

# A Survey on the Satisfaction of Hangzhou Culture and Tourism Integrating China's Song Dynasty Culture (Song Culture) under the background of The 19th Asian Games Hangzhou 2022

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**Abstract:** The holding of the 2023 Hangzhou Asian Games provides a good opportunity for the development of Hangzhou cultural tourism, especially in the promotion of traditional Song Yun culture. However, there are still many unknown problems for the actual effect of Hangzhou cultural and tourism culture integrating Song Yun culture and its attraction to tourists. We applied the structural equation model to explore the interaction between the factors, and then investigated the satisfaction of Hangzhou citizens with Song Yun Cultural Tourism<sup>[1]</sup>.

**Keywords:** Structure Equation; China's Song Dynasty Culture (Song Culture); Satisfaction

## 1. Introduction

In order to study the satisfaction and consumption willingness of Song Yun, we conducted a questionnaire survey. In the questionnaire, we set 20 factors influencing satisfaction, and summarized the four factors into "infrastructure", "consumption cost", "attraction content" and "cultural travel value" through factor analysis. Based on this, we used the structural equation model to explore the interaction between the factors and analyze the direct and indirect influence coefficients of each factor and satisfaction on consumption willingness<sup>[2]</sup>.

## 2. Impact pathway analysis based on the structural equation model

### 2.1 Index system

We take satisfaction as the core variable and consumption willingness as the outcome variable, and finally form an SEM model composed of six modules of infrastructure, consumption cost, scenic spot content, cultural and tourism value, satisfaction and consumption willingness. Each module index is shown in the following table:

**Table 1 Table of the structural equation index system**

Subactive variables	observable variable	variable name
Infrastructure	Transportation facilities	JC1
	Maintenance prevention	JC2
	Network facility	JC3
	Management facilities	JC4
	Service facility	JC5
	Identification system	JC6
Consumption cost	Time cost	XF1
	Ticket price	XF2
	Cultural and creative costs	XF3
	Basic overhead	XF4
Scenic spot content	Cultural atmosphere	JD1

	Resource protection	JD2
	Stage set	JD3
	Personnel explanation	JD4
	Featured activities	JD5
	Cultural and creative content	JD6
	Cultural tourism value	Social value
	Emotional value	WL2
	Cognitive value	WL3
	Physical and mental health	WL4

## 2.2 Reliability test

Before establishing the structural equation model, we first used SPSS 24.0 to conduct the reliability and validity test, and the results are shown in the following table:

**Table 2 Credit and validity results table**

Subactive variables	infrastructure	Consumption cost	Scenic spot content	Cultural tourism value	Citizen satisfaction	Citizens' willingness to consume
Number of observed variables	6	4	6	4	5	5
Alpha	0.953	0.910	0.957	0.964	0.856	0.771
AVE	0.657	0.653	0.635	0.648	0.569	0.593
CR	0.887	0.883	0.874	0.846	0.836	0.854

In the above results, Alpha values were above 0.7, AVE values were greater than 0.5, and CR values were less than 0.8, indicating that the scale has good reliability and validity and can be used to construct structural equation models.

## 2.3 Establish a structural equation model

We used Amos24.0 software to adopt the maximum likelihood estimation parameter method to construct the structural equation model, and analyzed the model fit degree of Hangzhou citizens' consumption willingness. The results are shown in the following table.

**Table 3 Fit indicators of Hangzhou citizens' consumption willingness model**

Fit statistics	Model fit values		Reference value
	Primary model fitting values	Corrected model fit values	
df	7.694	4.456	≤5.0
GFI	0.678	0.835	>0.8
CFI	0.782	0.852	>0.8
NFI	0.764	0.830	>0.8
IFI	0.768	0.853	>0.8

Then we adjusted the model through the MI correction model, that is, starting from the maximum path of the MI value, and adjusted it by increasing the correlation path between the variable residues, until the model fitting effect is better. The modified fitting index of the model is shown in the table above, the modified df is 4.456 5.0, and the indexes GFI, CFI, NFI and IFI are all greater than

0.8. Therefore, the modified model is well adapted, and the final model results are shown in the following figure<sup>[3]</sup>.

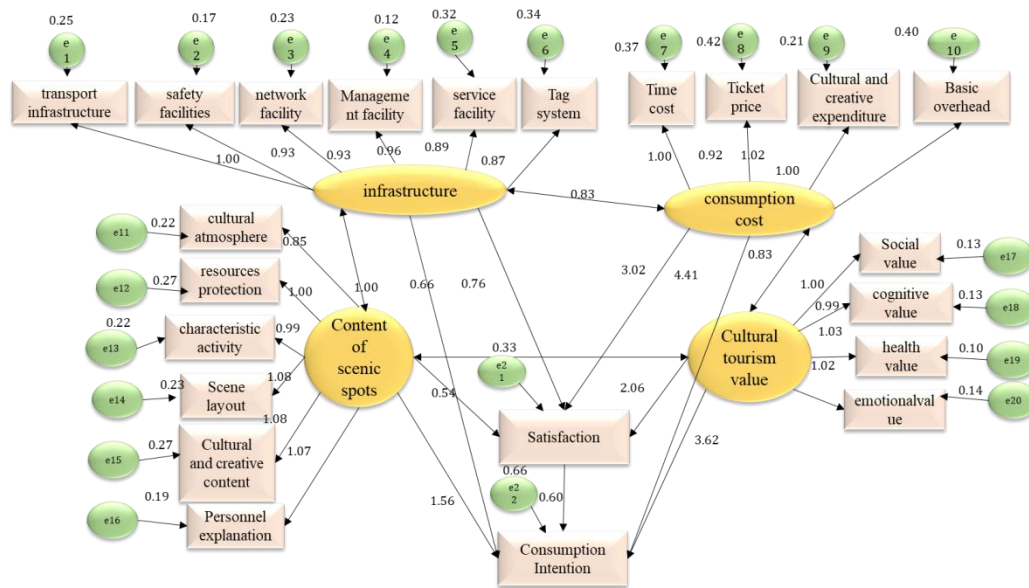


Fig. 1 Structural equations of the parameter fit

## 2.4 Analysis of the hypothesis test results

To further explore the influence between the modules, we further examined the pathway coefficients, and the results are shown in the table below.

Table 4 Pathway coefficient test table

route	S.E.	C.R.	P value	Standardized path coefficient
Satisfaction<---Infrastructure	0.460	6.871	0.028	0.665
Satisfaction<---Consumption Cost	0.019	2.074	***	3.019
Satisfaction<--- Cultural tourism value	0.424	9.631	***	2.062
Satisfaction<--- Content of scenic spots	0.348	6.365	0.015	0.541
JC1 <--- Infrastructure	0.094	2.300	***	1.000
JC2 <--- Infrastructure	0.127	4.853	***	0.934
JC3 <--- Infrastructure	0.189	4.816	***	0.935
JC4 <--- Infrastructure	0.116	2.512	0.029	0.962
JC5 <--- Infrastructure	0.150	4.965	***	0.891
JC6 <--- Infrastructure	0.249	6.819	***	0.872
XF1 <--- Consumption Cost	0.346	8.575	***	1.000
XF2 <--- Consumption Cost	0.430	9.412	***	0.920
XF3 <--- Consumption Cost	0.294	5.686	***	1.016

XF4 <--- Consumption Cost	0.102	3.059	***	1.000
JD2 <--- Content of scenic spots	0.103	3.082	***	1.021
JD3 <--- Content of scenic spots	0.263	5.742	***	0.989
JD4 <--- Content of scenic spots	0.340	6.871	0.037	1.084
JD5 <--- Content of scenic spots	0.467	8.157	***	1.080
JD1 <--- Content of scenic spots	0.356	5.957	***	1.000
JD6 <--- Content of scenic spots	0.276	6.988	***	1.071
WL1 <--- Cultural tourism value	0.239	4.895	***	1.000
WL2 <--- Cultural tourism value	0.133	4.923	***	1.071
WL3 <--- Cultural tourism value	0.332	3.856	0.023	1.000
WL4 <--- Cultural tourism value	0.432	4.971	***	0.992
Consumption Intention <--- Satisfaction	0.384	4.668	***	1.027

It can be seen that the P values of the construction path are all smaller than the given significance level, and the model is reasonable.

### 3. Result analysis

#### 3.1 Infrastructure has a positive impact on satisfaction and consumption intention

With a path coefficient of 0.66, infrastructure positively affects the satisfaction of tourists to Song tourism, and with a path coefficient of 0.82, it positively affects the consumption intention. The infrastructure of Song cultural tourism attractions such as transportation facilities and safety facilities will affect the satisfaction of citizens and tourists to a certain extent, and the perfect infrastructure can make citizens have high expectations for cultural tourism attractions, thereby stimulating the willingness of citizens and tourists to consume.

#### 3.2 Consumption cost has a positive impact on satisfaction and consumption willingness level

The consumption cost positively affects the satisfaction of citizens and tourists with Song Cultural Tourism with a path coefficient of 3.02, and the consumption willingness with a path coefficient of 4.41. The lower the consumption costs such as time, tickets, cultural and creative expenses and basic expenses, the higher the satisfaction of citizens with Song Cultural Tourism, the higher the possibility of taking the initiative to go to Song Cultural Tourism to experience traditional culture, and then the more willing to consume Song cultural tourism products.

#### 3.3 The content of attractions has a positive impact on satisfaction and consumption willingness level

With a path coefficient of 0.54, the content of scenic spots has a positive impact on the satisfaction of tourists to Song tourism, and with a path coefficient of 1.56, it has a positive impact on consumption intention. Cultural atmosphere, resource protection, special activities and cultural and creative content will affect the satisfaction of Hangzhou citizens with Song cultural tourism, while a good cultural atmosphere, colorful special activities, and innovative cultural and creative content will all promote tourists' desire to consume.

### **3.4 The value of cultural tourism has a positive impact on satisfaction and consumption willingness level**

The value of cultural tourism positively affects the satisfaction of citizens and tourists with Song cultural tourism with a path coefficient of 2.06, and the consumption willingness with a path coefficient of 3.62. When citizens and tourists participate in Song cultural tourism activities, if they are satisfied in terms of social, emotional, cognitive value and physical and mental health, citizens' satisfaction with Song cultural tourism will increase, and at the same time, they will be more interested in cultural tourism products related to Song culture, and their willingness to consume will be higher.

### **3.5 Citizen satisfaction has a positive impact on the level of consumption intention**

Citizen satisfaction positively affects the willingness of citizens and tourists to consume Song cultural tourism products with a path coefficient of 0.60.<sup>[4]</sup>The higher the public's satisfaction with Song's infrastructure, consumption costs, scenic spot content and cultural tourism value, the more likely it is to participate in Hangzhou Song cultural tourism activities again, which will drive the consumption boom of Song cultural tourism products, and the stronger the willingness to invest money and time for Song cultural tourism products.

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