%, indicating that emerging short video social media platforms are more readily accepted by younger people. The 26-30 and 31-40 age groups also had significant and comparable proportions. Education: Consumers with "college and undergraduate" and "postgraduate and above" qualifications accounted for the highest proportion, reaching 80.95%, indicating a relatively high education level among the surveyed group. Occupation: Respondents came from diverse professional backgrounds, primarily civil servants and public institution employees (31.2%) and corporate employees (28.1%), followed by students (16.8%) and freelancers (13.2%). Income: Distribution across income brackets was relatively even, with the highest proportion (37.14%) earning monthly incomes above 8000 yuan. Personal experience: 91.43% of respondents had experience watching food-related short videos. Viewing frequency: The highest proportion (54.29%) watched food-related short videos "almost daily" or "frequently". Personal preference: 76.19% of respondents preferred watching food-related short videos under 3 minutes in length. Overall, the sample distribution in this survey is scientifically reasonable and representative.

### 4.2 Reliability and Validity Analysis

This study used SPSS 27.0 and AMOS 28.0 to conduct reliability and validity tests on the scales (see Table 1).

To obtain more accurate and scientific research results, this study employed Composite Reliability (CR) and Cronbach's α coefficient to test the reliability of the 9 variables in the research model. The results show that the Composite Reliability (CR) of each variable in the scale is greater than 0.7, and the overall Cronbach's α coefficient of the scale is 0.962. The Cronbach's α coefficients of each dimension are all greater than 0.8, indicating that the scale has good internal consistency. Additionally, the Corrected Item-Total Correlation (CITC) index is greater than 0.5, and deleting any item would not increase the value of Cronbach's α, further proving that the scale has good reliability.

In terms of validity, this study first conducted exploratory factor analysis using KMO test and Bartlett's test of sphericity. The results show that the KMO value is 0.959, far greater than 0.7, and the Bartlett's test of sphericity is significant ($p < 0.001$), indicating that the questionnaire data is suitable for factor analysis. Secondly, this study extracted common factors with eigenvalues greater than 1 using principal component analysis and performed orthogonal rotation calculations using the

maximum variance method to test the structural validity of the scale. The results show that 9 factors were extracted, with a cumulative explained variance of 72.20%, which is consistent with the number of factors in the hypothesis, indicating that the structural validity of this questionnaire is good and suitable for subsequent analysis. Next, this study conducted confirmatory factor analysis on the scale data. The results show that the standardized factor loadings of each variable in the scale are between 0.674 and 0.802, all exceeding the standard of 0.6. The Average Variance Extracted (AVE) of each variable in the scale is greater than 0.5, indicating that the items have good explanatory power for the variables, and the scale has good convergent validity. Additionally, this study also tested the discriminant validity between variables. Discriminant validity is generally tested by comparing the square root of the Average Variance Extracted (AVE) with the correlation coefficients between variables. As shown in Table 2, the square roots of the AVE for each variable are between 0.811 and 0.871, which are greater than the correlation coefficients of other variables. Therefore, the discriminant validity between variables meets the requirements. In conclusion, the scale has good reliability and validity, and the measured data is authentic and reliable.

Table 1: Reliability and Validity Analysis of the Scale

| Variables | Items | CITC | Cronbach's Alpha if Item Deleted | Cronbach' Alpha | Standardized Factor Loading | CR | AVE |
|---|---|---|---|---|---|---|---|
| Uniqueness of Food Culture | A1 | 0.722 | 0.795 | 0.852 | 0.808 | 0.852 | 0.658 |
| | A2 | 0.720 | 0.796 | | 0.805 | | |
| | A3 | 0.726 | 0.790 | | 0.820 | | |
| Perceived Authenticity | B1 | 0.719 | 0.803 | 0.854 | 0.795 | 0.855 | 0.663 |
| | B2 | 0.749 | 0.774 | | 0.831 | | |
| | B3 | 0.709 | 0.812 | | 0.816 | | |
| Perceived Interestingness | C1 | 0.684 | 0.828 | 0.852 | 0.839 | 0.854 | 0.660 |
| | C2 | 0.741 | 0.776 | | 0.832 | | |
| | C3 | 0.743 | 0.773 | | 0.765 | | |
| Perceived Interactivity | D1 | 0.762 | 0.801 | 0.868 | 0.838 | 0.869 | 0.688 |
| | D2 | 0.730 | 0.830 | | 0.816 | | |
| | D3 | 0.752 | 0.811 | | 0.834 | | |
| Opinion Leaders | E1 | 0.780 | 0.860 | 0.895 | 0.823 | 0.895 | 0.681 |
| | E2 | 0.758 | 0.869 | | 0.825 | | |
| | E3 | 0.770 | 0.864 | | 0.807 | | |
| | E4 | 0.762 | 0.867 | | 0.845 | | |
| Sense of Presence | F1 | 0.760 | 0.863 | 0.893 | 0.825 | 0.893 | 0.676 |
| | F2 | 0.766 | 0.861 | | 0.819 | | |
| | F3 | 0.760 | 0.863 | | 0.826 | | |
| | F4 | 0.767 | 0.861 | | 0.818 | | |
| Cognitive Image | G1 | 0.801 | 0.880 | 0.909 | 0.842 | 0.909 | 0.715 |
| | G2 | 0.791 | 0.883 | | 0.857 | | |
| | G3 | 0.791 | 0.883 | | 0.841 | | |
| | G4 | 0.792 | 0.883 | | 0.841 | | |
| Affective Image | H1 | 0.765 | 0.858 | 0.891 | 0.804 | 0.891 | 0.672 |
| | H2 | 0.766 | 0.858 | | 0.828 | | |
| | H3 | 0.755 | 0.862 | | 0.828 | | |
| | H4 | 0.755 | 0.862 | | 0.819 | | |
| Travel Intention | I1 | 0.811 | 0.860 | 0.904 | 0.870 | 0.904 | 0.758 |
| | I2 | 0.798 | 0.871 | | 0.865 | | |
| | I3 | 0.816 | 0.856 | | 0.877 | | |

Table 2: Discriminant Validity Table

| Variables | Uniqueness of Food Culture | Perceived Authenticity | Perceived Interestingness | Perceived Interactivity | Opinion Leaders | Sense of Presence | Cognitive Image | Affective Image | Travel Intention |
|---|---|---|---|---|---|---|---|---|---|
| Uniqueness of Food Culture | 0.811 | | | | | | | | |
| Perceived Authenticity | 0.646*** | 0.813 | | | | | | | |
| Perceived Interestingness | 0.567*** | 0.553*** | 0.829 | | | | | | |
| Perceived Interactivity | 0.555*** | 0.576*** | 0.622*** | 0.825 | | | | | |
| Opinion Leaders | 0.618*** | 0.566*** | 0.631*** | 0.617*** | 0.822 | | | | |
| Sense of Presence | 0.583*** | 0.622*** | 0.553*** | 0.563*** | 0.611*** | 0.814 | | | |
| Cognitive Image | 0.635*** | 0.640*** | 0.609*** | 0.601*** | 0.631*** | 0.611*** | 0.845 | | |
| Affective Image | 0.611*** | 0.619*** | 0.624*** | 0.611*** | 0.630*** | 0.617*** | 0.648*** | 0.820*** | |
| Travel Intention | 0.676*** | 0.692*** | 0.666*** | 0.650*** | 0.681*** | 0.681*** | 0.693*** | 0.700*** | 0.871 |

Note: The bold values on the diagonal represent the square root of the Average Variance Extracted (AVE), the numbers in the lower triangular region represent the correlation coefficients between variables, *** indicates significance at the 0.001 level.

## 4.3 Model Fit Test

Before conducting hypothesis testing on the structural equation model, this study first employed confirmatory factor analysis to test the model fit. The output report from AMOS 28.0 shows (see Table 3) that the absolute fit indices are X ²/df = 1.254, GFI = 0.945, RMSEA = 0.021, and the relative fit indices are CFI = 0.992, AGFI = 0.932, NFI = 0.960, IFI = 0.992. All indices have reached good levels, indicating that the overall model fit is satisfactory and suitable for hypothesis verification.

Table 3: Model Fit Indices Evaluation

| Fit Indices | Absolute Fit Indices | | | Relative Fit Indices | | | | Parsimonious Fit Indices | |
|---|---|---|---|---|---|---|---|---|---|
| | X ²/df | GFI | RMSEA | AGFI | NFI | CFI | IFI | AIC | CAIC |
| Ideal Index | (1—3) | >0.90 | <0.08 | >0.80 | >0.90 | >0.90 | >0.90 | The smaller, the better | The smaller, the better |
| Value | 1.254 | 0.945 | 0.021 | 0.932 | 0.960 | 0.992 | 0.992 | 695.039 | 1216.474 |

## 4.4 Hypothesis Testing

This study will use the maximum likelihood estimation method in AMOS 28.0 software to conduct parameter estimation of the path coefficients in the model, thereby verifying the hypothesized relationships. The structural relationship model validation results show the correlations between variables and their impact levels (see Table 4).

The results indicate that:

1) Cognitive image positively influences affective image perception (β=0.583, t-value=19.011, p<0.001), thus confirming hypothesis H1.

2) The uniqueness of food culture (β=0.558, t-value=15.839, p<0.001), perceived authenticity (β=0.566, t-value=16.156, p<0.001), perceived interestingness (β=0.540, t-value=15.085, p<0.001), perceived interactivity (β=0.535, t-value=14.891, p<0.001), opinion leaders (β=0.569, t-value=15.947, p<0.001), and sense of presence (β=0.552, t-value=15.528, p<0.001) all have

significant positive effects on cognitive image. Among these, opinion leaders are the most influential factor on potential tourists' cognitive image of the destination. Therefore, hypotheses H2, H7, H12, H17, H22, and H27 are supported.

3) The uniqueness of food culture (β=0.532, t-value=14.781, p<0.001), perceived authenticity (β=0.541, t-value=15.145, p<0.001), perceived interestingness (β=0.548, t-value=15.435, p<0.001), perceived interactivity (β=0.537, t-value=15.002, p<0.001), opinion leaders (β=0.561, t-value=15.947, p<0.001), and sense of presence (β=0.549, t-value=15.479, p<0.001) all have significant positive effects on affective image. Opinion leaders play a key role in tourists' affective image perception of the destination. Thus, hypotheses H3, H8, H12, H13, H18, H23, and H28 are supported.

4) The uniqueness of food culture (β=0.592, t-value=17.310, p<0.001), perceived authenticity (β=0.611, t-value=18.186, p<0.001), perceived interestingness (β=0.589, t-value=17.168, p<0.001), perceived interactivity (β=0.578, t-value=16.658, p<0.001), opinion leaders (β=0.612, t-value=18.226, p<0.001), and sense of presence (β=0.612, t-value=18.209, p<0.001) all have significant positive effects on travel intention. Opinion leaders and sense of presence are the main antecedents of consumers' travel intentions. Therefore, hypotheses H4, H9, H14, H19, H24, and H29 are supported.

5) Furthermore, cognitive image (β=0.628, t-value=16.870, p<0.001) and affective image (β=0.628, t-value=18.984, p<0.001) show significant positive relationships with travel intention, confirming hypotheses H32 and H33.

Table 4: Model Path Test Results

| Research Hypothesis | Path | Standardized Path Coefficient | t-value | Significance | Test Result |
|---|---|---|---|---|---|
| H1 | Cognitive Image → Affective Image | 0.583 | 19.011 | *** | Support |
| H2 | Uniqueness of Food Culture → Cognitive Image | 0.558 | 15.839 | *** | Support |
| H3 | Uniqueness of Food Culture → Affective Image | 0.532 | 14.781 | *** | Support |
| H4 | Uniqueness of Food Culture → Travel Intention | 0.592 | 17.310 | *** | Support |
| H7 | Perceived Authenticity → Cognitive Image | 0.566 | 16.156 | *** | Support |
| H8 | Perceived Authenticity → Affective Image | 0.541 | 15.145 | *** | Support |
| H9 | Perceived Authenticity → Travel Intention | 0.611 | 18.186 | *** | Support |
| H12 | Perceived Interestingness → Cognitive Image | 0.540 | 15.085 | *** | Support |
| H13 | Perceived Interestingness → Affective Image | 0.548 | 15.435 | *** | Support |
| H14 | Perceived Interestingness → Travel Intention | 0.589 | 17.168 | *** | Support |
| H17 | Perceived Interactivity → Cognitive Image | 0.535 | 14.891 | *** | Support |
| H18 | Perceived Interactivity → Affective Image | 0.537 | 15.002 | *** | Support |
| H19 | Perceived Interactivity → Travel Intention | 0.578 | 16.658 | *** | Support |
| H22 | Opinion Leaders → Cognitive Image | 0.569 | 16.286 | *** | Support |
| H23 | Opinion Leaders → Affective Image | 0.561 | 15.947 | *** | Support |
| H24 | Opinion Leaders → Travel Intention | 0.612 | 18.226 | *** | Support |
| H27 | Sense of Presence → Cognitive Image | 0.551 | 15.528 | *** | Support |
| H28 | Sense of Presence → Affective Image | 0.549 | 15.479 | *** | Support |
| H29 | Sense of Presence → Travel Intention | 0.612 | 18.209 | *** | Support |
| H32 | Cognitive Image → Travel Intention | 0.628 | 16.870 | *** | Support |
| H33 | Affective Image → Travel Intention | 0.628 | 18.984 | *** | Support |

Note: *** indicates significance at the P<0.001 level

## 4.5 Mediation Effect Test

This study uses AMOS 28.0 software and employs the Bootstrap method to test the mediating effects of cognitive image and affective image in the model, with a 95% confidence interval and 5000 Bootstrap samples. If the indirect effect does not include 0 in the confidence interval, it indicates a

significant mediating effect; if it includes 0, it suggests no mediating effect exists.

Table 5: Mediation Effect Test Results

| Hypothesis | Paths | Effect size | 95% Confidence Interval | | Test results |
|---|---|---|---|---|---|
| | | | Upper limit | Lower limit | |
| H5 | Uniqueness of food culture → Cognitive image → Travel intention | 0.494 | 0.626 | 0.361 | Support |
| H6 | Uniqueness of food culture → Emotional image → Travel intention | 0.429 | 0.663 | 0.216 | Support |
| H10 | Perception of authenticity → Cognitive image → Travel intention | 0.266 | 0.148 | 0.033 | Support |
| H11 | Perception of authenticity → Emotional image → Travel intention | 0.269 | 0.184 | 0.051 | Support |
| H15 | Perceived interestingness → Cognitive image → Travel intention | 0.371 | 0.639 | 0.151 | Support |
| H16 | Perceived interestingness → Emotional image → Travel intention | 0.363 | 0.481 | 0.255 | Support |
| H20 | Perceived interactivity → Cognitive image → Travel intention | 0.389 | 0.655 | 0.167 | Support |
| H21 | Perceived interactivity → Emotional image → Travel intention | 0.125 | 0.344 | 0.033 | Support |
| H25 | Opinion leaders → Cognitive image → Travel intention | 0.274 | 0.342 | 0.190 | Support |
| H26 | Opinion leaders → Emotional image → Travel intention | 0.546 | 0.687 | 0.412 | Support |
| H30 | Sense of presence → Cognitive image → Travel intention | 0.356 | 0.475 | 0.249 | Support |
| H31 | Sense of presence → Emotional image → Travel intention | 0.229 | 0.289 | 0.138 | Support |

The test results, as shown in Table 5, indicate the following: The mediating effect of cognitive image from the uniqueness of food culture to travel intention has a Bootstrap confidence interval of (0.361, 0.626), which doesn't include 0, with a mediation effect value of 0.494. This signifies a significant mediating effect of cognitive image, thus verifying H5. The mediating effect of affective image from the uniqueness of food culture to travel intention has a Bootstrap confidence interval of (0.033, 0.148), which doesn't include 0, with a mediation effect value of 0.266. This indicates a significant mediating effect of affective image, thus verifying H6.The mediating effect of cognitive image from perceived authenticity to travel intention has a Bootstrap confidence interval of (0.051, 0.184), which doesn't include 0, with a mediation effect value of 0.269. This confirms a significant mediating effect of cognitive image, verifying H10.The mediating effect of affective image from perceived authenticity to travel intention has a Bootstrap confidence interval of (0.151, 0.639), which doesn't include 0, with a mediation effect value of 0.371. This demonstrates a significant mediating effect of affective image, verifying H11.The mediating effect of cognitive image from perceived interestingness to travel intention has a Bootstrap confidence interval of (0.255, 0.481), which doesn't include 0, with a mediation effect value of 0.363. This establishes a significant mediating effect of cognitive image, verifying H15.The mediating effect of affective image from perceived interestingness to travel intention has a Bootstrap confidence interval of (0.255, 0.418), which doesn't include 0, with a mediation effect value of 0.363. This confirms a significant mediating effect of affective image, verifying H16. The mediating effect of cognitive image from perceived interactivity to travel intention has a Bootstrap confidence interval of (0.167, 0.655), which doesn't include 0, with a mediation effect value of 0.389. This indicates a significant mediating effect of cognitive image, verifying H20. The mediating effect of affective image from perceived interactivity to travel intention has a Bootstrap confidence interval of (0.033, 0.344), which doesn't include 0, with a mediation effect value of 0.125. This demonstrates a significant mediating effect of affective image, verifying H21. The mediating effect of cognitive image from opinion leaders to travel intention has a Bootstrap confidence interval of (0.190, 0.342), which doesn't include 0, with a mediation effect value of 0.274. This confirms a significant mediating effect of cognitive image, verifying H25. The mediating effect of affective image from opinion leaders to travel intention has a Bootstrap confidence interval of (0.412, 0.687), which doesn't include 0, with a mediation effect value of 0.546. This establishes a significant mediating effect of affective image, verifying H26. The mediating effect of cognitive image from sense of presence to travel intention has a Bootstrap confidence interval of (0.249, 0.475), which doesn't include 0, with a mediation effect value of 0.356. This indicates a significant mediating

effect of cognitive image, verifying H30. The mediating effect of affective image from sense of presence to travel intention has a Bootstrap confidence interval of (0.138, 0.289), which doesn't include 0, with a mediation effect value of 0.229. This demonstrates a significant mediating effect of affective image, verifying H31.

## 5. Discussion

This study combines Stimulus-Organism-Response (SOR) theory and destination image theory, using the "stimulus-response-organism" framework as a research model. Statistical analyses were conducted using SPSS and AMOS software to elucidate how six dimensions of the short video scenario (uniqueness of food culture, perception of authenticity, perceived interestingness, perceived interactivity, opinion leaders, and sense of presence) function as stimulus variables that positively influence consumers' perception of destination image, which serves as the response variable. During the process of watching food-related short videos, consumers experience a sense of authenticity and presence provided by the scenario. They are attracted by the interesting content in the short videos and engage in positive interactions with video publishers. This successfully constructs a positive cognitive image of the destination, promoting positive emotions in consumers. Consequently, consumers develop emotional connections with the food presented in the short video scenarios and the underlying cultural connotations, leading to an organismic response—the idea of traveling to the destination. The research results validate the applicability and practicality of SOR theory and destination image theory in the field of food-related short videos. This not only fills an academic gap but also provides a new research perspective for future studies in related fields.

In terms of practical implications, tourism marketing organizations should consider utilizing food-related short videos for destination image promotion. Based on the research findings, six recommendations are proposed:

1) Tourism marketing organizations should emphasize authenticity and atmosphere in food-related short video content creation. For instance, they should comprehensively showcase the selection, preparation, cooking, and tasting processes of dishes to provide a genuine experience without excessive embellishment. This approach can attract new viewers and maintain the loyalty and trust of existing audiences.

2) Content creators should fully explore unique local ingredients or cooking methods, combining informative content about traditional food culture and various local culinary cultural activities. Through comprehensive and diverse short videos, they can present the local tourism image and unique characteristics, shaping a positive image of the food tourism destination to attract potential tourists.

3) Tourism marketing organizations should frequently interact with short video viewers, fully satisfying the culinary needs of online audiences. They should also organize engaging activities such as coupon giveaways, food challenges, and soliciting food recommendations to increase online viewers' watching and sharing frequency.

4) To maximize promotional effects, tourism marketing organizations can actively collaborate with short video opinion leaders, leveraging their personal charm, appeal, and influence to promote food, thereby enhancing promotional effectiveness.

5) Short video producers should regularly analyze audience comments and feedback from social media platforms like Weibo and forums to fully understand audience preferences and make corresponding adjustments.

6) Tourism marketing organizations should pay close attention to negative information on social media, promptly identifying dissatisfaction and criticism, correcting shortcomings, reducing negative word-of-mouth, and fostering positive online word-of-mouth effects. This can stimulate potential tourists' desire to try and increase their willingness to travel.

While this study has made certain contributions to the field of food tourism, there are still some limitations that need further improvement. Firstly, this study primarily used quantitative analysis as the main research method. Future research could combine qualitative research methods such as interviews and grounded theory to deeply explore the characteristics of food-related short videos that can influence consumers' travel intentions. This would allow research conclusions to go beyond surface-level data analysis and discuss attitudes and thoughts that interviewees may not have explicitly expressed. Secondly, there may be more mediating and moderating variables in the process of food-related short videos influencing consumers' travel intentions, which are worth discussing. Lastly, this study used destination image as a mediating variable, only dividing it into cognitive image and emotional image dimensions. Subsequent research could incorporate overall image into the study. strategies.

## 6. Conclusion

This study, based on Stimulus-Organism-Response (SOR) theory and destination image theory, employs the "stimulus-organism-response" framework. Through structural equation modeling, it constructs and verifies the relationships among food-related short videos, destination image, and travel intention, leading to the following conclusions: First, food-related short videos have a significant positive influence on destination image, and destination image has a significant positive influence on travel intention. Destination image plays a mediating role between food-related short videos and travel intention. Second, the uniqueness of food culture, perception of authenticity, perceived interestingness, perceived interactivity, opinion leaders, and sense of presence presented in food-related short videos have significant positive effects on potential tourists' travel intentions. Additionally, these factors can indirectly influence travel intentions through potential tourists' perceptions of the destination's cognitive and emotional images, promoting the transformation of potential tourists into actual tourists. Among these factors, opinion leaders are the most significant in influencing potential tourists' cognitive and emotional images of the destination. Both opinion leaders and sense of presence play crucial roles in consumers' travel intentions.

## References


*[1] Tang Wai-wai, Chan Lai-kwan, lam ying-sing. A study on the behavioral intention of food tourists based on push-pull theory—an analysis from the perspective of sensation pursuit and authenticity [J].Journal of the Fuzhou University (philosophy and social sciences), 2022, 36(04): 34-44.*

*[2] Mehrabian A. An approach to environmental psychology[J]. Massachusetts Institute of Technology, 1974.*

*[3] Slama M E, Tashchian A. Validating the SOR paradigm for consumer involvement with a convenience good[J]. Journal of the Academy of Marketing Science, 1987, 15: 36-45.*

*[4] Baber R, Baber P. Influence of social media marketing efforts, e-reputation and destination image on intention to visit among tourists: application of SOR model[J]. Journal of Hospitality and Tourism Insights, 2023, 6(5): 2298-2316.*

*[5] Liu Mingxue, Li Xueyan, Dong Hailiang. Research on the effect of Guangxi Tourism Douyin Short Video on tourism intention based on Sor Model [J].New Media Studies, 2023,9(12): 97-101. DOI: 10.16604/J.CNKI. ISSN 2096-0360.2023.12.019.*

*[6] Hunt J D. Image as a factor in tourism development[J].Journal of travel research, 1975, 13(3): 1-7.*

*[7] Jenkins O H. Understanding and measuring tourist destination images[J]. International journal of tourism research, 1999, 1(1): 1-15.*

*[8] Fakeye P C, Crompton J L. Image differences between prospective, first-time, and repeat visitors to the Lower Rio Grande Valley[J].Journal of travel research, 1991, 30(2): 10-16.*

*[9] Tasci A D A, Gartner W C, Cavusgil S T. Measurement of destination brand bias using a quasi-experimental design[J].Tourism management, 2007, 28(6): 1529-1540.*

*[10] Afshardoost M, Eshaghi M S. Destination image and tourist behavioral intentions: A meta-analysis[J].Tourism management, 2020, 81: 104154.*

*[11] Li Leilei. Tourism Destination Image Planning: Theory and practice [M]. Guangdong tourism publishing house,*

*1999.*
*[12] Engim Po, Herina. Study on the impact path of urban tourism image based on structural equation modeling -- a case study of Xi'an City [J].Human Geography, 2015, 30(3): 130-136.*
*[13] Jin Ziyue. How Chinese food videos affect overseas viewers' travel intentions: the moderating effect of food personality [D].Huazhong University of Science and Technology, 2023. DOI: 10.27157/d. CNKI. Ghzku.2023.003752.*
*[14] Björk P, Kauppinen-Räisänen H. Local food: a source for destination attraction[J].International Journal of Contemporary Hospitality Management, 2016, 28(1): 177-194.*
*[15] Robinson R N S, Getz D. Food enthusiasts and tourism: Exploring food involvement dimensions[J].Journal of Hospitality & Tourism Research, 2016, 40(4): 432-455.*
*[16] Jie Liu. A study on the impact of short video on tourists' travel intention based on Sor theory [D].Northwest Normal University, 2023. DOI: 10.27410/d. CNKI. GXBFU. 2023.001922.*
*[17] Lin yuan. A study on the influence of food documentaries on the travel intention of the youth group [D].Guangdong University of Foreign Studies, 2023. DOI: 10.27032/d. CNKI. GGDWU 2023.000069.*
*[18] Gao Haixia,Ying Yangshen. The impact of customer-enterprise interaction on user stickiness in short video social platform [J].Journal of Hangzhou Dianzi University Science (Social Sciences), 2020,16(04): 9-15. DOI: 10.13954/J. CNKI. Hdus. 2020.04.002.*
*[19] Zhang Di. The impact of short video on destination decision-making in the context of Internet celebrity marketing [D].Beijing International Studies University, 2021. DOI: 10.26930/d. CNKI. GBYEC. 2021.000004.*
*[20] Guan Tingdan. A study on the effect of Douyin short video on the image perception and tourism intention of tourism destination [D].Harbin University of Commerce, 2024. DOI: 10.27787/d. CNKI. Ghrbs. 2024.000528.*
*[21] Zhao Mengyuan. A study on the effect of restaurant-exploring short videos on urban tourism intention [D].Lanzhou University of Finance and Economics, 2024. DOI: 10.27732/d. CNKI. Gnzs.x. 2024.000220.*
*[22] Goodrich J N. The relationship between preferences for and perceptions of vacation destinations: Application of a choice model[J].Journal of Travel research, 1978, 17(2): 8-13.*
*[23] Lu Xin. A comparative study of travel decision-making between Chinese and French young tourists [D].East China University of Science and Technology, 2014.*
*[24] Wiertz C, de Ruyter K. Beyond the call of duty: Why customers contribute to firm-hosted commercial online communities [J].Organization studies, 2007, 28(3): 347-376.*
*[25] Testa R, Galati A, Schifani G, et al. Culinary tourism experiences in agri-tourism destinations and sustainable consumption—understanding Italian tourists' Motivations [J]. Sustainability, 2019, 11(17): 4588.*
*[26] Zhang T, Chen J, Hu B. Authenticity, quality, and loyalty: Local food and sustainable tourism experience[J]. Sustainability, 2019, 11(12): 3437.*
*[27] Ducoffe R H. Advertising value and advertising on the web[J]. Journal of advertising research, 1996, 36(5): 21-22.*
*[28] Ngan Seok. A study on the impact of short video marketing on Xiamen's tourism destination image and tourism willingness [D]. Tianjin University, 2020. DOI: 10.27356/d. CNKI. GTJDU.2020.002598.*
*[29] Mayer R C. An Integrative Model of Organizational Trust[J]. Academy of Management Review, 1995.*
*[30] Liu Li. Perception of tourism destination image and tourist travel intention: a comprehensive study based on the perspective of film and television tourism [J].Journal of Tourism, 28(09)2013:61-72.*