

A Global Research Trend on Leadership in Sport: A Bibliometric Analysis

Jen Ling Gan and Halimah Mohd Yusof

Abstract--- *The contribution of leadership in sport industry has been slowly recognised by the scholars. Effective leadership in sport is believed that it could enhance the performance of sport teams, as well as the performance of sport organizations. However, till to date, there is no bibliometric analysis conducted on sport leadership. Hence, a bibliometric analysis is necessary to evaluate the global research growth to retrieve and analyse the publication on sport leadership in order to enhance the performance of sport teams. The bibliometric analysis is used to search the database of Scopus from the oldest publication in 1956 to the recent publication in 2019. This study used VOS Viewer 1.6.11 to analyse and visualise the global research trend on sport leadership in analysing the bibliographic data. The objectives were to evaluate the output of publications, co-authorship, leading countries, and co-occurrences of author keywords. This study retrieved 945 journal articles from Scopus database from 1960 to 2019. The publication's trend revealed that the number of publications has been increasing rapidly since 2009. The leading countries in ethical leadership research are the United States and United Kingdom. Among the author keywords, 'coach' has the most links with sport leadership, which indicated the importance of sport leadership among coaches. Recommendations were discussed in this paper for future researchers.*

Keywords--- *Sport Leadership, Bibliometric Analysis, Bibliographic Map, VOS Viewer.*

I. INTRODUCTION

In recent years, the importance of leadership in sports industry has been recognized by the scholars (Peachey et al., 2015). This is because leadership is known as one of the crucial element in enhancing the performance of sports, especially the environment of a team among players (Cotterill and Fransen, 2016). Due to the major role of leadership in sport teams, past scholars have been conducting research to investigate the approaches of being an effective leaders, how the leaders lead, and why the leaders lead in certain ways (Cruickshank and Collins, 2016). It was mentioned that the required competencies among sport leaders have been changed, where the sport leaders nowadays are required more effective skills in becoming an effective leader in sport teams (Takos, O'Boyle, and Murray, 2015). Hence, it is believed that leadership could be applied in wider range of contexts instead of focusing only on organizational behaviour (Cotterill and Fransen, 2016). The importance of effective sport leadership has gained attention from the players, coaches, and sport organizations (Fransen et al., 2014). Therefore, this paper was intended to present bibliometric analysis to outline the trend of leadership research in sport area since 1960 to 2019.

Although the attention on sport leadership has been growing, the discussion regarding global research trend on sport leadership is still lacking. Till to date, there is no bibliometric analysis conducted on sport leadership by using VOS Viewer. This paper intended to conduct data mining via Scopus database to collect more research articles. This

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is because Scopus is known as the biggest abstract and citation database that covers a wide range of multidisciplinary research. This bibliometric paper can be beneficial for academicians, sport organisations, and sport business policymakers in understanding the global trend of leadership in sport area besides discovering the future directions and opportunities for future studies. The bibliometric analysis has four objectives as follows:

1. To investigate temporal distribution outline of 'leadership in sport' journal article;
2. To indicate the contribution of leading countries;
3. To discover the author keywords; and
4. To provide new insight of future directions.

II. METHODS

Inclusion Criteria

To do this bibliometric analysis, this study includes only articles that were published in Scopus indexed journals. Besides, this analysis includes only empirical studies that provided research findings. Articles that used "leadership" and "sport" as keywords were included in this analysis.

Exclusion Criteria

Few types of articles were excluded in this analysis: (a) Articles that did not study leadership in sports area; (b) Articles that provide insufficient research data which may affect the analysis; and (c) Conference minutes or review papers that did not provide research analysis on leadership in sports.

Searching Strategy and Result

The searching was conducted on 2nd December 2019. It started from searching the keywords of "leadership" and "sport", hence the searching query was (TITLE-ABS-KEY (leadership) AND TITLE-ABS-KEY (sport)) AND DOCTYPE (ar) AND PUBYEAR > 1956 AND PUBYEAR < 2020 AND (LIMIT-TO (SRCTYPE , "j")), resulting 1, 146 documents. In order to exclude review papers which are not related to our analysis, the following searching query was inserted to look for review papers: (TITLE-ABS-KEY (leadership) AND TITLE-ABS-KEY (sport)) AND DOCTYPE (ar) AND PUBYEAR > 1956 AND PUBYEAR < 2020 AND (TITLE ("recent" OR progress OR review OR critical OR revisit OR advance OR development OR highlight OR perspective OR prospect OR trends OR bibliometric OR scientometric) OR (ABS (progress OR review OR bibliometric OR scientometric))) AND (LIMIT-TO (SRCTYPE , "j")), resulting 201 review papers. The EIDs (Scopus article identifier) of the review papers were recorded and added to the next query string to exclude the review papers. After excluding the review papers, a total of 945 documents were found to be included in this bibliometric analysis. Figure 1 illustrates the process of searching.

Data Abstraction

Following data was retrieved from the Scopus database when bibliometric analysis was conducted, (a) research trend from 1960-2019; (b) top 10 most active journals; (c) top 10 most active countries; (d) co-authorship; (e) funding of research; and (f) author keywords.

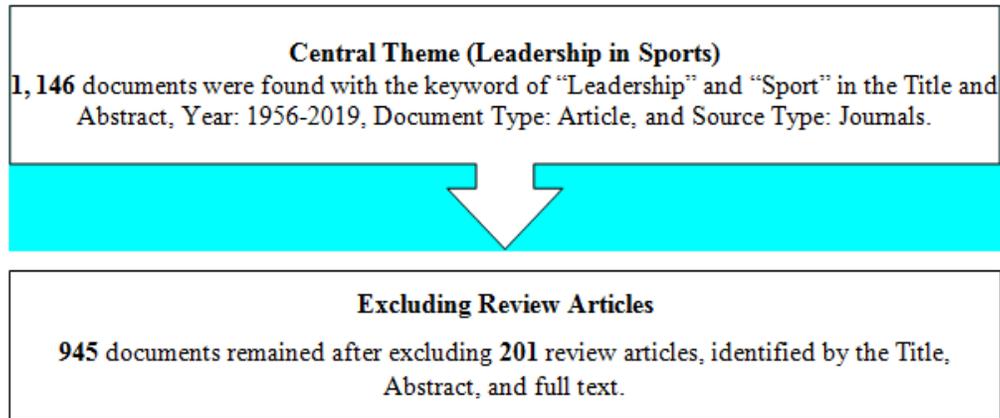


Figure 1: Process of Collecting Data of Publications for Central Theme

III. RESULTS

Trend of Research

There were 945 research articles published in 59 years. Figure 2 shows the growth of publication. The first research in sport leadership was in 1960 (McCoy, 1960) and there was no published research in 1962 and 1963. From 1964 onwards, the number of publications in sport leadership has been increasing very slowly till the year of 2005. The annual growth rate increased rapidly in 2006 when the number of publications was almost twenty times more than the publications in 1964. The increasing number of publications has resulted in the increased number of cumulative total publications. From 2009 to 2019, the number of publications of sport leadership has rapidly and significantly increased. Therefore, it is believed that the attention on sport leadership publications will increase in future. It is suggested that more research works should have public access for the reference of future researchers. As of 2019 (2nd December), only 11% (108 research articles) had public access for readers.



Figure 2: The Annual and Cumulative Numbers of Research Articles on Sport Leadership Indexed in Scopus from 1960 Until 2019

Top 10 Active Journals

A total of 159 journals were found in the Scopus database that published the articles of sport leadership. Out of 945 documents, 188 documents were published by top ten active journals in the area of sport leadership. The top journal that published the most articles was International Journal of Sports Science and Coaching (27 documents), followed by Journal of Sport Management (27 documents), and Journal of Applied Sport Psychology (24 documents). Table 1 indicates the top ten active journals and their numbers of publication.

Table 1: Top 10 Active Journals in Sport Leadership

Name of Journal	Number of Publications	Percentage
International Journal Of Sports Science And Coaching	27	2.9
Journal Of Sport Management	27	2.9
Journal Of Applied Sport Psychology	24	2.5
International Review For The Sociology Of Sport	20	2.1
Psychology Of Sport And Exercise	18	1.9
Sport Psychologist	18	1.9
Sport Management Review	16	1.7
Sport In Society	15	1.6
Teoriya I PraktikaFizicheskoyKultury	12	1.3
Journal Of Sports Sciences	11	1.2

Top 10 Active Countries in Publication

Out of 945 documents, 891 articles were published from 69 countries, while 54 articles were under undefined countries according to the analysis in Scopus database. About 50% of the publications were dominated by the United States and United Kingdom, which indicated that both countries were the key contributors to this research topic. The United States had the most publications with 332 publications which covered 35.1% of the publications at the global level. United Kingdom was ranked as the second most productive country in leadership of sports publication with 144 publications. Figure 3 below shows the top ten countries that contributed to the development of leadership research in sport at the global level.

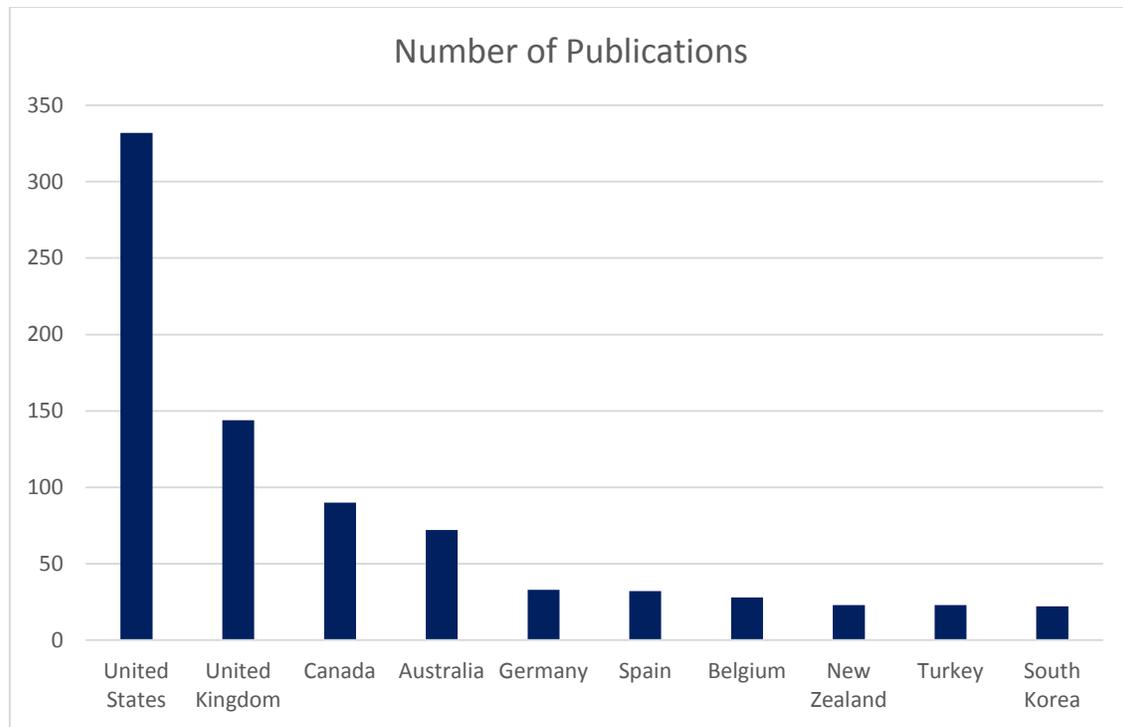


Figure 3: Top Ten Countries in Leadership of Sports Area

Co-Authorship Analysis

This study had included 85 countries that were affiliated with 159 authors in the co-authorship analysis. The affiliated countries were clustered into seven regions, namely America, Middle East, Asia, Oceania, Europe, Eurasia, and the Caribbean.

Funding Organizations

Out of 945 documents, only 19.5% (185 documents) journal articles received funding from particular organizations. The top five funding organizations in the sports leadership research were educational organizations (41.62%), government organizations (10.27%), foundations (10.27%), medical and health organizations (7.03%), and council funding (4.32%). The remained (12.43%) funding organizations were from other sources. Regarding the countries of funding, Canada, United States, and Australia have the most research funding in sport leadership area.

Author Keywords

The analysis of author keywords was conducted by using VOS Viewer. Out of 59 author keywords, the keyword that was used most frequently was ‘coach’ (57 occurrences). The ‘coach’ was related to other words that were related to ‘coach’, such as ‘coaches’, and ‘coaching’. Followed by second most frequent used author keyword, ‘gender’ (34 occurrences) was frequently related to the topic of sport leadership. Out of several types of leadership, only five leadership styles appeared as author keywords, namely ‘transformational leadership’ (13 occurrences), ‘athlete leadership’ (8 occurrences), ‘peer leadership’ (6 occurrences), ‘shared leadership’ (6 occurrences), and ‘sport leadership’ (5 occurrences). Figure 4 indicated the trend of author keywords that were used by past studies in the sport leadership research area.

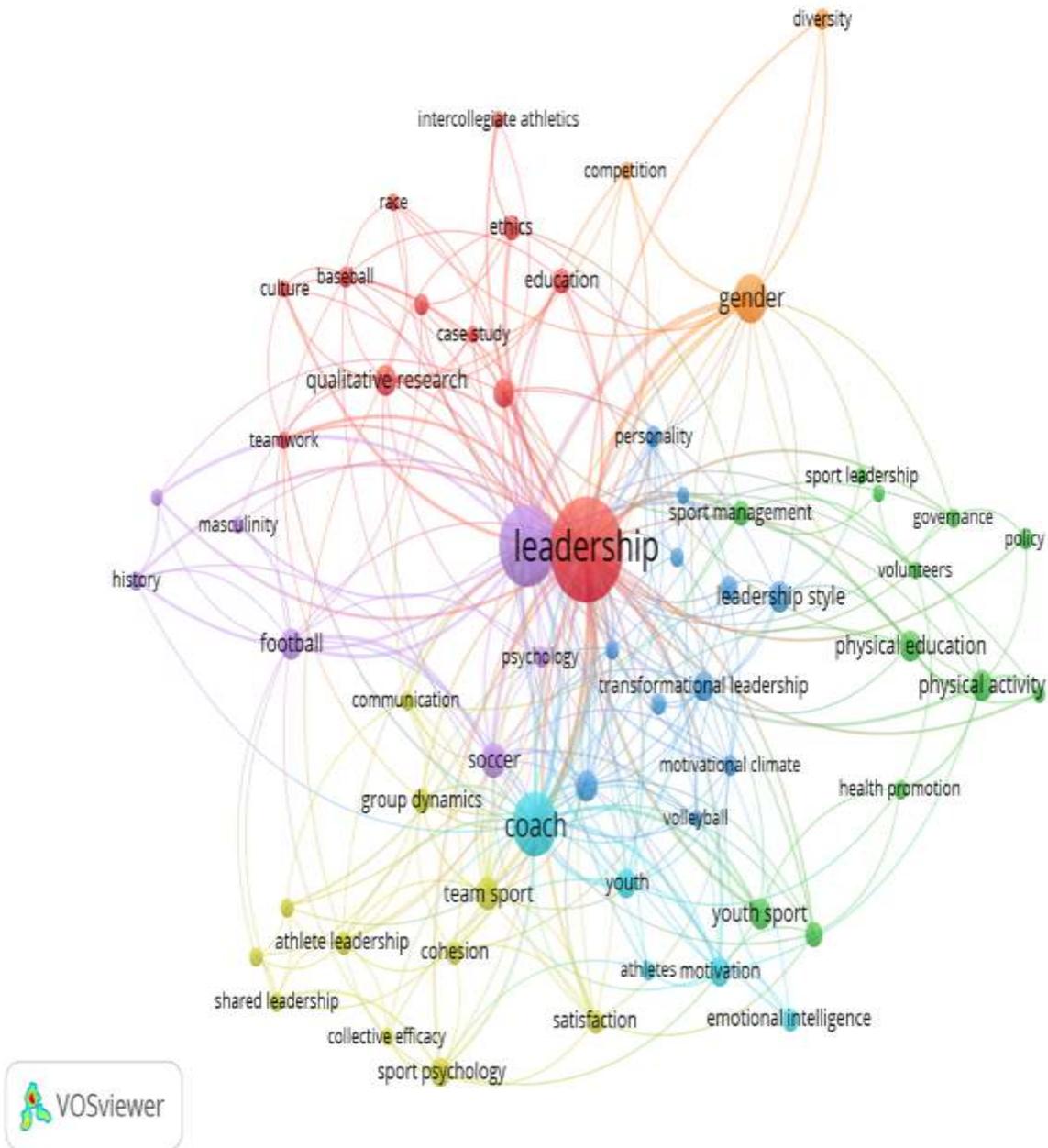


Figure 4: Bibliometric Map of Author Keywords of Sport Leadership Research in VOS Viewer (Minimum Occurrences: 5)

IV. DISCUSSION

The analysis of this study indicated that the trend of sport leadership has been increasing rapidly from the year 2009 to 2019, suggesting that the scholars of sport leadership have been starting to pay attention on sport leadership since a decade ago. The reason might be effective sport leadership could enhance the performance of sport players

significantly, which in turn improving the overall performance of sport organizations that could bring more profits. Besides, it should be noted that 50% of the active publications were from United States and United Kingdom. This brings a meaning that, other regions such as Asia, should start to pay attention to sport leadership in order to improve the performance of athletes.

Other than that, research funding is believed that its major role is important to develop more independent researchers in conducting empirical studies to strengthen the theories (Shan, Yan, and Hao, 2014). However, the analysis reported that only small portion (19.5%) of documents were sponsored by research funding through particular organizations. It is recommended that funding organizations should be more active in sponsoring researchers in carrying out sport leadership research in order to promote the future researchers in applying funds for a better quality of research.

As for author keywords, although there are several leadership styles available in leadership literature, only transformational leadership style was frequently mentioned in sport leadership as compared with others. This is probably because the theory of transformational leadership was recognised as one of the most effective leadership styles in sport industry among the coaches (Turnnidge and Côté, 2018). It was believed that transformational leadership theory was discussed in sport research since 1990-s, hence transformational leadership was frequently mentioned as author keyword in sport leadership research (Peachey et al., 2015). However, although transformational leadership in sport has been discussed earlier, empirical studies of transformational leadership in sports were still immature in recent years, hence needing more future researches to investigate the leadership style (Arthur, Bastardo, and Eklund, 2017).

Other than transformational leadership style, 'coach' was one of the frequent used author keywords as well. This is probably because it is believed that, successful coaching in sport could depend on the behaviour of leaders or the leadership of coaches (Misasi, Morin, and Kwasnowski, 2016). Although effective coaching is widely concerned in sport leadership research, it was stated that the scholars should not solely focus on coaching, where team players in sport could also help to fulfil the function of sport leadership (Fransen et al., 2014). Hence, 'team sport' was also one of the top five author keywords in sport leadership research. Another top five author keyword in sport leadership research was 'gender'. Gender is known as one of the biggest challenges in sport leadership, especially when woman was introduced to be involved in all level of sport, which included the process of decision making, and leading the sport teams (Adriaanse and Claringbould, 2016). Therefore, it could be explained that past scholars have been investigating the impact of gender in sport leadership area.

V. CONCLUSION

This bibliometric analysis provides a comprehensive understanding which presented the trend of leadership research in sports. By looking at the author keywords analysis through VOS Viewer, it was found that other crucial leadership styles were not widely discussed by the past scholars, such as servant leadership, and ethical leadership which could enhance the performance of sport teams, as well as the performance of sport organizations. Hence, it was recommended that future researchers should conduct more research on other leadership styles in sport industry (Peachey et al., 2015). Although comprehensive analysis was provided, there are several limitations in this study.

Firstly, the publications in this analysis came from Scopus database only. Data from other database could be ignored. Future researchers are suggested to include Web of Science (WOS) database in order to provide a more comprehensive bibliometric analysis. Secondly, this study used the keyword of “sport” only, where other papers that are related to sports might be excluded. This is because some authors might not include “sport” as keywords and opted for other sports related keywords, such as “athlete”.

REFERENCES

- [1] Adriaanse, J. A., & Claringbould, I. (2016). Gender equality in sport leadership: From the Brighton Declaration to the Sydney Scoreboard. *International Review for the Sociology of Sport*, 51(5), 547-566.
- [2] Arthur, C. A., Bastardo, N., & Eklund, R. (2017). Transformational leadership in sport: Current status and future directions. *Current opinion in Psychology*, 16, 78-83.
- [3] Cotterill, S. T., & Fransen, K. (2016). Athlete leadership in sport teams: Current understanding and future directions. *International Review of Sport and Exercise Psychology*, 9(1), 116-133.
- [4] Cruickshank, A., & Collins, D. (2016). Advancing leadership in sport: time to take off the blinkers?. *Sports Medicine*, 46(9), 1199-1204.
- [5] Fransen, K., Vanbeselaere, N., De Cuyper, B., VandeBroek, G., & Boen, F. (2014). The myth of the team captain as principal leader: Extending the athlete leadership classification within sport teams. *Journal of Sports Sciences*, 32(14), 1389-1397.
- [6] McCoy, M. E. (1960). Program, Facilities, Time, Leadership, and Budget for the Girls Sports Program. *The bulletin of the National Association of Secondary School Principals*, 44(256), 127-130.
- [7] Misasi, S. P., Morin, G., & Kwasnowski, L. (2016). Leadership: Athletes and coaches in sport. *The Sport Journal*, 19.
- [8] Peachey, J. W., Zhou, Y., Damon, Z. J., & Burton, L. J. (2015). Forty years of leadership research in sport management: A review, synthesis, and conceptual framework. *Journal of Sport Management*, 29(5), 570-587.
- [9] Shan, Y. W., Yan, L. J., & Hao, Y. F. (2014). The development status of Traditional Chinese Nursing based on bibliometric analysis. *Chin J Nurs Educ*, 11(08), 565e70.
- [10] Takos, N., O'Boyle, I., & Murray, D. (2015). The future: Trends and challenges in sport leadership. In I. O'Boyle, D. Murray, & P. Cummins (Eds.), *Foundations of sport management. Leadership in sport* (p. 240–247). Routledge/Taylor & Francis Group.
- [11] Turnnidge, J., & Côté, J. (2018). Applying transformational leadership theory to coaching research in youth sport: A systematic literature review. *International Journal of Sport and Exercise Psychology*, 16(3), 327-342.