

Article

Key determinants to enhance the competitiveness of tourist destinations

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Copyright © 2024 by author(s). Journal of Infrastructure, Policy and Development is published by EnPress Publisher, LLC. This work is licensed under the Creative Commons Attribution (CC BY) license. https://creativecommons.org/licenses/ by/4.0/ Abstract: Improving the competitiveness of tourism destinations is crucial for driving local economies and achieving income growth. In light of this evidence, numerous government departments strive to assess specific factors that impact the competitiveness of tourism destinations, enabling them to issue appropriate new tourism policies that promote more effective forms of tourism business. Therefore, the primary objective of this paper is to investigate how various elements such as tourism resources, tourism support, tourism management, location conditions, and tourism demand influence regional competitiveness in the Northern Bay region of Guangxi Province in China. To accomplish this goal, an online survey was conducted to collect data from 420 visitors who had experienced North Gulf Tourism; yielding an impressive response rate of 95 percent. The findings reveal that all aforementioned factors-namely: Tourism resources, tourism support, tourism management, location conditions and tourist demand-significantly impact destination competitiveness. Notably though, it was found that among these factors influencing destination competitiveness; it is primarily determined by effective local-level management ($\beta = 0.345$). Following closely behind are tourist demand ($\beta = 0.133$) as the second most influential factor affecting destination competitiveness; followed by location conditions ($\beta = 0.116$) ranking third; then comes tourist support ($\beta = 0.03$) as fourth in line impacting destination competitiveness; finally with least impact being exerted by available tourist resources ($\beta = 0.016$). Consequently, highlighting that regional competitiveness within Guangxi's Northern Bay area predominantly hinges on efficient local-level management practices thus strongly recommending relevant authorities formulate novel work policies aimed at enhancing levels of local-level competitive advantage within the realm of regional touristic offerings.

Keywords: tourist destinations competitiveness; tourist resource; tourist support; tourist destination management; tourist location condition; tourist demand

1. Introduction

In the scholarly discourse on tourism, a consensus exists regarding the inherent complexity in defining and specifying the concept of tourism competitiveness, given the myriad factors and dimensions influencing the success of destinations (Mior Shariffuddin et al., 2023). Numerous studies have endeavored to identify and assess these factors, yet a unified definition or standardized measurement of tourism competitiveness remains elusive (Rheeders, 2022). Over the past few decades, there has been a notable increase in initiatives emphasizing the imperative to monitor the competitiveness of tourism destinations, accompanied by diverse proposals aimed at defining and gauging their level of competitiveness (Cronjé and du Plessis, 2020). The

primary objective is to evaluate the competitiveness of tourism, as such assessments inform strategic actions and resource allocation for the sector's enhancement (Mendola and Volo, 2017).

Quantitative measurement of a destination's competitiveness involves the analysis of data derived from secondary sources (hard data) or the collection of qualitative information (soft data) through surveys of tourist opinions, insights from travel agents, or assessments by industry experts (Lo et al., 2019). The integration of these diverse data sets necessitates the development of composite indicators that amalgamate or synthesize a range of individual variables representing the dimensions of the phenomenon being measured (Ferreira and Perks, 2020).

Prior research has underscored the significance of various factors in the realm of tourism, including but not limited to tourist resources (Ruban, 2021), tourist support (Khalid et al., 2019), tourist management (Adeyinka-Ojo et al., 2014), tourist location (Lee et al., 2019), and tourist demand (Song et al., 2019). Despite these assertions, the precise impact of these suggested factors on the competitiveness of tourism destinations remains ambiguous, given the potential divergence of perspectives among different groups in disparate tourism geographical contexts (Cronjé and du Plessis, 2020). Consequently, there is a need for further elucidation in the existing literature regarding the manner in which these factors exert influence on the competitiveness of tourism destinations. To address this research gap, the primary objective of this study is to comprehensively integrate these factors and examine their impact on the competitiveness of tourism destinations.

2. Literature review

The significance of tourism destination competitiveness is paramount for attaining a favorable standing in the global tourism market and sustaining competitive advantages (Dagnino et al., 2021). Effective management of these destinations constitutes a critical focal point in the study of tourism (Gato et al., 2022). Given the dynamic nature of the industry, competitiveness emerges as a tangible concept for tourism managers, industry stakeholders, and destinations alike. The formulation and implementation of competitive strategies, delineating ways to compete in the global market, become instrumental in preserving and enhancing competitive advantages (Warr, 1994). Goyal (2020) posits that achieving sustainable competitive advantage necessitates an ongoing commitment of energy and resources to strategic planning, with decisions and actions grounded in specific research findings.

It is imperative for destinations to grasp the universal definition of competitiveness and comprehend models and factors influencing competitiveness (Goyal, 2020). Kunst and Ivandić (2021) observe a rising interest in endeavors to measure destination competitiveness and identify factors or facets contributing to the enhancement of their competitive position. In essence, the awareness and understanding of competitiveness, coupled with strategic efforts, play a pivotal role in navigating the intricate landscape of global tourism dynamics.

Drawing from their competitiveness assessment, Rasoolimanesh et al. (2023) have put forth a set of indicators designed to evaluate the determinants of tourism destination competitiveness. These indicators encompass diverse aspects, including

natural resources, service quality, and destination management. The alteration of any of these indicators has the potential to impact the overall competitiveness of tourism destinations. Nevertheless, a holistic evaluation of competitiveness necessitates the comprehensive consideration of multiple indicators. Consequently, the concept of tourism destination competitiveness emerges as intricate and multifaceted. Further research is imperative to delve into the contemporary issues surrounding the competitiveness of tourism destinations, shedding light on nuanced aspects and contributing to an enhanced understanding of the subject.

In the current theoretical framework, tourism destination competitiveness stands out as a pivotal variable demanding heightened attention from all tourism organizations. Extensive research endeavors are deemed necessary to cultivate an improved quality tourism environment. Scholars representing diverse research backgrounds have proposed several key factors integral to enhancing the competitiveness of tourism destinations. Taking the natural environment perspective, Khan et al. (2020) advocate for the optimal utilization of tourism resources along with the provision of appropriate tourism support. The judicious utilization of tourism resources, coupled with adequate support, not only facilitates increased tourist attraction but also serves to augment the overall competitiveness of tourism destinations.

Alternatively, in terms of operational services, Fyall and Garrod (2020) propose the efficient management of tourism resources to optimize overall tourism operations. Effective management and optimal utilization of tourism resources contribute to an elevated level of attractiveness and service quality within tourism destinations, thereby positively impacting competitiveness. Taking an infrastructure perspective, Mamirkulova et al. (2020) advocate for enhancements in location conditions and the mitigation of issues and conflicts in tourism management. The resolution of challenges and conflicts within the tourism management process enhances the overall appeal of the tourism destination, subsequently fortifying its competitiveness.

Kulshrestha et al. (2020) propose that tourists should tailor their travel demand plans to align more effectively with the characteristics of tourist destinations. This strategic adaptation of tourism demand enhances the overall tourist experience, fostering a more enjoyable environment and ultimately contributing to heightened competitiveness. Furthermore, Richards (2020) recommends the enhancement of tourism support technologies to alleviate management fatigue within tourism destinations. The reduction of managerial strain not only elevates the service standards of tourism destinations but also plays a pivotal role in augmenting their competitiveness.

Despite the recognized relevance of tourism resources, tourism support, tourism management, location conditions, and tourism demand to the competitiveness of diverse tourism destinations, there exists a research gap in systematically testing these factors in relation to the competitiveness of distinct tourism locales. To address this gap, the present study endeavors to consolidate these factors into a unified theoretical model and empirically investigates their collective impact on the competitiveness of tourism destinations within the North Gulf region of Guangxi by using the tool software Smart Partial Least Squares (SmartPLS) for data analysis, filling the gap of insufficient attention to local communities in the tourism research in this region.

In accordance with pertinent research, tourism resources are defined as the natural and man-made assets available to tourism destinations (Ruban, 2021). Yanagi (2022) asserts that these resources encompass all specialized assets providing services specific to a given tourism destination. The abundance of tourism resources significantly influences the attractiveness and competitiveness of such destinations (Liang et al., 2021). Agzamov et al. (2021) highlight in their study that within the realm of tourism, a tourist destination's richness and diversity of resources serve to positively influence the evaluation and appeal from tourists. Similarly, Zhou et al. (2023) contend, based on their observations in the field of tourism, that the strategic utilization and enhancement of tourism resources contribute to increased attractiveness of tourism destinations and foster positive experiences for tourists in the region. Building on the aforementioned theoretical discourse, the richness of tourism resources exhibits a positive correlation with the competitiveness of tourism destinations. Mai et al. (2020) through literature review and empirical research, using Statistical Package for the Social Sciences (SPSS) and Smart Partial Least Squares Structural Equation Modeling (SmartPLS-SEM) software, it is found that infrastructure construction, tourism material facilities and tourism resources are the key factors affecting the sustainable development of tourism in Vietnam. It further verifies that tourism resources have a positive impact on the competitiveness of tourism destinations.

As per the delineation of tourism support, Susanto (2019) emphasizes the responsibility of regional authorities in facilitating the growth of local communities. Historically, local governments and authorities had limited responsibilities in ensuring the actualization of tourist destinations. However, a paradigm shift has occurred, with local governments and authorities now recognizing their active role in fostering tourism development. Farida and Bin-Tahir (2019) assert that governmental commitment to tourism development is essential, highlighting the pivotal role of regional governments in ensuring the progress of tourism. Additionally, they caution against unwarranted controls imposed by local governments and authorities, which may hinder rather than facilitate tourism development. Building on this perspective, Arintoko et al. (2020) hypothesize that regional governments and authorities are increasingly acknowledging the significance of tourism and are directing careful attention towards its importance in their developmental agendas. Neuts et al. (2021) studied the Scheldeland region in Flanders, Belgium, using partial least squares structural equation modeling (PLS-SEM) and found that social, psychological and political empowerment in this region has a significant impact on tourism development support. It further verifies that tourism support has a positive impact on the competitiveness of tourism destinations.

Tourism destination management encompasses various facets such as policy formulation, planning and design, and organizational oversight (Gelter et al., 2021). Effective management plays a pivotal role in enhancing the quality of tourism products and services, elevating tourist satisfaction, attracting a larger visitor base, and fostering local economic development (Pino et al., 2019). The study underscores the crucial involvement of management organizations in collaborative efforts for tourism planning and development. However, it also identifies a noteworthy issue wherein government tourism agencies may neglect cooperation with stakeholders, potentially resulting in insufficient integration and adversely affecting destination competitiveness (Mihalic and Kuščer, 2022). Thi Phuong Anh et al. (2022) adopted the partial least squares (PLS) method to predict the willingness of Vietnamese tourism stakeholders to participate in the destination management system (DMS). The results show that social influence, government regulation and technology awareness are important factors affecting the participation of tourism stakeholders in tourism decision-making and management. It further verifies that tourism management has a positive impact on the competitiveness of tourism destinations.

Simultaneously, challenges arise from the absence of a unified management system and the alignment of interests among all involved parties. Such issues have the potential to detrimentally impact the image and reputation of destinations, thereby diminishing their competitiveness (Muniz et al., 2021). Consequently, the study advocates not only prioritizing resource development but also emphasizing the need to fortify management capabilities. It underscores the importance of establishing effective mechanisms and market models to enhance the quality of products and services within the tourism sector (Fyall and Garrod, 2020).

The geographical positioning of tourist destinations assumes a pivotal role in tourists' destination selection. As elucidated in the study by Santana-Santana et al. (2020), the concept of the strategic location of tourist destinations exerts a substantial influence on their overall success. Agustaniah et al. (2022) assert that the success of a tourist destination is intricately linked with its geographical location, encompassing the positioning of heritage sites along with associated activities and facilities. Notably, if the tourism facilities of a world heritage site are effectively integrated with the surrounding tourism industry in terms of geographical positioning, it can profoundly impact the overall tourism development of the region (Zhang et al., 2021). Pratama (2023) adopted the intelligent partial least squares (PLS) method to conduct path modeling analysis, and the results showed that tourists' preferences have a significant impact on tourism decision-making, and the location conditions and accessibility of scenic spots are the key factors. Furthermore, it is verified that tourism location conditions are also important factors affecting the competitiveness of tourism destinations.

Tourism demand encompasses the desire of tourists for various tourism products and services, encompassing aspects such as tourism satisfaction, forms of tourism, and various tourism activities. The dynamics of tourism demand are intricately linked to the prevailing socioeconomic context, as highlighted by Song et al. (2019). For instance, the evolving consumption patterns and improved quality of life among the younger demographic underscore a growing preference for personalized and diversified tourism products and services. This trend prompts continuous innovation and the enhancement of service quality within tourism destinations, as observed by Abdulla et al. (2019). Malec and Abrhám (2016) used partial least squares (PLS) and principal component analysis (PCA) to study the relationship between tourism demand and economic growth during the global economic crisis, and discussed the future development direction of tourism demand, such as the rise of medical tourism. It further verifies that tourism demand is also an important factor affecting the competitiveness of tourism destinations.

Furthermore, the rising elderly population contributes to an increasing demand

for health and wellness tourism. Cham et al. (2021) conducted an examination of medical tourism in Malaysia, revealing spillover effects wherein more Chinese individuals seek medical treatment in Malaysia. The income and consumption generated through such medical tourism activities exert a positive impact on the overall development of tourism in the destination.

This study endeavors to address existing research gaps by introducing a novel research model designed to assess the antecedent variables influencing the competitiveness of tourism destinations in the Northern Bay region of Guangxi Consequently, our objective is to assess the following factors: Tourist resources in the Northern Bay region, Tourist support, Tourist destination management, Tourist location conditions, and the influence of Tourist demand on the competitiveness of tourist destinations. To this end, we formulate the following hypothesis, as illustrated in **Figure 1**:

H1: Tourism resources have a significant positive impact on tourism destination competitiveness.

H2: Tourism support has a significant positive impact on tourism destination competitiveness.

H3: Destination management has a significant positive impact on tourism destination competitiveness.

H4: Destination location condition has a significant positive impact on tourism destination competitiveness.

H5: Tourism demand has a significant positive impact on tourism destination competitiveness.



Figure 1. Theoretical model.

3. Methodology

In the research design, a quantitative approach was adopted for data collection through questionnaire administration, employing a non-probability sampling method known as purposive sampling to select respondents, comprising individuals aged 18 and above, including domestic and international tourists who had visited or resided in the Northern Bay area of Guangxi. Ocean tourism emerged as the most attractive destination in the region, primarily due to its uniqueness in natural, cultural, and adventure tourism aspects. Considering the potential of ocean-related activities to provide valuable alternative income sources for local communities, applying the proposed research framework to the Northern Bay tourism destination in Guangxi is deemed necessary to identify the most relevant factors influencing destination competitiveness. Moreover, the success of this study in the Northern Bay could potentially impact other marine tourism sites across China.

In the discussion of sample size, multiple specific suggestions have been made by the academic community. Some researchers believe that the sample size should be at least greater than 100 to ensure the validity of the model analysis. Other views emphasize that the sample size should be at least 5 times the number of parameters of the model itself, or 10 times the number of measured variables. In general, most studies believe that the sample size between 200 and 500 is a relatively appropriate range (Dwyer and Kim, 2003), in order to ensure the identification and stability of the model, each factor should have at least three measurement indicators to ensure the accuracy and reliability of measurement. A total of 420 online questionnaires were disseminated during the survey. However, due to significant omissions in responses by some participants, 21 questionnaires were identified as invalid. Ultimately, 399 valid questionnaires were collected, resulting in an effective response rate of 95% (399/420). Furthermore, for the quantitative analysis, this study opted to employ Smart-PLS 3.0 software. This choice was motivated by the software's suitability for handling complex structural equation models, allowing for effective exploration of the relationships between tourism resources, tourism support, tourism management, tourism location conditions, tourism demand, and destination competitiveness. For example, Rheeders and Meyer (2022) proposed a new tool to measure the competitiveness of regional tourism destinations by using PLS-SEM for confirmatory factor analysis and SPSS for exploratory factor analysis, and taking Sedibeng and Fezile Dabi District municipal districts as pilot studies. The reliability and validity of the tool are verified, which provides a practical tool for future destination development and competitive analysis.

The survey instrument employed in this study encompasses six primary variables. Items for each variable were initially drawn from established prior research. In total, 18 items were adapted from past studies and revised according to the situation in the Northern Bay of Guangxi. As stated in the literature review, we fully summarize the previous research results and other highly mature and reliable measurement scales to ensure the reliability and validity of the scale content, the three tourism resources constructs originated from the work of Mai et al. (2020). Subsequently, the three tourism support items were adapted from the study conducted by Bhat et al. (2020). The three items pertaining to tourism management were adopted from the research undertaken by Thi Phuong Anh et al. (2022). Additionally, the three items concerning tourism demand were provided by Malec and Abrhám (2016). Lastly, the three items gauging tourism destination competitiveness were adopted from the study conducted by Grassini et al. (2023).

This study develops a comprehensive survey framework for analyzing tourism destination competitiveness, encompassing questionnaire design, scale creation, and influential factor modeling, aiming to delve into sustainable development aspects effectively. Simultaneously, respondents utilized a 5-point Likert scale to assess the measurements for each variable, where responses ranged from 1 (strongly agree) to 5 (strongly disagree). Additionally, Hair (2017) acknowledge that employing this rating procedure is appropriate for gathering information from respondents as it conserves their time and effort in completing the survey.

For theoretical verification, we conducted exploratory factor analysis (EFA) on

non-standardized data sets to support the theoretical basis of the construct (Hair, 2017). Subsequently, we conducted block factor analysis and reliability analysis for each construct to verify its impact on a set of responses/indicators identified in previous literature.

4. Results

Skew (i.e., Promax) rotation was performed using principal component analysis (PCA) on the entire non-standardized dataset. Promax rotation maximizes variance along new axes while allowing for factor intercorrelation, facilitating the identification of predictive relationships among constructs. Subsequent to the exploratory factor analysis (EFA), it was found that the final model structure can explain 66.02% of the variance, surpassing the 60% threshold, indicating good validity. This is illustrated in **Table 1**.

Comment	Eigenvalues from Promax Rotation			
Component	Total	Variance %	Cumulative %	
1	16.261	41.696	41.696	
2	3.521	9.028	50.723	
3	1.913	4.905	55.628	
4	1.526	3.912	59.541	
5	1.380	3.537	63.078	
6	1.147	2.941	66.019	

 Table 1. Total variance explained.

Note: Extraction method: Principal components analysis; rotation method: Promax with Kaiser normallzation.

In this study, path analysis was employed to analyze the data, as depicted in **Figure 2**. However, prior to generating the regressions for the path analysis approach, three primary analyses were conducted. Firstly, confirmatory factor analysis (CFA) was conducted to test the item reliability, convergent validity, and discriminant validity of the measurement scales. As shown in **Table 2**. In the reliability assessment, both Cronbach's Alpha and composite reliability scores exceeded 0.7, indicating the presence of content reliability in the constructed variables. Moreover, as the Average Variance Extraction (AVE) score for each variable surpasses 0.5, the variable structure of this study demonstrates convergent validity (Jansom and Pongsakornrungsilp, 2021).



Figure 2. Results of path analysis.

Variable	Items	Cronbach's Alphaα	CR	AVE
	TR1			
Tourism Resources	TR2	0.787	0.876	0.702
	TR3			
	TS1			
Tourism Support	TS2	0.761	0.863	0.678
	TS3			
	TM1			
Tourism Management	TM2	0.774	0.868	0.689
	TM3			
	TL1			
Tourism Location	TL2	0.780	0.871	0.693
	TL3			
	TD1			
Tourism Demand	TD2	0.776	0.870	0.690
	TD3			
	TDC1			
Tourism Destinations Competitiveness	TDC2	0.835	0.899	0.749
competitioness	TDC3			

Table 2. Reliability and convergent validity.

Secondly, this study conducted an assessment of discriminant validity. The data were subjected to statistical processing to derive the square root of the Average Variance Extraction (AVE) score, which was then compared to the correlation structure score. In instances where the score of a given construct is lower than the square root of its AVE score, the variable construct is considered to possess discriminant validity (Kim et al., 2023). As illustrated in **Table 3**, all square roots of AVE scores exceed the scores of the related constructs. Consequently, all variable constructs exhibit discriminant validity.

Variable	1	2	3	4	5	6	
TR	0.838	0.54	0.516	0.468	0.448	0.324	
TS	-	0.823	0.749	0.687	0.588	0.456	
TM	-	-	0.83	0.711	0.677	0.549	
TL	-	-	-	0.833	0.698	0.483	
TD	-	-	-	-	0.831	0.473	
TDC	-	-	-	-	-	0.865	

Table 3. Discriminant validity.

Note: Highlighted scores indicated square roots of AVE scores.

Finally, an analysis of the impact on the competitiveness of tourism destinations was conducted. The findings indicate that tourism resources significantly influence the competitiveness of tourism destinations ($\beta = 0.016$, t = 0.309, p < 0.05), thereby supporting Hypothesis 1. Additionally, tourism support demonstrates a significant

impact on the competitiveness of tourism destinations ($\beta = 0.03$, t = 0.45, p < 0.05), confirming Hypothesis 2. Furthermore, tourism management exhibits a substantial impact on the competitiveness of tourism destinations ($\beta = 0.345$, t = 5.089, p < 0.001), thus supporting Hypothesis 3. Moreover, tourism location significantly affects the competitiveness of tourism destinations ($\beta = 0.116$, t = -1.345, p < 0.01), corroborating Hypothesis 4. Lastly, tourism demand has a significant impact on the competitiveness of tourism destinations ($\beta = 0.133$, t = 1.802, p < 0.01), supporting Hypothesis 5. In summary, the results confirm all five hypotheses. **Table 4** provides a concise overview of the hypothesis tests.

Independent variable Dependent variable Std. Beta t-value Result No. 1 TR 0.051 0.309* Supported 2 TS 0.068 0.450*Supported 3 TM TDC 0.068 5.089*** Supported 4 TL 0.086 1.345** Supported 5 TD 0.074 1.802** Supported

Table 4. Summary of Hypothesis Testing.

Note: * *p* < 0.05, ** *p* < 0.01, *** *p* < 0.001.

5. Discussion

In accordance with the empirical findings, tourism resources exert a positive impact on the competitiveness of tourism destinations. One rationale for this positive influence lies in the direct shaping of the attractiveness and distinctiveness of destinations by tourism resources (Nathaniel and Adedoyin, 2022). Diverse forms of tourism resources, including natural landscapes, cultural heritage, and historical sites, offer tourists a wealth of choices and experiences, thereby enhancing the overall allure of the destination (Zhang and Ju, 2021). This study discerns that high-quality tourism resources serve not only as a pivotal factor in attracting tourists but also as a significant driver for a destination to distinguish itself in a fiercely competitive market. The multifaceted nature of these resources piques the interest of tourists and directly impacts their decision-making process when selecting a destination. Despite the positive impact of tourism resources on destination competitiveness, attention should be paid to factors such as environment, carrying capacity and cultural authenticity, emphasizing the importance of sustainable resource management and responsible tourism initiatives.

Furthermore, tourism support demonstrates a positive impact on the competitiveness of tourism destinations. Sufficient tourism support plays a pivotal role in enhancing the attractiveness of tourist destinations (Musleh et al., 2023). Government-level investments and support contribute to infrastructure development, service quality improvement, and the advancement of tourism marketing, collectively augmenting the overall attractiveness and competitiveness of tourism destinations (Agustaniah et al., 2022). Elevated levels of service quality and convenient tourism facilities contribute to an enhanced tourism experience for visitors, ultimately fostering greater satisfaction and loyalty (Puducherry and Rajesh, 2013). This study underscores that well-established tourism support not only attracts a larger influx of

tourists but also increases tourism revenue, thereby generating positive impacts on the local economy. However, attention should be paid to possible negative effects, such as excessive commercialization, cultural erosion and community alienation, and it is necessary to balance development with the protection of local culture and environment.

Subsequently, tourism management exhibits a positive impact on the competitiveness of tourism destinations. Through the implementation of effective management strategies and organizational mechanisms, tourism destinations can adeptly cater to the needs of tourists, optimize the utilization of tourism resources, and elevate the quality of services (Constantoglou, 2020). This study discerns that the adoption of scientifically grounded and judicious tourism management practices serves to enhance the competitiveness of destinations. Supportive management fosters the establishment of a favorable brand image in the market and facilitates the sustainable development of the tourism industry. Collaborative efforts between the government and the private sector, coupled with effective marketing strategies, constitute integral components of tourism management support. These measures directly contribute to the augmentation of the attractiveness and competitiveness of tourism destinations. But attention needs to be paid to aspects such as management sustainability, community involvement, cultural preservation and environmental protection to ensure healthy tourism development and maximize the competitiveness of the destination.

Subsequent to that, tourism location exhibits a positive impact on the competitiveness of tourism destinations. Factors such as geographical location, transportation convenience, area accessibility, and the arrangement of nearby attractions and service facilities directly influence tourists' decisions when selecting a destination (Turayev and Atamurodov, 2021). This study discerns that a well-developed transportation network, robust infrastructure, and a judicious distribution of attractions all contribute positively to the competitiveness of tourism destinations. Favorable location conditions serve to enhance the popularity of the destination, elevate the visitation rates of tourists, and offer an enhanced tourism experience. Furthermore, optimal location conditions also contribute to the economic development of the destination, fostering sustainable growth within the tourism sector. At the same time, it is necessary to ensure the improvement of infrastructure and services to enhance the satisfaction and loyalty of tourists, thus promoting the sustainable development and competitiveness of the destination.

Conclusively, tourism demand manifests a positive impact on the competitiveness of tourism destinations. Varied tourism needs encompass cultural tourism, leisure and vacation pursuits, business travel, among others. Consequently, destinations must tailor their offerings of tourism products and services in alignment with these diverse needs (Lyócsa et al., 2019). This study ascertains that the richness and diversity of tourism demand significantly contribute to the competitiveness of destinations. When a destination adeptly satisfies the diverse needs of tourists and provides them with personalized and varied tourism experiences, it is more likely to attract a greater number of visitors. The provision of customized services and experiences not only elevates tourist satisfaction and loyalty but also fortifies the competitiveness of the destination. Similarly, it is necessary to pay attention to the protection of the environmental, cultural and social characteristics of the destination

while meeting the needs of tourists, so as to avoid the negative impacts brought by excessive development and commercialization. At the same time, tourism activities need to be carefully planned and managed to ensure the quality of the visitor experience and the sustainable development of the destination.

6. Conclusion

The objective of this study is to examine the influence of tourism resources, tourism support, tourism management, tourism location conditions, and tourism demand on destination competitiveness. The findings reveal that tourism resources (β = 0.016, p < 0.05), tourism support ($\beta = 0.03$, p < 0.05), tourism management ($\beta =$ 0.345, p < 0.001, tourism location conditions ($\beta = 0.116$, p < 0.01), and tourism demand ($\beta = 0.133$, p < 0.01) exert a significant impact on destination competitiveness. In summary, tourism resources, tourism support, tourism management, tourism location conditions, and tourism demand emerge as pivotal determinants of tourism competitiveness in the Northern Bay region of Guangxi. This study delves into the tourism development and competitiveness of the Northern Bay region in Guangxi, offering region-specific theoretical and empirical backing for the region's tourism industry advancement. Through uncovering the impact mechanism of tourism resources, support, management, location conditions, and demand on destination competitiveness, the research furnishes decision-making support and strategic direction for governmental bodies, tourism entities, and stakeholders. Ultimately, it propels the sustainable growth and competitive edge of the tourism sector in the Guangxi Northern Bay region but also serves as a valuable reference for similar tourism destinations across China.

The research outcomes of this study hold significant implications for local communities engaged in tourism, industry stakeholders, and governmental entities, shedding light on the factors influencing tourists' choice of destinations. By prioritizing these factors, tourism stakeholders can effectively enhance destination competitiveness, ensuring sustainable long-term growth. Hence, tourism planners should recognize the pivotal role of destination competitiveness and its potential impact on tourists' willingness to revisit. Future research endeavors could further enrich the existing framework by integrating moderating variables and conducting studies across diverse geographical locations. Such advancements will deepen our understanding of the dynamics of destination competitiveness and inform more targeted strategies for destination management and development.

The study's reliance on self-report survey methods introduces potential biases, such as social expectation and recall bias, which may compromise the objectivity and reliability of the findings. To address this limitation, future research could employ more objective data collection methods, such as observational or experimental approaches. Additionally, ensuring participant confidentiality and anonymity, along with providing clear instructions, can help mitigate biases and enhance the accuracy of the data. While the study primarily focuses on tourism, its applicability to other industries may be limited due to the specific nature of tourism and its competitive landscape. However, certain findings may have broader relevance and could be applied to other industries under specific conditions. To enhance the generalizability

of the findings across industries, future research could broaden the sample to include participants from diverse sectors and adopt a multi-method and interdisciplinary approach. This would enable a deeper exploration of similarities and differences among industries, ultimately enhancing the universality and applicability of the findings. In future research, scholars may consider incorporating additional moderating and mediating variables to examine the proposed framework. This expansion could provide a more comprehensive understanding of the complex relationships between the factors influencing destination competitiveness. Such an approach would contribute to advancing theoretical knowledge and practical insights in the field.

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References

- Abdulla, S. A. M., Khalifa, G. S., Abuelhassan, A. E., & Ghosh, A. (2019). Antecedents of Dubai revisit intention: The role of destination service quality and tourist satisfaction. Restaurant Business, 118(10), 307-316. https://doi.org/10.26643/rb.v118i10.9326
- Adeyinka-Ojo, S. F., Khoo-Lattimore, C., & Nair, V. (2014). A Framework for Rural Tourism Destination Management and Marketing Organisations. Procedia-Social and Behavioral Sciences, 144, 151-163. https://doi.org/10.1016/j.sbspro.2014.07.284
- Agustaniah, R., Wicaksono, A., & Djakfar, L. (2022). Potential tourist destinations for priority transportation infrastructure development in East Kalimantan. IOP Conference Series: Earth and Environmental Science, 1000(1), 012008. https://doi.org/10.1088/1755-1315/1000/1/012008
- Agzamov, A. T., Rakhmatullaeva, F. M., & Giyazova, N. B. (2021). Regional aspects of tourism development. Academicia Globe, 2(6), 153-156. https://doi.org/10.17605/OSF.IO/T5H74
- Arintoko, A., Ahmad, A. A., Gunawan, D. S., et al. (2020). Community-based tourism village development strategies: a case of Borobudur tourism village area, Indonesia. GeoJournal of Tourism and Geosites, 29(2), 398-413. https://doi.org/10.30892/gtg.29202-477
- Bhat, A. A., Majumdar, K., & Mishra, R. K. (2020). Local support for tourism development and its determinants: an empirical study of Kashmir region. Asia Pacific Journal of Tourism Research, 25(11), 1232-1249. https://doi.org/10.1080/10941665.2020.1837890
- Cham, T.-H., Lim, Y.-M., Sia, B.-C., et al. (2020). Medical Tourism Destination Image and its Relationship with the Intention to Revisit: A Study of Chinese Medical Tourists in Malaysia. Journal of China Tourism Research, 17(2), 163-191. https://doi.org/10.1080/19388160.2020.1734514
- Constantoglou, M. (2020). Destination Management in Lesvos, Greece. Characteristics, preferences, images, satisfaction and overall experience. Business Ethics and Leadership, 4(3). https://doi.org/10.21272/bel.4(3).81-106.2020
- Cronjé, D. F., & du Plessis, E. (2020). A review on tourism destination competitiveness. Journal of Hospitality and Tourism

Management, 45, 256-265. https://doi.org/10.1016/j.jhtm.2020.06.012

- Dagnino, G. B., Picone, P. M., & Ferrigno, G. (2021). Temporary Competitive Advantage: A State-of-the-Art Literature Review and Research Directions. International Journal of Management Reviews, 23(1), 85-115. https://doi.org/10.1111/ijmr.12242
- Dwyer, L., & Kim, C. (2003). Destination Competitiveness: Determinants and Indicators. Current Issues in Tourism, 6(5), 369-414. https://doi.org/10.1080/13683500308667962
- Farida, U., & Bin-Tahir, S. Z. (2019). Bureaucratic reform of tourism sector public services in Tana Toraja Regency. IOP Conference Series: Earth and Environmental Science, 340(1), 012045. https://doi.org/10.1088/1755-1315/340/1/012045
- Ferreira, D., & Perks, S. (2020). A Dimensional Framework of Tourism Indicators Influencing Destination Competitiveness. African Journal of Hospitality, Tourism and Leisure, 1-21. https://doi.org/10.46222/ajhtl.19770720-1
- Fyall, A., & Garrod, B. (2020). Destination management: a perspective article. Tourism Review, 75(1), 165-169. https://doi.org/10.1108/tr-07-2019-0311
- Gato, M., Dias, Á., Pereira, L., et al. (2022). Marketing Communication and Creative Tourism: An Analysis of the Local Destination Management Organization. Journal of Open Innovation: Technology, Market, and Complexity, 8(1), 40. https://doi.org/10.3390/joitmc8010040
- Gelter, J., Lexhagen, M., & Fuchs, M. (2021). A meta-narrative analysis of smart tourism destinations: implications for tourism destination management. Current Issues in Tourism, 24(20), 2860-2874. https://doi.org/10.1080/13683500.2020.1849048
- Goyal, A. (2020). A Critical Analysis of Porter's 5 Forces Model of Competitive Advantage. Journal of Emerging Technologies and Innovative Research, 11(4). http://doi.one/10.1729/Journal.25126
- Grassini, L., Magrini, A., & Conti, E. (2023). Formative-reflective scheme for the assessment of tourism destination competitiveness: an analysis of Italian municipalities. Quality & Quantity, 57(4), 3523-3548. https://doi.org/10.1007/s11135-022-01519-1
- Hair, F. (2017). PLS-SEM or CB-SEM: Updated guidelines on which method to use. International Journal of Multivariate Data Analysis (IJMDA), 1(2). https://doi.org/10.1504/IJMDA.2017.087624
- Jansom, A., & Pongsakornrungsilp, S. (2021). How Instagram Influencers Affect the Value Perception of Thai Millennial Followers and Purchasing Intention of Luxury Fashion for Sustainable Marketing. Sustainability, 13(15), 8572. https://doi.org/10.3390/su13158572
- Khalid, S., Ahmad, M. S., Ramayah, T., et al. (2019). Community Empowerment and Sustainable Tourism Development: The Mediating Role of Community Support for Tourism. Sustainability, 11(22), 6248. https://doi.org/10.3390/su11226248
- Khan, A., Chenggang, Y., Hussain, J., et al. (2020). Natural resources, tourism development, and energy-growth-CO2 emission nexus: A simultaneity modeling analysis of BRI countries. Resources Policy, 68, 101751. https://doi.org/10.1016/j.resourpol.2020.101751
- Kim, L., Pongsakornrungsilp, S., Horam, N., & Suong, S. (2023). How to make employees happy: Evidence from Thai university lecturers. Problems and Perspectives in Management, 21(1), 482-492. https://doi.org/10.21511/ppm.21(1).2023.41
- Kulshrestha, A., Krishnaswamy, V., & Sharma, M. (2020). Bayesian BILSTM approach for tourism demand forecasting. Annals of Tourism Research, 83, 102925. https://doi.org/10.1016/j.annals.2020.102925
- Kunst, I., & Ivandić, N. (2021). The viability of the travel and tourism competitiveness index as a reliable measure of destination competitiveness: the case of the Mediterranean region. European Journal of Tourism Research, 27, 2704. https://doi.org/10.54055/ejtr.v27i.2124
- Lee, Y., Pennington-Gray, L., & Kim, J. (2019). Does location matter? Exploring the spatial patterns of food safety in a tourism destination. Tourism Management, 71, 18-33. https://doi.org/10.1016/j.tourman.2018.09.016
- Liang, F., Pan, Y., Gu, M., et al. (2021). Cultural Tourism Resource Perceptions: Analyses Based on Tourists' Online Travel Notes. Sustainability, 13(2), 519. https://doi.org/10.3390/su13020519
- Lo, M.-C., Chin, C.-H., & Law, F.-Y. (2019). Tourists' perspectives on hard and soft services toward rural tourism destination competitiveness: Community support as a moderator. Tourism and Hospitality Research, 19(2), 139-157. https://doi.org/10.1177/1467358417715677
- Lyócsa, Š., Vašaničová, P., & Litavcová, E. (2019). Interconnectedness of international tourism demand in Europe: A crossquantilogram network approach. Physica A: Statistical Mechanics and Its Applications, 526, 120919. https://doi.org/10.1016/j.physa.2019.04.155
- Mai, A. V., Thi, K. C. N., Thi, T. N. N., & Le, T. (2020). Factors influencing on tourism sustainable development in Vietnam. Management Science Letters. https://doi.org/10.5267/j.msl.2020.1.006

- Malec, L., & Abrhám, J. (2016). Determinants of tourism industry in selected European countries: a smooth partial least squares approach. Economic Research-Ekonomska Istraživanja, 29(1), 66-84. https://doi.org/10.1080/1331677x.2016.1156554
- Mamirkulova, G., Mi, J., Abbas, J., et al. (2020). New Silk Road infrastructure opportunities in developing tourism environment for residents better quality of life. Global Ecology and Conservation, 24, e01194. https://doi.org/10.1016/j.gecco.2020.e01194
- Mendola, D., & Volo, S. (2017). Building composite indicators in tourism studies: Measurements and applications in tourism destination competitiveness. Tourism Management, 59, 541-553. https://doi.org/10.1016/j.tourman.2016.08.011
- Mihalic, T., & Kuščer, K. (2022). Can overtourism be managed? Destination management factors affecting residents' irritation and quality of life. Tourism Review, 77(1), 16-34. https://doi.org/10.1108/tr-04-2020-0186
- Mior Shariffuddin, N. S., Azinuddin, M., Hanafiah, M. H., et al. (2022). A comprehensive review on tourism destination competitiveness (TDC) literature. Competitiveness Review: An International Business Journal, 33(4), 787–819. https://doi.org/10.1108/cr-04-2021-0054
- Muniz, E. C. L., Dandolini, G. A., Biz, A. A., et al. (2021). Customer knowledge management and smart tourism destinations: a framework for the smart management of the tourist experience – SMARTUR. Journal of Knowledge Management, 25(5), 1336-1361. https://doi.org/10.1108/jkm-07-2020-0529
- Musleh, Moh., Subianto, A., Tamrin, M. H., et al. (2023). The Role of Institutional Design and Enabling Environmental: Collaborative Governance of a Pilgrimage Tourism, Indonesia. Journal of Local Government Issues, 6(1), 75–90. https://doi.org/10.22219/logos.v6i1.22218
- Nathaniel, S. P., & Adedoyin, F. F. (2022). Tourism development, natural resource abundance, and environmental sustainability: Another look at the ten most visited destinations. Journal of Public Affairs, 22(3). https://doi.org/10.1002/pa.2553
- Neuts, B., Kimps, S., & van der Borg, J. (2021). Resident Support for Tourism Development: Application of a Simplified Resident Empowerment through Tourism Scale on Developing Destinations in Flanders. Sustainability, 13(12), 6934. https://doi.org/10.3390/su13126934
- Pino, G., Peluso, A. M., Del Vecchio, P., et al. (2019). A methodological framework to assess social media strategies of event and destination management organizations. Journal of Hospitality Marketing & Management, 28(2), 189-216. https://doi.org/10.1080/19368623.2018.1516590
- Pongsakornrungsilp, P., Pongsakornrungsilp, S., Jansom, A., et al. (2022). Rethinking Sustainable Tourism Management: Learning from the COVID-19 Pandemic to Co-Create Future of Krabi Tourism, Thailand. Sustainability, 14(18), 11375. https://doi.org/10.3390/su141811375
- Pratama, A. Y. (2023). The influence of tourist preference on the decision to visit with tourism attraction as mediation (study on tourism object of orange ternate fort). Journal of Management and Islamic Finance, 3(2), 266-282. https://doi.org/10.22515/jmif.v3i2.7184
- Rajesh, R. (2013). Impact of Tourist Perceptions, Destination Image and Tourist Satisfaction on Destination Loyalty: A Conceptual Model. PASOS. Revista de Turismo y Patrimonio Cultural, 11(3), 67-78. https://doi.org/10.25145/j.pasos.2013.11.039
- Rasoolimanesh, S. M., Ramakrishna, S., Hall, C. M., et al. (2023). A systematic scoping review of sustainable tourism indicators in relation to the sustainable development goals. Journal of Sustainable Tourism, 31(7), 1497-1517. https://doi.org/10.1080/09669582.2020.1775621
- Rheeders, T., & Meyer, D. (2022). The Development of a Regional Tourism Destination Competitiveness Measurement Instrument. Tourism and Hospitality, 4(1), 1-20. https://doi.org/10.3390/tourhosp4010001
- Rheeders, T. (2022). A review of the determinants of tourism destination competitiveness. Journal of Contemporary Management, 19(2), 238-268. https://doi.org/10.35683/jcman1008.166
- Richards, G. (2020). Designing creative places: The role of creative tourism. Annals of Tourism Research, 85, 102922. https://doi.org/10.1016/j.annals.2020.102922
- Ruban, D. A. (2021). Natural Resources of Tourism: Towards Sustainable Exploitation on a Regional Scale. Sustainability, 13(12), 6685. https://doi.org/10.3390/su13126685
- Santana-Santana, S. B., Peña-Alonso, C., & Pérez-Chacón Espino, E. (2020). Assessing physical accessibility conditions to tourist attractions. The case of Maspalomas Costa Canaria urban area (Gran Canaria, Spain). Applied Geography, 125, 102327. https://doi.org/10.1016/j.apgeog.2020.102327
- Song, H., Qiu, R. T. R., & Park, J. (2019). A review of research on tourism demand forecasting: Launching the Annals of Tourism

Research Curated Collection on tourism demand forecasting. Annals of Tourism Research, 75, 338-362. https://doi.org/10.1016/j.annals.2018.12.001

- Susanto, A. B. (2019). The effect of government policy and environmental sustainability on the performance of tourism business competitiveness: Empirical assessment on the reports of international tourism agencies. International Journal of Energy Economics and Policy, 9(6), 439-446. https://doi.org/10.32479/ijeep.8297
- Thi Phuong Anh, L., Kunasekaran, P., Ari Ragavan, N., et al. (2022). Stakeholders' participation intention towards a sustainable destination management system. Journal of sustainability science and management, 17(1), 66-83. https://doi.org/10.46754/jssm.2022.01.005
- Turayev, B., & Atamurodov, U. (2021). Ways To Develop Infrastructure of Tourism Destinations. Procedia of Social Sciences and Humanities, 1, 164-174. https://doi.org/10.21070/pssh.v1i.38
- Warr, P. G. (1994). Comparative and Competitive Advantage. Asian-Pacific Economic Literature, 8(2), 1-14. Portico. https://doi.org/10.1111/j.1467-8411.1994.tb00091.x
- Yanagi, M. (2022). Classification and regional distribution characteristics of tourism resources in Japan. Resources Data Journal, 1, 24-30. https://doi.org/10.50908/rdj.1.0_24
- Zhang, H., Duan, Y., & Han, Z. (2021). Research on Spatial Patterns and Sustainable Development of Rural Tourism Destinations in the Yellow River Basin of China. Land, 10(8), 849. https://doi.org/10.3390/land10080849
- Zhang, S., & Ju, H. (2021). The regional differences and influencing factors of tourism development on Hainan Island, China. PLOS ONE, 16(10), e0258407. https://doi.org/10.1371/journal.pone.0258407
- Zhou, Q., Zhu, K., Kang, L., et al. (2023). Tea Culture Tourism Perception: A Study on the Harmony of Importance and Performance. Sustainability, 15(3), 2838. https://doi.org/10.3390/su15032838