

Factors affecting individual sports consumption motivation towards sports consumption behavior: A bibliometric analysis

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Copyright © 2024 by author(s). Journal of Infrastructure, Policy and Development is published by EnPress Publisher, LLC. This work is licensed under the Creative Commons Attribution (CC BY) license. https://creativecommons.org/licenses/ by/4.0/ Abstract: Purpose: The purpose of this research is to present a bibliometric analysis of the literature on the ways in which the motivations of individual sports consumers impact the creation of sports infrastructure and the creation of sports-related policy. Design/methodology/approach: Based on the PRISMA approach and information gleaned from the Scopus database, 2605 publications were found to be pertinent to the subject. We conducted a literature analysis of trends and patterns using VOSviewer-based knowledge mapping. Findings: Recent years have seen a proliferation of scholarly publications on the topic of individual sports consumption motivation and its influence on policy formulation and infrastructure development. This suggests that interest in this field is expanding. The list of eminent journals, decision-makers, and organizations involved in this issue demonstrates its global influence. The interdisciplinary nature of the subject is reflected in the study's emphasis on the most widely published authors and key research terminology. Originality/value: This study closes significant knowledge gaps regarding the complex interactions between societal, environmental, and individual factors that affect the motivation to consume sports and how these motivations influence decisions about sports infrastructure and policies. It does this by using bibliometric techniques and the most recent data. The project aims to create a more thorough picture of how public health policy, sports governance, and urban planning are impacted by the motivations behind sports consumption. Policy implications: Policymakers, planners, and sports organizations can use the results to generate more targeted and effective strategies for the development of sports infrastructure and policy formulation. The study highlights how important it is to make well-informed policy decisions and participate in customized involvement in order to improve public welfare and the overall sports consumer experience.

Keywords: sports consumption motivation; sports consumption behavior; bibliometric analysis; VOSviewer

1. Introduction

The growing consumer demand for sports-related products and services has led to a significant expansion and transformation of the sports industry in recent decades. Policymakers, urban planners, public health officials, and sports organizations are among the many stakeholders that will be impacted by this increase. It is imperative for stakeholders to comprehend the factors that influence a person's inclination to engage in sports in order to make well-informed judgments about public health campaigns, policy development, and the construction of sports infrastructure.

Sports-consuming behavior includes various activities, such as going to live events, watching sports online or on television, purchasing team gear, and engaging with sports-related content on social media. These actions have an effect on sports organizations that goes beyond their short-term financial gains. They have an impact on choices concerning the locations of stadiums, the layout of public areas for sports and leisure, and the kinds of laws to enact in order to encourage physical exercise and the well-being of the neighborhood.

Numerous individual, cultural, and environmental factors that influence a person's motivation to consume sports have been the subject of previous studies on the topic of sports consumer behavior (Funk and James, 2001; Trail and James, 2001; Wann, 1995). Research has found that sports consumption behavior is significantly predicted by factors such as social connections, personal interests, team identity, and the perceived benefits of sports participation. Further research is needed to determine how these factors interact and affect sports consumer behavior and motivation, and how these factors in turn affect infrastructure and policy choices.

The primary gap is our inadequate understanding of how different human, social, and environmental factors interact to influence an individual's desire to consume sports experiences and products, and how these desires subsequently influence choices about sports infrastructure and regulations. Previous research has identified numerous potential factors, including individual factors (personal interests, team identification, perceived benefits), social factors (connections with others, sense of community, peer influences), and environmental factors (access, promotions, media exposure), that may influence sports consumption motivation.

The relative impact and significance of each type of factor in influencing policy and infrastructure decisions is still unknown. In other words, what criteria are more important when deciding on stadium locations, the construction of public sports facilities, or the types of sports-related laws to enact? Furthermore, it is doubtful that these elements will operate independently. The area of unmet study need is how these various human, social, and environmental factors interact and effect one another in intricate ways to determine the type and placement of sports infrastructure as well as the content of legislation pertaining to sports.

Thus, there are two gaps: (1) Not being clear on how much weight should be placed on social, environmental, and individual factors when making decisions about sports-related policies and infrastructure. (2) Limited understanding of the complex interactions and cumulative consequences of these various elements on the design of infrastructure and the creation of policies.

Researchers may more accurately estimate and forecast how people's incentives for consuming sports affect public health policy, sports governance, and urban planning by filling in these gaps. With this improved knowledge, lawmakers, urban planners, and sports groups will be able to create more focused and successful plans for building sports facilities, developing public areas, and formulating laws that encourage participation in sports and the well-being of the community.

The purpose of this study is to present a more comprehensive analysis that takes into consideration the relative importance of each type of element as well as their intricately intertwined consequences on policy and infrastructure decisions related to sports. Therefore, this study aims to address the following research inquiries.

Thus, the purpose of this study is to respond to the following research questions. (1) How are high-quality publications on the factors affecting individual sports consumption motivation towards sports consumption behavior distributed between 1965 and 2023?

- (2) What are the most relevant journals and authors on the factors affecting individual sports consumption motivation towards sports consumption behavior?
- (3) Which academic institutions are the most important in the field of the factors affecting individual sports consumption motivation towards sports consumption behavior?
- (4) Which nations are the most important in the field of the factors affecting individual sports consumption motivation towards sports consumption behavior?
- (5) What are the main research keywords related to the factors affecting individual sports consumption motivation towards sports consumption behavior?
- (6) What is the most important subject area involving the factors affecting individual sports consumption motivation towards sports consumption behavior?

An overview of the article is given in this section. The second section examines the previous research that is relevant to the current study. he third section explores the methods that were used in the present study. Sections four and five offer a more thorough analysis of the data and discussion, emphasizing the study's conclusions drawn from the methods used and illuminating the network as well as the major conclusions drawn from the review of published articles. The paper concludes in part six, and the final portion focuses on research limits and directions for future work.

2. Literature review

The related issue of factors affecting individual sports consumption motivation towards sports consumption behavior has been explored using review papers in previous research, as **Table 1** illustrates. Despite this, none of the 2605 publications selected for analysis from the Scopus database offered bibliometric review about the variables influencing a person's motivation for engaging in sports consumption. As a result, this study will contribute to the body of preliminary studies already conducted on this issue. A list of highly cited publications, prestigious universities, and countries involved in the area are also included.

Citation	Article Title	Journal Title	Review Type	TDE	Review Period
Baier-Fuentes et al. (2020)	Emotions and sport management: a bibliometric overview	Frontiers in psychology	Bibliometric Review	153	1989–2019
Shilbury (2011)	A bibliometric analysis of four sport management journals	Sport Management Review	Bibliometric Review	925	1987–2009
Brown (2016)	Association Between Alcohol Sports Sponsorship and Consumption: A Systematic Review	Alcohol and alcoholism	Systematic Review	7	until 2015
Kim et al. (2019)	Meta-Analytic Review of Sport Consumption: Factors Affecting Attendance to Sporting Events	Sport Marketing Quarterly	Meta-Analytic Review	119	-
Hammerschmidt et al. (2023)	Tracing the state of sport management research: a bibliometric analysis	Management Review Quarterly	Bibliometric Review	-	2011–2020
Jiménez-García et al. (2020)	A Bibliometric Analysis of Sports Tourism and Sustainability (2002–2019)	Sustainability	Bibliometri Review	214	2002–2019

Table 1.	. Summary	of past	review	literature.
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Note: TDE = Total documents examined.

Several critical studies have contributed to the understanding of sports consumption motivation. Baier-Fuentes et al. (2020) provided a bibliometric overview of emotions in sport management, indicating a growing interest in the psychological aspects of sports consumption. Shilbury (2011) analyzed sport management journals, highlighting the evolution of research trends over two decades. Kim et al. (2019) conducted a meta-analytic review of factors affecting attendance at sporting events, offering insights into the determinants of sports consumption behavior. Hammerschmidt et al. (2023) traced the state of sport management research, identifying key trends and gaps.

3. Methodology

This bibliometric is based on the PRISMA framework (Moher et al., 2010). Using the PRISMA template involves three steps: identification, screening, and finally determining which studies were included in the review. **Figure 1** below provides more explanations of the specifics of this process.

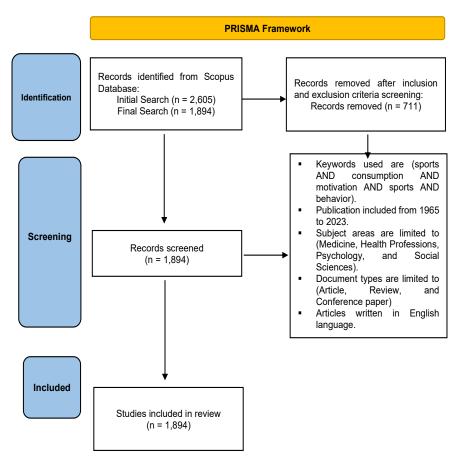


Figure 1. PRISMA framework of this study.

According to the PRISMA framework, shown above, some key points could be clarified: Concerning identification, the initial search in the Scopus database yielded 2607 records, and the final search resulted in 1873 records. Regarding screening, the latter 1873 records were screened, and no records were removed after inclusion and exclusion screening. For eligibility, 1734 records were removed due to various exclusion criteria, such as keywords used are limited to "sports AND consumption

AND motivation AND sports AND behavior", publication years are limited from 1965 to 2021, and subject areas are limited to "Medicine, Health Professions, Psychology, and Social Sciences", document types are limited to "Article, Review, and Conference paper", and articles written in the English language. The final number of studies included in the review is 1873. In summary, the PRISMA framework outlines the systematic process of identifying, screening, and selecting relevant studies for the review of factors affecting individual sports consumption motivation and behavior.

This review seeks to identify the characteristics of the research done on the factors Affecting individual sports consumption motivation towards sports consumption behavior, top journals, most prolific authors, top countries, most trends and keywords, top educational institutions, and the subject area of this research. This review took place on 9 March 2024, Scopus database was selected as the main database for this review. This database was selected because it is one of the most prestigious databases for analyzing scientific research. The rationale behind choosing the Scopus database is that frequently used in bibliometric research because of a number of important benefits, including extensive coverage across fields, material that is quality-controlled, rich metadata for analysis, ease of data export, and frequent updates (Harzing and Alakangas, 2015; Mongeon and Paul-Hus, 2015). Additionally, because VOSviewer is an efficient tool for analyzing and visualizing bibliometric data analysis, it was heavily utilized in this work for data visualization and analysis (Soegoto et al., 2022). The rational of using VOSviewer is that is it a well-liked tool for bibliometric analysis and visualization. In terms of VOSviewer concepts, these include clustering and visualization based on distance, as well as the use of normalizing algorithms. Its uses include co-authorship analysis, co-occurrence analysis of terms, overlay and density visualizations, bibliographic coupling, citation network visualization, and co-citation analysis. In general, VOSviewer provides insights into research landscapes, collaboration networks, and subject evolution while assisting researchers in the analysis and visualization of complicated bibliometric data (Perianes-Rodriguez et al., 2016; van Eck and Waltman, 2010; van Eck and Waltman, 2014).

In this study, we use the PRISMA framework. It is superior to other literature review techniques in a number of ways. That is, it offers an approach that is standardized, which increases the consistency and comparability of reviews between various investigations. It also improves reproducibility by promoting unambiguous reporting of the review process. Moreover, this framework makes sure that every pertinent review component is taken into account and documented. Besides, researchers can reduce bias and raise the general caliber of their reviews by adhering to PRISMA recommendations. Finally, PRISMA provides researchers with a systematic and comprehensive review process by providing a step-by-step guide (Liberati et al., 2009; Moher et al., 2009).

Utilizing the PRISMA statement template, the initial step in the identification phase was to locate database records by utilizing precise keywords, these keywords were "TITLE-ABS-KEY (sports AND consumption AND motivation AND sports AND behavior). The total number of initial searches provided 2607 documents. The screening process included studies published from 1965 to 2023, for instance, "AND PUBYEAR > 1964 AND PUBYEAR < 2024". Additionally, only Medicine, Health

Professions, Psychology, and Social Sciences were covered, for instance "AND (LIMIT-TO (SUBJAREA, "MEDI") OR LIMIT-TO (SUBJAREA, "HEAL") OR LIMIT-TO (SUBJAREA, "PSYC") OR LIMIT TO (SUBJAREA, "SOCI"))". In addition, publications were limited to Article, Review, and Conference paper only, for instance "AND (LIMIT-TO (DOCTYPE "ar") OR LIMIT-TO (DOCTYPE, "re") OR LIMIT-TO (DOCTYPE, "cp"))". Lastly, publications in English were selected in this review, for example "AND (LIMIT-TO (LANGUAGE, "English").

After applying the inclusion and exclusion criteria, as indicated in **Table 2** below. The publications were reduced to 1894 as the final search since 711 were excluded.

Inclusion Criteria	Exclusion Criteria
Factors Affecting Individual Sports Consumption Motivation towards Sports Consumption Behavior	Any other subjects were excluded
1965–2023	No publications before 1965. And 2024 publications were excluded.
Article, Review, and Conference Paper	Thesis, book chapters, books, proceedings papers, nonindexed publications.
Medicine, Health Professions, Psychology, and Social Sciences	Computer Science, Engineering, Arts and Humanities, Agricultural and Biological Sciences, Business, Management and Accounting, Economics, Econometrics and Finance.
English	Any other languages

Table 2. Data screening inclusion and exclusion criteria.

The findings of this bibliometric analysis will be reported based on the PRISMA framework. Thus, the following section will start addressing the research question.

4. Analyses and findings

The goal of this study is to present the factors affecting individual sports consumption motivation towards sports consumption behavior distributed between 1965 and 2023. This section's discussion of the review's findings was predicated on the research questions.

4.1. Research question one

Figure 2 shows the distribution of publications produced from 1965 to 2023. Some key insights from the graph could be illustrated as follows: The number of publications started relatively low in the 1960s and 1970s, around 0–20 articles per year. There is a sharp increase in the number of publications in the late 1980s, peaking around 140 articles in the early 1990s. After the peak in the early 1990s, the number of publications declines rapidly, dropping to around 20–30 articles per year by the early 2000s. From the early 2000s onwards, the number of publications remains relatively stable, fluctuating between 10–20 articles per year. The graph shows a cyclical pattern, with periods of higher publication counts followed by periods of lower publications over the entire period, from the peak in the early 1990s to the relatively low levels in recent years.

This graph provides a visual representation of the evolution of publication output in the field over the past several decades, highlighting the fluctuations and the general declining trend in the number of publications produced.

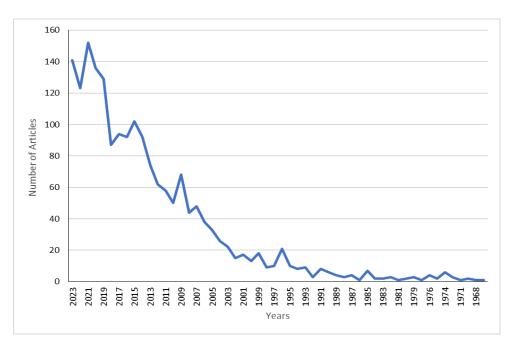


Figure 2. Distribution of publications produced, 1965–2023.

4.2. Research question two

Table 3 displays bibliometric data for various academic journals related to sports and exercise science. The table includes columns for the journal name, total publications (TP), total citations (TC), cite score, mean cited articles, times cited, and the publisher of each journal. Some key details I can provide about the information presented in the table: The journal with the highest total publications (TP) is "Journal of Sports Sciences" with 1087 publications. The journal with the highest total citations (TC) is also "Journal of Sports Sciences" with 6912 citations. The journal with the highest cite score is "International Journal of Environmental Research and Public Health" with a cite score of 3.43. The journal with the highest number of mean cited articles is "International Journal of Environmental Research and Public Health" with 225 mean cited articles. The journal that has been cited the most times is "Medicine & Science in Sports and Exercise" with 8265 times cited. The publisher with the most journals represented in the table is Taylor & Francis, publishing 4 of the listed journals. Overall, this table provides a bibliometric comparison of several academic journals in the sports and exercise science domain, covering metrics related to publication output, citation impact, and publisher information.

Journal	ТР	ТС	Cite Score (2023)	Most Cited Articles (Reference)	Times Cited	Publisher
Journal of Sports Sciences	1087	6912	6.4	International performance level in adult ice hockey: The role of the talent environment in youth	4	Taylor & Francis
International Journal of Environmental Research and Public Health	46.693	338.647	7.3	How Antimicrobial Resistance Is Linked to Climate Change: An Overview of Two Intertwined Global Challenges	225	Multidisciplinary Digital Publishing Institute (MDPI)
Perceptual and Motor Skills	435	1258	2.9	Predicting Teaching Enjoyment from Teachers' Perceived School Climate, Self-Efficacy, and Psychological Wellbeing at Work: EFL Teachers	22	SAGE
Research Quarterly for Exercise and Sport	362	1544	4.3	Long-Term Time-Course of Strength Adaptation to Minimal Dose Resistance Training Through Retrospective Longitudinal Growth Modeling	8	Taylor & Francis
Psychology of Sport and Exercise	657	4173	6.4	Extraordinary claims in the literature on high-intensity interval training (HIIT): IV. Is HIIT associated with higher long-term exercise adherence?	12	Elsevier
Journal of Sport and Exercise Psychology	173	612	3.5	Affective Responses to Increasing- and Decreasing-Intensity Resistance Training Protocols	6	Human Kinetics Publishers Inc.
Scandinavian Journal of Medicine and Science in Sports	819	6418	7.8	IL-6 signaling in acute exercise and chronic training: Potential consequences for health and athletic performance	11	Wiley-Blackwell
Frontiers in Psychology	22.441	119.280	5.3	Reflection on whether Chat GPT should be banned by academia from the perspective of education and teaching	40	Frontiers Media SA
Medicine and Science in Sports and Exercise	1.072	8.265	7.7	Effect of Pregnancy in 42 Elite to World-Class Runners on Training and Performance Outcomes	11	Wolters Kluwer Health
BMC Public Health	9.077	58.647	6.5	Muscle quality index is associated with trouble sleeping: a cross- sectional population-based study	28	Springer Nature

Table 3. A list of top journals relevant to factors affecting individual sports consumption motivation.

Note: TP = Total Publications, TC = Total Citation.

Author	Year of First Publication	T	P H-Inde	x TC	Current Affiliation	Country
Ntoumanis, Nikos	1998	29	5 75	19,961	Syddansk Universitet	Denmark
Duda, Joan L.	1996	25	8 67	16,496	University of Birmingham	United Kingdom
Hagger, Martin S.	1997	42	8 72	22,895	UC Merced	United States
Chan, Derwin King Chung	2008	95	27	1958	The Education University of Hong Kong	China
Weiss, Maureen R.	1995	84	40	3539	University of Minnesota Twin Cities	United States
Barkoukis, Vassilis	1998	12	2 31	3394	Aristotle University of Thessaloniki	Greece
Hing, Nerilee	1995	19	6 40	4984	CQUniversity Australia	Australia
Roberts, Glyn C.	1995	83	35	3781	Norges Idrettshøgskole	Norway
Gucciardi, Daniel F.	2008	15	5 40	4239	Curtin University	Australia
Kavussanu, Maria	1996	12	2 40	4611	University of Birmingham	United Kingdom

 Table 4. Summary of the top main prolific authors.

Note: TP = Total Publications, TC = Total Citation.

Table 4 exhibits a summary of the top main prolific authors in the field, including their year of first publication, total publications (TP), h-index, total citations (TC), current affiliation, and country. The author with the highest total publications is Duda, Joan L. with 258 publications, followed by Hagger, Martin S. with 428 publications. The author with the highest h-index is Ntoumanis, Nikos with a value of 75, indicating significant impact and influence in the field. The author with the highest total citations is Ntoumanis, Nikos with 19,961 citations, followed by Duda, Joan L. with 16,496 citations. The authors are affiliated with various institutions, including universities in the United States, the United Kingdom, Denmark, China, Greece, Australia, and Norway. The countries represented by the top authors are diverse, with the majority coming from the United States, the United Kingdom, and Australia. The publication years for the first publication of these authors range from 1995 to 2008, suggesting a span of active research over the past few decades. Overall, this table provides a snapshot of the leading scholars in the field, highlighting their research productivity, impact, and institutional and geographical diversity.

4.3. Research question three

Table 5 provides a summary of the top 10 educational institutions in terms of total publications (TP) in the field. The institution with the highest total publications is the University of Birmingham with 48 publications. The other top institutions include Loughborough University (39 publications), Norges Idrettshøgskole (31 publications), Curtin University (28 publications), and The University of Queensland (27 publications). The top institutions are located across different countries, with the majority being in the United Kingdom (4 institutions), followed by Australia (3 institutions), Norway (1 institution), Belgium (2 institutions), Greece (1 institution), and Canada (1 institution). The diversity of the top institutions suggests that research on the topic is being conducted globally, with significant contributions from both European and non-European countries. The range of total publications for the top 10

Educational Institutions	ТР	Country
University of Birmingham	48	United Kingdom
Loughborough University	39	United Kingdom
Norges Idrettshøgskole	31	Norway
Curtin University	28	Australia
The University of Queensland	27	Australia
KU Leuven	23	Belgium
Universiteit Gent	22	Belgium
Aristotle University of Thessaloniki	20	Greece
The Faculty of Health Sciences	20	Australia
University of Toronto	19	Canada

 Table 5. Summary of the top 10 educational institutions.

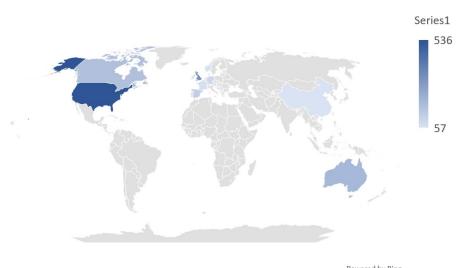
Note: TP = Total Publications.

institutions varies from 19 (University of Toronto) to 48 (University of Birmingham), indicating a fairly widespread in the research output of these leading institutions.

Overall, this table provides a snapshot of the most prolific educational institutions in the field, highlighting the global nature of the research and the potential influence and impact of these institutions on the overall understanding of the topic.

4.4. Research question four

According to **Figure 3**, notably, the United States and Australia are colored in dark blue, signifying their prominence in the context of factors affecting individual sports consumption motivation. Other countries remain uncolored, suggesting they are not as significant in this specific field. The U.S. stands out as a major player in sports consumption motivation. Its prominence is represented by a numerical value of 536 (labeled as "Series1") on the scale bar. Australia also holds importance in this domain. It is denoted by a value of 57 on the same scale. While the map does not explicitly label other nations, we can assume that their influence in this area is comparatively lower. The focus remains on the U.S. and Australia, which play a pivotal role in shaping individual sports consumption behavior.



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Figure 3. The map chart for most significant countries.

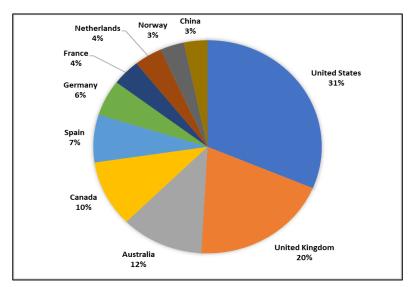


Figure 4. List of the most major countries, 1965–2023.

The pie chart, shown in **Figure 4**, provides a clear visualization of the relative sizes of the major countries represented in the data from 1965 to 2023. This chart represents the list of the most major countries from 1965 to 2023. The chart shows the percentage share of each country in the overall data. The key insights from the chart are: the United States has the highest percentage share at 31%. The United Kingdom has the second-highest percentage share at 20%. Australia has the third highest percentage share at 12%. Norway and China have the ninth-highest percentage share at 3%.

Figure 5 shows a network visualization or diagram that depicts relationships and connections between various countries. Here are the key observations: the United States is the central and largest node in the network, indicating it has the most extensive connections to other countries. The United Kingdom and Australia are also prominent nodes, suggesting they have strong ties to multiple countries in the network. Other major nodes include Canada, Brazil, Germany, and China, which have significant connections to other nations. Smaller nodes represent countries like Spain, Italy, Poland, Lithuania, Iran, Malaysia, and others, which have fewer direct connections in this visualization. The lines or edges between the nodes represent the relationships or interactions between the countries, with thicker/stronger lines indicating more substantial connections. The arrangement and positioning of the nodes suggest certain regional/geographic groupings, such as European countries clustered together, as well as some Asian and Middle Eastern countries forming distinct subgroups. Overall, this network diagram appears to be visualizing the global interconnectedness and relationships between various countries, with the United States playing a central role in this network.

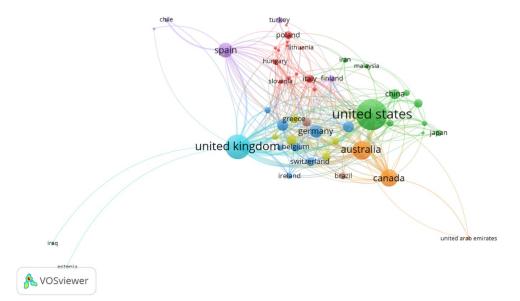


Figure 5. A map based on the co-authorship relationships with different nations. Note: The relationship between co-authorship with other countries is represented by the line that connects each nation. The number of publications is indicated by the circle's size.

4.5. Research question five

Figure 6 is a conceptual word cloud or network diagram that focuses on the topic of motivation, particularly as it relates to sports, physical activity, and health

behaviors. In this context, the central and largest term is "motivation", indicating this is the core concept being explored. Surrounding the main term are various related concepts and factors that influence or are associated with motivation, including Sportsrelated terms like "sports", "athlete", "athletic injuries", "golf", "soccer", "youth sport", etc. Physical activity and exercise-related terms like "exercise", "physical activity", "kinesiology", "body weight", "walking", etc. Health behavior and psychology-related terms like "health behavior", "alcohol drinking", "gambling", "emotions", "self-concept", "psychology", etc. Goal-oriented terms like "goals", "achievement", "goal theory", "motivation", etc. The size and placement of the terms suggest their relative importance or strength of connection to the central concept of motivation. Larger terms like "sports", "exercise", "health behavior", and "psychological aspect" are likely the most significant factors.

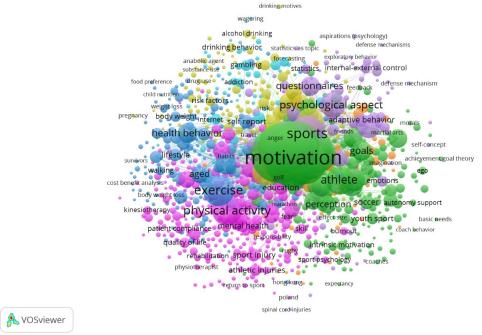


Figure 6. An illustrated map based on the correlation between co-occurrence and all keywords.

Note: The co-occurrence of each keyword with other keywords is indicated by the line connecting them. The circle's size indicates the number of occurrences.

There are also more specific terms related to sports psychology, coaching, injury rehabilitation, and health outcomes, indicating the multifaceted nature of motivation in the context of sports, physical activity, and health. The overall visualization provides a holistic, conceptual view of the various elements that contribute to and influence motivation, particularly from the perspective of sports, physical activity, and health behaviors.

4.6. Research question six

Figure 7 displays the number of publications produced by different subject areas. Here are the key details: Medicine has the highest number of publications at 1145, which corresponds to 36% of the total. Health Professions is the second highest with 626 publications, accounting for 19% of the total. Psychology has the third highest with 564 publications, making up 18% of the total. Social Sciences has 393 publications, which is 12% of the total. Environmental Science has 131 publications, or 4% of the total. Neuroscience has 101 publications, which is 3% of the total. Business, Management and Accounting has 89 publications, accounting for 3% of the total. Nursing has 67 publications, which is 2% of the total. Arts and Humanities has 65 publications, making up 2% of the total. Biochemistry, Genetics and Molecular Biology has 46 publications, or 1% of the total. The chart provides a clear visualization of the relative distribution of publications across these different subject areas, with the medical and health-related fields being the most dominant.

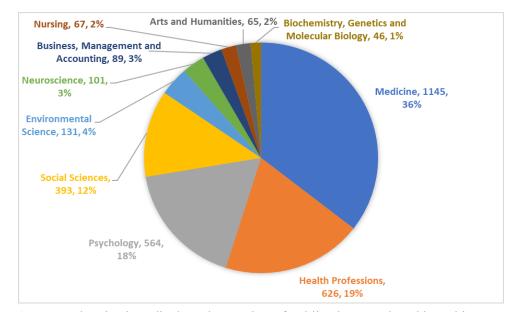


Figure 7. The pie chart displays the number of publications produced by subject area.

5. Discussion

The sports sector has undergone substantial growth in recent decades due to rising consumer demand for sports-related goods and services. Understanding the determinants that impact an individual's motivation to consume sports is important for sports organizations, marketers, and policymakers to attract and retain sports fans. Previous studies have explored individual, societal, and environmental factors affecting sports consumption motivation and behavior, but more exploration is needed on their relative importance and interplay. This study analyzes the multiple factors determining individual sports consumption motivation and their impact on sports consumption behavior. Understanding these factors can help build targeted strategies to attract and retain sports fans, contributing to the growth and sustainability of the sports sector. The study focuses on individual sports consumption behaviors like watching broadcasts, online interactions, and solitary leisure sports. Insights into motivations for individual sports consumption are valuable for marketers, sports organizations, and public health promotion of active lifestyles. The research aims to enhance theoretical knowledge and practical applications in sports administration, marketing, and public health. Research questions address publication trends, leading journals/authors/institutions/countries, main keywords, and subject areas related to

factors affecting individual sports consumption motivation.

The study follows the PRISMA framework involving identification, screening, and inclusion of relevant studies. The initial Scopus search for related keywords yielded 2607 records, which was narrowed to 1,894 final records after screening by publication year, subject area, document type, and language. Data analysis and visualization was done using the VOSviewer bibliometric tool.

Publication trends (RQ1): Very few publications in the 1960s–70s, sharp rise peaking in early 1990s, then declined to relatively stable low levels in 2000s onwards. Leading journals (RQ2): "Journal of Sports Sciences" had the highest number of publications and citations. Other leading journals include "Medicine & Science in Sports & Exercise", "Psychology of Sport and Exercise" etc. Top authors (RQ2): Joan L. Duda had the highest publications, Nikos Ntoumanis had the highest h-index and citations. Other prolific authors from the US, UK, Australia, etc. Top institutions (RQ3): the University of Birmingham, Loughborough University, and Norges Idrettshøgskole were top publishers, mainly from the UK, Australia, and Norway. Leading countries (RQ4): The United States dominated followed by the United Kingdom and Australia based on publications, citations, and collaborations. Main keywords (RQ5): Central concepts were "motivation", relating to sports, physical activity, health behaviors, psychological aspects like goals, self-concept, etc. Subject areas (RQ6): Medicine had the highest number of publications, followed by Health Professions, Psychology, Social Sciences, and other related fields.

To further connect the analysis results with practical implications, the bibliometric analysis of the variables influencing a person's motivation to consume sports provides insightful information for the creation of sports-related infrastructure and legislation. Through an understanding of the primary drivers of sports consumption, such as societal connections, personal interests, and perceived health benefits, policymakers can develop more focused and successful initiatives to encourage sports participation. This entails fostering community-based sports initiatives that capitalize on social incentives for participation, creating public health campaigns that highlight the health benefits of sports consumption, and promoting youth sports participation through deeper integration of sports programs into educational curricula.

The analysis's wide range of topic areas emphasizes the necessity of an interdisciplinary approach to sports policy, with cross-departmental task teams established to create thorough sports policies. The allocation of research funds can be guided by data-driven decision making, and international cooperation can be started to exchange best practices and modify effective policies for various cultural situations.

Multipurpose sports facilities that serve a range of age groups and interests, technology integration, community-centric design, an emphasis on health and wellbeing, accessibility and inclusivity, and environmental sustainability are some of the consequences of infrastructure development. By putting these suggestions into practice, a more interesting, diverse, and long-lasting sports ecosystem that successfully caters to the various reasons why people watch sports can be established.

The paper provides a comprehensive bibliometric analysis identifying key publication trends, leading contributors, main concepts, and subject areas related to understanding factors driving individual sports consumption motivation and behavior. The findings highlight the interdisciplinary nature of this research domain spanning sports science, medicine, psychology, and other fields.

6. Conclusion

Through a thorough bibliometric analysis, the purpose of this paper was to investigate the elements influencing the motivation of individual sports consumption. The study, which makes use of a dataset from the Scopus database and applies the PRISMA approach, emphasizes the growing interest in the topic among academics, particularly with regard to the ways in which different individual, societal, and environmental factors influence sports consumption behaviors. The results highlight the noteworthy surge in study on this subject, indicating a wider scholarly and practical interest. Important factors that influenced the reasons behind sports consumption were found to include social connections, personal interests, and media involvement. This research has broader implications for the domains of infrastructure planning, policy making, and community development than just the theoretical domain. This study offers important insights to guide decision-making processes across different domains by synthesizing the available literature and offering a thorough understanding of the interplay between individual, societal, and environmental elements that drive sports consumption motivation.

The results underline how crucial it is to plan public areas and sports facilities in a way that accommodates a wide range of personal preferences, encourages social interaction, and works with the environment to increase accessibility and involvement. Urban planners and legislators may actively promote sports participation in their communities by implementing these ideas, which will ultimately lead to healthier and more socially cohesive societies. The study emphasizes the importance of an integrated, multidisciplinary approach to policy creation that takes into account the interdependence of social, environmental, and individual elements. Through interdisciplinary collaboration with public health specialists, urban planners, sociologists, and community leaders, policymakers can formulate all-encompassing approaches that tackle the many factors influencing the motivation for sports consumption. This may result in tailored policies that encourage active lifestyles and community involvement, inclusive sports governance, and more successful public health efforts. The results of this study also have important ramifications for community development programs. Communities and sports organizations can create programs and outreach initiatives that promote social cohesion, celebrate local sports cultures, and encourage people to get active by understanding the social factors that influence sports consumption motivation, such as relationships with others, a sense of community, and peer influences. These initiatives may help create communities that are more robust, resilient, and engaged.

This work provides a synthesis of the body of evidence, which not only improves our understanding of sports consumption behavior but also creates new opportunities for future research. Subsequent research endeavors may aim to delve more profoundly into the precise mechanisms and causal connections among individual, societal, and environmental factors, in addition to investigating plausible moderating or mediating variables. Furthermore, scholars may examine the influence of nascent technology, including virtual and augmented reality, on the incentives and practices around sports consumption. This work may lead to significant change and promote a more diverse, long-lasting, and active sports culture by influencing future research orientations and supporting evidence-based decision-making procedures. By working together and utilizing these insights, stakeholders from all sectors may jointly create policies and settings that support mental and physical health, social cohesion, and a common understanding of the transformative potential of sports.

7. Implications

The implications of this research are manifold. Firstly, for sports organizations and marketers, understanding these diverse motivational factors is crucial in crafting strategies that engage and retain sports consumers more effectively. The insights from this study can help in designing targeted marketing campaigns and improving consumer engagement tactics. Furthermore, the planning and construction of sports infrastructure can benefit from these insights. For example, if the desire for health and fitness is a major factor in sports consumption, then building wellness-focused amenities like state-of-the-art gyms, running lanes, and community health centers inside sports venues ought to receive more attention. Secondly, policymakers can use this knowledge to support initiatives that promote sports participation, considering the identified factors that enhance motivation. The approach used in this study, especially the bibliometric analysis, can be used to assess policy pertaining to sports. Through the examination of keywords like "impact assessment," "sports policy outcomes," and "sports policy evaluation," policymakers can acquire valuable information regarding the efficacy of their approaches. Increased rates of sports participation, better public health outcomes, the financial advantages of sports tourism, and the promotion of social cohesion through community sports initiatives could all be considered success metrics.

Furthermore, the creation of policies should be centered on the elements influencing each person's motivation to consume sports. Policies that support goals like "self-concept" or "achievement" may concentrate on school sports programs, amateur athlete support, or grassroots sports development. Given that "social" aspects influence motivation, policy can encourage team sports or other community-based activities. Similar to the publication patterns examined in this study, the evolution of these policies over time can offer important insights into how social demands and values are changing.

There are more things at play when it comes to sports infrastructure construction than just consumer motivation. One can employ a comparable bibliometric methodology to examine literature pertaining to "sports facilities," "stadium construction," and "sports venue design." Important elements include financial concerns, difficulties in urban planning, effects on the environment, and the function of public-private partnerships may become clear from this examination. Infrastructure projects' efficacy could be assessed using metrics such as urban regeneration, economic return on investment, and usage rates.

Moreover, big athletic events like the Olympics or World Cup frequently serve as catalysts for the construction of expansive infrastructure. Governments, sports leagues, and private investors are among the parties involved in these projects. A network analysis of these groups could reveal best practices for cooperation and sustainable development. A major area of emphasis in this research should also be the environment, which is becoming more and more important in contemporary building.

The United States, the UK, and Australia are the most influential nations in sports science due to their strong research infrastructure, sports culture, interdisciplinary approach, and language advantage. Keyword changes in the field include a shift towards health and well-being, psychological aspects, youth focus, and the impact of technology. These developments highlight the importance of understanding the psychological underpinnings of sports consumption behavior, the influence of youth sports, and the growing importance of understanding sports consumption on digital platforms.

The global spread of the contributing researchers and institutions also suggests the need for international collaborations to foster advancements in sports consumption research and practices. It is equally crucial to comprehend sports infrastructure and policy from an international perspective. Innovative solutions and common issues can be brought to light by comparing sports policies in many nations and utilizing citation analysis to find key policy papers. Comparably, charting worldwide trends in sports infrastructure can show how various locations strike a compromise between things like community requirements, environmental sustainability, and economic development.

We can essentially create a more thorough picture of the sports ecosystem by applying the techniques utilized in this consumer motivation study—bibliometric analysis, trend mapping, and network visualization—to the domains of sports infrastructure and policy. This comprehensive strategy, which combines consumer psychology with physical infrastructure and governance, can direct global sports development initiatives toward greater efficacy, sustainability, and community engagement.

7.1. Practical implications for sports infrastructure and policy

The bibliometric analysis of sports-related laws and infrastructure has significant practical implications for policymakers and urban planners. Understanding the factors that motivate people to participate in sports can help allocate funds for sports facilities and design public areas that encourage physical exercise. Personal interests, team identification, and perceived rewards are important factors in determining sports consumption motivation. These elements can offer insightful information for developing policies and designing infrastructure. Personal interests include youth sports, soccer, and golf, which should be prioritized for creating a variety of sporting facilities that cater to different tastes. Team identification is also crucial, as it suggests a sense of belonging and team identification. To capitalize on this aspect, legislators should focus on building community-focused sports facilities that encourage fan community building and social connections. Initiatives like fan zones, community outreach programs, and chances for fans to interact with their favorite clubs could fall under this category. Perceived advantages, such as those in the "Medicine" and "Health Professions" fields, suggest that sports consumption is mostly driven by perceived health advantages. Policymakers could work with medical professionals and public health organizations to incorporate sports into public health programs, creating

guidelines suggesting physical exercise for specific medical illnesses, offering financial incentives to sports facilities, or starting public awareness campaigns emphasizing the benefits of sports involvement for both physical and mental health.

Social aspects such as peer influences, sense of community, and connections with others play a significant role in shaping sports consumption patterns. Building community-focused sports facilities that encourage social interactions and a sense of shared identity among participants should be a top priority for policymakers. Urban planners can also include public spaces and gathering places in sports facilities to promote social interactions and fortify community ties. Peer influence is important, as it can be constructively utilized by policymakers to encourage sports participation through community-led projects or school-based programs. This can harness the power of social influence and promote an active participation culture by providing opportunities for peers to play sports together. Interaction with personal preferences and environmental conditions is also important. Strong social ties and a welcoming community can enhance a person's interest in a sport and improve involvement. However, a lack of access to sports facilities or lack of involvement from peers can diminish motivation.

Policymakers and urban planners should use a comprehensive approach that takes into account social considerations, personal preferences, and environmental circumstances simultaneously. This could involve conducting community assessments, getting feedback from various stakeholders, and creating detailed plans that take into account the specific requirements and preferences of every community. By understanding and resolving the intricate interactions between human preferences, societal influences, and environmental conditions, they can establish an environment that actively encourages sports consumption and builds healthier, more socially connected, and active communities. Environmental factors, such as media exposure, facility accessibility, and promotional initiatives, can also impact sports consumption. Building accessible and well-maintained sports infrastructure should be a top priority, and utilizing media channels and funding advertising efforts can increase public knowledge, spark enthusiasm, and promote sports participation. Urban planners and policymakers can build focused strategies for sports infrastructure development and policy formulation by considering these unique factors. For instance, team identity could influence fan engagement programs, the layout and amenities of sports facilities could be influenced by personal interests, and the incorporation of sports into public health initiatives could be determined by perceived advantages.

The study suggests that policymakers, urban planners, and sports organizations should adopt a comprehensive, multidisciplinary approach to address the factors influencing sports consumption. This includes a focus on accessibility and inclusion, addressing potential obstacles related to gender, age, financial status, or cultural backgrounds. Additionally, sports should be integrated into public health campaigns and initiatives, such as fitness memberships and corporate wellness programs. Encouraging social connections and community engagement through policies and programs that support community participation in sports can promote a sense of camaraderie. Urban planners should conduct thorough needs assessments to understand the unique preferences, passions, and reasons for participating in sports, and use this data to guide the planning and construction of public areas and sports facilities. Creating sporting facilities with multiple uses and purposes is crucial, catering to different age groups and individual preferences. Environmental sustainability, accessibility, and safety are top priorities, and components like ramps, well-lit walkways, and eco-friendly design should be prioritized. Technology and media exposure can also be leveraged to enhance the design of sports infrastructure. Athletics should create focused marketing and advertising strategies that address specific interests, social motives, and community dynamics. They should collaborate with local communities, educational institutions, and community organizations to create outreach programs and projects that encourage involvement in sports. Influencer marketing and social media can be used to increase the impact and reach of messaging and content about sports, while providing inclusive and personalized experiences that cater to various sports consumer market segments.

By implementing these recommendations, policymakers, urban planners, and sports organizations can actively promote sports consumption and cultivate more socially connected, active, and healthier communities. These tactics aim to address the interrelated personal, social, and environmental elements that influence sports consumption, leading to higher levels of involvement, better public health outcomes, and a vibrant sports culture.

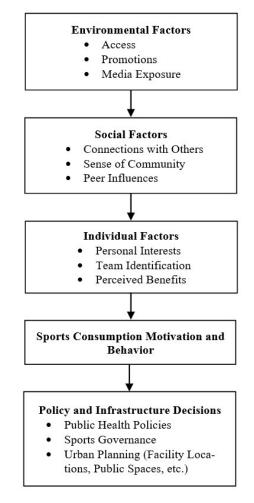
Finally, the fact that the network's fundamental keyword is "motivation" (**Figure 6**) suggests that policy must also address psychological motivators in addition to infrastructure. This could take the form of community initiatives that use sports as a vehicle for social cohesion and personal growth, school collaborations that cultivate an early love of physical activity, or public education efforts that emphasize the mental health advantages of sports.

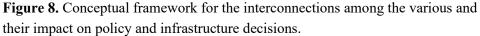
To sum up, the knowledge gained from this bibliometric research should help urban planners and policymakers develop integrated, psychologically informed, and health-focused plans for sports infrastructure and policy. Through the alignment of physical spaces with the many motivations of individuals, it is possible to establish surroundings that not only enable but also actively promote sports consumption, ultimately leading to the development of healthier, more socially connected, and active communities.

7.2. Conceptual framework: Understanding the interplay of factors influencing sports consumption motivation and policy/infrastructure decisions

The results of this bibliometric analysis, along with the discussion of the practical implications, can be used to create a conceptual framework that shows how different individual, social, and environmental factors are related to one another and how their influence affects infrastructure and policy decisions pertaining to sports consumption. The conceptual framework, represented in **Figure 8**, offers a hierarchical model that shows how many elements interact and impact the motivation behind sports consumption as well as the decisions made about infrastructure and policy that follow. Top of the hierarchy are external elements, like media exposure, promotional activities, and facility access. These elements establish the general framework and circumstances that either help or impede the consumption of sports. The social aspects

represented at the next level of the hierarchy include peer influences, ties to others, and a sense of community. Environmental variables impact these characteristics, which in turn mold individual drives and behaviors. The foundation of the model is made up of individual elements including perceived rewards, personal interests, and team identity. An individual's motivation and behavior regarding sports consumption are directly influenced by these characteristics, which are molded by both environmental and social influences. Public health policies, sports governance, and urban planning (e.g., facility locations, public spaces, etc.) are among the policy and infrastructure decisions that are ultimately impacted by an individual's sports consumption motivation and behavior. The conceptual framework emphasizes the hierarchical and interconnected nature of the different factors, highlighting the need for policy and infrastructure decisions to take into account the intricate interactions between environmental, social, and individual factors that shape the motivation and behavior of sports consumption as a whole.





Policymakers, urban planners, and sports organizations can create more focused and efficient strategies that address the various needs and preferences of various communities by comprehending and utilizing this conceptual framework. This will ultimately encourage more people to participate in sports and promote societies that are healthier, more socially connected, and more active.

This section gives a conceptual framework that illustrates the relationships and hierarchy of influence between the many social, environmental, and individual aspects, as well as how these factors affect decisions on infrastructure and policy pertaining to sports consumption. A hierarchical model is used to present the framework, with social elements, individual variables, policy and infrastructure decisions, sports consumption motive and behavior, and environmental considerations at the top. The conceptual framework emphasizes the need for an all-encompassing approach when creating regulations and planning infrastructure related to sports consumption by providing a visual help to comprehend the intricate interplay and interdependencies among various aspects. Through an understanding of the distinct components and how they work together, policymakers and urban planners may create more focused and efficient plans that meet the varied requirements and preferences of local populations.

7.3. Limitations and future research directions

Despite its contributions, this study has several limitations that future research should address. The bibliometric analysis, while comprehensive, is limited to articles indexed in the Scopus database and may not capture all relevant literature on the topic. As a result, not all scholarly journals are covered. As a result, our analysis might not have included journals from other databases, such as Web of Science, IEEE Xplore Digital Library, or Springer Link. However, it is unlikely that these restrictions will influence the trends and patterns found in this study. Moreover, while this study provides a broad overview of influential factors, it does not delve deeply into the causal relationships between these factors and sports consumption behavior. Future research could employ qualitative and quantitative methods to better understand these dynamics and to test the relative impact of different motivational factors across various demographic groups. This would help in understanding how individual preferences and societal influences converge to shape behavior in specific contexts.

Furthermore, database restrictions, language bias, time constraints, keyword restrictions, a lack of qualitative analysis, and a limited understanding of causality are some of the study's limitations. Prospective avenues for investigation encompass multidatabase analysis, mixed-approaches methodology, cross-cultural investigations, longitudinal analyses, technological implications, multidisciplinary amalgamation, policy assessment, and an emphasis on emerging markets.

Conflict of interest: The authors declare no conflict of interest.

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