A close-up of bibliographic coupling on organizational communication in sports research

Khairul Hafezad Abdullah¹, Davi Sofyan², Jeferson Roberto Rojo³, Waleed A. Hammood⁴

¹Department of Academic Affairs, Universiti Teknologi MARA, Perlis Branch, Malaysia

²Faculty of Teacher Training and Education, Universitas Majalengka, Majalengka, Indonesia

³Department of Physical Education, Universidade Estadual de Maringá, Maringá, Brazil

⁴Department of Computer Science, Bayan University, Erbil, Kurdistan Region of Iraq

ABSTRACT

The emergence of sport sociology related to sport and communication spurred a gradual entry into academic research. This study uses bibliometric analysis of bibliographic coupling, a phenomenon that occurs when two texts quote the same source. The purpose of this study is to explore publishing trends using the unit of analysis bibliographical coupling on organizational communication in sports. The results indicated that 419 publications had been indexed in the Scopus database between 1981 and 2022. Articles were the most common document published in the database, accumulating 265 papers. Social Sciences is the most significant subject area, with 214 records. A paper written by Winand et al. in 2019 entitled "International sports federations' social media communication: A content analysis of FIFA's Twitter account" has become a document that obtained more citations accruing a total strength of 91. Notably, this analysis alludes that the International Journal of Sport Communication has become the most multiple credentials, with 240 citations. Two scholars, Anagnostopoulos, C. and Chadwick, S., were credited as successful authors. Griffith University, from Australia, advanced 67 citations. The United States became the leading country with total link strength of 3876. It can be concluded that research on this topic is expanding due to the empowerment of research methodologies and the development of new research contributions in the form of new avenues. Researchers and practitioners can increase future understanding in this field by thoroughly examining sports communication in numerous research areas.

Keywords: Bibliographic coupling; bibliometric; organizational communication; publication trends; sport

Tampilan close-up penggabungan bibliografi pada komunikasi organisasi dalam penelitian olahraga

ABSTRAK

Munculnya sosiologi olahraga yang terkait dengan olahraga dan komunikasi mendorong masuknya penelitian akademis secara bertahap. Penelitian ini menggunakan analisis bibliometrik bibliographic coupling yaitu fenomena yang terjadi ketika dua teks mengutip sumber yang sama. Tujuan dari penelitian ini adalah untuk mengeksplorasi tren penerbitan menggunakan unit analisis bibliografi coupling pada komunikasi organisasi dalam olahraga. Hasilnya menunjukkan bahwa 419 publikasi telah terindeks dalam database Scopus antara tahun 1981 dan 2022. Artikel adalah dokumen yang paling umum diterbitkan dalam database, sebanyak 265 makalah. Ilmu Sosial adalah bidang studi yang paling signifikan dengan 214 catatan. Sebuah makalah yang ditulis oleh Winand dan kawan-kawan pada tahun 2019 berjudul "Komunikasi media sosial federasi olahraga internasional: Analisis konten akun Twitter FIFA" telah menjadi dokumen yang memperoleh lebih banyak kutipan dengan total kekuatan 91. Hasil lainnya menunjukkan bahwa International Journal of Sport Communication telah menjadi kredensial paling banyak, dengan 240 kutipan. Dua sarjana, Anagnostopoulos, C. dan Chadwick, S., dikreditkan sebagai penulis yang sukses. Griffith University, dari Australia, mendapatkan 67 kutipan. Amerika Serikat menjadi negara terdepan dengan total link strength 3876. Dapat disimpulkan bahwa penelitian tentang topik ini berkembang karena pemberdayaan metodologi penelitian dan pengembangan kontribusi penelitian baru dalam bentuk cara baru. Peneliti dan praktisi dapat meningkatkan pemahaman masa depan di bidang ini dengan memeriksa komunikasi olahraga secara menyeluruh di berbagai bidang penelitian.

Kata-kata kunci: Bibliometrik; komunikasi organisasi; olahraga; penggabungan bibliografi; tren publikasi

Correspondence: Davi Sofyan, M.Pd., Faculty of Teacher Training and Education Universitas Majalengka, Indonesia. Jl. K.H. Abdul Halim No. 103, Majalengka, Jawa Barat, Kode Pos: 45418. *Email*: davisofyan@ unma.ac.id

INTRODUCTION

People today reside in the big data era. Big data has a profound impact on every element of human life. For instance, governments worldwide have used data collecting and analysis to fight the Covid-19 outbreak. Contact tracing and hotspot identification would now have been conceivable with big data. However, Industry 4.0 is still in its infancy in society. Big Data and the Internet of Things will influence the future in ways that are currently unthinkable. One of those affected is the sports sector. Humans use sport as a drug and opium to satisfy specific needs in life, including those related to entertainment, economics, social life, and health (Sofyan, Abdullah, & Hafiar, 2022). The sports industry is not exempt from crises that may harm a company's standing with its stakeholders and ability to conduct business (Jordan & Smith, 2013). The economy benefits significantly from the sports industry in terms of trade, investments, taxes, and employment. Most nations are engaged athletic competition with one another (Mishra, Sharma, & Kamalanabhan, 2016).

Modern sports have developed into powerful magnets in the joints of human living (Sofyan, Saputra, Nurihsan, & Kusmaedi, 2021). The field of communication explores how individuals create meaning via verbal and nonverbal cues in

various contexts, cultures, media, and channels. Since the philosophical perspectives that serve as the foundation for communication study might be in conflict or work in concert, there is no comprehensive definition of communication as a discipline. Thus, philosophical viewpoints are the cornerstone for how communication researchers position messages to mean and receivers to senders (Keyton, 2017). Sometimes the message is not conveyed entirely because the meaning changes due to the addition or subtraction of information. Choosing how much communication should take place between coworkers is crucial in organizations. Although much theoretical work has focused on this issue, empirical research on organizational communication has fallen behind (Battiston, Vidal, & Kirchmaier, 2020).

Understanding the concept of decent organizational communication is crucial since it is a part of the superiority of corporate sectors. Once the appropriate communication medium between organizational elements has been used, a significant rapport between organizational communication and performance is gradually improved (Haroon & Malik, 2018). Notably, the modern corporate environment has diversified; therefore, its environmental and communication processes have become more complex or multifacets (Cetin, 2020). This matter is not exempted in sports organizations and has become a new

challenge to this circumstance (Nicholson, Kerr, & Sherwood, 2015; Winand, Belot, Merten, & Kolyperas, 2019).

In handling complex internal communications, particularly in the sports industry, an important consideration should be given to organizing more team social activities for players and personnel. It can be accomplished by incorporating a more systematic analysis of team performance for players and coaching staff, by incorporating a variety of training sessions in anticipation of the participation of players and coaching staff, and by encouraging communication between players and senior staff (Rumbold, Fletcher, & Daniels, 2018).

Social media is one of the tools used in organizational communication in sports. However, studies on organizational communication in sports are still limited and have developed much in the media aspect. More research on social media and its impact on the sports industry is needed (Abeza, O'Reilly, & Reid, 2016; Abeza, O'Reilly, Seguin, & Nzindukiyimana, 2017; Filo, Lock, & Karg, 2015).

Mobile media sports require more attention from academics that study media sports (Hutchins, 2019)effects, and meanings of mobile media and communications. This situation is partly explained by the fact mobile media encompass practices, technologies,

and markets that are grounded historically in the telecommunications and information technology industries, which sit apart from the broadcast (radio and television. The media has been discussed as a valuable conduit capable of fostering deep connections between two parties in the literature on the use of social media in sports marketing (Abeza, O'Reilly, & Seguin, 2019; Hambrick & Kang, 2015).

The purpose of the current study was to 1) assess publishing trends; 2) explore information about bibliographic coupling, which is the linking of documents that refer to a group of documents cited and used to compare citing articles; and 3) examine information about communication organizational in sports. Parameters are determined by researchers, of course, with various considerations. Publication trends are determined by the distribution of the article's publication and the peak year of the research. The next researcher can do this by analyzing the bibliometric by year. On a citation approach, a bibliometric analysis of the subject with a focus on bibliographic coupling has been conducted (Boyack & Klavans, 2010)we use innovative full-text citation analysis along with supervised topic modeling and network-analysis algorithms to enhance classical bibliometric analysis and publication/ author/venue ranking. By utilizing citation contexts extracted from a large number of fulltext publications, each citation or publication is represented by a probability distribution over a set of predefined topics, where each topic is labeled by an author-contributed keyword. We then used publication/citation topic distribution to generate a citation graph with vertex prior and edge transitioning probability distributions. The publication importance score for each given topic is calculated by PageRank with edge and vertex prior distributions. To evaluate this work, we sampled 104 topics (labeled with keywords; strategic management ability (Vogel & Güttel, 2013); business model (Belussia, Orsi, & Savarese, 2019). The more related the two papers are, the higher the value of the bibliographic coupling strength(Habib & Afzal, 2019).

This study unequivocally establishes the bibliometric review approach value. The information in this study is relevant to providing readers and academics with a trustworthy overview of organizational communication in sports and inspiring them to conduct more in-depth research on this significant subject. Particularly in providing research on interpersonal and intrapersonal connections from all organizational angles.

RESEARCH METHOD

This study employs bibliometric analysis, a robust metrics study favored by a growing number of experts and is credible. Building a system for analyzing research in the literature and finding publication patterns and trends has proven to be reliable with bibliometric analysis. The bibliometric review summarizes the vast corpus of scientific literature in this context and is crucial for academics to make well-informed decisions. An in-depth analysis of the study materials and chosen themes is also beneficial for scholars.

This study uses the well-known database Scopus to analyze current growth and trends in organizational communication research in sports. As such, it highlights the value of reviews in detecting problems and points the way forward for scientific research. The research objectives, which include evaluating the effects of publications, fields of study, authors, sources, and institutions by country based on the selected database, are also relevant to this study.

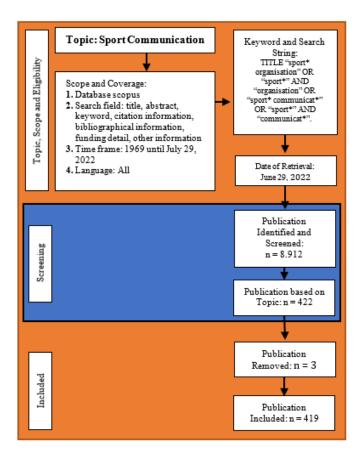
Due to the proliferation of studies in all areas of knowledge, bibliometric reviews are growing in popularity. The popularity is perhaps to locate and evaluate research by creating a system for analyzing the literature to perceive publication patterns and trends (Aziz, Harith, Abdullah, & Sofyan, 2022)so they rely on each other's empathy and compassion and not be self-centered. Therefore, it is essential to promote the ethics of road safety and road users' exemplary behavior upmost. This review

analyzed the publication trends and thematic evolution of road user behaviour over 47 years from 1973 to 2020. The assessment uses the Scopus database and various bibliometric indicators, such as output growth trends, eminent countries, research hotspots, and author keywords. Also, this study presented a graphical visualization of bibliometric indicators using a VOSviewer. Another bibliometric software tool, known as SciMAT, was used to inspect road user behaviour research's thematic evolution. The verdicts revealed that the number of publications increased exponentially, starting in 2005 with a hike in publications in 2020. Road user behaviour researches were diverse by examining the various research hotspots. This review also focuses on several themes and dimensions of road user behaviour research. The essential motor theme during the first period (2005-2012. This technique benefits tracking research performance and scientific progress and supports relevant policy measures (Abdullah & Sofyan, 2022).

Prior research on organizational communication in sports is analyzed using bibliometric measurement to improve future study directions and promote the scientific progress of this field. In contemplation of assisting researchers in better understanding the literature in their field, the baseline bibliometric variables pertinent to the annual trends of

publications and the frequency of citations, number of authors, institutions, countries, journals, collaboration-matched author analysis, and current research were evaluated. A list of publications from the Scopus database was compiled and examined to complete this operation. Scopus is one of the specialized databases that may be used for bibliometric research. The Scopus database was chosen because it contains a more significant number of documents than the Web of Science and Pubmed (Abdullah, 2021).

On July 29, 2022, a thorough review of the organizational communication literature in sports was undertaken using appropriate keywords. Accurately, the selected keywords are a crucial component that must be considered when looking for publications related to the study topic (Sofyan & Abdullah, 2022a). The initial string search strategy used TITLE-ABS-KEY in Scopus, but after manually checking documents, many articles were unrelated to organizational communication in sports. Therefore, the use of the search strategy was changed to the search string TITLE. The Scopus database was explored for articles published between 1981 to 2022 using the following keyword search strings: TITLE "sport* organization" OR "sport*" AND "organization" OR "sport* communicat*" OR "sport*" AND "communicat*". The retrieval technique was



Source: Author processed data, 2022; (Moher, Liberati, Tetzlaff, & Altman, 2009)

Figure 1 PRISMA flowchart of search and data retrieval

based on article titles to maximize the precision of the results concerning this study's purpose.

The collection of 422 articles about organizational communication in sports was discovered. Initial retrieval results suggested ten distinct types of documents and 11 different languages. The retrieval results are then downloaded in CSV and RIS formats. Neither a minimum nor a maximum number of documents may be employed in bibliometric analysis (Sofyan, 2022).

The research was finished in the context of descriptive analysis using the documentchecking method in the Scopus database (Alpen et al., 2022). The 422 data discovered were carefully examined after being converted from CSV to Excel format. The manual analysis turned up three duplicate files. As a result, only 419 papers will undergo additional bibliometric examination using the VOSviewer program.

Bibliometric mapping investigates nation co-authorship and the co-occurrence by authors' keywords. The mapping techniques used by VOSviewer to turn data in the Comma Separated Values (CSV) format into diagrams or clusters included visual elements. Consequently, mapping algorithms help researchers analyze specific data, including

authors, places, institutions, citations, cocitations, and other refining criteria. Utilizing VOSviewer visualization software to evaluate data (version 1.6.8) (van Eck & Waltman, 2013) for mapping analysis makes it easier to see the dynamics and information structure of the document being studied (van Eck & Waltman, 2010, 2013, 2017).

RESULTS AND DISCUSSION

Before studying bibliometric analysis, this study identified obscure publication descriptors such as leading author, source type, language, and subject category. By document type, 265 (63.25%) of these publications were articles, 71 (16.94%) were book chapters, 42 (10.02%) were conference papers, 10 (2,38%) were editorial, 9 (2,14%) were book, 8 (1,91%) were review, 7 (1,67%) were note, 6 (1,43%) were erratum, and 1 (0,24) were letter. By language, 369 (86.41%) of these articles have been published in English, 14 (3.27%) have been published in German, Russian, and Spanish, 10 (2.34%) in French, and one (0.23%) in Chinese, Croatian, Japanese, Malay, Portuguese and Slovak. Table 1 shows the subject areas in organizational communication in sports.

Millions of people travel worldwide to attend exhibits, trade shows, public displays, and trade expositions (hereafter exhibitions) that highlight specific sectors of the economy and product categories (Lee & Lee, 2014). Comparatively speaking to the print-only era, tracking and gathering usage data has been more straightforward due to the continuously rising popularity of electronic journals (Gorraiz, Gumpenberger, & Schlögl, 2014). To identify markers of scientific output, impact, and collaboration between authors, institutions, and nations, bibliometric and social network analyses were carried out. The critical terms assigned to papers and the journal subject headings were also used in a subject analysis (Aleixandre-Benavent, Aleixandre-Tudó, Castelló-Cogollos, & Aleixandre, 2017).

The Social Sciences, with a total of 214 documents, became the most popular subject area compared to other subject areas. Table 1 describes other subject areas related to organizational communication in sports.

Researching how bibliographic coupling is measured is fascinating. Bibliographic uses co-word analysis and bibliographic coupling to examine an exciting topic (Rojas-Lamorena, Del Barrio-García, & Alcántara-Pilar, 2022). The bibliographic coupling technique is predicated on the idea that two publications with shared references have similar content (Donthu et al., 2021a). The method of bibliographic coupling identifies trending research themes that academics would want to explore in the future (Donthu et al., 2021b).

Table 1 Subject areas

Subject area	Total	Subject area	Total
Social Sciences	214	Agricultural and Biological Sciences	9
Business, Management, and Accounting	84	Biochemistry, Genetics, and Molecular Biology	7
Medicine	73	Energy	6
Health Professions	63	Physics and Astronomy	6
Computer Science	60	Materials Science	5
Arts and Humanities	50	Neuroscience	4
Psychology	47	Multidisciplinary	3
Engineering	41	Chemical Engineering	2
Economics, Econometrics, and Finance	30	Chemistry	2
Decision Sciences	16	Nursing	2
Environmental Science	16	Veterinary	2
Mathematics	11	Earth and Planetary Sciences	1

Source: Scopus database, 2022

Bibliographic coupling is when the bibliographies of two works mention a third work they both have in common (Abdullah, 2021). They investigate the relational elements that reveal similarities between documents (Maseda, Iturralde, Cooper, & Aparicio, 2022). The strength of each document's bibliographic coupling with other texts was determined. Techniques for science mapping are one of the cornerstones of bibliometrics. The VOSviewer software's default setup (without citation) produced 419 documents from bibliographic coupling based on documents. Figure 1 depicts the pairing of bibliographies by the document.

The article by Winand et al. (2019), "International sports federations' social media communication: A content analysis of FIFA's Twitter account," refers to several referenced sources and is used to evaluate the degree

of similarity among 91 referencing articles. Following them were Yoo, S.K. (2013), with a total strength of 76; Denham, B.E. (2019); and Harker, J.L. (2018), each with a total strength of 78. Only these four authors outperformed 75 in total.

The total strength of bibliographic coupling relationships between each scientific source and other sources will be computed. The cited papers are interpreted as sources of inspiration based on the patented invention's broadest sense (Callaert, Pellens, & Van Looy, 2014). Nearly every day, people either look for or encounter evidence and statements concerning scientific concerns from many sources in news and information sources online, on social media platforms, and in forums. People may want to consider these assertions since they usually desire to make the best decisions for themselves

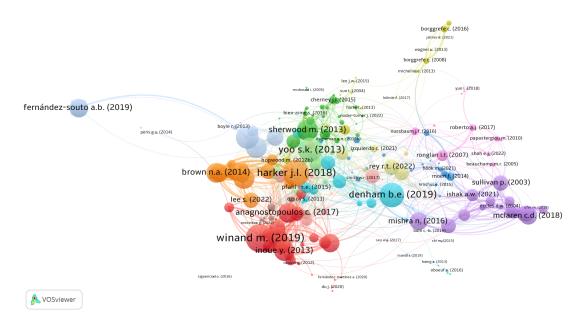


Figure 2 Network visualization based on documents

and their families (Sinatra & Hofer, 2016) conflicting information on challenging topics. This article presents research on challenges for public understanding of science: In addition to increased scientific literacy (knowledge. Many people are aware that information needs to be verified in some way. Even though the expression "it must be real, I read it on the Internet" is frequently used as a joke, it can be challenging for students and the general public to assess the reliability of alternative statements about a scientific topic that they read online (Sinatra & Hofer, 2016)conflicting information on challenging topics. This article presents research on challenges for public understanding of science: In addition to increased scientific literacy (knowledge.

Sixty-four scientific sources were discovered from 241 sources connected to organization and communication in sports—the minimum amount of 2 documents by scientific sources and 0 citations. The International Journal of Sport Communication achieved 240 total power. Conversely, the Routledge Handbook of Sport Communication came with 211 citations. These two scientific sources rose to the top two with more than 200 combined power. We chose the scientific source with the highest overall connection strength.

The overall strength of the bibliographic coupling relationships with other authors will be determined for each author, as shown in Figure 3. One of the constraints of bibliometric studies is the potential for author names to be

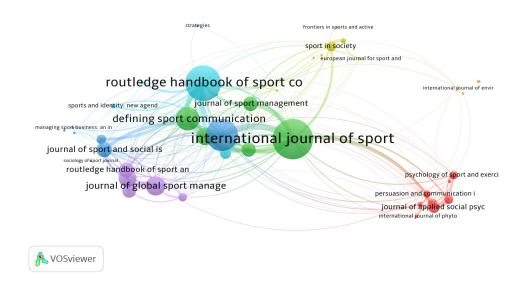


Figure 3 Network visualization based on scientific sources

identical (Sofyan & Abdullah, 2022b). An orderly description of the theory, findings, and recommendations can be found in a scientific article. Research must be published or documented to be considered complete.

Principal investigators or lead authors are typically the first authors, and the importance of authors decreases with rank. There are a few exceptions to the generalization about author name order, though (Asubiaro, 2019). The authors with the most robust overall link profile will be chosen. There were 57 authors from 803 related to organization and communication in sports. The minimum number of 2 documents owned by the author and the minimum number of citations is 5.

The authors, Anagnostopoulos, C., and

Chadwick, S., have two documents combined with 367 and 49 citations. There are four documents, 22 citations, and 320 total citations for C.D. McLaren. Only those three authors' combined power was more significant than 300.

Universities have played a crucial role in knowledge formation and dissemination for millennia. As a result, universities significantly impact society's transformation in various ways, including teaching and learning, education, research, and the creation of new ideas and knowledge. Universities and other institutions of higher learning on both sides of the Atlantic have rare opportunities to work together, such as on collaborative research projects. The university rankings worldwide emphasize the number of faculty publications

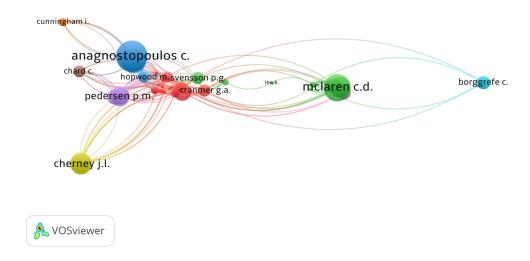


Figure 4 Network visualization by author

and students but not the relevance of academic research and how it might benefit societies (Nejati, Shafaei, Salamzadeh, & Daraei, 2011). Fisher commented on the role of universities in "our National System of Education" in 1919. He emphasized a number of the changes that had occurred. Noting, "the State has now begun to exercise an influence over the direction of Scientific Research through the creation of Privy Council Department that formed to encourage the science application to Practical Affairs of Life." (Taylor, 2018).

However, there were significant adjustments made within the Universities as well. The promotion and organization of research came to the attention of university leadership, which led to the creation of new Committees and policies and the challenge of conventional ideas

about academic lives and careers. University researchers developed closer contacts with industry and many other external organizations due to the War. Information and research outcomes "ownership", as well as research costing and pricing, were some new problems that Universities had to deal with in this matter. Once more, there are a lot of significant challenges that will affect universities for many years to come. (Taylor, 2018).

Twenty organizations among 689 organizations relevant to organization and communication in sports were determined to have a minimum of 2 documents owned by the organization and a minimum of 1 citation. The overall strength of bibliographic coupling linkages with other organizations will be estimated for each organization, as shown in

Figure 4. The company chosen will have the highest overall connection strength.

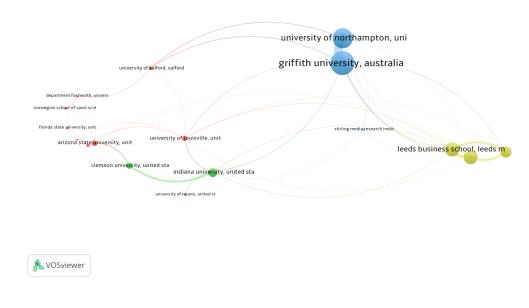
The University of Northampton in the United Kingdom and Griffith University in Australia each have total powers of 67 and 55, respectively. Only these two entities or organizations possess a combined strength of more than 50.

When research is conducted in collaboration with practitioners rather than by an academic researcher alone and when its findings are communicated to those who influence policy and practice in a practical, easy-to-read format, these two factors have the most significant potential to influence change in practice and policy (Sullivan, Hunter, & Bonnie, 2013).

The total strength of bibliographic coupling relationships with other nations will be

estimated for each country, as shown in Figure 5. The nation with the most robust overall linkage will be chosen. Out of 57 countries, 27 had at least one state-owned document, and at least five citations were deemed relevant to sports organizations and communication. With 3876 links overall, the United States is the most linked nation. United kingdom with 3543, Australia with 2773, Greece with 2221, Germany with 2169, Spain with 2106, Italy with 1902, Denmark with 1833, and Canada with 1166.

The term "organizational communication" refers to the channels and modes of communication used by entities like businesses, nonprofit organizations, and governmental bodies. This definition encompasses both internal communications that take place within



Source: VOSviewer, 2022

Figure 5 Network visualization by organization

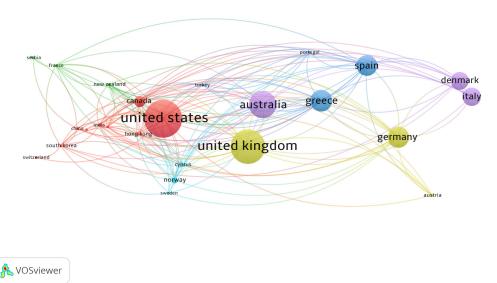


Figure 6 Network visualization by country

an organization and external communications that take place between an organization and its stakeholders. The effectiveness of a company can be significantly impacted by improving organizational communication.

Organizational communication is a vast field that includes all forms of communication that enable organizations, including businesses, governmental bodies, and nonprofits, to run smoothly, develop, interact with stakeholders, and positively impact society. Internal communications like employee training messaging about a company's materials, mission, interpersonal communications between management and employees, and formal communication like emails are all examples of organizational communication. Additionally, it

covers communications directed at the outside world, such as news releases, marketing collateral, and branding.

Any organization's management strategy include effective communication. must Effective communication is a crucial component of effective management, regardless of whether the goal is to inform employees of new policies, plan for a weather disaster, maintain safety throughout the company, or to pay attention to employee attitudes. Organizations need detailed rules and plans for communicating with their constituencies, employees, stakeholders, and the general public if they want to succeed. However, there is one thing that is essential to it all organizational communication. Because of the complexity and importance of organisational

communication, there is a demand for people skilled in optimizing internal and external-facing communications for businesses, nonprofits, government agencies, and similar organizations.

The term "sports communication" includes the sports industry as a whole or allied field (Wei, Zhang, & Yin, 2020)Organizational communication is part of social responsibility (McCullough, Pelcher, Trendafilova, 2020). The information transmission and communication pattern has significantly changed due to technological advancement and digitization (Drago, 2015; Febriani, 2021) Sports clubs today should compete with one another on a variety of levels. Marketing is one of the most well-liked competitive fields. Sports clubs must employ sophisticated and efficient communication techniques in this regard. They frequently use Facebook, Twitter, YouTube, and Instagram to promote a positive image; this is done partly to educate their younger followers about the club's online presence. Today, one of the most prevalent methods of communication is through websites (Siguencia, Herman, Marzano, & Rodak, 2016).

Sports communication is exchanging information using sports as the medium and subject matter. Information content and media technology are crucial to the communication process and a necessary component of all

communication activities, which serve as the communication's content and medium (Peng, 2020). A distinct position is set aside in the framework of sports communication for sports communication, a system of communicational actions logically coordinated by the sports subjects to simultaneously react in presenting sports results at a specific location (Terzić, 2018). Only a tiny portion of the sports communication market comprises ambush marketing. Many businesses cannot be accused of engaging in this behavior. They make links between sports and their characteristics that are legal and widely available (Konczak, 2021).

In professional sports organizations, key employees frequently have to make complex judgments, ranging from routine procedure decisions to sporadic strategic decisions (Ward et al., 2019). Sports organizations can compile a strength profile of the organizations they linked. They will have elements if the relationship does not please them (Lassalle, 2020). At a time when there is a growing reliance on the third sector to provide possibilities for participation in sports, sports organizations have persisted and achieved their goals and objectives for local people in a disadvantaged community. It offers original insights from an anthropological case study focused on the particular sports, socioeconomic, and political milieu (Kenyon, Mason, & Rookwood, 2018).

Every organization needs to adapt to move from the present to the future with different objectives (Gusmarani & Rajiyem, 2022). One of the most responsible parties is the sports organization because it is in their hands to create and implement the sports activity system (Lumintuarso, 2013; Reftari, Suryana, & Setiaman, 2018). Implementing organizational culture and skill development resulting from pupils' communication is also possible. Possibility of inspiring children to excel in all endeavors, especially in sports (athletic posture, self-assurance, graceful movement, gait); genuine desire to instil in students strong character traits (Maksymchuk et al., 2020).

The demand for excellent governance has increased as a sport has become more commercial and professional; hence sports board functions have taken a similar course to those of the corporate sector, where purpose-fitting systems can be introduced (Shilbury & Ferkins, 2015; Takos, Murray, & O'Boyle, 2018).

Since it facilitates an understanding of various difficulties in this area, including those in the disciplines of human resources, organizational behavior, organizational transformations, and economic and ecological efficiency, organizational culture is a major topic in the academic literature on organizational communications (Ivanka, 2020).

Using digital communication is an effective tool to engage club members (Schallhorn et al., 2022). Experience in a sports group can help people in crucial community contexts (Jones, Wegner, Bunds, Edwards, & Bocarro, 2018) sport-for-development (SFD. Social media platforms offer a forum for direct communication between sports organizations and their supporters (Li, Dittmore, Scott, Lo, & Stokowski, 2019). Every component participating in the sports industry must have effective organizational communication. This research helps academics interested in organizational communication in sports and policymakers create more systematic sports development. Each researcher considers the pattern of organizational communication research in sports to identify potential future research opportunities.

CONCLUSION

This bibliometric analysis promotes the investigation and integration of established paths in organizational communication research in higher sports when new trends are developed. Based on a bibliometric assessment of 41 years of organizational communication research in sports, the researchers discovered that the data below offers readers, education professionals, sports practitioners, and researchers a more practical reality. Bibliometric analyses can forecast or offer insight into the current situation

in a given field or topic area. This work provides some helpful information, but it also has some limitations that should be vivid for the benefit of future readers and researchers. The study does have certain restrictions. Other databases, such as PubMed, Google Scholar, or Web of Science (WoS), could incorporate more documents than Scopus, even if the researcher only utilizes one database. Because Scopus publishes papers in high-impact publications, researchers favor it.

The limitations of this study are mainly due to the search strings that have been implemented. If additional keywords are used, the discussion may be slightly different. However, this analysis is only a starting point that can be disseminated by more in-depth investigation, such as a reviewed article or systematic literature review. These findings can develop a theoretical framework, map the field's current state, and quickly identify gaps in scientific research. Furthermore, the findings of this study have been projected to stimulate the development of new ideas as a result of keyword analysis, enabling the more effective dissemination and communication of scientific work related to organizational communication in sports and the formation of new, more relevant concepts and ideas. This research is expected to be a stepping stone for future work in developing research on organizational communication in sports.

This study has demonstrated a significant

particularly remarkable growth but not trajectory of organizational communication research in sports since 2012. Organizational communication research in sports is gaining traction due to the involvement of academics and practitioners, which requires much scrutiny in this area. Organizational communication in sports is an inseparable part of many people's lives, so good communication is needed in every element of the organization. Of course, this will have a positive psychological, emotional, and social impact on athletes, coaches, officials, or external parties. It indirectly attracts and facilitates current and future researchers who want to learn more and are interested in the topic of organizational communication in sports.

REFERENCES

Abdullah, K. H. (2021). Publication trends of leadership excellence: A bibliometric review using VOSviewer. *Advances in Business Research International Journal*, 7(1), 1–11.

Abdullah, K. H., & Sofyan, D. (2022). Middle managers and dilemmas in the organization. *Asian Journal of Research in Business and Management*, 1–15. https://doi.org/10.55057/ajrbm.2022.4.2.4

Abeza, G., O'Reilly, N., & Reid, I. (2016). Relationship marketing and social media in sport. *International Journal of Sport Communication*, 6(2), 120–142. https://doi.org/10.1123/ijsc.6.2.120

Abeza, G., O'Reilly, N., & Seguin, B. (2019). Social media in relationship

- marketing: The perspective of professional sport managers in the MLB, NBA, NFL, and NHL. *Communication and Sport*, 7(1), 80–109. https://doi.org/10.1177/2167479517740343
- Abeza, G., O'Reilly, N., Seguin, B., & Nzindukiyimana, O. (2017). Social edia as a relationship marketing tool in professional sport: A netnogmraphical exploration. *International Journal of Sport Communication*, 10(3), 325–358. https://doi.org/10.1123/ijsc.2017-0041
- Aleixandre-Benavent, R., Aleixandre-Tudó, J. L., Castelló-Cogollos, L., & Aleixandre, J. L. (2017). Trends in scientific research on climate change in agriculture and forestry subject areas (2005–2014). *Journal of Cleaner Production*, 147, 406–418. https://doi.org/10.1016/j.jclepro.2017.01.112
- Alpen, J., Dlis, F., Hernawan, H., Widiastuti, W., Apriani, L., Kurniawan, E., & Sofyan, D. (2022). Journal sport area trends in scientific publication of traditional game learning models in physical education and sports in Indonesia: A bibliometric analysis. *Journal Sport Area*, 7(2), 214–226. https://doi.org/10.25299/sportarea.2022. vol7(2).9072
- Asubiaro, T. (2019). How collaboration type, publication place, funding and author's role affect citations received by publications from Africa: A bibliometric study of LIS research from 1996 to 2015. *Scientometrics*, *120*(3), 1261–1287. https://doi.org/10.1007/s11192-019-03157-1
- Aziz, F. S. A., Harith, S. H., Abdullah, K. H., & Sofyan, D. (2022). Trends and evolution of road user behaviour research: A bibliometric review. *International Journal of Information Science and Management*, 20(3), 69–93.

- Battiston, D., Vidal, J. B. i, & Kirchmaier, T. (2020). Face-to-face communication in organisations. *Organisational Behaviour*, 152–184. https://doi.org/10.4324/9781003022121-5
- Belussia, F., Orsib, L., & Savaresea, M. (2019). Mapping business model research: A document bibliometric analysis. *Scandinavian Journal of Management*, 35(3), 101048. https://doi.org/10.1016/j. scaman.2019.101048
- Boyack, K. W., & Klavans, R. (2010). Cocitation analysis, bibliographic coupling, and direct citation: Which citation approach represents the research front most accurately? *Journal of the American Society for Information Science and Technology*, 61(12), 2389–2404. https://doi.org/10.1002/asi.21419
- Callaert, J., Pellens, M., & Van Looy, B. (2014). Sources of inspiration? Making sense of scientific references in patents. *Scientometrics*, *98*(3), 1617–1629. https://doi.org/10.1007/s11192-013-1073-x
- Cetin, A. (2020). Organizational silence and organizational commitment: A study of Turkish sport managers. *Annals of Applied Sport Science*, 8(2), 1–10. https://doi.org/10.29252/aassjournal.830
- Donthu, N., Kumar, S., Mukherjee, D., Pandey, N., & Lim, W. M. (2021). How to conduct a bibliometric analysis: An overview and guidelines. *Journal of Business Research*, *133*(April), 285–296. https://doi.org/10.1016/j.jbusres.2021.04.070
- Donthu, N., Kumar, S., Pattnaik, D., & Lim, W. M. (2021). A bibliometric retrospection of marketing from the lens of psychology: Insights from psychology & marketing. *Psychology and Marketing*, *38*(5), 834–865. https://doi.org/10.1002/mar.21472

- Drago, E. (2015). The effect of technology on face-to-face communication. *Elon Journal of Undergraduate Research in Communications*, 6(1), 13–19.
- Febriani, N. (2021). Efektivitas strategi komunikasi pemasaran celebrity endorsement di Instagram terhadap generasi Z. *Jurnal Manajemen Komunikasi*, 5(2), 238. https://doi.org/10.24198/jmk. v5i2.27682
- Filo, K., Lock, D., & Karg, A. (2015). Sport and social media research: A review. *Sport Management Review*, 18(2), 166–181. https://doi.org/10.1016/j.smr.2014.11.001
- Gorraiz, J., Gumpenberger, C., & Schlögl, C. (2014). Usage versus citation behaviours in four subject areas. *Scientometrics*, *101*(2), 1077–1095. https://doi.org/10.1007/s11192-014-1271-1
- Gusmarani, K., & Rajiyem, R. (2022). Strategi komunikasi internal perubahan organisasi lembaga pemerintah (Studi kasus masa transisi di LIPI tahun 2019-2020). *Jurnal Manajemen Komunikasi*, *6*(2), 137–163. https://doi.org/10.24198/jmk.v6i2.35518
- Habib, R., & Afzal, M. T. (2019). Sections-based bibliographic coupling for research paper recommendation. *Scientometrics*, 119(2), 643–656. https://doi.org/10.1007/s11192-019-03053-8
- Hambrick, M. E., & Kang, S. J. (2015). it: Exploring how professional sports organizations pinterest as use communications relationshipand marketing tool. Communication 3(4),434-457. https://doi. Sport, org/10.1177/2167479513518044
- Haroon, H., & Malik, H. D. (2018). The impact of organizational communication on organizational performance. *Journal of Research in Social Sciences*, 6(2), 140–152.

- Hutchins, В. Mobile media (2019).building sport: The case for media and mobile communications research agenda. Communication and Sport, 7(4), 466-487. https://doi. org/10.1177/2167479518788833
- Ivanka, G. (2020). Storytelling as a communication tool for establishing an organizational culture focused on changes in sport organization. *International Review*, (1–2), 75–81. https://doi.org/10.5937/intrev2001075g
- Jones, G. J., Wegner, C. E., Bunds, K. S., Edwards, M. B., & Bocarro, J. N. (2018). Examining the environmental characteristics of shared leadership in a sport-for-development organization. *Journal of Sport Management*, 32(2), 82–95. https://doi.org/10.1123/jsm.2017-0274
- Jordan, T., & Smith, D. (2013). Crisis communication in sport management: Research aides crisis response selection. *KAHPERD Journal*, *51*(1), 26–33.
- Kenyon, J. A., Mason, C., & Rookwood, J. (2018). Emerging third-sector sports organizations and navigating uncertainty in an 'era of austerity': a single ethnographic case study from Liverpool. *International Journal of Sport Policy*, 10(1), 25–42. https://doi.org/10.1080/19406940.2018.14 25732
- Keyton, J. (2017).Communication in organizations. Annual Review of Organizational Psychology and 4(March), Organizational Behavior, 501-526. https://doi.org/10.1146/annurevorgpsych-032516-113341
- Konczak, J. (2021). Sports themes in advertising. Journal of Physical Education and Sport, 21(2), 1179–1184. https://doi.org/10.7752/jpes.2021.s2149

- Lassalle, F. (2020). Exit, voice, loyalty to sport organization power. *Strategic Change*, 29(5), 571–588. https://doi.org/10.1002/jsc.2366
- Lee, M. J., & Lee, S. (2014). Subject areas and future research agendas in exhibition research: Exhibitors' perspectives. *Event Management*, *18*(2), 185–194. https://doi.org/10.3727/152599514X13947236947545
- Li, B., Dittmore, S. W., Scott, O. K. M., Lo, W. juo, & Stokowski, S. (2019). Why we follow: Examining motivational differences in following sport organizations on Twitter and Weibo. *Sport Management Review*, 22(3), 335–347. https://doi.org/10.1016/j. smr.2018.04.006
- Lumintuarso, R. (2013). Humas dan pemasaran olahraga di Indonesia. *JUARA: Jurnal IPTEK Olahraga*, *I*(1), 101–115.
- Maksymchuk, B., Gurevych, R., Matviichuk, T., Surovov, O., Stepanchenko, N., Opushko, N., ... Maksymchuk, I. (2020). Training future teachers to organize school sport. *Revista Romaneasca Pentru Educatie Multidimensionala*, 12(4), 310–327. https://doi.org/10.18662/rrem/12.4/347
- Maseda, A., Iturralde, T., Cooper, S., & Aparicio, G. (2022). Mapping women's involvement in family firms: A review based on bibliographic coupling analysis. *International Journal of Management Reviews*, 24(2), 279–305. https://doi.org/10.1111/ijmr.12278
- McCullough, B. P., Pelcher, J., & Trendafilova, S. (2020). An exploratory analysis of the environmental sustainability performance signalling communications among North American sports organizations. *Sustainability (Switzerland)*, *12*(5), 1–17. https://doi.org/10.3390/su12051950
- Mishra, N., Sharma, N., & Kamalanabhan,

- T. J. (2016). Is internal communication important for sport commitment: Survey of Indian cricket players. *Communication and Sport*, *4*(2), 212–239. https://doi.org/10.1177/2167479515572810
- Moher, D., Liberati, A., Tetzlaff, J., & Altman, D. G. (2009). Academia and clinic annals of internal medicine preferred reporting items for systematic reviews and meta-analyses: The PRISMA statement. *Annals of Internal Medicine*, *151*(4), 264–269. https://doi.org/10.7326/0003-4819-151-4-200908180-00135
- Nejati, M., Shafaei, A., Salamzadeh, Y., & Daraei, M. (2011). Corporate social responsibility and universities: A study of top 10 universities 'websites. *African Journal of Business Management*, 5(2), 440–447. https://doi.org/10.5897/AJBM10.554
- Nicholson, M., Kerr, A., & Sherwood, M. (2015). Sport and the media. London: Routledge. https://doi.org/10.4324/9780203509159-27
- Peng, Y. (2020). Reconstructing the way of sports communication in artificial intelligence's field of view. *International Journal of Education and Economics*, *3*(3), 32–34.
- Reftari, D. H., Suryana, A., & Setiaman, A. (2018). Komunikasi pemasaran olahraga renang. *Jurnal Kajian Komunikasi*, 6(2), 247. https://doi.org/10.24198/jkk. v6i2.13221
- Rojas-Lamorena, Á. J., Del Barrio-García, S., & Alcántara-Pilar, J. M. (2022). A review of three decades of academic research on brand equity: A bibliometric approach using co-word analysis and bibliographic coupling. *Journal of Business Research*, 139, 1067–1083. https://doi.org/10.1016/j.

- jbusres.2021.10.025
- Rumbold, J. L., Fletcher, D., & Daniels, K. (2018). Using a mixed method audit to inform organizational stress management interventions in sport. *Psychology of Sport and Exercise*, *35*, 27–38. https://doi.org/10.1016/j.psychsport.2017.10.010
- Schallhorn, C., Nölleke, D., Sinner, P., Seeger, C., Nieland, J. U., Horky, T., & Mehler, K. (2022). Mediatization in times of pandemic: How German grassroots sports clubs employed digital media to communication overcome challenges during COVID-19. Communication 1-22.https://doi. Sport, $\theta(0)$, org/10.1177/21674795221109759
- Shilbury, D., & Ferkins, L. (2015). Exploring the utility of collaborative governance in a national sport organization. *Journal of Sport Management*, 29(4), 380–397. https://doi.org/10.1123/JSM.2014-0139
- Siguencia, L. O., Herman, D., Marzano, G., & Rodak, P. (2016). The role of social media in sports communication management: An analysis of polish top league teams' strategy. *Procedia Computer Science*, 104(December), 73–80. https://doi.org/10.1016/j.procs.2017.01.074
- Sinatra, G. M., & Hofer, B. K. (2016). Public understanding of science: Policy and educational implications. *Policy Insights from the Behavioral and Brain Sciences*, 3(2), 245–253. https://doi.org/10.1177/2372732216656870
- Sofyan, D. (2022). The development of sports management research in Indonesia in the early twenty-first century: A bibliometric analysis. *Indonesian Journal of Sport Management*, 2(1), 28–37. https://doi.org/10.31949/ijsm.v2i1.2248
- Sofyan, D., & Abdullah, K. H. (2022a). College

- sport publication trends over 15 decades: A bibliometric analysis. *Khizanah Al-Hikmah: Jurnal Ilmu Perpustakaan, Informasi, Dan Kearsipan, 10*(1), 69–82. https://doi.org/10.24252/kah.v10i1a7
- Sofyan, D., & Abdullah, K. H. (2022b). Scientific developments in educational innovation research in Indonesia and Malaysia: A scientometric review. *International Journal of Educational Innovation and Research*, *1*(1), 42–51. https://doi.org/10.31949/ijeir. v1i1.2312
- Sofyan, D., Abdullah, K. H., & Hafiar, H. (2022). The philosophy of sport and physical education: Four decade publication trends via scientometric evaluation. *Physical Education Theory and Methodology*, 22(3), 430–442. https://doi.org/10.17309/tmfv.2022.3.20
- Sofyan, D., Saputra, Y. M., Nurihsan, J., & Kusmaedi, N. (2021). Islamic Solidarity Games (ISG): Historical perspective. *Journal Sport Area*, 6(2), 201–208. https://doi.org/10.25299/sportarea.2021. vol6(2).6476
- Sullivan, T. P., Hunter, B. A., & Bonnie, S. (2013). Evidence-based policy and practice: The role of the state in advancing criminal justice research, findings from the Researcher-Practitioner Partnerships Study (RPPS). United States.
- Takos, N., Murray, D., & O'Boyle, I. (2018). Authentic leadership in nonprofit sport organization boards. *Journal of Sport Management*, *32*(2), 109–122. https://doi.org/10.1123/jsm.2017-0282
- Taylor, J. (2018). The impact of the first world war on British universities: Emerging from the shadows. In *The Impact of the First World War on British Universities: Emerging from the Shadows*. https://doi.

- org/10.1057/978-1-137-52433-1
- Terzić, E. (2018). The significance of vertical and horizontal communication for business effectiveness in sports organizations. *Sport Science-Inernational Scientific Journal of Kinesiology*, *September*, 110–118.
- van Eck, N. J., & Waltman, L. (2010). Software survey: VOSviewer, a computer program for bibliometric mapping. *Scientometrics*, 84(2), 523–538. https://doi.org/10.1007/s11192-009-0146-3
- van Eck, N. J., & Waltman, L. (2013). {VOSviewer} manual. Leiden: Univeristeit Leiden.
- van Eck, N. J., & Waltman, L. (2017). Citation-based clustering of publications using CitNetExplorer and VOSviewer. *Scientometrics*, *111*(2), 1053–1070. https://doi.org/10.1007/s11192-017-2300-7
- Vogel, R., & Güttel, W. H. (2013). The dynamic capability view in strategic management: A bibliometric review. *International Journal*

- of Management Reviews, 15(4), 426–446. https://doi.org/10.1111/ijmr.12000
- Ward, P., Windt, J., & Kempton, T. (2019). Business intelligence: How sport scientists can support organization decision making in professional sport. *International Journal of Sports Physiology and Performance*, 14(4), 544–546. https://doi.org/10.1123/ijspp.2018-0903
- Wei, Y., Zhang, H., & Yin, H. (2020). Development of communication and sport in China based on mapping of knowledge information visualization. *SAGE Open*, 10(1), 1–9. https://doi.org/10.1177/2158244019900175
- Winand, M., Belot, M., Merten, S., & Kolyperas, D. (2019). International sport federations' social media communication: A content analysis of FIFA's Twitter account. *International Journal of Sport Communication*, *12*(2), 209–233. https://doi.org/10.1123/ijsc.2018-0173