Bibliometric Analysis of Sports Marketing-Related Articles on the Web of Science Database

Ahmet Yavuz KARAFİL[1]   Mehmet Haşim AKGÜL[2]

Abstract

The objective of the study was to perform a bibliometric analysis of all sports marketing-related publications in the Web of Science Database. This study is descriptive, it presents the current situation without any changes. Also, since it studies the publications within a certain period, this study is a cross-sectional study, one of the descriptive research models. A total of 176 publications on the Web of Science Database between 1993 and 2020 constitute the universe of the study. Descriptive statistical methods were used in the data analysis. Network maps and density maps were created using Voswiever. The evaluation criteria were determined according to the literature by the researcher to provide different information from the literature. These criteria consist of elements such as the number of articles, the number of citations by country, the methodological model used in studies, and the criteria specified in the SCI-SSCI indexes and different indexes of the web of science database. It has been concluded that the sports marketing-related publications in the Web of Science Database mostly used qualitative research model, the articles were mostly published on SSCI and SCI indexes, and most of the publications in these journals were published in Q^2.

Keywords: Bibliometric Analysis, Sports Marketing, Web of Science

Web of Science Veri Tabanında Yer Alan Spor Pazarlaması Temalı Makalelerin Bibliometrik Analizi

Öz

Bu araştırmanın amacı, web of science veri tabanında yer alan spor pazarlaması temalı makalelerin bibliometrik analizinin yapılmasıdır. Araştırma mevcut durumu herhangi bir değişiklik yapmadan belirttiği için betimsel araştırma modelindedir. Ayrıca belirli bir zaman aralığı içerisinde yayınlanmış makalelerin ele alındığı bu çalışma betimsel araştırma modellerinden kesitsel araştırma özelliği taşımaktadır. Araştırma kapsamında, 1993-2020 zaman aralığında web of science veri tabanında toplam 176 makale araştırmanın evrenini oluşturmuştur. Verilerin analizinde tanımlayıcı istatistik yöntemleri kullanılmış ve Vos wiever kullanılarak ilişki haritaları ve yoğunluk haritaları oluşturulmuştur. Araştırmada değerlendirme yapılması sağlanacak kriterler literatüre göre ve literatürden farklı bilgiler sağlaması açısından araştırmacı tarafından oluşturulmuştur. Bu kriterler, makale sayısı, ülkelere göre atıf sayısı, araştırmalarda kullanılan yöntemsel model, web of science veri tabanındaki farklı indeksler, sci-ssci indekslerinde belirtilen nitelik ölçütleri gibi unsurlardan oluşmaktadır. Sonuç olarak; araştırma kapsamında web of science veri tabanında değerlendirilen spor pazarlaması temalı makalelerin yöntemsel model olarak genellikle nitel araştırmaları benimsedikleri, yayınlanan makalelerin daha çok ssci ve sci indekslerde yoğunlaştıkları ve bu dergilerdeki yayınların çoğu Q^2 niteliğinde yayımlanan makaleler olduğu sonucuna ulaşılmıştır.

Anahtar Kelimeler: Bibliyometrik Analiz, Spor Pazarlaması, Web of Science.

[1]Sorumlu Yazar: Burdur Mehmet Akif Ersoy University, Burdur-Turkey. aykarafil@mehmetakif.edu.tr , 0000-0002-1910-4673
[2]Burdur Mehmet Akif Ersoy University, Burdur-Turkey. mhakgul@mehmetakif.edu.tr , 0000-0002-4665-9615

INTRODUCTION

The sports industry has a structure that includes the selection and preference process, where sports products and services meet with their participants. Identifying the consumers' changing and growing needs over time has lead to the emergence of new products and services. These new products and services meet target consumers through sports marketing. Sports marketing is the advertising of sportive and non-sportive products through sports and is a particular marketing area that operates from pricing to sales of these products (Shank and Lyberger, 2014). Sports marketing can be considered as a process that gives sports customers, fans, sports business managers, participants, and other associated people, bunches, and organizations the chance to achieve their goals simultaneously (Da Silva and LasCasas, 2017). Sports marketing is a method that branded products and services use to win customers who have a high level of brand loyalty (Wakefield, 2007). Sports marketing have to apply different methods in order to acquire new customers and meet the increasing and changing needs of existing customers. The existence of these different methods can be identified through academic studies and research trends in the field of sports marketing. Producing new approaches in the field of sports marketing, which is a separate field of study in sports science, is possible by knowing the study field. In this respect, the bibliometric method can be considered as a method that will help researchers to recognize the academic field better and identifying its application trends. The bibliometric method is a field of science that quantitatively studies bibliometric material (Merigó and Yang, 2017). The bibliometric method is expressed as a quantitative method that includes the statistical analysis of large-scale research such as articles, reviews, papers, books, etc. (Khan, Ali, and Ashraf, 2020). Bibliometric research focuses on the analysis of networks of journals, keywords, and authors (Waltman, Van Eck, and Noyons, 2010). This method, which is used to evaluate academic impact and productivity, has started to be used to determine the place of institutions and universities in the world rankings while

examining various aspects of the field of science (EllegaardWallin, 2015). Bibliometric studies focused on three types of indicators. These can be expressed as indicators measuring the productivity of the researcher, indicators measuring the impact of the researcher, and indicators measuring the links between researchers, publications, and research topics (Durieux and Gevenois, 2010). It can be stated that these indicators contribute to the researcher's limitation of their studies and differentiation from other studies. The database is another factor that differentiates the work of researchers. Bibliometric analysis studies focus on different databases depending on their purpose. One of these databases is the Web of Science. The web of science, which consists of research and citations, is one of the oldest and most widespread databases in the world (Birkle, Pendlebury, Schnell, & Adams, 2020). This database is used both as a research tool, providing broad scientific information, and as a data set for large-scale studies (Li, Rollins, and Yan, 2018). Web of Science contains three different indexes. These are Science Citation Index Expanded (ESCI), Social Sciences Citation Index (SSCI), and Arts and Humanities Citation Index (AHCI) (Norris and Oppenheim, 2007). The Web of Science database is an important resource for bibliometric studies, thanks to its advanced search features such as researchers' previous publications, the citations of the publications, the keywords, and the criteria of the journals in a wide range.

Sports marketing can be considered as a separate discipline within the science of marketing. Since sports marketing-related studies are limited, it is essential to know the study trends in sports marketing to guide future studies. There are studies carried out in this field (Nawaz, Sajeel, and Saeed, 2020; Maldonado-Erazovd, 2019). In a previous sports marketing and sponsorship study, a sports marketing magazine was examined. In another study, it was aimed to perform bibliometric analysis of articles on sports sponsorship, which is an important topic in sports marketing, in the Scopus database. The present study differs from other studies in terms of covering all sports marketing-related

_____

articles published in the web of science database between 1993 and 2020, revealing the differences of the indexes in which these articles were published and the methodological tendencies of the studies.

The objective of the study was to perform a bibliometric analysis of all sports marketing-related publications in the Web of Science Database.

METHOD

Research Method

The objective of the study was to perform a bibliometric analysis of all sports marketing-related publications between 1993 and 2020. The number of articles, the publication years, the index to which it was published, the number of citations, the journal in which the article was published, the country of the researcher, and quality criteria for SSCI and SCI journals was determined to evaluate the articles. Only sports marketing-related articles were included in the study. Since it presents the current situation as it is, this study is descriptive. Descriptive studies are studies that aim to reveal the relationship or what is what (Erkuş, 2009). In terms of revealing the current situation for a certain period, this study is a cross-sectional study, one of the descriptive research models. Cross-sectional studies are studies that outline a common situation in general. This research is a cross-sectional

study because it was conducted in a cross-section of time in which the relationships between the variables in the sample were specified only once (Ocak, 2019).

The Universe and Sample of the Study

The universe of this study consists of 176 articles on sports marketing published in the web of science database between 1993 and 2020. The simple random sampling method, one of the probabilistic sampling methods, was used to determine the sample of the study. In this sampling method, every member of the population has an equal chance of being selected (Gürbüz and Şahin, 2017; Oral & Çoban, 2020). In order to apply this sampling method, the researcher is expected to have a sample list (Gürbüz and Şahin, 2017). To determine the sample number in the research, the evaluation was made by a 99% confidence interval and a 1% error rate, and the value of 174 was reached as a result. Since all of the articles in the database were accessed, 176 articles, which represent the entire universe of the study, were included in the study.

Statistical Analysis

As a result of the criteria determined according to the journals to be used in the study, descriptive statistics values are given. Relations and density maps of the journals used in the research are produced using Vos (Web of Sciencewiever version 1.6.15)

FINDINGS

Table 1. Evaluation of the Most-Cited Articles According to Various Elements

Sequence	Author(s)	Article	Country	University	Publication Year	Total Citations
1	Hightower, R; Brady, MK; Baker, TL	Investigating the role of the physical environment in hedonic service consumption: an exploratory study of sporting events	USA	Florida A&M Univ	2002	283
2	Bush, AJ; Martin, CA; Bush, VD	Sports celebrity influence on the behavioral intentions of generation Y	USA	Univ Memphis	2004	174
3	Kelley, SW; Turley, LW	Consumer perceptions of service quality attributes at sporting events	USA	Univ Kentucky	2001	108
4	Dalakas, Vassilis; Melancon, JoannaPhillips	Fan identification, Schadenfreude toward hate drivels, and the mediating effects of Importance of Winning Index (IWIN)	USA	Calif State Univ	2012	47
5	Uhrich, Sebastian; Benkenstein, Martin	Physical and social atmospheric effects in hedonic service consumption: customers' roles at sporting events	Germany	Univ Rostock	2012	46
6	Lacey, Russell; Close, Angeline G.;Finney, R. Zachary	The pivotal roles of product knowledge and corporate social responsibility in event sponsorship effectiveness	USA	New Orleans	2010	46
7	Yang, Yupin; Shi, Mengze; Goldfarb, Avi	Estimating the Value of Brand Alliances in Professional Team Sports	Canada	Simon Fraser Univ	2009	45
8	Ratten, Vanessa; Ratten, Hamish	International sport marketing: practical and future research implications	Australia	DeakinUniv	2011	42

					2017	
9	Woisetschlaeger, David M.;Backhaus, Christof; Cornwell, T. Bettina	Inferring Corporate Motives: How Deal Characteristics Shape Sponsorship Perceptions	Germany	Tech Univ		35
10	Lee, JoonSung; Kwak, DaeHee	Consumers' Responses to Public Figures' Transgression: Moral Reasoning Strategies and Implications for Endorsed	USA	Univ Michigan	2016	35

Table 1 lists the country, university, author, and article names of the top 10 most-cited articles.

As can be seen in Graph 1, sports marketing-related articles showed a fluctuating increase trend in time.
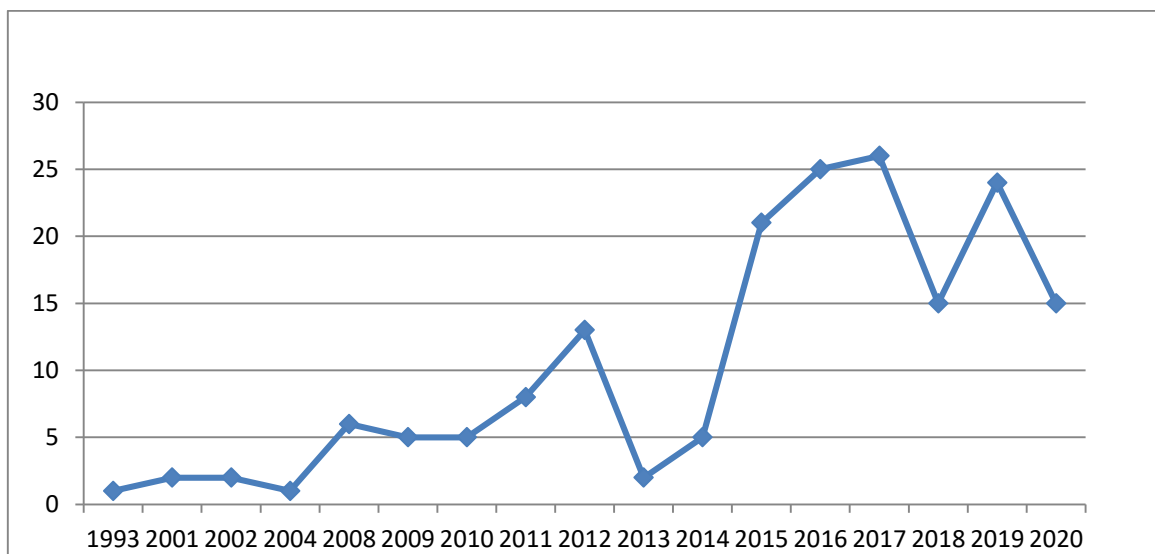
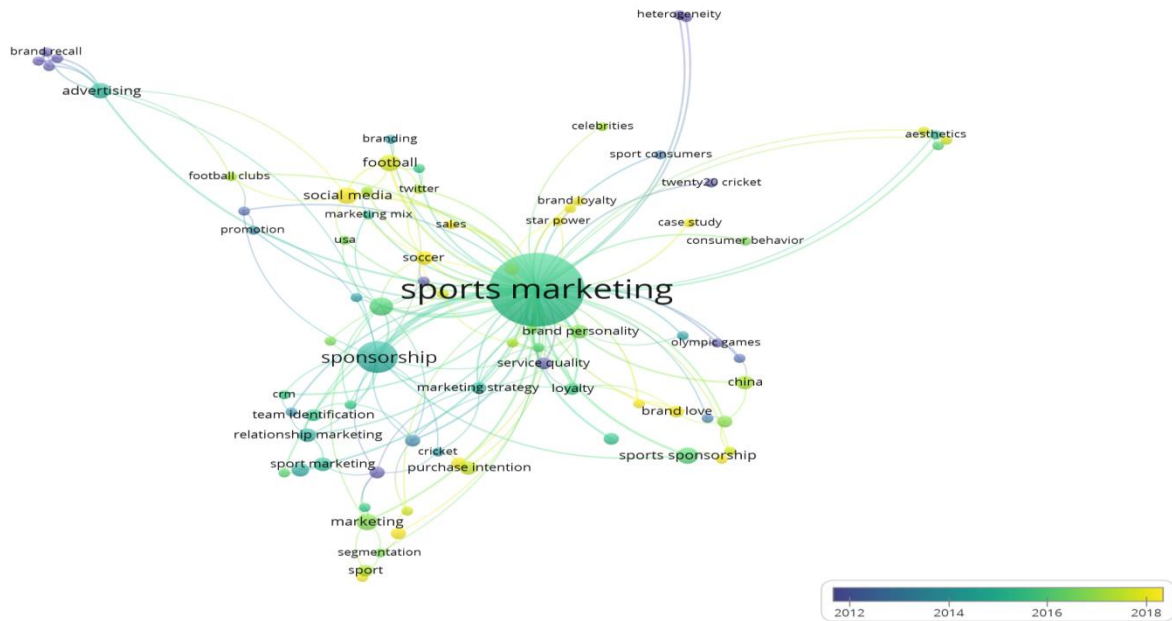Graph 1. Distribution of Sports Marketing Articles by Years

Figure 1. Most Used Keywords in Articles

As can be seen in Figure 1, the most frequently used keywords over time in the studies were specified. A total of 528 keywords were used in sports marketing studies. In these keywords, sports marketing was used 111 times, sponsorship was used 21 times, and consumer behavior was used seven times.
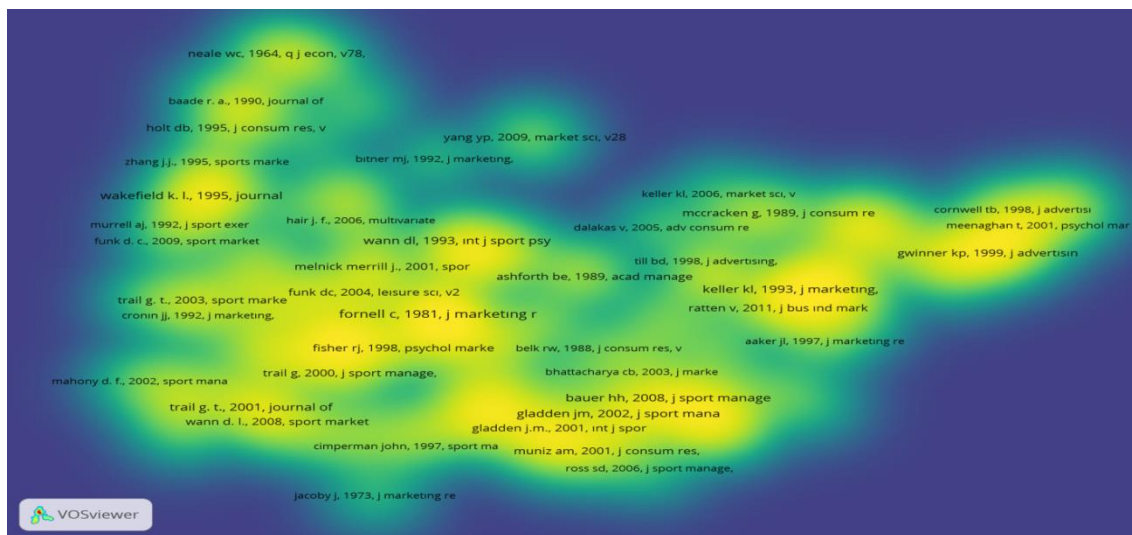

Figure 2. Density Map of the Most-Cited Journals

As can be seen in Figure 2, the most cited authors were identified as Hightower, R; Brady, MK; Baker, T, (n = 283), Bush, AJ; Martin, CA; Bush, VD (n = 174) Kelley, SW; Turley LW (n = 108), respectively.
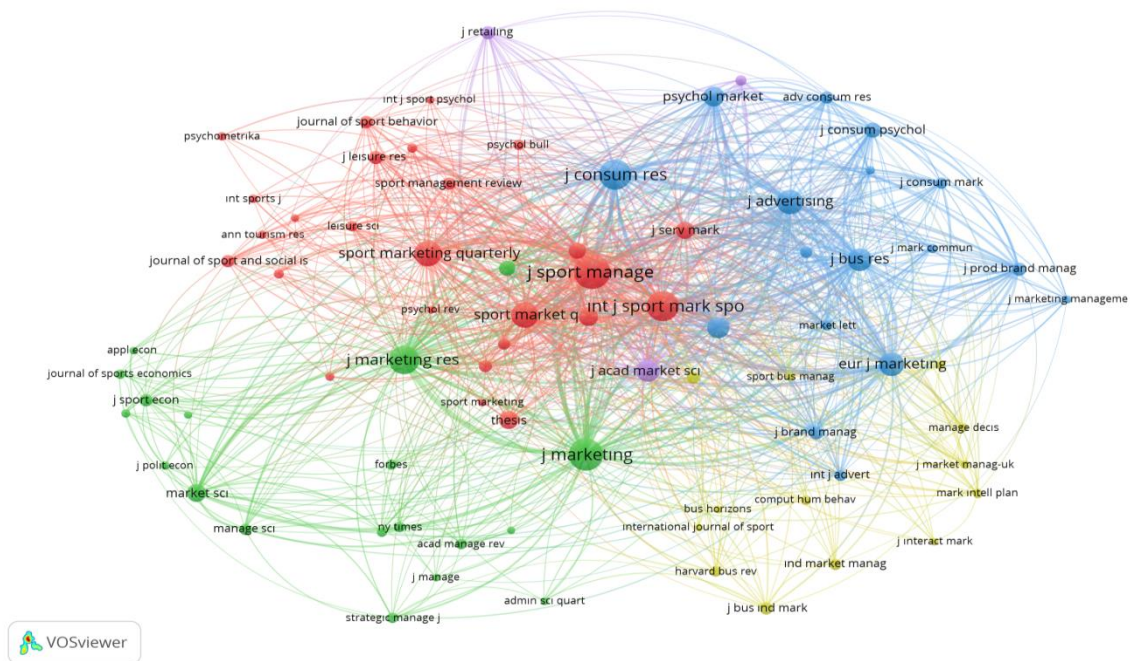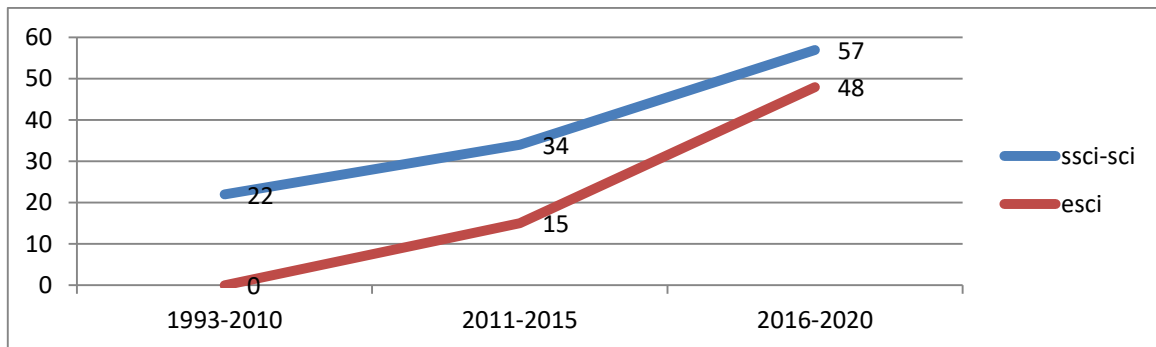
_____

Figure 3. Most-Cited Journals

As can be seen in Figure 3, the most-cited journals were the international journal of sports management with 53 articles and 245 citations, the journal of advertising research with two articles and 206 citations, and the journal of business & industrial management with four articles and 64 citations, respectively.

Graph 2. Distribution of Sports Marketing Articles by Indexes

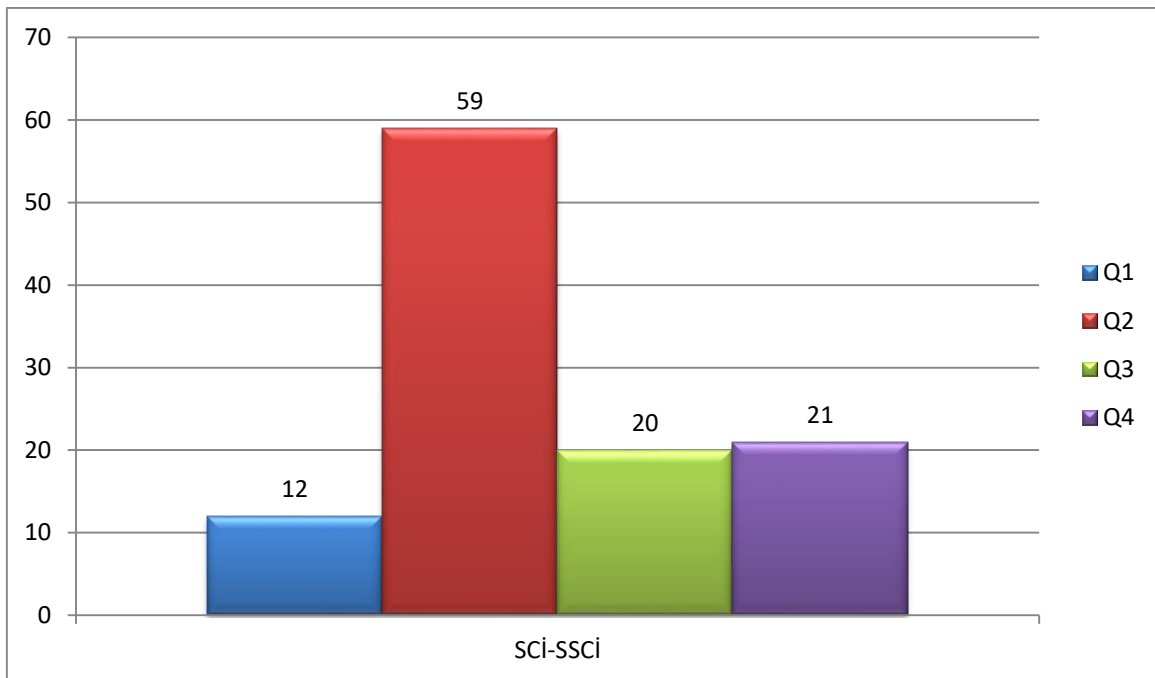As can be seen in Graph 2, as a result of the evaluation of the number of journals covered by the study in terms of years, it was determined that the number of articles published in the SSCI-SCI and ESCI indexes increased by years.
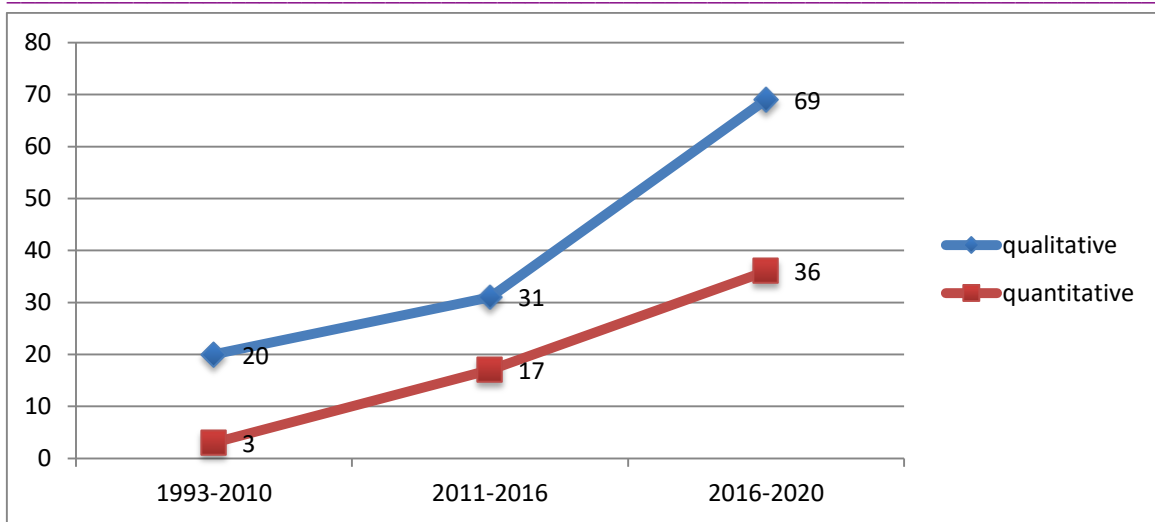
Graph3. Methodological Trends in Sports Marketing Articles

As can be seen in Graph 3, as a result of the evaluation of the method used in the articles published in the field of sports management, it was determined that qualitative studies were in majority.

Graph 4. Comparison of the Impact Factors of the Journals

As can be seen in Graph 4, as a result of the evaluation of SCI and SSCI journals in terms of quality, it was determined that researchers in the field of sports marketing mostly made publications in Q2 journals.

As can be seen from Table 2, according to the evaluation of the number of articles and citations by countries in the field of sports marketing, it was determined that the countries with the highest number of publications were

America n = 66, Canada n = 16 and South Korea n = 16, respectively. The most cited countries were America n = 1128, Canada n = 192, and England n = 89, respectively.

Table 2. Articles and Citations of Sports-related Authors by Countries

Country	Article	Citation	Country	Article	Citation
1. USA	66	1128	22. India	6	9
2. Canada	16	192	23. Wales	1	8
3. England	9	89	24. North Ireland	1	3
4. Germany	5	83	25. Pakistan	1	3
5. Australia	9	76	26. Saudi Arabia	1	3
6. South Korea	16	74	27. Sri Lanka	1	3
7. China	12	73	28. Switzerland	1	3
8. France	7	46	29. Ireland	1	3
9. Sweden	5	39	30. Ecuador	2	2
10. New Zealand	4	34	31. Kuwait	1	2
11. Spain	9	33	32. Poland	3	2
12. Malaysia	3	31	33. Serbia	1	2
13. Greece	4	27	34. Iran	5	2
14. Taiwan	5	19	35. Mexico	1	1
15. Japan	2	15	36. Portugal	1	1
16. South Africa	2	15	37. Romania	2	1
17. Brazil	11	12	38. Belgium	2	0
18. Finland	1	12	39. Croatia	2	0
19. Russia	3	12	40. Singapore	1	0
20. Turkey	8	11	41. Slovakia	2	0
21. United Arab Emirates	2	11	42. Thailand	2	0

Table 3. Sports-related Journals and the Distribution of Their Citations

Journal	Article	Citation	Journal	Article	Citation
1. journal of business research	3	425	11. marketing intelligence & planning	5	31
1. international journal of sports marketing & sponsorship	53	245	12. sociology of sport journal	1	31
2. journal of advertising research	2	206	13. European journal of marketing	1	30
3. journal of business & industrial marketing	4	64	14. journal of marketing research	2	28
4. journal of services marketing	1	47	15. international journal of consumer studies	1	23
5. service industries journal	1	45	16. international journal of the history of sport	1	21
6. marketing science	1	44	17. journal of sports economics	2	19
7. journal of marketing	2	43	18. sport management review	1	18
8. journal of business ethics	1	35	19. journal of sport management	1	16
9. business horizons	1	31	20. management decision	2	16

_____

As can be seen in Table 3, the most-cited journals were journal of business research n = 425, International journal of sports marketing & sponsorship n = 245, and journal of advertising research n = 206, respectively.

CONCLUSION AND DISCUSSION

This research aims to perform a bibliometric analysis of the articles on sports marketing published in the Web of Science database between 1993 and 2020. The journal names, the keywords used, the research methods of the studies, the countries of the authors, the number of citations of the articles, the indexes of the journals, and the quality criteria of the journals SSCI-SCI were used as evaluation criteria in the study.

In the research, it has been determined that sports marketing-related articles have a fluctuating number of publications by years, as in the study of Maldonado-Erazovd, (2019 Academic studies are carried out in order to solve a need that is presented to the benefit of people. The aims of the sports marketing field are to market sports products and services to the customer and to apply new marketing techniques. Both the changes in customer needs and the changes existing in the field of science can be shown as the reasons for the fluctuation in the number of publications in the field of sports marketing. In this research, it was determined that the researchers mostly used the qualitative research method. Hence, it can be concluded that since the needs of consumers vary according to subjective qualities more qualitative research methods are used in the field of sports marketing.

In terms of productivity, as a result of evaluating the number of articles on sports marketing, it was determined that the top countries that contributed to the literature were America, Canada, and South Korea, respectively, and the most cited countries were America, Canada, and England, respectively. These results are similar to the results of the studies of Nawaz, Sajeel, and Saeed (2020) and Maldonado-Erazovd, (2019).

As a result of the evaluation in terms of indexes in the web of science database, it was determined that the articles on sports marketing were mostly published in SSCI-SCI indexes. This can be attributed to the idea that publishing in these indexes, which are deemed more qualified scientifically, is considered more significant by the authors. In addition, the fact that the ESCI index was established later than other indexes may be another reason for the lower number of articles published in the ESCI index.

It was determined that the most used keywords in sports marketing themed articles were sports marketing, sports sponsorship, and consumer behavior, respectively. This result is partially similar to the study of Maldonado-Erazovd, (2019). Accordingly, it can be stated that the intensity of the subjects that the researchers studied are on these subjects.

It was determined that the most-cited journals were journal of business research n = 425, International journal of sports marketing & sponsorship research n = 245, and journal of adverting research n = 206, respectively. According to the number of citations, it can be stated that researchers mostly use these journals as sources of information.

As a result, it has been determined that sports marketing-related articles were mostly used qualitative methods, the publications were mostly published in SSCI and SCI indexes, the number of publications shows a fluctuating graph by years, and America is ahead of other countries in terms of publication productivity and number of citations.

The findings can contribute to the awareness of the paradigm trend in the field of sports marketing. In addition, it can make known the countries and authors publishing the most articles. It can contribute to the fact that researchers who will work in the field of sports marketing act in line with the information obtained.

A comparative and causal analysis of national and international literature can contribute to

the field for researchers who will work in this field within the framework of the findings obtained in the research. In addition, in order to better understand the place of sports marketing in the field of sports sciences, it is recommended that other researchers who will work in the field design a study that will compare sports marketing with other sports science fields

Author Contributions

Study concept/Design: **Ahmet Yavuz Karafil, Mehmet Haşim Akgül;** Data Collection: **Ahmet Yavuz Karafil, Mehmet Haşim Akgül;** Data Analysis and Interpretation: **Ahmet Yavuz Karafil, Mehmet Haşim Akgül;** Post draft: **Ahmet Yavuz Karafil, Mehmet Haşim Akgül;** Critical review of the content: **Ahmet Yavuz Karafil, Mehmet Haşim Akgül;** Final approval and responsibility: **Ahmet Yavuz Karafil;** Supervision: **Ahmet Yavuz Karafil**

Conflict of interest

There are no conflicts of interest.

Ethical Approval

No Ethics Committee approval was necessary since no human and experimental products were used.

Peer Review Process

Extremely peer-reviewed

REFERENCES

Birkle, C., Pendlebury, D. A., Schnell, J., & Adams, J. (2020).Web of Science as a data source for research on scientific and scholarly activity. *Quantitative Science Studies*, 1(1), 363-376.

Bush, A. J., Martin, C. A., & Bush, V. D. (2004).Sports celebrity influence on the behavioral intentions of generation Y. *Journal of advertising research*, 44(1), 108-118.

Da Silva, E. C., & Las Casas, A. L. (2017). Sports marketing plan: an alternative framework for sports club. *International Journal of Marketing Studies*, 9(4), 15-28.

Dalakas, V., & Melancon, J. P. (2012).Fan identification, schadenfreude toward hated rivals, and the mediating effects of Importance of Winning Index (IWIN).*Journal of Services Marketing*, 26 (1), 51–59.

Durieux, V., & Gevenois, P. A. (2010).Bibliometric indicators: quality measurements of scientific publication. *Radiology*, 255(2), 342-351.

Ellegaard, O., & Wallin, J. A. (2015). The bibliometric analysis of scholarly production: How great is the impact?. *Scientometrics*, 105(3), 1809-1831.

Erkus, A. (2009). *Davranış Bilimleri İçin Bilimsel Araştırma Süreci* Ankara: Seçkin Yayıncılık.

Gürbüz, S., Şahin, F. (2017).*Sosyal Bilimlerde Bilimsel Araştırma Yöntemleri*. Ankara. Seçkin Yayıncılık.

Hightower Jr, R., Brady, M. K., & Baker, T. L. (2002).Investigating the role of the physical environment in hedonic service consumption: an exploratory study of sporting events.*Journal of Business research*, 55(9), 697-707.

Kelley, S. W., & Turley, L. W. (2001). Consumer perceptions of service quality attributes at sporting events. *Journal of Business Research*, 54(2), 161-166.

Khan, M. A., Ali, I., & Ashraf, R. (2020). A Bibliometric Review of the Special Issues of Psychology & Marketing: 1984-2020. *Psychology & Marketing*, 37(9), 1144-1170.

Lacey, R., Close, A. G., & Finney, R. Z. (2010).The pivotal roles of product knowledge and corporate social responsibility in event sponsorship effectiveness .*Journal of Business Research*, 63(11), 1222-1228.

Lee, J. S., &Kwak, D. H. (2016). Consumers' responses to public figures' transgression: Moral reasoning strategies and implications for endorsed brands. *Journal of Business Ethics*, 137(1), 101-113.

Li, K., Rollins, J., & Yan, E. (2018). Web of Science use in published research and review papers 1997–2017: A selective, dynamic, cross-domain, content-based analysis. *Scientometrics*, 115(1), 1-20.

Maldonado-Erazo, C.P., Durán-Sánchez, A., Álvarez-García, J. and Del Río-Rama, M.D.L.C. (2019), "Sports sponsorship: scientific coverage in academic journals",

_____

Journal of Entrepreneurship and Public Policy, 8 (1), 163-186.

Merigó, J. M., & Yang, J. B. (2017).Accounting research: A bibliometric analysis *.Australian Accounting Review*, 27(1), 71-100.

Nawaz, K, Sajeel, A, T. & Saeed, A, H. (2020).A Bibliometric Analysis of the International Journal of Sports Marketing &Sponsorship *.International Journal of Business and Psychology*, 2(1), 45–60

Norris, M., & Oppenheim, C. (2007).Comparing alternatives to the Web of Science for coverage of the social sciences' literature *.Journal of informetrics*, 1(2), 161-169.

Ocak,G. (2019). *Eğitimde Bilimsel Araştırma Yöntemleri*. Ankara. Pegem Akademi.

Oral, B., Çoban, A. (2020). *Kuramdan Uygulamaya Eğitimde Bilimsel Araştırma Yöntemleri*. Ankara. Pegem Akademi.

Ratten, V. and Ratten, H. (2011), "International sports marketing: practical and future research implications", *Journal of Business & Industrial Marketing*, Vol. 26 No. 8, pp. 614-620.

Shank, M. D., &Lyberger, M. R. (2014).*Sports marketing*: A strategic perspective. Routledge.

Uhrich, S., & Benkenstein, M. (2012). Physical and social atmospheric effects in hedonic service consumption: customers' roles at sporting events. *The Service Industries Journal*, 32(11), 1741-1757.

Wakefield, K. L. (2007). *Team sports marketing*. Elsevier.

Waltman, L., Van Eck, N. J., & Noyons, E. C. (2010).A Unified Approach To Mapping And Clustering Of Bibliometric Networks. *Journal of Informetrics*, 4(4), 629-635.

Woisetschläger, D. M., Backhaus, C., & Cornwell, T. B. (2017). Inferring corporate motives: How deal characteristics shape sponsorship perceptions. *Journal of Marketing*, 81(5), 121-141.

Yang, Y., Shi, M., & Goldfarb, A. (2009).Estimating The Value Of Brand Alliances In Professional Team Sports. *Marketing Science*, 28(6), 1095-1111.