



The Evolution and Trends in Sport Tourism Research: A Bibliometric and Citation Analysis

Erfan Moradi  

Assistant Professor; Department of Sport Tourism and Health, Faculty of Tourism, University of Tehran, Iran
Email: erfan.moradi68@ut.ac.ir

ARTICLE INFO

Article type:

Original article

Article history:

Received: 21 August 2024

Received in revised form: 07
December 2024

Accepted: 19 November 2024

Publish online: 20 August
2025

Keywords:

Bibliometric analysis
Journal of Sport & Tourism
Negative binomial regression
Sport tourism

ABSTRACT

The research utilizes bibliometric analysis and negative binomial regression to conduct a retrospective evaluation of the Journal of Sport & Tourism (JS&T), widely recognized as the oldest and most prominent publication in the industry. The objective is to gain a comprehensive understanding of the development and patterns seen in sports tourism area. We analyzed 243 articles published in Journal of Sport & Tourism from 2006 to 2022 (Volume 26, Issue 2). The first bibliometric analysis of Journal of Sport & Tourism reveals that the journal has significantly contributed to the sport tourism area for academics and professionals. For example, the percentage of female co-authors is, on average, 35.8%. However, a significant portion (42.38%) of all publications have been authored solely by men, with no female co-authors. These findings suggest an opportunity to enhance gender diversity in the journal's publications and research. In addition, the negative binomial regression results show that the article age variable positively correlates with citation, while the demeaned age squared variable displays a negative association. Also, we found a significant association between gender and citations per year but no significant relationship between gender and total citations. The detailed interpretation of these findings contributes to a deeper understanding of the intricate dynamics surrounding gender-related factors in scholarly impact, emphasising the importance of considering annualised and cumulative citation metrics for a comprehensive evaluation. As a results, the study provides a lens for academics and practitioners to follow to understand the evolution of sport tourism.

Introduction

One of the most important and foundational aspects of how people spend their leisure time is the combination of the sport and tourism industries (Norouzi Seyed Hossini et al., 2022). Despite their conceptual differences, Elahi et al. (2020) have established a connection between them. Standeven (1998) emphasises the interconnectedness of sport and tourism, resulting in the emergence of sport tourism (hereafter, ST). In a study conducted by Moradi et al. (2023a), they found that ST plays a vital role in driving the growth of the tourism industry and serves as a critical economic niche for management and promotion. Thus, it can be deduced that ST is not just a social phenomenon but a substantial economic and cultural force on a global level (Higham, 2005). Similarly, ST holds

How to Cite: Moradi, E. (2026). The Evolution and Trends in Sport Tourism Research: A Bibliometric and Citation Analysis. *Journal of New Studies in Sport Management*, 7(1), 19-42. DOI: 10.22103/jnssm.2024.23918.1328



significant economic, cultural, and social value, as per the definition provided by Weed (2009), wherein it refers to the amalgamation of an activity and a group of individuals to produce a distinctive and unified experience of a particular place. The assertion in question finds support in the work of Moradi et al. (2022), who acknowledge that ST is one of the fastest-growing markets in the tourism industry and thus has the potential to engender beneficial economic-social effects for a destination.

Over the past twenty years, ST has garnered significant discourse within academic circles. The domain of sport and tourism has witnessed a surge in the involvement of destination management organisations since the turn of the millennium. This trend has paved the way for various prospects for collaboration and innovation (Higham, 2020). Apart from its theoretical contributions, Weed (2005) regards research on ST as a promising avenue because of its potential to catalyse crucial societal transformations. Likewise, Smith and Weed (2007) acknowledge that this is crucial to determining the best course of action when developing strategies and policies and determining the scope of necessary practises. Thus, a unique aspect of ST lies in its contemporary acknowledgement by academicians and practitioners. Because of this, the upsurge in the literature about the intersection of sport and tourism has been noted in recent decades.

Despite the efforts of researchers, the literature on ST research remains fragmented. The growing body of literature in this research field has challenged scholars aiming to gain a comprehensive understanding of and perspective on the subject and its findings. According to Guzeller and Celiker (2019), analysing publication data can provide valuable insights into current research trends and publication patterns in a specific field. Several methods have been devised to assess scholarly literature in a particular journal or study area using retrospective analyses. A technique commonly used in this field is bibliometric analysis. Bibliometric analysis has gained recognition as a reliable method for identifying central themes (Leung et al., 2017) and evaluating the current status, trends, and potential future directions within a specific field or journal (Liu et al., 2020).

Considering this, the present study uses the bibliometric analysis method to examine the evolution of ST, utilising the oldest specialist journal in the area, the *Journal of Sport & Tourism* (JS&T), as the unit of analysis. According to Van Rheenen et al. (2017), it is the impression that the journal's history is an accurate illustration of how an academic field emerges and matures over time. Hence, the journal's retrospective analyses are a significant element of scientific publications and can contribute to the body of knowledge (Singh et al., 2022b). This claim is supported by Dant and Lapuka (2008), who emphasise that academic publications must do a meta-analysis of their existing intellectual capital, expand their legacy, and develop a strategy for the journal's future.

Therefore, this study aims to discover the contributions made by the journal to the ST field based on the publication data. It will facilitate a more comprehensive comprehension of the scientific patterns and advancements delineated in the journal. This work will address the following research questions (RQs) using a bibliometric technique and negative binomial regression analysis, as is conventional for retrospective reviews:

- RQ1. What is the publication and citation structure of *Journal of Sport & Tourism*?
- RQ2. What are the most influential publications of *Journal of Sport & Tourism*?
- RQ3. Which journals are often cited by *Journal of Sport & Tourism*?
- RQ4. What is the status of collaboration (authors and institutions) for *Journal of Sport & Tourism*?
- RQ5. How is the co-citation network of cited references in *Journal of Sport & Tourism*?
- RQ6. Which are the most prominent themes published in *Journal of Sport & Tourism*?
- RQ7. How has the evolution of research topics happened for *Journal of Sport & Tourism*?
- RQ8. What factors are contributing to *Journal of Sport & Tourism's* growing impact in terms of citations?

This study's results will help authors, readers, and editorial board members better understand how to contribute to JS&T. The present study serves as a foundation for assessing the knowledge domain of the journal through an examination of the interrelationships between JS&T and other relevant journals, as well as a comprehension of its knowledge domain. Aside from that, its value for editors is that it helps them develop policies for focusing on publications that have significantly

impacted the journal's growth prospects. It also aids in formulating future guidelines regarding the publications they should prioritise.

The following sections of the article are organised in a structured manner. In the following section, we present a concise summary of the historical development of the JS&T. The subsequent section will provide a literature review. Then, we will discuss the method used to conduct the study. Next, the findings are presented and thoroughly discussed. The final section covers the implications, limitations, future research directions, and conclusions of the paper.

The Journal of Sport & Tourism

The subject area of Tourism, Leisure and Hospitality Management is home to 149 journals indexed in Scopus (Scopus, 2021). However, few journals have focused on ST and its problems and issues. Because of this, Joseph Kurtzman started the Journal of Sport and Tourism (JST) in 1993. At the time, there was a need for a sport tourism-specific journal, and Kurtzman wanted to meet the needs and wants of different academics and practitioners. The Sport Tourism International Council (STIC) owned and operated the journal. Having emerged in the ST community in the early 1990s, JST has gained a unique position. From the beginning, the JST's vision was to serve the commercial, professional, and academic communities (as one might expect from an association like STIC) (Weed, 2006a). In this vein, Weed (2006a) argued that even though this dual role is commendable, it has proved difficult to fulfil, leading to situations where the journal's content has disappointed the academic community sometimes.

In light of this, the journal underwent significant changes beginning in 2006. For instance, journal ownership was transferred to Taylor & Francis, releasing it from its responsibilities towards its commercial and professional readership (Weed, 2006a). There were also changes in the journal's editor and its editorial board. Professor Mike Weed, Senior Pro Vice-Chancellor (Research, Enterprise, Business Development) at Canterbury Christ Church University, UK, and Professor of Applied Policy Sciences, is the current editor of J&ST. The journal has also been renamed from Journal of Sport Tourism (JST) to Journal of Sport & Tourism as further evidence of this change. In Weed's (2006a) view, the name changes to JS&T showed that the journal had expanded in scope and would have a broader remit. Instead of focusing solely on sports-related travel, the title of JS&T depicts a greater interest in the connection (alliance) between sport and tourism. Sport-tourism alliances or sport's role in developing tourism through policy partnerships between tourism agencies are such aspects of these actions. As part of the development of JS&T, one of the primary objectives was to reposition the journal for an academic audience and to publish papers suited for an international peer-reviewed journal. Associate Editors and an international Editorial Review Board of renowned researchers from the USA, the UK, New Zealand, Canada, Germany, and Australia were involved in this endeavour. On the other hand, as stated in a part of JS&T's mission, this journal wants to publish research that adds to the body of knowledge about the relationship between sport and tourism in a fundamental, theoretical, or methodological way. For this purpose, from 2008 onwards, there have been 11 special issues of the journal, each covering a different topic related to the journal's scope. These topics include "Sport Fans and Spectators as Sport Tourists," "Sustainability in Sport & Tourism," "Cultural Foundations of Sport and Tourism," "Sport, Tourism and National Identities," "Sport, Tourism and the Olympic Games," "Experiencing sport tourism," "Sport Tourism Destinations," "Theory in Sports Tourism," "Active Sport Tourism," "Sport & Tourism Events," and "Systematic Reviews in Sports Tourism."

Review of related literature

Although the connection between sport and tourism has a long history, the development of ST as a distinct research field only acquired momentum in the 1990s (Oliveira et al., 2021). During that period, research on ST has expanded in various directions. It includes the development of a typology that categorises different types of behaviour related to ST (Gibson, 1998). The typology not only defines the concept of ST but also outlines its boundaries and offers a framework for future research (Hinch & Higham, 2001; Gammon & Robinson, 2003). However, Hinch and Higham (2001) state that until this period, ST was primarily developed in other domains, with sport being considered more of a contextual element in tourism research rather than a central focus. The

editorial by Weed (2005) in the European Sport Management Quarterly presented noteworthy milestones in the field. In Weed's editorial, he emphasises a noticeable absence of explicit consideration of epistemology in sports tourism, a deficiency also found in much of the research in the broader sport and tourism fields. Over time, progress in this discipline was established by endeavours to meticulously examine the theory in ST (Gammon et al., 2017; Gibson, 2017) and define its epistemological boundaries (Van Rheenen et al., 2017).

The classification and summarisation of ST research literature and the introduction of new ideas and perspectives hold immense importance in the current landscape of ST research. It is particularly relevant because of the abundance of research findings in this field. The researchers employed techniques and approaches, such as systematic review, meta-review, and bibliometric analysis, to summarise the research literature in ST. For example, when assessing the advancements in ST research, Weed (2009) emphasised the level of development in the research field, which is clear through various perspectives and external scrutiny. This comprehensive analysis explores the paths that previous researchers in ST have traversed. The complex and multifaceted nature of core concepts, dominant research areas, and the underlying topics and disciplines were thoroughly examined and analysed. Hinch et al. (2014) examine scholarly progress and offer observations and commentary on the present state of research in ST. This research comprehensively analyses articles published in the *Journal of Sport & Tourism* and other related journals over five years (2007-2011). Similarly, Yamashita (2022) conducted a study to examine and explain the scope of peer-reviewed research on information search behaviour in ST literature. The findings revealed that the initial discussion was published in 1992, with most articles centring on active sport tourism. While offline information sources were predominant, the utilisation of social media has experienced a significant surge in recent times. In addition, this study discovered that sport tourists gather information to reduce potential risks, which can differ based on the specific athletic activities they participate in while visiting.

Furthermore, researchers have explored different aspects and fields related to ST. They have utilised bibliometric analysis and systematic literature review techniques to investigate current trends, key themes, collaboration networks, and citation analysis. Some areas that stand out are football (Oliveira et al., 2021), sustainability (Jiménez-García et al., 2020), authenticity (Takata & Hallmann, 2021), and collaboration (Mollah et al., 2021). A study conducted by Oliveira et al. (2021) found that football tourism strongly focuses on researching mega-events, specifically the FIFA Men's World Cup. However, significant advancements, such as the rise of football club tourism, which includes stadium tours, museums, memorials, live matches, and pre-season football camps, were acknowledged. Likewise, Jiménez-García et al. (2020) utilised bibliometric techniques to analyse research trends related to ST and sustainability. There has been a significant rise in interest in studying these concepts, especially in the last four years. The field of research is relatively new, beginning in 2002. Consequently, there remains a lack of established connections between various study areas, with only a few authors and journals dedicated to this topic.

Similarly, comprehensive research has been conducted in other fields. The study by Ciomaga (2013) primarily aimed to use bibliometric analysis methods, especially citation and co-citation analyses, in articles published in three sport management journals between 1987 and 2010. The results provide excellent insights into many significant themes observed throughout the time. These trends emphasised the need to implement changes inside an organisation, comprehend the factors that drive customer behaviour in sport marketing, and promote inclusivity and variety in the work environment. In addition, Moradi (2023) performed a bibliometric study on the papers published in the *SMQ* journal between 2012 and 2022. He aimed to provide empirical evidence that might enhance the existing discourse on the corpus of knowledge in the field of sport marketing.

Methodology

Data collection

Scopus was employed to obtain the data because it is a leading database for citations and abstracts within the peer-reviewed literature and one of the most used databases in the world. It is a citation

database for peer-reviewed publications and high-quality information online (Ballew, 2009). Moreover, its repository of documents contains a far more extensive collection of documents (Romero-García et al., 2019). Following the standard procedure of Kumar et al. (2020) and Sharma et al. (2021), this study searched for "Journal of Sport & Tourism" under the title in Scopus; it generated 489 publications. Our research only considered papers published between 2006 and 2022 (Volume 26, Issue 2). Documents published between 1993 and 2005 were left out. The main reason is that the journal's scope and approach shifted significantly after 2006. It reduced the number of records to 279. The next step was to remove the editorials (33), erratum (1), and note (2) from the list of documents. Finally, this refined search returned 243 articles. As a next step, the data was exported in CSV format and analysed further. Table 1 presents the inclusion and exclusion criteria.

Table 1. The inclusion and exclusion criteria

Criteria	Inclusion	Exclusion
Time Period	Publications from 2006 to 2022	Publications from 1993 to 2005
Journal Title	"Journal of Sport & Tourism"	Any other journal
Document Type	Research articles and Review	Editorials, erratum, notes
Database	Scopus	Any other database
Relevance	Focus on sport and tourism research	Documents outside the journal's revised scope post-2006

Data analysis

This study also used Bibliometrix, a tool created with the R programming language. The bibliometrix R-package offers a comprehensive suite of quantitative research tools for conducting bibliometric and scientometric analyses. The code is scripted in the R programming language, a publicly accessible environment and ecosystem. Because of its powerful statistical algorithms, accessibility to better numerical routines, and inclusion of integrated data visualisation tools, R outperforms other programming languages for scientific computing. In addition, the Bibliometrix software package offers a range of analytical tools and data matrix construction capabilities for conducting co-citation, coupling, scientific collaboration, and co-word analyses (Aria & Cuccurullo, 2017; Derviş, 2019).

Bibliometric analysis and Social Network Analysis

Both bibliometric analysis and social network analysis (SNA) have become valuable tools for studying the structure and dynamics of scholarly communication. Bibliometric analysis has its origins in Eugene Garfield's research. Its goal is to measure the influence of scientific literature by examining citation patterns, publication counts, and co-authorship networks. In addition, Bibliometrics has facilitated the identification of key contributors, development patterns, and impactful publications within a certain discipline (Donthu et al., 2021c).

On the other hand, SNA, which draws from sociology and graph theory, centres on examining the relationships among persons inside a network (Zhang, 2010). Nodes represent individuals or entities, while edges show relationships. SNA reveals collaboration patterns, information flow, and centrality within a network, providing a comprehensive understanding of social structures (Tabassum et al., 2018). In other words, SNA emphasises the connections and exchanges between individuals within a network. These individuals or entities can embody authors, institutions, or even specific publications in scholarly communication. Researchers can use SNA to visually analyse collaboration structures, identify important actors, and evaluate the strength of relationships within a scholarly community (Cross et al., 2002).

Integrating bibliometric and social network analysis offers a comprehensive grasp of scholarly communication. Network structures can enhance bibliometric indicators by providing insights into the nature and strength of relationships among authors and institutions beyond measuring collaboration volume. On the other hand, SNA can gain valuable insights from bibliometric data.

By analysing citation patterns and impact measures, researchers can evaluate the importance of different nodes within the network (Shen et al., 2019).

Based on the four categories of analysis (descriptive, conceptual, intellectual, and social), Sharma et al. (2021) established a standard technique for analysing the key results. That procedure is used in this study. An in-depth look at the publishing structures, citations of papers and the most influential articles may be gleaned through a descriptive analysis of JS&T. Conceptual structure analysis is used to identify the most important topics and future research directions in JS&T. It is a technique for visually depicting concepts according to the connections between the keywords (Sharma et al., 2021). Exploring citations and co-citations provides insight into the intellectual analysis supporting a particular study area (Maggon, 2022). Intellectual analysis in bibliometrics involves the examination of the content, themes, and impact of scholarly publications. This includes understanding the intellectual contributions, scientific themes, and knowledge diffusion within a specific field (Aria & Cuccurullo, 2020). Analysing citation patterns in academic papers may illuminate previously unknown connections and avenues of inquiry (Farooq, 2021). Assessing the significance of publications by counting how often they are referenced is a reasonable method. This feature also makes it possible to investigate the connection between the works that have been referenced (Hota et al., 2020). Like citation analysis, co-citation analysis examines the relationships between cited works to better understand the intellectual architecture underlying a particular field of study. The basic idea behind co-citation analysis is that works often referenced in the same bibliometrics are likely to have some commonalities (Benckendorff & Zehrer, 2013). In addition, collaboration networks can depict the relationships between authors, institutions, or countries within a particular research topic (e.g., universities, departments, or research centres). Indeed, Social analysis involves the examination of collaboration patterns, co-authorship networks, and the social structures within the scientific community. It seeks to understand the social dynamics, relationships, and collaborative behaviours among researchers (Aria & Cuccurullo, 2020).

The research design, as depicted in Figure 1, involves the following steps: (1) identifying articles published in JS&T between 2006 and 2022 (Volume 26, Issue 2) and indexed in Scopus; (2) inclusion and exclusion criteria; (3) conducting a descriptive analysis; (4) conducting an intellectual structure analysis; (5) conducting a social structure analysis; (6) conducting an analysis of citations; and (7) Interpretation of results.

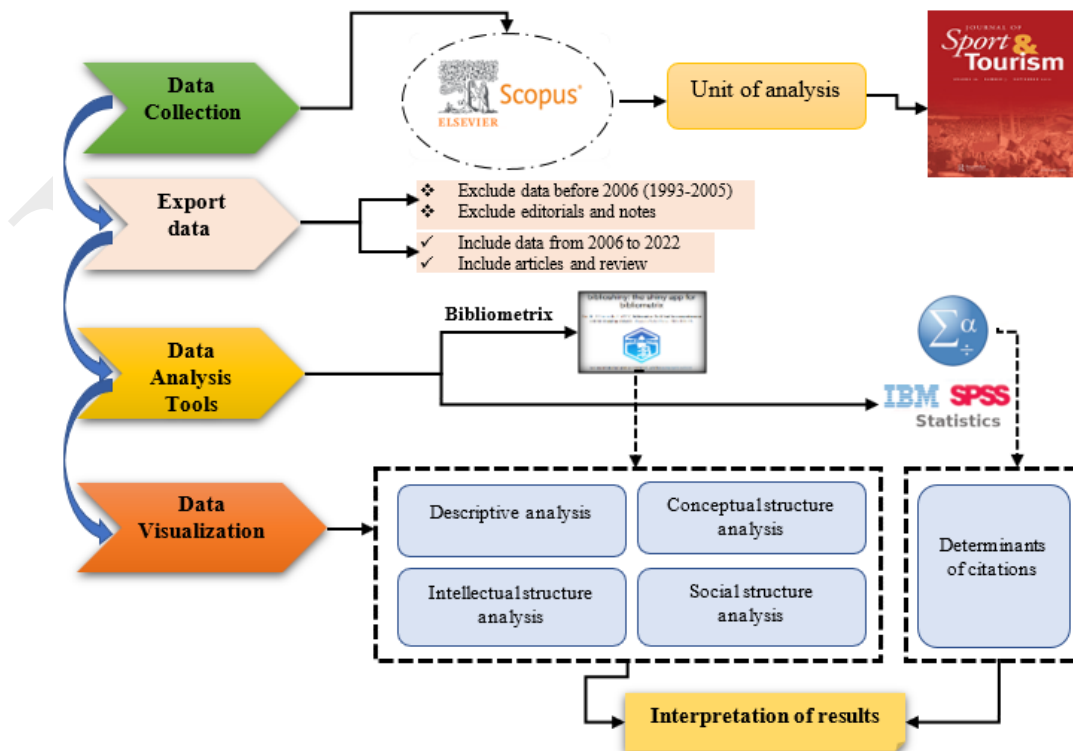


Figure 1. The research design of the study

Results

Publication and citation structure of JS&T

To address RQ1, an examination of JS&T's publication and citation patterns from 2006 to 2022 was required. Figure 2 displays the publication patterns and citation structure of JS&T. Quantitative metrics, such as publication and citation counts, serve as crucial indicators for assessing a journal's present state and future direction from a macro perspective (Jing et al., 2021). The annual growth rate of articles published in the journal is impressive, at 3.04%. Its popularity has grown over time.

The most articles were published in 2022 (Issues 1-2), accounting for 8.64% of the total. The journal maintained a consistent and standardised system for publishing articles during the specified period. However, there have been ups and downs in certain instances. As an illustration, JS&T did not publish any articles in 2015, but in 2018, a total of 17 articles were published. In 2019, the journal's published articles decreased to 12. However, there has been a noticeable increase in the number of articles published in the journal over the past three years. It shows researchers' growing interest in sharing their research findings with JS&T. The significant increase in citations received annually is worth mentioning. Indeed, an important percentage of the 243 papers received many citations. More than half of them, specifically 52%, received over twenty citations, while an impressive 83% got at least five citations. These statistics show the widespread recognition and popularity of the papers published in JS&T. In addition, the JS&T has an average of 28.62 citations per published article. It highlights the significance of the journal in ensuring the publication of top-notch work and its contribution to the growth of ST literature. The average number of citations per article demonstrates the quality and relevance of the work published in JS&T, solidifying its position as a leading platform for disseminating scientific knowledge in ST. Other journals, like Sport Marketing Quarterly (5.44) (Moradi, 2023) and International Journal of Sport Policy and Politics (12.83) (Moradi et al., 2023b), also have comparable values. These comparable citation averages indicate that JS&T is on par with other reputable journals regarding the impact and influence of its published articles. The high citation rates for JS&T papers suggest that they contribute significantly to the ST field. Researchers recognise the valuable insights and findings presented in these papers, further solidifying the journal's reputation as a leading publication in the field. Overall, these statistics demonstrate the strong standing and broad reach of JS&T within the academic community.

Based on the decreasing yellow line (Figure 2), it is evident that the earlier years' papers received more citations than the articles published more recently. This can be attributed to the lack of time for newer articles to reach their full citation potential (Moradi, 2024). As time passes, the number of citations decreases. It is common for papers to have a shorter period between their initial and recent publications. As a result, the number of citations is expected to increase in the coming years.

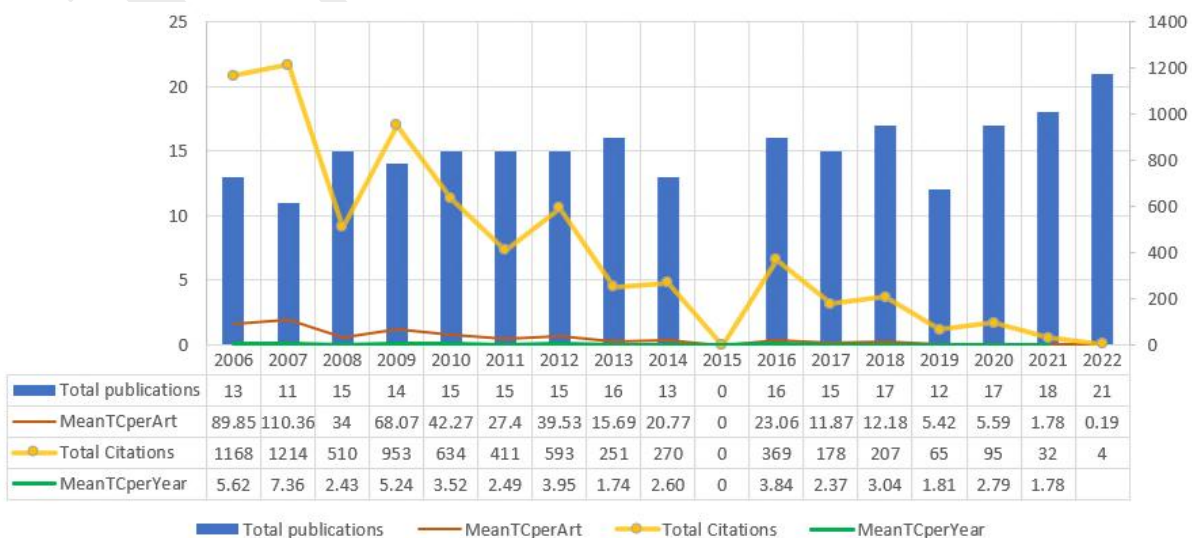


Figure 2. Publication and citation structure of JS&T between 2006 and 2022

The most cited JS&T articles

As Kumar et al. (2020) acknowledged, the number of citations a scientific paper receives indicates its quality, impact, value, and scientific performance. Based on data from Scopus, Table 2 lists the most cited JS&T articles (RQ2) cited at least 100 times in Scopus. These articles accounted for 24.76% of the citations. Notably, only three articles on this list are single-authored, while seven are multi-authored. This list comprises publications published between 2006 and 2010. Specifically, out of the 10, 6 articles were published in 2006–2007. Nine highly cited articles focused on sports events, while only one dealt with a different topic. This article by Weed (2006b) examined the research in the field of ST between 2000–2004 with a systematic review and meta-evaluation approach. The most-cited article on this list is "Towards Social Leverage of Sport Events" by Chalip (2006). It has 544 citations—32 per year—and discusses the importance of considering events' social value. The second most cited was Preuss's article from 2007 called "The Conceptualization and Measurement of Mega Sport Event Legacies" (Preuss, 2007). A key focus of this article is to describe how mega sporting events have left a lasting legacy. In this article, the authors define legacy and introduce a bottom-up approach for identifying event legacy through the evaluation of 'soft' and 'hard' changes in a city following an event. It is described as a set of "event structures," which include infrastructure, knowledge, image, emotions, networks, and culture. The third most influential article is 'The Interrelationship between Sport Event and Destination Image and Sport Tourists' Behaviours' by Kaplanidou and Vogt (2007). Based on an attitude-behaviour theoretical framework, this study examines images of sports events, destination images, satisfaction with the events, past experiences with the events and destinations, intentions to return to the destinations, and the subsequent behaviour of sports tourists. Also, in terms of local citations, Chalip's (2006) article got the most, followed by Kaplanidou and Vogt's (2007) and Weed's (2006b). Understanding local citations is essential when assessing the significance and reach of research within a particular community or domain. While global citations give a broader perspective on the impact of a publication across various fields and disciplines, local citations provide valuable insights into how a work is received and utilised within a more specialised context (Chung, 2007; Wilson & Tenopir, 2008).

Table 2. Most cited articles of JS&T

Author	Title	TC	TCpY	NTC	LC
Chalip (2006)	Towards social leverage of sport events	544	32	7.38	31
Preuss (2007)	The conceptualisation and measurement of mega sport event legacies	459	28.69	5.28	8
Kaplanidou & Vogt (2007)	The interrelationship between sport event and destination image and sport tourists' behaviours	265	16.56	3.05	25
Ritchie et al., (2009)	Resident perceptions of mega-sporting events: A non-host city perspective of the 2012 London Olympic Games	177	12.64	3.07	5
Kaplanidou & Gibson (2010)	Predicting behavioral intentions of active event sport tourists: The case of a small-scale recurring sports event	156	12.00	4.76	13
Qi et al., (2009)	Perceptions of risk and travel intentions: The case of China and the Beijing Olympic Games	143	10.21	2.48	10
Ohmann et al., (2006)	The perceived social impacts of the 2006 Football World Cup on Munich residents	140	8.24	1.92	7
Bull & Lovell (2007)	The impact of hosting major sporting events on local residents: An analysis of the views and perceptions of Canterbury residents in relation to the Tour de France 2007	128	8.00	1.47	5
Weed (2006b)	Sports tourism research 2000–2004: A systematic review of knowledge and a meta-evaluation of methods	124	7.29	1.70	22
Richard & Jones (2008)	The Great Suburban Everest: An 'Insiders' Perspective on Experiences at the 2007 Flora London Marathon	114	7.60	3.87	13

Notes: **TC** = Total Citations; **TCpY** = Total citations per Year; **NTC** = Normalized TC; **LC** = Local Citations

Most cited sources by JS&T

We examined the most cited papers in JS&T to identify sources of influence for JS&T articles (RQ3). Journals, the most cited by JS&T publications, are included in Table 3, along with their position on the Australian Business Deans Council's (ABDC) rating. Often-cited journals have the most A or A* ratings. The Journal of Sport & Tourism is the top-cited journal by JS&T publications, followed by the Tourism Management and Annals of Tourism Research, with 719 and 663, respectively. Given JS&T's dominance in ST, this latter finding is not surprising. The findings suggest that JS&T's reputation and impact are well-established within the sport and tourism research community.

Table 3. List of most cited journals in JS&T

Source	ABCD	Citations
Journal of Sport & Tourism	B	732
Tourism Management	A*	719
Annals of Tourism Research	A*	663
Journal of Travel Research	A*	478
Journal of Sport Management	A	305
Sport Management Review	A	229
Journal of Leisure Research	A	205
European Sport Management Quarterly	A	194
Leisure Studies	A	170
Leisure Sciences	A	161

Note: **ABCD** = The Australian Business Deans Council

The state of collaboration for the JS&T

Techniques for creating scientific maps, such as collaboration analysis (RQ4), are effective ways to trace the connections between researchers who have made important contributions. Donthu et al. (2021b) assert that collaboration networks represent a leading approach to documenting scientific collaborations. Figure 3 illustrates the university collaboration network of the top 27 universities worldwide.

The University of Florida and Griffith University are the most prominent nodes within this network, suggesting they hold a central position in collaborative work. The magnitude of these nodes corresponds to the volume of collaborations or the importance of these institutions within the academic network. The University of Florida appears to have the largest set of links and, therefore, becomes a key player in international relationships, especially with institutions like Griffith University and the University of Queensland. Griffith University also shows significant linkages with major Australian institutions, like the University of Queensland, Southern Cross University, and the University of South Australia, which complements the fact that there is a sound structure of partnerships within the Australian higher education sector. A clear, separate structural relationship exists between Clemson University, Loughborough University, Auckland University of Technology, and the University of Central Lancashire, which may indicate consortia or partnerships targeting specific research areas.

On the other hand, the University of Florida has an intercontinental network wherein it collaborates not only with universities in Australia but also with universities in Asia, as in the case of Kyung Hee University in Korea. Waseda University and German Sport University Cologne form a more regional cluster that could imply cross-continental cooperation between Japan and Germany. Further, the University of South Carolina, Kent State University, and the University of Illinois are part of the network. Still, their centrality is relatively small compared to a central hub like the University of Florida. These smaller nodes indicate that, while they collaborate, their breadth or number of collaborations is somewhat more limited.

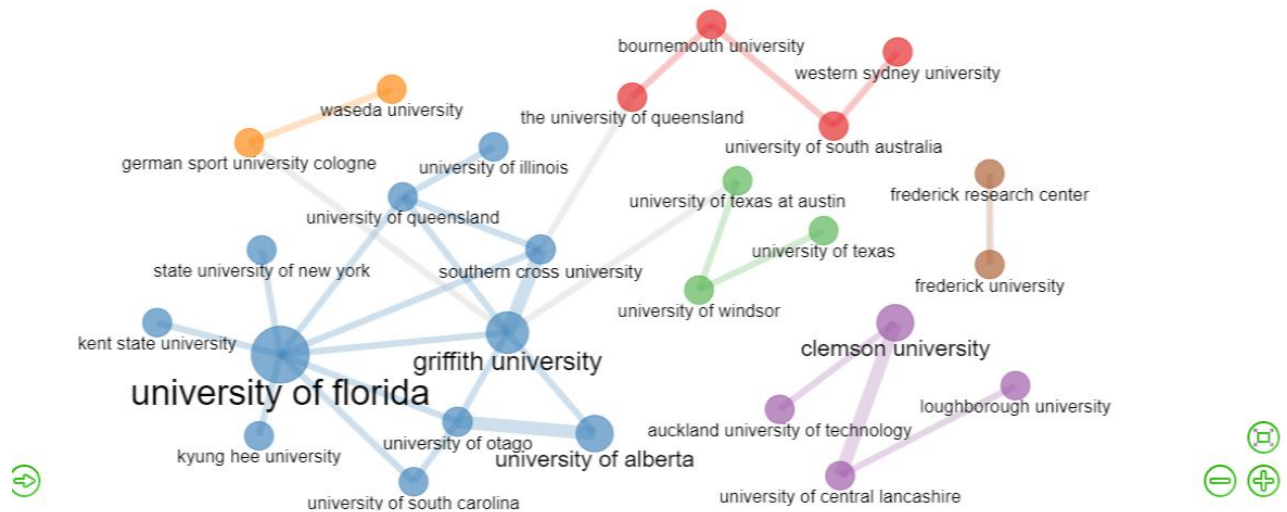


Figure 3. Collaboration networks (institutions) of JS&T

Table 4 shows a continuous increase in the share of articles with three or more authors (RQ4). From 2006 to 2022, approximately 26% of the articles published were written by a single author. Meanwhile, a considerable portion of articles have been published collaboratively. There seems to be a growing trend of collaboration among the authors who contribute to JS&T. It is evident that the proportion of co-authored articles in JS&T has been on the rise, suggesting that collaborative efforts have gained popularity over time. Furthermore, the findings show that publications typically have an average of 2.32 (SD = 1.16) co-authors. In addition, most publications in the journal typically result from collaboration between two co-authors, accounting for 34.98% of the total. These findings indicate that collaboration is a common practice among authors in JS&T. The average number of co-authors suggests that researchers often work together to produce articles for the journal. The fact that most publications result from collaboration between two co-authors suggests that pairs of researchers are forming partnerships to conduct and present their research.

This collaborative approach may be beneficial in sharing knowledge, resources, and expertise, ultimately leading to higher-quality articles in JS&T. Meanwhile, publications in the *European Journal for Sport and Society* (EJSS) primarily comprised a single author (43.6%) (Wicker et al., 2022). This data highlights a stark contrast between JS&T and EJSS regarding authorship patterns. While JS&T demonstrates a growing trend towards collaborative efforts, EJSS predominantly features single-authored publications. This suggests that the research community within the field of sport and society has divergent preferences and practices when it comes to collaborative research. Understanding these differences can provide valuable insights into the scholarly landscape and the dynamics of knowledge production within these two journals. Further research could explore the factors contributing to these varying authorship patterns and their implications for the field.

On the other hand, the average share of female co-authors is 35.8%. A more detailed examination shows that nearly half (42.38%) of all publications have been written without female co-authors, whereas 16.87% have only female co-authors. The share of male co-authors suggests the lack of female contributors to an article, while conversely, the share of female co-authors means the absence of male co-authors contributing to the article. In addition, only 18.93% of publications have gender-equal authorship. Indeed, gender-equal co-authorship signifies that both male and female authors are equally represented in an article, indicating an equal contribution from both genders in co-authorships. Also, multi-authorship in an article is characterised by an uneven distribution of male and female authors, as evidenced by the varying numbers of co-authorships and the differing proportions of contributing authors from each gender. These findings suggest an opportunity to enhance gender diversity in the journal's publications and research. However, it should be acknowledged that compared to journals such as EJSS, performing JS&T has been relatively more appropriate regarding gender diversity. For example, in EJSS, the average share of female co-authors was 27.7% (Wicker et al., 2022). In addition, the share of gender-equal authorship in JS&T was 7% more than in EJSS. However, these results still partially reflect the gender publication gap in the journals (JS&T and EJSS). These results highlight the need for further efforts to promote gender diversity in both JS&T and EJSS. While JS&T has shown some progress in achieving gender equality in authorship, there is still room for improvement. The journals should implement policies and initiatives that encourage and support the

inclusion of more female authors in their publications. By addressing the gender publication gap, these journals can ensure a more balanced and representative representation of research from all genders.

Table 4. The state of collaboration for author per article per period

No of authors	2006-2009	2010-2013	2014-2018	2019-2022	Percentage
1	19	16	13	16	26.34
2	19	26	23	17	34.98
3	11	13	17	19	24.69
4	2	6	7	10	10.29
5+	2	0	1	6	3.70
Share of co-authors			Frequency	Percentage	
Share of men co-authors* (in %)			103	42.4	
Share of women co-authors** (in %)			41	16.9	
Share of gender-equal co-author*** (in %)			46	18.9	
Share of multiple-author****			53	21.8	
N			243	100%	

Note: *The share of male co-authors implies the absence of female contributors to an article

**The share of female co-authors indicates that no male co-authors contribute to the article.

*** Gender-equal co-authorship signifies that both male and female authors are equally represented in an article, indicating an equal contribution from both genders in co-authorships.

****Multi-authorship refers to an article's unequal distribution of male and female authors. This disparity is evident in the varying number of co-authorships and the differing proportions of male and female contributing authors.

Co-citation network of cited references in JS&T

In the scientific community, researchers utilise co-citation analysis to plot the development of a field's intellectual structure (the co-citation network of cited references) and pinpoint active research niches (Fangfang & Guijie, 2020). In this regard, Aria and Cuccurullo (2020) suggested that citation analysis is a classical technique to show intellectual linkages. The intellectual structure explains how an author's work influences a scientific community. Observing how an idea is constructed and tracing its origins can be done with this technique. According to Danvila-del-Valle et al. (2019) and Leung et al. (2017), using a cut-off point may help researchers locate the central idea of a complex thought structure and choose relevant references. As a result, this analysis included only sources with at least seven citations. Using these criteria, we had 50 sources in our co-citation research. Figure 4 shows an overview of the co-citation network (RQ5). This graph dissects two things: the size of the nodes, which shows how many times the article has been cited, and the thickness of the lines, which shows how strong the co-citation is between the nodes. Consequently, three clusters emerged in the co-citation network.

The red articles in the first cluster (Hinch & Higham, 2001; Gammon & Robinson, 2003) focus on developing a conceptual framework for ST. It constituted 26 articles. Hinch and Higham (2001), who looked at sports in terms of the spatial and temporal dimensions of tourism, are one example of people who have given attention to the new body of literature. They also defined ST in terms of these dimensions and looked at sporting activity from a sociological point of view. Then, using Leiper's system model of attractions, they looked at what makes sport a unique tourist attraction. Gammon and Robinson (2003) also developed a new model for putting consumer interests in sport and tourism into groups. This shows how broad and deep the topic is. In their article, they offer a theoretical framework which illustrates the variety of customer motivations and how they could be related to defined categories such as sports and tourism. Gibson (1998) and Weed (2005) have also been pivotal to the ST literature in this cluster. While presenting a novel definition of ST, Gibson (1998) divided tourists' behaviour into three groups (active, passive, and nostalgia). She also acknowledged that policy, research, and education did not work well in this field. Aside from that, Weed's study (theory and method) in 2005 looked at concepts, issues, and epistemology related to ST to understand this field (Weed, 2005).

There are 14 references in Cluster 2 (green), including articles on small-scale event sport tourism (Gibson et al., 2003; Kaplanidou & Gibson, 2010; Gibson et al., 2012), and event tourism (Getz, 2008; Getz & McConnell, 2011). Getz's article (2008) is a key part of this cluster through chronological and thematic

literature reviews because it shows where event tourism research came from and how it has changed over time. This article also has a conceptual model that shows the main things that have happened and the main ideas that have come from the study of event tourism. The author hopes this model will help advance theory and find research gaps. Aside from these works, Gibson et al. (2003; 2012) also played an important role by contributing necessary research.

There are ten references in Cluster 3 (blue), the tiniest cluster. These references paid particular attention to the sports event, destination image, and branding (Chalip et al., 2003; Chalip & McGuirly, 2004; Chalip & Costa, 2005). Gholipour and Moradi (2020) acknowledge the importance of considering sports events and their impact on organisations, host countries, and destinations.

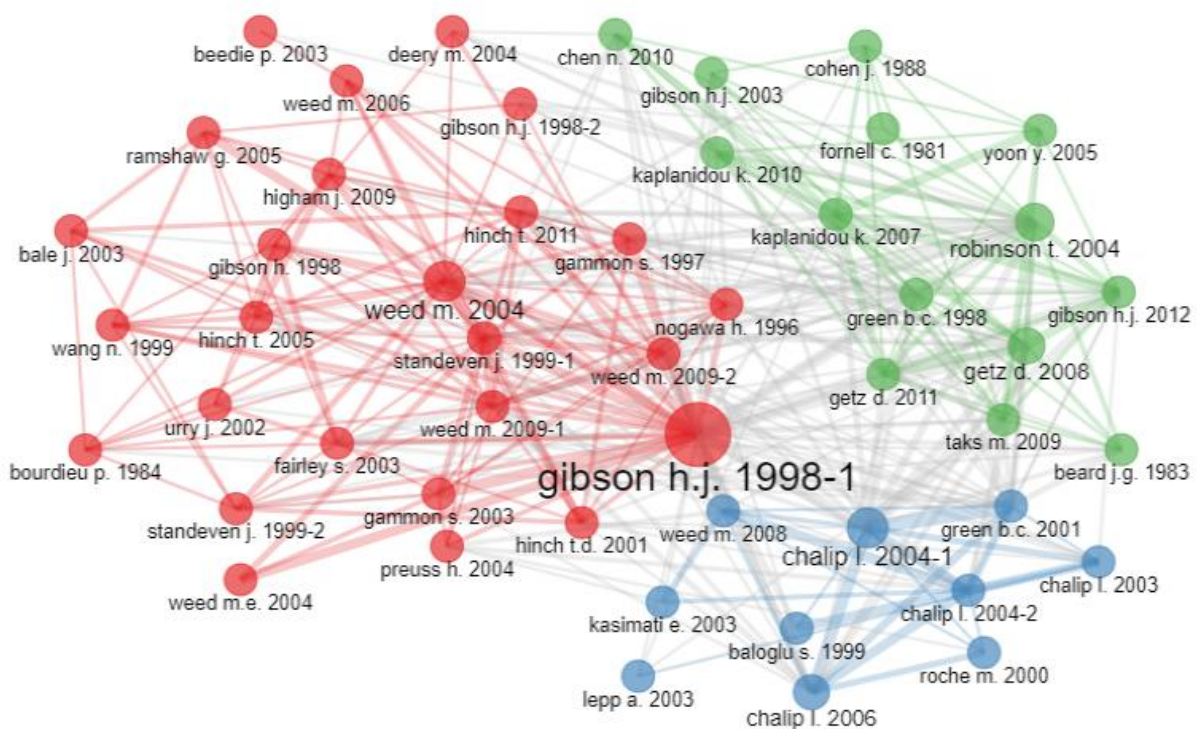


Figure 4. Co-citation network of cited references

Strategic map of ST research themes in JS&T

Figure 5 displays the thematic mapping approach to depict the journal's prominent themes (RQ6). A strategic map is a two-dimensional diagram that plots theme clusters along X and Y axes based on their calculated density and centrality (Gao et al., 2021). The x-axis represents centrality or the external cohesion index, namely the central position of the theme within the overall network. The y-axis represents density or the internal cohesion index, namely the conceptual development of the theme (Shi et al., 2019). Centrality measures the extent of interaction between clusters (or themes, topics)—the intensity of their external links. This metric demonstrates the significance of a theme in developing the research field. In addition, density serves as a metric that measures the level of cohesion within a cluster, specifically, the level of interconnectedness among the keywords related to a specific research topic. This metric can measure the degree to which the investigation's subject has progressed (Nova-Reyes., 2020). As Wäsche et al. (2017) emphasise, density is an important factor when evaluating the cohesion of a network concept. Thus, the x-axis and y-axis produce four quadrants.

Motor themes: The themes in the quadrants are well-developed and form the basis of the journal's research. Centrality and density are high among these themes. This quadrant includes the following aspects: destination image, place attachment, satisfaction, Olympic Games, and mountain biking.

Niche themes: A niche theme is well-defined, specific, and developed within a research area or journal. These topics are areas of rapid development. Based on the results presented in Figure 4, Tour de France,

authenticity, sustainability, surf tourism, and to some extent, active sport tourism and sport events are the journal's specialised research areas.

Emerging or Declining themes: The third quadrant contains either emerging or declining themes; low centrality and low density characterise these themes. This quadrant included "climate change" and, to some extent, "adventure tourism."

Basic themes: low density and high centrality characterise the fourth quadrant. Despite their importance, these themes are not well developed. Golf, events, identity, football, and, to some extent, motivation are included in this quadrant.

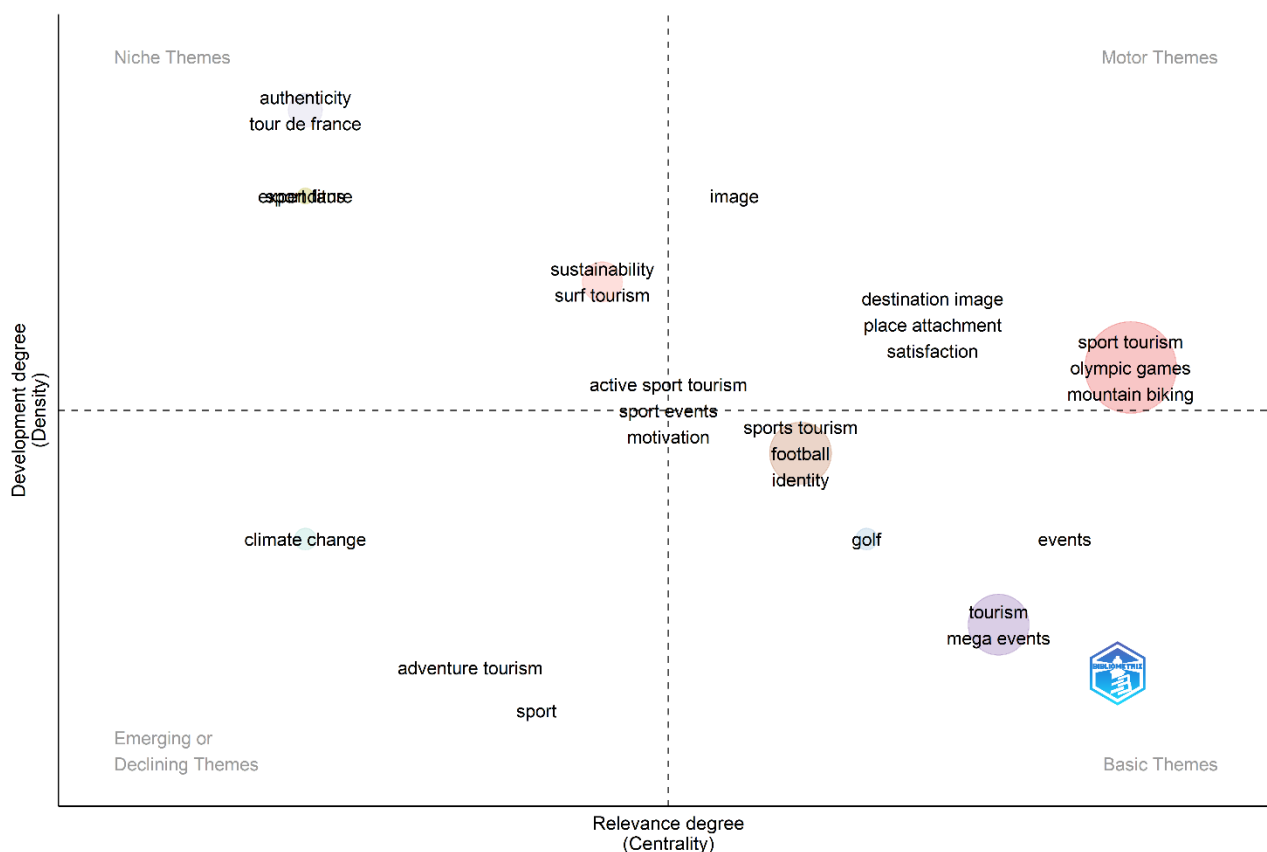


Figure 5. Strategic map of ST research themes in JS&T

The evolution of research topics in JS&T

Identifying the trends and evolution of research topics is crucial for future research in any discipline. Figure 6 illustrates the progression of issues over time, providing insights into the changing trends from year to year (RQ7). Specific keywords accompany every published article.

Events, Motivation, and Destination Image appeared early in research (around 2010–2014) but seem to have stabilized without significant growth afterward. These might represent foundational concepts in tourism research that have plateaued in academic focus. Sustainability has also seen a steady rise, particularly from 2012 onward. This aligns with the global discourse around sustainable tourism practices and environmental concerns. Climate Change has emerged prominently in recent years, with increasing attention post-2014. This reflects a growing focus on the environmental impacts of tourism and sports activities, particularly in the context of sustainability and global warming. In addition, adventure Tourism shows early interest but appears to peak around 2016, with continued but less frequent attention in recent years. Although mountain Biking is a specific topic, it seems to have gained significant attention around 2016–2017, indicating a surge of interest in niche sports activities within tourism studies.

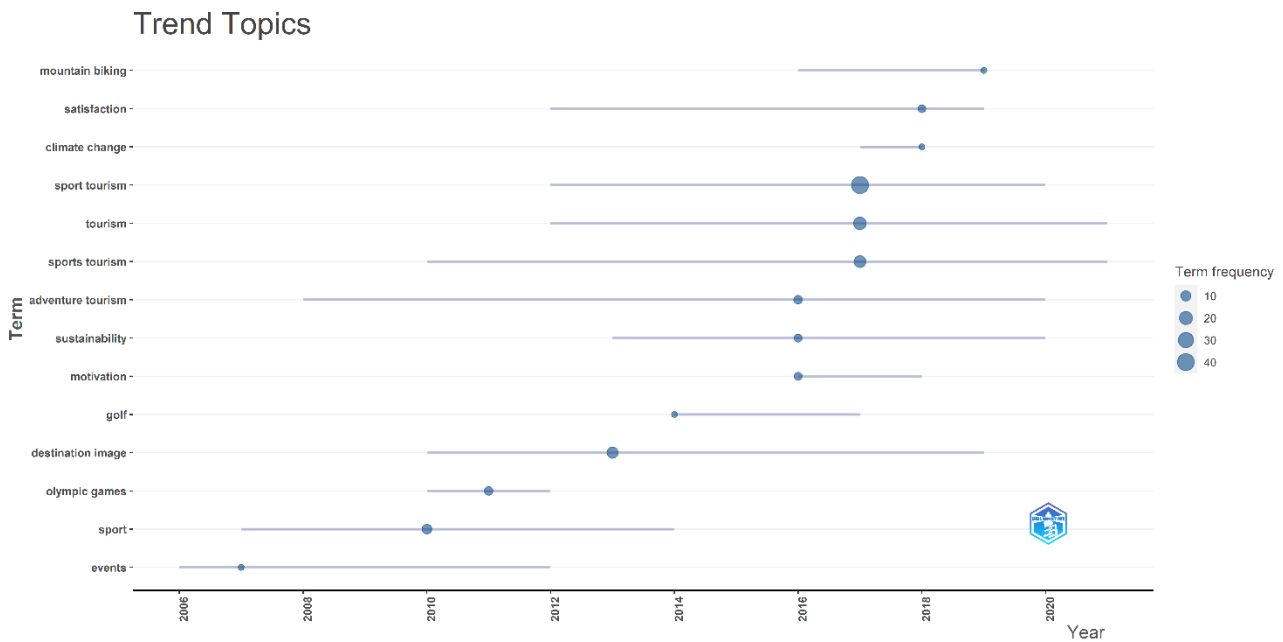


Figure 6. Trending topics in JS&T

Impact of JS&T articles- citation analysis

The citation count measures a journal and article's impact on the scientific community (Donthu et al., 2021b). This analysis explores various article-related characteristics that explain the citations of JS&T articles (RQ8), providing insights into the factors contributing to JS&T's impact. According to O'Leary's (2021) procedure, we utilise a conceptual framework that includes availability (open access), views, and discussions about it (Altmetrics). O'Leary's findings in 2021 indicate that papers accessible through open access are more readily available to readers. This is because there is no charge to access the document and no need to log into the journal site to download the article. In addition, discussing the paper on social media can help raise awareness and spark meaningful conversations about the article's content that may capture others' interest. Additionally, researchers can view and download the document if it captures their interest. In addition, if the paper fulfils the researcher's requirements or sparks new ideas, it could be incorporated into further research and referenced, potentially making a significant impact in the field.

Considering the existing literature, we also considered two additional variables that could potentially influence citation rates. Having multiple authors enhances the visibility of an article within the scientific community and increases citations (Stremersch et al., 2007; Valtakoski, 2019; Wicker et al., 2022). In addition, this study includes a control variable known as the article age variable. Previous studies have found that article age can affect the citation of an article (Meyer et al., 2018; Valtakoski, 2019; Donthu et al., 2021a; Kumar et al., 2021; Baker et al., 2021; O'Leary, 2021). The term "article age" refers to the number of years between the publication year (2006) and 2022. While it is anticipated that older articles would receive more citations, this correlation is not consistently linear, as Stremersch et al. (2007) noted. We employ the variable "demeaned age squared" introduced by Meyer et al. (2018) to account for this nonlinearity. This variable represents the squared difference between the age of the article and the mean age of all articles. In addition, it has been found in various studies that the gender of authors can impact the way citations are distributed (Tahamtan et al., 2018).

The number of global citations of the articles is the dependent variable for this study. While negative citations can slightly increase an article's citation count, this is generally insignificant and not necessarily bad since total citations still serve as an objective measure of article impact (Varma et al., 2022). Hence, the study uses citations per year as a countercheck as an alternative dependent variable. The citation count for JS&T publications varies from 0 to 544, with an average of 28.62 citations. It suggests a level of variability in the dependent variable. Based on previous research (Donthu et al., 2021a; Baker et al., 2021; O'Leary, 2021; Kumar et al., 2021), negative binomial regression has been identified as the most suitable regression

model in cases where there is a significant dispersion of dependent variables or when dealing with a count dependent variable. This study utilises the negative binomial regression model to examine six predictive variables: article age, number of authors, open access, views, Altmetric, and gender. The aim is to understand the factors influencing the total citations and citations per year of JS&T publications. Table 5 presents the descriptive statistics for all variables.

Table 5. Descriptive statistics of variables

Variable	Description	Minimum	Maximum	Mean	Std. Deviation
Dependent Variable					
Total citations	Total number of citations received by an article	0	544	28.61	55.13
Total citations per year	Total number of citations received by an article per year	0	32	1.88	4.41
Control Variables					
Article age	Number of years between publication year 2006 and 2022	1	17	8.55	5.09
Demeaned age squared	Difference between article age and mean of all articles ages squared	0.20	71.38	25.81	21.44
Independent Variables					
Number of authors	Total number of authors involved in a study	1	9	2.32	1.16
Open access	Refers to the free and online availability of research outputs such as journal articles	0	1	0.09	0.29
Views	Refers to the number of times the paper has been accessed or viewed	71	24879	1743.78	3236.83
Altmetri	Conversations about the article on social media	0	976	6.041	62.94
Gender	Gender pertains to the roles and identities of both women and men among the co-authors	1	2	-	-

Table 6 presents the correlation between various variables in the model. Our analysis solely concentrates on the statistically significant relationship between the independent and dependent variables (total citations), with a significance level of 0.05 or higher, disregarding other noteworthy correlations. Based on the findings, it is evident that certain factors, including the age of the article, the squared demeaned age, the number of views, and the number of authors, positively correlate with the total number of citations.

Table 6. Correlations between variables

Variable	1	2	3	4	5	6	7	8
1. Total Citation	1							
2. Article age	0.453***	1						
3. Demeaned age squared	0.185***	0.113*	1					
4. Number of authors	-0.117*	-0.221***	-0.021	1				
5. Open access	0.013	-0.009	0.155**	-0.056	1			
6. Views	0.587***	0.289***	0.057	-0.105	0.354***	1		
7. Altmetric	0.009	-0.084	0.099	-0.078	0.197***	0.026	1	
8. Gender	0.032	-0.087	-0.042	0.033	-0.067	-0.118	-0.067	1

Notes: *, **, and *** indicate statistical significance at the 0.10, 0.05, and 0.01 levels of significance, respectively.

Table 7 presents the regression results. In Model 1, we introduce the control variables only. The negative binomial regression analysis findings validate the possibility of a non-linear relationship between article age and citations. Specifically, the article age variable positively correlates with citation, while the demeaned age squared variable displays a negative association. These results are consistent with the prior research (Donthu et al., 2021a; Varma et al., 2022). In Model 2, we added the remaining variables (except for gender) and examined the relationship between the variables and the total citation. The findings show a positive

association between total citations and article age, open access, and views. However, there is no significant relationship between the number of authors and Altmetric. In Model 3, we analysed the relationship between the variables and the citations per year. The findings indicate a positive association between citations per year and article age, open access, and views. However, there is no significant relationship between the number of authors and Altmetric. Contrary to the primary regression model, the results show no statistically significant association between open access and the number of citations received yearly.

In order to evaluate the influence of gender on citation counts and citations per year, it was necessary to divide the gender variable into two categories: men and women (referring to contributors who are male co-authors and female co-authors of an article). The categorization was determined by analysing the distribution of co-authors, as presented in Table 3. Consequently, the analysis did not include a group of articles with an uneven distribution of male and female authors (multi-authorship). It is worth noting that the gender variable had a different sample size than the other independent variables due to removing the imbalanced distribution of male and female authors (multi-authorship), considering our primary goal of investigating this hypothesis by comparing two separate groups of writers - male and female authors - who each made individual contributions to an article, our analysis at this point was limited to 144 articles (see Table 6). To address this, we chose to use separate models to assess the two research hypotheses regarding the influence of gender on citations. This approach enabled us to uphold statistical rigour and safeguard the integrity of our analyses. The findings indicate a notable correlation between gender and citations per year, although there is no statistically significant link between gender and total citations.

In the presented research, a noteworthy outcome emerged concerning the association between gender and citation metrics. The finding asserts a statistically significant correlation between gender and citations per year. This implies that, on average, a discernible difference exists in the rate at which individuals of different genders accrue citations annually. The significance of this relationship underscores potential gender-based disparities in scholarly visibility and impact over time. Contrastingly, the investigation did not reveal a significant relationship between gender and total citations. This implies that, when considering the cumulative count of citations without an annualized perspective, the individual's gender does not emerge as a factor significantly influencing the total number of citations received. The absence of statistical significance in this context suggests that irrespective of gender, individuals may accumulate a comparable number of citations throughout their academic careers. The detailed interpretation of these findings contributes to a deeper understanding of the intricate dynamics surrounding gender-related factors in scholarly impact, emphasizing the importance of considering annualized and cumulative citation metrics for a comprehensive evaluation.



Table 7. Results of negative binomial regression analysis

Variables	Model 1 (CV)		Model 2 (TC)		Model 3 (TCpY)		Model 4 (TC)		Model 5 (TCpY)	
	B	Std. Error	B	Std. Error	B	Std. Error	B	Std. Error	B	Std. Error
(Intercept)	0.935	(0.1442)***	0.989	(0.2325)***	0.066	-0.6796	3.858	(0.0996)***	0.965	(0.2399)***
Article age	0.259	(0.0148)***	0.218	(0.0161)***	0.114	(0.0537)**	-	-	-	-
Demeaned age squared	-0.016	(0.0034)***	-0.019	(0.0035)***	-0.025	(0.0100)**	-	-	-	-
Number of authors	-	-	0.024	(0.0664)	-0.108	(0.2159)	-	-	-	-
Open access	-	-	-1.152	(0.2662)***	-0.671	(0.6366)	-	-	-	-
Views	-	-	0.000	(0.0003)***	0.003	(0.0018)***	-	-	-	-
Altmetric	-	-	-0.001	(0.0029)	-0.004	(0.0137)	-	-	-	-
Gender ^(b)	-	-	-	-	-	-	0.10	(0.1867)	1.571	(0.5614)***
Log Likelihood	-925.2378		-897.216		-76.9543		-697.015		-62.28	
Akaike's Information Criterion (AIC)	1856.476		1808.433		167.909		1398.03		128.561	
Bayesian Information Criterion (BIC)	1866.955		1832.884		182.452		1403.97		131.672	
N	243						144			

Notes: CV: Control Variables; TC: Total Citation; TCpY: Total Citation perYear; Std. Error = Standard error

*, **, and *** indicate statistical significance at the 0.10, 0.05, and 0.01 levels of significance, respectively.

(b) Articles with an uneven distribution of male and female authors (multi-authorship) and gender-equal co-authors were omitted from the analysis.



Shahid Bahonar
University of Kerman



Journal of New Studies in Sport Management

Online ISSN: 2717 - 4069

Homepage: <https://jnssm.uk.ac.ir>



Iranian Scientific
Association of
Sport Management

Discussion and Conclusion

Through this multifaceted effort, findings highlight how the journal has made substantial contributions to the sport and tourism segments that provide a baseline for scholars to build upon and insight for practitioners to rely upon when guiding their actions.

Our first research question (RQ1) relates to JS&T's trend of publications and citations. The study found that there has been a growing publication trend in recent years. In particular, the number of articles published in the journal has been increasing over the last three years. It shows that more researchers are interested in publishing their research results in JS&T. The annual growth rate of articles published in the journal also equals 3.04%, which is impressive. The growth in the citations received each year is also noteworthy. For instance, over 52% of the 243 papers received over twenty citations, and over 83% obtained at least five citations, indicating the popularity of the documents published in JS&T. RQ2 focused on studying the most influential papers in the intellectual structure. Based on the results, out of the 10, 6 most-cited articles were published in 2006–2007. In addition, nine highly cited articles focused on sports events, while only one dealt with a different topic (Weed, 2006b). RQ3 sought to know the main journals often cited by JS&T publications. Some of the best tourism and hospitality journals, like *Tourism Management*, *Annals of Tourism Research*, and *Journal of Travel Research*, have cited articles from JS&T. This shows the interrelationship between JS&T and leading tourism journals.

Our fourth research question (RQ4) examines the current state of collaboration among JS&T authors and institutions. The share of articles with three or more authors has increased continuously. Specifically, publications in the journal are mostly the product of two co-authors (34.98%). This finding supports the notion that the increasing difficulty of getting into high-quality journals has contributed to a much larger proportion of authors working together (Baker et al., 2021). Moreover, the average share of female co-authors is 35.8%. Indeed, nearly half (42.38%) of all publications have been written without female co-authors, whereas 16.87% have only female co-authors. On the other hand, the results showed that the most important contributors to JS&T came from the University of Florida, the University of Alberta, and Griffith University. Among all the universities, Griffith University has had the most international cooperation. RQ5 refers to the co-citation network. In this regard, three clusters emerged in the co-citation network. The research conducted by these three clusters centres on the exposition of theoretical frameworks about the field of ST, the role of events in ST development, and the examination of topics such as branding and destination.

Our sixth research question (RQ6) involves the main themes of JS&T publications. The main themes of the journal were mapped using the thematic map technique. Niche themes included surf tourism and sustainability, while emerging themes comprised climate change. Our seventh research question (RQ7) examines the evolution of research topics. Looking at how the topics have changed over time shows that destination image and adventure tourism continued to be popular in the journal from 2008 to 2020. Despite this, the popularity of adventure tourism has decreased slightly in the last two years. Our final research question (RQ8) focuses on factors associated with citations of JS&T articles. The negative binomial regression results indicate the article age variable positively correlates with citation, while the demeaned age squared variable displays a negative association. In addition, the results show a positive association between total citations and article age, open access, and views. However, there is no significant relationship between the number of authors and Altmetric. Moreover, our study has shown a significant correlation between gender and citations per year; however, there is no statistically significant connection between gender and total citations.

This study aimed to review the *Journal of Sport & Tourism* comprehensively. The goal was to identify the published main topics and shed light on current research gaps that could be explored in future studies. The study employed various research methods to comprehensively understand the

journal's publication trends and identify areas that require further attention. This effort provided valuable context into the topics consistently present in the field and the evolution of emerging areas. Through this analysis, we gained valuable insights into the articles in JS&T that received the highest number of citations from other journals.

Findings in this study provide valuable insights for scholars, readers, and JS&T editorial board members by enhancing their understanding of the implications resulting from the research. A basis for evaluating the knowledge domain of a specific journal (i.e., JS&T) and its connections to other prominent journals in the field was established, highlighting the positioning of JS&T among other journals in the industry. In addition, the utility of the results for editors lies in its capacity to facilitate policies that prioritise publications that substantially impact and contribute to the journal's growth potential. In addition, insight is provided to scholars regarding potential areas of focus for future research, as well as the value that comes from collaboration with others in the field.

Limitations and future directions of research

Although the bibliometric approach offers benefits in the current investigation's retrospective and prospective aspects, it is important to acknowledge certain limitations. The primary constraint concerns data sources, as bibliometric data obtained from extensive scientific databases, such as Scopus, is not only designed for bibliometric analysis. These datasets may contain unintentional errors that can influence research results. Scopus citations are the second limitation. Scopus is a credible source for citations, but it only gathers citations from sources that fulfil its high-quality indexing standards. Thus, this study's citations should be limited. The third limitation concerns the depth of analysis, as the aim of the paper is to present a comprehensive review of the JS&T corpus rather than an evaluation of the critical or systematic literature review of the precursors and outcomes that might exist in each topic cluster that forms the foundation of the journal's intellectual structure. Prospective authors can conduct alternative reviews, contributing to the insights presented in JS&T. Another limitation of this retrospective review is that it draws only from sources selected by JS&T. Aside from that, the bibliometric analysis focused only on articles and reviews. The book's editorials, errata, and notes were left out. This research attempts to foretell the future trends of JS&T; however, it is more of a retrospective on the journal's development from 2006 to 2022 (Volume 26, Issue 2). Still, we tried to demonstrate what we think may be on JS&T's future research agenda by doing a bibliometric analysis and deciding based on our analysis.

Ethical Considerations

All procedures performed in this study followed ethical guidelines relevant to bibliometric and citation analysis. Since the study relied solely on secondary data from publicly available articles in the Journal of Sport & Tourism, no personal or sensitive data were involved, thereby minimizing ethical risks.

Funding

No external funding or financial support was received for this study.

Author's Contribution

The author independently designed, conducted, and analyzed the research presented in this study. The author also prepared and revised the manuscript for publication.

Conflict of Interest

The author declares no potential conflict of interest related to this article's research, authorship, and publication.

Acknowledgments

Thanks are due to the researchers whose research has been reviewed in this study and to the respected referees whose opinions enriched this research.

References

- Aria, M., & Cuccurullo, C. (2017). bibliometrix: An R-tool for comprehensive science mapping analysis. *Journal of Informetrics*, 11(4), 959–975. <https://doi.org/10.1016/j.joi.2017.08.007>
- Aria, M., & Cuccurullo, C. (2020). Science mapping analysis with bibliometrix R-package: An example. https://bibliometrix.org/documents/bibliometrix_Report.html
- Aghaei, N., & Moradi, E. (2016). The effect of the perception of leadership style in sport, practices of applying power by coaches and sport commitment on the satisfaction of athletes (Individual and team disciplines). *Organizational Behavior Management in Sport Studies*, 3(10), 77-90. <https://doi.org/20.1001.1.25384023.1395.3.2.7.8>
- Baker, H. K., Kumar, S., & Pandey, N. (2021). Five decades of the Journal of Consumer Affairs: A bibliometric analysis. *Journal of Consumer Affairs*, 55(1), 293–331. <https://doi.org/10.1111/joca.12347>
- Ballew, B. S. (2009). Elsevier's Scopus® database. *Journal of Electronic Resources in Medical Libraries*, 6(3), 245–252. <https://doi.org/10.1080/15424060903167252>
- Benckendorff, P., & Zehrer, A. (2013). A network analysis of tourism research. *Annals of Tourism Research*, 43, 121–149. <https://doi.org/10.1016/j.annals.2013.04.005>
- Chalip, L. (2006). Towards Social Leverage of Sport Events. *Journal of Sport & Tourism*, 11(2), 109–127. <https://doi.org/10.1080/14775080601155126>
- Chalip, L., & Costa, C. A. (2005). Sport event tourism and the destination brand: Towards a general theory. *Sport in Society*, 8(2), 218–237. <https://doi.org/10.1080/17430430500108579>
- Chalip, L., Green, B. C., & Hill, B. (2003). Effects of Sport Event Media on Destination Image and Intention to Visit. *Journal of Sport Management*, 17(3), 214–234. <https://doi.org/10.1123/jsm.17.3.214>
- Chalip, L., & McGuirly, J. (2004). Bundling sport events with the host destination. *Journal of Sport and Tourism*, 9(3), 267–282. <https://doi.org/10.1080/1477508042000320241>
- Chung, H. K. (2007). Evaluating Academic Journals using Impact Factor and Local Citation Score. *Journal of Academic Librarianship*, 33(3), 393–402. <https://doi.org/10.1016/j.acalib.2007.01.016>
- Ciomaga, B. (2013). Sport management: A bibliometric study on central themes and trends. *European Sport Management Quarterly*, 13(5), 557–578. <https://doi.org/10.1080/16184742.2013.838283>
- Cross, R., Borgatti, S. P., & Parker, A. (2002). Making invisible work visible: Using social network analysis to support strategic collaboration. *California Management Review*, 44(2), 25–46. <https://doi.org/10.2307/41166121>
- Dant, R. P., & Lapuka, I. I. (2008). The Journal of Business-to-Business Marketing comes of age: Some postscripts. *Journal of Business-to-Business Marketing*, 15(2), 192–197. <https://doi.org/10.1080/15470620802020259>
- Danvila-del-Valle, I., Estévez-Mendoza, C., & Lara, F. J. (2019). Human resources training: A bibliometric analysis. *Journal of Business Research*, 101, 627–636. <https://doi.org/10.1016/j.jbusres.2019.02.026>
- Dervis, H. (2019). Bibliometric analysis using bibliometrix an R package. *Journal of Scientometric Research*, 8(3), 156–160. <https://doi.org/10.5530/JSCIRES.8.3.32>
- Donthu, N., Kumar, S., Mukherjee, D., Pandey, N., & Lim, W. M. (2021a). How to conduct a bibliometric analysis: An overview and guidelines. *Journal of Business Research*, 133, 285–296. <https://doi.org/10.1016/j.jbusres.2021.04.070>

- Donthu, N., Kumar, S., Pandey, N., & Gupta, P. (2021b). Forty years of the International Journal of Information Management: A bibliometric analysis. *International Journal of Information Management*, 57, 102307. <https://doi.org/10.1016/j.ijinfomgt.2020.102307>
- Donthu, N., Kumar, S., Ranaweera, C., Sigala, M., & Sureka, R. (2021c). Journal of Service Theory and Practice at age 30: past, present and future contributions to service research. *Journal of Service Theory and Practice*, 31(3), 265–295. <https://doi.org/10.1108/JSTP-10-2020-0233>
- Elahi, A., Moradi, E., & Saffari, M. (2020). Antecedents and consequences of tourists' satisfaction in sport event: Mediating role of destination image. *Journal of Convention and Event Tourism*, 21(2), 123–154. <https://doi.org/10.1080/15470148.2020.1731726>
- Farooq, R. (2023). Mapping the field of knowledge management: a bibliometric analysis using R. *VINE Journal of Information and Knowledge Management Systems*, 53(6), 1178–1206. <https://doi.org/10.1108/VJIKMS-06-2021-0089>
- Gammon, S., Ramshaw, G., & Wright, R. (2017). Theory in sport tourism: some critical reflections. *Journal of Sport and Tourism*, 21(2), 69–74. <https://doi.org/10.1080/14775085.2017.1319515>
- Gammon, S., & Robinson, T. (2003). Sport and tourism: A conceptual framework. *Journal of Sport and Tourism*, 8(1), 21–26. <https://doi.org/10.1080/14775080306236>
- Gao, W., Yang, L., & Shi, B. (2021). Mapping themes trends and knowledge structure of trophoblastic invasion, a bibliometric analysis from 2012–2021. *Journal of Reproductive Immunology*, 146, 103347. <https://doi.org/10.1016/j.jri.2021.103347>
- Getz, D. (2008). Event tourism: Definition, evolution, and research. *Tourism Management*, 29(3), 403–428. <https://doi.org/10.1016/j.tourman.2007.07.017>
- Getz, D., & McConnell, A. (2011). Serious Sport Tourism and Event Travel Careers. *Journal of Sport Management*, 25(4), 326–338. <https://doi.org/10.1123/jsm.25.4.326>
- Gholipour, N., & Moradi, E. (2020). The relationship between sport event quality, satisfaction, perceive value, loyalty and behavior intention: a meta-analysis. *New Approaches in Exercise Physiology*, 2(4), 151-178. <https://doi.org/10.22054/nass.2021.58974.1085>
- Gibson, H. (2017). Sport tourism and theory and other developments: some reflections. *Journal of Sport and Tourism*, 21(2), 153–158. <https://doi.org/10.1080/14775085.2017.1319514>
- Gibson, H. J. (1998). Sport Tourism: A Critical Analysis of Research. *Sport Management Review*, 1(1), 45–76. [https://doi.org/10.1016/S1441-3523\(98\)70099-3](https://doi.org/10.1016/S1441-3523(98)70099-3)
- Gibson, H. J., Kaplanidou, K., & Kang, S. J. (2012). Small-scale event sport tourism: A case study in sustainable tourism. *Sport Management Review*, 15(2), 160–170. <https://doi.org/10.1016/j.smr.2011.08.013>
- Gibson, H. J., Willming, C., & Holdnak, A. (2003). Small-scale event sport tourism: Fans as tourists. *Tourism Management*, 24(2), 181–190. [https://doi.org/10.1016/S0261-5177\(02\)00058-4](https://doi.org/10.1016/S0261-5177(02)00058-4)
- Gholipour, N., & Moradi, E. (2020). The relationship between sport event quality, satisfaction, perceive value, loyalty and behavior intention: a meta-analysis. *New Approaches in Exercise Physiology*, 2(4), 151-178. <https://doi.org/10.22054/nass.2021.58974.1085>
- Guzeller, C. O., & Celiker, N. (2019). Bibliometrical analysis of Asia Pacific Journal of Tourism Research. *Asia Pacific Journal of Tourism Research*, 24(1), 108–120. <https://doi.org/10.1080/10941665.2018.1541182>
- Higham, J. (2005). *Sport tourism destinations: Issues, opportunities and analysis*. In *Sport tourism destinations: Issues, opportunities and analysis*. Amsterdam: Elsevier Butterworth Heinemann. <https://www.taylorfrancis.com/chapters/edit/10.4324/9780080474434-1>
- Higham, J. (2021). Sport tourism: a perspective article. *Tourism Review*, 76(1), 64–68. <https://doi.org/10.1108/TR-10-2019-0424>
- Hinch, T. D., & Higham, J. E. S. (2001). Sport tourism: a framework for research. *International Journal of*

- Tourism Research*, 3(1), 45–58. [https://doi.org/10.1002/1522-1970\(200101/02\)3:1<45::aid-jtr243>3.0.co;2-a](https://doi.org/10.1002/1522-1970(200101/02)3:1<45::aid-jtr243>3.0.co;2-a)
- Hinch, T., Higham, J., & Sant, S. L. (2014). Taking stock of sport tourism research. In *The Wiley Blackwell Companion to Tourism* (pp. 413–424). Wiley. <https://doi.org/10.1002/9781118474648.ch33>
- Hota, P. K., Subramanian, B., & Narayanamurthy, G. (2020). Mapping the Intellectual Structure of Social Entrepreneurship Research: A Citation/Co-citation Analysis. *Journal of Business Ethics*, 166(1), 89–114. <https://doi.org/10.1007/s10551-019-04129-4>
- Jiménez-García, M., Ruiz-Chico, J., Peña-Sánchez, A. R., & López-Sánchez, J. A. (2020). A Bibliometric Analysis of Sports Tourism and Sustainability (2002–2019). *Sustainability*, 12(7), 2840. <https://doi.org/10.3390/su12072840>
- Kaplanidou, K., & Gibson, H. J. (2010). Predicting behavioral intentions of active event sport tourists: The case of a small-scale recurring sports event. *Journal of Sport and Tourism*, 15(2), 163–179. <https://doi.org/10.1080/14775085.2010.498261>
- Kaplanidou, K., & Vogt, C. (2007). The interrelationship between sport event and destination image and sport tourists' behaviours. *Journal of Sport and Tourism*, 12(3–4), 183–206. <https://doi.org/10.1080/14775080701736932>
- Kumar, S., Maggino, F., Mahto, R. V., Sureka, R., Alaimo, L. S., & Lim, W. M. (2022). Social Indicators Research: A Retrospective Using Bibliometric Analysis. *Social Indicators Research*, 162(1), 413–448. <https://doi.org/10.1007/s11205-021-02847-9>
- Kumar, S., Sureka, R., & Vashishtha, A. (2020). The Journal of Heritage Tourism: a bibliometric overview since its inception. *Journal of Heritage Tourism*, 15(4), 365–380. <https://doi.org/10.1080/1743873X.2020.1754423>
- Leung, X. Y., Sun, J., & Bai, B. (2017). Bibliometrics of social media research: A co-citation and co-word analysis. *International Journal of Hospitality Management*, 66, 35–45. <https://doi.org/10.1016/j.ijhm.2017.06.012>
- Liu, H., Chen, H., Hong, R., Liu, H., & You, W. (2020). Mapping knowledge structure and research trends of emergency evacuation studies. *Safety Science*, 121, 348–361. <https://doi.org/10.1016/j.ssci.2019.09.020>
- Maggon, M. (2022). A Bibliometric Analysis of Journal of Relationship Marketing (2002–2019). *Journal of Relationship Marketing*, 21(4), 324–351. <https://doi.org/10.1080/15332667.2022.2080465>
- Meyer, M., Waldkirch, R. W., Duscher, I., & Just, A. (2018). Drivers of citations: An analysis of publications in “top” accounting journals. *Critical Perspectives on Accounting*, 51, 24–46. <https://doi.org/10.1016/j.cpa.2017.07.001>
- Mollah, M. R. A., Cuskelly, G., & Hill, B. (2021). Sport tourism collaboration: a systematic quantitative literature review. *Journal of Sport and Tourism*, 25(1), 3–25. <https://doi.org/10.1080/14775085.2021.1877563>
- Moradi, E. (2023). An Updated Overview of Research Published in Sport Marketing Quarterly (2012 to 2022): A Tri-Method Approach. *Sport Marketing Quarterly*, 32(4), 343–369. <https://doi.org/10.32731/smq.324.122023.06>
- Moradi, E. (2024). Mapping of Journal of Hospitality and Tourism Insights themes: a retrospective overview. *Journal of Hospitality and Tourism Insights*, 7(2), 1211–1237. <https://doi.org/10.1108/JHTI-12-2022-0638>
- Moradi, E., Ehsani, M., Saffari, M., & Norouzi Seyed Hosseini, R. (2022). Developing an integrated model for the competitiveness of sports tourism destinations. *Journal of Destination Marketing and Management*, 26, 100743. <https://doi.org/10.1016/j.jdmm.2022.100743>
- Moradi, E., Ehsani, M., Saffari, M., & Norouzi Seyed Hosseini, R. (2023a). How can destination competitiveness play an essential role in small island sports tourism development? Integrated ISM-MICMAC modelling of key factors. *Journal of Hospitality and Tourism Insights*, 6(3), 1222–1252.

<https://doi.org/10.1108/JHTI-03-2022-0118>

- Moradi, E., Gholampour, S., & Gholampour, B. (2023b). Past, present and future of sport policy: a bibliometric analysis of International Journal of Sport Policy and Politics (2010–2022). *International Journal of Sport Policy and Politics*, 15(4), 577–602. <https://doi.org/10.1080/19406940.2023.2228829>
- Nova-Reyes, A., Muñoz-Leiva, F., & Luque-Martínez, T. (2020). The Tipping Point in the Status of Socially Responsible Consumer Behavior Research? A Bibliometric Analysis. *Sustainability*, 12(8), 3141. <https://doi.org/10.3390/su12083141>
- Norouzi Seyed Hossini, R., Moradi, E., & Amini, M. (2022). How Can the Elite Sports in Iran Lead to the Promotion of the Sports Industry Businesses? An ISM-MICMAC Approach. *Sports Business Journal*, 2(2), 145-168. <https://doi.org/10.22051/sbj.2022.42189.1062>
- O’Leary, D. E. (2021). Recent Research Topics and a Bibliometric Analysis of Jocec. *Journal of Organizational Computing and Electronic Commerce*, 31(1), 78–91. <https://doi.org/10.1080/10919392.2021.1885875>
- Oliveira, J. R. de, Tobar, F. B., & Capraro, A. M. (2021). Football tourism: a bibliometric analysis of published works in the tourism-based journals (2003–2019). *Journal of Sport and Tourism*, 25(4), 317–335. <https://doi.org/10.1080/14775085.2021.1965010>
- Preuss, H. (2007). The conceptualisation and measurement of mega sport event legacies. *Journal of Sport and Tourism*, 12(3–4), 207–228. <https://doi.org/10.1080/14775080701736957>
- Scopus. (2021). *Sources*. Elsevier B. V. <https://www.scopus.com/sources.uri>
- Sharma, P., Singh, R., Tamang, M., Singh, A. K., & Singh, A. K. (2021). Journal of teaching in travel & tourism: a bibliometric analysis. *Journal of Teaching in Travel and Tourism*, 21(2), 155–176. <https://doi.org/10.1080/15313220.2020.1845283>
- Shi, B., Wei, W., Qin, X., Zhao, F., Duan, Y., Sun, W., Li, D., & Cao, Y. (2019). Mapping theme trends and knowledge structure on adipose-derived stem cells: A bibliometric analysis from 2003 to 2017. *Regenerative Medicine*, 14(1), 33–48. <https://doi.org/10.2217/rme-2018-0117>
- Singh, R., Sibi, P. S., & Sharma, P. (2022). Journal of ecotourism: a bibliometric analysis. *Journal of Ecotourism*, 21(1), 37–53. <https://doi.org/10.1080/14724049.2021.1916509>
- Smith, B., & Weed, M. (2007). The potential of narrative research in sports tourism. *Journal of Sport and Tourism*, 12(3–4), 249–269. <https://doi.org/10.1080/14775080701737005>
- Standeven, J. (1998). Sport tourism: Joint marketing — A starting point for beneficial synergies. *Journal of Vacation Marketing*, 4(1), 39–51. <https://doi.org/10.1177/135676679800400104>
- Stremersch, S., Verniers, I., & Verhoef, P. C. (2007). The Quest for Citations: Drivers of Article Impact. *Journal of Marketing*, 71(3), 171–193. <https://doi.org/10.1509/jmkg.71.3.171>
- Tabassum, S., Pereira, F. S. F., Fernandes, S., & Gama, J. (2018). Social network analysis: An overview. *Wiley Interdisciplinary Reviews: Data Mining and Knowledge Discovery*, 8(5). <https://doi.org/10.1002/widm.1256>
- Tahamtan, I., Safipour Afshar, A., & Ahamdzadeh, K. (2016). Factors affecting number of citations: a comprehensive review of the literature. *Scientometrics*, 107(3), 1195–1225. <https://doi.org/10.1007/s11192-016-1889-2>
- Takata, K., & Hallmann, K. (2021). A systematic quantitative review of authenticity in sport tourism. *Journal of Sport and Tourism*, 25(1), 26–41. <https://doi.org/10.1080/14775085.2021.1877564>
- Valtakoski, A. (2020). The evolution and impact of qualitative research in Journal of Services Marketing. *Journal of Services Marketing*, 34(1), 8–23. <https://doi.org/10.1108/JSM-12-2018-0359>
- Van Rheenen, D., Cernaianu, S., & Sobry, C. (2017). Defining sport tourism: a content analysis of an evolving epistemology. *Journal of Sport and Tourism*, 21(2), 75–93. <https://doi.org/10.1080/14775085.2016.1229212>

- Varma, A., Kumar, S., Lim, W. M., & Pandey, N. (2023). Personnel Review at age 50: a retrospective using bibliometric analysis. *Personnel Review*, 52(4), 1291–1320. <https://doi.org/10.1108/PR-05-2021-0313>
- Wäsche, H., Dickson, G., Woll, A., & Brandes, U. (2017). Social network analysis in sport research: an emerging paradigm. *European Journal for Sport and Society*, 14(2), 138–165. <https://doi.org/10.1080/16138171.2017.1318198>
- Weed, M. (2005). Sports Tourism Theory and Method—Concepts, Issues and Epistemologies. *European Sport Management Quarterly*, 5(3), 229–242. <https://doi.org/10.1080/16184740500190587>
- Weed, M. (2006a). Editorial: Introducing the journal of sport & tourism. *Journal of Sport and Tourism*, 11(1), 1–4. <https://doi.org/10.1080/1477508060985143>
- Weed, M. (2006b). Sports tourism research 2000–2004: A systematic review of knowledge and a meta-evaluation of methods. *Journal of Sport and Tourism*, 11(1), 5–30. <https://doi.org/10.1080/14775080600985150>
- Weed, M. (2009). Progress in sports tourism research? A meta-review and exploration of futures. *Tourism Management*, 30(5), 615–628. <https://doi.org/10.1016/j.tourman.2009.02.002>
- Wei, F., & Zhang, G. (2020). Exploring the intellectual structure and evolution of 24 top business journals: a scientometric analysis. *Electronic Library*, 38(3), 493–511. <https://doi.org/10.1108/EL-12-2019-0279>
- Wicker, P., Scharfenkamp, K., & Lesch, L. (2022). Publication and citation analysis of articles published in the European Journal for Sport and Society, 2004–2020. *European Journal for Sport and Society*, 19(4), 295–304. <https://doi.org/10.1080/16138171.2022.2133412>
- Wilson, C. S., & Tenopir, C. (2008). Local citation analysis, publishing and reading patterns: Using multiple methods to evaluate faculty use of an academic library's research collection. *Journal of the American Society for Information Science and Technology*, 59(9), 1393–1408. <https://doi.org/10.1002/asi.20812>
- Yamashita, R. (2022). A quantitative scoping review of information search behaviour in sport tourism. *Journal of Sport and Tourism*, 26(4), 363–386. <https://doi.org/10.1080/14775085.2022.2098807>
- Zhang, M. (2010). Social Network Analysis: History, Concepts, and Research. In *Handbook of Social Network Technologies and Applications* (pp. 3–21). Springer US. https://doi.org/10.1007/978-1-4419-7142-5_1