

ARTICLE

Spatial Dislocation Analysis of Tourism Economy and Its Influencing Factors in Jiangsu Province

Yuxiang Zheng Yue Zhu*

School of Economics & Management, Shanghai Maritime University, Shanghai, 201306, China

ARTICLE INFO

Article history

Received: 3 December 2020

Accepted: 14 December 2020

Published Online: 31 January 2021

Keywords:

Jiangsu province

Tourism revenue

Spatial dislocation

Matrix analysis

ABSTRACT

Taking 13 prefecture-level cities in Jiangsu Province as the research object, based on the theory of spatial dislocation, the gravity model and two-dimensional composite matrix method are used to analyze the spatial dislocation between tourism resources, permanent population and other factors in Jiangsu Province and tourism revenue. The results show that the population center, the center of tourism resources, the center of tourist numbers, the center of economic development, and the center of tourism revenue of Jiangsu Province are all biased toward the southern part of Jiangsu Province. From the analysis of four sets of two-dimensional composite matrixes, 13 prefecture-level cities have synchronized coordination and also have positive and negative dislocation types. Southern Jiangsu has the best synchronization and coordination, and northern Jiangsu has a strong negative dislocation trend; the combination of tourist numbers and tourism revenue is the strongest, but the dislocation is weak; population and tourism revenue have a strong positive dislocation trend; there is a strong negative dislocation trend between economic development and tourism revenue; the matrix combination of Nanjing, Wuxi and Suzhou has good synchronization; the city of Xuzhou in northern Jiangsu has a strong negative dislocation. In view of the results of spatial dislocation analysis, suggestions for improvement and optimization are put forward to promote the high-quality development of tourism in Jiangsu Province.

1. Introduction

The unbalanced development of regional tourism economy is a common phenomenon and a hot topic in academic research. Tourism revenue can reflect the operating conditions of regional tourism economy, and comprehensively measure tourism economic activities

and their effects^[1]. It is affected by factors such as high-level tourism resources, number of tourists^[2], GDP^[3], etc. The study of tourism economy from a spatial perspective is the method currently adopted by most scholars, and there are many research results. Scholars have carried out rich research on the spatial distribution of resources, the temporal and spatial evolution of scenic spots, and

*Corresponding Author:

Yue Zhu,

School of Economics & Management, Shanghai Maritime University, Shanghai, 201306, China;

Email: 17761706842@163.com

Funding:

National Social Science Fund project (19BJY208) Research on the innovation Model of High Quality Development of China's Marine Tourism Industry under the Background of Consumption Upgrade.

the efficiency of tourism economy. Kain first proposed the spatial dislocation theory in the 1960s, reflecting the theoretical hypothesis of the living and employment opportunities of disadvantaged groups^[4]. It was gradually used in the fields of geography and economics^[5]. The methods in the empirical study of spatial dislocation are mostly regression models, which are combined with GIS and spatial measurement^[6]. Most domestic researches on spatial dislocation are based on specific cities or regions. Northeast, western, Shanxi, Anhui, Henan and other places are common research objects. Many scholars selected various influencing factors based on the spatial dislocation theory, and use the gravity model and two-dimensional combination matrix to conduct research: Deng etc al. studied the spatial dislocation of tourism resources, location, and inbound tourism revenue in 31 provinces on the mainland^[7]; Weng etc al. further included regional tourism services and cultural industries into the dislocation research objects^[8]; Ren used star hotels as a factor in analyzing the dislocation of Zhejiang's tourism space^[9]; Wang etc al. considered the impact of demographic factors on the tourism performance of Anhui Province^[10]. Therefore, it can be seen that based on the theory of spatial dislocation, the use of gravity model and two-dimensional combined matrix analysis method is the current mainstream trend of analyzing regional tourism spatial dislocation, which has strong persuasiveness and empirical evidence.

Located in the Yangtze River Economic Zone, Jiangsu Province is an important part of the Yangtze River Delta, and its comprehensive economic development level ranks among the top in the country. There are rich tourism resources, many types of tourism, natural ecology, red imprints, world heritage, etc., and the westward journey culture, ocean culture, red culture and tourism are fully integrated. One of the key points of Jiangsu Province's work in 2020 is to promote the high-quality development of the cultural and tourism industry. On August 20, 2020, General Secretary Xi Jinping mentioned in his speech at the symposium on solidly promoting the integrated development of the Yangtze River Delta that one of the measures to promote integrated development is to improve the quality of urban development in the Yangtze River Delta. The high-quality development of tourism is an important part of the integration of the Yangtze River Delta and the improvement of urban quality. As of the end of 2019, there were 615 A-level scenic spots in Jiangsu Province; in 2019, the total tourism revenue was 1432.16 billion yuan and the number of domestic tourists received was 880 million, all of which increased year by year. However, judging from the development of the tourism

industry in Jiangsu Province, the total tourism revenue of Nanjing in 2019 reached 27,849,500 yuan, while the total tourism revenue of Suqian in 2019 was only 3.36 million, which is only equivalent to 12% of Nanjing. Therefore, there are differences in the development of tourism economy among regions, and the overall development of the tourism industry is not coordinated.

However, there are few studies on the spatial dislocation of tourism development in Jiangsu Province. Existing studies have examined the spatial dislocation relationship between tourism resources, tourism reception capacity and tourism performance^[11]. Few other factors are included in the scope of research. Therefore, based on the theory of spatial dislocation, this article explores the spatial dislocation between resources, population, economic development, tourist numbers and tourism revenue, and studies the imbalances that exist in various cities. The paper also combines the gravity model and two-dimensional combination matrix to analyze deeply the degree of spatial dislocation among various elements, and finally put forward suggestions to optimize the spatial dislocation, which is important for the future high-quality development of the tourism industry in Jiangsu Province, giving full play to resource advantages, increasing domestic and foreign visibility, and meeting people's diversified tourism Demand.

2. Research Methods

This paper standardizes the tourism resources, permanent population, economic development level, total number of tourists, and total tourism revenue to obtain the index of each indicator. At the same time, using the gravity model, the center of tourism resources, population, and economy of Jiangsu Province are obtained, which are used to conduct macro spatial dislocation analysis; finally, the tourism resource index, population index, economic development level index, tourist number index and total tourism revenue index are respectively formed into a two-dimensional matrix for further analysis the degree of spatial dislocation in the relevant aspects of the prefecture-level cities in Jiangsu Province. Tourism resource indicators are analyzed from the perspective of A-level scenic spots. A-level scenic spots are highly representative in measuring the quality of regional scenic spots, displaying characteristic resources, and laying the foundation for the development of tourism economy^[12]. The level of economic development is measured by per capita GDP, which is generally calculated based on the permanent population, so the permanent population data is used for the demographic factor; the total number of tourists and the total tourism revenue are the sum of the number of domestic

and foreign tourists and revenue respectively.

2.1 Quantification of the Abundance Value of Tourism Resources

The abundance of tourism resources affects the economic benefits of the region, which is related to people's travel experience and satisfaction, and affects tourists' behavior intentions such as willingness to revisit. In order to facilitate the subsequent index analysis, the abundance value of the tourism resources of each city is quantified here to reflect the quality and quantity of the tourism resources of each city. The formula is:0.5

$$R_i = 5.0N_5 + 2.5N_4 + 1.75N_3 + 0.5N_2 + 0.25N_1 \quad (1)$$

among them: R_i is the quantified value of tourism resources in prefecture-level city of i ; $N_1 \sim N_5$ respectively indicate the number of A-5A-level scenic spots in Jiangsu Province by the end of 2019, the data comes from the official website of the Department of Culture and Tourism of Jiangsu Province;we refer to previous research models ^[13], 0.25, 0.5, 1.75, 2.5, 5.0 represent the weight of the A-5A-level scenic spot.

2.2 Research Index

Incorporating the quantified value of tourism resources, total tourism revenue, permanent population, economic development, total number of tourists and other data into formula (2) ^[14], and carrying out range standardization processing to obtain the index value of each indicator, which are used as the measurement of analysis index.The original data comes from the 2019 National Economic and Social Development Statistical Bulletin of Jiangsu Province.

$$M_x = \frac{Q_i - Q_{\min}}{Q_{\max} - Q_{\min}} \times 100 \quad (2)$$

among them: M_x indicates the index value of each indicator; Q_i indicates the value of an indicator in a prefecture-level city i ; Q_{\min} indicates the minimum value of an indicator in 13 prefecture-level cities; Q_{\max} represents the maximum value of an indicator in 13 prefecture-level cities.

2.3 Gravity Model

Gravity model is often used in the study of regional economic spatial structure to reflect the location relationship and spatial organization of economic things in the carrier of geographic space ^[15]. Emphasis indicates the point that can maintain balance in all directions in a certain area ^[16]. The gravity model can be used to calculate the center of gravity of tourism resources, population,

economic development, total number of tourists, and total tourism revenue in Jiangsu Province. The specific calculation formula is as follows ^[17]:

$$X_R = \frac{\sum_{i=1}^n (M_i \times X_i)}{\sum_{i=1}^n M_i} \quad Y_R = \frac{\sum_{i=1}^n (M_i \times Y_i)}{\sum_{i=1}^n M_i} \quad (3)$$

Among them: X_R, Y_R indicates the latitude and longitude of the center of gravity of the spatial distribution of an index in Jiangsu Province; M_i indicates the value of an index in city i ; X_i, Y_i indicates the latitude and longitude of the administrative center of gravity in city i ; n is the number of prefecture-level cities in Jiangsu Province, that is, $n=13$.

2.4 Two-dimensional Combination Matrix

The gravity model shows the distribution of the center of gravity and the degree of spatial dislocation of various indicators from a macro perspective ^[12]. In order to understand the specific spatial dislocation of tourism resources, permanent population, economic development level, total number of tourists and total tourism revenue in 13 prefecture-level cities, we need to use Two-dimensional combination matrix; according to the index size of the indicators, they are divided into different levels, and then the above four types of indicators and tourism revenue are respectively formed into a matrix, and the dislocation relationship between each level city is analyzed in detail, and also the spatial dislocation type is summarized.

3. Results

3.1 Analysis of various indexes

Through the above calculation formula, the tourism resource abundance index, tourism revenue index, population abundance index, economic development index and tourist population index can be obtained respectively (see Table 1). From the perspective of tourism resource abundance index, Suzhou has the highest resource index. Although it is not the prefecture-level city with the most scenic spots, it has a certain resource attraction. At the same time, its permanent population abundance index is also the highest. Regarding the economic development index, Wuxi has the highest per capita GDP index, followed by Suzhou and Nanjing, and the gap between the indices is large; in terms of tourist number index, the provincial capital city Nanjing has the highest tourist number index, Suzhou ranks second, and Suqian index the lowest; tourism revenue can reflect tourism benefits, Nanjing's tourism has developed well, ranking first. Followed by

Table 1. Spatial dislocation index of tourism in prefecture-level cities in Jiangsu Province

City	Index					
	Quantification of tourism	Abundance index of tourism resources	Tourism revenue Index	Population abundance index	Economic Development Index	Tourist Attendance Index
Nanjing	105.000	60.182	100.000	70.185	87.799	100.000
Yangzhou	96.250	49.544	27.530	17.829	56.399	41.699
Zhenjiang	55.500	0.000	28.118	0.000	56.485	36.433
Taizhou	70.750	18.541	3.186	18.984	40.870	3.108
Wuxi	113.500	70.517	70.516	44.895	100.000	62.631
Changzhou	63.250	9.422	35.182	20.307	79.863	43.547
Suzhou	137.750	100.000	98.614	100.000	99.317	90.979
Nantong	87.000	38.298	18.240	54.522	55.887	20.884
Xuzhou	110.750	67.173	21.158	74.499	15.614	30.008
Lianyungang	67.750	14.894	10.287	17.326	5.717	11.902
Huaian	65.250	11.854	5.475	22.913	13.396	7.348
Yancheng	93.500	46.201	3.508	53.076	13.908	7.765
Suqian	74.000	22.492	0.000	22.983	0.000	0.000

Suzhou and Wuxi. The data in the table reflects that there is a large gap in the tourism development of various cities in Jiangsu Province, there is a certain imbalance, and there is a certain spatial dislocation between resources and other factors and revenue.

3.2 Overall Analysis of the Province’s Spatial Dislocation

Jiangsu Province is located on the eastern coast of the mainland, between 116.18°~121.57°east longitude and 30.45°~35.20° north latitude. According to the calculation of the gravity model, the center of tourism resources in Jiangsu Province is located at 32.46° north latitude and 119.67° east longitude; the center of economic development is at 31.99° north latitude and 119.85° east longitude; the population center is at 32.54° north latitude and 119.66° east longitude; the center of tourist number is at 32.08° north latitude and east 119.66° longitude; the center of tourism revenue is at 31.98° north latitude and 119.71° east longitude. The center of gravity of tourism resources and population is located in Yangzhou City, and the center of population is located to the north and west of tourism resources. The center of tourism population and tourism revenue are located in Zhenjiang City. The center of tourism revenue is close to Changzhou City, and the center of economic development gravity lies in Changzhou City, but also close to Zhenjiang City. It can

be seen that the spatial dislocation of population, tourism resources and tourism revenue is quite significant, and there is a certain degree of disharmony; the spatial dislocation of tourist number, economic development and tourism revenue is relatively small, and the five centers of gravity are generally biased towards southern Jiangsu. The development of tourism in southern Jiangsu has obvious advantages in all aspects. The per capita GDP of Nanjing, Suzhou, Wuxi, Changzhou and other places are in the forefront of Jiangsu Province, and they are well-known at home and abroad. And the number of tourists is increasing, and the number of A-level tourist attractions has reached more than 50, with abundant tourist resources. Compared with northern Jiangsu, the population center of gravity is closest to northern Jiangsu. This is because the population in northern Jiangsu is relatively concentrated. Although there are many tourism resources, it may cause uncoordinated tourism revenue and economic development due to traffic location and popularity.

3.3 Spatial Combination Type Analysis

3.3.1 Analysis on the Spatial Misalignment of Tourism Resources and Tourism Revenue

Tourism resources are the gospel of the development of the tourism industry ^[19] and unique production factors of the tourism industry ^[20], which affects tourists’ willingness

to play. Through the two-dimensional matrix analysis of tourism resources and tourism revenue, Table 2 can be obtained.

It can be seen that Wuxi and Suzhou are rich in tourism resources, and tourism revenue has increased simultaneously, and the two have reached the best match. There are more than 50 A-level scenic spots in the two places, rich in resources. Wuxi is a famous historical and cultural city in the world, Suzhou gardens are included in the world cultural heritage, and the transportation facilities in the two places are very complete, so the tourism development advantages are significant. Nanjing is rich in tourism resources, but the tourism revenue is high, and the two are the matching positive and dislocation areas; Nanjing is the capital city of Jiangsu Province and the ancient capital of the Six Dynasties. It has a strong history and culture, many historical attractions, and complete transportation facilities. Although the amount of resources is not as good as Wuxi and Suzhou, it is in line with Wuxi Suzhou in terms of tourism revenue; Yangzhou's tourism resources and revenue are both in the middle area, reaching the middle area that matches the two. Yangzhou is rich in forests, gardens, food and other cultures. Tourism incorporates the concept of ecological civilization, and it has become a general trend for current tourists to pay attention to environmental protection and ecology; Xuzhou has a relatively high degree of tourism resources, but tourism revenue is low. The two belong to the matching negative dislocation area. The number of A-level tourist attractions in Xuzhou has reached 64, ranking first in Jiangsu Province. However, due to the geographical location and the focus on industry in regional development, tourism revenue and resources do not match. Nantong and Yancheng have moderately rich tourism resources, but in terms of tourism revenue, one is in the lower position and the other is in the lower position. The

degree of spatial dislocation in Nantong is relatively low, while that in Yancheng is relatively high. Nantong A-level scenic spots account for a large proportion of 3A-level scenic spots. 3A-level scenic spots are not as well-known as 4A and 5A-level scenic spots, so it may slightly restrict the development of local tourism; Yancheng is located in the northern part of Jiangsu, although there are large areas of coastal beaches, and it has the only world natural heritage site in Jiangsu for migratory birds in China's Yellow (Bo) Sea. However, due to geographical location and other factors, tourism development does not have great advantages; Huai'an and Lianyungang show a synchronized trend of tourism resources and tourism revenue, which is a double low Area. The number of A-level scenic spots in Huai'an and Lianyungang are at the end of Jiangsu Province, but Huai'an has red tourist attractions such as Zhou Enlai's former residence, and Lianyungang's Huaguo Mountain and other tourist attractions are popular, so tourism revenue and tourism resources have reached a positive match; The tourism resources and tourism revenue of Taizhou and Suqian show a negative dislocation; Changzhou and Zhenjiang have low tourism resource richness, but the tourism revenue is in the middle and low locations respectively, which belong to the matching negative dislocation area; Changzhou and Zhenjiang are close to the provincial capital cities Nanjing, therefore, will indirectly promote the development of tourism in the two places, and tourism revenue and tourism resources will not match.

3.3.2 Analysis on the Spatial Misalignment of Permanent Residents and Tourism Revenue

The factor of permanent resident population is an important consideration in the development of regional tourism economy. It can bring the scale of tourist source to the

Table 2. Two-dimensional combination matrix of tourism resources and tourism revenue

		Tourism revenue Index				
		High (>65)	Higher (45-65)	Medium (25-45)	Lower (5-25)	Low (<5)
Abundance index of tourism resources	High (>70)	Wuxi, Suzhou				
	Higher (50-70)	Nanjing		Xuzhou		
	Medium (30-50)			Yangzhou	Nantong	Yancheng
	Lower (10-30)			Huainan, Lianyungang		Taizhou, Suqian
	Low (<10)			Changzhou	Zhenjiang	

Table 3. Two-dimensional matrix of permanent residents and tourism revenue

		Tourism revenue Index				
		High (>65)	Higher (45-65)	Medium (25-45)	Lower (5-25)	Low (<5)
Population abundance index	High (>70)	Nanjing, Suzhou			Xuzhou	
	Higher (50-70)				Nantong	Yancheng
	Medium (30-50)	Wuxi				
	Lower (10-30)			Yangzhou, Changzhou	Lianyungang, Huaian	Taizhou, Suqian
	Low (<10)			Zhenjiang		

Table 4. Two-dimensional combination matrix of economic development and tourism revenue

		Tourism revenue Index				
		High (>65)	Higher (45-65)	Medium (25-45)	Lower (5-25)	Low (<5)
Economic Development Index	High (>70)	Nanjing, Suzhou, Wuxi		Changzhou		
	Higher (50-70)			Zhenjiang	Nantong, Yangzhou	
	Medium (30-50)					Taizhou
	Lower (10-30)				Huaian, Xuzhou	Yancheng
	Low (<10)				Lianyungang	Suqian

tourism market and support the operation and development of scenic spots^[20]. Through two-dimensional matrix analysis, a two-dimensional matrix of permanent residents and tourism revenue is obtained (see Table 3).

Nanjing and Suzhou’s population and tourism revenue have reached the best match and belong to the double high area; Nanjing and Suzhou have the top two permanent residents in the province in 2019, and they have huge development space and potential; The population and tourism income of Lianyungang and Huai’an have also reached the same level, and the population and tourism revenue are both low; Wuxi’s population abundance is medium, but tourism revenue is high, and it belongs to a matching positive dislocation area, thanks to Wuxi’s good geographical location and rich tourism resources; Xuzhou is densely populated, but its tourism income is low, which is a matching negative dislocation area; Nantong has a high population abundance, but the tourism revenue is also low, which belongs to the matching negative dislocation

area; Yangzhou and Changzhou have low permanent population abundance, but tourism revenue is in the Medium, and the two are matched positive dislocation areas; Taizhou and Suqian have low population abundance indexes, and tourism revenue is at a low level, which belong to matching negative dislocation areas; finally, Zhenjiang is not densely populated, but tourism revenue is at a medium level. It belongs to positive and wrong matching.

3.3.3 Analysis on the Spatial Misalignment of Economic Development and Tourism Revenue

GDP per capita can measure people’s lives and is also an important cornerstone of tourism development. The two-dimensional matrix model of economic development and tourism revenue is obtained through the combination of two-dimensional matrix (see Table 4).

The economic development and tourism revenue of Nanjing, Suzhou and Wuxi are at a high level, and the

two have reached the best match. The per capita GDP of these three cities is also the top three in Jiangsu Province, and the level of economic development is high, thus to a large extent promoting the development of tourism; Suqian's economic development and tourism revenue are both low, and it is in a double-low area; Huai'an and Xuzhou's economic development and tourism revenue are both low, and the two have reached a match; in addition, The economic development level of Changzhou and Zhenjiang has reached a relatively high level, but the tourism revenue is at a medium level, which is a matching negative dislocation area; the economic development level of Nantong, Yangzhou, and Taizhou is above the medium level, but the tourism revenue level is low, which belongs to the matching negative dislocation zone; Yancheng's economic development and tourism revenue are also in a negative dislocation zone; finally, Lianyungang's economic development level is low, but it has low tourism revenue, which is a positive dislocation of matching. Therefore, there is a great correlation between the level of economic development and tourism revenue.

3.3.4 Analysis of the Spatial Misalignment of Tourist Number and Tourist revenue

The number of tourists reflects the attractiveness of regional tourism and is a direct prerequisite for bringing tourism revenue. Table 5 shows the two-dimensional matrix of the number of tourists and tourism revenue.

It can be seen that the number of tourists and tourism revenue in the 10 places of Suzhou, Nanjing, Zhenjiang, Yangzhou, Changzhou, Lianyungang, Nantong, Suqian, Taizhou and Yancheng have reached synchronization and coordination. Nanjing and Suzhou are in the double high

districts, thanks to the good economic development and the endowment of resources, and the number of tourists in 2019 is the top two in the province; Zhenjiang, Yangzhou and Changzhou belong to the middle-range areas that match the two, and Suqian, Taizhou and Yancheng are in the double low zone. The number of tourists in Wuxi is relatively high and the level of tourism revenue is high, both of which belong to the positive dislocation zone; the number of tourists in Xuzhou is medium, but the level of tourism revenue is low, which is a negative dislocation zone; the number of tourists in Huaian is low, but the level of tourism revenue is low, which is the positive dislocation area. It can be seen that the number of tourists in general may be positively correlated with tourism revenue, but after comprehensive consideration of other factors, the mechanism of action will change.

4. Conclusions and Suggestions

4.1 Conclusions

From the analysis of the gravity model, it is concluded that the population center of gravity and the center of tourism resources of Jiangsu Province are both in Yangzhou City, and the center of population and resources are relatively close; the center of tourist population and tourism revenue are located in Zhenjiang City; the center of economic center is located in Changzhou City. And the distribution of the five centers of gravity is biased towards the southern part of Jiangsu Province. The population center, the center of resources, the center of population, and the center of economic center and tourism revenue all have obvious spatial dislocation.

From the analysis of the two-dimensional combina-

Table 5. Two-dimensional combination matrix of tourist numbers and tourist revenue

		Tourism revenue Index				
		High (>65)	Higher (45-65)	Medium (25-45)	Lower (5-25)	Low (<5)
Tourist Attendance Index	High (>70)	Suzhou, Nanjing				
	Higher (50-70)	Wuxi				
	Medium (30-50)	Zhenjiang, Yangzhou, Changzhou				
	Lower (10-30)	Lianyungang, Nantong				
	Low (<10)	Huaian				
		Suqian, Taizhou, Yancheng				

tion matrix, in the combination of tourism resources and tourism revenue, the synchronization areas of the two are mainly in Wuxi, Suzhou, Yangzhou, Huai'an and Lianyungang, and the double high area is in the southern area of Jiangsu (Wuxi, Suzhou), and the middle area is in central Jiangsu (Yangzhou), and the double lower area is in northern Jiangsu (Huai'an, Lianyungang); the positive dislocation area has only three southern Jiangsu cities, Nanjing, Changzhou and Zhenjiang; the rest are negative dislocation areas, distributed in Suzhonghe Northern Jiangsu. In the spatial combination of resident population and tourism revenue, the synchronization area of the two is reflected in the four places of Nanjing, Suzhou, Lianyungang and Huai'an. Among them, the double high area is located in southern Jiangsu (Nanjing, Suzhou), and the lower double area is located in northern Jiangsu (Lianyungang, Huai'an), most of the positive dislocation areas are distributed in southern Jiangsu, while the negative dislocation areas are distributed in central Jiangsu and northern Jiangsu. In the combination of economic development and tourism revenue, the synchronization areas of the two are mainly in southern Jiangsu (Nanjing, Suzhou, Wuxi) and northern Jiangsu (Huai'an, Xuzhou, Suqian), a total of 6 cities, the positive dislocation area is only Lianyungang, the remaining 6 cities are all negative dislocation areas, distributed in southern Jiangsu, central Jiangsu and northern Jiangsu. Finally, in the spatial combination of the number of tourists and tourism revenue, Synchronous coordination accounted for the majority, a total of 10 cities, concentrated in Southern Jiangsu and Northern Jiangsu; there are 2 positive dislocation areas, and only Xuzhou is the negative dislocation area.

In summary, the four spatial combinations of Nanjing, Wuxi and Suzhou are all coordinated or positively dislocated. The tourism industry is developing well and resources can be fully and effectively utilized. Two spatial combinations in Yangzhou are in the medium zone, and the other two combinations are in the negative dislocation zone; Changzhou is mostly in the negative dislocation area; Zhenjiang's four spatial combinations are involved in the positive and negative dislocation areas; the central Jiangsu cities Nantong and Taizhou are mostly negative dislocation areas; The tourism development trend of the five cities in northern Jiangsu is not very good, and most of them are negative dislocation areas. Therefore, in view of the different spatial dislocation combinations of different cities, it is necessary to put forward countermeasures and suggestions to help coordinate the development of tourism in various cities, promote the rational use of resources, increase tourism brand awareness, narrow the gap between cities, and work

together to improve tourism in Jiangsu Province High-quality development of the industry.

4.2 Suggestions

Based on the analysis of the above results and conclusions, three regions of Southern Jiangsu, Central Jiangsu, and Northern Jiangsu are divided into three areas to propose countermeasures for spatial dislocation.

The southern Jiangsu region (Nanjing, Wuxi, Changzhou, Suzhou and Zhenjiang) is a region with a relatively high level of economic development in Jiangsu Province, with convenient transportation, high per capita GDP, high disposable revenue of residents, and relatively high level of consumption. The tourism industry in Nanjing, Wuxi and Suzhou should continue to maintain a good momentum, make full use of their own advantages, innovate, develop creative tourism projects, strengthen integrated marketing, and at the same time radiate their own value to the neighboring cities- Zhenjiang and Changzhou, driving the development of two places. Zhenjiang and Changzhou do not have many tourism resources, but they are showing good trends in terms of number of tourists and revenue. Therefore, these two cities must play a role in promoting the tourism activities of the local permanent population on the one hand, and on the other hand, the management of tourist attractions should be more precise and linked, accurately locate the target group, and create a linked boutique route. At the same time it is very important to make good use of the resources of surrounding cities.

The three regions of Central Jiangsu (Yangzhou, Taizhou and Nantong) have their own advantages in the development of tourism. Yangzhou's resources and revenue are relatively matched, and 3A-level scenic spots account for the proportion, but economic development and tourism performance are not balanced, so it can give full play to its own advantages, strengthen the tourism promotion of local people, create distinctive tourism resources, and form a unique tourism brand; Taizhou and Nantong, where most of the combinations are negative dislocation areas, should increase the promotion of tourism resources and organize innovative tourism activities to enhance tourist attraction.

The development of tourism in northern Jiangsu (Huai'an, Lianyungang, Yancheng, Xuzhou and Suqian) is restricted by many factors. The level of economic development is relatively backward, the geographical position is not good, the transportation is not convenient, the tourism reputation is low, and the attraction of resources is slightly less, so tourism revenue is also affected. Therefore, the most important thing is that each

region should identify its own tourism development model, form a clear positioning, and achieve a balance between all walks of life. Most of the five places in northern Jiangsu have memories of the Red Revolution and a strong traditional cultural atmosphere. 2021 will be the 100th anniversary of the founding of the Communist Party of China. Red tourist attractions can rationally and scientifically plan tourism activities, make overall arrangements, and enhance the attractiveness of resources. The per capita GDP of northern Jiangsu is relatively low, so the consumption level of residents is slightly lower. The local permanent population may have a weaker willingness to travel. Therefore, improving the local economy and driving the development of the tourism industry is the primary task; secondly, the government and tourism enterprises should focus on analyzing tourist crowds and strengthen the marketing of tourist sources. In addition, the railway construction in the northern part of Jiangsu Province is becoming more and more perfect. Many lines will directly connect to the southern part of Jiangsu in the future. Therefore, the tourist accessibility of northern Jiangsu cities will be significantly improved, and the development of tourism economy is just around the corner.

In summary, the development of tourism economy in Jiangsu Province is affected by many internal and external factors, not only the factors mentioned in this article, but the mechanism of action between factors that can promote the evolution of the spatial pattern of the tourism industry. The phenomenon of spatial dislocation needs to be improved and optimized for a long time. There are more influencing factors that deserve to be discussed in the future, and we are committed to enriching the theory and practice of spatial dislocation. At the same time, this article has certain limitations. It has not studied the long-term trend of the spatial dislocation of tourism economy in Jiangsu Province, and only selected the data of 2019 for research. It is worth studying to observe the trend of spatial dislocation through long-term data.

References

- [1] Rong-hua, J., Jiu-he Z. Research on the Influence Factors of Domestic Tourism Revenue Based on Gray Relational Analysis[J]. *Commerical Research*, 2010(08): 203-206.
- [2] Hongmei, D., Jingbo, Z. Relationship between the abundances of tourism resources and the development of tourism industry in China[J]. *Journal of Arid Land Resources and Environment*, 2011, 25(02): 173-177.
- [3] Huili,Y., Hao X. An analysis on the co-integration and causality relationship between tourism income and Gross Domestic Product (GDP) of China[J]. *Journal of Huazhong Normal University (Natural Sciences)*, 2014, 48(01): 136-141.
- [4] Kain j f. Housing segregation, negro employment, and metropolitan decentralization[J]. *Quarterly Journal of Economics*, 1968, 82(2): 175-197.
- [5] Xing-xing,P., Shuang-yu X., Wan-shuang X. An analysis on Spatial Mismatch of Tourism Development in Shanxi Province[J]. *Geography and Geo-Information Science*, 2014, 30(02): 102-106.
- [6] Zhilin,L., Maojun,W., Yanwei C. Spatial mismatch theory: A review on empirical research and methodology[J]. *Human geography*, 2010, 25(01): 1-6.
- [7] Zutao D., Yimei Y. An Analysis of the Spatial Mismatch of Tourism Resources, Location and Inbound Tourism Revenue in China[J]. *Tourism Science*, 2009, 23(03): 6-10.
- [8] Gang-min W., Lin-na C. Analysis on the Spatial Mismatch of Tourism Services, Traffic Location and Tourism Economy in China[J]. *Geography and Geo-Information Science*, 2014, 30(04): 90-94.
- [9] Qian R., Jing H.,Xiaojuan C., et al. A study on the evolution of the spatial mismatch of inbound tourism flows, scenic spots and star hotels in Zhejiang Province[J]. *Journal of Huazhong Normal University (Natural Sciences)*, 2016, 50(01): 151-157.
- [10] Qin'an W., Shuang G., Qiao W. Spatial Combination Analysis of Tourism Performance and Its Influencing Factors in Anhui Province Based on the Dislocation Theory[J]. *Areal Research and Development*, 2019, 38(06): 91-96.
- [11] Yuquan T., Ruiling J. Spatial Mismatch Analysis of City Tourism in Jiangsu Province[J]. *Journal of Nanjing Institute of Technology(Social Science Edition)*, 2017, 17(02): 36-41.
- [12] Min L., Furong Z., Zhihan X. Analysis of Spatial Dislocation of Class A Tourist Spots and Tourism Income in Shanxi Province[J]. *Areal Research and Development*, 2020, 39(02): 82-87+93.
- [13] Xian-hong B. Analysis on the Intercity Difference and Abundance of Urban Tourism Resources in the Yangtze River Delta[J]. *Jiangsu Business*, 2006(01): 109-112.
- [14] Biao L. Analysis on the Dynamic Evolution and Mechanism of Spatial Dislocation of China's Tourism Economy[J]. *Management World*, 2018, 34(05): 172-173.
- [15] Chuang-xin L., Yao-feng M., You-yin Z., et al. An analysis of space- time dynamic evolution and dislocation of inbound tourism based on typical cities-with the gravity model as an empirical research[J]. *Eco-*

- conomic geography, 2010, 30(08): 1372-1377.
- [16] Zong-xian F., Jian-shan H. Empirical Application of Research Methods of Focus in the Evolution and Characteristics of China's Industry and Economic Space[J]. *Social scientist*, 2005(02): 77-80+83.
- [17] Mei-hong W., Gen-nian S., Guo-dong K. The Spatial Mismatch and Combination Matrix Analysis of Natural Capital, Human Capital and Economy Capital in China[J]. *Soft Science*, 2008(08): 1-5+10.
- [18] Zhi-xi T., Gen-nian S. The basis of high-quality development of tourism: an analysis of the gospel theory of tourism resources[J]. *Social scientist*, 2019(05): 108-115.
- [19] Hao L., Run F. On the economic nature of tourist attractions, tourist products, tourist resources and some related concepts[J]. *Tourism tribune*, 2019, 34(11): 116-123.
- [20] Min L., Wei H. Spatial distribution and its influencing factors of national A-level tourist attractions in Shanxi Province[J]. *Acta Geographica Sinica*, 2020, 75(04): 878-888.