

Research on the Supply-side Reform of Guangxi Tour Guides from the Perspective of New Quality Productivity - Based on the Data Analysis of Ten Thousand Tour Guides

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ABSTRACT

New-quality productivity is a productivity centered on new technologies, new business forms, and new models. The supply-side reform of tour guides mainly focuses on the scale and growth of the tour guide team. The emergence of the concept of new-quality productivity provides a new direction and idea for the career development of tour guides. By elaborating the theoretical framework and necessity of the supply-side reform of tour guides, and analyzing the data of 10,000 practicing tour guides in Guangxi, it is found that there are problems such as an excessive gender ratio gap, a scarcity of high-level tour guides, an unbalanced regional distribution, and a scarcity of foreign language tour guides among tour guides in Guangxi. From the correlation analysis and regression analysis of the corresponding indicators of tour guide supply and tourism demand, it can be understood that the tourism market demand has a huge impact on the supply of tour guide practitioners, and further verifies the imbalance between supply and demand of tour guides and the tourism market in Guangxi. Based on this, corresponding countermeasures and suggestions are proposed from the perspectives of the government, tourism management departments, colleges and universities, and tourism enterprises.

Keywords: *New-quality productivity, Supply-side reform of tour guides, Correlation analysis, Regression analysis.*

1. INTRODUCTION

New-quality productivity is generated by technological revolutionary breakthroughs, innovative allocation of production factors, and in-depth transformation and upgrading of industries. It takes the leap of laborers, means of labor, objects of labor, and their optimal combination as the basic connotation, and takes a significant increase in total factor productivity as the core sign. Its characteristics are innovation, the key is high quality, and the essence is advanced productivity[1]. What it shows in the tourism industry is new-quality human resources, using new technologies, concepts, and models to create new tourism service experiences for tourists, and improve tourism efficiency and promote sustainable tourism development. As an important part of the tourism industry, tour guides are the most potential new-

quality human resources, and the supply-side reform of the tour guide talent team has become the key to improving the quality of tourism services and promoting the sustainable development of the tourism industry. From the perspective of new-quality productivity, the supply-side reform of tour guides faces new opportunities and challenges. New-quality productivity emphasizes scientific and technological innovation, talent training, and industrial upgrading, which provides new ideas and directions for the supply-side reform of tour guides. By introducing new technologies, improving the quality of tour guides, and optimizing service models, the quality and efficiency of tour guide services can be improved to meet the increasingly diverse needs of tourists.

Guangxi has rich natural and cultural tourism resources, and tour guides are the messengers of spreading tourism culture. The construction and

development of the tour guide team is crucial to the prosperity of Guangxi's tourism industry. This study aims to explore the current situation, problems, and countermeasures of the supply-side reform of tour guides in Guangxi from the perspective of new-quality productivity. Through the data analysis of 10,000 tour guides, we can deeply understand the structure, quality, and working conditions of the tour guide team in Guangxi, and provide scientific basis and practical reference for the supply-side reform of tour guides.

2. THE NECESSITY OF THE SUPPLY-SIDE REFORM OF TOUR GUIDES IN GUANGXI

2.1 Meeting the Diversified and Innovative Service Requirements of the Tourism Demand Side

With the improvement of people's living standards and the transformation of tourism consumption concepts, the tourism demand side shows a trend of diversification and personalization. Tourists are no longer satisfied with traditional sightseeing tourism, but pay more attention to experiential, cultural, and innovative tourism services. New-quality productivity emphasizes scientific and technological innovation and application, and by introducing new technologies, models, and business forms, it can provide new impetus and opportunities for the supply-side reform of tour guides. For example, using technologies such as the Internet, big data, and artificial intelligence to develop intelligent tour guide systems, online tourism platforms, etc., can provide tourists with more convenient and personalized services. In addition, new-quality productivity also pays attention to talent training and the improvement of innovation ability. By strengthening tour guide training and education, improving the professional quality and innovation awareness of tour guides, they can better meet the diversified and innovative service requirements of tourists.

2.2 Adapting to the New Trend of Social and Economic Development and the Transformation and Upgrading of the Tourism Industry

The level of social and economic development is the decisive factor in the evolution of the tour guide profession[2]. With the development of

society and economy, people's living standards continue to improve, and tourism demand is also growing. This provides a broad market space for the development of the tour guide profession. At the same time, the development of society and economy has also promoted the industrialization and scale of the tourism industry, and the tour guide profession has gradually developed from individual operation to professionalization and standardization. At the same time, as an important pillar industry of the national economy, the tourism industry is facing the challenges and opportunities of transformation and upgrading. The development of new-quality productivity has brought new development opportunities to the tourism industry, such as the rise of emerging formats such as smart tourism, green tourism, and cultural tourism. As an important part of the tourism industry, tour guides need to adapt to these new trends and continuously improve their service quality and level. Through the supply-side reform of tour guides, the structure of the tour guide team can be optimized, the professional quality and service ability of tour guides can be improved, and the tourism industry can be promoted to develop in a high-quality and sustainable direction.

2.3 Adapting to the New Situation of Science and Technology, the Transformation of Tour Guides is Imperative

Scientific and technological progress plays an important role in promoting the evolution of the tour guide profession. With the continuous progress of science and technology, the tourism industry is also constantly innovating and developing. The application of Internet technology makes tourism information more convenient and transparent, and tourists can more easily obtain tourism information and book tourism products. The application of virtual reality technology, artificial intelligence technology, etc. has also brought a professional crisis to traditional tour guides. Facing these huge challenges brought about by the progress of science and technology, the working skills and living space of tour guides on the front line have been greatly affected, and the transformation and upgrading of tour guide practitioners is imminent[3].

3. DISTRIBUTION CHARACTERISTICS ANALYSIS OF TOUR GUIDES IN GUANGXI

3.1 Basic Characteristics Analysis of Tour Guides in Guangxi

Select 10,000 professional tour guides in Guangxi as samples for data analysis, and the data comes from the latest "Directory of Tour Guides in Guangxi" released by the website of the Department of Culture and Tourism of the Guangxi Zhuang Autonomous Region in 2024 [4]. Firstly, analyze the basic information such as gender, level, and the institution where they are located of these ten thousand tour guides. Among the 10,005 tour guides in Guangxi, there are 3,176 male tour guides, accounting for 32%, and 6,829 female tour guides, accounting for 68%, with the number of female tour guides more than twice that of male tour guides. In terms of level, primary tour guides account for the vast majority. Among the tour guides in Guangxi, primary tour guides account for the largest proportion, with a total of 9,712, accounting for 97.07%, while the number of intermediate and senior tour guides is extremely scarce, with 272 and 21 respectively, accounting for 2.72% and 0.21%. In terms of the institution where they are located, part-time tour guides affiliated with associations and tour guide service centers account for the vast majority, with a proportion of 84%, while full-time tour guides in travel agencies account for 16%, and part-time tour guides are 5.25 times that of full-time tour guides.

3.2 Further Analysis by Taking 14 Prefecture-level Cities in Guangxi as Sample Disassembly Dimensions

Due to the impact of the COVID-19 pandemic, tourism-related data in recent years has fluctuated greatly and may not be representative. Therefore, when conducting tourism big data analysis, we first make an assumption, that is, let some tourism indicators such as "total number of tourists", "number of inbound tourists", and "tourism consumption" take the data of 2019, while the number of tour guides takes the data of 2024. The purpose of this is to eliminate the interference of factors caused by global public health events as much as possible, and to ensure that the industry data is not distorted in normal years. Even if the number of tour guides in the current year has decreased compared to the past three years, we can

also observe to what extent the supply of tour guides needs to reach to match the state of the tourism industry in 2019 or even more prosperous.

3.2.1 Unbalanced Distribution of Tour Guides in Different Prefecture-level Cities

As shown in "Table 1", the top three cities in terms of total number of tourists are Nanning, Guilin, and Liuzhou, while the top three cities in terms of number of tour guides are Guilin, Nanning, and Beihai. Liuzhou has a relatively large total number of tourists, while the number of tour guides ranks sixth; Beihai has the third largest number of tour guides in the region, and the total number of local tourists ranks sixth, indicating that the supply and demand in some cities are unbalanced. Similarly, Yulin and Baise have a large number of tourists, but the number of tour guides ranks relatively low. In detail, Nanning has the largest total number of tourists in the region, but the number of tour guides is only 20% of that in Guilin, indicating a relatively obvious gap between supply and demand. At the same time, it also shows that although the number of tour guides in Guilin, an international tourist destination, has an absolute advantage, there is a suspicion of redundancy.

Table 1. Distribution details of tour guides in 14 cities in Guangxi

City	Number of tour guides	Number of foreign language tour guides	Proportion of foreign language tour guides	Inbound international tourists (person-times)	Total number of tourists (10,000 person-times)
Nanning	1392	119	8.55%	689900	15278.73
Liuzhou	200	8	4.00%	262622	7002.91
Guilin	6072	498	8.20%	3145903	13833.66
Wuzhou	85	5	5.88%	237268	4220.78
Beihai	448	16	3.57%	176872	5296.54
Fangchenggang	331	4	1.21%	197533	3671.44
Qinzhou	113	2	1.77%	83680	4996.40
Guigang	93	0	0.00%	107720	3602.61
Yulin	205	5	2.44%	172621	6987.51
Baise	120	3	2.50%	96974	5592.35
Hezhou	100	5	5.00%	455134	4344.68
Hechi	117	0	0.00%	128589	4505.87
Laibin	6	1	16.67%	26635	3513.19
Chongzuo	10	0	0.00%	458117	4772.27
Others	713	49	6.87%	—	—

a Note: "Others" come from non-prefectural-level Guangxi regional or regional travel agency enterprises, etc., and do not participate in the ranking.

3.2.2 Foreign Language Tour Guides in Different Prefecture-level Cities are All Very Scarce

Overall, foreign language tour guides in Guangxi are very scarce. Firstly, among the tour guides in Guangxi, the proportion of foreign language speakers is too low, only 7.42%, of which English tour guides account for 4.08%, and non-English foreign language tour guides account for 3.34%. The "content" of foreign language tour guides in various prefecture-level cities is also relatively low, and some even do not have them. Secondly, except for English, the top ten main foreign language speakers are Japanese (93), Vietnamese (53), Thai (47), Korean (46), French (28), Spanish (23), Korean (21), German (17), Russian (4), and Indonesian (3). The top ten countries in terms of the number of inbound international tourists (excluding compatriots from Hong Kong, Macao, and Taiwan region) are Vietnam, Malaysia, South Korea, Indonesia, Singapore, the United States, Thailand, the United Kingdom, France, and Japan. The matching degree is not satisfactory. For example, the number of inbound Japanese tourists is not as many as the previous nine countries, but the number of Japanese tour guides ranks first; there are many inbound Indonesian tourists, but the number of tour guides

who can speak Indonesian is sparse population; there are only 4 Russian reserve tour guides. Against the background of the friendly relationship between China and Russia, Guangxi will face huge challenges in responding to the future Russian inbound tourism offensive. Thirdly, although there are many tour guides in Guilin, an international tourist destination, foreign language tour guides are still lacking. Taking the capital Nanning as a comparison object, the "content" of foreign language tour guides in the two cities is not much different. As shown in "Table 1", Nanning is 8.55% and Guilin is 8.20%. However, comparing the number of inbound international tourists, the number of inbound tourists in Guilin is 4.6 times that of Nanning. As the permanent venue of the China-ASEAN Expo, Nanning has a certain international business atmosphere, so the reserve of foreign language tour guides is relatively considerable. However, as an international tourist destination, Guilin has several times more inbound tourists than other cities each year, but the reserve of foreign language tour guides is not considerable. Combined with the first point mentioned above, to a certain extent, it shows that although there are redundancies in tour guides in Guilin, foreign language tour guides are scarce.

Table 2. Language analysis of tour guides in Guangxi

Language distribution	Number	Proportion
Number of tour guides who can speak Mandarin	9263	92.58%
Number of tour guides who can speak at least one foreign language	742	7.42%
Number of tour guides who can speak two or more foreign languages	8	0.08%
English tour guide	408	4.08%
Non-English foreign language tour guide	334	3.34%

4. CORRELATION ANALYSIS BETWEEN TOUR GUIDE SUPPLY AND MAIN INDICATORS OF TOURISM INDUSTRY

Today, in the pursuit of high-quality tourism development, tour guides are still the driving force for the development of the tourism industry, and their supply status is closely related to the sustainable development of the tourism industry. Correlation analysis can help determine the matching degree between tour guide supply and tourism demand, and it is also convenient for subsequent linear regression analysis of sample data. Select 10 tourism indicators for correlation analysis, among which, the volume of tourism resources is obtained by adding the number of public museums, the number of cultural memorial halls, and the number of A-level scenic spots. The data of other indicators are all from the "Guangxi Statistical Yearbook 2020", and the reasons for data

selection have been explained above. Use the Pearson correlation coefficient formula to calculate the correlation between each indicator, and obtain "Table 3". The indicators I to X in this table represent respectively "Tourism resource volume" "Tourism management department" "Travel agency" "Number of catering and accommodation enterprises" "Number of catering and accommodation practitioners (person)" "Inbound international tourists (person-times)" "International tourism consumption (10,000 yuan)" "Total number of tourists (10,000 person-times)" "Total tourism consumption (100 million yuan)" "Number of tour guide practitioners (person)".

$$r_{xy} = \frac{\sum_{i=1}^n (x_i - \bar{x})(y_i - \bar{y})}{\sqrt{\sum_{i=1}^n (x_i - \bar{x})^2 \sum_{i=1}^n (y_i - \bar{y})^2}}$$

Table 3. Correlation coefficient of main tourism indicators

	I	II	III	IV	V	VI	VII	VIII	IX	X
I	1.00									
II	0.70	1.00								
III	0.73	0.80	1.00							
IV	0.75	0.58	0.52	1.00						
V	0.55	0.38	0.51	0.84	1.00					
VI	0.64	0.80	0.94	0.37	0.32	1.00				
VII	0.65	0.82	0.95	0.37	0.31	1.00	1.00			
VIII	0.78	0.68	0.82	0.87	0.87	0.70	0.70	1.00		
IX	0.80	0.75	0.89	0.82	0.80	0.78	0.78	0.99	1.00	
X	0.66	0.81	0.97	0.41	0.38	0.98	0.99	0.74	0.82	1.00

According to the magnitude of the correlation coefficient, the linear correlation degree between two variables is judged. Generally speaking, when $0 < |r| \leq 0.3$, it is considered that there is a weak linear correlation between the two variables, when

$0.3 < |r| \leq 0.7$, it belongs to a moderate linear correlation, and when $0.7 < |r| \leq 1$, it is a high linear correlation. As can be seen from the above table, the indicators that have a highly positive linear correlation with the number of tour guide

practitioners are the number of tourism management departments, the number of travel agencies, the number of inbound international tourists, the amount of international tourism consumption, the total number of tourists, and the total amount of tourism consumption, indicating that these 6 indicators can be used as the strongest influencing factors of the local tour guide supply level; the indicators that have a moderate linear correlation with the number of tour guide practitioners are the volume of tourism resources, indicating that the number of A-level scenic spots, cultural memorial halls, museums, and other institutions representing local cultural tourism resources also have a certain impact on the local tour guide supply; the indicators that have a weak relationship with the number of tour guide practitioners are the number of catering and accommodation enterprises and the number of catering and accommodation practitioners, indicating that the volume of local catering and accommodation enterprises and their practitioners is not the main factor affecting the supply level of tour guides.

5. REGRESSION ANALYSIS BETWEEN TOUR GUIDE SUPPLY AND MAIN INDICATORS OF TOURISM INDUSTRY

In the above analysis, it has been verified that the supply level of tour guides in Guangxi is significantly positively correlated with the number of tourism management departments, the number of travel agencies, the number of inbound international tourists, the amount of international tourism consumption, the total number of tourists, and the total amount of tourism consumption. In order to further understand the relationship between tour guide supply and the main indicators of the tourism industry, and scientifically explain the specific relationship between the independent variable and the dependent variable, it is proposed to use regression analysis to establish a regression equation, and take the three tourism indicators representing the number of tourism subjects or objects that have a highly linear correlation, namely the total number of tourists, the number of inbound international tourists, and the number of travel agencies, as independent variables to regress with the number of tour guide practitioners respectively.

Table 4. Regression analysis results of main tourism indicators

	Total number of tourists(X_1)	Inbound international tourists(X_2)	Number of travel agencies(X_3)
Correlation coefficient	0.74	0.98	0.97
R^2	0.5442	0.9660	0.9474
Significant value	0.0026	0.0000	0.0000
P value	0.0026	0.0000	0.0000
Regression equation	$Y_1=0.32X_1-1332$	$Y_2=0.001965X_2-212$	$Y_3=13.96X_3-349$
X Simulation Assumption	100000000(person-times)	1000000(person-times)	10005(persons)
Y Estimated Assumption	30668(persons)	1753(persons)	741(institutions)

As shown in "Table 4", taking X_1 , the total number of tourists, as the independent variable, and Y, the number of tour guide practitioners, as the dependent variable, and performing linear regression analysis, it can be concluded that, first, the R-square value is 0.5442, indicating that the total number of tourists can explain 54.42% of the change in the number of tour guide practitioners. Second, the significant value or P value of the model is 0.0026, which is less than 0.005, indicating that the total number of tourists will definitely have an impact on the number of tour guide practitioners. Third, the model formula is $Y_1=0.32X_1-1332$, and it can be estimated that if the total number of tourists in the region reaches 1

billion throughout the year (it is known that the total number of tourists in Guangxi in 2019 is 876 million), then the supply scale of tour guides needs to reach 30,668 to match the corresponding demand, while the existing reserve is 10,005, indicating that the supply is insufficient.

Taking X_2 , the number of inbound international tourists, as the independent variable, and performing linear regression analysis with the number of tour guide practitioners, it can be concluded that, first, the R-square value is 0.9660, indicating that the number of inbound international tourists can explain 96.6% of the change in the number of tour guide practitioners, which also fully

shows that the regression model fits very well. Second, the significant value or P value is far lower than 0.05, indicating that the total number of tourists will definitely have an impact on the number of tour guide practitioners. Third, the model formula is $Y_2=0.001965X_2-212$, and it can be estimated that if the total number of inbound international tourists reaches 1 million throughout the year (it is known that the total number of inbound international tourists in Guangxi in 2019 is 624,000), then the supply scale of foreign language tour guides needs to reach 1,753 to match the demand, while the existing reserve is 742, indicating that the supply is insufficient.

Taking X_3 , the number of travel agencies, as the independent variable, and performing linear regression analysis with the number of tour guide practitioners, it can be concluded that, first, the R-square value is 0.9474, indicating that the regression model fits very well, that is, the number of travel agencies can explain 94.74% of the change in the number of tour guide practitioners. Second, the significant value or P value is far lower than 0.05, indicating that the number of travel agencies will definitely have an impact on the number of tour guide practitioners. Third, the model formula is $Y_3=13.96X_3-349$, then when the number of tour guide practitioners is 10,005, the number of travel agencies X_3 can be calculated to be 741, which is more appropriate, while the actual situation is that the statistical data in 2019 shows that there are a total of 1,016 travel agencies registered in Guangxi. On the one hand, it may indicate that the number of tour guide practitioners is insufficient, and on the other hand, it can also indicate that the travel agency institutions are slightly redundant.

6. COUNTERMEASURES AND SUGGESTIONS FOR THE SUPPLY-SIDE REFORM OF TOUR GUIDES IN GUANGXI FROM THE PERSPECTIVE OF NEW-QUALITY PRODUCTIVITY

6.1 *The Government and Tourism Management Departments Should Take Measures to Stabilize the Tour Guide Team*

6.1.1 *Increasing the Proportion of Middle and Senior Tour Guides*

Among the tour guide practitioners in Guangxi, the total number of middle and senior tour guides only accounts for 2.9% of all tour guides. Moreover, most of the middle and senior tour guides have left the front-line positions of tour guides and are mainly engaged in management or tour guide-related education and training work. This leads to a sufficient number of tour guides on the front line, but the overall quality is low, and high-standard tour guides are scarce [5]. The government and tourism management departments can take the following measures to encourage the improvement of the overall quality of the tour guide team. First, an incentive mechanism should be established, a reward system for middle and senior tour guides should be established, and outstanding tour guides should be commended and rewarded to encourage more tour guides to improve their grades. Secondly, training and assessment should be strengthened, training courses for middle and senior tour guides should be provided to help tour guides improve their professional knowledge and skills, and at the same time, the assessment and evaluation of tour guide grades should be strengthened to ensure the quality of middle and senior tour guides. Thirdly, career development opportunities should be provided, more career development opportunities should be provided for middle and senior tour guides, such as promotion to senior lecturers and trainers in the industry, to stimulate their work enthusiasm and creativity.

6.1.2 *Improving the Tour Guide Affiliation Mechanism of Travel Agencies*

The government and tourism management departments should improve the tour guide affiliation mechanism of travel agencies on the premise of protecting the rights and interests of tour

guides, ensuring the quality of customer service and healthy market competition, and seek more benefits for tour guide practitioners. Specifically, it includes standardizing the affiliation process, that is, clarifying the rights and obligations between travel agencies and tour guides, standardizing the process and requirements of tour guide affiliation, and ensuring the legitimate rights and interests of both parties; strengthening supervision and management, establishing and improving the supervision and management mechanism of travel agency tour guide affiliation, strengthening the daily supervision of travel agencies and tour guides, and preventing violations; providing guarantee and support, providing necessary guarantee and support for tour guides, such as social insurance and training opportunities, to improve the sense of belonging and stability of tour guides.

6.2 Colleges and Universities Should Actively Respond to the Internationalization Trend and Improve the Training Mechanism of Language Tour Guides

6.2.1 Optimizing the Curriculum

Increase language courses, and according to market demand and students' interests, in addition to conventional foreign languages, courses in languages such as Russian and Southeast Asian countries can be added; Offer courses on cross-cultural communication to cultivate students' awareness and ability in cross-cultural communication, enabling them to better understand and respect tourists from different cultural backgrounds; strengthen practical teaching, increase practical links such as internships and practical training to improve students' practical ability and professional quality.

6.2.2 Strengthening the Construction of the Teaching Staff

Introduce high-quality teachers with rich teaching experience and practical experience to improve the overall quality of the teaching staff; strengthen teacher training, improve the teaching level and professional quality of teachers, so that teachers can better adapt to the needs of international teaching; establish a teacher incentive mechanism, give recognition and rewards to teachers with outstanding teaching achievements,

and stimulate teachers' teaching enthusiasm and creativity.

6.2.3 Strengthening International Exchanges and Cooperation

Carry out international cooperation in running schools, cooperate with foreign colleges and universities to train foreign language tour guides, introduce advanced foreign teaching concepts and teaching methods, and improve the internationalization level of students; strengthen international exchanges and cooperation, organize students to participate in international tourism exhibitions, conferences and other activities, and broaden students' international horizons and communication channels; establish an international internship base to provide more international internship opportunities for students and improve their practical ability and professional quality.

6.3 Tourism Enterprises Should Face up to Structural Excess and Transform and Upgrade to Cultivate New-quality Tour Guides

6.3.1 Decentralizing Tour Guides and Encouraging Regional Mobility

Decentralizing tour guides does not mean completely canceling tour guides, but changing the role of tour guides from traditional tour leading and explanation to planning and organizing tourism experiences. Tour guides can provide personalized tourism services, such as customized tours and theme tours, to meet the diverse needs of tourists. In addition, in the tourism industry, travel agencies are facing the problem of structural excess. It is necessary to encourage tour guides in different regions and languages to flow across regions and provide them with adequate logistical support.

6.3.2 Developing New-quality Positions

Tourism enterprises can develop new-quality positions, such as tourism experience designers, tourism marketing planners, tourism consultants, tourism e-commerce operators, tourism data analysts, etc., to meet market demand and improve the competitiveness of enterprises. New-quality positions should have the characteristics of innovation, personalization and technology. Among them, innovation can continuously innovate tourism service models and products, and improve the quality and competitiveness of tourism services.

Personalization means that customized tourism services can be provided according to the needs and interests of tourists. Technology means that technological means can be used to improve the efficiency and quality of tourism services.

6.3.3 *Cultivating new-quality tour guides*

New-quality tour guides refer to tour guides with interdisciplinary knowledge and skills and the ability to provide personalized tourism services. They should have higher quality and stronger competitiveness. Their connotations are manifested in three aspects. First, new-quality tour guides should have interdisciplinary knowledge and skills, such as having a certain reserve of interdisciplinary knowledge and skills in tourism, culture, history, geography, science and technology, and being able to provide tourists with comprehensive and in-depth tourism services. Secondly, new-quality tour guides should have the ability to provide personalized services, and be able to provide customized tourism services according to the needs and interests of tourists. Thirdly, new-quality tour guides should have innovation awareness and ability, be able to continuously innovate tourism service models and products, and improve the quality and competitiveness of tourism services. In short, tourism enterprises should provide a practical platform for tour guide practitioners, and actively guide and cultivate the new-quality core competitiveness of tour guides.

7. CONCLUSIONS, DEFICIENCIES AND PROSPECTS

This paper analyzes the data of 10,000 tour guides in Guangxi, and finds that there are problems such as a large gender ratio gap, a scarcity of high-level tour guides, an unbalanced regional distribution, and a scarcity of foreign language tour guides among tour guides in Guangxi. At the same time, the correlation analysis and regression analysis of the supply of tour guides and the main indicators of tourism show that the tourism market demand has a huge impact on the supply of tour guide practitioners, and further verifies the imbalance between supply and demand of tour guides and the tourism market in Guangxi. In response to these problems, corresponding countermeasures and suggestions are proposed from the perspectives of the government, tourism management departments, colleges and universities, tourism enterprises and tour guides themselves, including stabilizing the tour guide team, improving

the training mechanism of language tour guides, and cultivating new-quality tour guides. The innovation of this study lies in introducing the theory of new-quality productivity into the research of the supply-side reform of tour guides, providing a useful reference and suggestion for the supply-side reform of tour guides in Guangxi.

The deficiency of this study lies in the limitation of the data sample. Although the data of 10,000 practicing tour guides in Guangxi was analyzed, the sample size is still limited. During the three years of the COVID-19 pandemic, a large number of tour guide practitioners have withdrawn from the stage of the tourism industry, which may not be able to fully represent the overall situation of tour guides in Guangxi. Future research can be expanded from the following aspects. First, expand the data sample to increase the representativeness and reliability of the research. Secondly, adopt a variety of research methods to deeply explore the internal mechanism and influencing factors of the supply-side reform of tour guides. Thirdly, strengthen the long-term tracking research on the career development of tour guides, understand the trends and laws of the career development of tour guides, and provide a more scientific basis for the supply-side reform of tour guides. Fourthly, due to the new opportunities and challenges faced by the tour guide profession at present, future research can focus on the impact of the tour guide profession in the context of new-quality productivity, and provide guidance for the development of the tour guide profession.

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REFERENCES

- [1] Xi Jinping emphasized at the 11th collective study of the Political Bureau of the CPC Central Committee that "we should accelerate the development of new-quality productive forces and solidly promote high-quality development." [EB/OL]. (2024-02-01) [2024-

07-18]

<http://www.chinanews.com.cn/gn/2024/02-01/10156678.shtml>. (in Chinese)

- [2] HAN Guo-hua. Analysis on the Developing Trend of Tour Guides from Historical Perspective[J]. Journal of Wuhan Polytechnic, 2017, 16 (01): 109-112+116.(in Chinese)
- [3] Zhu Ye, Yin Hongwei. Exploration of the Training Mechanism of Higher Vocational Tourist Guides Driven by Supply-side Reform [J]. Chinese Vocational and Technical Education, 2017, (35): 111-114+120. (in Chinese)
- [4] Tour guide personal information query [EB/OL]. (2024-05-30) [2024-07-26] <http://wlt.gxzf.gov.cn/zfxxgk/fdzdgknr/bmcfw/dygrxxcx1/>(in Chinese)
- [5] Wang Yipin, He Yongxiang, Zhang Panpan. Training of Tourist Guides from the Perspective of Supply-side Reform: A Case Study of Chongqing Vocational Institute of Tourism [J]. Youthful Years, 2017, (05): 166-167. (in Chinese)