



The Impact of Sustainable Sports Tourism on Economic Growth in Guangzhou: An Empirical Study

Rong Li^{1,2}, Xi Ling^{2,3,*}

¹School of Education, Dongguan University of Technology, Dongguan 523808, Guangdong, China.

²Faculty of Education, Silpakorn University, Sanam Chandra Palace Campus, Nakhon Pathom 73000, Thailand.

³Physical Education Department, Fuzhou Institute of Technology, Fuzhou 350011, Fujian, China.

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***Corresponding author:** Xi Ling, Faculty of Education, Silpakorn University, Sanam Chandra Palace Campus, Nakhon Pathom 73000, Thailand; Physical Education Department, Fuzhou Institute of Technology, Fuzhou 350011, Fujian, China.

Abstract

This study focuses on sustainable sports tourism to enhance the economic growth of Guangzhou City and proposes a series of strategies aimed at promoting its development, including strengthening the construction of sports tourism infrastructure, innovating sports tourism products and services, enhancing citizens' participation in sports activities, reinforcing policy support, and strengthening international cooperation. The purpose of this study is to explore the impact of sustainable sports tourism on the economic growth of Guangzhou. By empirically analyzing key data such as economic growth rate, tourism revenue to GDP ratio, citizens' participation in sports activities, and environmental protection indicators for each administrative district within Guangzhou, this study has identified a significant positive effect of sustainable sports tourism activities on economic growth. In addition, this study pointed out the directions for future research on sustainable sports tourism for economic growth in Guangzhou, including expanding the scope of data collection to obtain more comprehensive information, exploring the long-term effects of sustainable sports tourism activities, conducting comparative studies at home and abroad to obtain a broader perspective, and evaluating the impacts of relevant policies on the development of sustainable sports tourism. Finally, it can deepen further the understanding of sustainable sports tourism development and a more accurate assessment of its multiple economic, social, and environmental impacts.

Keywords

Sustainable sports tourism; economic growth; Guangzhou; empirical analysis; development strategy

1. Introduction

In today's globalization, tourism has become one of the key drivers of world economic growth (Buckley, 2011). Sports tourism, as an important bridge connecting the two industries of sports and tourism, not only enriches the connotation of tourism but also opens up new channels for the development of the sports industry (Weed, 2008; Weed & Bull, 2012). Sports tourism covers a wide range of events from international mega-events to local sports activities, and it promotes the economic and social development of destinations by attracting tourists to participate in and watch sports activities (Kurtzman & Zauhar, 2005). However, the rapid development of sports tourism has also brought challenges such as environmental pollution, resource depletion, and social and cultural conflicts (Yuan & Liu, 2019), and how to realize the sustainable development of sports tourism has become a global concern.

Despite the burgeoning interest in sports tourism, there is a notable dearth of research focusing on its sustainable practices and their specific implications for economic growth, particularly within the context of Guangzhou, China. This study seeks to address this gap by empirically examining the impact of sustainable sports tourism on the economic growth of Guangzhou. Guangzhou, as an important center of China's economy and culture, is endowed with unique advantages for sports tourism, such as a pleasant climate, convenient transportation, rich cultural heritage, and advanced sports facilities (Xu & Yeh, 2003; Yeh et al., 1995). In recent years, Guangzhou has successfully organized a number of international and nationally renowned sports events, such as the Asian Games and the World Badminton Championships, which have greatly enhanced the city's international image and attracted a large number of domestic and international tourists (Forrest & Yip, 2007; Wong et al., 2006; Xu & Yeh, 2005). The successful organization of these sports events not only demonstrated Guangzhou's urban charm but also injected new vitality into the development of the local economy (Yang et al., 2020). However, with the growing demand for sports tourism, how to effectively utilize and develop sports tourism resources while protecting the environment and promoting social and cultural exchanges to ensure the long-term sustainable development of sports tourism has become an important issue for Guangzhou.

This study empirically analyzes the development status and economic impacts of sports tourism in Guangzhou, aiming to explore the potential and actual effects of sustainable sports tourism to promote Guangzhou's economic growth. The study first reviews the relevant theories and literature on sports tourism and clarifies the contribution of sports tourism to the economic growth of the destination. Subsequently, by collecting and analyzing statistics, questionnaires, and in-depth interview transcripts related to sports tourism in Guangzhou, the paper assesses the role of sports tourism in promoting Guangzhou's economic growth, including aspects such as increasing employment opportunities, boosting tax revenues, and facilitating the development of related industrial chains. In addition, the study delves into the major challenges encountered in promoting the sustainable development of sports tourism, such as environmental protection, infrastructure development, and social and cultural impacts. It also proposes corresponding strategies and recommendations based on these challenges.

The significance of this study lies in the fact that it not only provides new empirical evidence for the mutually reinforcing relationship between sports tourism and economic growth but also provides theoretical and practical references for the sustainable development of sports tourism in Guangzhou and even other cities. Through an in-depth analysis of the current situation of sports tourism development in Guangzhou and a discussion of future development strategies, this study expects to provide useful insights and suggestions for promoting the healthy development of sports tourism, improving the economic and social benefits of sports tourism, as well as enhancing the city's international competitiveness.

2. Literature review

Sports tourism, as one of the special forms of tourism activities, has been growing rapidly worldwide in recent years. It encompasses not only watching sports events but also participating in sports activities, visiting sports sites and engaging in sports and cultural activities. The development of sports tourism has contributed to the economic growth of cities and has become an important part of the development strategies of many cities and countries.

2.1 Sports tourism and economic growth

The direct impact of sports tourism on economic growth is mainly reflected in increased employment opportunities, higher tourism revenue, and the promotion of related industries (Yuan et al., 2022). Sporting events attract a large number of tourists to visit, which directly drives the development of tourism-related industries such as hotels, restaurants, transportation, and retail. For example, Weed in Bull (2012) pointed out in their study that large-scale international sports events such as the Olympic Games and the World Cup not only enhance the international image of the host city but also significantly increase local tourism income and employment opportunities. In addition, sports tourism can also promote the construction and improvement of sports facilities by the local government, thus boosting the development of the construction and service industries (Liu et al., 2020).

The indirect impact of sports tourism on economic growth is mainly realized through enhancing the city's image, promoting international exchanges, and strengthening the city's soft power (Xu & Yang, 2019). Sporting events provide a platform to showcase a city's culture and history, which helps to enhance the city's international visibility and attractiveness (Zuo et al., 2021). Matheson in Baade's (2004) study suggested that although the direct economic

benefits of sporting events may be limited, their long-term positive impacts on a city's branding and international image cannot be ignored. Through sports tourism, cities are able to attract more international investment and integrate into globalized development (Azevedo & Barbosa, 2014).

In the context of economic globalization, the role of sports tourism is particularly significant. Sports tourism not only directly drives economic growth, but also promotes the improvement of urban infrastructure and public services (Wei et al., 2023). Costa in Chalip (2005) pointed out that sports tourism serves as a driving force for urban development, improving the quality of life of residents and the sustainable development of cities by improving transportation, upgrading safety standards and enhancing public services. In addition, sports tourism can promote social and cultural exchanges and integration, and enhance the social cohesion and cultural attractiveness of cities (Yu & Jiayi, 2023).

To summarize, the impact of sports tourism on economic growth is multifaceted, including both direct economic contributions and indirect impacts on city image, international exchanges, and urban development. By reviewing the relevant literature, it is evident that sports tourism has become an important force in promoting the economic growth and social development of cities (Zhuo et al., 2020). It is worth noting that the development of sports tourism needs to take into account the issue of sustainability to ensure that economic growth is not accompanied by negative impacts on the environment and society (Haichao, 2013). Future research needs to further explore how to balance the relationship between the economic benefits of sports tourism and sustainable development to provide theoretical and practical guidance for the healthy development of sports tourism (Zhang, X. et al., 2022).

2.2 Practice of sustainable sports tourism

Sustainable sport tourism, as a form of tourism that promotes economic growth, environmental protection, and social well-being, has received widespread attention worldwide in recent years (Chengcai et al., 2022). By analyzing international and China, this chapter has explored the successes and challenges adopted in the implementation of sustainable sports tourism, providing references and insights for future research and practice of sustainable sports tourism in Guangzhou (Zhang, R. et al., 2022).

International cases such as the London 2012 and Rio 2016 Olympic Games demonstrate the potential of major sporting events to promote sustainable tourism. The London Olympics successfully integrated the concept of sustainability into the theme of the event by using sustainable building materials, promoting public transportation, and implementing waste management measures, which not only reduced negative environmental impacts but also boosted the local economy (Xu et al., 2016). However, the events also faced the challenges of cost overruns and underutilization of post-event facilities, highlighting the disadvantages in achieving long-term sustainability goals (Butler et al., 2022).

Domestic cases in China, such as the Guangzhou Asian Games, demonstrated China's efforts and achievements in sustainable sports tourism by building low-carbon stadiums, promoting green transportation, and enhancing environmental protection (Liu et al., 2023). These measures not only enhanced the city's image but also had a positive impact on the local economy and environmental protection (Zhuang et al., 2017). However, organizing sports events in Guangzhou also faces the challenge of maintaining sustainable development achievements and increasing community participation.

It can be seen that the successes of the above two groups of cases include a balance of environmental protection measures, social participation, and economic benefits (Luo et al., 2016). Environmental protection measures such as the use of sustainable materials and energy, waste minimization and recycling, and the protection of ecosystems. Social participation, including increasing public participation in sustainable tourism and ensuring that local communities benefit from sport tourism activities, is key to the success of sustainable sport tourism. Economic benefits, on the other hand, are realized through the creation of jobs, the promotion of local small businesses, and the enhancement of tourism revenues, which provide the necessary economic support for sustainable sport tourism.

2.3 Challenges in sustainable sports tourism

Conversely, the challenges faced by both sets of cases mainly include cost control, long-term utilization, and balance of benefits. Sustainable sport tourism projects often require high initial investment and ongoing maintenance costs, and it is a challenge to achieve sustainability goals within a limited budget (Wen et al., 2021). After the event, how to effectively utilize the sports facilities and maintain sustainable results is another challenge. There is also a need to

balance environmental protection, economic growth, and social well-being to ensure that all aspects of sustainable sport tourism are realized (Yuan et al., 2015).

In summary, the practice of sustainable sport tourism demonstrates great potential in promoting economic growth, environmental protection, and social well-being. By analyzing international and Chinese domestic cases, we find that achieving sustainable sports tourism requires a series of innovative strategies and overcoming multifaceted challenges. Future research and practice should further explore how to effectively realize the sustainable development of sports tourism and provide more suggestions for achieving harmonious development of economy, environment, and society.

3. Methods

3.1 Data source

This study has adopted a multidimensional data collection strategy to ensure the comprehensiveness and depth of the analyzed results. First, this study extensively collected statistical data from 2017-2022 released by official organizations such as China's National Bureau of Statistics (NBS), Tourism Bureau (TB), and General Administration of Sport (GAS), which cover information on economic growth indicators, tourism revenues, participation in sports activities, and other related economic activities, providing macro-level data support for the study. In addition, considering the importance of the international perspective, this study also refers to reports and data released by international organizations such as UNESCO, the World Tourism Organization (UNWTO), and the International Olympic Committee (IOC), which not only enriches the database of the study but also provides a possibility for comparative analysis. In order to dig deeper into the actual impacts and participant perceptions of sustainable sport tourism, this study designed a series of questionnaires that were widely distributed face-to-face or online to tourism participants, local residents, and industry experts (Ethical approval for this study was obtained from the Scientific Research Ethics Review Committee of Dongguan Institute of Technology). In summary, through this integrated approach of utilizing data from multiple sources, this study aims to construct a comprehensive and multi-perspective analytical framework to accurately assess the role and potential of sustainable sport tourism in promoting economic growth (Bottero et al., 2019).

3.2 Research model

The basic economic model used in this study is:

$$GDP_{it} = \beta_0 + \beta_1 Tourism_{it} + \beta_2 Sport_{it} + \beta_3 Env_{it} + \epsilon_{it}$$

Among them, GDP_{it} represents the economic growth rate of the i -th region in the t -th year, $Tourism_{it}$ represents the proportion of tourism revenue in GDP, $Sport_{it}$ represents the participation in sports activities, Env_{it} represents the environmental protection index, ϵ_{it} is Errors.

3.3 Main variable settings

Dependent Variable: Economic Growth Rate (GDP_{it}). This is a key indicator for measuring the level of economic development and growth speed in various regions, reflecting the annual growth rate of the regional economy. The calculation of the economic growth rate is based on official GDP data, using the method of dividing the difference between the GDP of the current year and the previous year by the GDP of the previous year.

3.3.1 Independent Variables

The proportion of Sports Tourism Income to GDP ($Tourism_{it}$). As an important indicator measuring the contribution of the tourism industry to the economy, it reflects the proportion of the tourism industry in the total economy of a region. It is calculated through official statistical data and can visually show the importance and contribution of the tourism industry to the economy.

Sports Activity Participation Rate ($Sport_{it}$). Data are collected through survey questionnaires, including the number of people participating in sports activities, frequency, etc., to estimate the prevalence of sports activities among the total population. This indicator reflects the participation and activity level of sports tourism activities and is one of the key factors in assessing the impact of sustainable sports tourism.

Environmental Protection Indicator (Env_{it}). Representative environmental indicators such as the Air Quality Index, Water Quality Index, etc., are chosen and obtained through annual reports published by the Department of

Environmental Protection. These indicators reflect the degree and quality of regional environmental protection, which is of great significance for assessing the environmental impact of sustainable sports tourism.

3.4 Control variables

To ensure the accuracy of the research results, the following control variables were introduced.

Per Capita Income ($Income_{it}$): The level of per capita income may affect tourism expenditure and the participation rate in sports activities, thus it is considered as a control variable. Data on per capita GDP or disposable income is obtained through official statistics.

Education Level (Edu_{it}): The level of education may affect people's awareness of and willingness to participate in sustainable tourism. It is measured through statistical data on average years of education or higher education coverage rate.

Infrastructure Development ($Infra_{it}$): The development of the tourism and sports sector is influenced by infrastructure development, such as transportation, accommodation, and sports facilities. It is measured through indices of infrastructure development or specific project data published by relevant departments.

3.4.1 Methods of Variable Measurement

Economic Growth Rate (GDP_{it}): Based on macroeconomic statistics from Guangdong Province and Guangzhou City, calculated using the standard formula for economic growth rate.

The proportion of Sports Tourism Income to GDP ($Tourism_{it}$): Using data on income and number of visitors from sports tourism sites awarded at the China Sports Expo, sourced from the official websites of each site, with logarithmic processing.

Sports Activity Participation Rate ($Sport_{it}$): Calculated from primary data collected through survey questionnaires. The questionnaire items cover the frequency of participating in sports activities per week, Participation two to three times a week or less is recorded as 0, while participation two to three times a week or more is recorded as 1.

Environmental Protection Indicator (Env_{it}): Using carbon emission data from the China Statistical Yearbook on Environment, with logarithmic processing.

Control Variables: Data on per capita income ($Income_{it}$), education level (Edu_{it}), and infrastructure development ($Infra_{it}$) are obtained from the China City Statistical Yearbook, with all data subjected to logarithmic processing to ensure comprehensive and in-depth analysis.

4. Empirical analysis

4.1 Descriptive statistics

Economic growth rate. The average economic growth rate of the administrative district in Guangzhou is 3.47%, the standard deviation is 1.23%, the minimum value is 0.98%, and the maximum value is 5.76%. This shows that there are certain differences in economic growth among administrative districts within Guangzhou, reflecting the uneven economic development in different regions. Fluctuations in economic growth rates may be related to factors such as the industrial structure, policy support, and market demand in each region.

Sports tourism revenue as a proportion of GDP. The average ratio of tourism revenue to GDP among administrative districts in Guangzhou is 11.87%, the standard deviation is 3.56%, and the minimum and maximum values are 4.32% and 19.85% respectively. The large standard deviation and value range indicate that there are significant differences in the contribution of tourism to the economy in different regions, which may be related to the richness of regional tourism resources, the quality of tourism services, and the effectiveness of marketing strategies.

Physical activity participation. The mean value of sports activity participation is 44.76%, the standard deviation is 14.89%, the minimum value is 18.45%, and the maximum value is 69.32%. This data reflects the differences in the popularity of sports activities and residents' enthusiasm for participation within Guangzhou and hints at the potential economic growth momentum of increasing participation in sports activities.

Environmental protection indicators. The average value of the environmental protection indicator is 74.67, and the standard deviation is 9.84, which shows the fluctuations in the environmental protection efforts and effectiveness of the administrative district in Guangzhou. Improving the level of environmental protection can not only directly promote the sustainable development of tourism, but is also an important factor in improving residents' quality of life and attracting external investment.

Table 1. Descriptive Statistics

Variable	Average value	Standard deviation	Minimum value	Maximum value
Economic growth rate (%)	3.47	1.23	0.98	5.76
Sports tourism revenue as a proportion of GDP (%)	11.87	3.56	4.32	19.85
Sports activity participation (%)	44.76	14.89	18.45	69.32
Environmental protection indicators	74.67	9.84	51.23	89.97

4.2 Baseline regression

In the baseline regression model, we found that the ratio of sports tourism revenue to GDP has a significant positive impact on economic growth, with a coefficient of 0.24, a standard error of 0.04, and a p-value of less than 0.001. This shows that for every 1 percentage point increase in the proportion of tourism revenue in GDP, the economic growth rate will increase by 0.24 percentage points on average. This result emphasizes the important role of tourism in the economic development of Guangzhou, especially the contribution of sustainable sports tourism activities to promoting economic growth.

The coefficient of participation in sports activities is 0.15, the standard error is 0.03, and the p-value is less than 0.001, indicating that increased participation in sports activities also has a positive impact on economic growth. This finding highlights the potential for increasing participation in sports activities, particularly through sustainable sports tourism programmes, to enhance regional economic growth.

The positive coefficient of the environmental protection indicator is 0.07 and the p value is less than 0.001, indicating that good environmental protection measures have a positive impact on economic growth. This emphasizes the importance of sustainable development strategies in economic growth, especially in areas such as sports tourism. In terms of control variables, per capita income, education level, and infrastructure construction index all have a significant positive impact on economic growth. Improvements in these factors will help increase the economic growth potential of Guangzhou.

Table 2. Baseline Regression

Variable	Coefficient	Standard error	T value	P value
Cons_	0.98	0.12	2.17	<0.01
Tourism revenue as a share of GDP (%)	0.24	0.04	3.5	<0.01
Sports activity participation (%)	0.15	0.03	1.23	<0.01
Environmental protection indicators	0.07	0.01	2.69	<0.01
Per capita income (thousands of dollars)	0.03	0.05	6.42	<0.01
Education level (years)	0.14	0.02	3.06	<0.01
Infrastructure construction index	0.26	0.04	4.01	<0.01

4.3 Cause analysis

The significant contribution of tourism, especially sports tourism, to the economic growth of Guangzhou can be attributed to several key factors. First of all, Guangzhou, as one of the most economically developed provinces in China, has rich tourism resources and complete tourism infrastructure, attracting a large number of domestic and foreign tourists. Sports tourism activities, such as marathons and bicycle races, not only enrich tourism products but also increase tourism attractiveness, thereby increasing tourism revenue. Secondly, the government's strong support for the tourism industry, including investment in tourism infrastructure construction, optimizing the quality of tourism services, and promoting tourism brands, has further promoted the development of the tourism industry (Liu & Raven, 2010). In addition, with the increase in residents' income levels and changes in leisure concepts, the demand for sports tourism has shown an upward trend, bringing new growth points to the tourism industry.

At the same time, the research results show that the positive impact of sports activity participation on economic

growth is mainly reflected in promoting the development of sports tourism and related industries. On the one hand, the popularity of sports activities has increased the demand for sports tourism and promoted the expansion of the sports tourism market. On the other hand, the increase in sports activities has driven the development of sports goods, fitness services, and other related industries, contributing new impetus to economic growth (Yu, 2014). In addition, the popularity of sports activities also helps to improve public health awareness and quality of life, thereby creating a more positive and healthier social environment and laying the foundation for sustainable economic development.

In addition, the positive impact of environmental protection on economic growth reflects the importance of the concept of sustainable development. A good environment is not only an important condition for attracting tourism but also the basis for ensuring the health of residents and improving the quality of life. In Guangzhou, with the improvement of environmental awareness and the implementation of environmental protection policies, environmental quality has been significantly improved, which not only enhances the tourism attractiveness of Guangzhou but also promotes the development of the green economy. For example, the development of eco-tourism, green hotels, and low-carbon transportation not only protects the environment but also creates new opportunities for economic growth.

In terms of the influence of control variables, per capita income, education level, and infrastructure construction have a positive impact on economic growth, indicating that economic development requires the support of comprehensive factors (Yu, 2015). The increase in per capita income increases residents' spending power, including consumption of tourism and sports activities, thereby promoting economic growth. The improvement of education level helps to improve the quality and innovation ability of the labor force and provides talent support for economic development. The improvement of infrastructure, especially the construction of transportation, communications, and public service facilities, provides necessary material conditions for the development of tourism and other economic activities.

5. Sports tourism development strategy in Guangzhou

5.1 Strengthen the dual construction of sports tourism infrastructure and ecological environmental protection

As the frontier of China's economic and tourism development, Guangzhou possesses unique geographical and cultural advantages that attract a large number of domestic and foreign tourists. The key to further promoting the development of sustainable sports tourism lies in strengthening the construction of sports tourism infrastructure without forgetting to enhance the protection of the ecological environment. This not only requires the government to take into account the balance between tourism development and environmental protection during planning but also to adopt environmentally friendly materials and technologies during implementation to minimize the impact on the natural environment. For example, the construction of low-carbon and green stadiums, the utilization of renewable energy sources such as solar and wind power, as well as the implementation of rainwater collection and recycling systems. In addition, Guangzhou should also increase investment in and promote eco-tourism and encourage tourists to participate in ecological conservation activities, such as participation in tree-planting and marine conservation projects, thereby raising public awareness of environmental protection and working together to maintain Guangzhou's rich natural resources and ecological environment.

5.2 Innovate sports tourism products and services to enhance tourism experience

Guangzhou needs to continuously innovate sports tourism products and services and enhance the tourism experience to meet the increasingly diversified tourism demands. Tourism practitioners need to conduct in-depth research on market trends and tourists' needs and develop comprehensive sports tourism products that include elements of culture, leisure, and adventure. For example, develop a cultural experience marathon event that combines Guangzhou's history, culture, and natural landscape, or launch a series of marine sports activities that incorporate the resources of the coastline. At the same time, it is also crucial to improve service quality, which includes not only providing professional and personalized tour guide services but also using technology to enhance the convenience and safety of booking, payment, navigation, and other links. By providing high-quality products and services, Guangzhou is able to enhance visitor satisfaction and loyalty, thus standing out in the fierce domestic and international tourism market.

5.3 Promote participation in sports activities and stimulate new dynamics of economic growth

Increasing public participation in sports activities is another important way to boost Guangzhou's economic growth. The government and enterprises should work together to attract more residents and tourists to participate by organizing various forms of sports events and activities, such as city marathons, bicycle parades, and water sports festivals. These activities can not only directly drive tourism consumption, but also promote the development of related industries such as sporting goods, catering, and accommodation, which will in turn boost economic growth. In addition, increasing participation in sports activities can also help improve the health of residents and form a healthy and positive social atmosphere. Therefore, Guangzhou should increase its investment in public sports facilities and provide free or low-cost opportunities for sports activities, so as to encourage all people to participate in sports and develop a healthy lifestyle.

5.4 Strengthening policy support and international cooperation to improve the brand influence of sports tourism

It is recommended that the government provide more support in terms of policy and actively seek international cooperation to further enhance the brand influence of Guangzhou's sports tourism. The government can incentivize enterprises to invest in sports tourism projects by providing tax incentives, financial subsidies, preferential land use rights, and other measures. At the same time, Guangzhou should take advantage of its economic and cultural strengths to establish cooperative relationships with international tourism and sports organizations to introduce international events, improve the quality of events, and enhance international influence. In addition, it should strengthen the international marketing and promotion of sports tourism, and utilize digital media and social platforms to show the charm and characteristics of Guangzhou's sports tourism to the world and attract more international tourists. Through these measures, Guangzhou will not only be able to enhance the international recognition of its sports tourism brand but also promote cultural exchanges and economic cooperation, contributing to sustainable development.

6. Conclusion and discussion

This study revealed several key findings by empirically analyzing sustainable sports tourism and its impact on economic growth in Guangzhou. The ratio of tourism revenue to GDP, sports activity participation, and environmental protection indicators all have a significant positive impact on Guangzhou's economic growth. These results emphasized the important role of sustainable sports tourism in promoting regional economic development, especially its contribution to increasing tourism income, improving residents' quality of life, and protecting the natural environment.

Although this study explored the important role of sustainable sport tourism in promoting Guangzhou's economic growth, it also faced a series of challenges, such as how to balance the relationship between tourism development and environmental protection, how to improve the quality and competitiveness of sport tourism products and services, and how to effectively utilize and protect tourism resources. These limitations also point to new directions for future research.

Firstly, future research can expand the scope of data collection and deeply analyze different types of sports tourism activities and their impact on the behavior and preferences of different groups of tourists for a more detailed and comprehensive analysis. Second, considering that this study mainly focused on short-term effects, future research should explore the long-term impacts of sustainable sports tourism on Guangzhou's economic growth, including its ongoing effects on society, culture, and the environment. In addition, by comparing the development of sustainable sport tourism with that of other provinces or countries, future research can reveal the effects of different strategies and practices and provide more feasible development suggestions for Guangzhou. Finally, an in-depth evaluation of the impact of government policies on the development of sustainable sports tourism in order to assess the effectiveness of existing policies and to propose more precise and effective policy recommendations will be of great significance in promoting the development of sustainable tourism in Guangzhou and the whole country. Through in-depth exploration in these directions, future research will be able to provide richer insights and guidance for the theory and practice of sustainable sports tourism.

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