



Mapping the Economic and Tourism Impacts of Sporting Events: A Bibliometric Analysis of Global Literature (2000–2025)

Nandan Kommineni

Rising Junior, Green Level High School, India

Kommineni.Nandan@gmail.com

<http://dx.doi.org/10.47814/ijssrr.v9i5.3565>

Abstract

Sporting events have evolved into powerful catalysts for economic development, tourism growth, and social engagement, extending far beyond mere athletic competition. This study systematically maps the scholarly landscape on the economic and tourism impacts of sporting events from 2000 to 2025, using bibliometric analysis of 572 peer-reviewed journal articles from the Scopus database. Key indicators, including publication trends, geographic concentration, co-authorship networks, and keyword co-occurrence, were analyzed to uncover the intellectual structure, collaborative patterns, and dominant themes in the field. Results indicate a marked increase in research activity after 2016, reflecting growing scholarly interest in both mega-events, such as the Olympic Games and FIFA World Cup, and smaller, recurring sporting events, including marathons and cycling competitions. Thematic clusters reveal a multidimensional focus encompassing sport tourism, economic outcomes, destination image and branding, community engagement, sustainability, and global competitions. While developed countries dominate the research output, emerging economies are increasingly contributing, highlighting the globalization of sport tourism scholarship. Notably, gaps persist in long-term sustainability assessment, community-centered impacts, and post-pandemic behavioral changes, suggesting avenues for future research. By integrating economic, social, environmental, and branding perspectives, this study provides a comprehensive understanding of how sporting events influence tourism and economic landscapes while offering a strategic roadmap for policymakers, event organizers, and scholars seeking to optimize event outcomes and long-term legacies.

Keywords: *Bibliometric Analysis; Community Impact; Destination Branding; Economic Impact; Sport Tourism*

1. Introduction

Sports events have turned into powerful global phenomena, which go beyond active participation in sports. Since the beginning of community-level competitions, and on the other end, mega climactic events like the Olympic Games and the FIFA world cup sport have become systemic in the economic

framework, tourism policies, and city development agendas of communities across the world. These attract millions of spectators, create large global media audiences and create significant levels of public and private investment. They have a greater social salience given they bring various people together, create national pride, and contribute to cultural exchange, and their economic and tourism consequences make them powerful development tool in host cities and countries (Horne, 2017). The research on sporting events has increased significantly over the last 20 years. The initial research was mainly aimed at measuring direct economic impacts and especially tourist or visitor spending, creation of employment opportunities, and multiplier effects in host countries (Burgan and Mules, 1992). These studies were intended to approximate the short-term fiscal benefits and to rationalize the government spending. Then, the analytical focus was expanded to comprise tourism development, destination branding, urban regeneration, sustainability, and legacy planning (Tomino et al., 2020). This has led to interdisciplinary study of sporting events, which utilizes the study of tourism, economics, urban planning, environmental management, and sports governance. One of the main factors that attract the interest of scholars in sporting events is the economic contribution. Big events provide sources of revenue in terms of ticket purchases, sponsorship packages, video rights, and sales, and they also create stimuli in the hospitality, transport, retailing, and entertainment markets (Tarigan et al., 2024). With the arrival of both domestic and international tourists, there is a possibility of increased hotel occupancy, increased restaurant income and increased local business. Organizing committees and host governments tend to make sporting events appear as stimuli to short and long-term economic development as well as structural change. However, this effect of economic benefits, particularly in their magnitude and distribution, is a disputed point, as some researchers believe in the risks of cost increase, debt, and unequal distribution of benefits (Horne, 2017). This discussion indicates the need to conduct strict and analytical evaluations of economic results, which are related to events.

Most closely related to the economic impact is the contribution of sporting events to the development of tourism. As a subset of the global tourism industry, sport tourism represents one of the rapidly expanding segments, which involves travel aimed at either the participation or observation of sporting events (Raso & Cherubini, 2023). The events always bring both domestic and international visitors who provide economic spillovers due to accommodation, food consumption, transportation, and leisure activities (Duglio & Beltramo, 2017). In addition to direct visitation, sporting events make the destinations visible to the world, creating perceptions and impacting future travel choices. Positive destination experiences are associated with greater destination image and a higher likelihood of revisiting the destination, which ensure long-term tourism competitiveness (Abdollahi et al., 2023). Cities like Barcelona, Beijing, Doha and Sydney have taken advantage of mega climactic events to boost their international branding profile and this is an indication of how strategically sports can be used as a destination branding tool.

Another dimension of event hosting which is salient is infrastructure development. Major competitions can be highly funded by investments in stadiums, transport systems and parks and regeneration of cities. These investments are often presented as legacy assets, which can be used by the community even after the event has ended. Such infrastructure can be optimized to increase the functionality of cities, accessibility, as well as global positioning of a city when planned and managed properly. However, low utilization rates of the facilities and projects that do not realize the entirety of their potential, i.e. the so-called white-elephant ones, reveal the dangers of high-cost event infrastructure and the necessity of strategic post-event utilization (Tomino et al., 2020). Urban legacies research has also established that the results are based on governance, planning and alignment of projects to the overall development goals. The growing number of scholarly articles discussing sporting events is an indication of the increasing complexity of the topic. Research has a broad range of theoretical orientations, methodologies, and geographic areas. There is coexistence between quantitative economic impact studies and qualitative research of community perceptions, sustainability practices, and social legacy outcomes. Although this diversity adds to the knowledge, it also creates fragmentation in the literature. The results

of the research are scattered in various fields and journals, which makes it hard to find an overall picture of the prevailing themes, networks, and rising tendencies. Despite systematic reviews as a study of particular subtopics, there is a lack of large-scale quantitative synthesis, which makes it difficult to map the intellectual framework of research that is specifically dedicated to the economic and touristic impact of sporting events.

In this regard, bibliometric analysis provides a good methodological way of synthesizing and assessing the emergence of academic disciplines. Bibliometrics allows the determination of impactful contributors, central research groups, and theme development through analysis of publication patterns, citation patterns, co-authorship, and keyword co-occurrence. It is more specifically applied to interdisciplinary areas where the production of knowledge cuts across, or includes more than one academic tradition. Bibliometric research using objective quantitative measures can be used to indicate the developmental pattern of a discipline as well as structural institutions of collaboration and concept. Although the phenomenon of sporting events is gaining greater popularity in economic and tourism research, bibliometric mapping of the particular intersection has not been thoroughly developed. Existing reviews have often concentrated on sport management in general or the effects of tourism without considering the economic aspects. As a result, a systematic retrospective analysis of the development of the research on sporting events, the economy in general, and tourism impact, as well as identification of the most prominent country and institutional contributions and the themes that are predominant in the academic discourse, are justified. The given study fills this gap by examining the literature about the economic and tourist implications of sporting events based on publications contained in the Scopus database. Through the analysis of the growth trends in publications, patterns in citation, authorship networks, and networks of keywords, this study offers a systematic review of the intellectual landscape. This method is able to bring together scattered knowledge, define the works with the most impact, emphasize future areas of research, and assist in the more strategic view of the way research in this field has evolved throughout history. The analysis of the trends in publications, networks of collaboration, and thematic clusters makes the study relevant to the understanding of the past and future of the research conducted on the economic and tourism value of sporting events.

2. Methodology

To examine the academic landscape of sporting events research, a structured search was conducted in the Scopus database. The following Boolean query was used:

```
TITLE-ABS-KEY ( sport* AND events AND ( tourism OR econom* ) ) AND PUBYEAR > 1999  
AND PUBYEAR < 2026 AND ( LIMIT-TO ( SUBJAREA , "SOCI" ) OR LIMIT-TO ( SUBJAREA  
, "ECON" ) OR LIMIT-TO ( SUBJAREA , "BUSI" ) ) AND ( LIMIT-TO ( DOCTYPE , "ar" ) )  
AND ( LIMIT-TO ( PUBSTAGE , "final" ) ) AND ( LIMIT-TO ( SRCTYPE , "j" ) ) AND ( LIMIT-  
TO ( LANGUAGE , "English" ) ) AND ( LIMIT-TO ( OA , "all" ) )
```

This search string was designed to retrieve peer-reviewed journal articles related to economic and tourism impacts of sporting events in the fields of social sciences, economics/econometrics/finance, and business/management/accounting, published between 2000 and 2025. A total of 4243 documents were initially retrieved. The following filters were applied to refine the dataset:

Table 1: Inclusion and Exclusion Criteria

Inclusion Criteria	Inclusions	Number of results
Year Range	2000-2025	Filtered to 4243
Subject Areas	Social science Economics/Econometrics/Finance Business/Management/Accounting	3258
Document Type	Journal articles only (“ar”)	2294
Publication Stage	Final publication (“final”)	2247
Source Type	Journals only (“j”)	2231
Language and Access	English and open access	Final dataset: 572 articles

After applying all filters, the final dataset comprised 572 articles, representing peer-reviewed, English-language, open-access journal publications focused on the economic and tourism impacts of sporting events. This dataset formed the basis for subsequent bibliometric analyses, including trend mapping, authorship and country collaboration networks, citation analysis, and thematic cluster identification using tools such as VOS viewer. The structured approach ensures that the study captures the breadth of research across multiple disciplines while maintaining relevance to the core objectives of evaluating publication growth, identifying key contributors, and mapping thematic developments in the field of sporting events and tourism economics.

3. Results and Findings

This section presents the results of the bibliometric analysis of research on sporting events and tourism. The findings are organized to highlight trends in publication volume, geographic distribution and collaboration, co-authorship networks, and thematic development. Through visualizations such as charts and network maps, this section illustrates the evolution of research activity, identifies key contributors, and uncovers the main thematic areas that have shaped the field over the past 25 years.

3.1 Publication Trends

The following chart presents the annual publication trends in research on sporting events and tourism from 2004 to 2025, highlighting the growth and changing interest in this field over time.

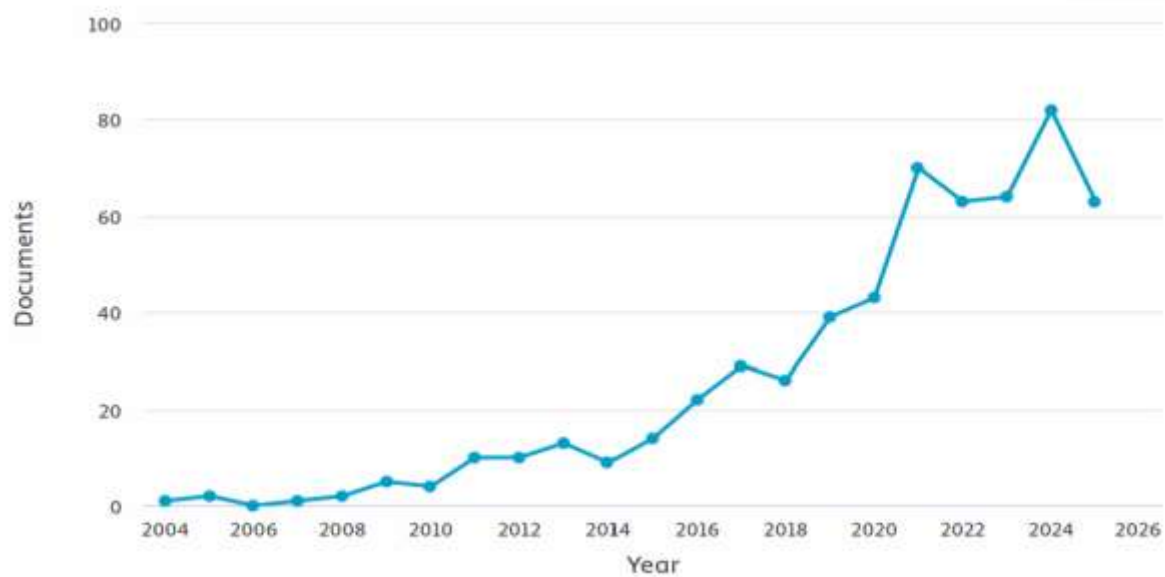


Figure 1: Year-wise Distribution of Documents

This chart shows how many research documents were published each year from 2004 to 2025. In the early years, the number of documents was very low, with only a few papers being published each year. Around 2016, the numbers started to rise, and after 2019 there was a much bigger increase. The highest number of publications appears around 2024, showing strong research interest in this topic during recent years. The periods of increasing numbers of studies coincide with the rise in global mega-events, the growing emphasis on sustainability, and the impact of COVID 19 on event and travel planning. Overall, the chart shows that studies in this field have become more common over time.

3.2 Geographic Concentration and Collaboration

The section illustrates the geographic distribution of research output on sporting events and economic tourism, highlighting countries with the highest contributions and patterns of international collaboration.

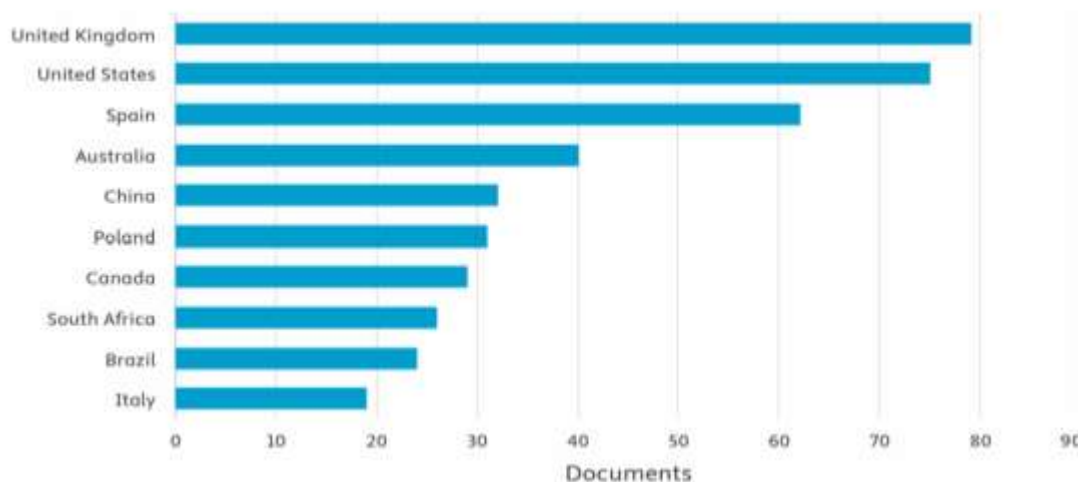


Figure 2: Geographic Concentration of Academic Output

The global research landscape on sporting events and tourism shows clear geographic variation, with certain countries emerging as leading contributors. The United Kingdom ranks first, producing nearly 80 publications, followed closely by the United States with just over 70 documents. Spain also demonstrates strong academic engagement, contributing more than 60 publications, reflecting its active hosting of international sporting events and its established tourism industry. South Africa, Brazil, and Italy make more modest contributions, with totals ranging from 18 to 25 publications. These outputs may reflect differences in research funding, institutional focus, or the relative prominence of sports tourism within national policy agendas. Overall, the distribution suggests that research activity is concentrated in countries with well-developed sports infrastructures, strong tourism economies, and frequent hosting of international events.

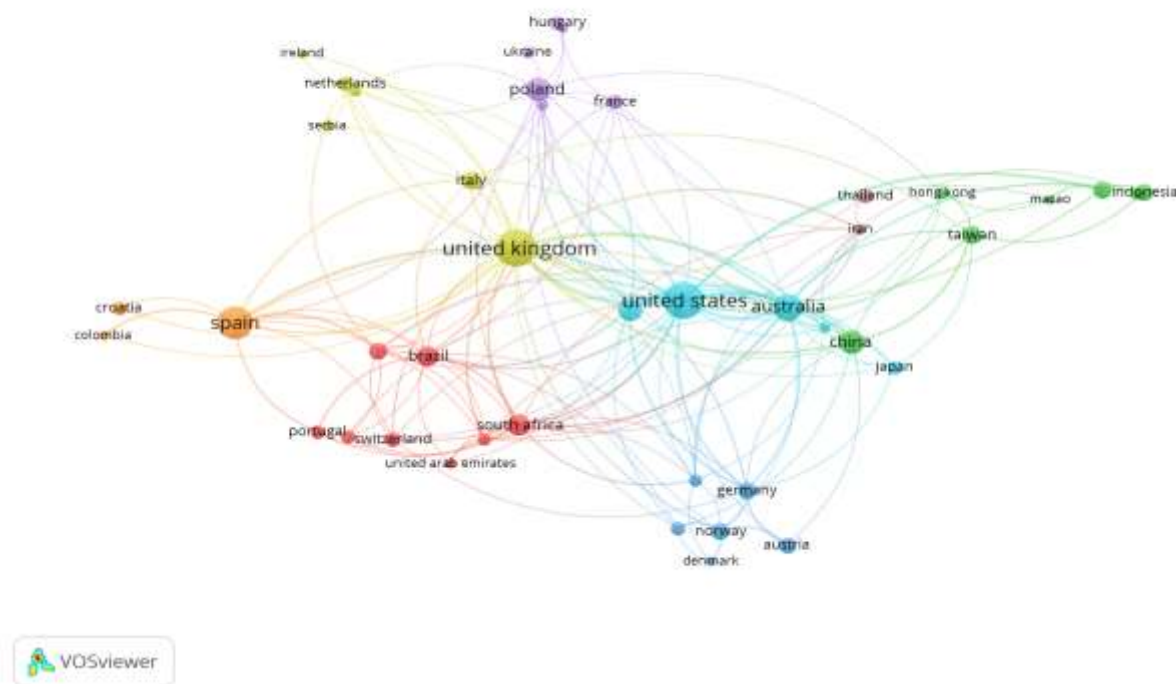


Figure 3: Country-level collaboration network

The network of collaboration with countries on the national level, which is shown in Figure 1, indicates the global spread and interconnection of the research related to sporting events and tourism. The bigger nodes, such as the United Kingdom and the United States, indicate that these countries are the most important contributors and they are central nodes within the international system of collaboration. A very close cluster is made of the European states such as Spain, Italy, France and Netherlands, which witness to the strong intra-regional research connections. Similarly, there is an emerging Asian cluster, joined by China, Japan, Taiwan, Hong Kong, Indonesia and Macao, which demonstrates a gradual intensification of academic activity of this geographic industry. There are other cluster arrangements, including the one that includes South Africa, Brazil, Switzerland, Portugal, as well as the United Arab Emirates, which increases collaborative activity in the Global South, whereas Australia has regional associations with Asia and the North American regions.

The cross-cluster connections within the diagram are co-authorship relationships and common themes and thus emphasize the intense cross-border collaborative activities. Overall, the network reveals the concentration of the sport-tourism research in the countries that have access to developed sport-

tourism infrastructure and tourism industries, but it also indicates the simultaneous involvement of the emerging economies, thus reflecting the global spread of the field and its collaborative nature.

3.3 Co-Authorship Network Analysis

The following visualization depicts co-authorship patterns among researchers in the field of sport tourism, highlighting collaborative clusters and thematic connections over time.

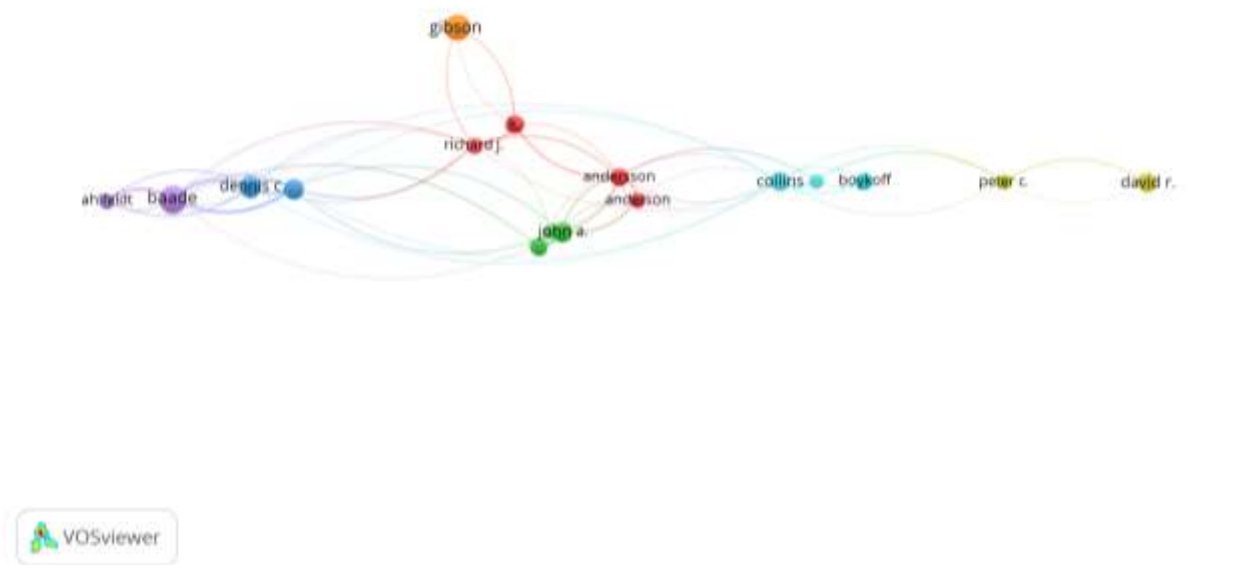


Figure 4: Author Collaboration Network

The network map clarifies collaborative trends as well as demonstrating the changing thematic architecture of sport tourism research. Each circle represents an author, and the lines show how often they work together or are linked through similar research. Authors that are closer together study similar ideas, while colors show small groups of researchers who focus on related topics. The development of sport tourism, visitor motivation and destination competitiveness is outlined by central clusters, highlighting the role of sporting events in spurring both traveling and the growth of a region. Subclusters are closely interdependent, exploring the economic impact in which the effects of events are quantified in terms of work, production of income, and investment of infrastructure. A unique cluster preoccupies sustainability and long-term planning, which brings into the limelight new issues of environmental protection and legacy achievement. Parallel streams of research look at communal involvement, social bond and the thoughts of the residents, with the results depicting that the effects of sporting events go beyond the tourists and into the locals. Together, the map depicts a rich, multidimensional space, which integrates economic, social, environmental, and branding perspectives to explain the transformational impact of sporting events on destinations.

3.4 Thematic Analysis

The conceptual landscape of sporting events research is explored using keyword co-occurrence analysis as part of the bibliometric mapping procedure. This method identifies patterns of thematic convergence by clustering frequently co-occurring terms, thereby uncovering the underlying knowledge structure and dominant research themes within the selected body of literature.

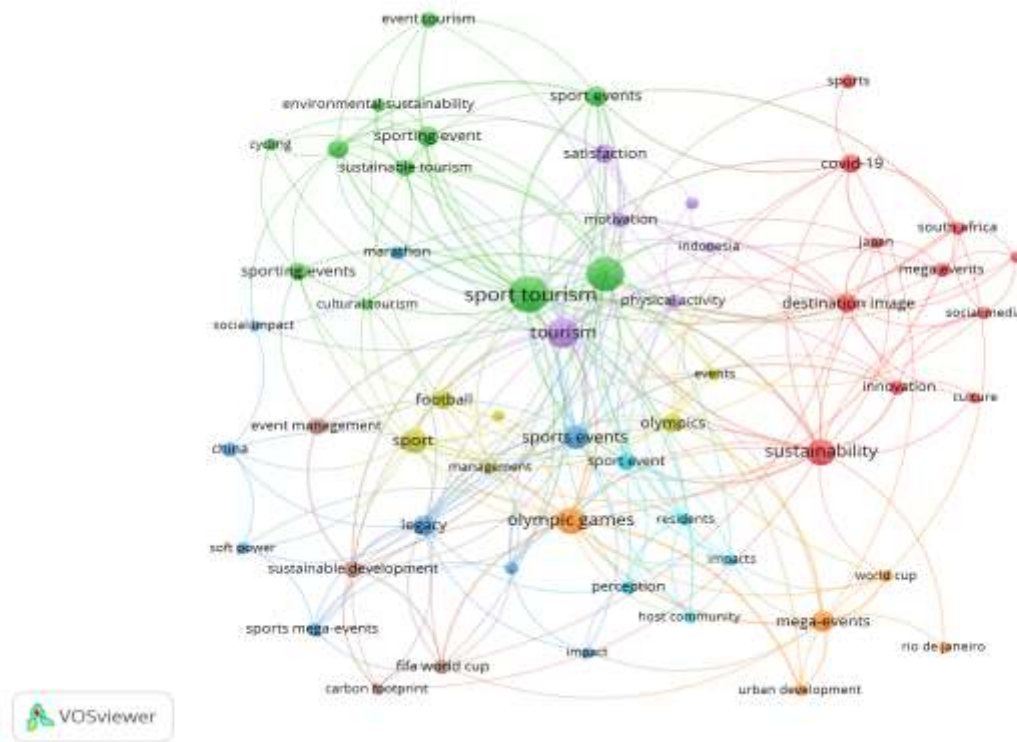


Figure 5: Keyword co-occurrence analysis

3.4.1 Sport tourism and sporting events

Sport tourism is widely discussed as the combination of travel and participation in or attendance at sporting events, and the studies consistently show its strong benefits for destinations. Tarigan et al. (2024) explain that sport tourism increases tourist spending and supports local economies while also encouraging cultural exchange, especially when sustainable practices are applied. Similarly, Traverso et al. (2020) show that events such as international marathons attract tourists who actively participate and consume local goods and services, strengthening the link between tourism and sport. Abdollahi et al. (2023) highlight that major sporting events improve destination image and generate economic revenue, although they also warn about high costs and environmental challenges that require good planning. From a social perspective, Yücel et al. (2022) emphasize that sport tourism promotes socialization between societies by bringing people from different cultures together through shared experiences. Dong (2023), in the case of the 2022 Qatar World Cup, demonstrates how large sporting events can improve infrastructure and significantly boost tourism development. Zu (2025) further supports this by showing that sports competitions increase venue popularity, service quality, and long-term urban development when aligned with local planning. Finally, Amelia (2023) notes that strategic planning of sport events, including mega and regional events, can attract investment and create lasting economic benefits for host destinations. Overall, these studies confirm that sporting events play a vital role in driving sport tourism, economic growth, and social interaction when managed effectively.

3.4.2 Sustainability and Environmental Impact

Sustainability and environmental impact are central concerns across many sectors, and the reviewed studies highlight the importance of reducing negative environmental effects through careful planning and innovation. Padmavathi et al. (2025) emphasize sustainable urban mobility, showing that eco-friendly transport, smart infrastructure, and zero-carbon policies can significantly reduce greenhouse

gas emissions. Lawrence (1996) provides a foundational view by explaining that integrating sustainability into environmental impact assessment strengthens decision-making by considering ecological limits and stakeholder involvement. More recent studies show how technology can support sustainability; Camastra and González Vallejo (2025) discuss how artificial intelligence can improve efficiency and environmental management while also warning about its energy consumption and environmental risks. In the business sector, sustainable e-commerce practices are shown to reduce environmental harm, with consumer demand playing a key role in encouraging greener operations (Economics & Sociology, 2022). Sector-specific research, such as the study by Vanaria et al. (2024), reveals that even healthcare activities contribute to environmental impact, but practices like tele-services and improved waste management can reduce this footprint. Mishra and Vikram (2024) further stress the need to balance industrial development with environmentally responsible technologies. Finally, Rott et al. (2025) demonstrate that large scientific projects, such as IceCube-Gen2, can adopt renewable energy and efficiency measures to minimize environmental damage. Overall, these studies show that sustainability requires integrated strategies, technological innovation, and responsible management to reduce environmental impact across different fields.

3.4.3 Mega events and Global competitions

Mega-events and global sports competitions are strongly linked to globalization and play an important role in shaping international visibility and influence. Müller and Gaffney (2018) explain that events such as the Olympic Games and the FIFA World Cup reflect global flows of people, capital, media, and knowledge, showing how cities become part of global networks. Fomeshi (2022) adds that governments and corporations often pursue these events to improve national and city images, although they can also create heavy financial burdens for host communities. From an international relations perspective, Paulino (2015) highlights that mega-events allow countries to display prestige, attract investment, and strengthen diplomatic relationships. Müller and Pickles (2015) further show that in post-socialist countries, mega-events are used to signal modernity and global competitiveness, while still being shaped by local political and economic conditions. Gaffney, Wolfe, and Müller (2018) describe mega-events as large, temporary projects organized by international networks that dissolve after the event and reappear in new host locations. Giulianotti (2017) emphasizes that global sport mega-events influence identities and social belonging, while also exposing political and economic inequalities. Finally, Horne (2017) notes that mass media has transformed sports mega-events into global spectacles that promote tourism and investment by increasing international exposure. Overall, these studies show that mega-events are powerful tools for global engagement but also involve significant economic, political, and social challenges.

3.4.4 Sports Community Impact

Several studies have examined the impact of sports communities on society from social, mental, and economic perspectives. Sunarti et al. (2025) studied community sports initiatives and found that participation in sports strengthens social cohesion, civic engagement, and community identity, while also contributing to local economic development, although benefits are not equally felt by all income groups. Nima (2022) focused on sports communities and showed that social support within these groups improves individual motivation, sports skills, and commitment to training. Fahmi et al. (2024) examined sports events and reported that their impact on community welfare is limited, as only certain community members gain economic benefits. Zhou (2024) found that participation in student sports communities has a positive impact on mental health, improving emotional stability, social ability, self awareness, and stress management. Zhong et al. (2015) highlighted that community sports help build social capital by increasing trust, social networks, and a sense of belonging, which supports community harmony. Van Marle (2024) discussed how sports communities encourage social cohesion through everyday social interactions, but emphasized that sports alone cannot solve deeper social issues. Finally, Mănescu (2023)

explained that sports communities promote social values and communication while also supporting local economies through tourism and well managed sporting events.

3.4.5 Destination, Image, Media, and Branding

Destination image and destination branding are central concepts in tourism research, and the reviewed studies highlight their strong influence on tourists' perceptions and visiting decisions. Ekinci (2002) provides a foundational view by explaining that destination image forms the basis of destination branding and plays a key role in positioning destinations in competitive markets. Pan and Hsu (2014) emphasize the role of media in shaping destination image, showing how travel media frames destinations and influences how tourists perceive places. More recent studies show how digital platforms have transformed this process; Ocke et al. (2023) demonstrate that social media allows multiple stakeholders, including tourists, to actively participate in creating and reshaping destination brands. Chu et al. (2022) highlight recent advances in destination image measurement, noting that improved methods help better understand tourist perceptions and strengthen branding strategies. In the context of sports tourism, Rocksand (2025) shows that destination branding has the strongest direct effect on sports tourism destination image, while social media amplifies the influence of facilities and infrastructure by turning them into shared digital narratives. Finally, empirical evidence from Zainurossalamia and Tricahyadinata (2025) indicates that although both destination image and branding influence visiting decisions, destination branding often has a stronger impact, while destination image remains essential for long-term destination competitiveness.

3.5 Evolution of Research

This section illustrates the evolution of research on sporting events and tourism from 2000 to 2025, highlighting shifts in focus and growth in publication output over time.

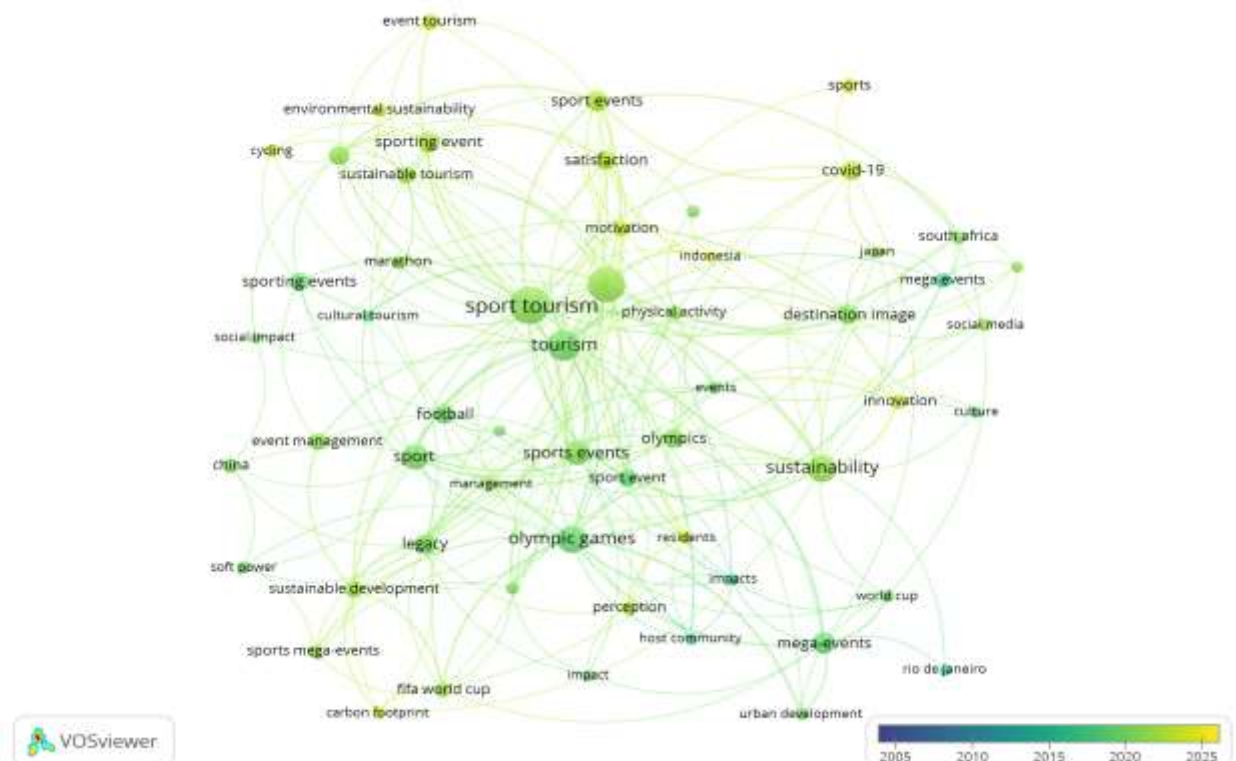


Figure 6: Temporal trends in Research

Over the last twenty-five years, research on how sporting events affect tourism has gradually changed as global events and social priorities evolved. From 2000 to around 2010, most studies focused on major sporting events such as the Olympic Games, the FIFA World Cup, and other mega-events. During this period, researchers mainly examined economic impacts, tourism growth, destination promotion, and short-term visitor increases in host cities. Between 2010 and 2018, the focus expanded to include social and cultural effects. Studies began to explore residents' perceptions, community impacts, event legacy, and destination image, as well as the role of event management and marketing. Researchers also paid more attention to smaller sporting events, such as marathons and cycling events, and their ability to attract tourists in a more sustainable way. From 2019 to 2025, research increasingly shifted toward sustainability, environmental impact, and behavior-related topics. Issues such as carbon footprint, sustainable tourism, environmental responsibility, and long-term development became more common, especially in the context of mega-events. The COVID-19 pandemic also influenced recent studies, leading to research on risk perception, motivation, satisfaction, and changes in travel behavior. At the same time, newer topics such as social media, innovation, physical activity, and destination branding gained importance. Overall, the research has moved from focusing mainly on economic benefits toward a broader view that includes social, environmental, and behavioral impacts of sporting events on tourism.

4. Research Gap and Discussion

Based on the trends and thematic clusters observed in the bibliometric analysis, several gaps in the literature become evident. Despite the growth of research on sporting events and tourism, several gaps remain in literature. Most studies still focus heavily on mega-events such as the Olympic Games and the FIFA World Cup, while smaller and recurring sporting events receive less attention, even though the graph shows growing interest in marathons, cycling, and local sports events. There is also limited long-term research on sustainability outcomes. While recent studies highlight environmental sustainability, carbon footprint, and sustainable development, fewer studies measure the lasting environmental and social effects after events end. In addition, research is uneven across regions. Countries such as Japan, China, and South Africa appear more often, while many developing destinations and smaller host communities are underrepresented. Another gap relates to residents and host communities. Although perception and social impact are discussed, there is still a lack of in-depth studies on how local communities experience tourism changes over time. The graph also shows emerging topics like social media, innovation, and destination image, but their direct influence on tourists' decision-making and actual travel behavior is not yet well understood. Finally, while COVID-19 appears as a recent theme, its long-term effects on sport tourism demand and event planning remain unclear. Future research should address these gaps by using longitudinal data, diverse destinations, and a stronger focus on sustainable and community-centered outcomes. Addressing these gaps will require longitudinal data, diverse destinations, and a stronger focus on sustainable and community-centered outcomes.

Bibliometric analysis demonstrates a more generalizing trend in the research field toward the shift to a broader and multidimensional paradigm of the problem, which would include the sociocultural, environmental, and behavioral aspects. The increased academic focus on sustainability, community involvement, and digital transformation is indicative of the adaptive reaction to the urgent modern issues such as climate change, responsible tourism or transforming tourist behavior. Moreover, the witnessed imbalance in geographic representation and collaborative networks is indicative of viable opportunities of transregional partnership and sharing of knowledge, especially of destinations that are still underrepresented in the existing literature. The results not only provide a guide to future scholarly research, but also carry implications on policy makers, event organizers and tourism planners interested in maximizing the long-term returns on sporting events and at the same time reducing the environmental and social impacts of such events.

5. Conclusion

The presented bibliometric research provides a systematic overview of academic literature on the economic and tourist implications of sport events over the last quarter of a century. The findings outline an overlapping developmental pattern in the field, which started with initial investigations that favored the financial gains linked to mega-events to the most current research that encompassed the social, environmental, and behavioral aspects. The review highlights important inputs, geographical clustering, cross-disciplinary partnerships, and emergent thematic groups, thus capturing the expanding interdisciplinarity and complexity of the intellectual environment. Despite the radical growth, gaps can still be identified. The corpus still is biased towards mega-events, whereas lesser, regular, or regional sporting events are underemphasized. Long-term sustainability outcomes, host community lived experience, and the effects of digital media on tourism decision-making are not well covered. Geographic inequality in research production also suggests the need to have more inclusive research studies that cover both developing countries and smaller host locations. The solution to these gaps provides future researchers with an opportunity to work out deeper, more comprehensive results about the contributive role of sporting events as a part of the tourism industry. The practical importance of the academic mass of work is also highlighted in the study. The policymakers, event managers, and urban planners will find it beneficial to have empirical evidence on the ways in which sporting events promote economic growth, destination branding, improvements in infrastructure, and social cohesiveness. Specifically, sustainable planning, involvement, and post-event legacy management become central conditions that maximize the benefits of the long term and reduce the environmental and social expenditures. Altogether, the research on sport tourism is expanding with an increasingly greater focus on the complex effects and the interdisciplinary approaches. Further research needs to continue to combine quantitative and qualitative paradigms, utilize longitudinal data, and analyze understudied areas and event types. Through this, the academic fraternity will be able to offer more practical conclusions that can be applied in the formulation of sustainable, inclusive, and well-designed sporting activities, which will contribute to the development of theoretical understanding as well as practice in the host destinations in the world.

References

- Abdollahi, M., Farsi, J. Y., & Talebi, K. (2023). Mega sporting events, destination image, and economic outcomes: Opportunities and challenges. *Sustainability*, 15(4), 3127. <https://doi.org/10.3390/su15043127>
- Achilleos, A., Makrominas, M., Markides, C., Alexandrou, R., Konstantinidis, A., Papacosta, E., Constantinides, P., Zikouli, 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. <https://doi.org/10.1080/14775085.2021.1965009>
- Amelia, R. (2023). Strategic sport event planning and investment attraction in host destinations. *Event Management*, 27(5), 911–926. <https://doi.org/10.3727/152599523X16744821042291>
- Burgan, B., & Mules, T. (1992). Economic impact of sporting events. *Annals of Tourism Research*, 19(4), 700–710. [https://doi.org/10.1016/0160-7383\(92\)90062-t](https://doi.org/10.1016/0160-7383(92)90062-t)
- Camastra, F., & González Vallejo, J. M. (2025). Artificial intelligence and environmental sustainability: Benefits and risks. *Journal of Cleaner Production*, 418, 139875. <https://doi.org/10.1016/j.jclepro.2024.139875>

- ÇetiN, A. (2023). Spor Turizmi ve Spor Etkinlikleri Üzerine Bir Derleme. *Türkiye Spor Bilimleri Dergisi*, 7(1), 49–58. <https://doi.org/10.32706/tusbid.1293281>
- Dong, E. (2023). Tourism development and infrastructure legacy of the 2022 FIFA World Cup in Qatar. *Tourism Management Perspectives*, 47, 101080. <https://doi.org/10.1016/j.tmp.2023.101080>
- Duglio, S., & Beltramo, R. (2017). Estimating the economic Impacts of a Small-Scale Sport Tourism Event: the case of the Italo-Swiss mountain Trail CollonTrek. *Sustainability*, 9(3), 343. <https://doi.org/10.3390/su9030343>
- Economics & Sociology. (2022). Sustainable e-commerce practices and consumer environmental responsibility. *Economics & Sociology*, 15(2), 68–82. <https://doi.org/10.14254/2071-789X.2022/15-2/4>
- Fomeshi, B. (2022). Mega-events, city branding, and political economy. *International Journal of Sport Policy and Politics*, 14(3), 415–431. <https://doi.org/10.1080/19406940.2021.1998824>
- Gaffney, C., Wolfe, S., & Müller, M. (2018). The megaproject as a political technology. *Environment and Planning C: Politics and Space*, 36(4), 699–717. <https://doi.org/10.1177/2399654417750983>
- Giulianotti, R. (2017). Sport mega-events, globalisation, and the study of world society. *The British Journal of Sociology*, 68(4), 684–702. <https://doi.org/10.1111/1468-4446.12286>
- Horne, J. (2017). Sports Mega-Events. In *Mass media and symbolic contestation* (pp. 19–32). <https://doi.org/10.4324/9781315680521-2>
- Lawrence, D. P. (1996). Integrating sustainability into environmental impact assessment. *Environmental Impact Assessment Review*, 16(3), 185–203. [https://doi.org/10.1016/0195-9255\(96\)00024-1](https://doi.org/10.1016/0195-9255(96)00024-1)
- Mishra, R., & Vikram, S. (2024). Industrial development and environmentally responsible technologies. *Journal of Environmental Management*, 345, 118899. <https://doi.org/10.1016/j.jenvman.2023.118899>
- Müller, M., & Gaffney, C. (2018). Comparing the urban impacts of the Olympic Games and FIFA World Cup. *Urban Geography*, 39(5), 643–664. <https://doi.org/10.1080/02723638.2017.1346299>
- Müller, M., & Pickles, J. (2015). Global games, local rules: Mega-events in post-socialist cities. *European Urban and Regional Studies*, 22(2), 121–136. <https://doi.org/10.1177/0969776413517242>
- Padmavathi, K., Rao, P. S., & Reddy, M. S. (2025). Sustainable urban mobility and climate-friendly infrastructure policies. *Sustainable Cities and Society*, 103, 105208. <https://doi.org/10.1016/j.scs.2024.105208>
- Paulino, F. O. (2015). Sport mega-events and international relations. *Sport in Society*, 18(9), 1186–1201. <https://doi.org/10.1080/17430437.2014.997583>
- Rangkuti, Y. A., Bangun, A. K., Kurniawan, R., Ilham, Z., Hasibuan, S., Tambunan, T. M. B., & Silitonga, D. F. (2025). Cultural heritage and sports tourism: a systematic literature review of sustainable destination management practices. *Frontiers in Sports and Active Living*, 7, 1680229. <https://doi.org/10.3389/fspor.2025.1680229>
- Raso, G., & Cherubini, D. (2023). sport tourism and regional economic development. *Scientific Journal of Sport and Performance*, 3(1), 108–121. <https://doi.org/10.55860/jkw7277>

- Rott, C., Kowalski, M., & Price, P. B. (2025). Renewable energy adoption in large-scale scientific infrastructure projects. *Energy Policy*, 186, 113918. <https://doi.org/10.1016/j.enpol.2024.113918>
- Sardi, A., Rizzi, A., & Sorano, E. (2025). Economic Impact Analysis of Mega Events for Sustainable Tourism: Insights from the Giro d'Italia and Tour de France. *Administrative Sciences*, 15(2), 35. <https://doi.org/10.3390/admsci15020035>
- Tarigan, A. P., Akhmad, I., & Tantri, A. (2025). Development of Web-Based information system to support personal trainers' performance in Medan. *Journal of Physical Education, Sport, Health and Recreation*, 14(3), 944–949. <https://journal.unnes.ac.id/journals/peshr>
- Tarigan, Z. J. H., Siagian, H., & Jie, F. (2024). Sport tourism, sustainability, and local economic development: Evidence from emerging destinations. *Journal of Sport and Tourism*, 28(1), 45–62. <https://doi.org/10.1080/14775085.2023.2289012>
- Tomino, A. C., Perić, M., & Wise, N. (2020). Assessing and Considering the Wider Impacts of Sport-Tourism Events: A research agenda Review of sustainability and Strategic Planning elements. *Sustainability*, 12(11), 4473. <https://doi.org/10.3390/su12114473>
- Traverso, M., Mastronardi, L., & Romagnoli, L. (2020). International marathons and sport tourism: Economic and social impacts on host cities. *Tourism Economics*, 26(6), 1005–1023. <https://doi.org/10.1177/1354816619888004>
- Vanaria, A., Bianchi, M., & Russo, G. (2024). Environmental sustainability in healthcare systems: Implications for policy and practice. *Sustainability*, 16(2), 845. <https://doi.org/10.3390/su16020845>
- Yücel, A. S., Özdemir, M., & Güngörmüş, H. A. (2022). Social interaction and cultural exchange through sport tourism events. *Journal of Hospitality, Leisure, Sport and Tourism Education*, 31, 100384. <https://doi.org/10.1016/j.jhlste.2022.100384>
- Zu, L. (2025). Sports competitions, urban planning, and long-term destination development. *Cities*, 148, 104742. <https://doi.org/10.1016/j.cities.2024.104742>

Copyright Notice

This is an open-access article distributed under the terms of the Creative Commons Attribution 4.0 International License (CC BY 4.0), which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.