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Source: Journal of Resources and Ecology, 12(5) : 669-681

Published By: Institute of Geographic Sciences and Natural Resources Research, Chinese Academy of Sciences

URL: <https://doi.org/10.5814/j.issn.1674-764x.2021.05.010>

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J. Resour. Ecol. 2021 12(5): 669-681  
DOI: 10.5814/j.issn.1674-764x.2021.05.010  
www.jorae.cn

# Sustainable Development and Tourists' Satisfaction in Historical Districts: Influencing Factors and Features

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**Abstract:** Determining how to achieve sustainable development and protection of historical districts is a worthwhile research topic. As a vital way to update urban space, tourism development in historical districts is an effective tool for redistributing urban functions and increasing urban vitality. This paper takes the Insa-dong in South Korea as a case study for the evaluation of tourist satisfaction in historical districts, based on 550 questionnaires. The questionnaire contains 33 evaluation indicators, and the subjects' subjective judgment and satisfaction with Insa-dong are measured in the form of the Likert scale. Using SPSS to analyze tourists' satisfaction with historical districts, this study finds that: (1) The tourist satisfaction evaluation of Insa-dong includes six dimensions in total: "Embodiment of historical elements", "The blend of tradition and modernity", "Industry distribution and type", "Consumer demand", "Street layout and function" and "Landscaping". (2) "The blend of tradition and modernity" has the highest weight while "Industry distribution and type" has the lowest one in the analysis of factors influencing overall satisfaction. (3) The analysis of the common factor weights and the common factor satisfaction levels shows that "The blend of tradition and modernity" and "Street layout and function" are the parts that need to be improved. "Consumer demand" also has a lot of room for promotion. The research results will be beneficial for enhancing the tourist experiences of historical districts and they provide a theoretical basis and practical experience reference for effective protection and sustainable development of historical districts.

**Key words:** historical district; sustainable development; satisfaction; Insa-dong, South Korea

## 1 Introduction

The historical district is an essential cultural heritage protection object due to extensive intrinsic values such as historical culture, aesthetic art, material legacies and human emotion. However, in the absence of scientific management and regulation mechanisms, historical districts are prone to falling into the opposing poles of rigid protection or excessive commercialization in terms of the original culture (Christian, 1980; Steven, 1991; Zhang and Chen, 2016). The recession problems faced by historical districts are complex: functional agglomeration but low land use, dense population but inadequate public facilities, dense traditional buildings

but insufficient protection (Liu et al., 2000). At the same time, additional problems such as aging and obsolescence of infrastructure, traffic congestion, and poor living environment also pose severe threats to the efficient regeneration of old towns (Lu and Wang, 2016; Xiao and Cao, 2017).

Determining how to effectively conserve historical district in contemporary urban construction, and guaranteeing sustainable development through deep excavation of urban life forms and spatial characteristics, have become important topics for discussion.

Under this premise, the emergence of tourism has become a way to stimulate effectively the vitality of historic

**Received:** 2020-05-20 **Accepted:** 2021-03-19

**Foundation:** The National Key Research and Development Program (2019YFC0507802); The National Natural Science Foundation of China (41801139).

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**Citation:** YU Wenting, ZHU He, ZHANG Shuying. 2021. Sustainable Development and Tourists' Satisfaction in Historical Districts: Influencing Factors and Features. *Journal of Resources and Ecology*, 12(5): 669-681.

districts, which is conducive to the protection and utilization of the cultural environment of historic districts.

Tourism can be an effective way to reduce poverty in historical districts (Croes, 2014), which provides jobs for residents of traditional neighborhoods and the sale of local specialty products (Lepp, 2007; Lee, 2013). Tourism development in historical districts can improve infrastructure, roads and recreational services for the neighborhoods, improve the quality of life of residents and preserve local culture (Brunt and Courtney, 1999), thereby increasing the sustainability of neighborhood development (Ruiz, 2011).

Hence, there exists practical significance for the protection of historical districts. With the era of consumption, the consumption concepts and consumer demands of residents have undergone tremendous changes. In order to meet the needs of modern consumption, it is necessary to regenerate roundly all the historical districts (Lin, 2016; Yang, 2016). Undoubtedly, the subjective elements like tourists' demands, behaviors and values, and the objective elements such as historical districts' culture, architecture and landscape, should be regarded as equally important development targets. These demands will affect tourists' impression and satisfaction of the historical districts, and tourist satisfaction is crucial for the development of tourism.

However, the development of tourism will also have some negative effects, such as potentially damaging the historical environment, affecting the daily life of residents, increasing the cost of living (Lee, 2013), or producing an uneven distribution of tourism income. Therefore, finding ways to balance the tourism development of historical districts and sustainability can be discussed and studied.

Although many scholars have carried out numerous studies on the sustainable development of historical districts, these studies are mostly focused on either historical and cultural protection or commercial consumption. Few have combined these two aspects into a comprehensive analysis. In fact, the sustainable development of historical districts needs to consider a variety of factors. As a precious cultural heritage, the historical districts contain rich urban memories. They not only witness urban evolution and manifest traditional culture, but also play a basic role in the tourism decision-making of tourists. This research explores the status quo and value of historic districts by analyzing the satisfaction of tourists, and finally achieves the purpose of effective protection and sustainable development of historical districts.

## 2 Literature review

### 2.1 Protection and sustainable development of historical districts

Historical districts extend the concepts of "historical center" or "building complex", including a broader urban context and geographical environment (Yu et al., 2017). Correspondingly, the value of historical districts should be ex-

plored with dynamic, active, and sustainable views in a wider urban background.

By linking the daily life of the citizens with the history and culture, the values of historical districts are reflected in the inheritance of the spirit and culture of the citizens. Historical districts are largely inseparable from regional influences and are rooted in the local historical context. Just like an urban history museum, they reflect the regional characteristics of a region under the influence of social culture and economy. Historical districts with developmental value are generally well-preserved and well-structured, and they tend to have excellent images, perfect businesses, and significant historical and cultural status. Endowed with the special responsibility of transforming the images of old cities, historical districts play a vital role in repairing buildings, replacing spatial functions, promoting public environment and perfecting supporting facilities. They are inestimable tangible, as well as intangible, resources for cities (Liao et al., 2010; Tao and Liu, 2014; Deng et al., 2016).

Under the background of urbanization from incremental expansion to stock exploration, the historical districts located in the city centers are the key areas for the improvement of urbanization quality, and are generally the most abundant areas of urban historical and cultural heritages. The rational development of urban historical districts and the coordinated management of functions, industries, facilities and spaces are important topics for protection and renewal (Bian and Jing, 2005; Shao et al., 2016).

### 2.2 Tourism sustainable development and tourist satisfaction regarding historical districts

The concept of sustainable development is mostly related to environmental quality. Its research content also includes environmental carrying capacity analysis and green ecological index research. The concept of sustainable development is also widely used in tourism development, and related research is also rich, including the sustainable development index (Anna and Francesc, 2018), the changes in tourism policy methods (Robin, 2017), and the trends of green consumption (Peng et al., 2018). But sustainable development should also include many social synergies and policy-oriented factors. Atsbha et al. believe that sustainable development is a "long-term economic, environmental and community health" (Atsbha and Satinder, 2019).

Tourism is a regeneration method commonly used in historical districts. Tourism development promotes the continuous adjustments of the relationships and behaviors between tourists and residents, thus achieving the sustainable conditions of the district (Liang and Zhang, 2016). Admittedly, the historical district environment is intimately bound up with tourism activities, but the protection and development of historical districts should be based upon the tourism development mode.

Historical districts are not only a tourism product, but al-

so a living space for local residents. Tourism intervention and historical development need to be interactive and balanced. In addition to the protection of historical building facilities, tourism development also coordinates the relationship with local communities, pays attention to the experiences of tourists, and avoids simplistic contents and forms (Zhou et al., 1999). In order to gain the approval of various stakeholders, the balancing of “Protection” and “Development”, which are the two major focuses of tourism development in historical districts, should be addressed (Zhang, 2004). In the development process, residents' willingness should be considered, and market and social revenues should be realized in order to achieve sustainable tourism development, thus ensuring the long-term competitiveness of the historical districts (Nicholas et al., 2009). The tourism development of historical districts must have a sense of community responsibility, and emphasize the fairness and the sense of participation of residents to provide income-generating opportunities for the residents. Resident support and tourist satisfaction both have positive impacts on the sustainable development of tourism. Historical districts are not only developed as tourist destinations. Therefore, the related facilities are not perfect and it is easy to ignore the needs of the tourists. In order to improve the quality of tourism products in historical districts and ensure the sustainable development of historical districts as tourist destinations, it is necessary to evaluate the degree to which they satisfy the tourists and identify the influencing factors.

The sustainable development of tourism generally considers regional environmental factors, but in the development of historical districts, sustainability represents “long-term economic, environmental and community health”. In addition, the tourism industry is very dynamic, unstable and unpredictable, so it needs to be grasped dynamically. From the perspective of the tourists, the continuous evaluation of the area's value can remind managers to correct and upgrade the community at any time, and provide a certain reference for promoting the development of historical districts.

### 2.3 Protection and renewal of historical districts in Korea

After the war, South Korea began to enter the stage of economic recovery in the 1960s. With the expansion and development of the city, old areas and traditional areas (in-

cluding historical districts) were greatly affected. The “Urban Planning Law” issued in 1962 had already begun to involve the content of urban regeneration. However, in the national land planning, the First Comprehensive Land Development Plan (1972–1981) still remained at the stage of large-scale development of industrial land and vigorously developed urban construction. After realizing this problem, the Korean government began to adjust its policies. In the Third Comprehensive Land Development Plan (1992–2001), the tasks were shifted to increase land intensive use, restrict excessive expansion of the metropolitan area, encourage multi-nuclear development and create regional characteristics (Doo, 2003). Through a period of experiences, the legalization of urban regeneration has been fully carried out since the 1990s, providing policy support and a guidance function for urban regeneration (Lee, 2016).

During the period of the 1988 Seoul Olympics, South Korea began to promote the urban beautification movement. Foreign tourists showed great interest in Korean culture, especially for Hanok (Korean traditional house) and Korean food. However, there was no relevant development related to traditional tourism types at that time. The preservation of Hanok and the regeneration of historical and cultural districts began to increase until 1985 (Hwuang, 2015). On January 23, 2007, the Ministry of Land, Infrastructure and Oceans established the Urban Recycling Group, which was committed to improving the urban recession from various aspects such as society, economy, and practice. This group is based on actual protection and renewal, cooperating with the Ministry of Culture and Tourism and carrying out historical and cultural tourism (Fig. 1).

South Korea has developed from a resource-poor peninsula country to a tourism destination with high standard services. This transformation occurred because South Korea attaches great importance to tourism resources, especially the protection and renewal of cultural tourism resources. It is worth mentioning that Korea's representative historical and cultural districts have become well-known tourist attractions after regeneration. The Ministry of Culture and Tourism established by the Korean government attaches equal importance to culture and tourism, which are mutually promoted and developed. Cultural and historical landscapes serve tourists and in turn export the Korean culture to tourists (Seo et al., 2009).

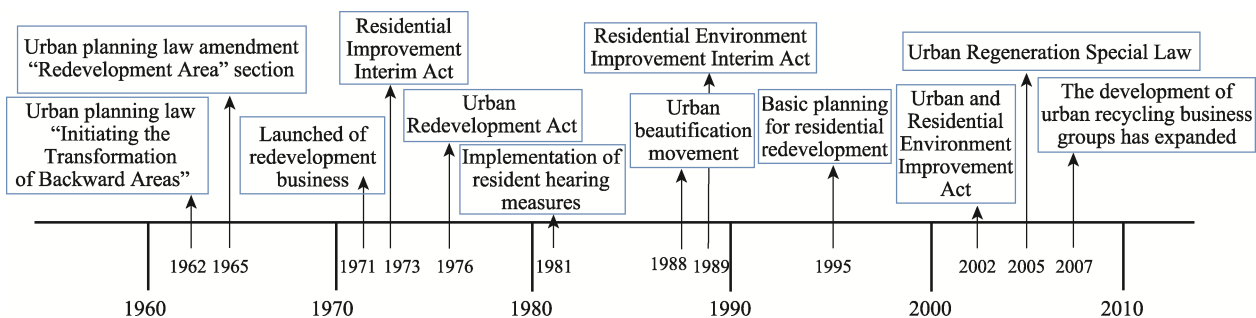


Fig. 1 Historical development of urban regeneration policy in Korea

### 3 Materials and methods

#### 3.1 Case selection

The traditional Hanoks in Insa-dong are an important part of Seoul's central city and the basis for the feature of the city scape. The development of Insa-dong reflects the emphasis of Korea's policy towards historic districts. Its architectural structures and artistic symbols are also important parts of the historical and cultural heritage (Seo, 2006). Insa-dong represents the most mature historical district in South Korean and even East Asian cultural circles. The choice of Insa-dong as a case study can provide an effective reference for the development of other historical districts in the East Asian cultural circle. Located in Jongno-gu, Seoul, South Korea, Insa-dong is one of the earliest historical districts in Seoul (Fig. 2). It combines various historical and cultural forms such as Hanok, ancient arts and galleries, and attracts a large number of tourists every year. The Insa-dong district experienced a period of extreme decline during the Japanese occupation period (Jung, 2010). After the Korean economy recovered in the 1960s, Insa-dong began to spontaneously carry out conservation and regeneration activities. In the 1980s, the Korean government realized the importance of historical and cultural districts, and supported the historical restoration and tourism development of Insa-dong with policies and regulations, which has allowed Insa-dong to become one of the most influential historical districts in Korea.

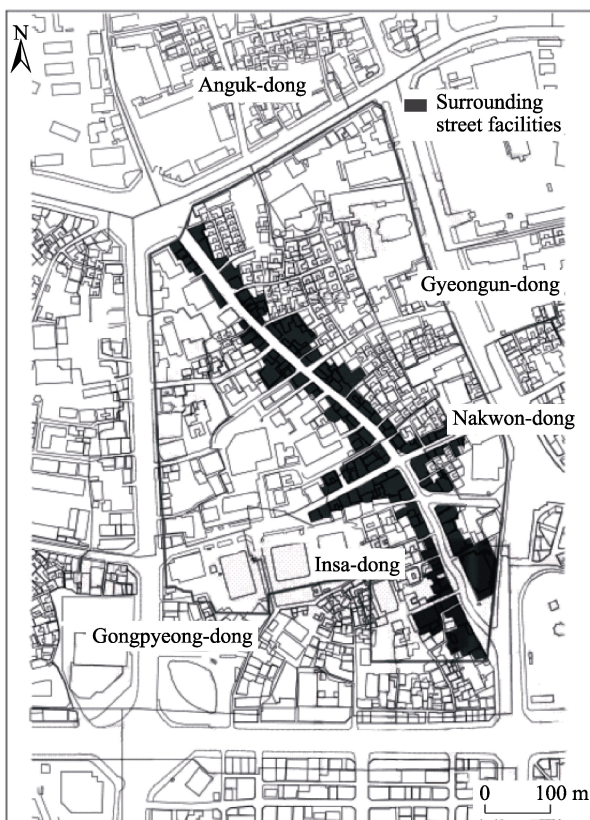


Fig. 2 The location of Insa-dong

#### 3.2 Questionnaire design and data analysis

This study combines on-the-spot investigations with theoretical studies. The data, including commercial structures, tourist satisfaction, and interviews with locals and tourists, were mainly collected in Insa-dong from May to July 2017. They serve as the basis for subsequent analyses of the policy implementation and marketing promotion.

### 4 Results

#### 4.1 Demographic characteristics of respondents

Evaluation factors are selected from the perspectives of protective development, sustainable development and usage perception in historical districts, in order to accurately show the current situation and feasibly summarize the experiences. Based on the sustainable development and the satisfaction regarding historical districts, the evaluation plan of this study is mainly considered from the perspectives of geography and tourism. Based on previous research experience, the evaluation mainly refers to the elements of tourism and indicators related to the human-land relationship system (place perception, place attachment). It is carried out on the basis of collating references, combining the respective characteristics of historical districts and recreational spaces, observing the systemic, scientific and objective principals, considering the selection of indicators to be measurable and easy to obtain, and there is no duplication or correlation between indicators. An evaluation system for the sustainable development of historical districts and tourist satisfaction was constructed, and the first draft of the questionnaire mainly includes: Embodiment of historical elements; The blend of tradition and modernity; Industry distribution and type; Consumer demand; Street layout and function; and Landscaping. A number of experts in the field of tourism and geography were invited to evaluate and guide the design of the questionnaire, and this effort was combined with expert opinions to further screen, eliminate duplications and improper semantic expressions and other issues, and ultimately obtain the final 33 evaluation factors (Appendix 1).

A total of 550 questionnaires were completed during the questionnaire survey. The questionnaire is aimed at tourists and a random distribution method is adopted. After eliminating incomplete questionnaires and outliers, 507 valid questionnaires were taken as the data source (recovery rate 92.18%). According to the Likert scale, the indicators in the questionnaire were measured by five levels (very poor, poor, general, good, and very good; respectively assigned values of 1, 2, 3, 4, and 5). Respondents were asked to express their subjective judgments and satisfactions regarding Insa-dong.

SPSS was used for descriptive statistical analyses and to obtain general statistical indicators, such as sample mean, variance, and frequency distribution. Since the questionnaire contains 33 indicators, the factor analysis method was first

performed to obtain the comprehensive evaluation index of tourists on this historical district. Then, taking the comprehensive evaluation index as independent variables and the overall satisfaction as the dependent variable, the multiple linear regression analysis was carried out to explore the influence weights of the different factors on the overall satisfaction. The importance-performance analysis grid was drawn and regarded as the basis of the quantitative evaluation. Due to the large number of questionnaires in this study, the principal component regression method was chosen for measuring the important factors of tourist satisfaction. Through principal component analysis, the idea of dimensionality reduction was applied first, and then orthogonal transformation was used to linearly combine the original questions to generate new independent variables, so that each new independent variable is a partially comprehensive variable. This was combined with regression analysis to find the most important comprehensive variable for the dependent variable. The combination of these two methods can better find the core indicators of tourist satisfaction. Ultimately, the research results are of significance to scientific planning and sustainable development of historical districts.

According to the survey results of the questionnaires, the sample has a balanced gender distribution. The percentage of female respondents (54.04%), is moderately higher than males (45.96%). The two largest age groups are the middle aged (31–55 years old) and the young (under 30 years old), accounting for 31.95% and 22.09%, respectively. In terms of transportation means, most people chose public transport (198 people, accounting for 39.05%).

## 4.2 Factor analysis

To assess the reliability of the questionnaire analysis results, Cronbach's alpha value is used as a measure of reliability analysis, and it is generally considered a reliable measure if the value is greater than 0.7. The alpha value for this study was 0.834.

As can be seen from Table 1, the value of Bartlett spherical test is 7654.5, and the corresponding probability ( $p$ ) is close to zero. If the significance level  $\alpha$  is 0.05, the null hypothesis should be rejected due to the low  $p$ -value (less than  $\alpha$ ), and the correlation coefficient matrix and the identity matrix are statistically significant. According to Kaiser's opinion, the KMO value (0.866) indicates that the original indicators are suitable for factor analysis and further research. In this study, the factor analysis method was used to extract the common factors. The number of common factors was obtained through analyzing the variances of each indicator. First, the common factors were rotated by the orthogonal maximization of indicators, and then the coordinate transformation was used to ensure the largest variances loaded by common factors.

Table 2 shows that there are a total of six common factors with 62.856% of the cumulative variance contribution rate,

which means that the first six common factors explain 62.856% of the variation of all indicators. Hence, these six factors can reflect most of the information of all the original indicators.

Table 1 Calculation of the fitness of original variables for factor analysis

Test result	Value
Kaiser-Meyer-Olkin measurement of sampling suitability	0.866
Bartlett's spherical test	7654.5
Degrees of freedom ( $df$ )	518
Significance	0.00

Table 2 The results of common factor extraction

Factor	Eigen values	Variation variance (%)	Cumulative variation variance (%)
1	6.327	19.104	15.877
2	5.031	13.393	29.866
3	3.679	11.412	41.583
4	2.833	9.292	50.875
5	2.482	7.617	58.492
6	1.166	4.364	62.856

After rotating the load matrix, common factor 1 has highest loading coefficients on Q1, Q2, Q3, Q4, Q5, Q8, Q9; common factor 2 is highest on Q28, Q29, Q30, Q31, Q32, Q33; Common factor 3 is highest on Q22, Q23, Q24, Q25, Q26; Common factor 4 is highest on Q17, Q18, Q19, Q20, Q21; Common factor 5 is highest on Q6, Q7, Q10, Q11, Q12; And common factor 6 is highest on Q13, Q14, Q15, Q16, Q27. The results of the classified evaluation factors can be seen in Appendix 1.

## 4.3 Results of common factors

### 4.3.1 Embodiment of historical elements

The mean value of "Embodiment of historical elements" is relatively high, ranking second in the list of common factors with a score of 3.99. Tourists believe that "Historical street form is well preserved" (4.24), "Historical building facilities are well preserved" (4.09), "Intangible culture such as folk custom and handicrafts have been passed down" (4.03), and "Traditional cultural experience activities are rich, and distinctive" (4.08). There are many houses of the Korean aristocrats in the district, and there are many famous places and former residences of celebrities hidden in the corners.

In the survey, the scores of "Able to experience the normal life of the aborigines" (3.89), "Tourist goods have historical elements" (3.95), and "Historical building facilities have explanations" (3.71) are relatively low. In the past 20 years, the dramatic growth in the number of tourists, foreign tourists in particular, has greatly boosted the sales of local specialty products. However, the increasing number of unoriginal and cheap souvenirs has destroyed the image of this district. These phenomena confirm the trend of tourism



consumption in today's society. Most of the products purchased by tourists are cheap crafts of less than 20000 won. Unlike the expensive and luxurious products of Insa-dong in the past, today's tourists are more eager to buy cheap and interesting souvenirs. Therefore, Insa-dong should focus on the development of traditional cultural products and traditional foods, and attract overseas tourists through its cultural characteristics. At the same time, the detailed interpretation of historical buildings should be supplemented to help tourists better understand the history of the development of the historical districts.

#### 4.3.2 The blend of tradition and modernity

The two highest scores in the common factor of "The blend of tradition and modernity" (3.742) are "The traditional culture of the district is integrated with modern culture through creative means" (4.04) and "The district can represent the traditional and modern image of Seoul" (3.92), which indicates that the strategy for the differentiation of cultural and creative industries based on traditional culture and modern demand characteristics is an excellent way to avoid "convergence" and "same images of thousand cities". The "city card" effect is generated by creating an "imprint" exclusive to Seoul.

#### 4.3.3 Industry distribution and type

The "Industry distribution and type" of Insa-dong scores 3.848, including three highly-scored indicators, namely "Diversified store types meet different needs of tourists" (4.12), "The format of the district has distinctive features" (3.99), and "Family-run shops with local characteristics are located in the district" (3.91). At the beginning of the government's transformation of Insa-dong, due to the regulation of business format, the retained businesses have convergence to a certain extent. For instance, there are many similar teahouses in the streets. The growing number of souvenir shops degrade the artistic level of the district, and some well-known galleries have chosen to move out. Furthermore, local residents are beset by the surge of arriving tourists.

In response to these problems, the government has effectively launched a series of measures. First of all, "Traditional famous stores" that have been in Insa-dong for more than 20 years, and operate excellent cultural goods, are selected and provided with necessary funding. These stores will be disqualified if they enjoy the fame but change their business contents or have quality problems that are repeatedly pointed out by the residents' committee and are not effectively corrected. Family-run shops, especially those located in the alleys, are important places for tourists to experience the historical districts in depth, which will affect the staying time and gathering space of tourists. Therefore, they have a great impact on the tourists' perception and support for tourist development patterns in the tourist districts.

#### 4.3.4 Consumer demand

In the "Consumer demand" (3.8), "The district can provide spaces for leisure and dining such as dining and coffee"

(3.88), "Tourists can feel the cultural and artistic atmosphere" (3.86), and "Tourists can feel the romantic, refined consumption atmosphere" (3.83) each scored high. On the contrary, "The format can meet the experience needs of tourists" (3.79), and "The consumer environment can help tourists unwind and relax" (3.64) need to be strengthened.

#### 4.3.5 Street layout and function

"Street layout and function" (3.732) has a general score, but "Leisure and consumption facilities are sufficient and convenient" (3.99), "Streetside recreational facilities are well arranged and suitable for tourists to enjoy the scenery" (3.91), and "Environment and facilities are safe" (3.86) are supported by respondents. Serving as important function carriers of historical districts, the leisure consumption facilities and recreation facilities in Insa-dong meet the needs of tourists for consumption, leisure and viewing. They express the development concepts of "leisure" and "humanization", and gained high support from tourists.

The scores of "Residential areas and shops are reasonably arranged and do not interfere with each other" (3.43), and "Guide system is perfect and convenient" (3.47) are relatively low. The Hanoks in Insa-dong served not only as scenic spots for tourists, but also as living houses for local residents. The museums and studios in the streets are set up in the Hanoks with local characteristics, but due to the deep tours of the tourists, there is a big contradiction among local residents, merchants and tourists.

#### 4.3.6 Landscaping

The overall score of "Landscaping" (4.168) and the scores of all of its indicators are relatively high, indicating that Insa-dong is very successful in creating a distinctive imagery. The image of the district space has more extensive and profound content and meaning than the district itself. Tourists realize the unique style and artistic atmosphere of Insa-dong, which positively influences the support of tourists.

### 4.4 Analysis of the factors influencing overall satisfaction

In order to measure the relationship between questionnaire indicators and overall satisfaction, six common factors extracted by factor analysis are used as independent variables, and the overall satisfaction is used as the dependent variable for multiple regression analysis. The test results of the linear model are given in Tables 3 and 4.

As can be seen from Table 3, the  $F$  value is 14.36, and the results are significant at a confidence level of 0.05.

The data in Table 4 show that in the linear model of overall satisfaction and common factors, the probability ( $P$ )

Table 3 Results of the linear model

Sum of squared value	Value	$df$	Average squared value	$F$	Significance
Regress	72.970	6	12.162	14.36	0.000
Residual	343.838	500	0.847		
Total	416.809	506			

Table 4 Results of the coefficients of the linear model

Variable	Beta	T value	Significance
$\beta_0$	3.753	82.879	0.000
$F1$	0.160	3.534	0.000
$F2$	0.210	4.629	0.000
$F3$	0.113	2.498	0.000
$F4$	0.205	4.532	0.001
$F5$	0.189	4.158	0.005
$F6$	0.130	2.859	0.004

value) of each common factor coefficient  $t$  test tends toward 0, and the significance level ( $\alpha$ ) is 0.05. Since each  $P$  value is significantly less than 0.05, the null hypothesis should be rejected and the factor parameters are not zero. Therefore, the model is:

$$Y = 3.753 + 0.16F1 + 0.21F2 + 0.113F3 + 0.205F4 + 0.189F5 + 0.13F6$$

where  $Y$  is the overall satisfaction, and  $F$  is “Embodiment of historical elements”. When other common factors are unchanged, if  $F1$  changes 1 unit, the overall satisfaction will change by 0.16 units. Similarly, the variations by 1 unit of  $F2$  (“The blend of tradition and modernity”),  $F3$  (“Industry distribution and type”),  $F4$  (“Consumer demand”),  $F5$  (“Street layout and function”), and  $F6$  (“Landscaping”) will cause the variation of overall satisfaction by 0.21 units, 0.113 units, 0.205 units, 0.189 units and 0.13 units, respectively.

In summary, the common factors in order of decreasing influence are: “The blend of tradition and modernity”,

“Consumer demand”, “Street layout and function”, “Embodiment of historical elements”, “Landscaping” and “Industry distribution and type”.

## 5 Discussion

### 5.1 Analysis of the factors influencing the sustainable development of historical districts based on the tourists' perspective

#### 5.1.1 Analysis of “Embodiment of historical elements”

Between 1960 and 1970, shops in the Insa-dong dealing in antiques and ancient paintings gradually increased. In the 1970s, the earliest commercial galleries in Korea were established in the region. Over the next few decades, the region has attracted many galleries, and has become a collection of modern art and Korean traditional culture. In the collection of traditional culture, Insa-dong uses this industrial orientation related to traditional art and culture to create a unique place for tourists to better understand them (Fig. 3).

The original street pattern reflects the historical authenticity through the spatial arrangement of the district texture, making tourists feel the depth of history and the tension of time and space. Various sizes of traditional streets and Hanoks exist in the Insa-dong. It is these historical traces in the urban center that distinguish Seoul from other cities in image and style. Ancient buildings are the preferred places for tourists to take pictures, which increases their interest and commemoration during the tour, and indirectly enhances the sense of history and authenticity of the historical districts, thereby increasing the satisfaction and support of tourists.

Era		Event	Results and impact	
Early Joseon era	Resource accumulation	Aristocratic area	High-end venue concentration	
Middle and late Joseon era		Immigration of immigrants	Artist intensive	
Japanese occupation	Resource outflow Antique street formation	Aristocratic decline	A large number of antiques out	Antique transactions for the Japanese
After liberation		Japanese retreat	Japanese people return Japan with a lot of antiques	The formation of the antique market for the natives
1960s	Traditional cultural format Tourism development	The antique market is initially formed	Decoration company, antique furniture company settled	
1970s		Concentration of foreign tourists	A large number of galleries, including many well-known chain galleries	
1980s		Olympic Games	Assessed as a traditional cultural district in Seoul	
1990s	Traditional culture street	Policy and development	Car-free street	Increased development efforts for tourists
21th century		Designated as a cultural block	Regional protection and regeneration	Seoul cultural commodification (Representative attractions)

Fig. 3 Historical change processes of Insa-dong



History and culture are the city's first memories with obvious regional characteristics and unique artistic styles. As the most essential information communicated in historical districts, they truly reflect the local lifestyles and customs. Therefore, it is common for tourists to sing high praises of the tourism development model that enhances the original atmosphere of historical districts. According to field research, the successful effect of conveying traditional culture is reflected in the fact that folk museums, traditional galleries and other facilities preserve the folklore and arts, and satisfy the tourists' pursuit of cultural authenticity. Moreover, many restaurants provide free folk art performances during mealtimes. High-level clubs have an especially strong cultural experience function, which naturally integrates the intangible culture into traveling. Insa-dong has always made every effort to preserve the local historical features by retaining the traditional styles of the Hanok, using brick roofs in new buildings, adopting nostalgic interior design and other architectural elements, and choosing old-fashioned street elements such as street lights, ground paving and sightseeing guides, to create a traditional district in modern Seoul, where tourists can learn about the ancient styles of Korea.

#### 5.1.2 Analysis of "The blend of tradition and modernity"

In the process of tourism development in historical districts, by harmonizing and integrating modern cultures of different countries and regions, the symbiosis between traditional and modern cultures will increase the sense of difference and freshness for the tourists, while also upgrading the sense of life and reducing the commercial atmosphere. In particular, the integration of creative culture in the district is based on a new lifestyle experience to create unique highlights that attract tourists. Insa-dong has profound artistic heritages. It has achieved a good integration through creative industries and tourism, and it has absorbed fresh blood such as modern arts and urban fashion vocabularies, allowing the district to become a gathering place for various artistic elements. The symbiotic development model has been recognized by tourists.

#### 5.1.3 Analysis of "Industry distribution and type"

Social and economic governance is the focus of the protective development of the district. With the changes of the times, Insa-dong has encountered many contradictions that are difficult to coordinate, such as the increasingly high land prices, the influx of low-end goods and small traders, and the proliferation of global chain stores, such as McDonald's and Starbucks.

In the form of tax relief and financing, the government mainly supports and retains shops with local traditional characteristics developed by individual small owners, rather than large commercial places or chain stores. Small-scale buildings and specialty shops have become a key feature of the Insa-dong, which allows it to avoid being too similar to the business models in other areas and increases the em-

ployment rate of local residents. In order to preserve the traditional features, except for several essential scenic spots and cultural relics, other areas are be classified as relatively restricted areas where street vendors peddle their goods along the sidewalk within a specified period. To a certain extent, this system guarantees the order of the street, and provides conditions for tourists to experience deep and slow tourism as well. Thereby, it has become a popular way of traveling.

#### 5.1.4 Analysis of "Consumer demand"

Compared to the popular tourist areas and souvenirs that are suitable for short stays and consumption, Insa-dong addresses leisure and experience, so there are many bars, cafes, homestays, galleries, restaurants and creative shops. Insa-dong can reflect the connotation of daily life aesthetics, return culture and art to district life, and express elegant culture and art in an easy-to-understand form, so that cultural consumer goods can be integrated into daily life consumption. The cultural and artistic atmosphere enhances the cultural experience of tourists. Insa-dong has become a portrait of exquisite, warm and petty-bourgeois life, satisfying the consumer psychology of urban middle-class people who have a profound impact on support.

#### 5.1.5 Analysis of "Street layout and function"

Excessive tourists and lack of effective management create a large amount of domestic garbage, damage cultural relics, and challenge the carrying capacity of tourism. Generally, historical districts are located in the center of the city, so it is difficult to set up parking lots to park vehicles. The congested traffic isolates the road system from the original street texture, and there are too many foreign merchants, causing traffic chaos and inconvenient daily life. It is difficult for tourists to arrive or stay. Redundant commercial facilities, crowded living spaces of local residents, and excessive decoration of commercial facilities cause the destruction of the street landscape image.

In response to these problems, tourists can be guided by planning a number of fixed tour routes and developing a comprehensive guide system. Congestion can be reduced by changing the opening directions of the courtyards or the traffic lines to avoid the crowded streets and this will ensure the privacy of the living environment. On one hand, it is necessary to reduce the blind searching by tourists for scenic spots; on the other hand, it is also necessary to reduce the disturbance to daily life of the locals to a certain extent by controlling the effective separation of the tourist routes and the living spaces.

#### 5.1.6 Analysis of "Landscaping"

Since Insa-dong is located in the center of Seoul, there is no large green space in the original streets. However, many shop owners have spontaneously planted plants around the storefronts, and some shops even have rooftop gardens, or use vertical greening to increase green areas. While beautifying the store environment, these efforts have created a

good street image and played a positive role in the healthy development of the tourism industry. Tourists are satisfied because it embodies a living environment where people and historical districts are organically integrated and interactive, and forms a historical district with diversified landscapes and good historical information preservation.

In the development process, Insa-dong strives to maintain the original style of the streets, and has added a number of unique shops to make the space full of design and fun. The local government vigorously promotes the characteristics of Hanok in the district and advocates in-depth tourism. While retaining the tradition, through a modern interpretation, the improved Hanok is more attractive and practical, and can attract tourists to visit.

## 5.2 Analysis of common factors' weight and satisfaction

According to the above results, the common factor weights and satisfaction values are taken as the ordinate for analyzing the importance-performance analysis matrix. In the scatter plot of common factor weights and satisfaction values (Fig. 4), it can be seen that all factors are in the 1, 2, and 4 quadrants.

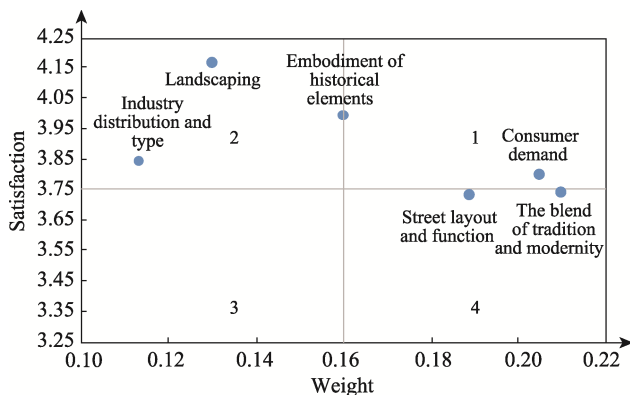


Fig. 4 The scatter plot of common factor weights and satisfaction values

The three most influential factors for comprehensive evaluation are “The blend of tradition and modernity”, “Consumer demand”, and “Street layout and function”. These three common factors are distributed in two quadrants: strong importance, high satisfaction (Quadrant 1) and strong importance, low satisfaction (Quadrant 4). Attention should be paid to the consumption needs of tourists, the integration of traditional elements of the district and modern culture, special activities, street management, and the relationships among stakeholders.

Cultural inheritance is the primary condition for the development of historical districts. A district achieves new development on the basis of inheriting the cultural charm of traditional cities and meeting consumer demands, which enhances the vitality of the historical district. The demands

for leisure experience and spiritual relief are the basic conditions for the survival and development of historical districts. In the layout of the district, the node space and the dynamic line layout can be utilized to ensure the satisfaction of the diversified leisure experience in the tourist area, and to create a humanized and characteristic historical district.

“Embodiment of historical elements”, “Industry distribution and type” and “Landscaping” are each in the quadrant of weak correlation and high satisfaction (Quadrant 2), indicating that the historical and cultural characteristics of the district are significant, while the landscape quality and tourism resources are unique. However, in these relatively common places, it can be seen that under the existing beautiful environment and historical characteristics, tourists pay more attention to the overall environment and consumer demand, addressing the realization of leisure and entertainment functions. Therefore, the landscape quality and historical and cultural parts can maintain the status quo, and the focus should be on the parts that urgently need improvement.

Based on six dimensions: “Embodiment of historical elements”, “The blend of tradition and modernity”, “Industry distribution and type”, “Consumer demand”, “Street layout and function” and “Landscaping”, and from the perspective of tourists, this study explores the factors influencing the tourism development model of historical districts. While the three elements of “The blend of tradition and modernity”, “Consumer demand” and “Street layout and function” have great influences, “Embodiment of historical elements”, “Industry Distribution and type” and “Landscaping” have less impacts.

This study cuts through the perspective of tourists and finds that for historical districts to achieve the goals of effective protection, sustainable development, and excellent living environment, six dimensions need to be considered, which mainly include historical culture, consumer demand and street management. The mechanisms acting between the dimensions are the keys to ensuring the development of historical districts and the satisfaction of tourists (Fig. 5). By focusing on the protection and management of stakeholders' demands and changes, the cooperation between public and private interests should be balanced to promote the sustainable development of the district.

## 5.3 Limitations and future research

The research presented in this paper focuses on the organization and summary of the phenomenon, but there are not many solutions to the problem. Therefore, the discussion on the developmental direction of historical districts, especially the sustainable development methods, will be the focus of the next step. Many scholars have questioned the commercial development of historical districts. In this case, determining how to coordinate the relationship between development and protection is worthy of further attention.

The results of this case study of Insa-dong are not enough

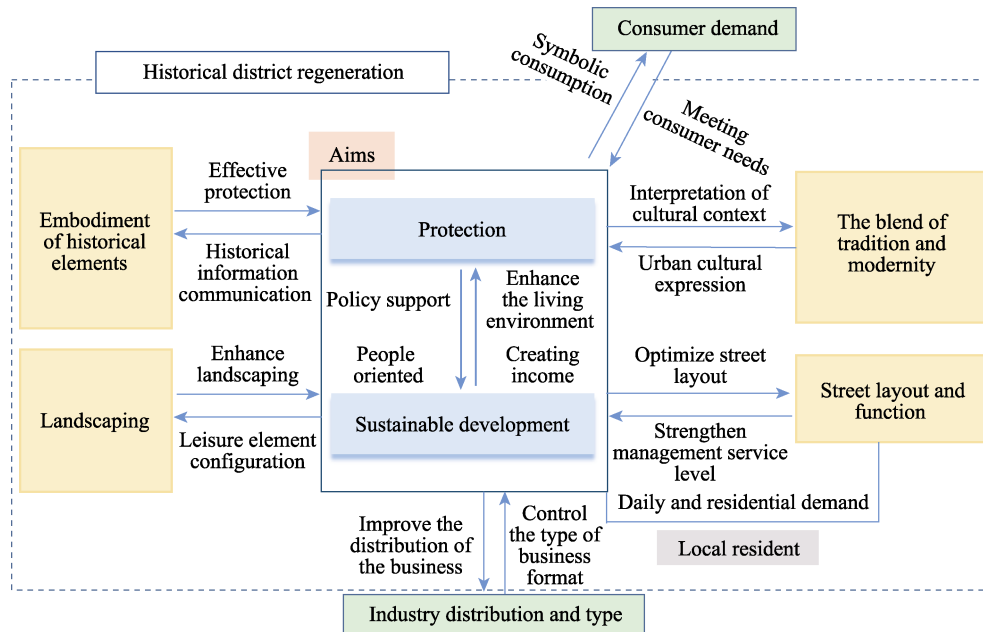


Fig. 5 Sustainable development mechanism of historical districts, with the integration of urban culture and consumer demand.

to represent the results of the popular historical district study overall. Subsequent work needs to consider various types of historical districts, thus incorporating historical functional replacement and human-land relationship into theory, and provide reference for the development of other historical districts. Attitude and perception are the precursors of behavior. Such psychological inclinations will inevitably become the resistance of historical district management and control, affecting the sustainable development of historical districts. Therefore, the coordination of social relations, tourists, residents and government attitudes in historical districts is also a meaningful research direction.

## 6 Conclusions

First of all, the connotation of historical districts is their cultural characteristics. Even under the background of globalization, historical culture and regionality cannot be replaced. The regeneration of historical districts is an important effort for integrating local historical characteristics with the everyday life of modern people. On the basis of protecting historical culture, the integration of traditional history and modern needs can help in the development of historical districts. During the development process, it is important to protect the historical context and promote the symbolism of the district.

Secondly, it is beneficial for improving the satisfaction and support of tourists by satisfying the leisure experience of tourists and the variety of business types. Adding the cultural experience function in the business configuration can increase the support of tourists and establish the leisure cultural symbols of the district, thus forming a unique consumption space and achieving the purpose of the benign development of the district.

Finally, the district layout and the landscape space have an impact on the support of tourists. The landscape space creates a unique spatial image by displaying the characteristic landscape of the historical district, which promotes the formation of a historical street image with distinctive styles, and improves the satisfaction and support of tourists. At the same time, a reasonable street layout should pay attention to the planning of residential and commercial facilities, avoiding the interference between the action space of the tourists and the aboriginal living space. By coordinating the spatial layout, a comfortable, convenient and charming district environment can be established.

Local authorities need to further strengthen the planning and management of historic districts. First of all, it is necessary to strengthen the construction and support of public service facilities, continuously improve the quantity and quality of community-based services, and continuously improve the satisfaction level of tourists for various needs (e.g., the purchase of daily consumer goods, convenience of travel, accessibility of medical treatment, network communication, daily leisure and entertainment). The second priority is to rationally arrange and balance the scenic spots in space, strengthen the spatial guidance of planning, and achieve orderly, coordinated and sustainable development. The third consideration is to further standardize market management and enhance security, e.g., strengthen the quality supervision of the reception area, standardize the management of tourism activities in scenic spots, and strive to eliminate the negative impact of tourism activities on the natural environment such as houses, water and soil. At the same time, attention should be paid to safety issues, by eliminating fire hazards in residential and reception areas, strengthening traffic safety management such as through bicycle rentals,

and regulating and supervising food safety and disturbance issues for night-time business projects such as nightingales, bars, and KTV. All local government departments should have strengthened comprehensive management and coordinated cooperation to improve the legalization, institutionalization, consistency and thoroughness of security work.

At the same time, tourists should respect the local community residents and their lifestyles and customs, strengthen the constraints and management of tourism behaviors and life behaviors, formulate and implement relevant tourism management rules and regulations, strengthen the sense of responsibility and management awareness of tourism activities, and build harmony. The relationship between the business entities and the customer, and the relationship between the people and the land, promote the sustainable development of tourism in the historic districts.

## References

- Anna T D, Francesc L P. 2018. The ISOST index: A tool for studying sustainable tourism. *Journal of Destination Marketing & Management*, 8: 281–289.
- Atspha G A, Satinder K. 2019. Assessing progress of tourism sustainability: Developing and validating sustainability indicators. *Tourism Management*, 71: 67–83.
- Bian L C, Jing Z J. 2005. Some thoughts on conservation planning of historic area: A case study of conservation planning of historic site in Shichahai. *City Planning Review*, 29(9): 44–59.
- Brunt P, Courtney P. 1999. Host perceptions of sociocultural impacts. *Annals of Tourism Research*, 26(3): 493–515.
- case study of Jeonju Hanok Village development project. Diss., Jeonju.
- Croes R. 2014. The role of tourism in poverty reduction: An empirical assessment. *Tourism Economics*, 20(2): 207–226.
- Deng W H, He Y, Hu H Y. 2016. Exploration on integrated conservation of historic city in the new period: The case of Ningbo. *Urban Planning Forum*, 4: 87–97. (in Chinese)
- Doo L J. 2003. A Study on the elements of urban image in Korean traditional residential area: The case of Bukchon Korean traditional residential area. Diss., Seoul, South Korea: Chungang University. (in Korean)
- Hwuang I W. 2015. The old town regeneration project and space conflicts: A study on the conservation of district characteristics through the special zone districts in Insa-dong District. Diss., Seoul, South Korea: University of Seoul. (in Korean)
- Kang E J. 2013. A Study on post occupancy evaluation of historic streets' improvement projects: The case study of Jung-dong road and Insa-dong road in Seoul. Diss., Seoul, South Korea: University of Seoul. (in Korean)
- Kim S Y. 2010. Importance-performance evaluation of street scape on Insa-dong road. Diss., Seoul, South Korea: Hanyang University. (in Korean)
- Lee D H. 2016. Bukchon Hanok Village tourists of motivation, tourism image, awareness of the perceived value comparison: Koreans and the Activities of foreigners. Diss., Seoul, South Korea: Hanyang University. (in Korean)
- Lee T H. 2013. Influence analysis of community resident support for sustainable tourism development. *Tourism Management*, 34: 37–46.
- Lepp A. 2007. Residents' attitudes towards tourism in Bigodi Village, Uganda. *Tourism Management*, 28(3): 876–885.
- Liang J, Zhang R R. 2016. City characteristic block and planning strategies: Based on Wuhu City. *Urban Planning Forum*, 6: 92–100. (in Chinese)
- Liao Y L, Fang Z, Qu X Q. 2010. Thought on spirit construction in traditional block. *Sichuan Building Science*, 36(6): 221–224. (in Chinese)
- Lin L. 2016. Conservation of historic and cultural cities in the context of the new normal: Perspective of historic urban area. *Urban Planning Forum*, (4): 94–101. (in Chinese)
- Liu J M, Tao W, Guo Y Z. 2000. Discussion on the tourism development of traditional dwelling houses: A case study of Pingyao Ancient City. *Geography Research*, 19(3): 264–270. (in Chinese)
- Lu J W, Wang Y. 2016. The making of distinctive Vibrant District: A strategy of urban regeneration. *Urban Planning Forum*, (6): 101–108. (in Chinese)
- Lu S, Wu X. 2017. Assessment of tourist satisfaction of the painting tourism in the ancient villages: The case study of Hongcun Village, Yixian County. *Geographical Research*, 36(8): 1570–1582. (in Chinese)
- Nicholas L N, Thapa B, Ko Y J. 2009. Residents' perspectives of a world heritage site: The pitons management area, St. Lucia. *Annals of Tourism Research*, 36(3): 390–412.
- Nunkoo R, Ramkissoon H. 2011. Developing a community support model for tourism. *Annals of Tourism Research*, 38(3): 964–988.
- Nunkoo R, So K K F. 2016. Residents' support for tourism. *Journal of Travel Research*, 55(7): 847–861.
- Peng H, Yong H, Xu F F. 2018. Evolutionary analysis of sustainable tourism. *Annals of Tourism Research*, 69: 76–89.
- Robin N. 2017. Governance and sustainable tourism: What is the role of trust, power and social capital? *Journal of Destination Marketing & Management*, 6(4): 277–285.
- Ruiz B E. 2011. Social-ecological resilience and community-based tourism: An approach from Agua Blanca. *Ecuador*, 32(3): 655–666.
- Seo I Y. 2006. A study on the policy of Insa-dong Cultural District: Focused on the place marketing strategies of city government. Diss., Seoul, South Korea: University of Seoul. (in Korean)
- Seo J W, Liu L, Wu H. 2009. Chinese tourism research related to the subject of South Korea: A Content Analysis. *Progress in Geography*, 28(11): 153–160. (in Chinese)
- Shao Y, Hu L J, Zhao J, et al. 2016. A research on the conservation plan of the Human-Habitat World Heritage: Case study of Pingyao Ancient City. *Urban Planning Forum*, (5): 94–102. (in Chinese)
- South Korea: Chonbuk National University. (in Korean)
- Tao H, Liu J M. 2014. Principles and practices of local hard landscape designing in Geopark: A case of mark monument designing in Wensu Geopark, Xinjiang. *Geographical Research*, 33(9): 1758–1767. (in Chinese)
- Xiao J, Cao K. 2017. Review, key issues, and methodology of historic district preservation studies. *Urban Planning Forum*, (3): 110–118. (in Chinese)
- Yang Z. 2016. Urban design and urban regeneration: The British experience as a reference to China. *Urban Planning Forum*, (1): 88–98. (in Chinese)
- Yu Y, Gao H B, Wang G. 2017. "Micro Centers" revitalized the historic district: Study on the renewal of the Suzhou Xuanqiaoxiang Historical District against the background of "Smart City". *Urban Development*

- Studies*, 24(10): 35–40. (in Chinese)
- Zhang C J. 2015. A research of Shanghai Li-long spaces from a heritage perspective. *Urban Planning Forum*, (4): 111–118. (in Chinese)
- Zhang H X, Zhou L Q. 2013. Factor components and differences of the park-based recreational happiness for urban residents: A case study of Hangzhou. *Scientia Geographica Sinica*, 33(9): 1074–1081. (in Chinese)
- Zhang P Y. 2004. Urban regeneration: Theory and practice in China's new urbanization. *Urban Planning*, 28(4): 25–30. (in Chinese)
- Zhang X Y, Chen T. 2016. Influence mechanism of tourism development on intangible cultural heritages (ICH) based on the perception of tourists: A case study of traditional handicraft Suzhou Embroidery. *Geographical Research*, 35(3): 590–604. (in Chinese)
- Zhong S E, Zhang J H, Ding L, et al. 2016. Multi-dimension influential factors of tourist satisfaction in the ancient waterfront towns in the south of the Changjiang River. *Scientia Geographica Sinica*, 36(11): 1715–1721. (in Chinese)

## 历史文化区的可持续发展与游客满意度：影响因素与特征

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**摘 要:** 如何实现历史文化区的可持续发展与保护是一个值得研究的课题。作为更新城市空间的重要途径, 历史街区的旅游业开发是重新分配城市功能和增加城市活力的有效解决方案。本文以韩国仁寺洞为例, 以 550 份问卷为基础, 对历史街区的游客满意度进行了评估。该问卷包含 33 个评估指标, 以李克特量表的形式衡量受访者对仁寺洞的主观判断和满意度。研究结果表明: (1) 仁寺洞游客满意度评价共包括 6 个方面: 历史元素的体现、传统与现代的交融、行业分布和类型、消费者需求、街道布局与功能、景观美化。(2) 在综合影响因素分析中, “传统与现代的融合” 的权重最高, 而 “行业分布和类型” 的权重最低。(3) 对公因素权重和公因素满意度的分析表明, “传统与现代的融合” 和 “街道布局与功能” 是需要改进的部分, “消费者需求” 也有很大的提升空间。研究结果将有助于增强历史街区的旅游体验, 为历史街区的有效保护和可持续发展提供理论依据和实践经验参考。

**关键词:** 历史街区; 可持续发展; 满意度; 韩国仁寺洞

**Appendix 1** The significance of common factors and evaluation indicators

Common factor	Evaluation indicator	Factor load	Mean	Mean common factor	Eigenvalue	Variance contribution rate (%)
Factor 1 Embodiment of historical elements	Historical street form is well preserved	0.843	4.24	3.999	6.321	14.967
	Historical building facilities are well preserved	0.947	4.09			
	Intangible culture such as folk customs and handicrafts have been passed down	0.832	4.03			
	Traditional cultural experience activities are rich and distinctive	0.846	4.08			
	Able to experience the normal life of the aborigines	0.821	3.89			
	Tourist goods have historical elements	0.787	3.95			
	Historical building facilities have explanations	0.716	3.71			
Factor 2 The blend of tradition and modernity	The district contains diverse traditional and modern cultures	0.718	3.63	3.742	4.09	11.899
	Revitalization of traditional buildings caters to modern consumer needs	0.787	3.54			
	The traditional culture of the district is integrated with modern culture through creative means	0.663	4.04			
	Reproduce the historical features of the district by modern technical means	0.776	3.54			
	Old brands and traditional handicrafts are passed down and carried forward through modern culture.	0.671	3.78			
	The district can represent the traditional and modern images of Seoul	0.701	3.92			
Factor 3 Industry distribution and type	The format of the district has distinctive features	0.760	3.99	3.848	3.769	10.016
	Diversified store types meet different needs of tourists	0.812	4.12			
	The scale of the stores is diversified and the size is reasonable	0.766	3.75			
	The distribution of shops and residential houses is reasonable	0.681	3.47			
	Family-run shops with local characteristics are located in the district	0.863	3.91			
Factor 4 Consumer demand	The format can meet the experience needs of tourists	0.749	3.79	3.8	3.033	9.832
	The district can provide spaces for leisure and dining such as dining and coffee	0.784	3.88			
	Tourists can feel the cultural and artistic atmosphere	0.871	3.86			
	Tourists can feel the romantic, refined consumption atmosphere	0.839	3.83			
	The consumer environment can help tourists unwind and relax	0.667	3.64			
Factor 5 Street layout and function	Environment and facilities are safe	0.880	3.86	3.732	2.544	8.741
	Leisure and consumption facilities are sufficient and convenient	0.738	3.99			
	Streetside recreational facilities are well arranged and suitable for tourists to enjoy the scenery	0.812	3.91			
	Residential areas and shops are reasonably arranged and do not interfere with each other	0.735	3.43			
	Guide system is perfect and convenient	0.757	3.47			
Factor 6 Landscaping	Diverse buildings and facilities show beautiful landscapes	0.897	4.22	4.168	1.596	7.401
	Appropriate visual field and good viewing effect during the tour	0.786	4.02			
	Street layout and style have local cultural characteristics	0.803	4.23			
	Building facilities have historical and cultural values	0.768	4.24			
	Street view and store layout have artistic value	0.895	4.13			
Cumulative contribution rate		62.856				
Overall assessment		3.753				