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Managing sustainable megaevents: Past, present and future

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Abstract. A bibliometric literature review systematically analyses and synthesizes research findings from numerous publications. This study aims to conduct a bibliometric literature review on sustainable megaevents management, identifying current trends, knowledge gaps, and future research directions. A comprehensive search was conducted using Scopus to identify relevant articles, with no time restrictions due to the dynamic nature of the field. The study used bibliometric software, namely Biblioshiny, and VOSviewer, to analyse bibliographic data, including co-citation and co-authorship analysis. Based on the analyses of the 397 articles, the results of the bibliometric analysis provided insights into the most influential authors (namely Getz, D.; Scholtz, M.; Ziakas, V.), journals (such as Journal of Cleaner Production and Journal of Sustainable Tourism), and trends in the field of managing sustainable megaevents (for example, sustainable development and economic and social effects of megaevents). The findings of this study contribute to a better understanding of the current state of research on managing sustainable megaevents. The study highlights the most significant research

themes and identifies potential areas for future research related with sustainability, innovation, and stakeholder engagement. Additionally, the study provides a valuable resource for practitioners, policymakers, and researchers interested in the field of sustainable megaevents.

Keywords: Sustainable development; Megaevents; Public events; Bibliometric review.

1. Introduction

This paper presents a bibliometric review of the literature on the sustainability of megaevents as a comprehensive and critical analysis of existing research, theories, and studies. The rationale for conducting such a review is to synthesize and summarize the current knowledge on the topic and identify gaps, in order to provide insights for future research, PRISMA guidelines were followed [1]. Providing a historical perspective on the development of knowledge in this scientific area allows tracing current theories and ideas and their evolution over time to gain a deeper understanding of the social, economic, and environmental factors that have influenced the concept of managing megaevents sustainably. This field is important and relevant for several reasons, namely:

- Environmental impacts: Megaevents, such as the Olympics or World Cups, have significant environmental impacts due to the large number of attendees, transportation needs, and infrastructure development [2]
- Social impacts: Mega events also have social impacts, such as displacing residents, affecting the local economy, and disrupting daily life by studying the sustainability of mega events, we can identify ways to mitigate these impacts and ensure that the event benefits the local community [3], [4]
- Economic impacts: Megaevents can have significant economic impacts, both positive and negative, by studying the sustainability of megaevents, we can identify ways to maximize the economic benefits while minimizing the costs [5], [6]
- Legacy: Megaevents often leave a legacy in the host city, such as improved infrastructure or increased tourism, by studying the sustainability of megaevents, we can ensure that the legacy is positive and contributes to the long-term sustainability of the host city [7], [8]
- Global significance: Megaevents are often global in scale and attract international attention [9], [10]

Considering this, the following research question was raised: “What is the current state of research on managing sustainable megaevents, with a focus on the role of the role of different stakeholders in promoting these events”.

Based on this research question it is possible to comprehend and analyse the literature and trends already documented on this topic and map future research.

2. Methodology & Methods

2.1. Data sources and search strategy

A systematic search of relevant academic databases was initially conducted to identify articles related to sustainable development and sustainability, public events management, and megaevents. Since initial results from the different databases were quite discrepant from each other, the authors decided to focus only on Scopus. This database was chosen, since from the initial screening (from the several databases available) it was the one that produced the most relevant articles for this review. The search strategy used a different combination of keywords related to the research question (Table 1). There was no time limit imposed since results were not numerous (articles until the present date, which was 31st March 2023), but limits were set regarding language (only published in English), subject areas (social sciences and business), and type of documents (only published articles).

Table 1. Search Criteria.

Search Equations (keywords, limits, exclusions)	Scopus Database Results
((sustainable) OR (sustainability) OR TITLE-ABS-KEY (sustainable AND development) AND TITLE-ABS-KEY (event AND management) OR TITLE-ABS-KEY (public AND events)) AND (LIMIT-TO (PUBSTAGE , “final”)) AND (LIMIT-TO (DOCTYPE, “ar”)) AND (LIMIT-TO (SUBJAREA , “BUSI”)) AND (LIMIT-TO (EXACTKEYWORD , “Article”) OR LIMIT-TO (EXACTKEYWORD , “Human”) OR LIMIT-TO (EXACTKEYWORD, “Sustainability”) OR LIMIT-TO (EXACTKEYWORD, “Sustainable Development”) OR LIMIT-TO (EXACTKEYWORD , “Humans”) OR LIMIT-TO (EXACTKEYWORD, “Urban Area”) OR LIMIT-TO (EXACTKEYWORD , “Tourism”)) AND (LIMIT-TO (LANGUAGE , “English”)) AND (LIMIT-TO (SRCTYPE , “j”))	N = 367

Study Selection

The search results were screened independently by two reviewers (the authors) to identify articles that met the inclusion criteria. Articles were catalogued as “according to criteria”, “discordant with criteria and “in doubt”. After a comparison of results, among the reviewers, and a discussion of discrepancies the final database resulted in 367 articles. There was mainly a consensus regarding 90% of the articles, allowing for a discussion regarding the remaining 10%. Inclusion criteria were articles that focus on megaevents, stakeholders’ roles, and sustainability impacts. Exclusion criteria would be articles that did not meet the focus of the research question, such as articles that examined only events of medium dimension or overlooked the impacts on sustainability.

2.2. Data Extraction and Analysis

Data were extracted from the database on the selected articles using a pre-defined data extraction form (provided by the Scopus database while exporting the data). The researchers decided to include, amongst others: the author’s name, year of publication, abstract, and keywords. Data was exported in BibText and CSV formats to allow for a deeper analysis. The extracted data were analysed using the bibliometric software of R-Program (bibliometrics package).

3. Results and Discussion

Using the bibliometric software, data were explored according to the following criteria: a summary of the results obtained, annual production over time, most prominent authors, journals where research was published, and keywords importance, amongst others.

The first article that met the criteria was published in 2001 [11]. The article delves into the discussion of sports facilities, international events, and the environmental efforts undertaken during the 2002 Winter Olympics. During the timespan generated by the search (almost 22 years), the authors selected 367 articles (Figure 1). Although the summary presents an annual growth rate of 5.86%, it is possible to see that until 2011 the growth was quite small but constant, having another two peaks of production, 2019 and 2021 respectively (Figure 2). One might explain these peaks in scientific production (research interest demonstrated) by the occurrence of mega events around these years, namely: the 2011 Rugby World Cup (New Zealand), 2011 Pan American Games (Guadalajara, Mexico), 2012 London Olympics and Paralympics (London, UK), 2019 Rugby World Cup (Japan), 2020 Summer Olympics and Para-

lympics (Tokyo, Japan - delayed to 2021 due to COVID-19), 2021 UEFA European Football Championship (Euro 2020) (various host cities across Europe).

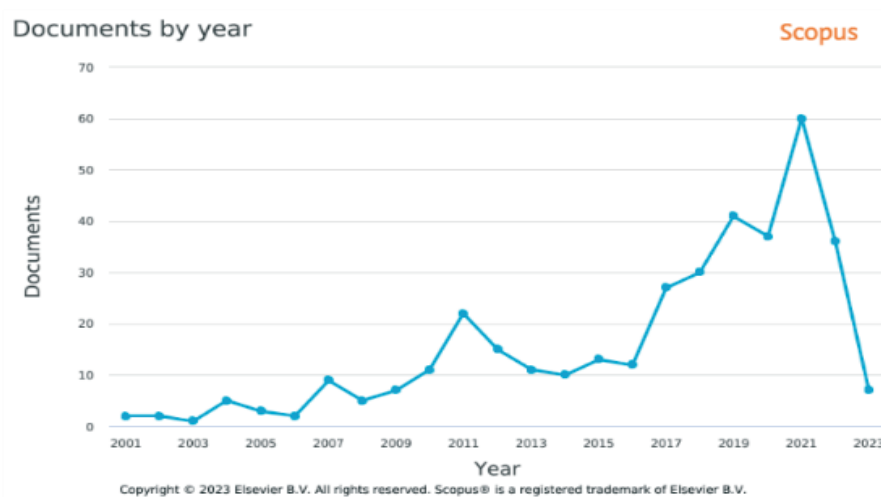


Figure 1. Summary of Data Collection from Scopus



Figure 2. Documents Published by Year

Most relevant sources identified the Journal of Cleaner Production (Figure 3) as the most prominent Journal, followed by far by the Journal of Sustainable Tourism. The importance of these sources can also be observed in Figure 4 (Sources Production over Time) with a clear distinction between the Journal of Cleaner Production (41 articles) and the Journal of Sustainable Tourism (23 articles). Other Journals contribute evenly ranging between 6 to 16 articles during the timespan analysed.

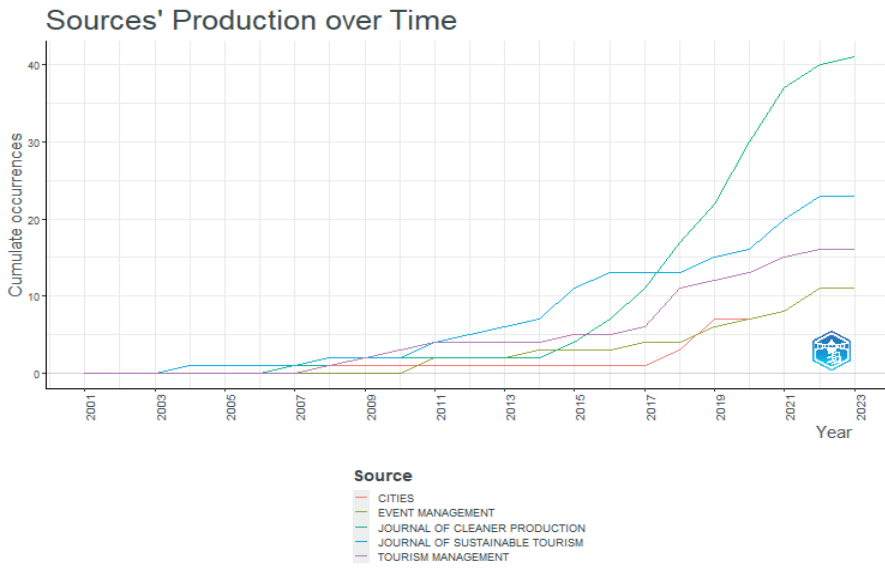


Figure 3. Most Relevant Sources

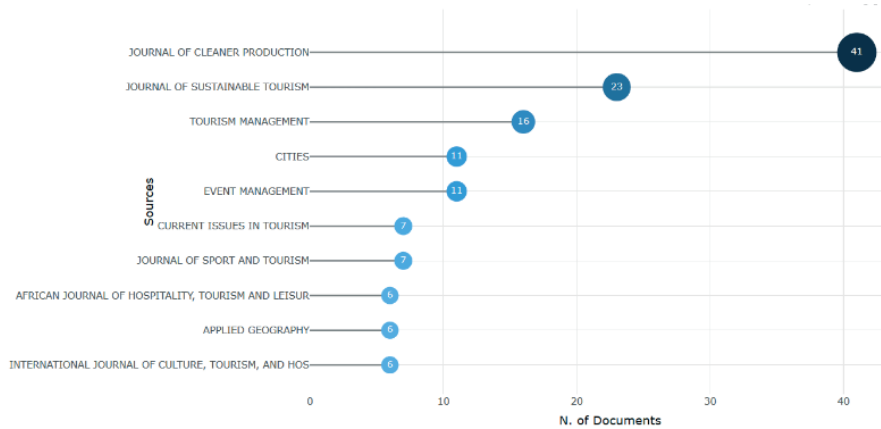


Figure 4. Sources Production over Time

Comparing the two sources (by analysing the Journals' websites) we can see that the scope of the Journal of Cleaner Production looks at a deeper understanding of cleaner production systems and sustainability. On the other hand, the scope of the Journal of Sustainable Tourism is more concerned with the impact of the megaevents sustainably but with a focus on tourism.

Another important feature of a bibliometric review is to identify the most relevant authors in the field (Figure 5). Three authors stand out, with four articles each, Getz, Scholtz, and Ziakas.

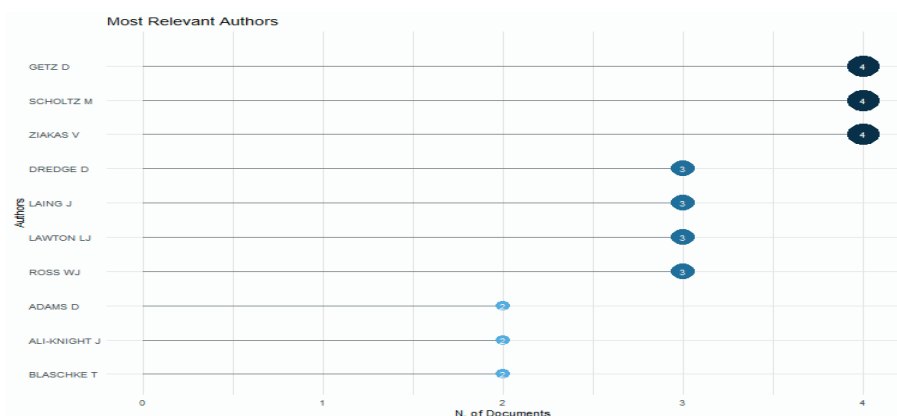


Figure 5. Most Relevant Authors

If we compare the number of articles according to production over time (Figure 6) it is interesting to note that Scholtz published all 4 articles in 2019 in contrast with Getz which started in 2008 and has an even production over time, as well as Ziakas that started in 2014 but maintaining a steady rate of production.

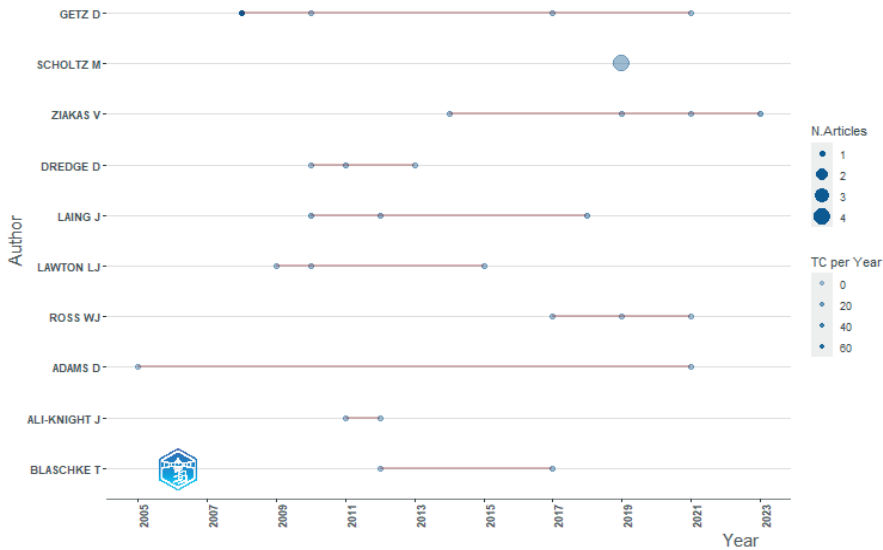


Figure 6. Authors' Production over Time

In order to understand the contribution towards knowledge produced by these important researchers, the authors have looked at first glance, at the titles of the articles and the Journals where they were published (Table 2).

Table 2. Works from the most prominent researchers in the field

Author / Date	Title	Journal
Getz D (2017)	Developing a framework for sustainable event cities	Event Management
Getz D. & Andersson T. (2010)	Festival stakeholders: Exploring relationships and dependency through a four-country comparison	Journal of Hospitality and Tourism Research
Getz D. (2008)	Event tourism: Definition, evolution, and research	Tourism Management
Ziakas V. & Getz D. (2021)	Event portfolio management: An emerging transdisciplinary field of theory and praxis	Tourism Management
Ziakas V. (2023)	Leveraging Sport Events for Tourism Development: The Event Portfolio Perspective	Perspective Journal of Global Sport Management

Author / Date	Title	Journal
Ziakas V. (2019)	Issues, patterns and strategies in the development of event portfolios: configuring models, design and policy	Journal of Policy Research in Tourism, Leisure and Events
Ziakas V. (2014)	Planning and Leveraging Event Portfolios: Towards a Holistic Theory	Journal of Hospitality Marketing and Management
Scholtz M. (2019)	One ultramarathon, two cities: differences in social impact perceptions	Journal of Sport and Tourism
Scholtz M. (2019)	Does a small community (town) benefit from an international event?	Tourism Management Perspectives

It is interesting to note that none of the top authors published in the Journal of Cleaner Production (the most relevant source in this study). This might be explained by the way this field has been treated, during the timespan analysed, namely with a focus on the impact on tourism rather than from a holistic perspective regarding the overall impacts of megaevents (economic, environmental, and social/cultural).

If we look at production by country (Table 3), it is interesting to see Portugal (a small country) appearing in the top ten countries. This might be explained by the importance the making of mega events had in Portugal since the Expo 98 (World Exhibition) and the UEFA Euro 2004 Cup. A keyword analysis was also performed. The overall results are presented in Figure 7 below. From the word cloud, the spotlight is given to the words: “sustainable development”, “sustainability”, “tourism” and “climate change”.



Figure 7. Word Cloud Produced from Authors' Keywords

Table 3. Production by Country (only top 10 included)

Region	Results
USA	406
UK	136
China	105
India	86
Australia	67
France	53
Germany	50
South Korea	43
Canada	42
Portugal	39

Another analysis undertaken was the identification of trend topics (Figure 8 below).

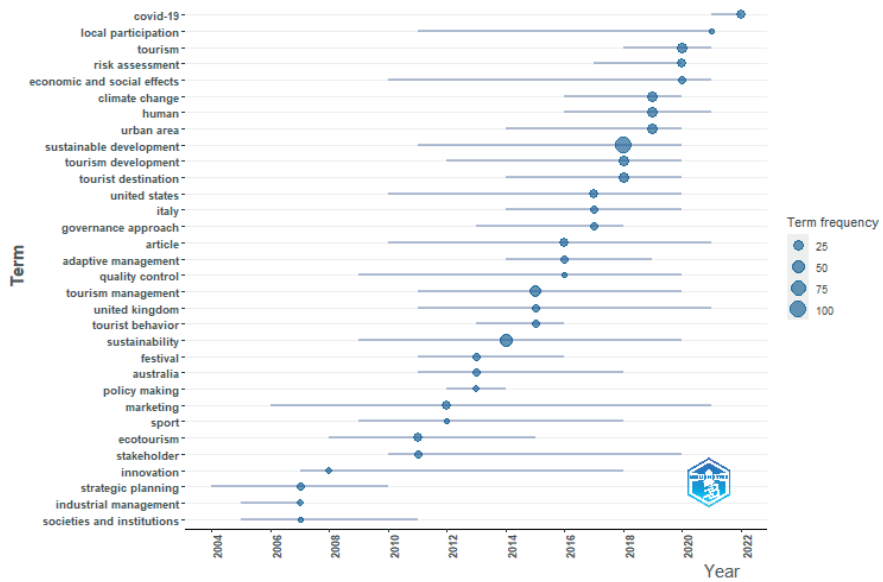


Figure 8. Trend Topics

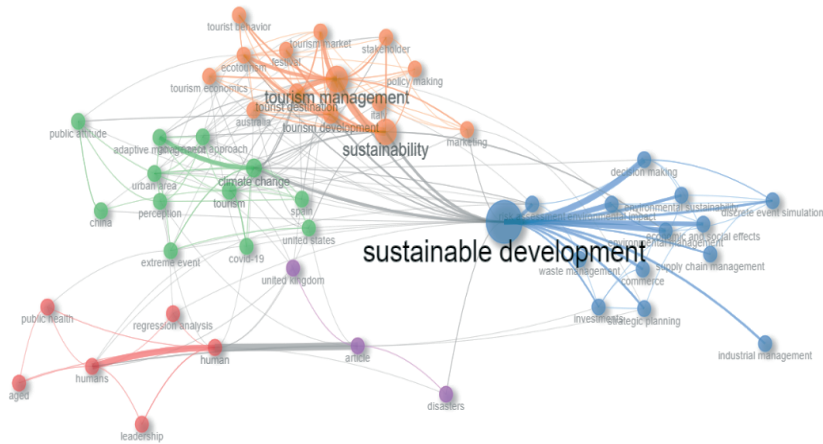


Figure 9. Co-Wording Network

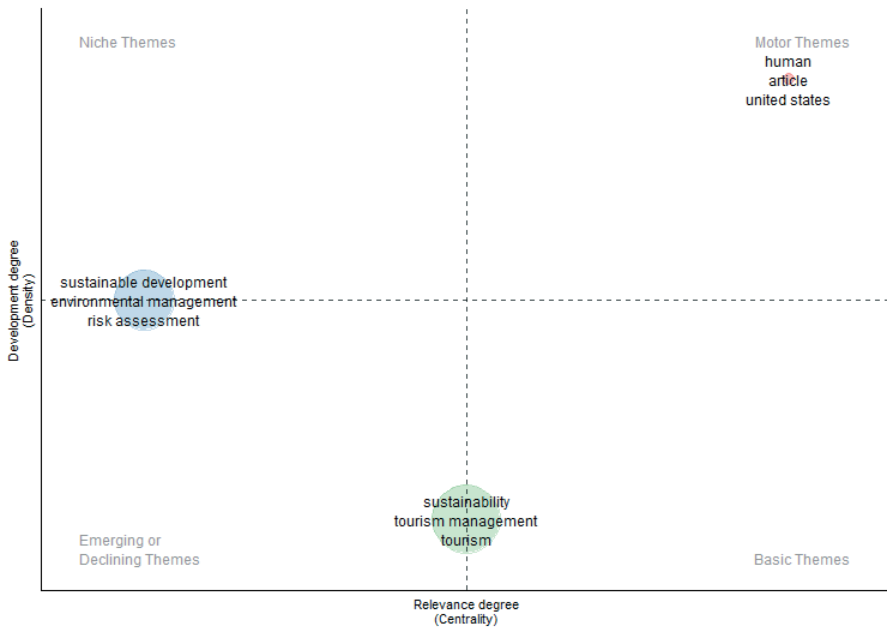


Figure 10. Thematic Mq

The trend topics map shows that recently, the focus is given to sustainable development and the economic and social effects of megaevents, even though, the impact on

tourism is still a trend. Another trends map was also produced (using a co-wording network – Figure 9) and a thematic map (Figure 10). The co-wording network identifies the frequency of occurrence of certain words or phrases in a corpus of documents and visualizes the relationships between them. The co-occurrence matrix shows the number of times each pair of keywords appears together. From the analysis of the co-wording network (Figure 9), it is possible to see five distinct areas of research. Nevertheless, only three demonstrate more weight on the overall analysis. The blue cluster addresses concerns regarding sustainability and sustainable development, namely linked to waste management and production systems (this is coherent with the top Journal being the Journal of Cleaner Production). The other two clusters, in orange and green, respectively address tourism management and perceptions regarding the impact of megaevents.

The thematic map produced in the R-Program is divided into four quadrants based on two dimensions: centrality and distinctiveness. Centrality refers to how closely related a cluster is to other clusters on the map. A cluster that is highly distinctive contains keywords that are different from those found in other clusters, while a cluster that is less distinctive contains keywords that are more commonly found in other clusters. By observing the thematic map below, one finds two clusters quite central but different regarding density and distinctiveness. The cluster on the left side appears to be an emerging theme that is being transformed into a niche theme (the environmental impact and risk assessment of mega events). The cluster addressing tourism management and sustainability is still quite relevant and seems to establish the main linkages with the other areas that have been explored in the past years.

4. Conclusions

In conclusion, this bibliometric review provides a comprehensive overview of the research conducted on managing sustainable megaevents from 2001 to 2023. The analysis of 367 articles published in the Scopus database highlights the increasing interest and focus on sustainable practices in megaevents, with a particular emphasis on environmental and social sustainability. The review also identifies key research themes, such as stakeholder engagement, legacy planning, and event impact assessment. Based on this analysis, it is evident that managing sustainable megaevents is a complex and multi-dimensional issue that requires a collaborative effort from various stakeholders, including event organizers, governments, and local communities. This review provides a valuable resource for researchers, practitioners, and policymakers who seek to understand the current state of research in this field and the key challenges and opportunities for future sustainable megaevents. Overall, the future of research in managing sustainable megaevents is likely to be characterized by a continued focus on sustainability, in-

novation, and stakeholder engagement. With the increasing awareness and importance of sustainability this field will likely continue to grow and evolve in the coming years. Finally, although Scopus is one of the most important scientific databases, the main limitation of this work is that it exclusively uses this database, which results in the exclusion of numerous studies published on the theme in other databases as well as grey literature. Therefore, for a more comprehensive understanding of this field, the authors strongly advise including as many sources of information as possible.

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References

1. Page MJ, Moher D, Bossuyt PM, Boutron I, Hoffmann TC, Mulrow CD, ... & PRISMA 2020 Statement: Updated Guideline for Reporting Systematic Reviews. *BMJ*, 372(71). (2021).
2. Gursoy D, Lu L, Lu X, (2019) Understanding tourists' environmental attitudes and behavior in a mega event context. *Journal of Travel Research*, 58(5), pp. 839-853.
3. Gibson HJ (2017) Mega-events as a strategy for city branding: A stakeholder perspective. *Journal of Place Management and Development*, 10(3), pp. 264-278.
4. Waitt G, Phillips R (2018). Social displacement from mega-events: A case study of the Gold Coast 2018 Commonwealth Games. *Journal of Policy Research in Tourism, Leisure and Events*, 10(1), pp. 51-65.
5. Maennig W, Zimbalist A (2012) *International handbook on the economics of mega sporting events*. Edward Elgar Publishing.
6. Grix J (2015) Mega-events and urban policy: The role of leading urban policy entrepreneurs. *International Journal of Urban and Regional Research*, 39(4), pp. 776-790.
7. Preuss H (2015) A framework for identifying the legacies of a mega sport event. *Leisure Studies*, 34(6), pp. 643-657.
8. Kang S, Perdue, RR (2016) A meta-analysis of the impacts of mega-events on tourist behavior and destination image. *Journal of Hospitality & Tourism Research*, 40(2), pp. 135-164.

9. Hall CM (2017) Sustainable mega-events: Beyond the myth of balanced approaches to mega-event sustainability. *Event Management*, 21(2), pp. 131-143.
10. Dredge D, Gyimóthy S (2015) *Tourism and water: Interactions, impacts and challenges*. Channel View Publications.
11. Andranovich G, Burbank MJ, Heying CH (2001) Olympic cities: Lessons learned from mega-events politics.. *Journal of Urban Affairs*, 23(2), pp. 113-131.