

# Research on the Mechanism of the Influence of Consumption Behavior in China's Cultural and Tourism Industry under the Normalization of COVID-19 Epidemic Prevention and Control

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## **Abstract:**

Based on the revitalization of the tourism industry under the normalization of the COVID-19 epidemic prevention and control, this study uses the most effective predictive index of research-driven behavior --- behavior intention to construct the Extended-TPB model, to study the behavior intention of tourists in the special period background and clarify the influence mechanism of tourists' choice of consumption behavior. The research not only provides a reference for the cultural and travel enterprises to suggest the characteristics of tourists' consumption behavior at present, but it also provides a reference for the revitalization of the industry after the epidemic. The results show that: 1) the prevention and control effect of China's COVID-19 and the epidemic prevention measures of cultural and tourism enterprises are important factors such as tourist behavior attitude, subjective norms, etc.; 2) Tourists' trust in Chinese culture and tourism industry and preference for Chinese culture dilute the pressure of subjective norms to a certain extent, that is the higher the trust, the less affected by the epidemic or the attitudes of surrounding relatives and friends, and vice versa; 3) According to the characteristics of China's culture and tourism industry and epidemic situation, the construction of culture and information capitals can effectively promote the generation of cultural tourism behavior.

**Keywords:** Normalization of Epidemic Prevention and Control, Culture and Tourism Industry, Extended-TPB, Information Capital.

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## I. INTRODUCTION

In recent years, Ministry of Culture and Tourism of China and other places adhere to the developing ideas that "fit for integration and integrate if it can integrate as far as possible integration, use culture to promote tourism and make tourism highlight culture", which accelerate the realization of the integration of cultural and tourism industry aggregation effect. But just when this new and high social benefits and economic value of the industry gradually towards the direction of mutual prosperity and mutual

dependence steadily forward, this "black swan" "COVID-19" suddenly struck disrupting the development trajectory and rhythm that the impact can be said to be unprecedented. Although China in the epidemic prevention and control has repeatedly made great efforts, with the "COVID-19" in-depth understanding, it can not completely eradicate the new crown virus has become a consensus in a short period of time. In order to recover economic and social development in the fastest time, the world will enter a long period of time to normalize prevention and control without affecting the epidemic prevention and control, that is "post-epidemic era." In this context, China's culture and tourism industry should not only re-boost the confidence of the development of the industry, but also combine the actual exploration of tourists' behavior intentions in the context of the epidemic and strive to find opportunities in the crisis. As long as the industry does not fall, the source of customers is still and the epidemic prevention and control is not lax coupled with China's strong consumption capacity and gradually increasing the level of urbanization and governments at all levels of the cultural and tourism industry benefits policy, it will certainly create a new development path in line with the requirements of epidemic prevention and control. However, in view of the cultural and tourism industry is vulnerable to the external situation, it is urgent to effectively promote the consumption behavior of tourists. Based on this, this study takes tourists' consumption behavior intention as the entry point and refers to the Multi-attribute Attitude Model (MAM), Rational Behavior Theory (TRA)[1] and Model of Goal-directed Behavior (MGB)[2] derived from the "attitudinal behavior" paradigm. MGB and other consumer behavior studies confirmed Ajzen's TPB model[3], which is widely used in various fields in behavior analysis, to verify the logical correlation of various predictive variables in this study. However, the traditional TPB framework is insufficient to fully analyze tourists' behavioral intentions and influence mechanism under the background of normalized epidemic prevention and control. It is necessary to add other predictive variables to improve the explanatory power of the model[4]. To this, this study puts forward the direction of the information capital variable assuming that the behavioral attitude, subjective norm, perceived behavioral control, tourists to the tour industry of trust, information consumption, network literature brigade knowledge and information to create nine variables. The variables are the three test items, snowball survey method is used in China and distributed 430 questionnaires, 362 valid questionnaires have been collected, and it is planned to explore the validity of the Extended-TPB model through the deviation test, reliability and validity test, model verification and other methods, and investigate the prevention and control effect of COVID-19 in China and factors influencing the epidemic prevention measures of cultural and tourism enterprises on tourists' behavior attitudes and subjective norms at the same time. The relationship between information capital construction and the development of culture and tourism industry.

## **II. THEORY BACKGROUND**

### **2.1 Culture Capital and Information Capital in Culture and Tourism Industry**

China has highlighted the new development pattern of "double circulation" in the 14th five-year plan, in which "internal circulation" occupies the main position in the framework of this pattern and the culture and tourism industry is one of the important industries to promote the internal circulation and effectively

expand domestic demand. With the further development of the industry, the structural relationship and internal logic of the integration of culture and tourism have also been re-examined[5]. However, there are few studies to grasp consumers' behavior cognition of this industry as a whole due to the lack of in-depth analysis of various dimensions of cultural and tourism integration, which makes the actual tourism products still tend to be solidified and single, which proves the importance and urgency of cultural capitalization in the development of cultural and tourism industry. Bourdieu summarized the importance of necessary "information" and "knowledge" in cultural tourism as "cultural capital". He believes that culture capital is not directly related to commodity trading or competition among individuals. It is an embodiment of soft power and its accumulation and exchange need to be transformed through time, action, money or social status[6]. From this perspective, the integration of culture and tourism is also a medium for the transformation of cultural capital, because tourism consumers can transform distant and difficult landscape presentations such as history and art into private experience and symbolic language through the acquisition of cultural capital. Although the concept of culture capital came into being with the discussion of Marx's capital theory, it points to the unfairness of cultural consumption and class opposition. However[7], with the changes of the times, the class structure of contemporary society has disintegrated and the social structure of digital media based on information has been formed at the same time[8]. Coupled with the popularity of network media, some cultural tourism projects that used to be limited to the upper class have now broken the class gap. The decisive factor of contemporary social and cultural consumption has also turned to the accumulation and utilization of information capital. In other words, information capital has become a new source of culture capital. Therefore, there are more and more studies on the demonstration of information capital as the core element of cultural capital accumulation in the academic circles and some discuss the network information as a new phenomenon of cultural consumption[9]; There are studies that assume different cultural consumption levels of individuals according to the degree of information utilization[10]; There are also studies on the assumption that information consumption and information production, which take the influencing variables of cultural consumption as elements of information capital[11]. Combined with the above literature, this paper will expand the discussion on the behavior of culture and tourism consumption from "what to consume" to "how to consume" and pay attention to the behavior characteristics before and after the emergence of cultural tourism consumption behavior.

## 2.2 Extensive Planned Behavior Theory

Predicting consumer behavior intention is an important part of social science research. In this regard, Ajzen and Fishbein believe that the behavior intention is the decisive factor affecting human behaviors, and the attitude and subjective norms are the two main antecedents determining behavior intention, and they put forward the rational behavior theory (TRA: Theory of Reasoned Action)[12]. TRA greatly improves the ability of behavior prediction, but its application must have individual controllability of behavior ignoring the influence of uncontrollable factors such as capital, time and the attitude of surrounding relatives and friends. Therefore, Ajzen added the antecedent variable of perceived behavioral control on the basis of TRA model and formed the theory of planned behavior (TPB: Theory of Planned Behavior) [13]. Perceived behavior control is the explanation of individual objective behavior ability,

which is more in line with the mastery of individual behavior uncontrollability in the real situation. After that, Ajzen put forward the Extended-TPB theory through demonstration pointing out that the persuasion and reliability of the TPB model can be solved by adding expansion variables according to the actual situation. E-TPB as a perfect scheme of the TPB model began to be accepted by the majority of scholars. Chen and Tung added environmental concerns and moral cognitive variables to effectively analyze the behavior of hotel consumers[14]; KO Jin-Sook and Seo Young-Soo decomposes social capital into three predictive variables: the relational, structural and cognitive as a supplement to the TPB model to explain the villagers' participation intention in Rural Revitalization in South Korea[15]. In addition, Richetin et al., Yang Eun Young and Lee Gye-Hee, Qiu Hongliang and other scholars have also demonstrated the effectiveness of E-TPB model from different perspectives[16-18]. However, most studies only set the antecedent or local attachment with the influencing factors on the variables such as attitude, subjective norms or perceived behavior control in the existing TPB model as the regulatory variable. It is as the dependent variable of behavior intention analysis and did not make empirical analysis or aftereffect hypothesis on the influencing variables after behavior intention. Therefore, this paper attempts to expand the analysis of the behavioral impact after the cultural tourism consumption intention, and adds hypothetical variables such as the information consumption and information production.

### **III. RESEARCH METHODOLOGY**

#### **3.1 Research Model and Hypothesis**

##### **3.1.1 Cognition and behavioral attitudes, subjective norms and place identity of the normalization of COVID-19 epidemic prevention and control**

Many studies have applied E-TPB model to discuss the consumption behaviors, and it has been proved that E-TPB model has good predictive and explanatory effectiveness in the field of behavior. This paper takes the consumption behavior of tourists in China's cultural and tourism industry as the research object that belongs to the category of typical individual behavioral intention decisions, so it is feasible and reasonable to take the TPB model as the basic analysis model framework. According to the analytical framework of this model, the behavioral attitude is an effective predictive variables that contribute to behavioral intentions, which can be seen as "and predictive behavioral intentions"[19,20]. In view of the research background of this paper is that China has entered the period of the normalization of COVID-19 epidemic prevention and control, two expansion variables that are "the cognition of normalization of COVID-19 epidemic prevention and control" and "tourists' place identity in China's culture and tourism industry" are added to the basic analysis framework. The main reason comes from the influence of "perceived risk" on tourists' consumption behavioral attitudes[21,22]. In this regard, the academic circle has empirically analyzed that the perceived risk of tourism industry (place) will significantly reduce the tourists' intentions of (re) consumption behavior from multiple perspectives such as infectious diseases, natural disasters, environmental health, terrorist events, etc[23,24]. It will also have adverse effects on the subjective norms and cognitive behavioral control[25]. On the premise that tourists have the correct cognitive ability of epidemic prevention and control, culture and tourism enterprises can establish a good

tourism image, service quality and tourism experience through effective prevention and control measures, that is to deepen the tourists' place identity in cultural and tourism enterprises. On the discussion of the place identity and behavioral attitudes, subjective norms and cognitive behavioral control, Chinese scholars Cao Wenping, Xu Chunxiao and Zhao Xianzhong took Shaoshan and Guilin Scenic Areas as examples to conduct empirical research, and the results proved that tourists' place identity in destination is an effective predictive variables of the above three variables[26]. Based on this, the following hypothesis are made:

H1a: The cognition of the normalization of epidemic prevention and control has a positive impact on tourists' consumption behavior attitudes of participation in China's culture and tourism industry.

H1b: The cognition of the normalization of epidemic prevention and control has a positive impact on tourists' subjective norms of consumption behavior of participation in China's culture and tourism industry.

H1c: The cognition of the normalization of epidemic prevention and control has a positive impact on the cognitive behavioral control.

H2a: The place identity of tourists has a positive impact on tourists' consumption behavior attitudes of participation in China's culture and tourism industry.

H2b: The place identity of tourists has a positive impact on the subjective norms of tourists' consumption behavior attitudes of participation in China's cultural and tourism industry.

H2c: The place identity of tourists has a positive impact on has a positive impact on the cognitive behavioral control.

### 3.1.2 The relationship between attitudes, subjective norms, cognitive behavioral control and behavioral intentions

According to the theory of planned behavior proposed by Ajzen and the research on expansion-TPB model carried by other scholars with the help of this theory[27-29]. Personal attitude (personal attitude, PA) is the persistent positive or negative behavior beliefs (Behavior Beliefs, BBi) and outcome evaluations (Outcome Evaluations, OEi) developed by individuals toward the industry. The attitude is the correct individual cognition of the normalization of COVID-19 epidemic prevention and control and the effective trust in China's cultural and tourism industry combined with the research objects of this paper. Therefore, the higher the individual trust evaluation of China's epidemic prevention measures and culture and tourism industry, the more positive attitudes with the stronger their behavioral intentions as follows:

$$PA = \sum_{i=1}^i BBiOEi; \quad (1)$$

Subjective Norm (Subjective Norm, SN) refers to the influence of certain social environment and pressure on individuals, so the formation of subjective norms will also have an effective influence on the formation of attitudes and cognitive behavioral control, which can be regarded as the sum of products of normative beliefs (Normative Belief, NBj) and the individual motivation to comply (MCj) to the social groups' environment and pressure with greater influence on them. As shown in the following:

$$SN = \sum_{j=1}^j NBjMCj; \quad (2)$$

Cognitive behavioral control is the degree of control that individual feels when trying to take a certain act mainly including two layers of interpretation: one is the control belief (Control Belief, CBk) that may promote or hinder behavioral intentions, namely the degree of individual trust or preference for China's culture and tourism industry; the other is the perceived facilitation (perceived facilitation, PFk), that is the perceived difficulty degree of individuals to participate in cultural travel in China. In short, the more they trust China's culture and tourism industry, the higher their preference for China's culture and tourism landscape and the more reasonable the cognition of the normalization of epidemic prevention and control, the stronger the intentions to realize the consumption behavior of China's culture and tourism industry. Its function expression can be summarized as follows:

$$PBC = \sum_{k=1}^k CBkPFk; \quad (3)$$

In conclusion, the following hypotheses are made:

H3a: Personal attitudes has a positive impact on tourists' intentions of consumption behavior.

H4a: Subjective norms have a positive impact on tourists' intentions of consumption behavior.

H5a: Cognitive behavioral control has a positive impact on tourists' intentions of consumption behavior.

### 3.1.3 The relationship among subjective norms, behavioral intentions and expansion variables

The behavioral intention mentioned in this paper refers to the tourists' behavioral intentions to conduct tourism consumption in China's culture and tourism industry. Due to the characteristics of culture and tourism industry such as leisure, health preservation and cultural cultivation, etc, the stronger the tourists' behavioral intentions, the higher the information demand for China's culture and tourism industry[30]. However, with the rise of 5G, the arrival of the big data era and the popularity of home office in the post-epidemic era, the information consumption has expended to the network environment, forming a "social currency" that cannot be underestimated and becoming an effective variable to promote tourists' consumption behavior[31]. This paper divides tourists' behavior under the influence of intention into three expansion variables: network information consumption, culture and tourism consumption and network information reproduction. However, we consider the particularity of COVID-19 epidemic and the strong influence relationship between the three expansion variables and subjective norms reflected in actual research, this paper adds the influence relationship between subjective norms and expansion relationships on the basis of behavioral intention, obtaining the following hypothesis:

H6a: Tourists' subjective norms have a positive impact on network information consumption.

H6b: Tourists' subjective norms have a positive impact on culture and tourism consumption.

H6c: Tourists' subjective norms have a positive impact on network information reproduction.

H7a: Tourists' behavioral intentions of consumption have a positive impact on network information



consumption.

H7b: Tourists' behavioral intentions of consumption have a positive impact on cultural and tourism consumption.

H7c: Tourists' behavioral intentions of consumption have a positive impact on network information reproduction.

### 3.2 Theoretical Model Construction

As mentioned above, based on the analysis of the TPB framework, this paper introduces expansion variables such as cognition of normalization of epidemic prevention and control, network information consumption and network information reproduction, and constructs a hypothesis model for researching the consumption behavior intentions in the China's cultural and tourism industry based on expansion-TPB, as shown in Fig1:

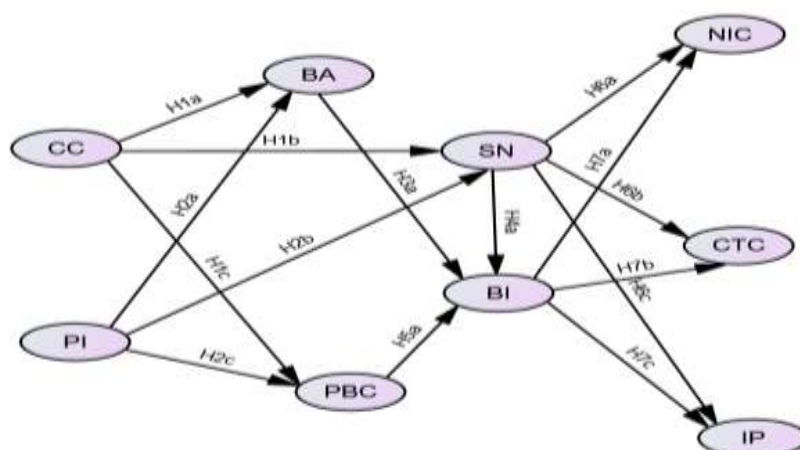


Fig.1: Hypothesis Model

### 3.3 Data Collection and Analysis Method

In this paper, we assume 9 variables including behavioral attitudes, subjective norms, control of perceived behavior, tourists' trust in culture and tourism industry, network information consumption, network information reproduction, etc. Each variable is given with 3 measurements, 430 questionnaires were distributed in inside and outside China by adopting the snowball survey, and 362 valid questionnaires were recovered with the recovery rate of 84.5%. The questionnaire used the Likert scale 5 (Likert scale 5) with setting a total of 27 item, the 362 effective sample sizes is 13.4 times the number of items measured reaching the prescribed criteria of the structural equation model to performing effective analysis. The questionnaires were collected from June 1 to August 10, 2021 lasted approximately two months. The paper mainly used tools to do data analysis such as SPSS25 and Amos27, etc. The existence of allowable variable error during Amos operation, which can obtain relatively accurate analysis results, is conducive to the optimization of structural equation model. Therefore, it is suitable for the analysis of this research adding multiple potential predictive variables with the E-TPB model.

## IV. RESEARCH RESULTS

### 4.1 Demographic Characteristics of the Available Data

Among the 362 valid questionnaires, the male accounting for 46.4% is total of 168; the female accounting for 53.6% is total of 194. There are slightly more female than male, but the gender distribution is more balanced. In terms of age, 71 people were under 20 years old accounting for 19.6%; the majority of young people is 158 people between 21-30 years old accounting for 43.6%; the proportion of aging 31-40 years old ranked second accounting for 20.7%. In terms of age distribution, this survey obtained positive responses from groups aged 21-30 and 31-40 years old, and also reflects the age characteristics of consumer groups in China's culture and tourism industry. In terms of educational level, it can be seen that the educational level distribution of the investigated groups is relatively balanced with the effective proportion of technical secondary schools and junior colleges 17.7% and 17.4% respectively; the largest number of respondents were 123 people those are with a bachelor's degree accounting for 34.0%; There are also no lack of high-level education respondents, such as 19.3% respondents with master's degree and 11.6% respondents with doctor's degree. The distribution of academic background of the respondents not only reflects the overall academic background structure of the current Chinese tourists, but also reveals that the high-level education people are the main force of consumers in the current culture and tourism industry. In terms of the occupations of respondents, 139 students take up a large proportion accounting for 38.4%; the rest are distributed in enterprises, government, medical and educational institutions accounting for 18.0%, 11.9%, and 21.3%, respectively; and other occupations accounted for 10.5%. In terms of monthly disposable income, respondents in the segment of 0-2,000 yuan income and 2001-4,000 yuan account for over half of the total accounting for 27.1% and 28.5% respectively, while the respondents with the income of 4001-6000 yuan, 60001-8000 yuan and 8000 yuan accounted for 18.5%, 10.5% and 15.5% respectively. This shows that there is still a great room for improvement in the consumption capacity of basic consumer groups although China's culture and tourism industry is gradually transforming to the high-end consumer market.

### 4.2 Test of Model Fitting Degree, Reliability and Validity

At the stage of specific analysis, this paper first performed the Cronbach's Alpha coefficient and Harman univariate test for the survey data. As the results are shown in TABLE I, the overall Cronbach's Alpha value of the 9 predictive variables is 0.969, greater than 0.9; Cronbach's Alpha values of each potential variable ranged from 0.745 to 0.842, all of which were greater than 0.7, showing that the questionnaire data were suitable for further analysis of this research with the high reliability. From the design rationality of the model, common method bias validation was performed using the Harman univariate test and the results show the value of KMO is 0.972 and  $\chi^2=6980.934$  ( $p=.000$ ). The first factor variance interpretation rate before rotation of the data was less than 50%, indicating that the CMV is in the acceptable range. the extracted factor was greater than 1 after rotation and the cumulative variance



interpretation rate is 76.99%, greater than 50%, showing that the CMV is not obvious and the information of all variables can be efficiently extracted. Based on this, it shows that common method bias problem of this sample data is not obvious with the higher overall data validity.

**TABLE I. Reliability Analysis Results**

Latent variables	Measurement index	Univariate Cronbach's alpha	Overall Cronbach's alpha	KMO value and significance
COVID-19's prevention and control normalization cognition	CC1~CC3	0.813	0.969	KMO: 0.972 Bartlett sphericity test: $\chi^2=6980.934$ (p=.000)
Place identity	PI1~PI3	0.745		
Attitude towards the behavior	BA1~BA3	0.822		
Subjective norm	SN1~SN3	0.842		
perceived behavioral control	PBC1~PBC3	0.817		
Behavioral intention	BI1~BI3	0.795		
Network information consumption	NIC1~NIC3	0.794		
Culture and tourism consumption	CTC1~CTC3	0.811	0.969	KMO: 0.972 Bartlett sphericity test: $\chi^2=6980.934$ (p=.000)
Information production	IP1~IP3	0.839		

After determined the validity of the sample data, this paper had carried out model fitting and verification factor analysis through AMOS software, and verified the influence of 5 expansion variables such as normalization cognition and 4 predictive variables such as the personal attitudes towards the behavior on the tourists' consumption behavior in culture and tourism industry in China under the epidemic. During the initial operation, it was found that part of the fitting index of the model did not meet the standard with  $\chi^2=785.641$  (df=269,  $p<.000$ ),  $\chi^2/\text{df}=2.871$  (Standard: between 3-1), RMR=.0426 (Standard:  $<.08$ ), GFI=.815 (Standard: greater than .9), AGFI=.786 (Standard: greater than .9), CFI=.898 (Standard: greater than .9), NFI=.861 (Standard: greater than .9), TLI=.884 (Standard: greater than .9), IFI=.899 (Standard: greater than .9) and RMSEA=.068 (Standard:  $<.08$ ) [32]. Therefore, we corrected the projects with the low SMC value according to the MI index, and the correction principle always followed the scientific and simple model design concept[33]. After modification, the fitting degree is more reasonable than the original model and all values are within the standard range with  $\chi^2=694.082$  (df=308,  $p<.000$ ),  $\chi^2/\text{df}=2.254$ , RMR=.0334, GFI=.871, AGFI=.842, CFI=.943, NFI=.903, TLI=.936, IFI=.944 and RMSEA=.059. Although the index of GFI and AGFI was not greater than 0.9, GFI and AGFI values are acceptable according to the study of Byrne and others scholars as long as they are above 0.8[34]. Therefore, it can be determined that the modified model fitting degree is relatively ideal, suitable for the research on tourists' intentions of consumption behavior in China's culture and tourism industry. The next step is to analyse the aggregation validity of the model by using confirmatory factor, which mainly verifies the factor loading, critical ratio (Critical Ratio, t value), topic reliability, combination reliability, convergence validity and other values. As shown in TABLE II, all the factor loadings are above 0.5, t values are greater than 1.965, the combination reliability is between 0.751~0.841 with all standard values greater than 0.7. AVE is 0.502~0.639 with all greater than 0.5, showing that the aggregation validity of each variable is

better. In addition, the AVE value square root of each latent variable in the scale is between 0.709~0.799, whereas the correlation coefficient between the latent variables is between 0.427~0.534, showing that the differential validity of each variable meets the expectation.

TABLE II. Confirmatory factor analysis results

Latent variables	Measurement index	Unstd.	S.E.	t-value	P	Std.	SMC	CR	AVE
CC	CC1	1.000				.776	.602	.815	.595
	CC2	1.089	.068	15.975	***	.794	.630		
	CC3	.972	.066	14.753	***	.743	.552		
PI	PI1	1.000				.723	.523	.751	.502
	PI2	.900	.068	13.243	***	.711	.506		
	PI3	.862	.067	12.867	***	.691	.477		
BA	BA1	1.000				.773	.598	.820	.603
	BA2	1.035	.065	15.885	***	.771	.594		
	BA3	1.077	.066	16.271	***	.786	.618		
SN	SN1	1.000				.786	.618	.841	.639
	SN2	1.053	.062	16.898	***	.811	.658		
	SN3	1.007	.061	16.588	***	.800	.640		
PBC	PBC1	1.000				.759	.576	.816	.597
	PBC2	1.045	.067	15.491	***	.782	.612		
	PBC3	1.068	.069	15.380	***	.777	.604		
BI	BI1	1.000				.745	.555	.792	.559
	BI2	.990	.066	14.946	***	.753	.567		
	BI3	.995	.067	14.766	***	.745	.555		
NIC	NIC1	1.000				.733	.537	.796	.565
	NIC2	1.060	.075	14.089	***	.769	.591		
	NIC3	1.047	.076	13.782	***	.753	.567		
CTC	CTC1	1.000				.802	.643	.815	.595
	CTC2	.944	.060	15.803	***	.794	.630		
	CTC3	.861	.062	13.992	***	.716	.513		
IP	IP1	1.000				.785	.616	.839	.635
	IP2	1.063	.063	16.925	***	.816	.666		
	IP3	.985	.061	16.265	***	.790	.624		

According to the data in TABLE III, the normalization cognition of epidemic prevention has a positive (+) impact on personal attitude towards the behavior ( $\beta_{CC \rightarrow BA}=.395$ , C.R.=3.242,  $P<.01$ ), subjective norm ( $\beta_{CC \rightarrow SN}=.454$ , C.R.=3.441,  $P<.001$ ) and perceived behavior control ( $\beta_{CC \rightarrow PBC}=.292$ , C.R.=2.043,  $P<.05$ ), so three hypothesis paths H1a, H1b and H1c are established; the tourists' place

identity to China's culture and tourism industry has a positive (+) impact on personal attitude towards the behavior ( $\beta_{PI \rightarrow BA} = .623$ , C.R. = 4.951,  $P < .001$ ), subjective norms ( $\beta_{PI \rightarrow SN} = .529$ , C.R. = 3.991,  $P < .001$ ) and perceived behavioral control ( $\beta_{PI \rightarrow PBC} = .686$ , C.R. = 4.623,  $P < .001$ ), so three hypothesis paths H2a, H2b and H2c are established; tourists' consumption behavior intentions affect by personal attitude towards the behavior ( $\beta_{BA \rightarrow BI} = .630$ , C.R. = 2.728,  $P < .01$ ) and subjective norms ( $\beta_{SN \rightarrow BI} = .009$ , C.R. = .049,  $P > .05$ ) with a positive (+) impact, but perceived behavior control has no positive (+) impact on towards tourists' consumption behavior intentions ( $\beta_{PBC \rightarrow BI} = .382$ , C.R. = 2.397,  $P < .05$ ), so the two hypothesis paths H3a and H5a are established, while the H4a hypothesis path isn't established; Tourists' subjective norms don't have the positive (+) impact on network information consumption ( $\beta_{SN \rightarrow NIC} = .077$ , C.R. = .343,  $P > .05$ ), culture and tourism consumption ( $\beta_{SN \rightarrow CTC} = .303$ , C.R. = 1.372,  $P > .05$ ) and network information production ( $\beta_{SN \rightarrow IP} = .170$ , C.R. = .866,  $P > .05$ ) all haven't a positive (+) impact, so three hypothesis paths H6a, H6b and H6c aren't established; Tourists' consumption behavior intentions have a positive (+) impact on network information consumption ( $\beta_{BI \rightarrow NIC} = .844$ , C.R. = 3.764,  $P < .001$ ), culture and tourism consumption ( $\beta_{BI \rightarrow CTC} = .573$ , C.R. = 2.639,  $P < .01$ ), and network information production ( $\beta_{BI \rightarrow IP} = .786$ , C.R. = 4.014,  $P < .001$ ), so three hypothesis paths H7a, H7b and H7c are established.

**TABLE III. Path coefficients test of the hypothesis model**

Hypothesis path		Path coefficient		S.E.	C.R. (t-value)	P	Results	
		Unstd.	Std.					
H1	a	CC→BA	.382	.395	.118	3.242	.001	Supported
	b	CC→SN	.472	.454	.137	3.441	***	Supported
	c	CC→PBC	.291	.292	.143	2.043	.041	Supported
H2	a	PI→BA	.595	.623	.120	4.951	***	Supported
	b	PI→SN	.541	.529	.136	3.991	***	Supported
	c	PI→PBC	.676	.686	.146	4.623	***	Supported
H3	a	BA→BI	.636	.630	.233	2.728	.006	Supported
H4	a	SN→BI	.008	.009	.168	.049	.961	Not support
H5	a	PBC→BI	.374	.382	.156	2.397	.017	Supported
H6	a	SN→NIC	.074	.077	.216	.343	.731	Not support
	b	SN→CTC	.306	.303	.223	1.372	.170	Not support
	c	SN→IP	.172	.170	.198	.866	.386	Not support
H7	a	BI→NIC	.865	.844	.230	3.764	***	Supported
	b	BI→CTC	.613	.573	.232	2.639	.008	Supported
	c	BI→IP	.845	.786	.210	4.014	***	Supported

goodness-of-fit statistics for the measurement model:  $\chi^2=694.082$  (df=308,  $p < .000$ ),  $\chi^2/df=2.254$ , RMR=.0334, GFI=.871, AGFI=.842, CFI=.943, NFI=.903, TLI=.936, IFI=.944, RMSEA=.059

Note. \*  $p < 0.05$ ; \*\*  $p < 0.01$ ; \*\*\*  $p < 0.001$ .

## V. CONCLUSION

Based on the theory of planned behavior (TPB) and combined with practices, this study attempts to form an Extended-TPB model by introducing pre-variables and post-variables such as tourists' cognition of the normalization of epidemic prevention and control, regional attachment and cultural and information capital in the culture and tourism industry combined with the fact, and explores the impact mechanism of tourists' consumption related to the culture and tourism industry in China under the actual situation of the normalization of epidemic prevention and control. Through the above model construction and empirical analysis, the following conclusions are drawn.

Firstly, the Extended-TPB model has a strong explanatory power to research the behavioral intention of consumers when they consume in China's culture and tourism industry under special public health problems, which is consistent with the research paradigm of typical TPB models.

Secondly, the pre-expanded variables of the normalization cognition of epidemic prevention and control and local attachment ( place identity ) of this study have significant influence on attitude towards the behavior, subjective norms and perceived behavioral control, which is consistent with the conclusions of previous studies. However, when analyzing the influence relations of attitude towards the behavior, subjective norms and perceived behavior control on tourists' behavior intention, it is found that personal attitude towards the behavior and perceived behavior control can have a direct impact on tourists' behavior intentions, while subjective norms don't have a significant impact on behavior intention, it isn't in consistent with the conclusions of previous studies. After analyzing this, this paper holds that: 1) There is no consensus on the current cognition of the epidemic, which leads to the fact that social pressures, environment and other factors do not have a due positive impact on the individual behavior intentions, indicating that tourists' place identity in China's culture and tourism industry and preference degree for Chinese culture dilute the pressure of subjective norms to a certain extent, that is, the higher the place identity, the less influenced by the epidemic situation or the attitude of surrounding relatives and friends, and vice versa; 2) Culture and tourism consumption is not a pure consumption of tourism projects, but has a strong tendency of personal cultural taste, so it is more susceptible to the influence of personal wishes, that is, the consumption of culture and tourism projects is less influenced by the persuasion or pressure of surrounding relatives and friends[35], and the personal attitude towards the behavior has a strong positive relationship; 3) The observation perspective of the measurement items need to be deepened. The measurement items of this variable mainly adopt the traditional observation perspective " how do the surrounding relatives and friends view my behaviors". If the observation perspective is changed to "how do the surrounding relatives and friends take action on a certain problem", maybe the empirical results will change[36]. Although the consumption of culture and tourism projects focuses on the difference of personal attitude towards the behavior, it can also be influenced by surrounding relatives and friends, which is proved by the positive influence of perceived behavioral control and behavioral intentions in this paper. Therefore, for this variable, we should consider not only other expectations, but also other

behavioral intentions, which provides a new direction for the follow-up research. In addition, since subjective norms don't have a significant positive impact on behavioral intentions, which also leads to the result that the hypothesis that subjective norms have a positive impact on the three post-extended variables in this paper is not established. However, behavioral intentions still have a strong positive impact on network information consumption, culture and tourism consumption, and information production, which further consolidates the Extended-TPB prediction model constructed in this paper.

Thirdly, the observation items of each potential variable have different impacts on it. According to the corresponding number of factor loadings, it can be seen that the item CC2, that is "China's epidemic prevention is in place and doesn't impact normal cultural tourism", has the greatest influence on the cognition of the normalization of epidemic prevention and control. The item PI1 that is "China's cultural and tourism attractions are relatively safe in terms of public health" has the greatest influence on trust degree. The item BA3 that is "I think it is valuable to carry out culture and tourism sightseeing and consumption in the post-epidemic era" has the greatest influence on personal attitude towards the behavior. The item SN2 that is "those who are important to me support my behavior of culture and tourism sightseeing and consumption in China even in the post-epidemic era" has the greatest influence on subjective norms. The item PBC2 that is "I have the ability to carry out culture and tourism sightseeing and consumption in China" has the greatest influence on perceived behavioral control. The item BI2 that is "I will actively recommend China's cultural and tourism industry, landscape and supporting facilities to surrounding relatives and friends" has the greatest influence on behavior intentions. The item NIC2 that is "I will know all kinds of image information through the network according to my personal cultural and tourism plan" has the greatest influence on network information consumption. The item CTC1 that is "I have formed the habit of regular culture and tourism sightseeing and consumption in China" has the greatest influence on culture and tourism consumption. The item IP2 that is "I will pass my personal travel experience to my friends through various online social media" has the greatest influence on information production. Based on the above situation, it can be seen that: 1) The quality of national epidemic prevention and control and public health preventive measures affect tourists' consumption psychology of culture and tourism industry; 2) The development of culture and tourism industry should focus on tourists' sense of value and identity to culture or the integration of culture and tourism, so as to enhance the attraction of culture and tourism products; 3) Although the personal attitude of surrounding relatives and friends is one of the influencing factors of behavioral intentions according to the research direction of this paper, the influence is not significant and more attentions should be paid to the attitude of different groups towards culture and tourism consumption and the ability of individuals towards cultural and travel consumption; 4) Chinese culture and tourism products are deeply loved by most interviewees, but it is necessary to use digital technology to improve the efficiency of tourists' active promotion and enhance the enthusiasm of potential tourists' participation in order to expand their influence and participation.

To sum up, this paper makes an empirical discussion on the research topic from a quantitative perspective, but some problems existing in this study are also reflected through sorting and analysis. There are mainly three aspects : 1) According to the estimation of China Tourism Academy, despite the negative

growth of 15.5% in the number of Chinese tourists in 2020 under the influence of the epidemic, the number of tourists still can't be underestimated reaching 5.074 billion. In 2021, the number of tourists and tourism revenue will return to the right track with the easing of the epidemic. Therefore, the number of empirical samples needs to be increased in the face of the research on such a large amount of industrial consumption behavior; 2) As the research on the mechanism of consumer behavior in China's cultural and tourism industry is still in its infancy, its measurement dimension, influence mechanism and guidance system have not been further discussed, which provides new enlightenment for follow-up research, such as using qualitative research method to further explore the core issues; 3) Due to the large number of participants in the research of consumer behavior in China's culture and tourism industry, the influence of tourists' behavior is not only influenced by culture or network capital and other variables expanded in this paper. There are many differences in observation dimensions among different types of tourists. Therefore, it may be a more meaningful attempt to research the influence mechanism of tourists' segmentation behavior in this large research framework.

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