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A Decade of Physical Literacy in Elementary Schools: A Bibliometric Study of Scopus Data

Sulthan Hadist Ismaiedh Cukarso[1], Tri Suryaningsih[2], Dindin Ridwanudin[3], Mochamad Derry Prasaja[4]

[1]Universitas Islam Negeri Syarif Hidayatullah Jakarta, Tangerang, Indonesia
[2]Universitas Islam Negeri Syarif Hidayatullah Jakarta, Tangerang, Indonesia
[3]Universitas Islam Negeri Syarif Hidayatullah Jakarta, Tangerang, Indonesia
[4]Universitas Setia Budhi Rangkasbitung, Lebak, Indonesia

Corresponding Author: sulthan.hadist@uinjkt.ac.id

ABSTRACT
This study aims to analyze the development of physical literacy studies in elementary schools based on Scopus data from. The study used bibliometric methods with the help of EndNote and VOSviewer. A total of 111 articles were analyzed to see the development of publications, citations, journals, publishers, keywords, and title terms. The results showed that the number of publications tended to increase and reached a peak in 2025 with 26 articles. The highest number of citations occurred in 2019. The journal that published the most articles was Physical Education and Sport Pedagogy, while the most dominant publisher was Taylor and Francis Ltd. The most frequently appearing keywords were physical literacy, physical education, and physical activity. These ´ ndings indicate that physical literacy in elementary schools is a continuously evolving topic and is closely related to physical education, physical activity, motor competence, and children's health.

KEYWORDS
Bibliometrics, Physical Literacy, Elementary School, Physical Education.

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I. Introduction

Physical literacy is an important skill that needs to be developed from elementary school age (Mekahani et al., 2023) because it is related to motivation, self-con´dence (Carl et al., 2022) , movement competence (Kretaine & Vecenane, 2025) , knowledge, and understanding of children in carrying out physical activities (Ardiana, 2024) . At this stage, children are in the development of basic movements that become the foundation for their involvement in various forms of physical activity (Ma & Luo, 2023) . Physical literacy also helps children understand that physical activity is not only a sporting activity (Friskawati et al., 2023) , but part of a healthy lifestyle that needs to be carried out continuously (Peranita et al., 2025) . By strengthening physical literacy, elementary school students can be more con´dent in moving, actively participate in physical education learning, and have an awareness of maintaining their body health (Son, 2025; Valle-Muñoz et al., 2025) . Therefore, physical literacy in elementary schools is a fundamental aspect in forming a generation that is active, healthy, and ready to live a quality physical life throughout life.

Ţn practice, physical education instruction in elementary schools often focuses on mastering speci´c sports techniques and fails to fully develop holistic physical literacy (Chen, 2022; Durden-Myers & Bartle, 2023) . Many children fail to achieve the recommended daily physical activity levels, while sedentary behavior and screen use increasingly present challenges in children's lives (Hanifah et al., 2023; Liu et al., 2024) . Another problem arises when teachers, schools, and curricula lack a uni´ed understanding of the concept, indicators, and methods for assessing physical literacy (Essiet et al., 2022; Grauduszus et al., 2023) . Studies on physical literacy assessments also show a diversity of de´nitions, structures, and measurement instruments used for children and adolescents. Therefore, the problem of physical literacy in elementary schools lies not only in children's low physical activity levels but also in the weak conceptual direction, implementation, and evaluation of learning.

Several academics have attempted to address these issues through intervention research, systematic reviews, and science mapping studies. For example, Yin et al. (2025) examined the relationship between school physical activity policy environments and physical literacy among elementary school students in Henan Province, China. The study involved 408 students who were asked to complete the School Physical Activity Environment Questionnaire (SPAEQ) and the Canadian Assessment of Physical Literacy-Edition 2 (CAPL-2) questionnaires. This is in line with the research conducted by Nur et al. (2025) who analyzed datasets to identify

elementary school students' physical literacy pro´les, their strengths and weaknesses in speci´c aspects of physical literacy, and to assess the suitability and reliability of physical literacy measurement instruments. However, this time they formulated their own instruments. The results of their study provide insights into the variability of students' understanding of physical literacy and potential intervention directions to improve their skills. Ţn contrast to previous research, Nuraryati and Adi (2025) analyzed physical literacy in upper elementary school students (grades V and VŢ) from Cepoko State Elementary School and Sadeng 01 State Elementary School, Semarang City, using a descriptive quantitative survey method. Physical literacy was assessed through three domains: physical competence (measured through the TŢAMSA, PACER, and Sit-Up tests), motivation and self-con´dence, and knowledge and understanding. The results of their study showed that most students were classi´ed as developing, with only a quarter reaching the achieving category. However, although various studies have been conducted, bibliometric mapping that speci´cally traces the development of physical literacy publications in elementary schools over the past decade using Scopus data is still needed to identify trends, scienti´c actors, dominant themes, and research gaps.

Although physical literacy has become a signi´cant focus in physical education studies, most research still focuses on learning interventions, measuring movement skills, or the relationship between physical literacy and children's physical activity and health. Studies that speci´cally place elementary schools as the primary context have yet to comprehensively map the direction of scienti´c development, especially over the past decade. Furthermore, it is unclear how publication patterns, dominant themes, academic contributions, and the shifting focus of physical literacy research in elementary schools have evolved over the years. This situation indicates a research gap in the form of a lack of comprehensive mapping of the knowledge structure and scienti´c trends regarding physical literacy in elementary schools. Considering these studies, this research is believed to be important to map bibliographies from speci´c ´elds (Fernandez-Batanero et al., 2020; Otchie & Pedaste, 2020) to examine the direction of research development related to fundamental movement skills in elementary schools (Cukarso et al., 2024) . Therefore, this study attempts to explore the literature on physical literacy in elementary schools in international journals indexed by Scopus from 2017 to 2026. To achieve the research objectives, 5 questions were formulated:

1. How is the development of physical literacy research in elementary schools in 2017 —2026?

2. How is the development of physical literacy research citations in elementary schools in 2017 —2026?
3. Which journals and publishers contributed the most to physical literacy research in elementary schools in 2017 —2026?
4. How is the development of keywords in physical literacy research in elementary schools in 2017 —2026?
5. How is the development of titles in physical literacy research in elementary schools in 2017 —2026?

II. Method

Bibliometric studies using systematic and explicit mapping methods are the design of this research (Batanero et al., 2019; Hudha et al., 2020; Muhtar et al., 2021) . Bibliometric analysis is a quantitative research method that aims to analyze bibliographic data in the form of journal articles, in addition to bibliometrics has the function of knowing the pattern of authorship and citation in a region within a certain period, as well as providing an overview of regional dynamics (Mathankar, 2018; şeref & Karagöz, 2019a, 2019b) . To analyze bibliometric data, several types of software are required as analysis tools such as EndNote and VOSviewer (Van Eck & Waltman, 2010, 2014; Zupic & Čater, 2015) .

Bibliometric research has 4 steps including bibliographic search and examination, bibliographic ´ltering, bibliographic re´nement and completion and bibliographic analysis (Julia, Dolifah, et al., 2020; Julia, Supriatna, Įsrokatun, Aisyah, Hakim, et al., 2020; Julia, Supriatna, Įsrokatun, Aisyah, Nuryani, et al., 2020) .

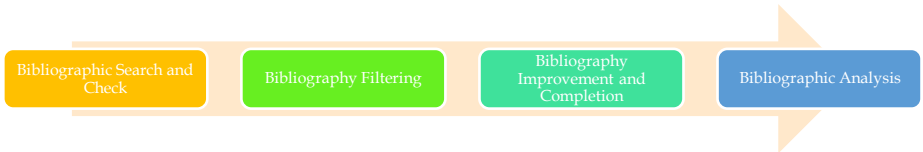


Figure 1Stages of Bibliometric Analysis

Bibliographic Search and Check

The initial step in this research requires Scopus data accessed through the website https://www.scopus.com/pages/home . The Scopus database was chosen because it is a source database for bibliographic searches and Scopus is one of the largest databases that provides *peer-reviewed literature* (Ballew, 2009; Kumar et al., 2023) . Įn addition, Scopus is also a database in this study because it has a much wider variety of products than other repositories (El Archi et al., 2023; Salisbury, 2009) and it contributes approximately 70% more publications compared to WoS (López-Įllescas et al., 2008; Shareefa & Moosa, 2020) . The criteria set in this

study are all bibliographies included in the analysis and cover the following three aspects: (1) the type of bibliography is only journals. Because, journals are a collection of scienti ´ c works published every period of time and must also go through a peer-review process carried out by reviewers who are experts or academics in the ´ eld being studied (Wajdi et al., 2017) (2) article titles include "Physical Literacy", "Elementary School", and "Primary School"; and (3) restrictions on the search year, namely the period 2017 - 2026 (the last 10 years), this time span is taken on the basis of the level of recency in literature studies. Figure 2 illustrates the bibliographic search process on the *Scopus Website* .

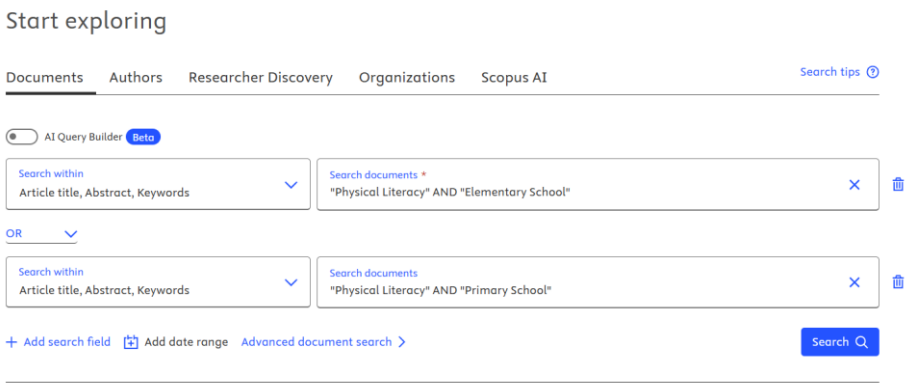


Figure 2Article Search in Scopus

The bibliographic search results above are then saved in EndNote X9 software and saved as a CSV ´ le, which can be opened using *Microsoft OłĆce Excel* . The ´ le is saved, reviewed, and supplemented with metadata.

Bibliography Filtering

Bibliography sorting and selection is carried out using several criteria, namely: (1) English language journals; (2) containing context about "Physical Literacy", "Elementary School", and "Primary School"; and (3) published by established and leading bibliographic database publishers (Julia, Dolifah, et al., 2020) . Each bibliography entered or excluded from the bibliometric analysis process will be checked by searching the Scopus database site extracted from the Scopus Database. So some bibliographies that appear in the Scopus Database search that are not equipped with abstracts and keywords are not selected.

An initial search through the Scopus website yielded 116 bibliographies, which were narrowed down to 111 selected bibliographies and 5 rejected for not meeting the established criteria. Table 1 presents the

number of bibliographies from each year returned by the Scopus database search.

Table 1 Bibliographic Search Results 2017 - 2026

Year	Accepted	Presentation	Rejected	Presentation	Total
2017	3	100%	0	0%	3
2018	4	100%	0	0%	4
2019	6	75%	2	25%	8
2020	8	100%	0	0%	8
2021	9	100%	0	0%	9
2022	15	94%	1	6%	16
2023	11	100%	0	0%	11
2024	19	100%	0	0%	19
2025	26	96%	1	4%	27
2026	10	91%	1	9%	11
Total	111		5		116

Bibliography Improvement and Completion

To conduct a bibliographic analysis, a filtering stage is required by examining and completing the metadata. This metadata examination includes the following aspects: article title, author name, affiliation or institution, country, abstract, keywords, article link, publisher, and year of publication. Once the metadata is complete, the next stage is bibliometric analysis.

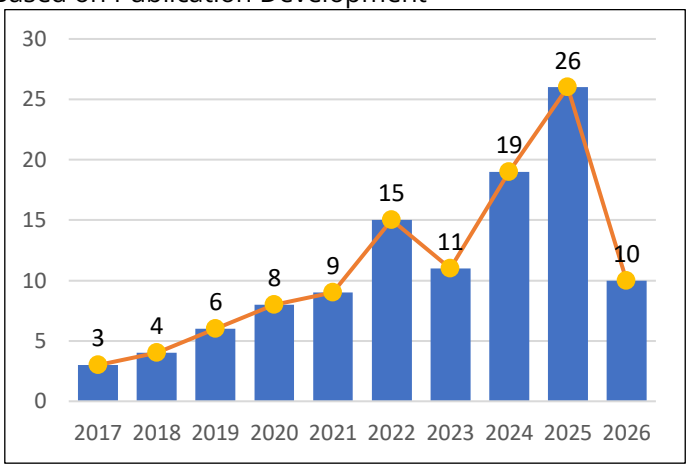
Bibliographic Analysis

Bibliometric analysis can be carried out based on five aspects including: (1) How is the development of physical literacy research in elementary schools in 2017 —2026?; (2) How is the development of citations of physical literacy research in elementary schools in 2017 —2026?; (3) What journals and publishers contributed the most to physical literacy research in elementary schools in 2017 —2026?; (4) How is the development of keywords in physical literacy research in elementary schools in 2017 —2026?; and (5) How is the development of titles in physical literacy research in elementary schools in 2017 —2026?. VOSviewer is a software used for bibliometric analysis so that the results of bibliometric analysis will be visualized by the *software* (Martínez-López et al., 2020; Shukla et al., 2020) . VOSviewer works by detecting large word counts and offering a variety of visuals or displays, analyzing different observations (Julia, Dolifah, et al.,

2020; Rafols et al., 2012; Van Eck & Waltman, 2010, 2014) . Similarly, VOSviewer can create publication, author, or journal maps based on co-citation platforms or key maps centered on distributed channels (Hudha et al., 2020; Julia, Dolifah, et al., 2020) . The type of ´ le imported into VOSviewer for analysis is a ´ le with an .RŢS extract from EndNote.

III. Results and Discussion

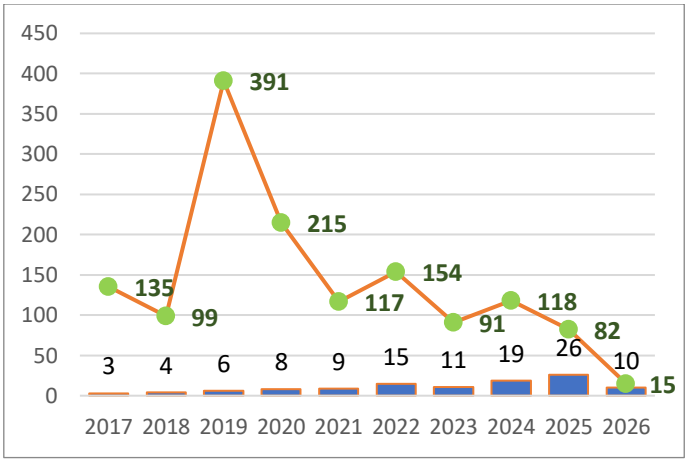
Analysis Based on Publication Development



Graph 1Trends in Publication of Physical Literacy Articles in Elementary Schools 2017-2026

Chart 1 shows that there were 111 articles published on physical literacy in elementary schools from 2017 to 2026. The development of publications shows a trend of increasing, although still experiencing ¸ uctuations in certain years. The increase in publications occurred gradually from 2017 to 2022, namely from 3 articles to 15 articles. However, in 2023 there was a decrease to 11 articles, before increasing signi´ cantly again in 2024 with 19 articles and reaching a peak in 2025 with 26 articles. Meanwhile, in 2026 showed a decrease to 10 articles, which is understandable because the publication period in that year was likely not fully completed.

Analysis Based on Citations



Graph 2Publication and Citation Trends of Physical Literacy Articles in Elementary Schools 2017-2026

Graph 2 shows that the number of citations of articles on physical literacy in elementary schools from 2017 to 2026 was 1,417. The citation pattern shows ¸ uctuating development from year to year. Citations decreased in 2017–2018, 2019–2020, 2020–2021, 2022–2023, 2024–2025, and 2025–2026. Meanwhile, citations increased in 2018–2019, 2021–2022, and 2023–2024. Overall, the highest number of citations occurred in 2019 with 391 citations, despite the number of articles in that year being only 6.

Conversely, the lowest number of citations occurred in 2026, with 15. The low number of citations in 2026 is understandable because the year was still ongoing or the publications hadn't had enough time to accumulate many citations. This ´ nding suggests that a high number of articles doesn't always equate to a high number of citations. This is evident in 2025, which had the highest number of articles, at 26, but only 82 citations.

Analysis by Journal and Publisher

Table 2Publishing Articles on Physical Literacy in Elementary Schools

Journal	Publisher	Number of Articles
Physical Education and Sport Pedagogy	Taylor and Francis Ltd.	13
Journal of Teaching in Physical Education	Human Kinetics Publishers Inc.	8
BMC Public Health	BioMed Central Ltd.	7
Retos	Federacion Espanola de Docentes de Educación Fisica	4

Children	Multidisciplinary Digital Publishing Institute (MDPI)	4
BMJ Open	BMJ Publishing Group	3
Journal of Physical Education and Sport	Editura Universitatii din Pitesti	3
Psychology of Sport and Exercise	Elsevier BV	3
Journal of Science and Medicine in Sport	Elsevier Ltd.	3
International Journal of Environmental Research and Public Health	Multidisciplinary Digital Publishing Institute (MDPI)	3
PLoS ONE	Public Library of Science	3
Sports Medicine - Open	Springer Science and Business Media Deutschland GmbH	3

Table 2 shows that the top 12 journals published the most articles on physical literacy in elementary schools. Overall, these 12 journals contributed 57 articles. The journal with the highest number of publications was Physical Education and Sport Pedagogy published by Taylor and Francis Ltd. with 13 articles. Second place was taken by the Journal of Teaching in Physical Education from Human Kinetics Publishers Ţnc. with 8 articles, while third place was BMC Public Health published by BioMed Central Ltd. with 7 articles.

Furthermore, the journals Retos and Children each published four articles. Several other journals had the same number of publications, namely three articles, including BMJ Open, Journal of Physical Education and Sport, Psychology of Sport and Exercise, Journal of Science and Medicine in Sport, Ţnternational Journal of Environmental Research and Public Health, PLOS ONE, and Sports Medicine - Open. These ´ ndings indicate that studies of physical literacy in elementary schools are not only published in physical education and sport journals, but also spread across journals in public health, sport psychology, sports medicine, and environmental health. This indicates that physical literacy is a multidisciplinary topic that attracts attention from various scienti´ c ´ elds.

Table 3Publishing Physical Literacy Articles in Elementary Schools

Publisher	Number of Articles
Taylor and Francis Ltd.	15
Human Kinetics Publishers Inc.	11

Multidisciplinary Digital Publishing Institute (MDPI)	10
BioMed Central Ltd.	8
Frontiers Media SA	5
Elsevier BV	4
Elsevier Ltd	4
Federacion Espanola de Docentes de Educación Fisica	4
Public Library of Science	4
BMJ Publishing Group	3
Editura Universitatii din Pitesti	3
Springer Science and Business Media Deutschland GmbH	3

Table 3 shows the top 12 publishers that published the most articles on physical literacy in elementary schools. Overall, these 12 publishers contributed 74 articles. The publisher with the highest number of articles was Taylor and Francis Ltd. with 15 articles, followed by Human Kinetics Publishers Inc. with 11 articles, and the Multidisciplinary Digital Publishing Institute (MDPI) with 10 articles. BioMed Central Ltd. was in fourth place with 8 articles, while Frontiers Media SA was in ´ fth place with 5 articles.

Several other publishers have relatively similar publication numbers. Elsevier BV, Elsevier Ltd., Federacion Española de Docentes de Educacion Fisica, and Public Library of Science each published four articles. Meanwhile, BMJ Publishing Group, Editura Universitatii din Pitesti, and Springer Science and Business Media Deutschland GmbH each published three articles. These ´ ndings indicate that publications on physical literacy in elementary schools are mostly published by reputable international publishers, particularly those specializing in physical education, sports, public health, sports medicine, and multidisciplinary research. This indicates that the topic of physical literacy has a broad scope of study and has received attention from various scienti´ c ´ elds.

Keyword Based Analysis

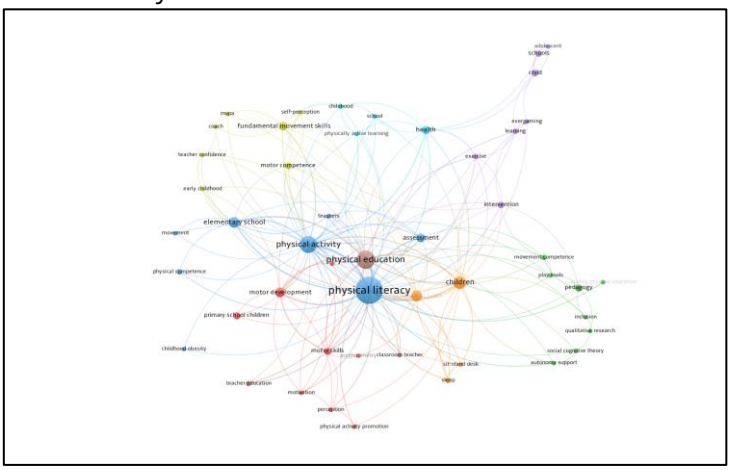


Figure 3Visualization of Keyword Relationships

Table 4Author Keyword Clusters

Cluster color	Keywords	Occurrences	Total link strength
Red	accelerometry	2	2
	motivation	2	7
	motor development	9	22
	motor skills	5	16
	perception	2	7
	physical activity promotion	2	4
	primary school children	5	3
	students	2	6
Green	autonomy support	2	5
	inclusion	2	4
	movement competence	3	7
	pedagogy	5	8
	play tools	2	5
	qualitative research	2	3
	quality physical education	2	3
	social cognitive theory	2	4
Dark blue	assessment	7	16
	childhood obesity	2	2
	elementary school	11	26
	movement	2	3
	physical activity	26	72
	physical competence	3	4

Cluster color	Keywords	Occurrences	Total link strength
	physical literacy	65	125
	teachers	2	8
Yellow	coach	2	4
	early childhood	2	6
	fundamental movement skills	7	13
	motor competence	4	9
	MVPA	2	4
	self-perception	2	6
	teacher confidence	2	5
Purple	adolescent	2	3
	child	4	7
	exercise	3	10
	exergaming	2	4
	intervention	4	10
	learning	3	7
	schools	4	6
Light blue	childhood	2	7
	health	6	16
	physically active learning	2	7
	school	2	6
Orange	children	15	40
	primary school	11	29
	sit-stand desk	2	9
	sleep	3	11
Chocolate	classroom teacher	2	6
	physical education	30	70
	teacher education	3	7

A total of 288 author keywords were identi´ed in this bibliometric study. After ´ltering with a minimum occurrence limit of 2 occurrences, 49 keywords were obtained that had relationships or collaborations between keywords. The analysis results showed that these keywords were divided into several clusters, namely red, green, dark blue, yellow, purple, light blue, orange, and brown. Table 3 shows the grouping of author keywords based on cluster color, number of occurrences, and strength of relationships between keywords, while Figure 6 displays a visualization of the relationship network between these terms.

Based on the analysis results, the most dominant keyword is physical literacy with 65 occurrences and a total link strength of 125, making it the main term in the research network. Ţn addition, the keyword physical education also has a signi ´ cant contribution with 30 occurrences and a total link strength of 70, followed by physical activity with 26 occurrences and a total link strength of 72. Other keywords that are quite prominent are children with 15 occurrences, elementary school and primary school each with 11 occurrences, and motor development with 9 occurrences. These ´ ndings indicate that research on physical literacy in elementary schools is largely associated with physical education, physical activity, movement development, motor competence, children, and the elementary school context.

The cluster grouping also shows that the study of physical literacy in elementary schools covers a diverse range of themes. The dark blue cluster is the strongest cluster because it contains key keywords such as physical literacy, physical activity, elementary school, and assessment. The brown cluster focuses on the themes of physical education, classroom teachers, and teacher education, while the yellow cluster is closely related to fundamental movement skills, motor competence, and self-perception. Meanwhile, other clusters show connections to the themes of pedagogy, motivation, intervention, health, active learning, and the school environment. Thus, these results indicate that physical literacy in elementary schools is a multidimensional topic that develops through the interconnectedness of education, health, physical activity, motor development, and learning practices in schools.

Analysis Based on Title Terms

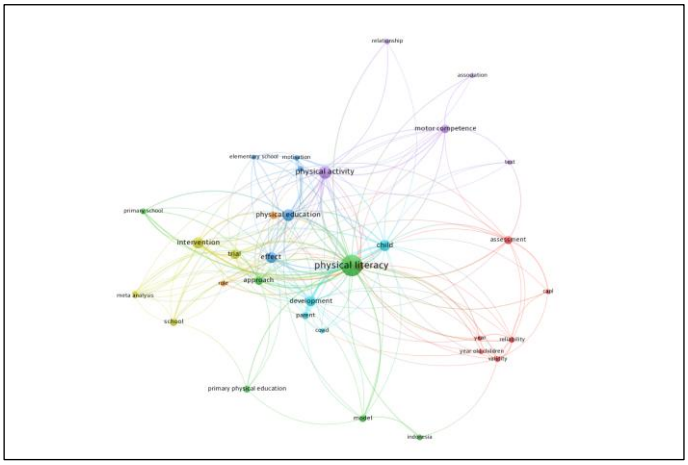


Figure 4Visualization of Abstract Term Relationships

A total of 408 terms were identi´ed in the term analysis using the VOSviewer application. After ´ltering with a minimum of three occurrences, 34 terms were identi´ed with strong network connections. Figure 7 shows a visualization of the term network in articles about physical literacy in elementary schools.

Based on the visualization, the term physical literacy is at the center of the network because it has the largest node size and is connected to various other terms. This term is closely related to physical activity, physical education, child, motor competence, assessment, intervention, and school. The interrelationships between these terms indicate that the study of physical literacy in elementary schools does not only focus on the concept of physical literacy itself, but also relates to physical activity, physical education, motor competence, assessment, learning intervention, and the context of the child and the school environment. Thus, the results of this visualization show that physical literacy is a topic that is interconnected with various aspects of education, health, and child development in elementary schools.

Discussion

The development of physical literacy publications in elementary schools from 2017 to 2026 shows a clear increase in academic attention. The number of publications, which initially only had three articles in 2017, gradually increased and reached a peak of 26 articles in 2025. This increase indicates that physical literacy is beginning to be viewed as an important issue in physical education, particularly as it relates to children's physical activity, movement competence, motivation, self-con´dence, and active lifestyles. However, ¸ uctuations that occurred in several years, such as declines in 2023 and 2026, indicate that the development of this study has not yet fully stabilized. The decline in 2026 also needs to be interpreted with caution because that year may not have been completed in terms of the publication period. Thus, the trend of physical literacy publications in elementary schools shows positive growth, but cannot yet be called a steady and consistent development.

The 1,417 citations indicate that the study of physical literacy in elementary schools has not only increased quantitatively but has also gained attention within the scienti´c community. Ţnterestingly, 2019 was the year with the highest number of citations, with 391 citations, despite the number of articles being only 6. This situation suggests that high publication productivity does not always correlate with high scienti´c impact (Dadiono, 2026) . Fewer articles with high quality, novelty, or strong conceptual

relevance can have a greater impact than many newly published articles. Conversely, 2025 had the highest number of publications, but the number of citations was not as high as in previous years because articles published during that period still needed time to be cited. Therefore, citations in this study should be understood not only as a measure of popularity but also as an indicator of the maturity, quality, and age of the publication.

The contributions of journals and publishers demonstrate that physical literacy in elementary schools has become a cross-disciplinary concern. Journals such as Physical Education and Sport Pedagogy, Journal of Teaching in Physical Education, and BMC Public Health demonstrate that this topic extends beyond physical education to include public health, sports psychology, sports medicine, and child health issues. The dominance of publishers such as Taylor and Francis Ltd., Human Kinetics Publishers Ịnc., MDPỊ, and BioMed Central Ltd. also indicates that physical literacy has gained traction in reputable international journals. However, the dominance of major publishers requires a critical examination, as it may indicate a tendency to concentrate publications in speci´c academic channels. Ịf not balanced with exploration of local and regional contexts, physical literacy studies risk predominantly representing the perspectives of countries or institutions with stronger access to international publications. Thus, the distribution of journals and publishers demonstrates the multidisciplinary nature of physical literacy, but also raises questions about the equitable distribution of academic contributions from various educational contexts.

The keyword analysis results show that physical literacy is the main focus of the research network, with 65 occurrences and a total link strength of 125. Other keywords such as physical education, physical activity, children, elementary school, primary school, and motor development indicate that the research direction remains focused on the relationship between physical literacy, physical education, physical activity, and child development. Conceptually, this reinforces the view that physical literacy is not simply the ability to perform movements, but rather a multidimensional construct encompassing physical, cognitive, affective, social, and behavioral aspects. However, the dominance of the main keywords also needs to be interpreted carefully because the term physical literacy is part of the search strategy, so its occurrence tends to be high. More important to critique is the emergence of keywords such as assessment, teacher education, classroom teacher, intervention, and pedagogy, which are smaller in number but have strategic signi´cance for the implementation of physical literacy in elementary schools. Thus, the keyword map not only shows

dominant themes but also reveals areas that still need to be strengthened in future research.

Keyword clusters indicate that physical literacy in elementary schools is developing through several research directions. Clusters related to physical literacy, physical activity, elementary school, and assessment highlight the importance of core concepts and their measurement. Another cluster containing physical education, classroom teacher, and teacher education demonstrates the importance of teachers' roles in translating physical literacy into learning practices. Meanwhile, clusters related to fundamental movement skills, motor competence, motivation, self-perception, health, and intervention demonstrate that physical literacy is related to motor development, psychological aspects, and children's health. However, the interconnectedness between these clusters also indicates that physical literacy research still faces challenges in integrating concepts, assessment, pedagogy, and school policies. Thus, physical literacy in elementary schools is a multidimensional ´eld of study, but still requires a more integrated implementation framework.

Analysis of title terms shows that physical literacy is central to the network and is linked to terms such as physical activity, physical education, child, motor competence, assessment, intervention, and school. This relationship suggests that article titles tend to position physical literacy as a key issue associated with physical activity, physical education, children, motor competence, and intervention. However, the strong presence of general terms in titles may also indicate that some research is still at the stage of mapping basic concepts and relationships between variables. Terms related to school policy, curriculum, teacher readiness, movement culture, family context, and the sustainability of an active lifestyle have not yet emerged as a prominent focus. Ţn fact, physical literacy in elementary schools depends not only on students, but also on the support of teachers, schools, families, curriculum, and the social environment (Romero-Martínez et al., 2025) . Thus, analysis of title terms indicates that the research direction has developed, but still leaves room for more contextual, practical, and transformative studies.

Methodologically, the use of the Scopus, EndNote, and VOSviewer databases strengthens this study, as the search, ´ltering, and visualization processes were systematic. Selecting English-language journal articles from 2017 to 2026 also provides a clear focus and aligns with the study's objective of assessing developments over the past decade. However, using only one database can limit the scope of the literature, as relevant articles indexed by Web of Science, ERŢC, PubMed, Google Scholar, or national journals are

excluded from the analysis. Furthermore, the search criteria, which focused on the terms Physical Literacy, Elementary School, and Primary School, potentially excluded articles using other terms such as primary education, school-aged children, or fundamental movement literacy. Therefore, while this study has the strength of being an initial bibliometric mapping tool, its results should be read as a Scopus-based overview, not as a comprehensive representation of the global literature.

The ´ndings of this study have important implications for the development of physical education in elementary schools. The increasing number of publications indicates that physical literacy is increasingly accepted as an important framework for developing active, con´dent, mobile-competent children with a healthy lifestyle (Barratt et al., 2024; Durden-Myers & Bartle, 2023) . However, the mapping results also indicate that research still focuses on conceptual aspects, physical activity, motor competence, and assessment, while issues of learning implementation, teacher readiness, curriculum, and school policies have not yet fully received attention. Ịn the elementary school context, physical literacy cannot simply be measured; it must be developed through enjoyable, inclusive, contextual, and sustainable learning. Therefore, the main contribution of this study lies in its ability to indicate the direction of scienti´c development while identifying the need for further research that is more applicable to physical education practice.

IV. Conclusion

Based on the results of bibliometric analysis, research on physical literacy in elementary schools in the Scopus database for the period 2017—2026 shows increasing development, especially in terms of the number of publications, the involvement of international journals and publishers, and the expansion of study themes to include physical education, physical activity, motor competence, assessment, intervention, health, and the role of teachers. However, the increase in the number of articles is not always in line with the high number of citations, so the quality, relevance, and scienti´c in¸uence of publications remain important aspects that need to be considered. The ´ndings of keywords and title terms show that physical literacy is the main focus of the study, but issues of learning implementation, teacher readiness, school policies, and the development of assessment instruments appropriate to the elementary school context still need to be strengthened. Thus, this study con´rms that physical literacy in elementary schools is a multidisciplinary ´eld of study that continues to develop, but still requires further research that is more applicable,

contextual, and oriented towards physical education practices in elementary schools.

V. References

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