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Analysis of Factors Affecting Voluntourism Network Attention in China: An empirical Test Based on Big Data Analysis

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Abstract: - Based on the Baidu index platform, this study takes panel data of 31 provinces, autonomous regions and municipality directly under the central government in China from 2019 to 2023 as a research sample, and and uses big data to empirically analyze the influencing factors of the Voluntourism Network Attention in China. This study chose the Voluntourism Network Attention as the explanatory variable, the seven indicators including the consumption level of the residents, the population above the college and the total tourism revenue of the region as explained variables. Using the STATA15.0 software, the big data model is determined by a descriptive test, a unit root test, a co-integration test, a variance expansion factor (VIF) test, etc. The regression equation of this study was constructed by the generalized least squares method. The empirical study is conducted to determine the influence mode and degree of each factor on the public interest tourism network attention and analyzes the internal causes. The results show that the educational level of the region, the level of economic development and the level of tourism development have a significant positive impact on the Voluntourism Network Attention, and the regression coefficient of the education level and economic development level is the largest. Both of them are the main factors of network the Voluntourism Network Attention. In view of the empirical results, this paper puts forward the following suggestions: First, it is necessary to create more voluntourism routes suitable for college students. Second, it is essential to increase the marketing and promotion of voluntourism activities in economic and tourism developed areas.Last, there is a need to innovate the connotation and form of the voluntourism.

Keywords: Voluntourism, Baidu Index, Big Data, Influencing Factors, China.

I. INTRODUCTION

In the rapidly developing landscape of digital information and technology, big data has become a key force in reshaping our understanding of and participation in various social phenomena, including volunteering. The volume, variety and velocity of data generated in today's digital age provide unprecedented opportunities to glean insights into complex behaviors and trends. By harnessing the power of big data analytics, this study aims to analyze the influencing factors that influence attention to volunteering networks in China.

Voluntourism is a new type of tourism that combines volunteering and tourism. It is the product of the organic combination of international volunteer activities and world tourism [1]. Voluntourism originated in the West at the earliest and is a pilgrimage religious tourism with postmodernism. The modern sense of voluntourism began in the 1970s. Many tourists began to abandon the Ford consumerism with the sole purpose of consumption, and instead pursued the non-mass tourism consumption form that paid attention to personal experience. New tourism concepts such as service and self-service backpacks have been integrated into tourism activities, enabling the rapid development of voluntourism [2]. Since the unpaid volunteer services provided to local communities in voluntourism are in line with the concept of public welfare and charity in Western countries, since the 1990s, voluntourism has received positive responses and strong support in Western developed countries, and has achieved great success. Rapid development has now become one of the important tourism activities in many countries around the world.

According to the 52nd "Statistical Report on China's Internet Development" released by China Internet Network (CNNIC), as of June 2023, the number of Internet users in China has reached 1.079 billion, and the Internet penetration rate has reached 76.4%. The number of Internet users has increased compared with 2022 11.09 million people. With the rapid development of China's Internet technology, mobile communication technology and wireless local area network technology have been continuously improved, the public is no longer limited to traditional media channels to understand tourism information, but can use emerging network means to obtain the latest tourism information. Travel to provide the necessary basis for decision-making. Under the background of the country's vigorous development of "Internet + tourism", voluntourism and Internet technology have moved towards a deep integration, heading for the fast lane of rapid development. Relevant surveys and studies show that 80.1% of domestic tourists obtain destination tourism information through the Internet [3], and

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the content and frequency of searches can truly reflect tourists' attention to tourism destinations. Therefore, to explore and analyze the influencing factors of public interest tourism network attention is of great significance for enterprises and researchers to use emerging Internet technologies to tap potential customers of voluntourism and expand tourism marketing.

II. LITERATURE REVIEW

Voluntourism is a modern tourism activity that deeply combines "tourism vacation" with "public welfare activities"[4]. It is a kind of public welfare activities undertaken by tourists in the process of vacation, including providing poverty alleviation services to disadvantaged groups in need, protect the natural environment, and conduct related research on the environment. As a form of non-mass tourism, voluntourism began to rise in Europe and the United States in the 1970s and flourished in the 1990s[6]. The research on voluntourism at home and abroad is mainly carried out from the fields of tourism, sociology, anthropology, psychology, ethics, etc., usually using literature research method, comparison method, experimental method, empirical research method and other research methods to study the impact of voluntourism. Definition, characteristics, significance and development, etc. to carry out relevant research. From the point of view of definition, some scholars have analyzed the voluntourism from the aspects of "travel purpose of public welfare tourists"[7,8,9], "tourism and public welfare behavior of tourists"[10,11], and "social benefits of tourism activities"[12,13], etc. A generalization of the concept; starting from the characteristics of tourism, some scholars have further improved the characteristics of voluntourism from the aspects of "public welfare and tourism"[14,15,16], "altruism and self-interest"[17] and "personal development and social development"[18,19]. into the discussion. In terms of tourism significance, scholars have carried out further research on the development of voluntourism from the individual level, community level and national level; in terms of voluntourism development, scholars have put forward the "lack of star appeal" through data investigation and empirical research[20], "Lack of state support"[21], "lack of organizational discipline and industry norms"[22] and "lack of development opportunities"[23] have become bottlenecks in the development of voluntourism, and by learning from foreign excellent practices, from "tourism publicity"[24,25], "Improve the tourism information system"[26], "strengthen management"[27] and "launch characteristic tourism products"[28] and other suggestions to promote the development of voluntourism.

Internet attention refers to the data records retrieved based on Internet big data, and is an important reference indicator for understanding the degree of tourists' attention to tourism content. In recent years, more and more experts and scholars have carried out research on Internet information and the content of tourists' online attention behaviors. Baidu Search is a comprehensive online search engine with the highest number of users and user penetration rate in China. Baidu Index is a data analysis platform provided by Baidu Search that reflects the value and changing trend of netizens' keyword search index. As an objective reflection of the frequency and frequency of users' searches for specific keywords, Baidu Index is widely used in the research of tourists' online attention. Although the relevant data of Baidu Index may be partially deviated due to the problems of retrieval sampling and approximation algorithm, the trend and trend results obtained still have their scientific basis support. At present, domestic research on Internet attention mainly focuses on the following two aspects: First, it focuses on the research on the relationship between Internet attention and tourist flow. For example, Wang et al. made relevant predictions on the flow of tourists in scenic spots through the study of the Baidu Index of 5A scenic spots on the Internet [30]. Fu et al. used the Baidu index of tourist searches in Sichuan Province to verify the correlation between tourist traffic and online attention [31]. Ma et al. constructed a spatiotemporal model of passenger flow and Internet attention by analyzing the passenger flow and Internet attention data of hot cities in China [32]; The second is to study the spatial and temporal characteristics and influencing factors of online attention of tourist destinations. For example, Zhang et al. analyzed the spatiotemporal characteristics of online attention in the ancient city of Pingyao, and explored the factors that affect the online attention of tourist sources [33]. Xuan et al. conducted a study on the characteristics of vacation network attention in West Lake Scenic Area based on Baidu Index [34]. He et al. explored the influencing factors by analyzing the spatial and temporal distribution characteristics of tourists' online attention in Kanas, Xinjiang [35]. Li explored the spatial differences and influencing factors of China's tourism safety network attention by using the research method of geographic detectors [36].

Voluntourism network attention, as a branch of tourism network attention research, is a quantitative index of public interest tourism information. Domestic scholars' research on voluntourism network attention is still in its infancy. Only a few experts and scholars have carried out research in this field, and the published research results are mainly concentrated within one year. Although some scholars have used Baidu Index to study the temporal

and spatial characteristics of voluntourism and its influencing factors, there is still a lot of room for exploration in terms of the selection of influencing indicators and the analysis of network data. In terms of research methods, most scholars use time-series data or cross-sectional data for quantitative analysis, and there are very few panel data analysis applications. This paper conducts a quantitative empirical analysis on the panel data of 31 provinces, autonomous regions, and municipalities directly under the Central Government in China (excluding Taiwan, Hong Kong and Macau Special Administrative Regions) on the online attention of philanthropy tourism in the past five years, and further explores the factors that affect the online attention of philanthropy tourism. In order to provide the necessary empirical basis for China's voluntourism Internet marketing decision-making.

III.   EMPIRICAL DESIGN

A. *Variable Design and Data Sources*

The research takes 31 provinces, autonomous regions and municipalities directly under the Central Government in China as the research object, using "voluntourism" as the keyword in the Baidu index, and retrieving the search index from January 1, 2019 to December 31, 2023 as the research sample. The panel data provides data support for the study of the influencing factors of China's voluntourism network security. According to existing research, online attention is an intuitive reflection of tourists' travel needs[32], and it is generally affected by factors such as the level of economic development, the degree of Internet development, and the population size of the source of tourists[33,37,38] Therefore, this study comprehensively considers the completeness of the data and the difficulty of acquisition, and selects the level of economic development, the level of network development, the demographic characteristics of the society, and the level of tourism development as the main factors that may affect the public interest tourism network. The specific indicators are shown in the Table 1:

Table 1: Influencing Factors and Indicators of Voluntourism Network Attention

Variable	Detection Category	Influencing Factor		Detection Factor
Explanatory variables	Regional economic development level	Regional GDP per capita		v1
		Consumption level of local residents		v2
	The level of network development	Internet penetration		v3
		The number of people using the Internet		v4
	sociodemographic characteristics	Age structure	15-64 years old	v5
		Education level	Population with college degree or above	v6
	Tourism development level	local tourism revenue		v7
Explained variable	Voluntourism network attention	"Public Tourism" Baidu Index User Attention Index		gyly

Explanatory variables: (1) Socio-demographic characteristics. It mainly includes age structure and educational level. According to the existing literature, it is pointed out that college students are the backbone of the development of public welfare undertakings in China [39,40,41] Therefore, the population with a college degree or above is selected as the indicator of education level, and the age group of 15-64 is used as the indicator of age structure. It is expected that these two indicators will have a significant impact on the attention of voluntourism network security, and further verification will be carried out. It affects direction and intensity. Socio-demographic data come from "China Unified Yearbook".

(2) The level of regional economic development. Some scholars have found that 35 the per capita GDP and residents' consumption level of tourist source places are the main influencing factors of the spatial distribution of online attention. The higher the individual's spiritual pursuit will be, the greater the possibility of paying attention to and participating in voluntourism. Therefore, this study selects regional per capita GDP and regional residents' consumption level as the measurement indicators reflecting the development of regional economic level, and expects that these two indicators have a significant positive impact on voluntourism network security concerns.

(3) Internet development level. Voluntourism network security concern is based on the data information collected on the basis of tourists' online search for voluntourism keywords, and the basis of Internet retrieval behavior is the level of Internet development. Zou pointed out that the level of Internet development is an important factor affecting the degree of network attention [37]. This study selects the Internet penetration rate and the total number of netizens as the measurement standards of the Internet development level, and expects to verify that they have a significant positive correlation with the voluntourism network security.

(4) Regional tourism development level. As an emerging form of voluntary tourism, voluntourism takes tourism as a platform and voluntary activities as the core, bringing tourists a new tourism experience. The essence

of voluntourism is a kind of tourism activity, so it is closely related to the level of tourism development in the region. The higher the level of regional tourism, the stronger the residents' willingness to travel, and the more people who pay attention to and search for voluntourism online. Therefore, this study selects the total regional tourism revenue as an indicator to measure the level of regional tourism development, and verifies its correlation with voluntourism network security through data monitoring.

Explained variable: The explained variable is the public interest tourism network attention of 31 provinces, autonomous regions and municipalities directly under the Central Government in China. Specifically, the Baidu Index user attention in each region searched with the keyword "voluntourism" is used as the voluntourism network attention index data. Baidu Index is a data analysis platform provided by Baidu Search that reflects the value and changing trend of netizens' keyword search index. By objectively counting the frequency and number of users' searches for specific keywords, it objectively reflects users' online attention to keywords.

B. Sample Data and Data Processing

The data statistics in this study were from 2019 to 2023, the data analysis software was STATA15.0 statistical software, and the original data were sourced from the China Statistical Yearbook, the official websites of the provincial departments of culture and tourism, the provincial tourism administration websites, Baidu Index Platform, etc. In order to eliminate the impact of population sampling comparison data, since the population sampling ratio in 2019 and 2020 was both 0.8%, this study processed the population data from 2021 to 2023 separately, and calculated uniformly according to the sampling ratio of 0.82%. At the same time, in order to eliminate the scale effect and reduce the heteroscedasticity, the data of all variables were logarithmized, and the index whose data was 0 was processed by 1. In order to ensure the accuracy of data testing, this study now conducts descriptive statistics on all variables from 2019 to 2023. The statistical results are shown in Table 2. Quantity Section

Table 2: Descriptive Statistics of Variables

Variable	Mean	Median	Maximum	Minimum	Standard Deviation	Observation	section
lngyly	5.601589	5.993961	8.607947	0	1.924207	155	31
lnv1	10.80902	10.69982	11.767	10.04979	0.4014256	155	31
lnv2	9.789398	9.707655	10.88962	8.744328	0.4022117	155	31
lnv3	-0.6964182	-0.7113112	-0.2484614	-1.120858	0.2109268	155	31
lnv4	7.52255	7.595387	9.558198	4.744932	0.8970372	155	31
lnv5	9.926417	10.05857	11.14419	7.513709	0.8357244	155	31
lnv6	8.071246	10.05857	9.38118	4.007333	0.9550556	155	31
lnv7	7.833979	8.140316	9.392078	4.844187	1.069854	155	31

From the descriptive analysis results in the above table, it can be seen that all data have no extreme data, and the dimension gap of the data is within an acceptable range.

C.   Model Design

$$\ln gylyit = \alpha + \beta1 \ln v1it + \beta2 \ln v2it + \beta3 \ln v3it + \beta4 \ln v4it + \beta5 \ln v5it + \beta6 \ln v6it + \beta7 \ln v7it + \mu i + \varepsilon it \qquad (1)$$

Among them, lngylyit is the value of the explanatory variable in province i and t period, lnv1it is the value of the explanatory variable in province i and t period, i represents different provinces, municipalities and autonomous regions; t represents time (2019-2023); α is Constant term; β represents the parameter to be estimated, ui represents an unobservable random variable in each province, εit represents the disturbance term that changes with the province and the time plane, and (ui+uit) constitutes a "compound disturbance term".

D.   Empirical Test

1) Unit root test: For panel data, in order to avoid false regression, the stationarity of the data will play a crucial role in the construction of the model. The unit root test is an important method to judge whether the data is stationary. In order to avoid the bias caused by a single test method and ensure the accuracy and rigor of the data, this study uses LLC and PP-Fisher test two test methods to test the unit root of the data to judge the stationarity of the data series. The test results are shown in Table 3:

Table 3: Unit Root Test Results

variable	Testing method	LLC	PP	test result
lngyly	Statistics	-4.7564	66.2187	stable
	P value	0.0000	0.0000	
lnv1	Statistics	-3.7571	25.8012	stable
	P value	0.0001	0.0000	
lnv2	Statistics	5.4263	52.9558	stable
	P value	0.0000	0.0000	
lnv3	Statistics	-8.9936	6.2726	stable
	P value	0.0000	0.0000	
lnv4	Statistics	-33.2264	28.0230	stable
	P value	0.0000	0.0000	
lnv5	Statistics	-6.5829	63.3545	stable
	P value	0.0000	0.0000	
lnv6	Statistics	8.9849	33.4907	stable
	P value	0.0001	0.0000	
lnv7	Statistics	-8.2390	96.3960	stable
	P value	0.0000	0.0000	

It can be seen from the above table that the p-value of the detection factor significantly rejects the null hypothesis of the unit root at the 1% confidence level, so the first-order difference data of the detection variable in this study has no unit root and has stationarity.

2)Cointegration test: Cointegration test is to analyze the existing first-order single integral variables uniformly, and by linearly combining the variables to eliminate the random trend of the data, obtain its long-term linkage trend, and determine whether there is a long-term stable relationship, so as to construct a reasonable model. Cointegration test of panel data generally adopts homogeneous panel cointegration test and heterogeneous panel cointegration test, the homogeneous panel generally adopts Kao cointegration test, and heterogeneous panel usually adopts Pedroni cointegration test. Since the data in this study belong to the former, the Kao test was used to detect the cointegration test of the factors. The test results are shown in Table 4:

Table 4: Kao Test Results

	Statistic	p-value
Modified Dickey-Fuller t	0.1127	0.4552
Dickey-Fuller t	-5.7550	0.0000
Augmented Dickey-Fuller t	-3.3994	0.0003
Unadjusted modified Dickey-Fuller t	-1.3702	0.0853
Unadjusted Dickey-Fuller t	-6.6915	0.0000

As can be seen from the above table, the p value of Augmented Dickey-Fuller is 0.0003, so the statistic significantly rejects the null hypothesis that there is no cointegration relationship between variables at the 95% confidence interval, indicating that there is a long-term stable relationship between the variables, that is, the seven detection factors have a long-term stable relationship with each other.

3)Regression analysis: The number of time series in this study is 5, which is less than the number of sections, which is 31, which is typical short panel data. In order to eliminate the heteroscedasticity phenomenon in short panel data, the generalized least squares method with cross-section weight was used for regression. Using Stata15.0 to regress the above model, the results are shown in Table 5:

Table 5: Model Regression Results

lngyly	Coef.	Ssd. Err	Z	P>|z|	[95% Conf. Interval]	
lnv1	-1.819034	0.7216297	-2.52	0.012	-3.233402	-0.4046655
lnv2	3.417716	0.8808231	3.88	0.000	1.691335	5.144098
lnv3	1.320764	0.9169408	1.44	0.150	-.4764068	3.117935
lnv4	-1.232106	0.4521275	-2.73	0.006	-2.11826	-0.3459526
lnv5	2.462867	0.6257976	3.94	0.000	1.236326	3.689407
lnv6	-0.1098554	0.3906473	-0.28	0.779	-0.87551	0.6557992
lnv7	0.3011407	0.1931994	1.56	0.119	-0.0775231	0.6798046
cons	-23.90902	7.301874	-3.27	0.001	-38.22043	-9.597614

From the results, most of the variables are significant at the 95% confidence level with the explained variables, but the regression coefficients of lnv1, lnv4 and lnv6 are negative, contrary to the existing theoretical expectations, it is preliminarily judged that the data model may have multicollinearity Therefore, the Variance Inflation Factor (VIF) test was used for factor test, and the results are shown in Table 6:

Table 6: VIF Test Results

Variable	VIF	1/VIF
lnv5	30.47	0.032819
lnv4	17.55	0.056972
lnv6	16.62	0.060158
lnv2	13.02	0.076824
lnv1	8.84	0.113088
lnv7	5.64	0.177285
lnv3	4.25	0.235497
Mean VIF	13.77	

From the results, Mean VIF=13.77>10, and VIF (lnv5, lnv4, lnv6, lnv2) are all greater than 10, indicating that the above model does have a multicollinearity problem. In order to solve the problem of multicollinearity, this study uses Stata15.0 to perform stepwise regression on each explanatory variable of the panel data, and removes the variables lnv1, lnv4, lnv3, and lnv5 through regression, and also adopts the generalized method for the remaining variables lnv2, lnv6, and lnv7. The least squares method is used for regression, and the results are shown in Table 7:

Table 7: Model Regression Results

lgyly	Coef.	Ssd. Err	Z	P>|z|	[95% Conf. Interval]	
lnv2	0.612724	0.3492957	1.75	0.079	-0.0718831	1.297331
lnv6	1.032289	0.175093	5.90	0.000	0.6891133	1.375465
lnv7	0.4100154	0.1682212	2.44	0.015	0.0803079	0.7397229
_cons	-11.91583	2.932731	-4.06	0.000	-17.66387	-6.16778

The regression equation obtained by the generalized least squares method is as follows:

$$\ln gyly_{it} = -11.91583 + 0.612724 v2_{it} + 1.032289 v6_{it} + 0.4100154 v7_{it} + \mu_i + \varepsilon_{it} \tag{2}$$

It can be seen from the figure that the p-value of the variable Lnv2 is significant at the 90% confidence level, and the variables Lnv6 and Lnv7 are significant at the 95% confidence level with the explained variable, 0.079, 0.000, and 0.015, respectively, rejecting the null hypothesis that the variables are not related before. , indicating that the regression equation is significant, that is, the various explanatory factors that make up the model jointly have a significant impact on the explained variable. The coefficients of the three explanatory variables are all positive, indicating that there is a positive correlation between the explanatory variables and the explained variables, that is, there is a significant trend of increase and decrease.

IV. CONCLUSIONS AND RECOMMENDATIONS

A. Conclusions

The regression coefficient of the population index with a college degree or above is 1.032289, which is the largest value, indicating that the more people with higher education, the higher the attention to the voluntourism network. The p value is 0 (p<0.01), indicating that the educational level has a very significant effect on the attention of the voluntourism network. This is because non-profit tourism, as a new type of personalized tourism model, developed in the early days through non-profit organizations that organized college students to use their vacation time to travel to different regions and participate in local public welfare social services during the travel process. By participating in voluntourism, college students can not only gain a sense of spiritual and emotional pleasure and achievement, but also enrich their self-connotation and reflect their self-worth. Therefore, this unique tourism method has been warmly welcomed by college students since its inception, and became a major participant in voluntourism, while spreading to tourists from other social classes.

The regression coefficient of the regional residents' consumption level index is 0.612724, and the value is only lower than the education level. The residents' consumption level is an important indicator of the regional economic development level, indicating that the regional economic development level is one of the main factors affecting the attention of the voluntourism network. At the same time, it is positive, indicating a positive correlation, that is, the more developed the regional economy, the higher the attention to the voluntourism network. The p value is 0.079 (p<0.1), indicating that the regional economic level has a significant impact on the attention of the voluntourism network. The reasons can be explained from two aspects: First, the higher the regional economic level, the more complete the network security in all aspects of infrastructure, such as Internet access equipment, the higher the penetration rate of Internet fixed-end and mobile-end facilities and equipment, and the use of the Internet. The more people there are, the higher the security of the voluntourism network will be. Second, the economic level of residents is an important constraint on their tourism decision-making. The higher the

consumption level of residents, the higher the intention of regional residents to participate in tourism activities. According to the hierarchy of needs theory proposed by Maslow, a famous humanistic psychologist, it is pointed out that for human beings, the pursuit of the spiritual level can only be put forward after the basic physiological needs are met. Therefore, the economic basis is the basic material basis of people. It has a certain positive impact on the spiritual needs of people's voluntourism activities.

The regression coefficient of each province's tourism income index is 0.175093, and the sign is positive, indicating a positive correlation, that is, the higher the regional tourism development level, the higher the network security of voluntourism. The p value is 0.015 (<0.05), indicating that the regional tourism development level has a very significant impact on the security of the voluntourism network. This is because voluntourism is a non-popular form of tourism that combines tourism and leisure activities with public welfare activities. It is essentially a tourism activity, so it is closely related to the level of regional tourism development. The more developed the tourism level of the region, the more times tourists participate in tourism activities, the higher the acceptance of new personalized tourism forms, and the higher the requirements for tourism connotation. People are no longer satisfied with the traditional way of traveling for physical relaxation, but instead pursue a more humane way of traveling that reflects their spiritual self-worth. Voluntourism adds the element of "public welfare" to the process of "tourism", so that participants can relax physically and mentally and enjoy the pleasure brought by "tourism", and at the same time, they can increase their knowledge through "public welfare activities", promote cultural exchanges, and reflect their individuality. The sense of achievement has become one of the best choices for tourists. Therefore, voluntourism has received more attention in areas with developed tourism.

B.Recommendations

Through empirical research, this research can conclude that the level of higher education (population above college), economic development level (resident consumption level) and tourism development level (tourism income) are three important factors that affect the attention of voluntourism network. The influence of the three factors on the voluntourism network attention is positively correlated, that is, the higher the level of higher education in the region, the more developed the economy, and the higher the level of tourism development, the higher the voluntourism network attention will be. Among the three factors, the level of higher education has the greatest and most significant impact on the voluntourism network security concern, followed by the level of economic development and regional tourism development. Based on the empirical research results, this paper puts forward the following suggestions:

First is to actively play the main role of college students' voluntourism, and create more voluntourism routes suitable for college students. From the point of view of the voluntourism route, the creation of tourist destinations can be more in line with the curiosity and exploration needs of college students, and select tourist destinations with niche and unique natural landscapes and human resources. From the design of tourism activities, we can pay more attention to cultural exchanges and the embodiment of self-worth, and enhance students' overall perception of socialist core values and sense of socialist ownership during participation. From the perspective of the choice of travel time, we can design public welfare travel routes that conform to the climate and humanistic characteristics according to the time and festivals of college students' winter and summer vacations.

The second is to increase the marketing and promotion of voluntourism activities in economically and tourism developed regions. Since there is a positive correlation between the level of regional economy and tourism development and the public interest tourism network attention, it is possible to use a combination of network marketing, word-of-mouth marketing, event marketing and experiential marketing in economically developed areas to carry out voluntourism promotion activities. The route design of voluntourism combines modern people's self-pursuit of spiritual value, and organically combines tourism leisure and public welfare services. This can prompt tourists to internalize and think deeply about their own value and social responsibility in specific and real social situations by participating in voluntourism.

The third is to innovate the connotation and form of voluntourism. As China's tourism industry gradually shifts from sightseeing tours to in-depth vacation tours and experience tours, the form and connotation of tourism have undergone rapid changes. Voluntourism should conform to the development trend of the times, seize the good opportunity for the development of "Internet + global tourism", combine with rural tourism, homestay tourism, ecotourism and other tourism forms, with tourism poverty alleviation as the main idea. Spread the public welfare cultural concept of "equality, mutual assistance and care", promote regional economic development, and form a new form of voluntourism development that integrates sightseeing, cultural exchanges, and public welfare poverty alleviation.

V. LIMITATION AND FUTURE DIRECTION

Since the research data of this study are panel data, some data such as the preference of non-profit tourism destinations, the number of tourists in non-profit tourism, the income of non-profit tourism, climate preference and other indicators are difficult to obtain. Therefore, many factors related to the network attention of non-profit tourism are not comprehensive. Considering that further research and analysis are needed. At the same time, the Baidu index data used in this study comes from the Baidu search behavior of netizens for keywords. The breadth of the data still has certain limitations, and it cannot specifically reflect the information and scale of user searches. Therefore, more sophisticated Internet technology will be needed in the future. Network security for data collation and analysis.

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