
**KAJIAN BIBLIOMETRIK: FOKUS PENELITIAN DRIBBLING DALAM SEPAK BOLA DARI
DATABASE SCOPUS (2008-2022)**

***BIBLIOMETRICS REVIEW: RESEARCH FOCUS ON DRIBBLING IN SOCCER FROM THE
DATABASE SCOPUS (2008-2022)***

Muhammad Irfan, Leni Apriani, Oki Candra*

Universitas Islam Riau (Health Physical Education and Recreation/Fakultas Keguruan Ilmu
Pendidikan,), Riau. Indonesia

***Corresponding Author: Oki Candra, okicandra@edu.uir.ac.id**

Received: 2023-11-14; Revised: 2023-11-20; Accepted: 2023-11-21

Abstrak

Menggiring bola merupakan kemampuan awal yang harus dikuasai oleh pemain sepak bola, pemain harus dapat menguasai bola pada saat bergerak, berdiri atau bersiap melakukan operan atau melakukan tembakan ke gawang. Tujuan dari penelitian ini adalah untuk memberikan gambaran yang jelas tentang penelitian yang telah dilakukan dan tren yang muncul dalam fokus penelitian tentang dribbling dalam sepak bola. Penelitian ini merupakan penelitian literatur review, terdapat 43 publikasi yang disemurnakan dengan 4 tahapan (identifikasi, screening, kelayakan, inklusi) dari database Scopus yang kemudian dianalisis menggunakan metode analisis bibliometrik berbantuan aplikasi Vosviewer. Hasil penelitian menunjukkan bahwa publikasi terkait keterampilan dribbling dalam sepakbola memuncak dengan jumlah publikasi tertinggi pada tahun 2007. Publikasi pada tahun 2015 paling banyak disitasi dibandingkan tahun lainnya. Sebagian besar publikasi yang terkait dengan bidang ini telah dipublikasikan di jurnal Q1. Inggris dan Portugal adalah negara yang memiliki pengaruh besar terhadap penelitian di bidang ini. Fokus penelitian dibagi menjadi tiga yaitu, 1) pemain sepak bola, performa dan kecepatan; 2) keterampilan dribbling, usia, dan kontrol; 3) pelatihan, perubahan dan pelatih. Tema baru dalam bidang ini adalah pemain sepak bola, pendekatan, tes dribbling, dan kelas olahraga. Kata kunci dribbling skill yang menjadi fokus penelitian pertama sekaligus tema dalam penelitian ini tidak memiliki kaitan langsung dengan kata kunci passing dan measure, artinya belum ada penelitian yang secara langsung mengaitkan skill dribline dan passing and measure secara bersama-sama.

Kata kunci: bibliometrik, kemampuan menggiring bola, sepak bola.

Abstract

Dribbling the ball is the initial ability that must be mastered by football players, players must be able to control the ball when moving, standing or preparing to make a pass or shot at goal. The purpose of this study is to provide a clear picture of the research that has been conducted and emerging trends in the research focus on dribbling in soccer. This research is a literature review research, there are 43 publications refined with 4 stages (identification, screening, eligibility, inclusion) from the Scopus database which are then analyzed using the bibliometric analysis method assisted by the Vosviewer application. The results of the research show that the publication is related to dribbling skill in football peaked with the highest number of publications in 2007. Publications in 2015 have been cited more than any other year. Most of the publications related to this field have been published in Q1 journals. England and Portugal are countries that have a great influence on research in this field. The research focus is divided into three, namely, 1) soccer players, performance and speed; 2) dribbling skill, age, and control; 3) training, change and coach. The new theme in this field is football player, approach, dribbling test, and sports class. Keyword dribbling the skills that are the focus of the first research as well as the theme in this study do not have a direct link to keywords passing and measure, meaning that there is no research that directly links dribline skill and

passing and measure together.

Keywords: *bibliometrics; dribbling skill; soccer*

How To Cite: Irfan, M., Apriani, L., Candra, O. (2023). Bibliometrics review: research focus on dribbling in soccer from the database scopus (2008-2022). *Journal Of Sports Education (JOPE)*, 5 (2), 124-136. doi:<http://dx.doi.org/10.31258/jope.5.2.124-136>



Journal Of Sport Education is an open-access article under the **CC-BY-SA 4.0**

INTRODUCTION

Football is a very popular sport among the people, both as a recreational activity and as a means to defend cities, regions and the nation (Wei, 2021). Currently, a lot of attention is paid to understanding strategy and tactics in this game, especially when it comes to dribbling. This is related to the importance of individual abilities and team collaboration in defending the ball (Febriarus & Hardinoto, 2022), creating opportunities (Bakar, 2020), and scoring goals (Harianto, Nurhadi, Wakit, & Sujarwo, 2016; Samudra & Nurjamal, 2022).

Dribbling the ball is an initial ability that must be mastered by football players, players must be able to control the ball when moving, standing or preparing to make a pass or shot at goal (Hasanuddin, 2018; Irawan, 2019). Meanwhile, according to (Hartanto, 2016; Iman, 2013) a player is said to be dribbling in football when the player carries the ball using his feet with the intention of kicking. So dribbling is making movements with the ball or carrying the ball with the feet with the aim that the ball is countered by either a pass or a direct kick at goal.

The advantage of a player dribbling is that it makes it easier to score goals and break the opponent's defensive plans (Angraini, Yolanda, & Muhammad, 2023; Farozy, M, A, Janiarli, M, Sinurat, 2021). The ability to dribble in soccer has several benefits, namely, 1) To overtake an opponent; 2) Look for opportunities to share bait balls correctly with friends; 3) If passing to a friend immediately is not an option or opportunity, hold onto the ball to maintain possession.

The goal of dribbling is simply to get past your opponent (Bekris, Gissis, & Kounalakis, 2018; Zare et al., 2022). To do this, players must use feint while dribbling to trick opponents, giving them the opportunity to get away from their obstacles. Players who are skilled at dribbling and have a powerful shot should use this time to provide a pass so that they have a greater chance of passing the ball to a partner who is not in the grip of the opponent. As a result, when dribbling the ball, players must always consider the state of the game and the position of teammates. When there is no possibility of passing, dribbling is used to guard and defend the ball. Because the position of friends is not profitable, it is intended to dribble so that it remains stuck in an area that does not allow passing. If the bait is offered, it will be destructive and ready to be predicted or captured by the opponent

There have been many studies discussing dribbling in football such as research conducted by (Aprianova & Hariadi, 2016; Effendi & Rhamadhansyah, 2017; Fajrin, Agustiyawan, Purnamadyawati, & Mahayati, 2021; Khozim & Nugroho, 2022). In order to gain a better understanding of the research focus on dribbling in soccer, a method is needed that can be used in analyzing the results of previous research related to the study that you want to examine, one of which is by using the bibliometric analysis method (Mayani, Suripah, & Muhammad, 2022; Muhammad, Darmayanti, & Arif, 2023; Muhammad, Yolanda, Andrian, & Rezeki, 2022; Sanusi, Triansyah, Muhammad, & Susanti, 2023). This method involves quantitative and qualitative analysis of scientific publications in the field of football which are published within a certain period of time. There have been many studies using this bibliometric method in analyzing research (Muhammad, Elmawati, Samosir, & Marchy, 2023; Muhammad, Himmawan, Mardiyah, & Dasari, 2023; Muhammad, Mukhibin, Naser, & Dasari, 2022; Muhammad, Samosir, Elmawati, & Marchy, 2023; Ramadhaniyati, Dwi, Siregar, Muhammad, & Triansyah, 2023; Soraya, Kurjono, & Muhammad, 2023).

Bibliometric research is to provide a clear picture of the research that has been conducted and emerging trends in the research focus on dribbling in soccer. Thus, this research will provide useful insights for researchers, coaches, and decision makers in soccer. In this article, we will discuss in detail about the bibliometric methodology review used in the research, as well as the results and analysis of the bibliometric research on the research focus of dribbling in soccer found in the database Scopus.

The research problem identified in this text revolves around the importance of understanding and analyzing the strategies and tactics involved in dribbling in soccer. Dribbling is an important skill in soccer that contributes to individual and team success in defending, creating opportunities and scoring goals. This research aims to study various aspects of dribbling in football, emphasizing the importance of overcoming opponents, facilitating accurate ball distribution, and maintaining possession of the ball.

The need for this research stems from the increasing attention and focus on strategy and tactics in football, especially in the context of dribbling. The ability to dribble effectively is considered an important skill that players must master to control the ball in various game situations, whether when moving, standing, or preparing a pass or shot on goal. Understanding the nuances of dribbling and its impact on the game is vital for players, coaches and decision makers in football.

The aims of this research include: First, it aims to contribute to existing knowledge about dribbling in football by carrying out a bibliometric analysis of relevant scientific publications. This involves a quantitative and qualitative assessment of research articles published within a certain time period, providing a comprehensive picture of the current state of research on dribbling. Second, this research seeks to identify emerging trends in the focus of dribbling research in football. By analyzing bibliometric data, researchers aim to gain insight into key themes, methodologies, and areas of emphasis within the field. This information can be useful for researchers, coaches and decision makers in the field of football to keep up to date with the latest developments and adapt their approaches.

Overall, this research aims to advance our understanding of dribbling in football through a systematic and comprehensive analysis of existing literature. These findings are intended to be of benefit to a wide range of stakeholders in the football community, including researchers, coaches and decision makers, by providing a clear and up-to-date picture of the research landscape regarding dribbling in football.

METHOD

This study uses a descriptive bibliometric analysis method, there are several steps in analyzing the results of studies related to dribbling football which are collected from the database scopus. Identification, screening, eligibility and inclusion are the four required steps (Moher, Liberati, Tetzlaff, & Altman, 2009).

Identification is the first step that must be taken, at this stage the researcher must search for or enter predefined keywords into a database to access research results related to a particular field. At this stage the researcher entered keywords according to the research theme, namely "dribbling skill" and "soccer" or "Football" in the database scopus. After being identified, the data that came out was 59 documents.

Screening is the second step that must be passed, at this stage the researcher filters out the 59 publications that have been obtained in the previous stage. In conducting screening, researchers must set the criteria according to what is needed. At this stage the researcher set the criteria, namely that the publication must be in English, out of 59 data, only 2 articles did not meet this criterion. This means that 2 publications that do not meet these criteria will not proceed to the next stage. 57 publication of the results of this screening stage will be continued at a later stage.

Eligibility is the third step that must be passed, at this stage the researcher looks at whether the 57 publications are feasible to be included in the final stage, for this reason the researcher must set criteria according to the research theme, namely, publications must link dribbling skills in the field of football, meaning that publications that do not relate this to, for example, other sports such as basketball will not be continued at the final stage. Of the 57 existing publications and after conducting feasibility studies, the remaining publications were 43 publications. for more details can be seen in Figure 1 on lower.

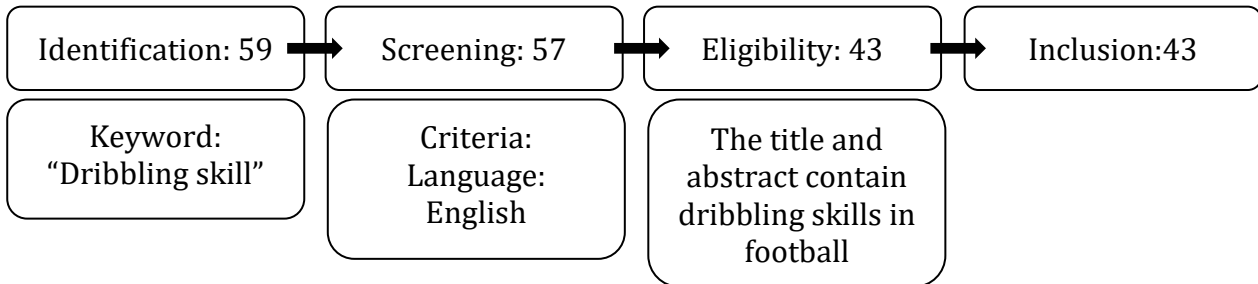


Figure 1. Stages in perfecting data

In conducting the analysis, researchers use various applications to help calculate and display the data that has been collected. The Microsoft Exel application is used to enter data and then displays tables such as publication trends and citation trends, the Vosviewer application is used to display images of relations between countries as well as research focus related to the field under study. PoP applications researchers use in calculating trend quotes such as NCP, C/CP, h- index and others

Analyze information applied to understand the research problem/project, thereby, allowing the readers to critically evaluate your project's/study's overall validity and reliability.

RESULTS

In displaying the results of the analysis of the inclusion results obtained, the researcher starts from publication trends then citation trends, distribution of journal rankings, relations between countries and research focus. This is in accordance with [what \(Zyoud, Waring, Al-Jabi, & Sweileh, 2017\)](#) said that in bibliometric research, data analysis is carried out using qualitative and quantitative indices such as: year of publication, affiliation, document type, country name, subject category, journal name, publisher language, collaboration and citation patterns.

Publication trends and citation trends.

Publication trends are displayed by grouping the number of publications by year of publication. The trend of publications from 2008 to 2023 related to ball dribbling research in soccer can be seen in figure 2 below.

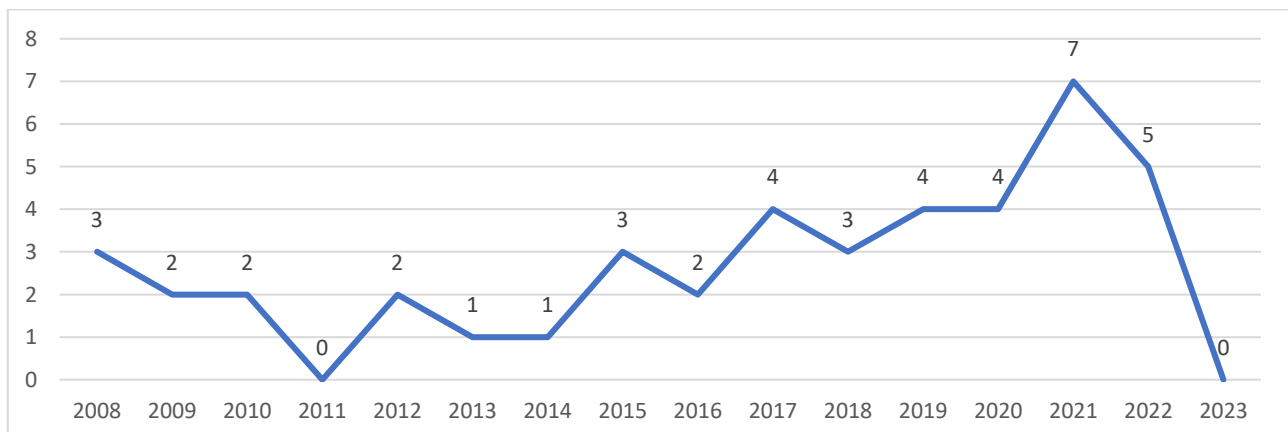


Figure 2. Publication trends

From figure 1 in above it can be seen that the year with the most publications was in 2021 with 7 documents. The highest increase was in 2020 to 2021, which increased by 3 publications, but in the following year the number of publications decreased to 5 documents and no documents were published in 2023. This is because 2023 is still running. Next, we will look at the trend of citations related to research on ball dribbling in football from 2008 to 2023.

Table 1. Citation trends by year

Year	TP	NCP	TC	C/P	C/CP	H	G
2023	0	0	0	0	0	0	0
2022	5	4	7	1,4	1,75	2	2
2021	7	6	40	5,71	6,667	4	6
2020	4	3	52	13	17,33	3	4
2019	4	3	48	12	16	2	4
2018	3	2	32	10,7	16	2	3
2017	4	4	49	12,3	12.25	4	4
2016	2	2	33	16.5	16.5	2	2
2015	3	3	174	58	58	3	3
2014	1	1	15	15	15	1	1
2013	1	0	0	0	0	0	0
2012	2	2	8	4	4	2	2
2011	0	0	0	0	0	0	0
2010	2	2	125	62.5	62.5	2	2
2009	2	2	48	24	24	1	2
2008	3	3	143	47,7	47,67	3	3
Total	43	37	774	203,81	204,667	31	35

TP: Total publications ; NCP: Number Citation Papers; TC: Total Citation ; C/P: Citation /Paper; C/CP: Citation /NCP; H: h- index ; G: g- index

From table 1 above it can be seen that the highest NCP is in 2021, this is due to the high TP value in that year. This means that out of 7 publications in 2021, six of them have been cited at least once. Furthermore, the trend of quotations can be seen from TC, TC is the total quotation in a certain year, the highest TC value was in 2015 with 174 quotations. The h-index and g-index values are a measure for researchers in developing their articles, meaning that the h-index and g- index values in a particular year determine the size in a particular year which has a major impact on a particular theme. The highest h- index and g- index values are in 2021, meaning that in 2021, published articles will have the greatest impact on research on ball dribbling in football. There is research in 2021 which can be seen in table 2 in lower.

Table 2. Publications in 2021

Author	Journal name	Quote
(Andry, Nawan, Fatkurahman, Nurhadi, & Dewangga, 2021)	Physical Education theory and Methodology	10
(Liang et al., 2021)	Proceedings of the 33rd Chinese control and decision Conference, CCDC 2021	0
(Peña-González, Sarabia, Roldan, Manresa-Rocamora, & Moya-Ramón, 2021)	International Journal of Sports Physiology and Performance	4
(Susaki, 2021)	Journals of Physical Education and Sport	1
(Peña-González, Roldan, Toledo, Urbán, & Reina, 2021)	International Journal of Sports Physiology and Performance	7

Author	Journal name	Quote
(Arslan et al., 2021)	Biology	13
(Formenti et al., 2021)	International Journal of Environmental Research and Public Health	5
Total		40

The publication in 2021 that had the greatest impact on research in this field, one of the most cited articles that year was research conducted by (Arslan et al., 2021) on "The effects of exercise order on the psychophysiological responses, physical and technical performances of young soccer players : Combined small-sided games and high-intensity interval training" which has been cited 13 times. The article is widely cited because it compares the order of effects of small-sided joins games (SSGs) and high-intensity interval training (HIIT) on psychophysiological responses and physical and technical performance of young soccer players. One element of the pre-test and post-test includes the 5–30 m sprint test, countermovement jump test, zigzag agility test with ball and without ball, repeated sprint ability test, and speed dribbling ability test. The results of this study can be used by coaches and practitioners to design training programs for young soccer players.

Distribution of Journal Ratings and Inter-Country Relations

The distribution of journal rankings is seen from the quartile value it on the website scimago, the distribution of journals starts from q1 to q4 which can be seen in Figure 3 below.

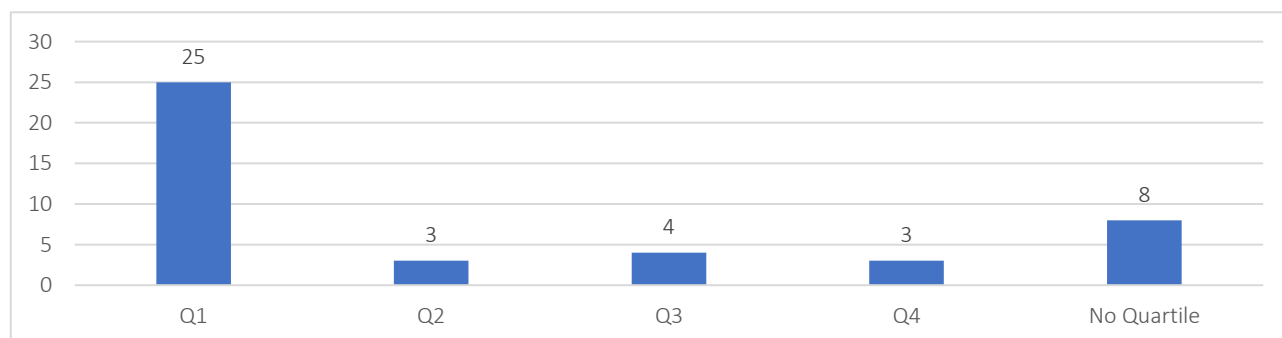


Figure 3. Distribution of Journal Ratings

In Figure 2 it can be seen that there are 25 publications in journals with a Q1 rating, this is the highest number among the other Qs, but even though 25 publications are in Q1 journals there are still 8 publications that have not been included in reputable journals. This means that the quality of writing on articles must be improved so that they can be published in reputable journals or Q1 to Q4. The journal that publishes many articles is the journal " Journal of Sports Sciences " journal has published articles in 5 publications. The journal with a Q1 rating is a journal from England and a publisher Routledge. This means that the journal can be used as a destination for researchers related to this field who want to publish their articles. Next, we will see the relationship between countries as shown in Figure 4 below.



Figure 4. Relations Between Countries

Figure 4 above is displayed with a threshold, that is, only countries with at least 1 document will be displayed. From Figure 4 above it also shows cooperation between countries, this is evidenced by the existence of links between circles. There are three clusters, namely countries with red, green and blue circles. For more details, see Figure 5 below.

Table 3. Bibliography country couplings

Country	Document	Citations	total link strength
Portugal	4	64	320
Romania	2	16	202
Turkey	3	107	187
Brazil	5	43	177
Poland	2	14	146
Australia	4	109	138
United Kingdom	7	239	134
Switzerland	2	95	101
Italy	3	40	97
Belgium	4	196	89
United States	2	9	59
Greece	2	9	7
Findland	2	35	33
Spain	4	30	3
Indonesia	3	10	1
China	2	3	0
Total	51	1019	1694

Table 3 above is displayed with a threshold, namely only countries with at least 2 documents will be displayed. 16 countries met the threshold. In table 3 above, England is the country with the largest number of documents, namely 7 publications. The country with the most citations is also the English country. Even though the UK has the highest number of documents and citations, Portugal has the highest link strength in terms of total link strength, with 320 total link strengths. This means that England and Portugal are countries that have great influence among other countries.

DISCUSSION

The research focus is related to dribbling skills in football can be seen in Figure 5, while to see the novelty of the research can be seen in Figure 6. The images displayed with the help of the Vosviewer application with a threshold of 2, meaning that the keywords displayed have been used by at least 2 documents.

From Figure 5 above it can be seen that there are three different colors, these colors are clusters that can be used to divide the focus of research related to this field. Keywords with a red circle are the first cluster and the largest cluster, meaning the red cluster is the focus of the first research, followed by the second largest cluster, namely keywords that have green circles. The last cluster is also the focus of the third research, namely the blue cluster (Zupic & Čater, 2015).

The first research focus consists of 17 items. The keywords that are the focus of research are keywords that have the largest circle among them circle other. Keyword soccer player, performance and speed are the keywords with the biggest circles in the red cluster. This means that the keyword is the focus of the first research. The second research focus consists of 15 items. The keywords that are the focus of research are keywords that have the largest circle among them circle other. Keyword dribbling skill, age, and control are the keywords with the

biggest circles in the green cluster. This means that these keywords are the focus of the second research. The third research focus consists of 14 items. The keywords that are the focus of research are keywords that have the largest circle among them circle other. Keyword training, change and coach are the keywords with the biggest circles in the red cluster. This means that these keywords are the focus of the third research.

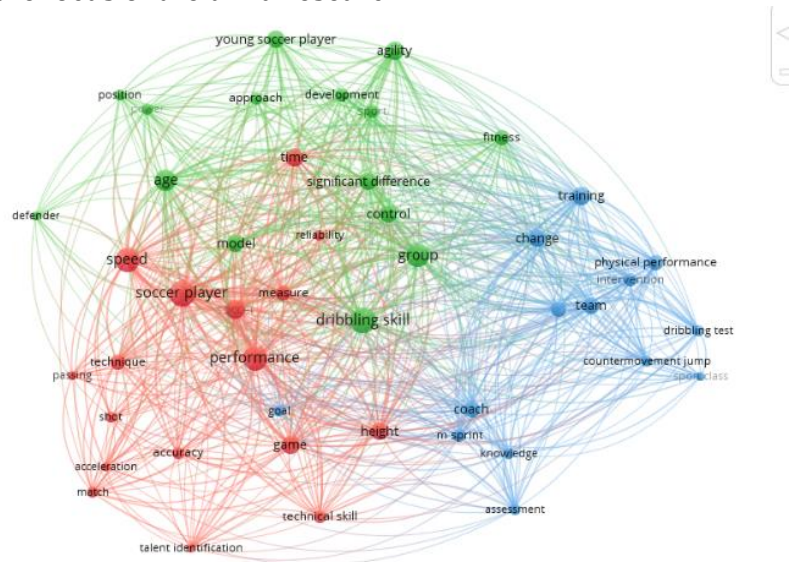


Figure 5. Research focus

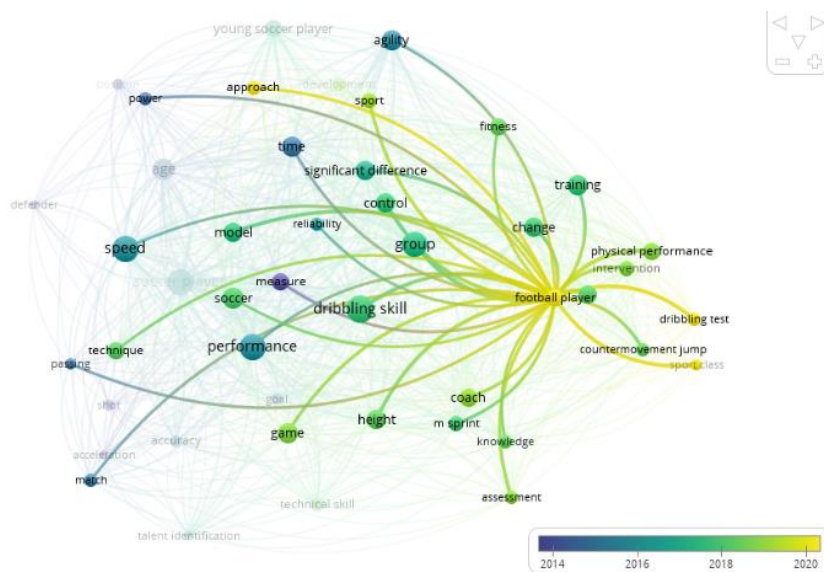


Figure 6. Novelty of research

In figure 6 above there are several colors displayed, starting from blue which indicates the keyword was used around 2014, green means the keyword was used around 2017 and yellow means the keyword has only been used in the last few years. Keywords with yellow circles are keywords that have just been used, meaning that these keywords are new themes in this field. The new theme is football player, approach, dribbling test, and sports class.

In looking at the novelty of research, links between keywords can be used, meaning that keywords that do not have links with other keywords are the novelty of research in this field (Eck & Waltman, 2010). Judging from figure 5, keywords dribbling the skills that are the focus

of the first research as well as the theme in this study do not have a direct link to keywords passing and measure, meaning that there is no research that directly links dribline skill and passing and measure together.

The three research focuses above can be useful for further research in setting research themes. Meanwhile, novelty and novelty can be used for further research to help find problems that have not been studied by previous research.

The first research, conducted by (Fajrin et al., 2021), focuses on the relationship between coordination and dribbling skills in football players. The literature review employs a traditional approach, analyzing five research articles obtained from Google Scholar and GARUDA databases. The study emphasizes the importance of dribbling as a fundamental technique in football, highlighting the role of coordination, particularly in the feet, for effective ball control. The goal is to comprehensively and critically review existing research on the correlation between coordination and dribbling skills. The findings suggest a positive relationship between coordination and the ability to dribble the ball.

In contrast, the second research discusses the bibliometric analysis of publications related to dribbling skills in football. It identifies the peak year for publications as 2007, with the highest number of publications being seven. The study notes that publications in 2015 received the highest citation count, totaling 174 citations. England and Portugal are recognized as influential countries in this field, and the research themes are categorized into three main focuses: soccer players, performance, and speed; dribbling skill, age, and control; and training, change, and coach. The analysis also reveals a new theme involving football player, approach, dribbling test, and sport class. Interestingly, the second research points out that there is no direct link between dribbling skill and passing and measure in the identified research themes. The study suggests that the three research focuses can guide future research themes, while emphasizing the importance of exploring novel areas not previously studied.

In comparing the two studies, it is evident that the first research is specific in examining the relationship between coordination and dribbling skills, relying on a traditional literature review method. On the other hand, the second research takes a broader approach, employing bibliometric analysis to provide an overview of the publication trends and research themes related to dribbling skills in football. Both studies contribute valuable insights, with the first offering a detailed review of the existing literature, and the second providing a quantitative analysis of the research landscape.

CONCLUSION

From the results and discussion above it can be concluded that the publication is related to dribbling skills in football reached the peak with the highest number of publications in 2007 with 7 publications. Publications in 2015 have been cited more than any other year, namely 174 times. Most of the publications related to this field have been published in Q1 journals as many as 25 articles. England and Portugal are countries that have a great influence on research in this field compared to other countries. The research focus is divided into three, namely, 1) soccer players, performance and speed ; 2) dribbling skill, age, and control ; 3) training, change and coach. The new theme in this field is football player, approach, dribbling test, and sport class, keywords dribbling the skills that are the focus of the first research as well as the theme in this study do not have a direct link to keywords passing and measure, meaning that there is no research that directly links dribline skill and passing and measure together. The three research focuses above can be useful for further research in setting research themes. Meanwhile, novelty and novelty can be used for further research to help find problems that have not been studied by previous research.

Despite valuable insights, research on dribbling skills in soccer has certain limitations that

must be acknowledged. The scope of the research is limited to a certain time period, thereby potentially excluding recent developments and changes in research trends. Additionally, a geographic bias is apparent as this study emphasizes the influence of England and Portugal, but this study may not fully represent the global landscape of research on dribbling skills. Reliance on the Scopus database as a publication source may introduce bias, and future researchers may benefit from combining multiple databases to ensure a more inclusive representation of the literature. The selection of specific keywords, while providing a focused analysis, can limit the breadth of the research landscape by excluding certain relevant terms such as passing and measurement. The thematic classification, although identifying three main research foci, may oversimplify the diversity of research themes within the field. To address these limitations, future researchers are encouraged to conduct longitudinal analyses, expand geographic coverage, diversify data sources, include additional keywords, and refine thematic analysis. In doing so, they can contribute to a more comprehensive and nuanced understanding of the dynamics and research trends related to dribbling skills in soccer.

REFERENCES

- Andry, A., Nawan, P., Fatkurahman, A., Nurhadi, S., & Dewangga, Y. (2021). The effect of 10 weeks game experience learning (gel) based training on teamwork, respect attitude, skill and physical ability in young football players. *Physical Education Theory and Methodology*, 21(2), 173–179. <https://doi.org/10.17309/TMFV.2021.2.11>
- Angraini, L. M., Yolanda, F., & Muhammad, I. (2023). Augmented reality: The improvement of computational thinking based on students' initial mathematical ability. *International Journal of Instruction*, 16(3), 1033–1054. <https://doi.org/10.29333/iji.2023.16355a>
- Aprianova, F., & Hariadi, I. (2016). Metode drill untuk meningkatkan teknik dasar menggiring bola (dribbling) dalam permainan sepakbola pada siswa sekolah sepakbola putra zodiac kabupaten bojonegoro usia 13-15 tahun. *Jurnal Kepeleatihan Olahraga*, 1(1), 63–74. Retrieved from <http://journal2.um.ac.id/index.php/jfik/article/view/11801/5424>
- Arslan, E., Kilit, B., Clemente, F. M., Soyly, Y., Sögüt, M., Badicu, G., Murawska-Ciałowicz, E. (2021). The effects of exercise order on the psychophysiological responses, physical and technical performances of young soccer players: Combined small-sided games and high-intensity interval training. *Biology*, 10(11). <https://doi.org/10.3390/biology10111180>
- Bakar, A. (2020). Pengaruh latihan lunge terhadap keterampilan shooting sepak bola pada ssb sjs usia 16-18 tahun. *BABASAL (Sport Education Journal)*, 1(2), 1–6. <https://doi.org/10.32529/bsej.v1i2.1011>
- Bekris, E., Gissis, I., & Kounalakis, S. (2018). The dribbling agility test as a potential tool for evaluating the dribbling skill in young soccer players. *Research in Sports Medicine*, 26(4), 425–435. <https://doi.org/10.1080/15438627.2018.1492395>
- Eck, N. J. van, & Waltman, L. (2010). Software survey: VOSviewer, a computer program for bibliometric mapping. *Scientometrics*, 84(2), 523–538.
- Effendi, A. R., & Rhamadhansyah, F. (2017). Peningkatan pembelajaran menggiring bola. *Jurnal Pendidikan Olahraga*, 6(1), 54–64.
- Fajrin, S. N., Agustiyawan, A., Purnamadyawati, P., & Mahayati, D. S. (2021). Literature review :

Hubungan koordinasi terhadap keterampilan menggiring bola pada pemain sepak bola. *Indonesian Journal of Physiotherapy*, 1(1), 6. <https://doi.org/10.52019/ijpt.v1i1.2605>

Farozy, M, A, Janiarli, M, Sinurat, R. (2021). Hubungan indeks massa tubuh dengan kemampuan menggiring bola pada pemain persatuan sepak bola muara musu. *Sport Education and Health Journal*, 2(2), 182–190. <https://journal.upp.ac.id/index.php/joset/article/view/1125>

Febriarus, J., & Hardinoto, N. (2022). Korelasi speed dan agility terhadap kemampuan dribbling pemain sepakbola gik fc tahun 2021. *Journal Physical Health Recreation*, 2(2), 140–149. <https://doi.org/10.55081/jphr.v2i2.646>

Formenti, D., Rossi, A., Bongiovanni, T., Campa, F., Cavaggioni, L., Alberti, G., Trecroci, A. (2021). Effects of non-sport-specific versus sport-specific training on physical performance and perceptual response in young football players. *International Journal of Environmental Research and Public Health*, 18(4), 1–11. <https://doi.org/10.3390/ijerph18041962>

Hariato, `Gutomo, Nurhadi, M., Waktu, N., & Sujarwo, E. (2016). Model pembelajaran passing sepak bola di sd. *Briliant: Jurnal Riset Dan Konseptual*, 1(1), 58. <https://doi.org/10.28926/briliant.v1i1.8>

Hartanto, D. (2016). Pengaruh latihan menggiring bola menggunakan bola berbeda ditinjau dari koordinasi mata-kaki terhadap peningkatan kemampuan menggiring bola. *Jurnal Pendidikan Olah Raga*, 4(1), 56–65. Retrieved from <http://www.journal.ikipgripta.ac.id/index.php/olahraga/article/view/30>

Hasanuddin, M. I. (2018). Kontribusi antara kecepatan, kelincahan dan koordinasi mata-kaki dengan kemampuan menggiring bola dalam permainan sepak bola pada siswa mts negeri 1 Kotabaru. *CENDEKIA Jurnal Ilmiah Pendidikan*, 6(1), 96–119. <https://ejournal.stkip-pb.ac.id/index.php/jurnal/article/view/76>

Iman, I. (2013). Hubungan antara kelincahan dan kecepatan terhadap hasil menggiring bola. *Jurnal Pendidikan Dan Pembelajaran Khatulistiwa (JPPK)*, 2(8), 1–16. <https://jurnal.untan.ac.id/index.php/jpdpb/article/view/2986>

Irawan, A. Y. (2019). Hubungan antara kecepatan dan kelincahan dengan keterampilan menggiring bola. *Sport Science and Health*, 1(3), 222–226. Retrieved from <http://journal2.um.ac.id/index.php/jfik/indexhttp://fik.um.ac.id/>

Khozim, N., & Nugroho, R. A. (2022). Hubungan bmi dan kelincahan terhadap keterampilan menggiring bola peserta ekstrakurikuler sepakbola. *Sport Science and Education Journal*, 3(2), 36–43. <https://doi.org/10.33365/ssej.v3i2.2220>

Liang, W., Liang, Z., Chen, K., Zhou, H., Zhao, G., & Xuan, Z. (2021). Dribble optimization of humanoid soccer robot based on overlapping layered learning. *Proceedings of the 33rd Chinese Control and Decision Conference, CCDC 2021*, 3346–3351. College of Automation and Artificial Intelligence, Nanjing University of Posts and Telecommunications, Nanjing, 210046, China: Institute of Electrical and Electronics Engineers Inc. <https://doi.org/10.1109/CCDC52312.2021.9602733>

- Mayani, I., Suripah, & Muhammad, I. (2022). Analysis of students' errors in solving statistical problems: A case of 8th grade students at smpn 4 siak hulu, indonesia. *Jurnal Pendidikan Mipa*, 23(4), 1826–1838. <https://doi.org/10.23960/jpmipa/v23i2.pp1827-1838>
- Moher, D., Liberati, A., Tetzlaff, J., & Altman, D. G. (2009). Preferred reporting items for systematic reviews and meta-analyses: The prisma statement. *BMJ (Online)*, 339(7716), 332–336. <https://doi.org/10.1136/bmj.b2535>
- Muhammad, I., Darmayanti, R., & Arif, V. R. (2023). Discovery learning research in mathematics learning: A bibliometric review. *Delta-Phi: Jurnal Pendidikan Matematika*, 1(1), 72–84. <https://doi.org/10.61650/dpjpm.v1i1.77>
- Muhammad, I., Elmawati, Samosir, C. M., & Marchy, F. (2023). Bibliometric analysis: Research on articulate storylines in mathematics learning. *EduMa: Mathematics Education Learning And Teaching*, 12(1), 77–87. <https://doi.org/10.24235/eduma.v12i1.12607>
- Muhammad, I., Himmawan, D. F., Mardiyah, S., & Dasari, D. (2023). Analisis bibliometrik: Fokus penelitian critical thinking dalam pembelajaran matematika (2017–2022). *JPMI (Jurnal Pembelajaran Matematika Inovatif)*, 6(1), 78–84. <https://doi.org/10.22460/jpmi.v6i1.14759>
- Muhammad, I., Mukhibin, A., Naser, A. do muhammad, & Dasari, D. (2022). Bibliometric analysis: Research trend of interactive learning media in mathematics learning in indonesia. *Prisma Sains: Jurnal Pengkajian Ilmu Dan Pembelajaran Matematika Dan IPA IKIP Mataram*, 11(1), 10–22. <https://doi.org/10.26737/jpmi.v8i1.4005>
- Muhammad, I., Samosir, C. M., Elmawati, & Marchy, F. (2023). Bibliometric analysis :Adobe flash cs6 research in mathematics learning. *Jurnal Pendidikan Matematika Indonesia*, 8(1), 25–34. <https://doi.org/10.26737/jpmi.v8i1.4005>
- Muhammad, I., Yolanda, F., Andrian, D., & Rezeki, S. (2022). Pengembangan media interaktif menggunakan adobe flash cs6 profesional pada materi relasi dan fungsi. *Journal of Authentic Research on Mathematics Education (JARME)*, 4(1), 128–140. <https://jurnal.unsil.ac.id/index.php/jarme/article/view/3958>
- Peña-González, I., Roldan, A., Toledo, C., Urbán, T., & Reina, R. (2021). Change-of-direction ability of para-footballers with cerebral palsy under a new evidence-based and sport-specific classification system. *International Journal of Sports Physiology and Performance*, 16(2), 267–272. <https://doi.org/10.1123/IJSPP.2019-0656>
- Peña-González, I., Sarabia, J. M., Roldan, A., Manresa-Rocamora, A., & Moya-Ramón, M. (2021). Physical performance differences between spanish selected and nonselected para-footballers with cerebral palsy for the national team. *International Journal of Sports Physiology and Performance*, 16(11), 1676–1683. <https://doi.org/10.1123/ijsp.2020-0842>
- Ramadhaniyati, R., Dwi, K., Siregar, P., Muhammad, I., & Triansyah, F. A. (2023). Guide discovery learning (gdl) in education : A bibliometric analysis. *Journal on Education*, 05(04), 11473–11484. <https://jonedu.org/index.php/joe/article/view/2094>

- Samudra, C. T., & Nurjamal, J. (2022). Pengaruh latihan imagery terhadap peningkatan kemampuan shooting permainan sepak bola pada siswa pemula ssb bina mandiri kabupaten penajam paser utara. *Bpej: Borneo Physical Education Journal*, 3, 25–32. <https://doi.org/10.30872/bpej.v3i1.1011>
- Sanusi, N., Triansyah, F. A., Muhammad, I., & Susanti, S. (2023). Analisis bibliometrik: Penelitian communication skills pada pendidikan tinggi. *JlIP - Jurnal Ilmiah Ilmu Pendidikan*, 6(3), 1694–1701. <https://doi.org/10.54371/jlrip.v6i3.1763>
- Soraya, S. M., Kurjono, & Muhammad, I. (2023). Analisis bibliometrik : Penelitian literasi digital dan hasil belajar pada database scopus (2009-2023). *EDUKASIA: Jurnal Pendidikan Dan Pembelajaran*, 4(20), 387–398. <https://jurnaledukasia.org/index.php/edukasia/article/view/270>
- Susaki, Y. (2021). Self-regulated learning and motor skills: Effects of a physical education intervention program on japanese college students. *Journal of Physical Education and Sport*, 21(6), 3593–3598. <https://doi.org/10.7752/jpes.2021.06485>
- Wei, D. (2021). Research on the culture connotation of english vocabulary. *Journal of Human Movement Science*, 2(2), 13–17. <https://doi.org/10.2991/emehss-18.2018.119>
- Zare, N., Amini, O., Sayareh, A., Sarvmaili, M., Firouzkouhi, A., Matwin, S., & Soares, A. (2022). Improving dribbling, passing, and marking actions in soccer simulation 2d games using machine learning. *Lecture Notes in Computer Science (Including Subseries Lecture Notes in Artificial Intelligence and Lecture Notes in Bioinformatics)*, 13132 LNAI(October), 340–351. https://doi.org/10.1007/978-3-030-98682-7_28
- Zupic, I., & Čater, T. (2015). Bibliometric methods in management and organization. *Organizational Research Methods*, 18(3), 429–472. <https://doi.org/10.1177/1094428114562629>
- Zyoud, Waring, W. S., Al-Jabi, S. W., & Sweileh, W. M. (2017). Global research production in glyphosate intoxication from 1978 to 2015: A bibliometric analysis. *Human and Experimental Toxicology*, 36(10), 997–1006. <https://doi.org/10.1177/0960327116678299>