

Past, Present, and Future Studied on the Topic of Small-Scale Sports Events: A Bibliometric Analysis

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Abstract

Sports events and sports tourism development are flourishing, and small-scale sports events are experiencing an exponential growth. Due to the gap between the lack of relevant research and the buoyancy of small-scale sports events in practice, it is imperative to systematically analyze the related studies. Utilizing CiteSpace and VOSviewer software, a bibliometric analysis was conducted on 39 papers on small-scale sports events indexed in Web of Science and Scopus. The analysis reveals that the topic of research on small-scale sports events is still in its nascent stage, with relatively few highly correlated research outcomes overall, but it demonstrates a steady upward trend. Within the realm of small-scale sports event research, subtopics such as tourism, sports tourism, image, and satisfaction stand out as academic hotspots. Notably, the content of this topic has evolved from examining economic impacts to social impacts, and the focus has shifted from tourists to local residents as the subjective of study. Moreover, the literature on small-scale sports events, despite in small numbers, contains a few highly influential academic works, establishing a solid theoretical foundation for related studies. Finally, a clear co-citation clustering of important reference works in small-scale sports events has emerged, not only providing a theoretical basis for a comprehensive understanding of small-scale sports events, but also outlining a clear knowledge framework for studying them from a tourism perspective.

Keywords: *Small-scale sports events; Sports tourism; Bibliometrics; VOSviewer; CiteSpace.*

1. Introduction

As an obvious result of the merits for the host, such as shaping a favorable image (Lyu & Han, 2016), boosting the local tourism economy, and optimizing industrial structure (Melo et al., 2021), all kinds of sports events are pretty much around the world (Malchrowicz-Moško & Poczta, 2018). Initially, mega-scale sports events are undoubtedly centered on the large percentage of scholars resulting from their significant multiplier impacts (Duglio & Beltramo, 2017). Meanwhile, no-mega-scale sports events, especially small-scale sports events, are habitually overshadowed in the field of sports

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events due to their impacts being underestimated by academics (Gibson et al., 2012; Malchrowicz-Mośko & Poczta, 2018).

However, there was an interesting metaphor that, according to Taks (2013, P.137), mega-scale sports events are “*small fish in a big pond*”, whereas small-scale sports events are like “*big fish in a small pond*”. Specifically, no shortage of critiques like heavy financial burden, low rate of facility and venue usage following games, high carbon emissions, as well as poor level of resident pleasure during the event, have been creeping into academia, with deeper insights into increasingly hosting mega-scale sports events (Malchrowicz-Mośko & Poczta, 2018; Gibson et al., 2012). On the other hand, small-scale sports events that are cost-saving, improve residents quality of life, have a higher utilization rate of facilities and equipment, and are more sustainable have been increasingly unfolding and discovering (Ghaderi et al., 2021). Within this setting, Duan et al. (2020) highlighted that there is a dramatic growing trend of research on no-mega-scale sports events, especially small-scale sports events. Therefore, small-scale sports events are increasingly becoming an interesting and more value topic in the field of sports events, along with the surge of the drawbacks of mega-scale sports events and the benefits of small-scale sports events on the lips of scholars and participators (Higham, 1999; Gibson et al, 2012; Duglio & Beltramo, 2017). What is more, the running of small-scale sports events featured a lot of aforementioned advantages are easier, more cost-saving, and simpler to organize for the host rather than other types of sports events, meaning a bulk of the events from polar to polar, which is also a calling to get a deeper academic insight on this type of sports events.

2. Small-Scale Sports Events

In terms of small-scale sports events, most scholars, such as Gibson et al. (2012), Priporas et al. (2018), Fotiadis et al. (2016), Ziakas (2014), Ghaderi et al. (2021), and Shonk et al. (2012), all considered that Higham was the first pioneer who was concerned about and discussed this topic. Obviously, Higham’s (1999) definition of small-scale sports events has been widely cited in the related studies, which referred to ranging from regular international sporting events (such as ice hockey, basketball, football, rugby, etc.), national competitions, masters’ games, to disability sports. Subsequently, the understanding of small-scale sports events has been evolving along with deeper study of the events as well as the ubiquitous events running in practice.

Table 1: sports events typology according to Gratton and Wilson.

Type of event	General characteristics
Type A	<i>Irregular, one-off, major international spectator events generating significant economic activity and media interest (e.g., Olympics, Football World Cup, European Football Championship)</i>
Type B	<i>Major spectator events, generating significant economic activity, media interest and part of an annual domestic cycle of sports events (e.g., FA Cup Final, Six Nations Rugby Union Internationals, Test Match Cricket, Open Golf, Wimbledon)</i>
Type C	<i>Irregular, one-off, major international spectator/ competitor events generating limited economic activity (e.g., European Junior Boxing Championships, European Junior Swimming Championships, World Badminton Championships, IAAF Grand Prix)</i>
Type D	<i>Major competitor events generating limited economic activity and part of an annual cycle of sports events (e.g., National Championships in most sports)</i>

Type E	<i>Minor competitor/spectator events, generating very limited economic activity, no media interest and part of an annual domestic cycle of sport events (e.g., Local and Regional sport events in most sports).</i>
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Source: Gratton et al. (2000, p.26), Wilson (2006, p68).

During the processing of the evolving understanding of small-scale sports events, Gibson (2012) attracted nearly all scholars' eyes to this topic through his studies and findings. Gibson (2012, p. 12) put forward another commonly authoritative definition: "*small-scale sports events include minor events where competitors may outnumber the spectators; they are often held annually, with little national media interest and limited economic activity compared to the large-scale events*". Retrospectively, Gibson's description of small-scale sports events stemmed from Wilson's (2006) classification of sports events, the immediate outcome of Gratton et al.'s (2000) findings. According to Gratton, there are four kinds of mega-scale sports events, despite the absence of small-scale sports events, which has put forward the basic criteria for the classification of sports events. Based on the findings, Wilson (2006, p. 68) stated that Type E (see Table 1) is a small-scale sports event rooted in its characteristics of being a domestic niche sporting event, especially for participants and spectators, reoccurring with less media interest and limited economic activities.

Furthermore, the studies on the topic of small-scale sports events were unstoppable, presenting a variety of understandings from various angles. For example, Amador et al. (2016) explored the low cost of the events based on the fact that they are hosted using existing facilities and equipment. Meanwhile, several scholars (e.g., Malchrowicz-Mo'sko & Poczta, 2018; Wafi et al., 2020; Melo et al. 2021) have dedicated themselves to critically studying and comprehending small-scale sports events through a wide range of empirical research. Notably, Melo et al. (2021, p. 27) integrated the previous fruits and considered that Type D2 and E (see Table 2) are the small-scale sports events that are regularly hosted at fixed venues, limited economic activities, fewer competitors and spectators, as well as minimal investment based on the available venues and facilities, by dividing sports events into five categories and seven sub-categories.

Table 2: small-scale sport events according to Melo (2021, p. 27)

Type of event	General characteristics
Type D2	<i>Regular events, part of the annual cycle of sports events, generating limited economic activity, no media interest, more competitors than spectators, less attraction to non-residents spectators (e.g., national sports events in most sports).</i>
Type E	<i>Regular events, part of the annual cycle of sports events, generating limited economic activity, no media interest, fewer spectators and competitors, and non-economic reasons for authorization (e.g., local and regional events in most sports).</i>

Therefore, there are four dimensions of criteria associated with small-scale sports events deriving from the aforementioned prior studies and findings, including periodicity, venue, influence (especially for economy and media interest), and participants (competitors and spectators). However, a few exceptions of small-scale sports events judging by four-dimension criteria were bubbled, especially as far as the nature of fewer spectators and limited economic activities are concerned. For example, Hallmann and Breuer (2011) stated that a tiny band of small-scale sports events also attracts a great number of tourists and fans due to their uniqueness. In addition, Duglio and Beltramo (2017) found that small-scale sports events sometimes possess significant economic contributions to the host cities through an empirical study on the Italo-Swiss Mountain Trail Collon Trek.

Therefore, although the outline of small-scale sports events based on four dimensions was approved by most scholars, due to a few “exceptional” or “out of the circle” events, the definition and understanding across different specific studies and geographies should not be limited to their characteristic dimensions.

3. Methodology

3.1 Data Collection

There are a wide range of databases that may be utilized in bibliometrics studies that scholars have comparatively analyzed different popular databases in a methodical manner. Precisely, according to Barnett & Lascar (2012), Scopus has more unique journal titles than Web of Science (WOS) in some specific research fields like Earth and Atmospheric. Similarly, in the work of Abrizah et al. (2012), Scopus has a little bit more unique titles than WOS. By contrast, as Li et al. (2021) considered, WOS is one of the most widely used databases with a higher data quality, making literature searches easier and more comprehensive compared with other databases. Meanwhile, Kersulić et al. (2020) highlighted that WOS as the database involves top-rated peer-reviewed journals with international scope and coverage, which widely collect scientific publications with the most significant impact (Hodge & Lacasse, 2011). Mongeon and Paul-Hus (2015) stated that, thus, WOS and Scopus are the crucial databases for citation data.

Based on this background, the current study employed WOS and Scopus to collect data on pertinent topics for collecting relevant literature data on this topic more thoroughly. Additionally, in order to obtain highly relevant data, the current study searched just “title” with the retrieval string “small scale sport* event*” on both the Scopus and WOSCC databases during the whole period (December 29, 2022). Later, the whole information of citations has been downloaded to be filtered gradually by the criteria “article”, “English”, and “already published”, followed by the merged dataset after being cleaned of duplicates by CiteSpace.

Table3: the number of publications titled with small-scale sport events (December,29,2022).

Retrieval style and filtered criteria	Scopus	WOSCC	Total
TITLE (small scale sport* event*)	48	31	79
Article	39	27	66
English article	38	25	63
Already published	35	25	60
Merging both datasets without duplicates	-	-	39

Source: retrieved from Scopus and WOSCC (Dec. 29 2022).

Specifically, the result is obviously presented in Table 3, in which there were 39 and 27 publications on Scopus and WOS matching up with the criterion of “article”, respectively, and then filtered the language in “English”, with 38 articles on Scopus and 25 articles on WOS publications. Next, by filtering with “already published”, the dataset from Scopus contained 35 already published articles in English studies on small-scale sports events, and the dataset from WOS was composed of 25 already published papers in English studies on this topic. Nevertheless, there are several identical publications in both databases by scrutinizing these papers. The study, as a result, retrieved and archived the whole texts of the pertinent papers on the WOS and Scopus, respectively. Finally, by employing CiteSpace software to integrate the two datasets and de-duplicate for cleaning

the data, a new combined literature data collection with 39 article titles that include “small scale sport* event*” was created. Therefore, there was a merging dataset composed of 39 all information of articles with pain text.

3.2 Data Analysis

Van Eck and Waltman (2009) emphasized that VOSviewer software is such a powerful tool for bibliometric analysis that the newly combined and cleaned dataset is utilized in this study for bibliometric analysis and visualizations by resorting to VOSviewer software. According to Palácios et al. (2021), the bibliometric analysis not only profiles the skeleton of the specific domain but also provides access to describing the corresponding structures of the field through scientific mapping. Meanwhile, Merigó and Yang (2017) highlighted that bibliometric analysis is a method of systematic study of scientific research publications on the basis of quantitative analysis, whereas visualization is a more logical way to present the findings of the analysis.

Specifically, the study started with a basic descriptive analysis of the papers containing the string “small scale sport* event*” in their titles. Then, a keyword co-occurrence analysis of pertinent publications is conducted, with the visual results immediately representing the current research hotspot and trend of this topic. Moreover, high-impact researchers and articles are identified by an analysis of citation frequency and prolific scholars. Furthermore, the co-citation analysis of the dataset is completed to identify the authoritative literature in related domains as well as the research foundation for small-scale sport events.

4. Results and Discussions

4.1 Descriptive Analysis

In this merging dataset, it is noting that this first article titled small-scale sports events is that “Small-scale event sport tourism: fans as tourists” was published on *Tourism Management* in 2003 by Gibson et al. (2003). As seen in Figure 1, in line with the findings by most scholars (e.g., Kaplanidou & Gibson, 2010; Malchrowicz-Mośko & Poczta, 2018; Ayanda et al., 2021; Fotiadis et al., 2016a; Fotiadis et al., 2016b; Fernández-Martínez et al., 2022; Fotiadis et al., 2020; Ghaderi et al., 2021; Pereira et al., 2015), the topic research on small-scale sports events presented an increasing trend during the period from 2003 to 2022 (December 29th of 2022), despite the growth pace being mildly sluggish. There are several reasons why the sum volumes of publications studying the topic of small-scale sports events are a little bit few involving the more restrictive search style (only “Title” with retrieval string “small scale sport* event*”) and the fact that studies focusing on this topic are still in their infancy.

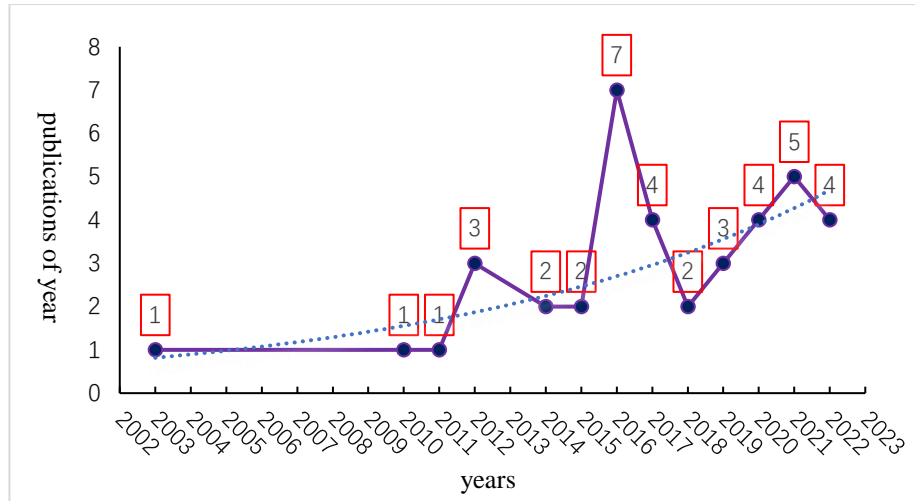


Figure 1. Number of publications titled with S-SSEs of year from 2003 to 2022.

Source: Scopus and WOS (Dec. 29, 2022)

4.2 The Hotspots, Network, and Trend

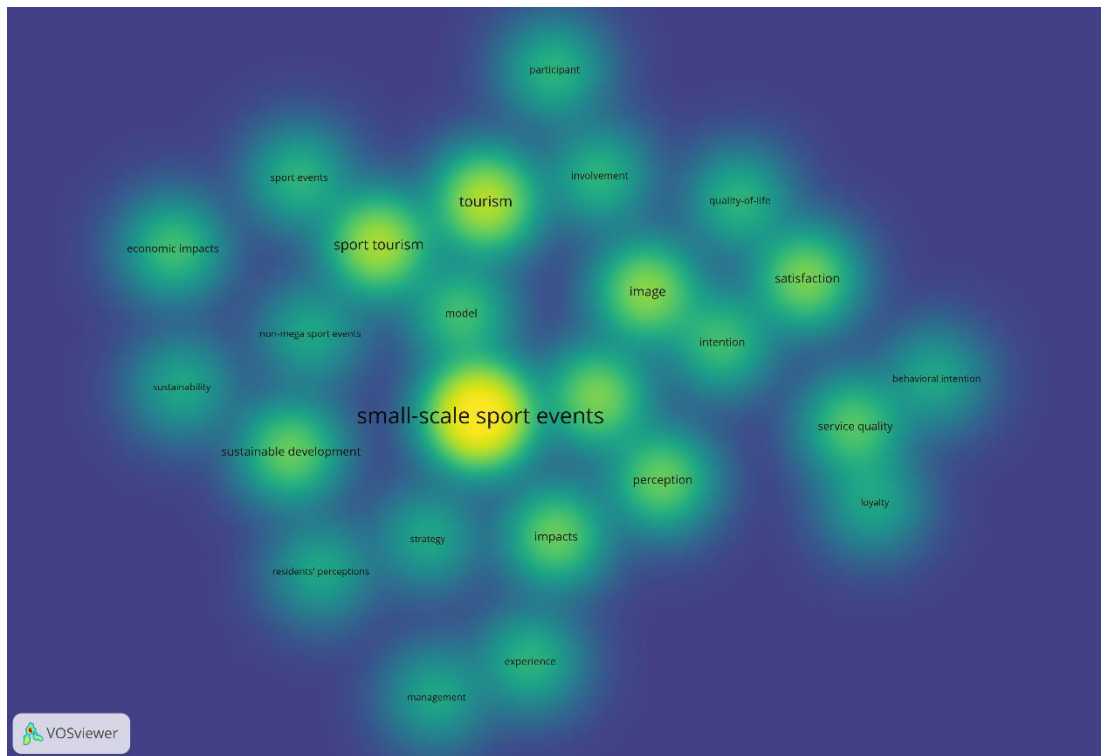


Figure 2. Density map of the co-occurrence of keywords

As Vong et al. (2021) articulated, the research status of a specific field can be presented by keyword co-occurrence analysis. In this respect, visualizing the merging dataset with all keywords (including both author and index keywords) from 39 publications by VOSviewer, there are 174 keywords, 25 of which meet the threshold occurring more than 3 times due to the few numbers of the dataset. The primary research subdivisions of pertinent publications containing the string “small scale sport* event*” in titles can be seen immediately in the keyword density map (see Figure 2). Obviously, it is a crystal fact that the keyword “small-scale sport events” has the highest occurrence (25) in this merging dataset due to the fact that this dataset all focuses on this type of sport event. Subsequently, other keywords that occurred more than at least 3 times mean that the

research of small-scale sports events is mainly distributed in those subtopics, including tourism (12), sport tourism (11), image (9), motivations (8), satisfaction (8), impacts (7), perception (7), sustainable development (7), service quality (6), economic impacts (5), intention (5), model (5), experience (4), involvement (4), participant (4), quality-of-life (4), sport events (4), behavioral intention (3), loyalty (3), management (3), non-mega sport events (3), residents' perceptions (3), strategy (3), and sustainability (3), respectively. The findings of the keyword co-occurrence analysis are usually in line with the findings of Vassiliadis and Fotiadis (2020, P.24), which is that the topic of sports events is an interdisciplinary study that primarily encompasses the sports industry, tourist industry, and event management.

According to VOSviewer, these subtopics can be clustered into four groups as the network map of the co-occurrence of keywords presented (see Figure 3), with cluster 1 marked in red, cluster 2 in green, cluster 3 in dark blue, and cluster 4 in yellow. Specifically, the most evident cluster is the red cluster, which involves 9 keywords, led by the keyword “tourism”. The green cluster is the second largest, which contains 7 keywords, and the leading tag is “small-scale sport events”. The third dark blue cluster is composed of 5 keywords with the leading word “impacts”. The yellow one is the fourth cluster, with 14 keywords, of which the leading keyword is “perception”. Thus, the topic of small-scale sports events has been studied in those four mainstream subtopics, encompassing tourism, small-scale sports events per se, their impacts, and participants' perceptions.

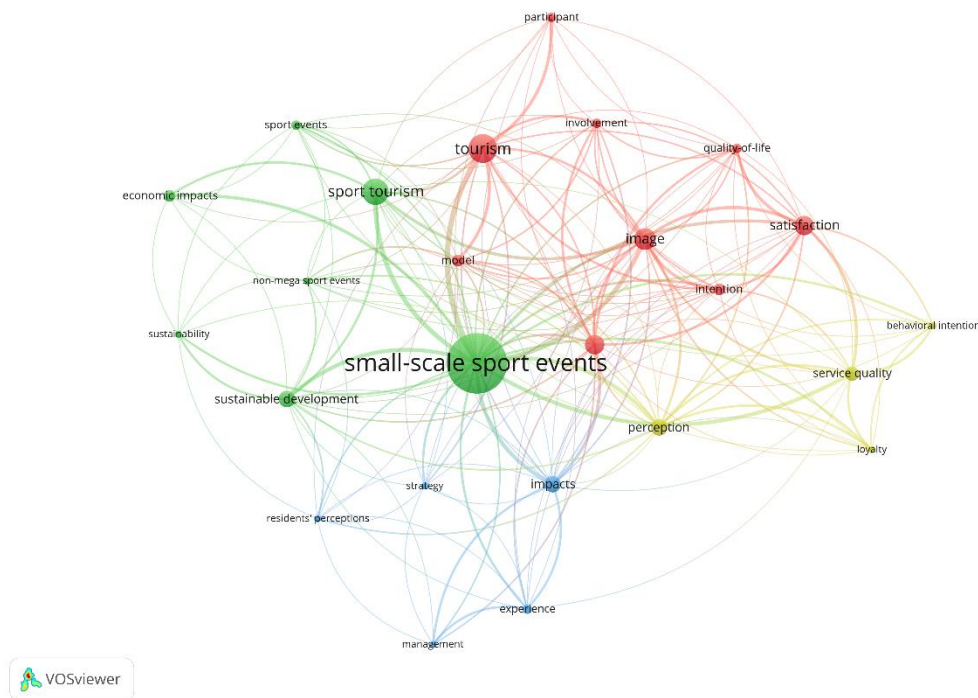


Figure 3. Network map of the co-occurrence of keywords

In the same vein, the research trend can also be identified via the analysis of the co-occurrence of keywords (Vong et al., 2021). It can be seen clearly from Figure 4 that the evolution of research topics on small-scale sports events is displayed in chronological order in an overlay visualization of the co-occurrence of keywords. Initially, the keywords in purple, such as sport tourism, sport events, and economic impacts, were the focal points of research (e.g., Kwiatkowski & Oklevik, 2017; Duglio & Beltramo, 2017), which means that the early research still focuses on the traditional topic with respect to

sport events, influenced by the research paradigm of other types of sport events, especially mega-scale sports events.

Later, the concerns of the small-scale sports events branched out into participant (e.g., Fernández-Martínez et al., 2022; Parra-Camacho et al., 2020), image (e.g., Hallmann & Breuer, 2011; Taberner & Juncà, 2021; Jeong & Kim, 2019), and comprehensive impacts (e.g., Parra-Camacho et al., 2020; Malchrowicz-Mo'sko & Poczta, 2018), as well as sport events management and strategy (e.g., Pereira et al., 2015; Pereira et al., 2019) with a bigger node in dark blue. Recently, it should not be overlooked that such things as perception (e.g., Shonk et al., 2012; Bazzanella, 2019), residents' perception (e.g., Bazzanella, 2019), quality of life (e.g., Fernández-Martínez et al., 2022), and customer loyalty, despite these keywords with small nodes, have become the new trend of research on the topic of small-scale sports events. As a result, there is a manifest transformation in that the research trend on small-scale sports events has evolved from economic impacts to social impacts and from tourists to residents, in line with the findings of Taks (2013) and Parra-Camacho et al. (2020), that social impacts are relatively new emphasis (Perić, 2018).

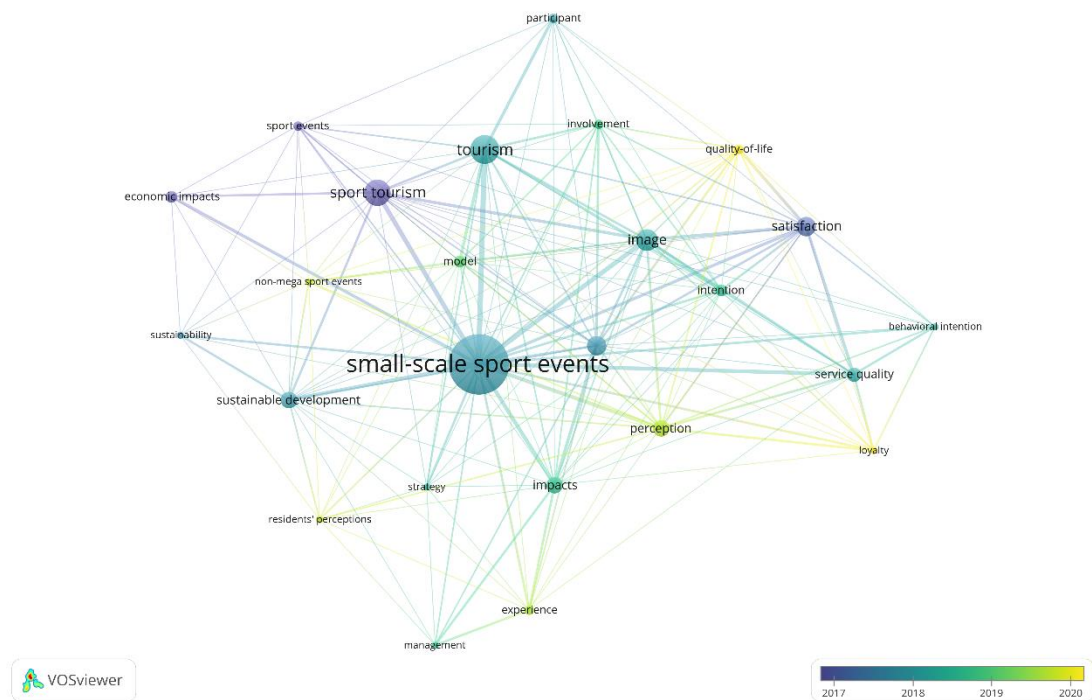


Figure 4. Overlay map of the co-occurrence of keywords

4.3 The Prolific Authors and Impactful Articles

According to Dzikowski (2018), the number of articles in the specific domain and the frequency cited might primarily indicate the scholars' productivity and influence in this field. As for small-scale sports events, only 11 researchers have published two papers focusing on this topic, including Bazzanella, Doumi, Durkin, Gibson, Vassiliadis, Fotiadis, Jeong, Mouratidis, Perić, Stylos, and Walker, while other researchers have just published one paper in this field small-scale sports events.

Furthermore, the cited frequency demonstrated the degree of acceptance for a specific work and its influence in the corresponding realm. According to data from WOS and Scopus, Table 4 lists the top five most-cited works, two of which were written by Gibson, ranking the top two. Specifically, the article "Small-scale event sport tourism: A case study in sustainable tourism" by Gibson from the University of Florida, published on *Tourism Management* in 2012, was the most frequently cited work. This research

empirically examined the sustainability of six small-scale sports events based on economic, social, and environmental impacts, indicating that this type of sports event is more sustainable for communities. Subsequently, the second place of rank was also Gibson's work, "Small-scale event sport tourism: fans as tourists" published on *Sport Management Review* in 2003, which considered that small-scale sports events have the potential to increase municipal income, neighborhood pride, and tourists' knowledge of nearby cities. Therefore, Gibson is one of the most productive and influential researchers in the area of small-scale sports events. Within this setting, Gibson's studies were more likely to arouse other scholars' interest in this topic, establishing a research paradigm in this domain, which was a cornerstone for research on small-scale sports events. Meanwhile, other commonly cited publications belonged to Duglio and Beltramo (2017), Kerwin (2015), and Malchrowicz-Moško (2018), respectively, reflecting that the subtopics such as economic impact of the events, volunteers involved in the events, and sustainable development of the events are all given significant attention.

Table 4. Top 5 cited documents of small-scale sport events.

Rank	Author	Title	Journal	F. (WOS)	F. (Scopus)	AVG.F
1	Gibson, 2012	Small-scale event sport tourism: A case study in sustainable tourism	<i>Sport Management Review</i>	190	259	224.5
2	Gibson, 2003	Small-scale event sport tourism: fans as tourists	<i>Tourism Management</i>	148	223	185.5
3	Duglio, 2017	Estimating the Economic Impacts of a Small-Scale Sport Tourism Event: The Case of the Italo-Swiss Mountain Trail Collon Trek	<i>Sustainability</i>	51	69	60
4	Kerwin, 2015	Exploring sense of community among small-scale sport event volunteers	<i>European Sport Management Quarterly</i>	53	52	52.5
5	Malchrowicz-Moško, 2018	A Small-Scale Event and a Big Impact-Is This Relationship Possible in the World of Sport? The Meaning of Heritage Sporting Events for Sustainable Development of Tourism-Experiences from Poland	<i>Sustainability</i>	31	61	46

Source: Scopus and WOS (Dec. 29, 2022).

Legend: F-cited frequency, and AVG.F-average cited frequency.

4.4 The Structures of Knowledge

According to Jeong and Ding (2014), co-citation refers to the relationship that two articles have with one another when they simultaneously appear in the reference list of the third article. The degree of resemblance between different works can also be evaluated prospectively and dynamically using co-citation analysis. Therefore, the co-citation analysis indicates the fundamental skeleton of knowledge of pertinent research to a certain extent (Li et al., 2021). Precisely, 39 publications included a total of 2831 references in the dataset. The dataset was subjected to a co-citation analysis by resorting to the VOSviewer with a threshold set at 5, meaning that the frequency of citations was not less than 5. Of these, eight citations met the threshold (see Table 5), forming a co-citation network with two clusters (see Figure 5).

Table 5. The important references of small-scale sport events (the reference is cited not less than 5 times, chronologically ascending by the publications).

Number	First author	Year	Title	Journal	Frequency
1	Higham	1999	Commentary-sport as an avenue of tourism development: an analysis of the positive and negative impacts of sport tourism	Current Issues in Tourism	15
2	Gratton	2000	The economic importance of major sports events: a case study of six events	Managing Leisure	6
3	Gallarza	2006	Value dimensions, perceived value, satisfaction and loyalty: an investigation of university students' travel behaviour	Tourism Management	15
4	Wilson	2006	The economic impact of local sport events: significant, limited or otherwise? A case study of four swimming events	Managing Leisure	12
5	Getz	2008	Event tourism: definition, evolution, and research	Tourism Management	7
6	Shonk	2008	Service quality, satisfaction, and intent to return in event sport tourism	Journal of Sport Management	20
7	Chen	2010	Exploring destination image, experience and revisit intention: A comparison of sport and non-sport tourist perceptions	Journal of Sport Tourism	7
8	Gibson	2012	Small-scale event sport tourism: A case study in sustainable tourism	Sport Management Review	6

As can be seen chronologically from Table 5, the initial studies mostly concentrated on cognition and its primary features in small-scale sports events. As previously mentioned, other scholars, such as Gratton et al. (2000), Wilson (2006), Getz (2008), and Gibson (2012), continued relevant basic research based on Higham's (1999) research fruits, which not only deepened the basic research system but also broadened the research scope

focusing on this topic. Moreover, any number of vital co-citations for small-scale sports events also illustrate how the topic has evolved throughout time. Basically, scrutinizing the text of the significant co-citations, the overall research trends present a transformation from the economic impacts, the perception of the event's legacies, the spectators' perception and satisfaction, and sustainable development, which is highly consistent with the evolution of the research topics in the time series.

Furthermore, it is notable that there are four works with more than 10 citations overall. Among these, Shonk's (2008) work published on the *Journal of Sport Management* in 2008, "Service quality, satisfaction, and intent to return in event sport tourism" and Gallarza and Saura's (2006) paper published on *Tourism Management* in 2006, "Value dimensions, perceived value, satisfaction and loyalty: an investigation of university students' travel behaviour", were both crucial references centered on exploring the tourists' satisfaction of sports events and its factors from a tourism perspective. Additionally, the two publications written by Higham and Wilson cited more than ten times, which have clarified the understanding of small-scale sports events with a description of their characteristics, are significantly essential cornerstones in this area.

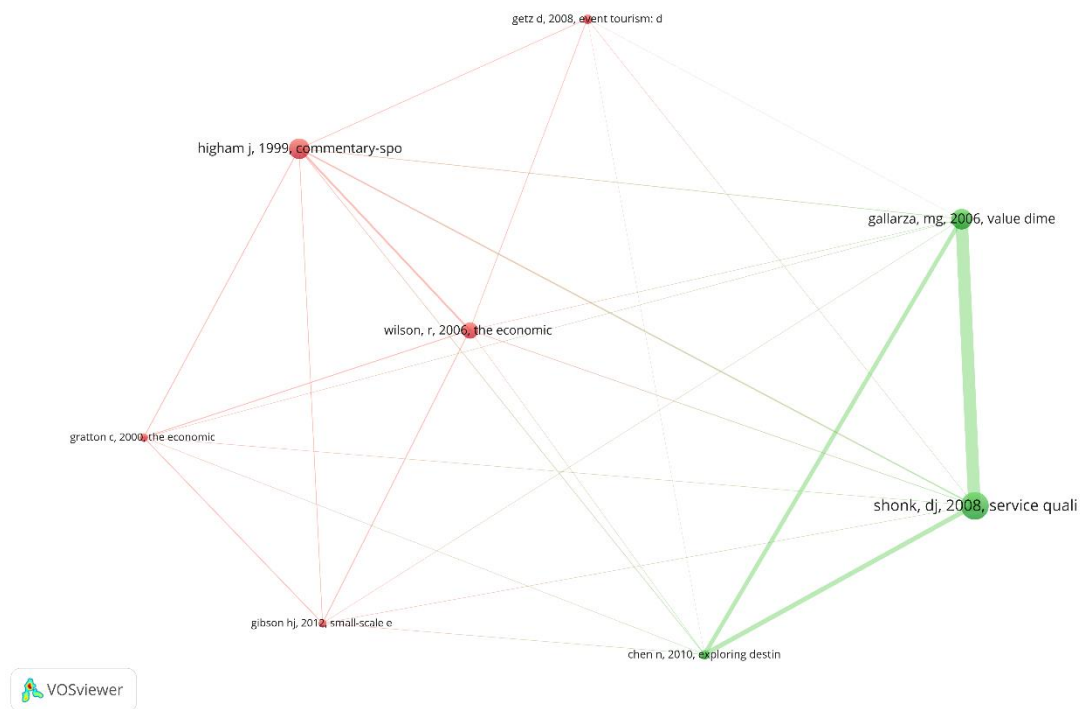


Figure 5. Network map of the co-citation by reference (the reference is cited not less than 5 times)

By the same token, Figure 5 illustrates how the co-citation network of significant references for small-scale sports events mostly divides into two groups. The primary cluster among them, as determined by the co-citation frequency, is shown by the green cluster, which mostly consists of three publications. Notably, the highest link strength between Shonk's work "Service quality, satisfaction, and intent to return in event sport tourism" and Gallarza's article "Value dimensions, perceived value, satisfaction and loyalty: an investigation of university students' travel behaviour" topped among all clusters with 49. Subsequently, the link between Shonk's paper and Chen's paper ranked second in link strength (19), whereas the lowest link strength existed between Chen's article and Gallarza's article in the green cluster (Link Strength: 15). Scrutinizing these three publications in the green cluster, they similarly address visitors' perceptions of

sports events from tourists' perspectives, all of which established the pillars and cornerstones for studying small-scale sports events from a tourism scope.

Moreover, the red cluster are composed of five publications. Compared with the green cluster, the link strength between pairwise works in the red cluster was poorer than that in the green one. Specifically, one of the strongest links presented between "Commentary-sport as an avenue of tourism development: an analysis of the positive and negative impacts of sport tourism" and "The economic impact of local sport events: significant, limited or otherwise? A case study of four swimming events" which is only 8. According to the specific text of the two works, the study topic has both horizontal and vertical extension, and the underlying cognition of small-scale sports events has been consistently evolving chronologically. In conjunction with the other three studies in the red cluster, they clearly profiled what small-scale sports events are and explained how to distinguish them from other types of sports events by their characteristics, providing the cognitive framework and theoretical foundation for studying the topic of small-scale sports events.

5. Conclusion

Sports events rooted in their excellent multiplier effect, agglomeration effect, high participation, and many other advantages have been listed as the first choice to host festivals and events around the world, enabling the development of regional economies and enhancing the popularity of the host place. Especially, the surge of small-scale sports events has shown a substantial growth trend featuring low investment, high utilization of facilities, improving the quality of life of the residents, and high sustainability, rather than many other types of sports events. The more relevant research on this topic results from the exponential increase of small-scale sports events in practice. Therefore, it is necessary and crucial to conduct a systematic analysis of the existing literature on this topic to answer a series of questions related to the operation and theory, such as "Is the small-scale sports events suitably held in a specific place?", "Can the corresponding small-scale sports events be sustainable?", "How can the specific small-scale sports events be more sustainable?", "Who are the main stakeholders for a small-scale sports event?", "What are the outcomes for the host to hold small-scale sports events?", "How can the small-scale sports events be supported by local residents?", and "What industries in the host can small-scale sports events empower?". Therefore, scrutinizing the literature on small-scale sports events through bibliographic analysis is both beneficial to scholars for clarifying the skeleton and gaps of studying on this topic and conducive to laying an essentially solid foundation for running the events in practice.

In the current study, a merged dataset composed of a total volume of 39 articles was obtained by means of CiteSpace to clean data from Scopus and WOS containing "small scale sport* event*" in the titles. Later, the merged dataset utilized for bibliometric analysis was analyzed and visualized by VOSviewer. There are several findings based on bibliometric analysis on the topic of small-scale sports events.

Firstly, in terms of the number of relevant papers, there were only 39 papers focusing on small-scale sports events in the titles included in Scopus and Web of Science. Obviously, the volume of studies on small-scale sports events presented a mildly upward trend during the whole period (from 2003 to 2023), despite the comparatively small number of articles centered on this topic. However, it is safe to say that small-scale sports events are bound to become a hot topic in the near future, with the super buoyancy of the type of sports events in practice.

Moreover, regarding keywords of small-scale sports events, "tourism", "sports tourism", "image", and "satisfaction" are the words with the highest occurrences in addition to "small-scale sports events". From the perspective of the evolution process of keywords, it

shows that the research content changes from the economic impact of small-scale sports events to its social impact, while the research object transforms from tourists to residents.

Additionally, in terms of the extant literature focusing on small-scale sports events, there is literature with high academic influence in related fields, in spite of the small total amount of papers, which has laid the solid research foundation for related research. Finally, as far as the important references of small-scale sports events are concerned, there is a relatively solid theoretical foundation and mature research system for the research, especially for the basic research on small-scale sports events that is widely studied from the perspective of tourism by reflecting the co-citation clustering and their text.

In conclusion, while the research on small-scale sports events is still in the initial stage with low activity and maturity, it does not mean that this topic is worthless or a low-value research topic. As a matter of fact, the topic is an inevitable and worthwhile subtopic for studying sports events because of their unparalleled merits and the surge of the events running in practice.

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