

Article

Impact Model of Tourism Production and Consumption in Nanjing Yunjin: The Perspective of Cultural Heritage Reproduction

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Abstract: Nanjing Yunjin was included in "the first batch of non-material cultural heritage list in China" in 2006, and the city was also selected as "a list of representatives of human intangible cultural heritage" by the United Nations in September 2009. Nanjing Yunjin is now a scarce tourism resource on the verge of extinction. Carrying out effective cultural tourism development and production, and informing consumers about its cultural connotation are problems worth studying. This study aims to explore and analyze the cultural reproduction process of Nanjing Yunjin in the cultural tourism production-consumption closed-cycle model. Based on the review, the study introduces word cloud tools and explores the cultural production links of heritage by means of narrative analysis, applies quantitative methods to verify the relationship among production, consumption, and reproduction, and finally, constructs the production-consumption impact model of Nanjing Yunjin cultural tourism. Results indicate that the cultural tourism production of Nanjing Yunjin has a significant positive impact on cultural tourism production has a significant impact on its cultural reproduction. In addition, cultural tourism production has a significant impact on its cultural reproduction part, and consumption plays a mediating role in the impact of cultural tourism production on its reproduction.

Keywords: intangible cultural heritage; Nanjing Yunjin; cultural reproduction; cultural tourism production; cultural tourism consumption

1. Research Background

Intangible cultural heritage has profound historical and cultural value as a carrier of traditional culture. In recent years, the intangible cultural heritage tourism market has experienced rapid growth. China's intangible cultural heritage can help shape a country's image that appeals to an international audience. Foreign tourists can experience the improvement of Chinese culture, civilization, and soft power through high-quality, low-cost services, and facilities of intangible cultural heritage tourism. Intangible cultural heritage is also a tool used by governments to attract and communicate with domestic tourists, which helps to shape national identity and strengthen nationalism [1]. Therefore, it is important to conduct empirical research on non-heritage cultural tourism and investigate the extent to which this form of tourism can help achieve political and economic goals. Statistics show that in the past ten years, the intangible cultural heritage tourism market has experienced a sharp increase, and the culture itself has been in a continuous production-consumption-reproduction process and has evolved in the process [2,3]. However, the inheritance and regeneration of intangible cultural heritage are still difficult, and whether long-term sustainability can be achieved is still questionable.



The study of heritage tourism is mostly conducted in the context of the separation of production and consumption. However, tourists are not simply one-way recipients of information from tourism resource developers; they are also re-creators and producers of heritage culture.

Nanjing Yunjin represents a high level of ancient Chinese fabrics. It began in the Yuan Dynasty and flourished in the Ming and Qing Dynasties, and has a history of more than 1500 years. Yunjin and Songjin in Suzhou, Shujin in Sichuan, and Zhuangjin in Guangxi are also known as the four famous Chinese brocades. Nanjing Yunjin, being the first of the four famous brocades, is known by experts as the last milestone in the history of brocade crafts in China. Nanjing Yunjin is thus a typical intangible cultural heritage in China which has high uniqueness. It is the only hand-crafted craft in the Chinese 3000+ years of tapestry history. As such, studying the tourism value of Nanjing Yunjin has important reference significance for intangible cultural heritage tourism.

Therefore, the present study is based on the viewpoint of cultural reproduction, and from the perspective of tourists' consumption and perception. This research also designs the circulation path of production, consumption, and reproduction of Nanjing Yunjin cultural tourism. In addition, the production and consumption links of Nanjing Yunjin cultural tourism are investigated. Moreover, this study discusses how to realize the inheritance and reproduction of intangible cultural heritage resources in the process of the production and consumption of cultural tourism.

2. Literature Review

2.1. Cultural Tourism Production and Consumption Research on Cultural Heritage

Foreign research on cultural tourism production and intangible cultural heritage has been previously conducted. Such studies are more diversified and systematic than domestic research. In terms of cultural tourism production, Yang, taking Xishuangbanna as an example, summarized and analyzed the places and channels of production and consumption of national culture. Yang also analyzed the authenticity of cultural goods development at the regional and local levels [4]. In terms of cultural consumption, Stylianou-Lambert pointed out in the discussion of the essential theory of consumption that cultural tourism consumption should be classified according to perception, rather than individual [5]. McKercher designed a -Dimensional (2D) model comprising five different types of cultural tourism on the basis of the depth of cultural experience, which advanced previous (1-Dimensional (1D) research [6]. Richards and Ark studied and designed 13 cultural sites and activities related to cultural consumption, analyzing the motivations for different cultural tourism consumption [7]. With regard to combining cultural tourism production with consumption as a whole, Brown provided a research model by exploring the motivations of popular music culture consumption and the production and consumption of pop culture. He also explored the links among music, the production, mediation, and consumption of young consumers [8]. Crewe and Beaverstock investigated the impact of cultural festivals on contemporary urban renewal activities. They found that cultural production and consumption play key roles in the revitalization of temporary cities [9]. On the basis of these related studies, the research on cultural tourism production, cultural tourism consumption, and the relationship between the two have been the focus of scholars. Apparently, findings of prior studies show the important value of production and consumption of cultural tourism, indicating the necessity of future works in the area.

In addition to specific case studies, in terms of theoretical research, some scholars have pointed out that the two elements also affect each other in the interaction process between cultural production and consumption. Similar studies on the mediating role of culture include how to provide enlightening insights for cultural self-replication through the practice of production and consumption [10]. Scholars have developed a "cultural route" model on the basis of Johnson's model of production, circulation, and consumption of cultural products [11,12]. This model depicts the cultural process as a complex and interdependent process. Since then, many cultural studies have been related to the cultural circuit models, which have continually turned the concept of consumption into production. For example,

Negus pointed out that cultural mediating is a part of cultural reproduction [10]. Moreover, Herbert used the theoretical model of "cultural routes" to explore the way in which urban imagery is embedded in the process of expression, production, and consumption [13]. However, as a kind of culture, Nanjing Yunjin's cultural heritage has not been studied by scholars using this model. In the study of other types of culture, scholars usually only investigate and explain each part in the system, without highlighting the process and significance of the cycle. They also study the interaction among the main parts.

2.2. Cultural Space Research on Intangible Cultural Heritage

In China, few studies regard the production and consumption of intangible cultural heritage in cultural tourism. These studies mainly focus on the study of tourism production or consumption of a specific cultural phenomenon. By contrast, research on other types of cultural production and cultural consumption mostly pay attention to the study of cultural space.

For the study of cultural production and consumption, Haim and Adorno proposed that the main performance of cultural production is the production of cultural products, such as newspapers, books, music, radio, film, and television by the modern industry [14]. In terms of cultural services, Jiang defined cultural production as a productive activity that people engage in to meet their own or other people's spiritual and cultural needs [15]. In terms of cultural production behavior, Hall suggested that public interpretation is also a part of cultural production and can be divided into three types: dominant, compromise, and resistance [16]. For intangible cultural tourism production and consumption, Peng and Lin believed that cultivating people's consumption preferences can promote the living inheritance of the content and style of intangible cultural heritage [17]. Tan took Guangxi Zhuang Opera as an example to analyze the problems in consumption from the perspective of cultural creation [18]. Tan considered that a "consumption view" of intangible cultural heritage should be established in the practice of intangible cultural heritage protection; a harmonious and orderly relationship should also be established between being protected and consumed [19].

For intangible cultural heritage, Chen took the rural and pastoral areas of Gannan Tibetan Autonomous Prefecture as an example. He pointed out that village culture, living culture, and cultural space are integrated and inseparable with intangible cultural heritage [20]. In addition to the study of cultural space protection, research on the leisure service function of cultural space, such as song and dance competition, leisure and entertainment, tourism services, festival celebration, and cultural production, exist. Case studies on the change and protection of cultural space also exist to explore the protection of intangible cultural heritage from the perspective of cultural space protection [21,22].

2.3. Tourism Development Research on Nanjing Yunjin

Only 14 documents were searched on China National Knowledge Infrastructure with "Nanjing Yunjin + Tourism" as the keywords for retrieval. Of these documents, only eight researched Nanjing Yunjin Tourism, including three themes for product design, two themes for tourism development, one theme for the Research Institute, one theme for the business model, and one theme for the basic introduction of Yunjin technology. Research on the art of Nanjing Yunjin culture mainly includes two aspects, namely, manufacturing technology and art value. Research on its inheritance mainly focuses on inheritors and ordinary people. Work on the tourism cultural products of Yunjin mainly focuses on the development of tourism activities and product design, and research on Nanjing Yunjin's cultural consumption pays attention to influencing factors and consumption patterns. Compared with domestic works, foreign-related research is limited. The important research result is "the history of ancient Chinese science and technology" by the British scholar Joseph Needham, which is the earliest and most systematic study of Nanjing Yunjin abroad [23].

Numerous articles about Nanjing Yunjin exist, and the research perspective is remarkably abundant. However, the historical significance of Nanjing Yunjin is constantly weakened. The historical sedimentation ceremony is constantly simplified, and the cultural heritage of Nanjing Yunjin in the new era has become a kind of superficial inheritance and development.

On the basis of the above content, the study starts from the perspective of cultural reproduction and selects Nanjing Yunjin as the research object. A cultural tourism production-consumption impact model of Nanjing Yunjin is also constructed by means of the "cultural route" model, confirming the research questions as follows:

- 1. How does one realize the cultural heritage and development of Nanjing Yunjin?
- 2. How do tourists recognize and perceive the cultural heritage of Nanjing Yunjin when consuming?
- 3. How do tourists participate in the cultural reproduction of Nanjing Yunjin?

3. Theory and Method

3.1. Overview of the Research Object

Nanjing, the capital of Jiangsu Province, is an important central city in eastern China approved by the State Council. The development of Nanjing's tourism industry is relatively stable, with the total number of tourists increasing every year. Moreover, the growth rate of domestic tourists basically remains high at approximately 10%.

Nanjing Yunjin is named after "Canruo Yunxia", which is the ancient Chinese "Brocade" and representative of the highest level of fabric. Yunjin, which began in the Yuan Dynasty and flourished in the Ming and Qing Dynasties, has a history of more than 1500 years and has high uniqueness. Yunjin is the only handicraft in China's more than 3000 years of brocade history that relies entirely on the passing of the word of mouth of the population and cannot be replaced by machines. The full name of Yunjin in the process of applying for the world heritage is "Nanjing Yunjin wooden machine makeup flower hand-weaving skills". The application for world heritage started in 2001 and was officially included in 2009.

3.2. Concept Definition

3.2.1. Nanjing Yunjin

The most authoritative concept of "intangible cultural heritage" is considered by the academic community to come from the Convention for the Safeguarding of the Intangible Cultural Heritage as adopted by The United Nations Educational, Scientific and Cultural Organization (UNESCO) [24]. In China, intangible cultural heritage is defined by legislation as "various traditional cultural expressions by people of all ethnic groups, which are handed down from generation to generation and regarded as part of their cultural heritage, as well as physical objects and places related to traditional cultural expressions" [25]. The two definitions are similar. Considering the actual national conditions, the present study uses the above-mentioned concept of the intangible cultural heritage law of the People's Republic of China. The objective of this study is to extend the definition of the intangible cultural heritage of Nanjing Yunjin as follows: people of all ethnic groups passing various traditional cultural cultural forms of expression from generation to generation and being regarded as part of Yunjin's cultural heritage, as well as physical objects and places related to the traditional cultural forms of Yunjin.

3.2.2. Cultural Tourism Production

Tourism production is the process of transforming low-value production factors into high-value wealth products through tourism production services. Production factors refer to all kinds of inputs needed for the development of the tourism industry, including tourism resources of tourist destinations [26]. This study defines Nanjing Yunjin cultural tourism production as "the relevant official institutions, which take Nanjing Yunjin cultural heritage as the tourism resource advantage and tourism attraction, and realize the activity of value transformation of Nanjing Yunjin's cultural heritage by tourists going to relevant places of Yunjin for cultural consumption." Part of the discussion in this study is briefly replaced by Nanjing Yunjin's cultural tourism production.

Relevant official institutions of Nanjing Yunjin's cultural heritage are divided according to the principle of specialization in the production of Nanjing Yunjin's cultural heritage and on the basis of the nature of work and tasks. The following are the six categories according to the principle of division by function:

- 1. Production department (e.g., Yunjin's weaving department, organization, or institution);
- 2. Management department (e.g., the education, science and technology, culture, and other national and local administrative departments involved in Nanjing Yunjin);
- 3. Protection department (e.g., the specialized organizations or departments of Nanjing Yunjin Protection);
- 4. Communication department (e.g., museums, archives, cultural centers, radio and television stations, publishing and distribution institutions, and schools);
- 5. Research department (such as Nanjing Yunjin's specialized research institutes and school departments);
- 6. Others.

3.2.3. Cultural Tourism Consumption

At present, the definition of cultural tourism consumption has certain controversies as follows: (1) from the perspective of tourism, the whole process of cultural tourism is regarded as a special tourism consumption, (2) from the perspective of social phenomena, the process of cultural tourism is regarded as an experience of cultural consumption, (3) from a statistical perspective, all costs incurred in the process of cultural tourism are regarded as the objects of consumption statistics. From the perspective of tourism, this study regards the cultural tourism consumption of Nanjing Yunjin as a kind of tourism consumption based on Nanjing Yunjin's cultural heritage as a tourist attraction. In certain discussions in the present study, cultural tourism consumption is briefly replaced by the tourism consumption of Nanjing Yunjin's culture.

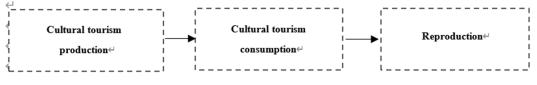
3.3. Theoretical Basis and Research Methods

3.3.1. Theoretical Base

The theoretical basis involved in the study mainly includes the following: cultural reproduction [27,28], customer behavior intention and customer perceived value [29], and tourist cognition theories. This basis provides a reference for all aspects of the study, as shown in Table 1.

Stage	Concept	Brief Statement	Adoption Theory	Study Latitude/Variable
(The whole process)	Nanjing Yunjin intangible cultural heritage	Nanjing Yunjin	Cultural reproduction theory	Inheritance/adaptation- creation-development
Production	Nanjing Yunjin cultural tourism production	Cultural tourism production	Tourist cognition theory	Tourism cognition
Consumption	Nanjing Yunjin cultural tourism consumption	Cultural tourism consumption	Customer perception value theory	Value perception
Reproduction	Heritage cultural reproduction	Cultural reproduction	Customer behavior intention theory	Tourist intention

Based on the above theories, we can derive the following conceptual model (Figure 1).





3.3.2. Research Methods

The research methods involved in this study mainly include literature research, interview method, word cloud analysis, narrative inquiry, and quantitative analysis. The study is a combination of qualitative and quantitative research. Among these methods, word cloud analysis refers to the extraction of keywords, the construction of common word networks, and the construction of word cloud maps, word frequency analysis, and visualization of the materials collected in the study. A narrative inquiry requires researchers to conduct site visits to obtain narrative materials, such as interviews and photos. In addition, narrative inquiry constructs the scene text together with the participants, including narratively analyzing Nanjing Yunjin's cultural production through the transformation of the research text. Statistical software such as IBM SPSS Statistics 25.0 and IBM SPSS Amos 24.0 is used to analyze the collected data, for presenting descriptive, exploratory, confirmatory, and path analyses, and final model construction.

4. Survey of the Present Situation of Nanjing Yunjin Culture Production

4.1. Word Cloud Analysis

Nanjing Yunjin was selected as the research object. This research investigated the current situation of Nanjing Yunjin's cultural reproduction and produced an investigation report of Nanjing Yunjin based on the collected information from the Nanjing Yunjin Research Institute, Yunjin Museum, and the Nanjing Yunjin College. The word frequency analysis of the survey report of Nanjing Yunjin was performed through data collection and language analysis to generate a visual image (Figure 2). In addition, the current situation of the cultural reproduction of Nanjing Yunjin's culture was interpreted from the perspective of trend and visualization. Such a perspective lays the foundation for the following research on cultural tourism production cognition, cultural tourism consumption perception, and cultural reproduction was interpreted from the perspective of trend and visualization. Such a situation of Nanjing Yunjin's culture reproduction intention. In the word cloud analysis, the current situation of Nanjing Yunjin's culture reproduction was interpreted from the perspective of trend and visualization. Such a situation was specifically interpreted by collecting corpus, extracting keywords, building a common word network, building a word cloud map, and finally generating a hot word frequency and weight maps (Figure 3 and Table 2).



Figure 2. Hot word frequency map.



Figure 3. Hot word weight map.

No.	Keywords	Word Frequency	Weight
1	Yunjin	114	1
2	Nanjing	66	0.8401
3	Weave	24	0.7767
4	Yunjin Research Institute	29	0.7629
5	Brocade	18	0.7613
6	Culture	33	0.7558
7	Museum	24	0.7429
8	Legacy	20	0.7351
9	Substance	16	0.6968
10	Jiangning	12	0.6956
11	Artistry	12	0.6864
12	Institutions	15	0.6812
13	Artifacts	12	0.6791
14	Professional	15	0.6771
15	Protection	13	0.6685
16	Craft	12	0.6656
17	The city of Nanjing	10	0.6647
18	College	13	0.6586
19	History	11	0.6535
20	Base	10	0.6498
21	Training	11	0.6481
22	Nation	8	0.6291
23	Ancient	7	0.6227
24	Tradition	8	0.621
25	Mission	7	0.6197
26	National	6	0.6107
27	Subject	6	0.6093
28	Clothing	6	0.6092
29	Data	7	0.6073
30	Titles	6	0.607
31	Nanjing Normal University	7	0.6042
32	Graduates	6	0.603
33	Talent	6	0.6005
34	Jinling	5	0.6002

Table 2. Hot word frequency and weight (weight ≥ 0.6).

Figures 2 and 3 show that enthusiasm is mainly concentrated in the inheritance/development stage for the current situation of Nanjing Yunjin's culture production, whether the work focus of the official body, activities, or tourist participation of the official agencies are still in the initial stage. However, notably, the most powerful high weight hot words are in the development stage, and people's emphasis on cultural reproduction gradually turns to the advanced stage, which is undoubtedly a good guide. In addition, the pre-study on the production and consumption of Nanjing Yunjin's cultural

tourism research is an integral part of the exploratory analysis of empirical research. The following influencing factors are extracted to lay the foundation for the subsequent research on the cultural tourism production cognition, cultural tourism consumption perception, and reproduction intention of Nanjing Yunjin cultural tourism.

- Technical process: weaving, brocade, skills, and crafts;
- Historical value: ancient, traditional, biographical, historical, national, and cultural;
- Cultural value: heritage, material, cultural relics, and protection;
- Cultural material carrier: material objects, clothing, and data;
- Cultural place carrier: Yunjin Research Institute, museum, institution, college, base, and Nanjing Normal University;
- Cultural geography carriers: Nanjing, Jiangning, Nanjing City, and Jinling.

4.2. Narrative Analysis

The relevant personnel of Nanjing Yunjin was selected as research objects. Moreover, relevant corpus and image data of Nanjing Yunjin cultural tourism development were collected and analyzed as narrative materials. The main content of this section of the interview outline is composed according to the three stages of Nanjing Yunjin culture production and the factors extracted from the study. The respondents who were interviewed in November 2017 are the staff of the relevant institutions of Nanjing Yunjin, and the interview method is a semi-structured interview. In the process, six different types of practitioners of Nanjing Yunjin (one Yunjin weaving inheritor (Zhou Shuangxi), two technicians, two apprentices, and one commentator) were interviewed for five in-depth semi-structured interviews (one of these was a group interview with two interviewees). The length of the interviews ranged from 16 to 77 min, with an average of 46 min.

The specific narrative analysis process is as follows: to construct the on-site text, including the voice data obtained from interviews and the information and photos displayed by interviewees; to construct the research text; and to briefly classify and code the on-site text data for subsequent narrative analysis, including open coding, spindle coding, and narrative analysis.

Open coding eventually yields 24 concepts, which are classified and refined into nine categories, namely, process complexity, technical complexity, uniqueness, inheritance, value, attitude recognition, market regulation, government support, and state support. The results of the spindle coding show that causal and logical relationships are observed among the nine categories obtained by open coding. Coding analysis reveals that Yunjin, as a cultural heritage production, has the following problems:

- The production and manufacturing process of Yunjin is very complex.
- Inheriting Yunjin technology is difficult.
- The development of the Yunjin market is not standardized.
- The national policy support is insufficient.

On the basis of the problems, we can also see the good side of Yunjin development as follows:

- Market recognition is constantly improving.
- Practitioners are willing to insist on paying.
- The industry is gradually standardizing.
- Relevant government departments and organizations have also begun to pay attention.

Narrative analysis is based on the analysis of various themes and conceptualized terms. The influencing factors related to the tourism production and consumption of Nanjing Yunjin cultural heritage are shown in the Table 3. At the same time, the core problem of "Nanjing Yunjin cultural tourism production and cultural shaping" is found to be a good explanation for the research. For the cultural regeneration perspective of Yunjin's development, the present study finds the following: (1) At the initial stage, individuals or organizations independently develop Yunjin, that is, folk artists

and organizations; (2) Medium-term government support entry into standardized development; (3) The cognitive attitude of all participants is improved to promote the sustainable development of Yunjin Tourism.

Table 3. The related influencing factors.

The Influencing Factors Related to the Tourism Production and Consumption of Nanjing Yunjin Cultural Heritage				
Process complexity (multiple materials and complex processes)				
Technical complexity (high material requirements, technical difficulties in all links, and no				
mechanized production)				
Uniqueness (unique color level, unique touch, and handcraft)				
Inheritance (independent division of labor in the inheritance content, long inheritance cycle, word of mouth,				
and complicated inheritance procedure);				
Value (historical and cultural values)				
Attitude recognition (lack of tour awareness, recognition of tradition, and views on promotion)				
Market regulation (insufficient investment, low profit, and vicious competition)				
Government support (insufficient official consumption and government efforts)				
State support (improve the sense of mission, official promotion, industry norms)				

Narrative research, as part of the study of Nanjing Yunjin cultural tourism production, is also the second part of the exploratory analysis of empirical research. Such research extracts the following influencing factors related to the tourism production and consumption of Nanjing Yunjin's cultural heritage. Table 3 shows the related influencing factors refined by narrative research.

5. Cultural Tourism Production-Consumption Impact Model of Nanjing Yunjin

5.1. Preliminary Research

Certain research variables of the scale designed in the present study came from the word cloud and grounded analyses above. Hence, small-scale preliminary research was conducted before formal research was made to ensure the scientificity and rationality of the observed variables.

This study designed a survey volume for tourists attracted by Nanjing Yunjin's cultural heritage and related activities on the basis of cultural reproduction and cultural tourism production extraction factors combined with the social scenario analysis framework [30]. In addition to the basic social demographic survey, the questionnaire included the knowledge of Nanjing Yunjin's cultural heritage and the cognitive evaluation of Nanjing Yunjin's cultural heritage.

From 7 to 11 August 2017, the questionnaire was distributed to relevant official institutions, such as the Nanjing Yunjin Museum and the stores selling Yunjin-related products. In addition, respondents were required to watch relevant Yunjin audio materials before filling in the questionnaire. A total of 380 questionnaires were sent out, and 350 were collected, with a response rate of 91.42%. Respondents were accompanied by researchers to complete the questionnaire without anyone missing; hence, the effective rate of this questionnaire was 91.42%. The preliminary research results indicated that the old and new research variables in the scale are suitable in terms of reliability and validity. This scale is suitable for this study.

5.2. Questionnaire Design

In this research, the existing scale of tourism cognition, perceived value, tourist intention, dimensions, and the results of preliminary research were used to build the research framework of the impact model of Nanjing Yunjin cultural tourism production and consumption. Most items in the questionnaire scale used the five-point Likert scale. In addition to the basic demographic survey, the research framework of Nanjing Yunjin's cultural tourism consumption and perception was further divided into five parts: basic knowledge cognition, environmental carrier cognition, value function

cognition, overall value perception, and tourist intention. Hypotheses H1, H2, H3 and H4 are proposed as follows, Figure 4 shows the relevant research hypotheses and models.

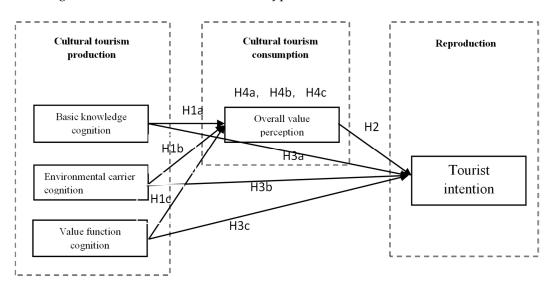


Figure 4. Research model.

Hypothesis 1a (H1a). Basic knowledge cognition has a positive impact on overall value perception.

Hypothesis 1b (H1b). Environmental carrier cognition has a positive impact on overall value perception.

Hypothesis 1c (H1c). *Value function cognition has a positive impact on overall value perception.*

Hypothesis 2 (H2). Overall value perception has a positive impact on tourist intention.

Hypothesis 3a (H3a). Basic knowledge cognition has a positive impact on tourist intention.

Hypothesis 3b (H3b). Environmental carrier cognition has a positive impact on tourist intention.

Hypothesis 3c (H3c). Value function cognition has a positive impact on tourist intention.

Hypothesis 4a (H4a). Overall value perception plays a mediating role in basic knowledge cognition affecting tourist intention.

Hypothesis 4b (H4b). Overall value perception plays a mediating role in environmental carrier cognition affecting tourist intention.

Hypothesis 4c (H4c). Overall value perception plays a mediating role in the perception of value function affecting tourist intention.

5.3. Data Collection and Analysis

Quantitative data were collected in July 2018. The questionnaires were mainly distributed at the Nanjing Yunjin Museum, the Jiangning Weaving Museum, the Beijing white Bureau, and the stores selling Yunjin-related products. A total of 360 questionnaires were sent out, and 351 were collected, with a response rate of 97.5%. The response rate was high, and the effective questionnaire rate was 97.5% because of no missing questionnaires.

The data analysis in this section was conducted using IBM SPSS Statistics 25.0 and IBM SPSS Amos 24.0. IBM SPSS Statistics 25.0 was used for collation and descriptive statistics of the preliminary data, whereas IBM SPSS Amos 24.0 was used for the confirmatory factor analysis (CFA) of paper data and hypothesis testing of the proposed model.

IBM SPSS Statistics 25.0 mainly conducts descriptive statistical analysis on the frequency and percentage of demography for the total sample. The analysis criteria are based on the questionnaire survey dimension; that is, the basic information of the respondents mainly includes gender, education level, age, and income.

5.3.1. Scale Reliability and Validity Analysis

The SPSS analysis questionnaire and its sub-dimensions have good reliability. The reliability and stability of the scale in the questionnaire are acceptable.

The research questionnaire was designed on the basis of the reference to the relevant maturity scale. Therefore, this questionnaire has high content validity. The analysis found that the structural validity is good, and the variables can be used for factor analysis.

The structural validity analysis was carried out by factor analysis, and the scale can extract three principal components. After extracting the principal component analysis method, Factor 1 contained five measurement indexes and named them as basic knowledge cognition. Factor 2 contained three measurement indexes and named them as environmental carrier cognition. Last, Factor 3 contained five measurement indexes and named them as value function cognition.

5.3.2. CFA

IBM SPSS Amos 24.0 was used to test the validity of the samples, that is, CFA. Constructing a validity index and paying attention to the model's goodness of fit index are necessary to verify the fit index of the model.

The output results indicated that the standardized factors of all measurement indexes are larger than 0.6, the average variance extracted (AVE) values are greater than 0.5, and the composite reliability (CR) values are greater than 0.8. Hence, the convergence validity is good. Such results were obtained through CFA by selecting suitable indicators for each variable in the study. After increasing the model's correlation paths of e5, e4, e9, and e13, the fitness indexes of the model are as follows: x^2 /df value is 2.272, less than 3, root mean square error of approximation(RMSEA) = 0.060) is less than 0.08, goodness of fit index (GFI), adjusted goodness of fit index (AGFI), normed fit index (NFI), comparative fit index (CFI), and incremental fit index (IFI) values are all greater than 0.9, thus achieving a good degree of fit.

5.3.3. Structural Equation Model (SEM) Test

Building and correcting SEM: SEM is a covariance matrix for analyzing the relationship among variables on the basis of the combination of the variable factor, multiple regression, and path analyses. The relationship model between each potential variable is constructed after CFA on the basis of the relevant theories and hypotheses of the present study. The main model includes five variables: three independent variables of basic knowledge cognition, carrier environment cognition, and value function cognition; one mediating variable of value perception; and one dependent variable of tourist intention, with a total of 23 measurement items. The model has reached a good degree of fitness through preliminary tests and modifications. Figure 5 illustrates the obtained Structural Equation Modeling(SEM), the factors are Basic knowledge cognition (BKC), Environmental carrier cognition (ECC), Value function cognition (VFC), Overall value perception (OVP), tourist intention (TI).



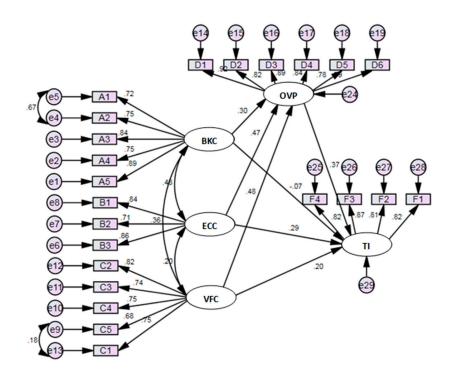


Figure 5. Model test of the impact on the cultural tourism production and consumption in Nanjing Yunjin.

Path analysis: The output results of the model were sorted out, and H3a: Basic knowledge cognition has a positive impact on tourist intention was not tenable. The remaining hypotheses H1a, H1b, H1c, H2, H3b, and H3c, were tenable. The specific results are shown in Table 4, in which S.E. represents the standard error, C.R. is the critical value, and p represents the significance level of the path relationship.

Hypothetical Path Relationship	Standardized Path	S.E.	C.R.	p	Test Result		
Basic knowledge cognition → overall value perception	0.298	0.052	7.794	***	Supported		
Environmental carrier cognition \rightarrow overall value perception	0.469	0.055	11.815	***	Supported		
Value function cognition → overall value perception	0.484	0.062	10.86	***	Supported		
Overall value perception → tourist intention	0.372	0.151	2.138	0.033	Supported		
Basic knowledge recognition → tourist intention	-0.072	0.09	-0.947	0.344	Not supported		
Environmental carrier cognition \rightarrow tourist intention	0.285	0.125	2.725	0.006	Supported		
Value function cognition \rightarrow tourist intention	0.204	0.126	1.96	0.05	Supported		

Table 4. Path coefficient and hypothesis test of SEM.

Note: *** *p* < 0.001.

5.3.4. Mediating Effect Test

This test uses IBM SPSS Amos 24.0 to examine the mediating effects of the hypotheses. Tourist intention was taken as the dependent variable, overall value perception as the intermediate variable, and basic knowledge, environmental carrier, and value function cognitions as independent variables. Thus, the number of bootstraps is set to 5000, and the significance of the specific mediating effect is estimated using the percentage bootstrap method with deviation correction.

Basic Knowledge Cognition as an Independent Variable

The results show that the model has a good fit, and the value perception passes through the mediating measurement model of basic knowledge and tourist intention. The analysis of the confidence interval reveals that the indirect effect of basic knowledge on tourist intention is significant, indicating that value perception has a mediating effect. However, the direct effect of basic knowledge on tourist intention is insignificant. Therefore, overall value perception is a complete mediating in the impact of basic knowledge and cognition on tourist intention.

Environmental Carrier Cognition as an Independent Variable

The findings indicate that the model fits well, and the value perception passes through the mediating measurement model of environmental carrier and tourist intention. The analysis of the confidence interval shows that the indirect effect of the environmental carrier on tourist intention is significant, indicating that value perception has a mediating effect. The direct effect of environmental carriers on tourist intention is also significant. Therefore, overall value perception is partly mediated in the cognitive impact of the environmental carrier on tourist intention.

Value Function Cognition as an Independent Variable

The results reveal that the model fits well, and the value perception passes through the mediating measurement model of the value function and tourist intention. The analysis of the confidence interval shows that the value function has a significant indirect effect on tourist intention, indicating that value perception has a mediating effect. However, the direct effect of the value function on tourist intention is insignificant. Therefore, overall value perception is a complete mediating in the effect of value function on tourist intention.

The above three hypotheses were individually tested, in which overall value perception is the complete mediating in the basic knowledge cognition and the effect of value function on tourist intention. Moreover, part of the mediating in the environmental carrier cognition has an effect on tourist intention. H4a and H4c are fully established, whereas H4b is partially established.

5.4. Hypothesis Verification

Through the above analysis, the validity of the factors in the production, consumption, and reproduction stages of Nanjing Yunjin cultural tourism was verified. On this basis, the model of "tourism cognition–value perception–tourist intention" was verified but was separated from the impact model of Nanjing Yunjin cultural tourism production, consumption, and reproduction. Hypotheses H1a, H1b, H1c, H2, H3b, H3c, H4a, H4c are fully established, however, H4b: Overall value perception plays a mediating role in environmental carrier cognition affecting tourist intention is partially established, and H3a: Basic knowledge cognition has a positive impact on tourist intention (p = 0.344 > 0.05, not significant) is not established.

6. Discussion and Conclusions

6.1. Discussion

6.1.1. Systematic Research

This research adopts a systematic and holistic reasoning method, provides a conceptual basis and detailed planning, investigates the cultural production status of Nanjing Yunjin, and then studies the two entities of cultural tourism producers and consumers. Based on the research on cultural reproduction, the research results of the two entities are compared and integrated to jointly build a research model of cultural tourism production and consumption. Finally, this article studies the relationship between cultural tourism production and consumption, and their respective effects on cultural reproduction. In the study of the interaction of tourism, society, and culture, previous research generally focused on producers rather than consumers and focused on conceptual description instead of experience. In the interaction of the two subjects, the meaning of cultural tourism is constantly changing at different levels of representation. This research goes beyond the dual separation of production and consumption. Under the guidance of cultural reproduction theory, a research model of cultural production, consumption, and reproduction suitable for intangible cultural heritage tourism research has been developed. From the perspective of object and subject, this study analyzes and discusses the potential influencing factors of cultural tourism reproduction and consumption process. It can also as a reference for related research on the production and consumption of similar intangible cultural heritage in the future.

6.1.3. Future Research

As a special factor of tourism production, Nanjing Yunjin's cultural heritage is also a kind of culture. Its particularity adopts different research paradigm and general tourism resources. A future study can increase the number of respondents by covering more people from different cultures. The limited number of respondents in this study could result in potentially insufficient factor extraction and incomplete dimensions. In addition, this empirical academic study does not offer important industry implications for cultural reproduction. Future research can investigate the topic from a practical approach, and attempt to offer feasible implications on what the government should do for this important topic.

6.2. Concluding Remarks

In this study, the cultural reproduction process in the closed-cycle model of Nanjing Yunjin's cultural tourism production and consumption was explored. The following are the specific links and final research conclusions.

In the study of Nanjing Yunjin's cultural production, the inheritance/adaptation stage of the three stages of cultural reproduction has the highest heat. The specific carriers of culture also occupy the highest heat. The similar dependence on various technologies in the creation stage is not evident. In the development stage, the specific places of cultural reproduction have the highest heat, whereas certain policy measures have the lowest heat. Therefore, in the cultural reproduction of Nanjing Yunjin's cultural heritage, attention should be paid to the carrier of cultural reproduction and the construction of specific fields. The implementation and landing of relevant policies should be supervised. Moreover, the focus of Nanjing Yunjin's cultural reproduction from the stage of inheritance and adaptation to the stage of creation and development should be promoted.

In the study of Nanjing Yunjin's cultural tourism production, (1) nine influencing factors of cultural shaping are obtained, namely, value, process, attitude recognition, quality perception, uniqueness, inheritance, market regulation, government support, and state support. (2) Nanjing Yunjin's cultural tourism production can be divided into three stages. At the initial stage, individuals or organizations independently develop Yunjin, and at the middle stage, the government supports entering into standardized development. At the sustainable development stage, the improvement of cognitive attitude makes tourists' demand become the starting point and core of the tourism industry value chain. At different stages of development, they undertake different roles of cultural production, participate in, guide, and help Nanjing Yunjin's cultural tourism production and cultural shaping.

In the study of Nanjing Yunjin's cultural tourism consumption, (1) the extracted influencing factors of cultural tourism production and consumption can well support the study of production, consumption, and reproduction. The results show that basic knowledge, environmental carrier, and functional value cognitions can well reflect cultural tourism production. Overall value perception can well measure cultural tourism consumption, including tourism perception as a variable measure of

cultural reproduction. (2) Through path analysis, basic knowledge, environmental carrier, and value function cognitions are found to have significant positive impacts on overall value perception; overall value perception has a significant positive impact on tourist intention; basic knowledge, environmental carrier, and value function cognitions have significant positive impacts on overall value perception; environmental carrier and value function cognitions have significant positive impacts on tourist intention, whereas basic knowledge cognition does not. (3) Through the research of the mediating effect, overall value perception is found to be a complete mediator in basic knowledge cognition and the impact of value function on tourist intention. Such an impact is part of the mediating of the environmental carrier cognition affecting tourist intention. (4) Finally, the impact model of Nanjing Yunjin's cultural tourism production and consumption is constructed.

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