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IDENTIFYING THE KEY FACTORS INFLUENCING THE SPORTS TOURISM DESTINATION COMPETITIVENESS: A CASE STUDY OF THE GREATER BAY AREA, CHINA

Luo Lei^{1*}, Mastura Jaafar², Wang Yongxia³

*¹School of Housing, Building and Planning,
UNIVERSITI SAINS MALAYSIA*

Abstract

Sports tourism has grown significantly in recent times. Despite the increasing number of tourists, companies and destinations involved in sports tourism, there is very limited knowledge of the key factors influencing the sports tourism destination competitiveness (STDC). Destinations should be aware of how to achieve competitive advantage by grasping the key competitiveness factors. This paper aims to identify the critical factors that influence the STDC of urban agglomeration of Guangdong–Hong Kong–Macao Greater Bay Area (GBA). In this research, the literature analysis method and the fuzzy Delphi method were employed. Firstly, the authors conducted a literature review to summarize the factors identified in current literature. Then investigated 5 industrial experts and 5 academic experts to determine the essential factors (using fuzzy Delphi method). The findings showed that STDC is not only affected by the general factors influencing tourism competitiveness but also by sport-specific factors. This study identified 14 key factors including sports event, natural sports resources, cultural sports resources, tourism infrastructure, sports infrastructure, quality of service, destination marketing, policy and planning, climate, human resource, technology, sports tourism activities, accessibility, security and safety that influence STDC of the GBA. Sports tourism stakeholders especially government and managers in the GBA may benefit from the findings since accurately grasping the key competitive factors is helpful to appropriately match available resources and management strategies and enhance the overall level of sports tourism competitiveness.

Keywords: Sports Tourism, destination competitiveness, influencing factors, Greater Bay Area

² Corresponding author. Email: masturaj@usm.my

INTRODUCTION

The tourism sector has experienced remarkable growth over the past few years. Tourism plays a significant role in stimulating economic growth, especially for developing countries, as it serves as a catalyst for expansion, generates foreign revenue, and contributes to the diversification of exports (Goffi et al., 2019). Sports tourism is now widely acknowledged as a dynamic and diverse specialization area in the tourism industry (Higham & Hinch, 2018). In addition to stimulating economic development, sports tourism contributes to sustaining the destination by fostering cultural exchanges between tourists and the locals, expanding tourism offerings through interaction with various types of tourism and diversifying tourist activities year-round (Mesci et al., 2021).

Destinations should recognize the implications of being competitive by comprehending the factors that determine competitiveness (Cronjé & Du Plessis, 2020). Therefore, it is important for tourism stakeholders to identify factors determining the destination's tourism competitiveness in order to effectively match available resources and development strategies, maximally creating value for tourists (Michael et al., 2019).

Destinations' competitiveness is affected by various factors, however, it is improbable that all of these factors carry equal weight or impact in determining the competitiveness of destinations in general or of individual destinations in specific tourism niche market (Ritchie & Crouch, 2011). In consideration of the distinct characteristics of sports tourism sector as well as the uniqueness of each destination (Cronjé & Du Plessis, 2020), it is essential to conduct destination-specific research on the influencing factors of STDC.

GBA boasts a remarkable advantage for sports tourism development with superior economic fundamentals, rich sports tourism resources, extensive facilities and strong supporting policy. However, there is still great room for improving STDC in the GBA. Therefore, this study takes GBA as a study area, aiming to identify the key factors affecting the STDC in GBA. This enables practitioners and policymakers concentrate on the identified key factors to improve the implementation strategy of STDC in the long term.

LITERATURE REVIEW

Models of tourism destination competitiveness (TDC)

Various models of TDC have been developed in previous studies (Crouch & Ritchie, 1999; Heath, 2002; Dwyer & Kim, 2003). For instance, Ritchie and Crouch (1999) developed a conceptual model of TDC and further refined it in 2003. They identified 36 major destination competitiveness factors and clustered them into five main groups: (1) core resources and attractors; (2) supporting factors and resource; (3) destination management; (4) destination policy, planning and development; (5) qualifying and amplifying determinants.

Moreover, Dwyer and Kim (2003) developed an Integrated Model (IM) of TDC. The IM contains many of the factors and category headings identified by Crouch and Ritchie (1999), but makes some adjustments, incorporating some additional determinants of TDC. The model identifies 25 factors and classifies these factors into five major groups: (1) endowed and created resources; (2) supporting factors; (3) destination management; (4) demand conditions; (5) situational condition.

In addition, Heath (2002) proposed a model which is depicted as a house, where the “foundation” establishes the base of competitiveness, the “cement” connects the competitive dimensions, the “building blocks” pillars are fundamental to tourism development of a destination and the “roof” is responsible for defining the “people” of the destination.

The aforementioned models are the best-known works aiming at identifying and explaining the factors that drive destination competitiveness (Andrades & Dimanche, 2017). For this study, these models provide a reference for identifying the major factors perceived as being important in determining the STDC.

Factors of STDC

Researchers have attempted to find answers to the question of “What factors influence STDC?”. On the one hand, it should be highlighted that not all factors that affect the competitiveness of a destination in terms of sport are unique to sports tourism. The knowledge from literature shows that general factors such as tourism infrastructure (Woyo & Slabbert, 2021), safety and security (Andrades and Dimanche, 2017) are very important for sports tourism destination, but they do not differ from other types of destination. On the other hand, it’s important to note that there are indeed factors specific to sport such as sports infrastructure (Liberato, 2021), sports event (Bazzanella et al., 2023), quality of sports tourism service (Rahmati et al., 2020) and so on.

The study identified sports-specific factors and general factors for STDC based on a previous literature review. Thus, a total of 22 potential factors were determined for initial FDM analysis, as presented in Table 1.

Table 1: Description of influencing factors identified in previous researches

	Influencing factors	Description
	Sports event	Sports event covers any organized competition where athletes or teams compete against each other, from local sports competitions to the Olympic Games (Chappelet & Parent, 2017).
Sports-specific factors	Natural sports resources	Refer to the natural scenic spots endowed by various natural resources including canyons, mountains, cliffs, the sea, rivers, snowfields, the sky, etc. These natural spaces constitute the base for the practice of nature sports activities (Melo, 2020).
	Cultural sports resources	Refer to specific cultural resources related to sports tourism such as sport heritage, national traditional sports such as dragon boat

	Influencing factors	Description
		race, martial art etc (Ramshaw & Gammon, 2017; Li & Huang, 2021).
	Sports infrastructure	Refers to physical facilities used for sports activities such as training, competition, fitness and leisure, which may include stadiums, arenas, training facilities (Nassr & Al-Neaimi, 2021).
	Sports tourism activities	Sports tourism activities can range from recreational activities such as golf tournaments, cycling to adventure sports activities like rock climbing or surfing (KIRÁLOVÁ & HAMARNEH, 2017).
	Sports tourism service	Sports tourism service involves the service of sports events as well as the travel agent, accommodation, transportation, and other related services required to enhance the sports tourists' experience (Higham & Hinch, 2018).
General factors	Climate	Climate is defined as the prevailing weather condition observed as a long-term average in a certain region (Werndl, 2016).
	Entertainment	Entertainment can be found in many forms, encompassing tourist assumes a passive "spectator" role such as watching wrestling or night show, as well as an active "participant" role such as gambling (Luo et al., 2020).
	Shopping	Including the availability of shopping facilities such as shopping center, the affordability of shopping items (Choi et al., 2018).
	Accessibility	Destination accessibility depends on the availability, efficiency and service quality of various transport modes (road, air, rail, sea), visa requirements, airport facilities, and carrier competition (Morrison et al., 2024).
	Residents' support	Residents' hospitable behavior and wholehearted participation (Chang et al., 2022).
	Tourism infrastructure	Including accommodation, food services, transportation systems, themed attractions, rental services, and convention facilities. (Dwyer & Kim, 2003).
	Technology	There are numerous applications of technology in sports tourism such as smart stadiums and arenas, online booking platforms, social media marketing, virtual sports tourism (Achilleos et al., 2021).
	Innovation	Innovation is the process of transforming knowledge into value creation. In the sports tourism context, this manifests through three primary dimensions: service optimization, marketing innovation, and the creation of novel sports-related offerings (Selim et al., 2021).
	Human resource	Refers to implementing education and training programs to cultivate professionals to meet the specific needs of the tourism and hospitality industries (Andrades & Dimanche, 2019).
	Destination marketing	Refer to implementing series of activities to conduct destination positioning, build destination brand, create destination image, and finally gain market share (Sotiriadis, 2020).
	Policy and planning	Refer to the guideline and system designed to work in concert to achieve the overall competitiveness and sustainability goals (Dredge & Jamal, 2015).

Influencing factors	Description
Sustainability	Sustainability of sports tourism refers to strategically addressing current stakeholder needs while systematically conserving resources to safeguard future development potential (Mousavi et al., 2022).
Location	Refers to the proximity to other destinations, distance or travel time from major origin markets (Dwyer & Kim, 2003).
Safety and security	Refers to strategies and protocols designed to safeguard tourists from injury, loss, or risk (Szabolcs et al., 2022).
Price competitiveness	Depend on respective prices of the goods and services that cater to tourists needs as well as exchange rate, taxes etc (Forsyth & Dwyer, 2009).
Vision and leadership	Vision and leadership in destination development require stakeholder consensus on an ideal future state and committed cross-sector leadership to achieve it. (Dwyer & Kim, 2003).

Area of study

The study was carried out in Greater Bay Area (GBA), encompassing Hong Kong, Macao and nine Pearl River Delta cities, that is, Shenzhen, Guangzhou, Zhuhai, Dongguan, Foshan, Huizhou, Zhaoqing, Zhongshan and Jiangmen. The region spans approximately 56,000 square kilometers, boasting a population exceeding 86 million as of 2020, with a per capita GDP of around \$20,000. GBA possesses favourable geographical features, including well-developed port clusters and extensive coasts. Furthermore, GBA is rich in abundant sports and tourism resources, hosting large-scale sports events such as the Hong Kong International Marathon, Guangzhou Asian Games and the World Men's Golf Championship. Additionally, a number of world-class sports venues have been constructed such as the Guangzhou Tianhe Sports Center, Shenzhen Universiade Sports Center, and Hong Kong Kai Tak Sports Park, laying a good foundation for sports tourism development in the GBA.

RESEARCH METHODOLOGY

This study identifies key factors influencing STDC in GBA. Using the fuzzy Delphi method (FDM), the importance of the factors identified in the literature review was debated. Microsoft Excel software can be used to deal with experts' views and analyze the result (Mohamed Yusoff et al., 2021).

Fuzzy Delphi Method (FDM)

The Fuzzy Delphi Method (FDM) was developed by Murray et al. (1985), and it integrates fuzzy theory with the Delphi method to achieve consensus by addressing the vagueness and ambiguity of expert opinions. By employing fuzzy set theory, it enhances the efficiency of the traditional Delphi method, particularly in scenarios where expert judgments cannot be precisely described. (Saffie et al., 2016). In other words, the advantage of FDM is that it incorporates and integrates

all expert opinions to achieve consensus, and offers the additional benefits of shorter survey times and lower decision-making costs (Lee et al., 2018).

The process of FDM in this study consists of three main stages: input arrangement, expert survey, and FDM analysis. The research method is demonstrated in figure 1.

Stage 1: Input arrangement

Input arrangement consists of literature review, questionnaire design, pre-test. Firstly, a literature review was conducted to identify the potential factors and design the initial questionnaires. And then 2 experts (they are the 2 professors from the 5 academic experts, one of them possesses extensive research experience in sports tourism and event management, while the other specializes in tourism destination competitiveness) were invited to review check the questionnaire for content validity and question clarity.

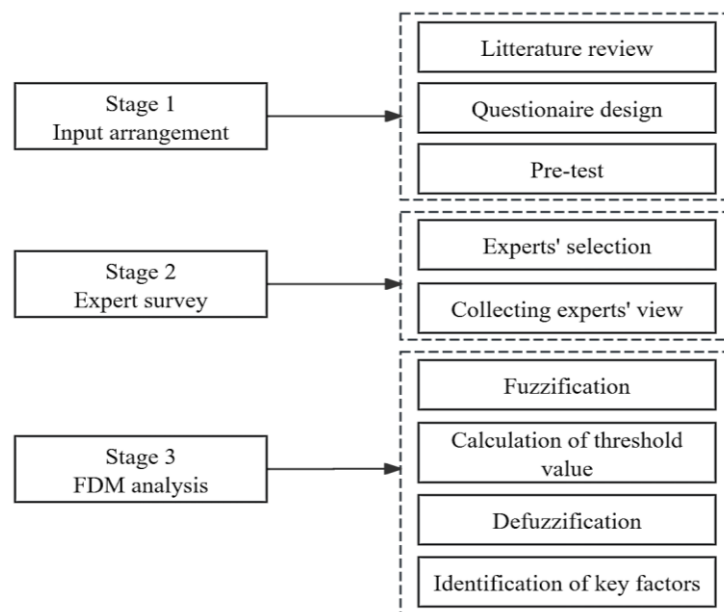


Figure 1: Process of FDM

Source: Author

Stage 2: Expert survey

Experts play a crucial role in qualitative research. Therefore, it was decided to select them based on a set of predefined criteria (educational background, field of expertise, accumulated experience, willingness to participate in the research) to ensure the integrity. According to previous researches (Novakowski & Wellar,

2008), a sample size of 10 experts was considered appropriate for this research. Specifically, the experts consisted of 5 academic experts (expertise in tourism destination competitiveness and sports tourism) and 5 industrial experts (General Manager of travel company and sports tourism company that engage in sports tourism business). The experts' profiles are listed in table 2 and Table 3.

Table 2: List of academic experts

Academic Experts	Field of Expertise	Title	Work experience
Expert 1	Sports tourism and event management	Professor	25 years
Expert 2	Tourism destination competitiveness	Professor	26 years
Expert 3	Tourism destination competitiveness	Associate Professor	22years
Expert 4	Tourism destination competitiveness	Lecturer	7 years
Expert 5	Sports tourism	Lecturer	8 years

Table 3: List of industrial experts

Industrial Experts	Sector of Industry	Position	Work experience
Expert 6	International Travel Service	General manager	25 years
Expert 7	International Travel Service	General manager	15 years
Expert 8	International Travel Service	General manager	12 years
Expert 9	Sport tourism company	Founder & General manager	11 years
Expert 10	Tourism and hospitality company	Co-founder & Deputy General manager	17 years

The next step was collecting qualitative data from experts, where readability-test questionnaires were distributed to experts, requiring them to rate every potential factor using the Likert scale. This process should be repeated until the experts' consensus is equal or higher than 75%.

Stage 3: FDM analysis

There are three requirements that must be fulfilled in the FDM analysis, which are the threshold value ($d \leq 0.2$), and the fuzzy score ($A \geq 0.5$), the experts' consensus $\geq 75\%$. This stage consisted of the following three primary steps (Marlina et al., 2022).

a. Conversion of the Likert score into fuzzy numbers

Experts scored each item in a Likert scale, then transformed into three fuzzy numbers to form a Triangular Fuzzy Number (TFN), which is called a fuzzification process. Fuzzy number, an extension of regular real numbers, does not represent a single value but a set of connected possible values. Each potential value ranges between 0 and 1 (Anand & Bharatraj, 2017). Table 4 illustrates the conversion of the Likert scale into fuzzy numbers.

Table 4: The conversion between the five-point in Likert scale and fuzzy scale

Likert Scale	Linguistic Terms	Fuzzy Scale (n_1, n_2, n_3)
5	Very important	0.6,0.8,1.0
4	Important	0.4,0.6,0.8
3	Neutral	0.2,0.4,0.6
2	Low importance	0.0,0.2,0.4
1	Not important at all	0.0,0.0,0.2

b. Compute the threshold value (d)

The threshold value (d) for determining the level of consensus among experts of specific item should be no greater than 0.2. The formula used to compute threshold value (d) is shown below (Manakandan et al., 2017):

$$d(\tilde{m}, \tilde{n}) = \sqrt{\frac{1}{3} [(m_1 - n_1)^2 + (m_2 - n_2)^2 + (m_3 - n_3)^2]}$$

c. Defuzzification process

The defuzzification process aims to determine the value of the fuzzy score (A). This process helps determine whether an item should be retained or discarded using the following formula:

$$A = \frac{1}{3} \times (m_1 + m_2 + m_3)$$

where m_1 , m_2 , and m_3 represents the average fuzzy number for each item. If the fuzzy score (A) is greater than or equal to 0.5, the item can be retained.

ANALYSIS AND DISCUSSION

The first and second rounds identified a total of 14 key factors, receiving unanimous agreement from all the experts. The other 8 factors did not meet the requirements and failed to obtain expert's consent. The results are presented in Table 5. The 8 discarded factors are: entertainment, shopping, resident's support, information, innovation, location, price competitiveness, vision and leadership,

sustainability. This does not mean that the rejected factors are irrelevant, but given the uniqueness of GBA, they had a lower priority for the interviewed experts compared to other factors.

Table 5: Results of experts' consensus on the influencing factors

Factor	Threshold value (d) ≤ 0.2	Percentage of expert consensus (%) ≥ 75%	Fuzzy score (A) ≥ 0.5	Result
Natural sports resources	0.036	80%	0.78	Accepted
Cultural sports resources	0.072	90%	0.76	Accepted
Sports event	0.036	100%	0.8	Accepted
Sports tourism activities	0.064	80%	0.56	Accepted
Climate	0.04	80%	0.6	Accepted
Tourism Infrastructure	0.064	80%	0.76	Accepted
Sports infrastructure	0.036	90%	0.78	Accepted
Quality of service	0.064	80%	0.76	Accepted
Accessibility	0.064	80%	0.56	Accepted
Human resource	0.04	80%	0.6	Accepted
Destination marketing	0.096	80%	0.74	Accepted
Policy and Planning	0.072	80%	0.62	Accepted
Technology	0.04	80%	0.6	Accepted
Security and safety	0.096	80%	0.54	Accepted
Innovation	0.124	50%	0.46	Rejected
Entertainment	0.14	50%	0.46	Rejected
Shopping	0.084	70%	0.34	Rejected
Resident's support	0.2	50%	0.4	Rejected
Location	0.072	70%	0.38	Rejected
Price competitiveness	0.08	60%	0.4	Rejected
Vision and leadership	0.084	70%	0.34	Rejected
Sustainability	0.096	60%	0.44	Rejected

Sports event

Sports event was considered as the most critical factor, gaining the highest fuzzy score of 0.8. The result was in accordance with previous studies which claimed that destinations can not only provide their tourists with distinctive experiences (Jeong et al., 2019) but also attract new tourist groups by hosting sports events (Pedauga et al., 2022). Various famous sports events are held in GBA, which accumulate extensive experience and good reputation for GBA. Therefore, GBA should further promote sports tourism and boost its reputation by hosting high-end international sports events.

Natural sports resources

Limited researches (Adabi Firouzjah, 2009; Safdel, 2014) had been found that discussed the effect of natural sports resources on sports tourism development. However, natural sports resources achieved the second highest fuzzy score of

0.78, where the consulted expert agreed that it was a critical factor driving sports tourism development for GBA. GBA is well endowed with natural resources such as mountains, rivers, streams and long coastlines. These spaces are natural venues for the practice of sports activities including paragliding, sailing, surfing, cycling, riding, rock-climbing, etc. GBA should deeply develop sports tourism resources and create high-quality sports tourism products to enhance sports tourism competitiveness.

Infrastructure

For sports tourism, infrastructure includes sports infrastructure and tourism infrastructure, which ranked second and third respectively. According to Jovanoviã and Ivana (2016), tourism infrastructure forms the foundation of tourism growth and improves the distribution of services. Sports infrastructure, particularly commercial sports facilities, can stimulate the sports industry, boost tourism, and improve the positive destination image of a city (Xue & Mason, 2019). GBA has a good foundation of tourism infrastructure as well as sports infrastructure. It should further strengthen the investment and construction of sports tourism infrastructure, focusing on attracting leading enterprises and sports tourism projects, thus stimulating the transformation and upgrading of urban infrastructure, accelerating the sports tourism development of the region.

Cultural sports resources

Cultural sports resources ranked third and had fuzzy score of 0.76 in the experts' questionnaire, which agreed with Li & Huang (2021), who stated that cultural sports resources can boost a sports tourism destination's degree of competitiveness. GBA has abundant sports folk cultural resources such as dragon boat races, martial arts and lion dance, which are adored by locals and tourists. In recent years, GBA has paid attention to tapping into the cultural resources and has built a series of unique branded sports projects, such as the Lion King Championship, Dragon Boat Race, and Martial Arts Elite Competition.

Quality of sports tourism service

Quality of sports tourism service also got the third highest fuzzy score with 0.76. This is because the sports tourism sector is part of service industry, and the experiences of sports tourists are greatly affected by the quality of services provided. Rahmati et al. (2020) identify service factors as the most influential factors in the development of sport tourism. To improve the sports tourism service quality of GBA, efforts should be focused on four aspects: basic service (e.g. quality of scenic spots and sports facilities), information service (e.g. information of sports events), entertainment service (e.g. sports entertainment), and supportable service (e.g. protect service during the experience).

Destination marketing

Just like in other works (Sotiriadis, 2020; Arasli et al., 2021), the result indicated that destination marketing is among the most important factors with a fuzzy score of 0.74. Arasli et al. (2021) stated that social media has become a popular and effective tool for destination marketing. Therefore, the sports tourism industry should build a multi-dimensional social media marketing and promotion system to enhance the popularity of sports tourism in GBA.

Policy and planning

Policy and planning got a relatively high fuzzy score of 0.64, which was in line with the opinion that supporting policy and scientific planning are promoting factors of sports tourism competitiveness (Tian et al., 2023). Currently, a number of supporting policies and planning have been issued, which can raise resource allocations, build infrastructure, and remove restrictions that limit development, thus promoting the development of sports tourism in the GBA.

Climate

As a notable factor of STDC, climate was generally discussed in prior studies (Cronjé & du Plessis, 2020; Steiger & Abegg, 2018), and got a fuzzy score of 0.6 in the expert survey. GBA is a typical climate vulnerable area, which is greatly affected by typhoon, rainstorm, lightning, wind, high temperature and other climatic disasters. Therefore, climate is undoubtedly a critical factor influencing the STDC of GBA. The sports tourism industry in GBA should strengthen climate disaster monitoring and early warning, establish and improve tourism risk emergency management mechanism, and better ensure the safety of tourists.

Human resource

Human resource is a factor that has been not well studied in STDC, however, the consulted experts determined it an essential factor with a fuzzy score of 0.6. Sports tourism, as an intersecting industry, urgently requires multifaceted professionals equipped with a combination of knowledge and skills in both sports management and tourism management. As a result, GBA must ensure continuous education development and training programmes to address the shortage of professionals in the field of the sports tourism industry.

Technology

Technology was also considered important with a fuzzy score of 0.6, corresponding to Liao and Nong (2021), who recognized that information technology is essential for a sports tourism destination to compete globally. Moreover, the technology related factors such as new media technology and internet popularity can offer the necessary platforms to enhance the competitiveness of sports tourism destinations. GBA is now at the forefront of

technology and information services in China, with various high technologies converging here. GBA should accelerate applications of technology in sports tourism such as smart stadiums and arenas, virtual sports tourism and E-sports tourism to promote the construction of a smart sports tourism destination.

Accessibility

The accessibility of a destination significantly impacts tourist satisfaction, making it a critical factor to consider (Malik et al., 2020). Nevertheless, it got a relatively low fuzzy score of 0.56 in the accepted factors. This is because the overall transportation network in GBA has already reached to a mature stage. However, accessibility (including airline, rail, highway) is uneven between core developed cities and less developed cities in GBA (Chen et al., 2020). Furthermore, in consideration of the GBA covering 11 cities operating under different political systems, the accessibility is also likely to be affected by the visa requirements and border security checks. Thus, increasing accessibility of GBA is not easy work and needs scientific planning and coordination.

Sports tourism activities

The available sports activities are driving forces in attracting visitors to a sports tourism destination (Ugi Nugraha et al., 2020), and this factor was accepted with a fuzzy score of 0.54. The sports tourism industry can make full use of the rich sports tourism resources to develop various sports activities and create brand to enhance the attractiveness and competitiveness of GBA.

Security and safety

Security and safety were also accepted with a fuzzy score of 0.54. Tourists' perceptions of a destination's safety and security plays a vital role in their decision (Andrades & Dimanche, 2017). Tourists will face risk when they participate in sports tourism, especially the competitive sports and adventure sports (Li et al., 2023). Hence, the security system in GBA must have a well-defined plan and procedure for handling emergencies as well as crises and must provide tourist-friendly security services. Creating a favorable perception of security amongst locals, tourists, and stakeholders will contribute to enhancing STDC of GBA.

CONCLUSIONS

This study attempts to identify key factors influencing STDC in GBA, the FDM was employed and 14 key factors were identified. Theoretically, it helps researchers better understand the factors affecting the improvement of STDC in GBA and consider their relative importance. What's more, this study fills the research gap of destination competitiveness and sports tourism literature by

increasing the empirical study at an urban agglomeration level. Practically, sports tourism stakeholders especially government and managers in GBA may benefit from the findings since focusing on the identified key STDC factors will enable them to organize their priorities better and match their development strategies appropriately to enhance their destinations' competitiveness, and provide tourists with more high-quality, innovative sports tourism attractions and services.

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REFERENCES

- Achilleos, A., Makrominas, M., Markides, C., Alexandrou, R., Konstantinidis, A., Papacosta, E., & Tselepos, L. (2021). Promoting active sports tourism through technology and evaluating its economic impact: Experiences from Cyprus. *Journal of Sport & Tourism*, 25(4), 297-315.
- Adabi Firouzjah, J., Kouzehchian, H., & Ehsani, M. (2009). A study of the effect of natural sport attractions on developing sport tourism in Iran from the viewpoint of the sport and tourism experts. *Sport Management Journal*, 1(1), 67-81.
- Anand, M. C. J., & Bharatraj, J. (2017). Theory of triangular fuzzy number. In *Proceedings of NCATM* (Vol. 80, pp. 80-83).
- Andrades, L., & Dimanche, F. (2017). Destination competitiveness and tourism development in Russia: Issues and challenges. *Tourism Management*, 62, 360-376.
- Andrades, L., & Dimanche, F. (2019). Destination competitiveness in Russia: Tourism professionals' skills and competences. *International Journal of Contemporary Hospitality Management*, 31(2), 910-930.
- Arasli, H., Abdullahi, M., & Gunay, T. (2021). Social media as a destination marketing tool for a sustainable heritage festival in Nigeria: A moderated mediation study. *Sustainability*, 13(11), 6191.
- Bazzanella, F., Schnitzer, M., Peters, M., & Bichler, B. F. (2023). The role of sports events in developing tourism destinations: A systematized review and future research agenda. *Journal of Sport & Tourism*, 27(2), 77-109.
- Chappelet, J. L., & Parent, M. M. (2017). The (wide) world of sports events. In *Routledge handbook of sports event management* (pp. 1-17). Routledge.
- Chang, M. X., Choong, Y. O., Ng, L. P., & Seow, A. N. (2022). The importance of support for sport tourism development among local residents: The mediating role of the perceived impacts of sport tourism. *Leisure Studies*, 41(3), 420-436.
- Chen, Z., Li, Y., & Wang, P. (2020). Transportation accessibility and regional growth in the Greater Bay Area of China. *Transportation Research Part D: Transport and Environment*, 86, 102453.
- Choi, M., Lee, J. S., & Seo, A. J. (2018). Shopping destination competitiveness: Scale development and validation. *Journal of Travel & Tourism Marketing*, 35(8), 1087-1103.
- Cronjé, D. F., & du Plessis, E. (2020). A review on tourism destination competitiveness. *Journal of Hospitality and Tourism Management*, 45, 256-265.

- Crouch, G. I., & Ritchie, J. B. (1999). Tourism, competitiveness, and societal prosperity. *Journal of Business Research*, 44(3), 137-152.
- Dredge, D., & Jamal, T. (2015). Progress in tourism planning and policy: A post-structural perspective on knowledge production. *Tourism Management*, 51, 285-297.
- Dwyer, L., & Kim, C. (2003). Destination competitiveness: A model and determinants. *Current Issues in Tourism*, 6(5), 369-414.
- Forsyth, P., & Dwyer, L. (2009). Tourism price competitiveness. In *The travel & tourism competitiveness report 2009* (pp. 77-90).
- Goffi, G., Cucculelli, M., & Masiero, L. (2019). Fostering tourism destination competitiveness in developing countries: The role of sustainability. *Journal of Cleaner Production*, 209, 101-115.
- Heath, E. (2002). Towards a model to enhance Africa's sustainable tourism competitiveness. *Journal of Public Administration*, 37(si-1), 327-353.
- Higham, J., & Hinch, T. (2018). *Sport tourism development* (Vol. 84). Channel View Publications.
- Jeong, Y., Yu, A., & Kim, S. K. (2019). The antecedents of tourists' behavioral intentions at sporting events: The case of South Korea. *Sustainability*, 12(1), 333.
- Jovanović, S., & Ilić, I. (2016). Infrastructure as important determinant of tourism development in the countries of Southeast Europe. *Ecoforum Journal*, 5(1).
- Kiráľová, A., & Hamarneh, I. (2017). Sports tourism activities as a driver of destination development. In *2017 Conference Proceedings on 20th International Colloquium on Regional Sciences Kurdějov, June* (pp. 14-16).
- Lee, C. H., Wu, K. J., & Tseng, M. L. (2018). Resource management practice through eco-innovation toward sustainable development using qualitative information and quantitative data. *Journal of Cleaner Production*, 202, 120-129.
- Li, G., Cheng, Y., & Cai, J. (2023). Study of risk perception consumption behavior of sports tourism in China. *PLOS ONE*, 18(7), e0288735.
- Li, P., & Huang, J. (2021). Review of the research on ethnic sports tourism in China. In *E3S Web of Conferences* (Vol. 251, p. 03015). EDP Sciences.
- Liao, C., & Nong, L. (2021). *WITHDRAWN: Smart city sports tourism integration based on 5G network and Internet of Things*.
- Liberato, D., Liberato, P., & Moreira, C. (2021). The role of sports tourism infrastructures and sports events in destinations competitiveness. In *Culture and tourism in a smart, globalized, and sustainable world* (pp. 127-144). Springer.
- Luo, J. M., Lam, C. F., & Fan, D. X. (2020). The development of measurement scale for entertainment tourism experience: A case study in Macau. *Current Issues in Tourism*, 23(7), 852-866.
- Malik, M., Al-Salahmi, S. M. K., Al-Kamiyani, N. K. N., & Al-Habsi, G. H. H. (2020). Tourist satisfaction with heritage site attributes in the Sultanate of Oman. *Enlightening Tourism: A Pathmaking Journal*, 10(1), 28-57.
- Manakandan, S. K., Ismai, R., Jamil, M. R. M., & Ragunath, P. (2017). Pesticide applicators questionnaire content validation: A fuzzy Delphi method. *Medical Journal of Malaysia*, 72, 228-235.
- Marlina, E., Hidayanto, A. N., & Purwandari, B. (2022). Towards a model of research data management readiness in Indonesian context: An investigation of factors and

- indicators through the fuzzy Delphi method. *Library & Information Science Research*, 44(1), 101141.
- Melo, R., Van Rheenen, D., & Gammon, S. J. (2020). Part I: Nature sports: A unifying concept. *Annals of Leisure Research*, 23(1), 1-18.
- Mesci, M., Pekerşen, Y., & Mesci, Z. (2021). An overall assessment of sports tourism articles. *Journal of Hospitality and Tourism Insights*, 4(5), 676-707.
- Michael, N., Reisinger, Y., & Hayes, J. P. (2019). The UAE's tourism competitiveness: A business perspective. *Tourism Management Perspectives*, 30, 53-64.
- Mohamed Yusoff, A. F., Hashim, A., Muhamad, N., & Wan Hamat, W. N. (2021). Application of fuzzy Delphi technique to identify the elements for designing and developing the e-PBM PI-Poli module. *Asian Journal of University Education (AJUE)*, 7(1), 292-304.
- Morrison, A. M., Cheah, J. H., & Kumar, R. (2024). A destination performance measurement framework: Exploring the relationships among performance criteria and revisit intentions. *Current Issues in Tourism*, 1-19.
- Mousavi, R., Najafabadi, M. O., Mirdamadi, S. M., & Hosseini, S. J. F. (2022). Rural sports and local games: Missing link between sports tourism development and sustainability. *Journal of Sport & Tourism*, 26(3), 201-223.
- Murray, T. J., Pipino, L. L., & Van Gigch, J. P. (1985). A pilot study of fuzzy set modification of Delphi. *Human Systems Management*, 5(1), 76-80.
- Nassr, E. H., & Al-Neaimi, K. G. (2021). The importance of sports infrastructure for residential neighbourhoods' centres. In *IOP Conference Series: Earth and Environmental Science* (Vol. 754, No. 1, p. 012010). IOP Publishing.
- Novakowski, N., & Wellar, B. (2008). Using the Delphi technique in normative planning research: Methodological design considerations. *Environment and Planning A*, 40(6), 1485-1500.
- Pedaua, L. E., Pardo-Fanjul, A., Redondo, J. C., & Izquierdo, J. M. (2022). Assessing the economic contribution of sports tourism events: A regional social accounting matrix analysis approach. *Tourism Economics*, 28(3), 599-620.
- Rahmati, M., Sadr, A. H., & Toorani, A. (2020). Explaining factors influencing sport tourism development case study: Minudasht County, Iran Mansour. *Revista Turismo Estudos e Práticas-RTEP/UERN*, (3), 1-14.
- Ramshaw, G., & Gammon, S. J. (2017). Towards a critical sport heritage: Implications for sport tourism. *Journal of Sport & Tourism*, 21(2), 115-131.
- Ritchie, J. B., & Crouch, G. I. (2011). *A model of destination competitiveness and sustainability*.
- Safdel, H., Yektayar, M., Mohammadi, S., & Molazem, T. (2014). Effective factors on sports tourism: Emphasizing development in sports natural attractions. *Annals of Applied Sport Science*, 2(4), 67-74.
- Saffie, N. A. M., & Rasmani, K. A. (2016). Fuzzy Delphi method: Issues and challenges. In *2016 International Conference on Logistics, Informatics and Service Sciences (LISS)* (pp. 1-7).
- Selim, M. A., Abdel-Fattah, N. A., & Hegazi, Y. S. (2021). A composite index to measure smartness and competitiveness of heritage tourism destination and historic building. *Sustainability*, 13(23), 13135.

- Sotiriadis, M. (2020). Tourism destination marketing: Academic knowledge. *Encyclopedia*, 1(1), 42-56.
- Steiger, R., & Abegg, B. (2018). Ski areas' competitiveness in the light of climate change: Comparative analysis in the Eastern Alps. In *Tourism in transitions: Recovering decline, managing change* (pp. 187-199).
- Szabolcs, M., Nagy-Tóth, N. Á., Dávid, L. D., Gogo, A. F. C., & Bujdosó, Z. (2022). The role of sports policing and tourism safety at the summer Olympics. *Sustainability*, 14(10), 5928.
- Tian, J., Deng, W., & Yuan, J. (2023). Evaluation of sports tourism competitiveness of urban agglomerations in Guangdong-Hong Kong-Macao Greater Bay Area. *Heliyon*, 9(12).
- Nugraha, U. U., Ilham, I., Ali, M. M., Iqroni, D. D., Humaid, H. H., & Humaid, F. H. (2020). The development of sports tourism in the Lake Sipin region of Jambi City. *Journal of Critical Reviews*, 7(12), 608-612.
- Werndl, C. (2016). On defining climate and climate change. *The British Journal for the Philosophy of Science*.
- Woyo, E., & Slabbert, E. (2021). Tourism destination competitiveness: A view from suppliers operating in a country with political challenges. *South African Journal of Economic and Management Sciences*, 24(1), 3717.
- Xue, H., & Mason, D. S. (2019). Stadium games in entrepreneurial cities in China: A state project. *Journal of Global Sport Management*, 4(2), 185-209.

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