

Study on the Evaluation and Countermeasures of Guangdong Cultural Industry Competitiveness Based on Diamond Model

Ling Yang *1,2, Daibo Xiao 2, Wanling Hu 1

Guangzhou Xinhua University, Guangzhou 510000;
 City University of Macau, Macau 999078

*Corresponding author Email: 1533194703@gg.com

Abstract. As an advanced position in China's reform and opening up policy, Guangdong Province has been playing a leading role in the economic level. However, the competitiveness of cultural industry is slightly inferior and is in an important transition period. Based on the Porter Diamond model theory, the factors affecting the competitiveness of cultural enterprises are explored in this paper. Through collecting the data from 2017 to 2019 and conducting the factor analysis, the ranking of cultural competitiveness of provinces and cities in China can be obtained. The results show that: (1) Internal environment, external conditions and relevant policies and regulations play a crucial role in the competitiveness of cultural enterprises; (2) The comprehensive competitiveness of Guangdong's cultural industry ranks the fourth among the 31 provinces in China, indicating that Guangdong has the cultural competitiveness of sustainable competitive advantage, but there is still a large room for improvement; (3) The internal driving force of consumer demand in Guangdong Province is insufficient, and the government intervention should be continuously strengthened.

Keywords: Guangdong Cultural industry, Competitiveness, Chinese provinces, Factor Analysis.

1 Introduction

Guangdong is a major province in the country's cultural tourism industry. According to relevant statistics, it has 1 World cultural heritage and 7 national intangible cultural heritages. In terms of cultural relics protection, Guangdong has more than 100 national key cultural relics protection units, 755 provincial cultural relics protection units, and more than 5,000 cultural relics protection units at the city and county levels, ranking first in the country. From 2015 to 2019, according to the statistics of relevant departments, the added value of culture and related industries in Guangdong province reached 257.9 billion yuan, accounting for 5.01% of the province's GDP to 5.77%, and the added value of culture and related industries in Guangdong Province has ranked first in the country for 18 consecutive years.

© The Author(s) 2024

A. Rauf et al. (eds.), Proceedings of the 3rd International Conference on Management Science and Software Engineering (ICMSSE 2023), Atlantis Highlights in Engineering 20,

However, due to the fierce competition in the development of cultural industry, the lack of obvious advantages in cultural industry resources in Guangdong Province, the insufficiency of urban public service facilities and supporting facilities in some economically underdeveloped areas, the development of regional cultural industry in the province is unbalanced, and the core cultural industry is not prominent. In particular, the impact of the COVID-19 epidemic in the past three years has greatly affected the global economy, and the cultural industry in Guangdong Province is no exception. However, the cultural industry in the province is also actively exploring new forms and new business forms, such as cloud tour guide, cloud live broadcast, cloud exhibition, etc. In terms of new forms and new forms of business, the cultural industry also reflects its characteristics of strong industrial driving, low energy consumption per unit and large market potential, and the cultural tourism industry has become a new growth point of economic development. With epidemic prevention and control on a regular basis, Guangdong has seized the opportunity to deepen cooperation in the Guangdong-Hong Kong-Macao Greater Bay Area and focused on the transformation and upgrading of the cultural industry. Therefore, it is necessary to evaluate the competitiveness of cultural industry in Guangdong Province.

At present, due to the unclear definition of cultural industry and the lack of data statistics, the evaluation indicators of cultural industry are still under exploration. For the definition of cultural industry, British scholars tend to use the creative industry, while American researchers tend to use the content industry. Howkins (2001) divides Copyrights, patents, trademarks, and designs related to intellectual property into a series of terms^[14]. No matter how the cultural industry is defined, its importance has been emphasized over the decades. With the increasing demand of people to understand art, absorb creativity and enjoy cultural activities, cultural industry has gradually attracted people's attention and is regarded as an important force to promote regional development and even national economy^[15]. According to the Ministry of Tourism and Creative Economy (2010), the cultural industry is an emerging industry that strengthens creativity and information with creativity and knowledge reserve as its main factor^[17]. Some regions achieve urban renewal or development by promoting the cultural values of local historic districts, creating more public Spaces that combine cultural and commercial values, and holding different cultural activities to attract more cultural companies and tourists [10, 18, 19]. Therefore, the development of cultural industries can become a positive brand for a certain region. Even in some countries, they use "creative cities" as a standard to test whether a city's productivity can be improved by the cultural ideas and creations of people rather than machines^[20]. Moreover, cultural industry has industrial competitiveness which is different from other industries. The competitiveness of cultural industry is to obtain large output and profit with less input. Therefore, the need to continuously expand the market share of each market is necessary to configure a reasonable cultural product structure with limited resources^[12].

The research on the development of cultural industry has always been a hot topic abroad. Duxbury (2021), for example, reveals cultural and creative work in rural and remote areas through themes and tracks of multidisciplinary and international literature^[11]. Through his research on cultural dynamism, he found that these themes of the past decade have been discussing the role of policy and planning documents on cultural

and creative work, and that the rural creative class is closely related to rural innovation, the rural creative economy, and creative entrepreneurship in rural and remote areas, so he concluded that the themes of these discussions need to be integrated into a holistic approach. To promote cultural and creative work in rural and remote areas^[11]. The competitiveness of cultural industry can also be measured by the following five indicators:(1) the richness of cultural resources. It refers to a series of resources with humanistic value and traditional cultural value left over from the course of human activities. (2) Cultural environment level. The demand for public infrastructure will have a unique scale and cluster effect on the cultural industry, which can improve the market allocation efficiency of cultural resources^[13]. Different scholars have put forward different views on the influencing factors and related evaluation of the cultural industry. Previtali and Cerchiello (2018) illustrate that the complementarity between creative talent, agglomeration economy, and firms and industries determines the emergence of creative clusters in Toronto^[21]. Munizu et al. (2019) also believe that creative human resources are essential to promote the development of cultural industries^[16]. Wirvono et al. (2015) proved that government regulation of interest rate is related to the development of cultural industry, which shows that government plays an important role in the construction and maintenance of a healthy environment for cultural industry^[22]. Pourzakarva and Bahramjerdi (2019) also propose the key role of government policies and strategies in developing cultural industries^[18]. These papers reflect the clustering of artists or creators, the role of the government, and the industrial clusters of supporting resources related to the cultural industry, respectively, which can provide a basis for analyzing the indicators affecting the competitiveness of the cultural industry. However, the comprehensive model for the comprehensive description and analysis of the influencing factors of the cultural industry is rarely used.

Domestic research on the competitiveness of cultural industry started late. Guo Qing (2017) used grey relational method as an analysis tool to build a relevant evaluation model and demonstrate and analyze the competitiveness of China's cultural industry^[2]. Yang Xiaolin (2016) analyzed the cultural development status of different provinces and cities in China with factor analysis method, and concluded that there was a positive correlation between the comprehensive competitiveness of cultural industry and the level of regional economic development on the whole^[7]. Liu Yaobin et al. (2017) conducted an experimental study on the dynamic nonlinear relationship between the agglomeration effect of cultural industries and the efficiency of green economy by using systematic generalized moments based on the data of 30 provinces, cities and autonomous regions in China from 2000 to 2013^[4]. From the perspective of research model, Zheng Qiyang et al. (2017) studied the cultural industry competitiveness of 11 cities in the Yangtze River Delta region by using the modified VRIO model based on the data from 2012 to 2018^[9]. Song Ziru (2019) made a comprehensive analysis of the cultural industry competitiveness of 16 prefectures, cities and states in Hubei Province by using the Porter Diamond Model theory and taking scientific and technological innovation ability and government investment as opportunity factors and auxiliary factors respectively^[6]. From the perspective of research objects, Hu Shaomeng (2020) makes a quantitative analysis of 11 countries based on the diamond model and IMD evaluation system, and believes that the growth potential of China's economy lies in the upgrading of industrial structure, the improvement of urbanization level and the enhancement of consumption power^[3]. He also believes that China has obvious advantages in cultural resources and environment and has a large space for development. But there are some difficult issues that need to be resolved. Pang Linlin (2017) made an empirical analysis of the cultural industry competitiveness of 31 provinces and cities, pointed out the existing problems and advantages of Shaanxi Province, and finally proposed improvement measures^[5]. Zhang Tao (2013) built an evaluation model for the cultural industry competitiveness in the Beijing-Tianjin-Hebei region. By collecting and analyzing relevant materials and data of the cultural industry in various provinces and cities across the country, he gave appropriate suggestions on the development direction of the cultural industry in the region^[8]. Fang Ye (2020) made use of SWOT model and other analytical tools to analyze the development of the cultural industry in Jianggan District of Hangzhou, and analyzed and judged the development trend of the cultural competitiveness of Jianggan District^[1].

The above literature can be used for reference in the study of the cultural industry competitiveness, but the above-mentioned researches do not involve the cultural industry of Guangdong Province. Therefore, based on the above-mentioned literature and Porter's "diamond model", this paper constructs the index system of cultural competitiveness based on the reality, and then studies the cultural industry competitiveness of Guangdong Province.

2 Construction of cultural industry competitiveness evaluation index system

Based on the current situation and comprehensive factors of the development of the cultural industry in Guangdong Province, this paper proposes to establish a feasible, innovative and innovative evaluation index system of the cultural industry in Guangdong Province by referring to the relevant literature on the evaluation index system of industrial competitiveness and combining with the Porter Diamond model. The specific indicators are shown in Table 1. The index system specifically includes 5 first-level influencing factor indicators, 10 second-level indicators and 14 third-level specific indicators, such as production factors, demand factors, related industries and enterprise strength and government behavior.

Primary index	Secondary index	Three-level index			
Factor of production	Capital resources	The proportion of added value of culture and related industries in GDP (%) X1			
	Human resources	Employees of major cultural institutions (persons) X2			
	Cultural resources	Public library collection per capita (volumes) X3			
		Public library building area (10,000 people) X4			
	infrastructure	Mass cultural facilities construction area (10,000 peo-			
		ple) X5			

Table 1. The index system of cultural competitiveness constructed

Consumption demand Related industry	Consumption level	Per capita consumption expenditure on culture and entertainment (Yuan) X6		
	Economic basis	Per capita disposable income (Yuan) X7 Per capita GDP (Yuan) X8		
	Education industry	Average number of students in colleges and universities per 100,000 population (persons) X9		
	Information industry	Internet penetration rate (%) X10		
Enterprise strength	Enterprise scale	Number of cultural enterprises above designated size (number) X11		
		Total assets of cultural enterprises above designated size (ten thousand yuan) X12		
Government		Per capita cultural funding (Yuan) X13		
	Government input	The proportion of cultural funds in fiscal expenditures (%) X14		

The establishment of an empirical model of cultural industry competitiveness and the evaluation results of cultural industry competitiveness in all provinces

Based on the index system built by Porter's theoretical model, this paper constructs an empirical model of cultural industry competitiveness, and collects the above related index data of 31 provinces and cities in China. In particular, horizontal comparison is made on the above 14 indicators, and exploratory factor analysis is adopted to obtain the ranking of cultural industry competitiveness of each province and city. Then, it focuses on analyzing the position of Guangdong cultural industry in the development of China's cultural industry, the advantages in the development process and the places to be further improved. Factor analysis mainly studies the dependence relationship in the original variable correlation matrix. In the process of empirical operation, SPSS software is used for factor analysis, common factors are extracted and dimensionality is reduced to reflect a large amount of data information, and the comprehensive factor score is calculated and ranked.

3.1 Empirical model construction

Combined with previous studies and according to variables and data characteristics, the empirical model constructed in this paper is as follows:

$$X_{1} = a_{11}F_{1} + a_{12}F_{2} + a_{13}F_{3} + ... + a_{1k}F_{k} + \varepsilon_{1}$$

$$X_{2} = a_{21}F_{1} + a_{22}F_{2} + a_{23}F_{3} + ... + a_{2k}F_{k} + \varepsilon_{2}$$

$$X_{3} = a_{31}F_{1} + a_{32}F_{2} + a_{33}F_{3} + ... + a_{3k}F_{k} + \varepsilon_{3}$$
...
$$X_{p} = a_{p1}F_{1} + a_{p2}F_{2} + a_{p3}F_{3} + ... + a_{pk}F_{k} + \varepsilon_{p}$$
(1)

Where, X_1 , X_2 , X_3 X_P is the original variable, X_P is the original P variable, and both are standardized variables with a mean of 0 and a standard deviation of 1, $F_i(i=1,2,3,.....k)$ is a common factor, E is a special factor, $a_{ij}(i=1,2,3,.....p; j=1,2,3.....k)$ is called the factor load, that is, the load of the original variable i in the factor variable j, and the absolute value of a_{ij} is large. There is a strong correlation between the principal factor F_i and the original variable X_i , conversely, the absolute value of a_{ij} is small, indicating that the correlation between the principal factor F_i and the original variable X_i is weak. The matrix A composed of the coefficients of the common factors is the factor load matrix as follows:

$$A = \begin{bmatrix} a_{11}a_{12}...a_{1k} \\ a_{21}a_{22}...a_{2k} \\ ... \\ a_{p1}a_{p2}...a_{pk} \end{bmatrix}$$
 (2)

3.2 Model data source and standardization processing

The above empirical model X_1 , X_2 , X_3 X_P data are the tertiary indicators of the cultural industry competitiveness evaluation index system (see Table 1), which are derived from the 2017-2019 China Statistical Yearbook, the Statistical Yearbook of Culture and Related Industries 2017-2019, and the Statistical Yearbook of Chinese Cultural Relics (2017-2019).

Since different units of the model data will affect the accuracy of the analysis, it is necessary to carry out dimensionless processing of the data, and then use the standardized data for factor analysis.

3.3 KMO and Bartlett sphericity test

Before factor analysis, KMO test and Bartlett sphericity test need to be conducted first, the KMO value of the model is 0.754, indicating a relatively significant effect in factor analysis. Meanwhile, under the assumption that the significance level is 5%, the SPSS test results show Sig. The value is 0.000, which is less than the significance level of 0.005, negating the null hypothesis, indicating that the data has the characteristics of multivariate normal distribution and there is a certain correlation between variables, which is suitable for factor analysis.

3.4 Extraction of common factors and naming

This paper extracts common factors through principal component analysis, and the extracted common factor variance is shown in Table 2:

Common Factor	Initial Eigenvalue			Extraction Sums of Squared Loading			
	Total	Variance	Contribution rate (%)	Total	Variance	Contribution rate (%)	
F1	7.495	53.535	53.535	7.495	53.535	53.535	
F2	2.535	18.108	71.644	2.535	18.108	71.644	
F3	1.426	10.182	81.826	1.426	10.182	81.826	

Table 2.Total variance of interpretation

The feature roots of the first three principal components extracted are all greater than 1, which are 7.495, 2.535 and 1.426, respectively. Moreover, the cumulative variance contribution rate of the three principal components extracted is 81.826% (see Table 2), indicating that the first three principal components can retain more original information. Therefore, the first 3 are extracted as primary factors.

The factor load matrix after rotation is obtained through the maximum orthogonal rotation (see Table 3).

Index	Components					
	F1	F2	F3			
X1	0.637	0.230	0.596			
X2	-0.033	-0.195	0.817			
X3	0.709	0.539	0.011			
X4	0.363	0.765	-0.107			
X5	-0.072	0.894	0.209			
X6	0.904	0.268	0.162			
X7	0.876	0.333	0.292			
X8	0.839	0.364	0.332			
X9	0.861	-0.143	0.065			
X10	0.806	0.279	0.248			
X11	0.319	0.068	0.884			
X12	0.504	0.210	0.758			
X13	0.199	0.864	-0.153			
X14	0.301	0.711	0.116			

Table 3. Factor Loading Matrix After Rotation

According to the different content of the index and the load of each variable on the common factor (main factor), the special name of each common factor is as follows:

The first public factor F1 has a large bearing on X1 (the proportion of the added value of culture and related industries in GDP), X3 (the number of books held by public libraries per capita), X6 (the consumption expenditure on culture and entertainment per capita), X7 (the disposable income per capita), X8 (the GDP per capita), X9 (the average number of college students per 100,000 population) and X10 (the Internet penetration rate) It comprehensively reflects the income and expenditure and resources of the cultural industry, so F1 is named the consumer demand factor.

The second public factor F2 has a large load on the proportion of financial expenditure in X4 (public library construction area), X5 (mass cultural facilities construction area), X13 (per capita cultural expenses) and X14 (cultural expenses), which can indicate the government's financial investment in regional cultural industry resources and the degree of attention. Therefore, Name F2 the government input factor.

The third public factor F3 reflects the comprehensive strength, development content and scale of the cultural industry cluster in X2 (employees of major cultural institutions), X11 (the number of cultural enterprises above the scale of cultural funds per capita) and X12 (the total capital of cultural enterprises above the scale). Therefore, this factor F3 can be named as the industrial scale factor.

3.5 Evaluates common factor expressions and total expressions

In this paper, regression algorithm is adopted to obtain the component score coefficient matrix (Table 4), and then the common factor expression is written according to the coefficient matrix:

$$F1 = 0.058 ZX1 - 0.138 ZX2 + \dots - 0.051 ZX14$$

$$F2 = 0.0003 ZX1 - 0.035 ZX2 + \dots + 0.231 ZX14$$

$$F3 = 0.176 ZX1 + 0.399 ZX2 + \dots + 0.029 ZX14$$
(3)

Components Index F1 F2 F3 X1 0.230 0.637 0.596 X2 -0.033 -0.1950.817 X3 0.709 0.539 0.011 X4 0.363 0.765 -0.107X5 -0.0720.894 0.209 X6 0.904 0.268 0.162 X7 0.876 0.333 0.292 X8 0.839 0.364 0.332 X9 0.065 0.861 -0.143X10 0.806 0.279 0.248 X11 0.319 0.068 0.884

Table 4. Component Score Coefficient Matrix

At the same time, as the variance contribution rate of each common factor is different, this paper takes the variance contribution rate after orthogonal rotation as the weight of the common factor, and obtains the relationship between the comprehensive competitiveness of the cultural industry and each main factor and the calculation formula of influence degree as follows:

0.210

0.864

0.711

0.758

0.116

0.504

0.199

0.301

X12

X13

X14

$$F = (0.37256*F1+0.24861*F2+0.19709*F3) /0.81826$$
 (4)

Therefore, the influencing factors of cultural industry competitiveness include consumer demand (F1), government input (F2), and industrial scale (F3). Among them, the weight of consumer demand (F1) is the largest, which is 0.37256, indicating that it has the greatest impact on the competitiveness of the cultural industry, followed by the government input (F2), which has the greatest impact, with the weight of 0.24861, and

the industrial scale (F3), which has the least impact on the competitiveness of the cultural industry, with the weight of 0.19709.

3.6 Factor score

The comprehensive factor score F and ranking of each region are the evaluation results of cultural industry competitiveness of all provinces in China (Table 5).

Table 5. Cultural competitiveness evaluation factor score and ranking table

	F1		F2		F3		F	
District	Score	Ranking	Score	Ranking	Score	Ranking	Score	Ranking
Shanghai	2.79915	2	1.57125	3	-0.45685	20	1.64	1
Beijing	3.07802	1	-0.0219	14	0.62698	7	1.55	2
Zhejiang	-0.15977	16	2.11445	2	2.17348	2	1.09	3
Guangdong	0.32302	6	0.29871	9	2.45323	1	0.83	4
Jiangsu	0.27182	7	0.806	6	1.86486	3	0.82	5
Tianjin	1.82047	3	0.43266	8	-1.52235	31	0.59	6
Fujian	0.38417	5	0.24783	10	0.21796	10	0.3	7
Shandong	-0.13275	13	-0.5401	21	1.1136	5	0.04	8
Hubei	0.13825	9	-0.24283	15	0.00199	12	-0.01	9
Tibet	-2.09697	31	3.1806	1	-0.30702	18	-0.06	10
Inner Mongolia	-0.3156	21	0.78121	7	-0.76802	25	-0.09	11
Chongqing	0.13108	10	-0.32437	19	-0.22058	15	-0.09	12
Liaoning	0.58098	4	-0.57579	22	-0.82371	26	-0.11	13
Ningxia	-0.24517	19	0.85098	5	-1.18829	30	-0.14	14
Hunan	-0.1438	15	-0.81186	26	0.52794	8	-0.18	15
Shaanxi	0.19244	8	-0.96273	28	0.03494	11	-0.2	16
Shanxi	-0.44872	22	0.07947	12	-0.29131	17	-0.25	17
Jilin	0.11102	11	-0.24325	16	-1.06316	29	-0.28	18
Sichuan	-0.54977	24	-0.51089	20	0.5223	9	-0.28	19
Qinghai	-0.75154	29	1.02803	4	-1.04744	28	-0.28	20
Anhui	-0.544	23	-1.11536	30	0.94695	6	-0.36	21
Hainan	-0.13298	14	-0.29699	18	-0.89188	27	-0.37	22
Henan	-0.72804	27	-1.34434	31	1.49684	4	-0.38	23
Jiangxi	-0.13052	12	-0.95688	27	-0.1523	15	-0.39	24
Hebei	-0.21779	17	-1.06132	29	-0.01287	13	-0.42	25
Xinjiang	-0.63855	26	0.09542	11	-0.66419	23	-0.42	26
Yunnan	-0.73868	28	-0.27503	17	-0.23041	16	-0.48	27
Gansu	-0.79772	30	-0.01846	13	-0.48739	21	-0.49	28
Amur River	-0.25511	20	-0.69564	24	-0.75947	24	-0.51	29
Guangxi	-0.23871	18	-0.79932	25	-0.65113	22	-0.51	30
Guizhou	-0.56421	25	-0.68954	23	-0.4427	19	-0.57	31

According to the results of the comprehensive score, the comprehensive competitiveness of Guangdong's cultural industry ranks fourth among the 31 provinces in

China, which indicates that Guangdong has the cultural competitiveness of sustainable competitive advantages and has certain room for improvement.

4 Evaluation results and countermeasures of cultural industry competitiveness in Guangdong Province

According to the above empirical results, consumer demand (F1), government input (F2) and industrial scale (F3) are important influencing indicators of cultural industry competitiveness, among which industrial scale (F3) accounts for a relatively small proportion of comprehensive competitiveness. According to the calculation result score of F3 (named industrial scale factor) (FIG. 1), Guangdong Province ranks first. As the key indicators that affect the common factor F3 above are decomposed into the number of cultural enterprises above designated size X11, employees of major cultural institutions X2 and total assets of cultural enterprises above designated size X12, Therefore, the evaluation results show that the scale strength of Guangdong's cultural industry exceeds that of other provinces, and it has a greater advantage in cultural enterprise resources. If Guangdong Province needs to further promote the development of its cultural industry, it needs to promote the high-quality development of cultural enterprises on the basis of the existing industrial scale, build more high-quality enterprises, and continue to expand the industrial scale.

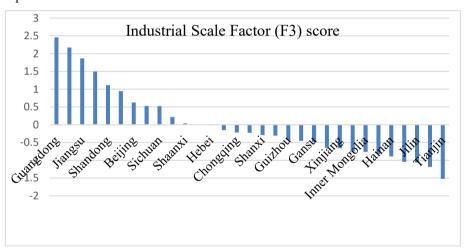


Fig. 1.Industrial scale score of all provinces in China

As mentioned above, consumer demand (F1) is the first decisive factor affecting the comprehensive competitiveness, and the consumer demand factor accounts for 53.535% of the weight in the comprehensive competitiveness expression. In the factor of consumer demand (F1) (see Fig. 2), Guangdong Province scores 0.32302, ranking 6th. Compared with Beijing, Shanghai and other provinces, Guangdong Province's cultural consumption is not strong and has insufficient staying power.

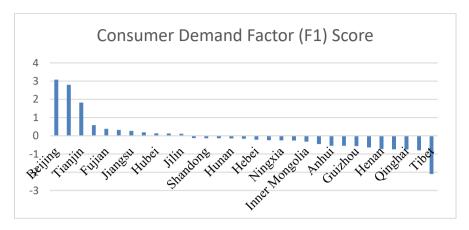


Fig. 2. Consumer demand score of all provinces in China

Government input factor (F2) is a necessary condition for cultural industry competitiveness. In the factor of government input (F2), Guangdong ranks ninth (see Fig. 3), indicating that Guangdong government input lacks traction and the precision of investment in innovative cultural resources needs to be further improved although its cultural industry has a large scale.

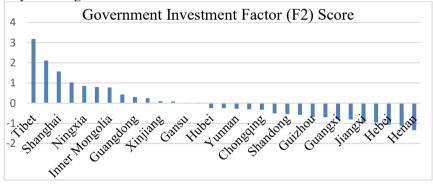


Fig. 3. Government investment score of all provinces in China

According to the ranking of Guangdong Province in the index system of cultural industry competitiveness in this paper, this paper discusses the countermeasures for the sustainable development of Guangdong Province's culture, which are as follows:

First, we need to raise the level of demand for cultural creativity. To truly achieve leap-forward development, Guangdong should not only ensure consumption quality and consumption level, so as to stimulate greater consumer market demand, but also give full play to Guangdong's existing advantages of the average number of college students per 100,000 population and the leading Internet penetration rate in China, cultivate more technical talents, and expand the digital application basic services in the content fields of consumption circulation, cultural and entertainment activities. At the

same time, relying on cultural advantages, integrate relevant cultural resources, publicize unique traditional Lingnan culture, increase cultural added value through brand effect, lead economic advantages with cultural advantages, and further improve the total economic and cultural value.

Second, enhance the support for the cultural industry in Guangdong Province. The government can start with public cultural facilities such as public libraries, cultural stations, and mass cultural facilities, and at the same time improve the average level of cultural undertakings in the province, so as to increase government investment and enhance its own cultural competitiveness. At the same time, we should actively guide cultural enterprises, increase support for small and medium-sized cultural enterprises, fully mobilize the enthusiasm of enterprises, so that enterprises can truly develop and make money with culture, so as to better promote the prosperity of cultural undertakings in Guangdong Province.

5 Conclusion

This study provides an empirical analysis of the cultural industry competitiveness of 31 provinces in China, mainly tests the cultural competitiveness of Guangdong province in the country, looks for the factors that influence the cultural competitiveness of Guangdong Province, and finds out the advantages and areas to be improved in the process of developing cultural enterprises in Guangdong Province. According to the empirical results, it can be concluded that Guangdong should understand its related advantages and disadvantages of its own cultural industry competitiveness so as to promote the consumption, enhance the residents' consumption ability of cultural products, stimulate the potential of cultural consumption, and improve the consumer demand competitiveness of cultural industry. At the same time, it is necessary for Guangdong to make full use of its advantage, strengthen the construction of cultural market system, promote development through innovation, promote the deep integration of culture and technology, and make every effort to promote the high-quality development of Guangdong's cultural industry.

Funded projects

Research support Fund of this paper: Guangdong Province Key Construction Discipline Research Capacity Improvement Project (Project No. : 2021ZDJS141); Macao Academic Project Funding Plan 2022 (Project Number: I00520-2112-592)

References

- 1. Fang Y. Research on evaluation and promotion strategy of cultural industry competitiveness in Jianggan District, Hangzhou [D]. Zhejiang University of Technology, 2020.
- Guo Qing, Liu Tongtong. Grey relational analysis of influencing factors of cultural industry competitiveness in China [J]. Journal of Shandong University of Science and Technology

- (Social Science Edition),2017,19(05):61-67+77.
- 3. Hu Shaomeng. Research on the International Competitiveness of China's Cultural Industry [D]. Graduate School of Chinese Academy of Social Sciences, 2020.
- Liu Yaobin, Yuan Huaxi, Wang Zhe. The influence of cultural industry agglomeration on the efficiency of green economy: An empirical analysis based on dynamic panel model [J]. Resources Science, 2017, 39(04):747-755.
- Pang Linlin. Research on Evaluation of Shaanxi Cultural Industry Competitiveness [D]. Chang 'an University,2017.
- Song Ziru. Research on Evaluation of Cultural Industry Competitiveness in Hubei Province [D]. Central China Normal University, 2019.
- 7. Yang Xiaolin. Empirical research on regional cultural industry competitiveness based on factor analysis [J]. Business Economics Research, 2016(03):193-196.
- 8. Zhang Tao. Empirical Research on cultural Industry Competitiveness in Beijing-Tianjin-Hebei Region [D]. Capital University of Economics and Business, 2013.
- Zheng Qiyang, Nian Fuhua, Zhang Haiping. Evaluation of cultural industry competitiveness in Yangtze River Delta based on modified VRIO model [J]. Areal Research and Development, 2021, 40(01):44-49.
- 10. Chapain, C., & Sagot-Duvauroux, D. (2018). Cultural and creative clusters a systematic literature review and a renewed research agenda. Urban Research & Practice, 1-30.
- 11. Duxbury, N. (2021). Cultural and creative work in rural and remote areas: an emerging international conversation. Int. J. Cultural Policy 27, 753–767.
- 12. Feng, Y. (2020). Evaluation and analysis of competitiveness of chinese cultural industry based on fuzzy clustering algorithm. Solid State Technol. 63, 8333–8341.
- 13. Jiang, X. J., and Luo, L. B. (2020). Globalization of services in the internet age: a new engine, acceleration and major power competitiveness. Soc. Sci. China 41, 5–23.
- 14. Howkins, John (2001). The Creative Economy: How People Make Money from Ideas. London: Allen Lane Penguin.
- 15. Miles, Steven & Paddison, Ronan 2005: Introduction: The Rise and Rise of Culture-led Urban Regeneration. Urban Studies, 42(5), 833-839.
- M Munizu, M Pono, Armayah, Sumardi and Haryuni. (2019). The effect of the external environment, internal resources, organizational capability, and competency on the competitiveness of creative industry in South Sulawesi[J]. Earth and Environmental Science, volume 3/12
- 17. Rijal S, Arifin M, Rante M W, et al. The existence of tourism higher education under the ministry of tourism and creative economy (PTNP) toward Indonesia's golden generation 2045[J]. Linguistics and Culture Review, 2022, 6(S2): 338-353.
- 18. Pourzakarya M, Bahramjerdi S F N. Towards developing a cultural and creative quarter: Culture-led regeneration of the historical district of Rasht Great Bazaar, Iran[J]. Land Use Policy, 2019, 89: 104218.
- 19. Bain A L, Landau F. Assessing the local embeddedness dynamics of the Baumwollspinnerei cultural quarter in Leipzig: introducing the POSES Star Framework[J]. European Planning Studies, 2019, 27(8): 1564-1586.
- Mollamirzaei R, Sajadzadeh H. Explaining the Model of the Creative City Approach in the Historical Context of Hamedan[J]. Geography and Environmental Planning, 2022, 33(2): 137-146.
- 21. Previtali P, Cerchiello P. The prevention of corruption as an unavoidable way to ensure healthcare system sustainability[J]. Sustainability, 2018, 10(9): 3071.
- Wiryono S K, Susatyo H, Utomo S, et al. Risk mapping on dynamics creative industry: case study at Bandung city, Indonesia[J]. Procedia-Social and Behavioral Sciences, 2015, 169: 125-130.

Open Access This chapter is licensed under the terms of the Creative Commons Attribution-NonCommercial 4.0 International License (http://creativecommons.org/licenses/by-nc/4.0/), which permits any noncommercial use, sharing, adaptation, distribution and reproduction in any medium or format, as long as you give appropriate credit to the original author(s) and the source, provide a link to the Creative Commons license and indicate if changes were made.

The images or other third party material in this chapter are included in the chapter's Creative Commons license, unless indicated otherwise in a credit line to the material. If material is not included in the chapter's Creative Commons license and your intended use is not permitted by statutory regulation or exceeds the permitted use, you will need to obtain permission directly from the copyright holder.

