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**Mega Events and Their Impact on Country Image:  
A Comprehensive Bibliometric Analysis**

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**Abstract**

*This bibliometric research reflects the literature available to date on the themes of mega-events – such as sporting events, cultural festivals, and world expos – in creating a country image. For that, a base dataset was set up with 137 papers from Web of Science written from 2000 to 2024 as input for the bibliometric analysis. Analysis demonstrates that the streams of literature focus mostly on sports, tourism, and cultural events. This reveals the fashion of looking for the impact the international mega-events, such as the Olympics, the FIFA World Cup, famous music festivals, and expositions, have on shaping the image of the country. Temporal analysis illustrates an increasing trend in the data publications. The most cited works in the field show the power of media coverage in changing the attitude toward tourist destinations and the intentions to visit them. It means that the research contributions are from all the continents; however, with regard to citations, the United States, Australia, and Austria come at the top. The present research takes stock of the current state of academic research and identifies areas important for further research, specifically that are relatively less researched with regard to economic effects and long-term effects associated with hosting international mega events on country image.*

**Keywords:** mega events, country image, bibliometric analysis, media coverage, national rebranding

**JEL Classification:** Z32, F59, M31, O57.

**1. Introduction**

The bibliometric analysis investigates the relationship between mega events and the creation of country image by employing a dataset of 137 articles from the Web of Science database.

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The study found that most articles have as main topic sports, tourism, and cultural events. Mega events such as the Olympics, FIFA World Cup, music festivals, and expositions all have a significant impact on a country's image. According to Hahm et al. (2019), hosting the 2018 Olympic Games improved South Korea's global image and led to a change in its perception, while showing its resilience and opposite evolution compared to its neighbouring country, North Korea. Similarly, Dubinsky (2022) underlined that, despite several challenges, the Tokyo 2020 Olympics considerably improved Japan's national branding and public diplomacy initiatives. An examination of the data over time reveals a growing trend in the number of publications, indicating an increasing level of academic interest.

Research papers that are frequently referenced emphasise the crucial significance of media coverage in altering perceptions of travel destinations and impacting the intents of potential visitors. This research shows the worldwide range of research input, with the US, Australia, and Austria among the most commonly referenced. It also indicates important gaps for future research, notably in terms of the economic impact and lasting effects of mega events on the image of the country. Hamelin et al. (2012) pointed out that winning the bid to host a big sporting event such as the FIFA World Cup could convey an impression of national prestige, attracting international attention and investment.

## **2. Literature Review**

Mega events were shown to have a number of transforming effects on the host site (Wolfe et al., 2021). Expecting the beneficial changes that mega-events bring, nations and cities have been driven to host them, and the results of these changes have been extensively investigated (Mair et al., 2021). Researchers focused on the lasting effects of mega events in relation to tourism because of their opportunity of developing infrastructure associated to tourism and draw the media's attention (Vrondou, 2023; Lu, 2021). Mega events can be distinguished by their tourism influence, media coverage, and economic impact on the host community (Duan et al., 2021).

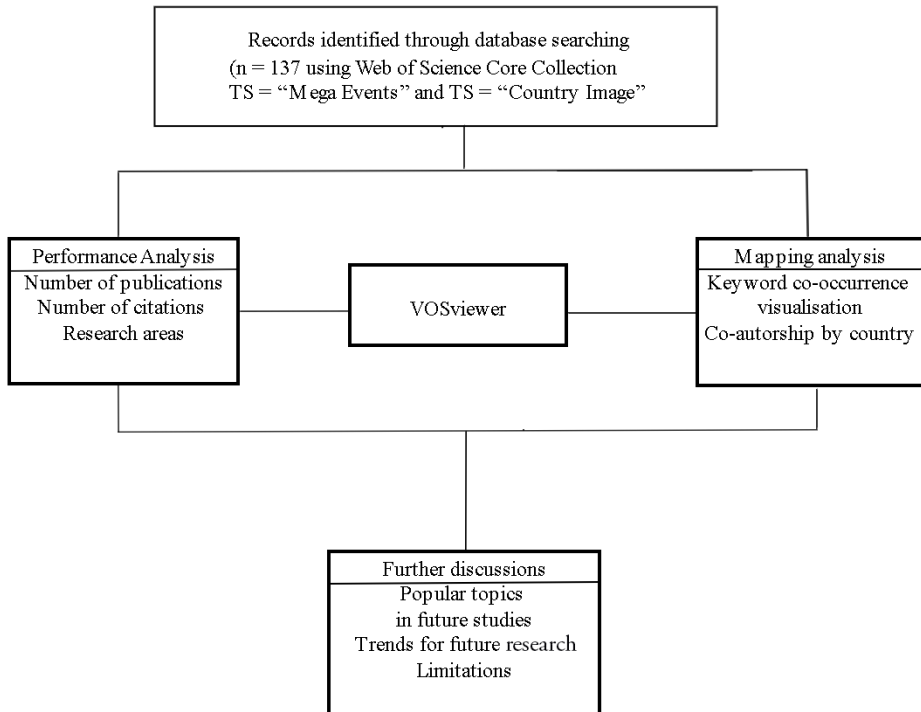
Since they can foster cooperation and offer incentive to tackle challenges, they become essential tools in urban policy (Smith and McGillivray, 2020). The growing number of cities from various socioeconomic backgrounds competing for mega-events confirms their importance in the urban agenda (Ponzini et al., 2022). Typically, these events are cultural or sports focused. Examples of such events are the World Cups in sports, the Olympic Games, or cultural festivals such as the UNTOLD festival in Cluj Napoca, Romania. So a hosted event can have a great impact on how attendees perceive the country that hosts it (Kim et al., 2019). Organising a mega event gives the opportunity to showcase the nation to a broad audience, and hence create a favorable perception, especially for relatively unknown developing regions. Through the organisation of an international mega event, the host nation may both associate its image with positive implications and contribute to influencing the perception of the visitors.

### 3. Methodology

This article seeks to provide a comprehensive bibliometric analysis of studies on mega events and their impact on country image. First, relevant studies are collected from the Web of Science database using an established retrieval methodology (Gusenbauer & Haddaway, 2020). After that, an analysis is conducted on the key features of these publications, including their yearly distribution, publication types, research focus, and work that has received a high number of citations. In addition to the data collection and preliminary analysis, this study will employ VOSviewer for further bibliometric analysis. VOSviewer is a specialised software tool designed for constructing and visualising bibliometric networks. These networks will enable the visualisation of various relationships such as and keyword occurrences and country co-authorship among the collected documents (van Eck & Waltman, 2009).

Finally, current issues, future trends, challenges, and limitations will be discussed. The methodology framework of this paper is shown in Figure 1.

**Figure 1. Methodology framework**



Source: authors' creation adapted from the PRISMA statement (Moher et al., 2009).

#### 3.1 Retrieval Process of the Data

Web of Science (WoS) is the oldest database (created in 1964 by Eugene Garfield from the Institute of Scientific Information (ISI) and is currently owned by Clarivate Analytics). Currently, it is the most comprehensive and selective academic research

resource worldwide (Singh et al., 2021). To retrieve and collect reliable literature, the WoS core collection is used as the data source in this paper. The retrieval settings are as follows: TS = “Mega Events” and TS = “Country Image”, Database = Web of Science Core Collection. On April 7<sup>th</sup> 2024, 137 publications were retrieved from the Web of Science database. Data including titles, abstracts, and keywords was exported in a .csv format for further analysis. The first article, “Analysis of the safety factors for event visitors: '99 Hanam Environmental Expo in Korea” (Kwon and Park, 2000), was published in *Ergonomics and Safety for Global Business Quality and Productivity* in 2000.

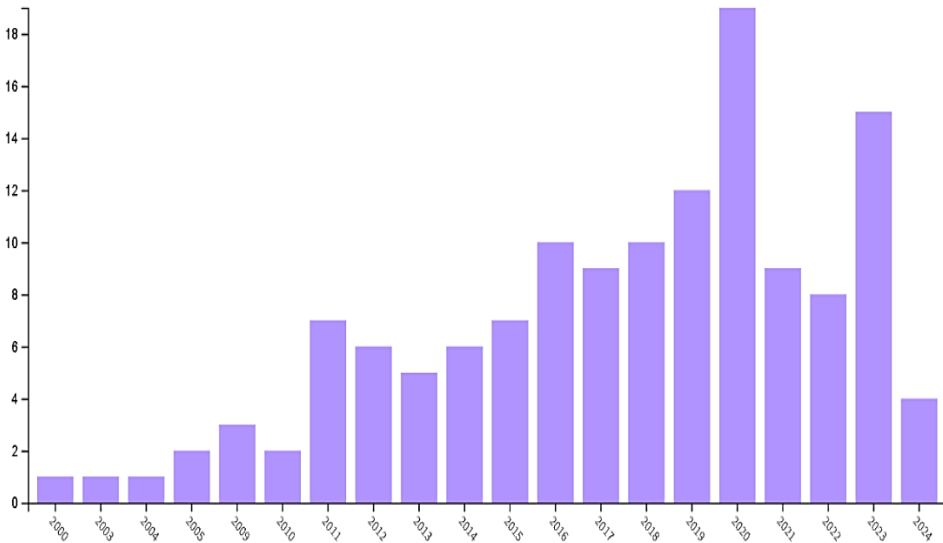
## 4. Results

Based on the retrieved data and the methodologies and tools presented, some results on the bibliometric analysis of the effects of hosting mega events on country image can be obtained. This can be demonstrated through the following four conditions, as first employed by Zhang et al. (2022) – Performance analysis, Annual indicators of publications, Types and research areas of publications, highly cited publications.

### 4.1 Performance Analysis

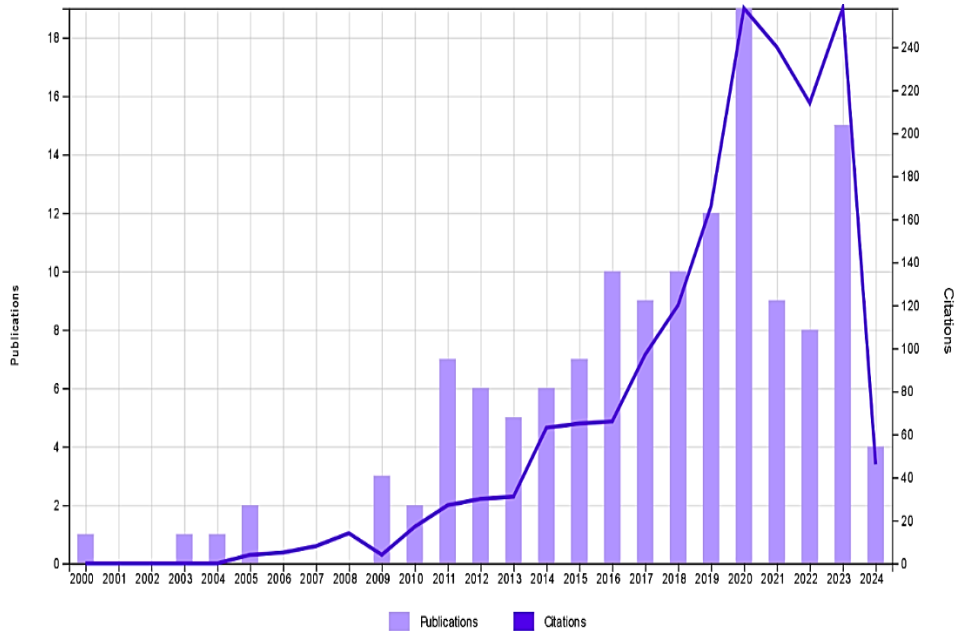
This section provides a performance analysis of publications regarding annual indicators, types, and research areas, as well as highly cited publications.

**Figure 2. The tendency of the number of publications**



Source: WoS based on author's input.

**Figure 3. Times cited and publications over time**



Source: WoS based on author's input.

Figure 2 illustrates the trend in the number of scholarly publications from 2000 to 2024 on the topic of mega events and their impact on the national image. As shown in Figure 1, the first related publication, Analysis of the safety factors for event visitors: '99 Hanam Environmental Expo in Korea, was published in 2000, and the second one was published in 2003. Post-2010, there is a noticeable increase in publications, especially from 2012 onward, where the annual publication rate starts to stabilise between 5 to 10 publications per year.

The highest number of publications appears in 2020, with 19 publications, representing about 13.87% of the total, indicating a peak of interest that might have been caused by events such as the Russia 2018 FIFA World Cup and the nearing when Qatar would host the World Cup (in 2022). The increased level of activity in the following years (2021 with 9 publications and 2023 with 15 publications) indicates a strong development of this research area among the academic community, possibly shaped by the immediate effects of recent mega events (2024 Summer Olympics Paris, 2022 Winter Olympics Beijing, 2021 Summer Olympics Tokyo, 2018 Winter Olympics Pyeongchang, etc.). Four publications have been written so far in 2024.

As shown in Figure 3, the first citations appeared in 2005, with a total of 4 citations in 2 publications. This initial point suggests a modest initial level of attention, possibly triggered by special events such as the 2002 FIFA World Cup Korea Japan. An increasing trend is visible through the high number of citations recorded in 2020 (258 citations) and 2023 (259 citations).

## 4.2 Types and Research Areas of Publications

**Table 1. Distribution of document types**

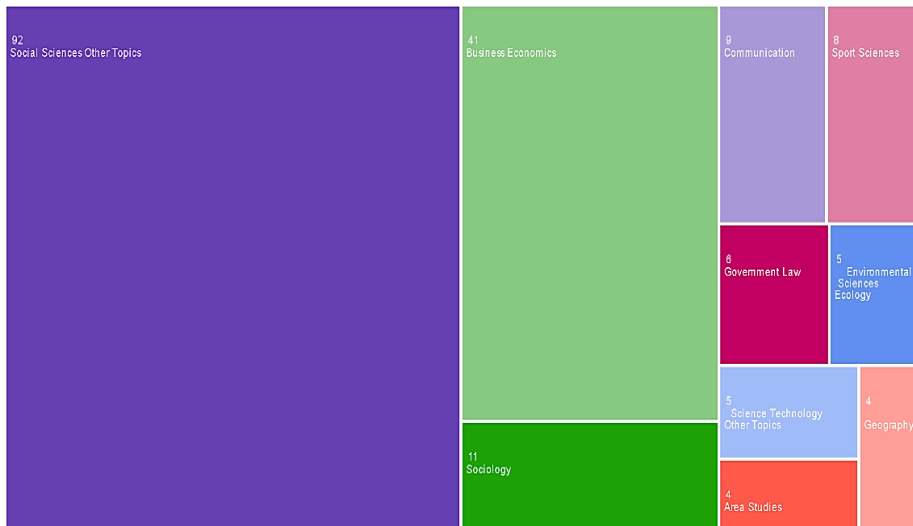
Document Type	Record Count	Percentage
Article	126	91.971%
Proceeding Paper	8	5.839%
Early Access	7	5.109%
Book Chapters	2	1.460%
Review Article	2	1.460%
Editorial Material	1	0.730%

Source: authors' creation.

The focus is on journal papers, which were 91.971%, or 126 entries. This means the high prevalence of the topic within academic research that has gone through the peer-review process. The 8 papers represent 5.839% of the total entries. This also includes articles comprising preliminary research results published at some of the academic conferences. Other, less frequent document types, are preliminary Communications, with a 5.109% share (7 documents), book chapters, and review documents with a share of 1.460% (2 documents) each, as well as editorial document types, with a share of 0.730% (1 document). All these document types allow for a comprehensive scientific debate about mega events and their impacts on the image of a country.

On the Web of Science (WoS), publications are categorised by different types. It is important to note that some documents are classified under multiple categories, which is why the total count per document type exceeds the total number of retrieved documents. Each publication focusses on at least one specific research domain. The top ten research areas are presented in Figure 4.

**Figure 4. Types and research areas of publications**



Source: WoS based on authors' input.

The treemap shows the top 10 research areas in 137 publications. Social Sciences Other Topics has 92 records, followed by Business Economics with 41. Sociology has 11 publications. Communication and Sport Sciences each have 9 and 8 records, respectively. Government Law includes 6 publications. Both Environmental Sciences Ecology and Science Technology Other Topics have 5 publications each, and Area Studies and Geography each have 4 publications.

### 4.3 Highly Cited Publications

The majority of the articles deal with how such sports events affect destination image, visitor intentions, economic impacts, and the wider implications for national branding. It emerges in the citation analysis that the publication "Effects of sport event media on destination image and intention to visit", which was published in the Journal of Sport Management in 2003, has had considerable impacts on the area's discussions. This has been confirmed by the fact that it has been cited 211 times. The presence of several global institutional affiliations tells of broad international collaboration and wide ranging academic perspectives, helping to deepen and broaden the scope of findings in this area of study significantly.

The affiliations listed in the Appendix for the top 10 highly cited articles indicate a high representation of some of the world's leading research universities within the social sciences, business and economics.

**Table 2. Top 10 journals which published the most articles**

Names of journals	Number of articles	Times cited (without self-citations)
Sport in society	6	64
International journal of sport policy and politics	5	20
Journal of vacation marketing	5	51
Communication sport	4	59
Journal of sport management	4	<b>265</b>
Sport marketing quarterly	4	75
Journal of destination marketing management	3	94
Journal of travel tourism marketing	3	65
Place branding and public diplomacy	3	8
Tourism economics	3	23

*Source:* authors' creation.

The data in Table 2 shows that the "Journal of Sport Management" has the highest number of citations, 265. This suggests that the journal plays a great role in sharing results on the effects of mega sports events on the country image. It is notable that journals like "Sport in Society" and "Communication Sport" have a considerable presence in the subject, with 64 and 59 citations, respectively.

The publications in "Sport Marketing Quarterly" and "Journal of Destination Marketing Management" mostly examine the marketing and tourism effects of sports. The former has received 75 citations, while the latter has received 94 citations. The comparatively lower citation counts in "Place Branding and Public

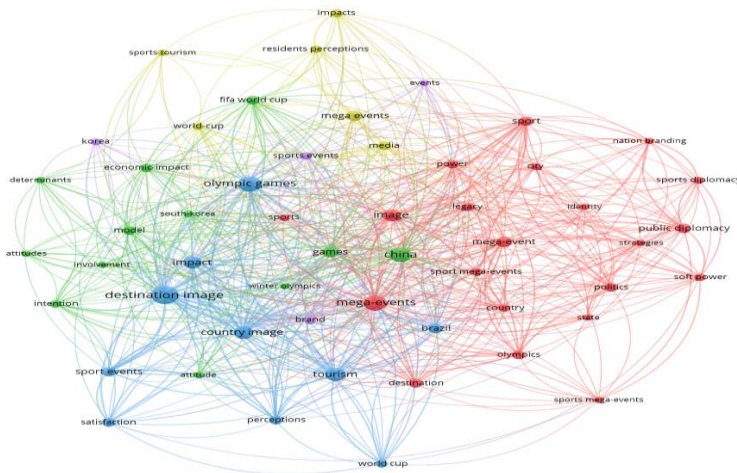
Diplomacy” and “Tourism Economics”, despite each consisting of three papers, indicate the existence of specialised subtopics that may not attract an extensive academic interest.

#### 4.4 Bibliometric Methods

Bibliometric tools are used to analyse and understand different aspects of written publications (Donthu et al., 2021). They employ statistical indicators to assess the impact, structure, and progression of scientific research. Researchers frequently analyse trends such as publication counts, citation analysis, and co-authorships to gain insights into the collaborative networks, and developing trends across academic fields (Moral-Muñoz et al., 2020).

In the parts that follow, VOSviewer will be used to visually represent two aspects of academic communication: the co-occurrence of keywords and the and the co-authorship by country. The aim is to identify the relationships between keywords and the fundamental concepts in the literature by representing their co-occurrence visually. Simultaneously, analysing co-authorship based on country will offer valuable understanding of the extent of international connections.

**Figure 5. Keyword co-occurrence visualisation**



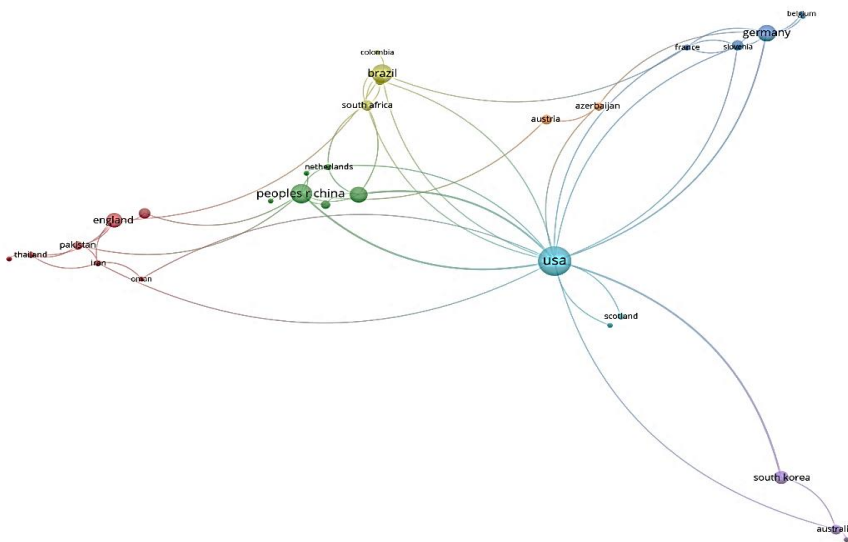
Source: VOSviewer based on authors' input.

The keyword co-occurrence analysis was conducted with VOSviewer in order to determine the main research interests in a specific area of study. To carry out the analysis, a minimum limit of 5 occurrences of keywords was set. Of the 648 keywords, only 53 fit this specific requirement. On the generated map, each node represents a keyword, while a connecting line between two nodes indicates their co-appearance in a publication. The size of each node corresponds to the frequency of occurrence of the keyword, where larger nodes indicate a higher frequency.



The 53 keywords are categorised into 5 groups, each coloured distinctly. The network map shows the link between “country image” and “mega events” in research. Keywords such as “Olympic games”, “World Cup”, and “mega-events” correspond to the biggest nodes, suggesting that these events are frequently examined together. The nodes of “economic impact” and “tourism” indicate that attention is placed on the physical advantages of hosting such events. Moreover, “sports diplomacy” and “soft power” underscore the importance of mega events in international relations. Furthermore, the five most often occurring keywords are “destination image”, “olympic games”, “mega events”, “tourism”, and “country image”.

**Figure 6. Co-authorship by country**



*Source:* VOSviewer based on authors’ input.

The United States and China are identified as central nodes, reflecting their dominant position in international research collaborations. The significant co-occurrence between these countries indicates a strong academic interest and, potentially, common research objectives.

Alongside these, there are nodes depicting Germany, France, and other countries, with a less dense presence, indicating ongoing, although more cautious, international collaborations. The different sizes of the nodes represent the equivalent frequency of each country's presence in the literature. The bigger nodes for the United States and China highlight the higher frequency of co-occurrence.

The network's structure, indicated by the width of the connections, also indicates the strength of research collaborations. The thin links that connect nations such as Iran, Pakistan, and Thailand suggest less significant collaborations.

## **5. Discussions and Conclusions**

The bibliometric analysis based on 137 publications in the Web of Science database has returned some important insights related to the association between mega-events and country image. Strong academic writing on sports tourism and cultural events touts the huge effects of the Olympics, FIFA World Cup, music festivals, and international expos. This is substantiated by the fact that high citation rates accrue to articles which, for example, analyze the impact of the 2018 Winter Olympics on South Korea or the impact of the 2020 Tokyo Olympics on Japan.

A temporal analysis expressed growing academic interest over the past two decades, while peaks matched the timing of international mega-events. It was therefore confirmed that international mega events could do not only light the spark of public attention but also further stimulate research interest. Contributions from the USA, Australia, and Austria are dominant, underlining the international value given to this topic of research.

However, there are still remarkable gaps, especially in the number of articles that have studied the long-term economic impact and durable implications on the image of the country. Most of these studies focus on the immediate impacts resulting from hosting the mega event and normally explore media attention and visitor intentions. In that respect, what is lacking is longitudinal work that would show a way to maximize the gains from hosting such an event over a longer period.

Keyword co-occurrence and country co-authorship plotted using VOSviewer, which describes in general the collaborative nature of this topic of study. The high frequency of keywords like "Olympic Games", "World Cup" and "mega events" occurring together with "economic impact" and "tourism" shows their interrelation. Strong scientific collaboration between countries can be observed, especially between the United States and China, indicating mutual interest at the academic level in studying the impact of mega events.

In summary, this study emphasizes the growing interest that scholars are showing in the study of international mega events and their impact on the image of a country. While the literature is currently focused mainly on sport tourism and cultural events, further research should be conducted on long-term economic implications and country image impacts.

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## Appendix

### Top 10 highly cited publications

Rank	Article Title	Source Title	Document Type	Publication Year	Times Cited, All Databases	Affiliations
1	Effects of sport event media on destination image and intention to visit	Journal of Sport Management	Article	2003	211	University of Texas System; University of Texas Austin; Griffith University; Griffith University - Gold Coast Campus
2	The Beijing Games in the Western Imagination of China: The Weak Power of Soft Power	Journal of Sport & Social Issues	Article	2010	139	University of Vienna
3	Economic and destination image impacts of mega-events in emerging tourist destinations	Journal of Destination Marketing & Management	Article	2016	74	University of Vienna

Rank	Article Title	Source Title	Document Type	Publication Year	Times Cited, All Databases	Affiliations
4	The Economic Benefits of Mega Events: A Myth or a Reality? A Longitudinal Study on the Olympic Games	Journal of Sport Management	Article	2011	76	National Taiwan Normal University; Yuan Ze University; National Taiwan University
5	Branding national images: The 2008 Beijing Summer Olympics, 2010 Shanghai World Expo, and 2010 Guangzhou Asian Games	Public Relations Review	Article	2012	62	City University of Hong Kong
6	Impact of Mega Sport Events on Destination Image and Country Image	Sport Marketing Quarterly	Article	2014	52	State University System of Florida; Florida State University; Seoul National University (SNU); Seoul National University (SNU)
7	Bringing the world to Canada: 'the periphery of the centre'	Third World Quarterly	Article	2004	62	University of Alberta
8	Festivalisation and urban renewal in the Global South: socio-spatial consequences of the 2010 FIFA World Cup	South African Geographical Journal	Article	2011	56	University Osnabruck; University of Erlangen Nuremberg; Technical University of Berlin

<b>Rank</b>	<b>Article Title</b>	<b>Source Title</b>	<b>Document Type</b>	<b>Publication Year</b>	<b>Times Cited, All Databases</b>	<b>Affiliations</b>
9	China and the Olympics: views of insiders and outsiders	International Marketing Review	Article	2010	56	Carleton University; Nipissing University; Syracuse University
10	The Impact of a Sport Mega-Event on Destination Image: The Case of the 2002 FIFA World Cup Korea/Japan	International Journal of Hospitality & Tourism Administration	Article	2005	48	Kyung Hee University; University of Technology Sydney; Dong-Eui University

*Source:* authors' creation.