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The Philosophical Paradigm of Science in The Transformation of Physical Education Research: Bibliometric Analysis

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ABSTRACT

This study explores the transformation of the philosophy of science paradigm in Physical Education research through bibliometric analysis and a Systematic Literature Review (SLR). Data were retrieved from the Scopus database using Publish or Perish for publications from 2015 to 2025 and selected based on PRISMA guidelines, resulting in seven eligible articles. Bibliometric analysis with VOSviewer was used to identify publication trends, citation networks, keyword co-occurrence, and thematic structures. The results indicate a paradigm shift from a positivistic and instrumental orientation toward more holistic, humanistic, and multidisciplinary approaches. Key themes include the philosophy of play, lifelong physical education, and Outcome-Based Education (OBE)-based curricula, which reinforce the ontological, epistemological, and axiological foundations of the field. The study concludes that the philosophy of science is essential in shaping more reflective, contextual, and meaningful Physical Education research.

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1. INTRODUCTION

The development of research in the field of Physical Education increasingly shows diversity, not only in methodological aspects, but also in the philosophical foundations that underlie it, aspects that are often neglected, even though they are crucial for the direction and quality of research. (Ayu et al., 2025). In many cases, physical education research is still trapped in an empirical-positivistic paradigm that only emphasizes quantitative aspects, objectivity, and physical measurements, without paying attention to the dimensions of meaning, value, and contextuality. (Ajar & Jasmani, 2015). However, as revealed in the study of the philosophy of science, the scientific paradigm determines the researcher's perspective on reality, knowledge, and educational goals. (Mujtahidin & Oktarianto, 2022).

Recent studies have shown that integrating science into education and sport can enrich understanding of the nature of human beings, knowledge, and social and ethical values in physical activity. For example, a recent article, "Philosophical Thinking in the Context of Sport," emphasizes that the philosophy of science, through its three main aspects: ontology, epistemology, and axiology, plays a crucial role in understanding sport as a scientific and social phenomenon. (Ilmi et al., 2024). Likewise, in the study Philosophical and Scientific Approaches in Understanding Humans and Knowledge: Implications for Holistic Physical Education, it is stated that a philosophical approach helps build education holistically, by considering all physical, cognitive, and affective potential. (Holistik, 2024).

However, based on a review of the latest literature and publications, such as in the Bibliometric Analysis of Scientific Publications on Physical Education in Indonesia (2015–2024) (Supriyatni et al., 2025). Most research on Physical Education still focuses solely on educational, physical health, and quantitative aspects. (Telaumbanua et al., 2025b). This shows that the use of the philosophical framework of science in Physical Education is still limited, so that the epistemological, ontological and axiological aspects of Physical Education as a scientific discipline have not been developed optimally. (Angga & Sari, 2025).

Against this background, this study presents a crucial point: the use of a bibliometric approach to map how the philosophy of science paradigm has been constructed, used, and transformed in physical education research. (Ummah et al., 2023). Bibliometric analysis approaches allow for quantitative and qualitative literature reviews, ranging from frequency paradigms, theories, and concepts to citation networks and research collaborations. In this context, studies such as "Exploring the Evolution of Physical Education and School Health Research: A Bibliometric Analysis" provide an example of how bibliometrics can be used to track research trends in physical education and school health. (Perdima et al., 2023).

Therefore, this study aims to address this gap by simplifying a comprehensive map of the philosophical foundations of science in Physical Education research, while also providing a reference for researchers, students, and practitioners in designing philosophically grounded research. By understanding the position of paradigms, theories, and philosophical frameworks of science, future research is expected to be more mature, contextual, and contribute to the development of a more holistic sport science and physical education.

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2. METHODS

This study uses bibliometric analysis combined with a Systematic Literature Review (SLR) to explore the development of the philosophy of science paradigm in Physical Education research (Rachmawati, 2024; Viani et al., 2024). Bibliometric analysis is used to identify publication trends, conceptual structures, and patterns of relationships between studies, while SLR is applied to ensure accuracy and transparency in the article selection process.

2.1 Procedures

The data sources were obtained from the Scopus database accessed through the Publish or Perish (PoP) software. The search was conducted using a combination of keywords such as "philosophy of science," "epistemology," "philosophy of science in physical education," and "physical education." The publication period was limited to the 2015–2025 period to capture the latest developments in the research field. To optimize search results, Boolean operators such as AND and OR were used, with the search focused on the title, abstract, and keywords of the articles. The included articles only included English-language journal publications that were in the final publication stage.

The SLR process was conducted through three main stages based on the PRISMA (Preferred Reporting Items for Systematic Reviews and Meta-Analyses) guidelines: identification, screening, and feasibility assessment. During the identification stage, 401 documents were obtained through Scopus (via Publish or Perish). Subsequently, duplication was removed using Mendeley, resulting in 13 duplicate articles being removed, leaving 388 documents for the screening stage. During the screening stage, the titles and abstracts of the 388 documents were reviewed. A total of 76 articles were excluded due to their irrelevance to the research topic (57 articles), inappropriate methods (20 articles), and book-based content (4 documents). After this stage, 231 articles were deemed suitable for full-text search. During the full-text search stage, 164 articles were found to be inaccessible due to limited access or availability.

Thus, only 67 articles entered the eligibility assessment stage. At this stage, an in-depth content analysis was conducted. The eligibility assessment results indicated that 23 articles were excluded, primarily due to the lack of Physical Education theory (16 articles) and the lack of full access to the articles (21 articles). After all selection stages were completed, only seven articles met all inclusion criteria and were used in the systematic review process.

2.2 Design or Data Analysis

The selected article data was then exported in RIS and CSV formats for further analysis. Bibliometric analysis was performed using VOSviewer software. (Husaeni, 2022) to map the relationships between keywords, citation networks, and the development of research themes (Shah et al., 2020). The types of analysis used include co-occurrence, co-citation, and bibliographic coupling, which are visualized in the form of network visualization, overlay visualization, and density visualization.

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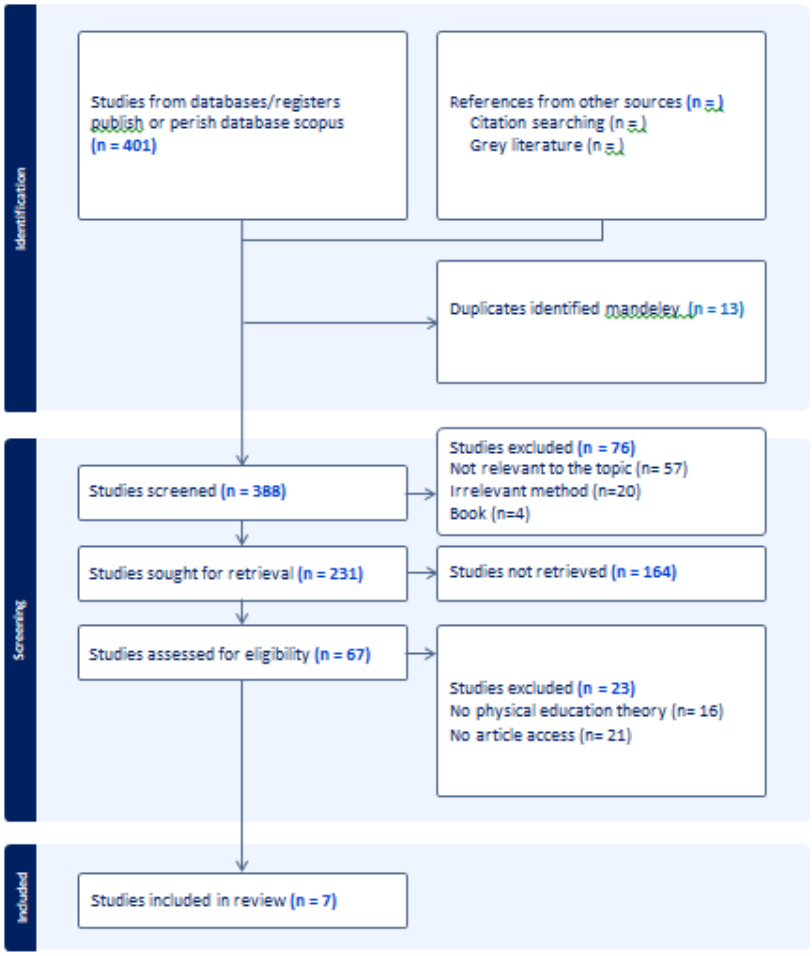

Figure 1. Prisma flow chart

This method provides a comprehensive overview of the transformation of the philosophy of science paradigm in Physical Education research over the last decade and ensures that the research process is carried out systematically, transparently, and can be replicated.

3. RESULTS

Publication Number Trend

Based on the results of a search using Publish or Perish in the Scopus database, 401 articles were found between 2015 and 2025. Publication trends show a fluctuating pattern. The year with the highest number of publications was 2015 (61 articles), while the lowest number was found in 2025 (17 articles). After the publication peak in 2015, there was a fairly steady decline until 2017, followed by a slight increase in 2018. The trend declined again in 2019-2022, and began to show an increase again in 2023–2024.

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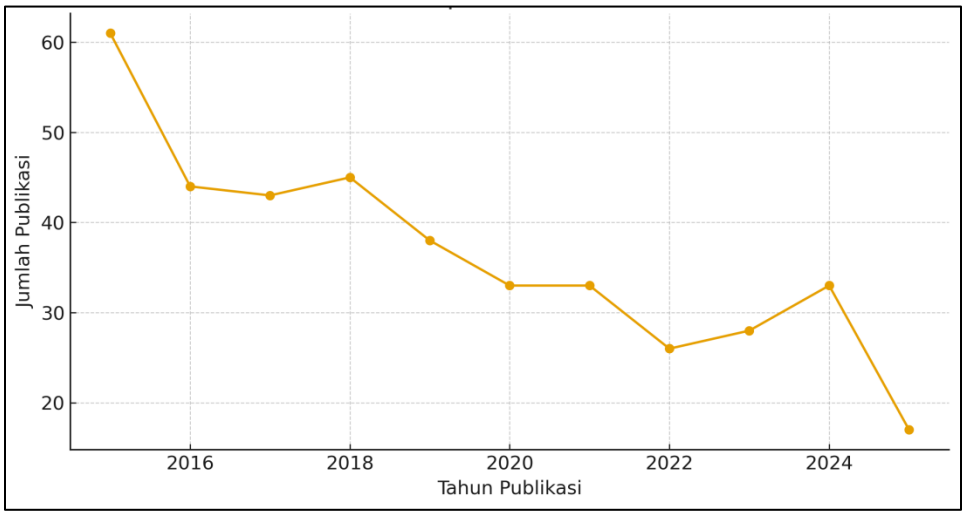
Table 1. Search Results for the Number of Publications 2015-2025

Publication Year	Number of Publications
2015	61
2016	44
2017	43
2018	45
2019	38
2020	33
2021	33
2022	26
2023	28
2024	33
2025	17
Average	36.45

Figure 2. Trend in Number of Publications 2015-2025



In general, this trend shows that the study of the philosophy of science in physical education experienced a phase of high exploration at the beginning of the period, stagnation in the middle of the period, and a revival at the end of the period, especially with the emergence of new themes such as achievement-based curriculum and meaningful learning.

Of the total of 401 articles, a selection process was carried out based on inclusion and exclusion criteria in the Systematic Literature Review process. (Telaumbanua et al., 2025a). After screening for titles, abstracts, duplications, topic relevance, and publication quality, only seven articles met the criteria for primary data collection. These articles served as the basis for the bibliometric analysis and discussion in this study.

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Most Related Journals

The analysis shows that research publications on the philosophy of science in physical education are not concentrated in purely sports journals, but are more frequently published in interdisciplinary journals. The most productive journals generally come from the fields of Philosophy of Sport, Sports Pedagogy, Philosophy of Education, Curriculum Studies and Educational Policy. Some of the journals that most frequently publish these studies include the Journal of Philosophy of Sport, Physical Education and Sport Pedagogy, and international journals focusing on sports education and critical pedagogy. The productivity of these journals indicates that the topic of philosophy in physical education is positioned as a strategic issue that bridges theory and practice. (Penelitian, 2022).

The nature of publications in these journals tends to feature a critical-theoretical approach, reflective analysis, and in-depth conceptual studies. This indicates that this field has developed into an established subdiscipline within sport and education studies.

Most Active Researcher

Bibliometric analysis shows that twenty authors have published on philosophy of science and research methodology relevant to the transformation of physical education research in the 2015–2025 period. The productivity of each author varies, reflecting differences in their contributions and roles in shaping the development of these studies.

Selected	Author	Documents	Total link strength
☑	mcnamee, m.	4	0
☑	norris, c.	2	0
☑	orekhov, e.f.	3	0
☑	pessoa, o.	2	0
☑	pradeu, t.	2	0
☑	rode, d.	2	0
☑	ryckman, t.	2	0
☑	schickore, j.	4	0
☑	scholl, r.	2	0
☑	senner, v.	2	0
☑	slavov, m.	2	0
☑	sofyan, d.	3	0
☑	standal, ø.f.	2	0
☑	uher, j.	2	0
☑	weigand, e.	2	0
☑	weng, s.	2	0
☑	whalen, c.	2	0
☑	zabala, m.e.	2	0
☑	zhurbina, i.v.	2	0
☑	škerbić, m.m.	3	0

Figure 3. Most active Author Trend Data

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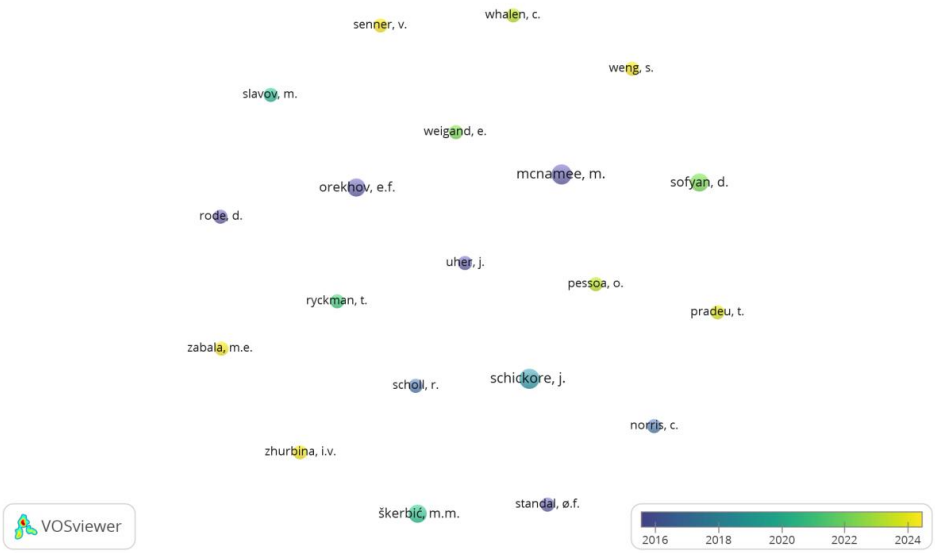

Figure 4. Overlay, Visualization of the most active authors

The two most active researchers are McNamee, M. and Schickore, J., each with four publications. Both are important figures who discuss aspects of ethics, epistemology, and research methods, thus having a major influence on the direction of the development of the philosophy of science paradigm in physical education research. In addition, researchers such as Orekhov, E.F., Sofyan, D., and Škerbić, M.M. are also quite productive with three publications. They strengthen the methodological and conceptual discussions that support the transformation of research in the field of physical education.

Meanwhile, most of the other authors have two publications, demonstrating consistent involvement in enriching the scientific discourse. Overall, this pattern suggests that the paradigm shift in the philosophy of science in physical education research is driven not only by a few key figures but also by a broader network of researchers. The combined contributions of core and supporting researchers have formed a stable and dynamic scientific ecosystem over the past decade.

Research Topic Trends

Trend Visualization The research topics in this study are divided into 3 parts, namely: Network Visualization (Figure 5), Overlay Visualization (Figure 6), and Density Visualization (Figure 7).

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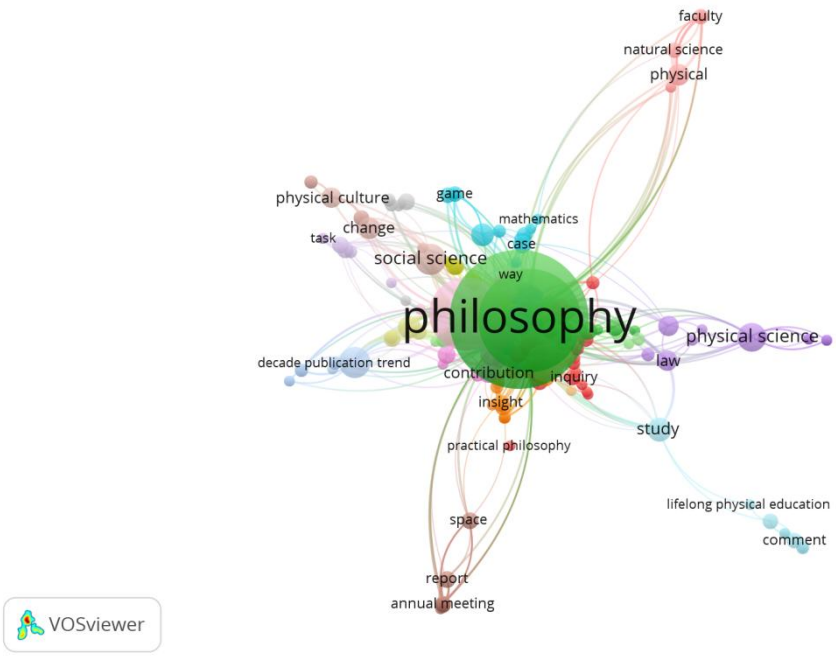

Figure 5. Network Visualization of Research Topic Trends

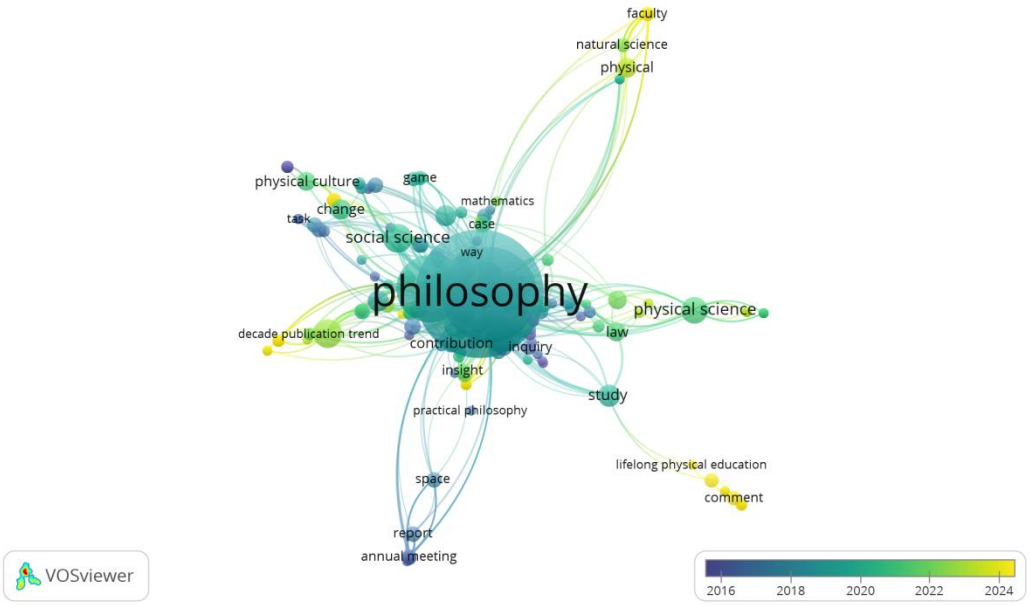

Figure 6. Overlay Visualization of Research Topic Trends

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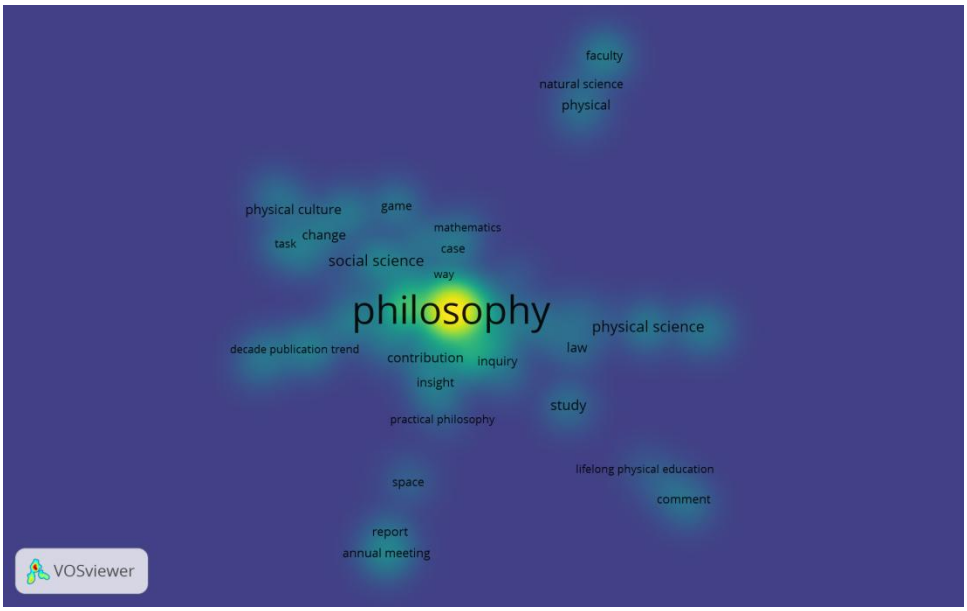

Figure 7. Density Visualization of Research Topic Trends

Based on the visualization of Research Topic Trends, it is clear that emerging research topics over the past decade demonstrate a strong link between the philosophy of science and the transformation of physical education research. The keyword "philosophy" is the primary hub within the network, indicating that the philosophy of science paradigm is the most dominant conceptual foundation and is frequently used to understand changes and developments in physical education research. This dominance of the term confirms that the philosophical approach is no longer merely complementary but has become the primary framework for thinking in physical education research.

The development of topic trends also indicates a shift from basic philosophical studies such as inquiry, insight, and practical philosophy to more applied and interdisciplinary themes. This is evident through the strong connection with keywords such as social science, physical science, mathematics, and natural science. This connection illustrates that physical education research is now not only confined to the realm of pedagogy and physical activity, but is also influenced by social science epistemology, natural science methodology, and even the principles of logic in mathematics. Thus, the transformation of physical education research occurs through a process of cross-disciplinary integration, which aligns with the philosophy of science paradigm regarding expanding the foundation of knowledge. (Warni & Mangkurat, 2024).

The latest trends are indicated by green to yellow nodes such as "lifelong physical education," "decade publication trend," and "comment," which appeared in the 2022–2024 period. The presence of these keywords indicates that the research focus is shifting to issues of sustainability in physical education, critical reflection on publication patterns, and more evaluative discussions of the direction of development in this field. These new topics demonstrate that the philosophy of science paradigm is now being used to interpret long-term dynamics, evaluate changes in physical education practices, and strengthen its relevance in the context of modern society. (Society & Fadli, 2021).

Overall, this visualization demonstrates that the transformation of physical education research over the past 10 years has occurred through a strengthening of the philosophical framework of science, multidisciplinary integration, and the emergence of new themes oriented toward sustainability and reflexivity. Thus, research examining the

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philosophical paradigm of science can provide a comprehensive picture of how the direction, approach, and focus of physical education research have developed and transformed over time.

4. DISCUSSION

Analysis of Selected Articles

Table 2. Data Analysis of Selected Articles

No	Author	Title	Method	Results and Discussion	Conclusion
1.	Wenceslao Garcia-Puchades & Oscar Chiva-Bartoll (Garcia-puchades & Chiva-bartoll, 2019)	*A Philosophy of Physical Education Oriented Toward the Game as an Object*	Theoretical study / Philosophy	Criticizes the instrumental justification of physical education and offers a new perspective through Bernard Suits' game theory and Object-Oriented Philosophy.	Games have intrinsic value in physical education and support the process of student subjectification.
2.	Zhao Haojun, Lim Seong Pek, Xin Zhuozhuo (Haojun, 2024)	*Reshaping Physical Education Curricula through the Outcome-Based Education Philosophy*	Experiment + Questionnaire	OBE improves students' social adaptation through a holistic assessment that includes physical, cognitive, and social.	OBE effectively forms a PJOK curriculum that is oriented towards results and holistic development of students.
3.	Shiyang Weng, Ang Li, Pengcheng Li (Weng, 2024)	*A Study of Paul Lengrand's Philosophy of Lifelong Physical Education*	Literature study + Logical induction	Describes the influence of historical and social context on Lengrand's thinking about lifelong physical education.	Physical education is an integral part of lifelong education and must be carried out continuously.
4.	Øyvind F. Standal & Kenneth Aggerholm (Standal, 2016)	*Habits, Skills and Embodied Experiences: A Contribution to Philosophy of Physical Education*	Phenomenological and pragmatism studies	Examining the relationship between skills, bodily experience, and habituation in PJOK.	Body habits and experiences play an important role in the formation of physical education skills and values.
5.	Davi Sofyan, Khairul Hafezad Abdullah, Hanny	*The Philosophy of Sport and Physical Education: Four Decade Publication*	Scientometric / Bibliometric	Analyzing global publication trends over 40 years. The US is the most productive country; Ryall E. is the most	Provides future research directions and a map of the development of the philosophy of sport & physical

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	Hafiar (Mara, 2022)	*Trends via Scientometric Evaluation*		productive author.	education.
6.	Frederick L. Ware (Reviewer) (Venema et al., 2018)	*Meanings and Transformations of Humanity in Theology, Philosophy, and Science (Review artikel)*	Literature review	Discusses various perspectives on humanity, the relationship between science and religion, the concept of sacred humanity, morality, human identity, and the implications of transhumanism.	Concludes that the study of humanity requires a multidisciplinary approach and a balance between theology, philosophy, and science to understand human identity and transformation.
7.	Wen-Ran Zhang, Karl E. Peace, Hyo-Joo Han (Zhang, 2016)	*YinYang Bipolar Dynamic Organizational Modeling for Equilibrium-Based Decision Analysis*	Development of bipolar logic (BDL) theory and modeling, conceptual approaches, and integration of methods (sociopsychiatry, cognitive maps, and quantum models).	Explains YinYang logic as a basis for modeling organizations, developing BDL, BDOM, and EBDA; demonstrates applications in decision making, regulation, organizational dynamics, and cognitive mapping.	It is concluded that YinYang BDL can be a global scientific basis for organizational modeling, offering an alternative to Western logic and becoming an integrative framework for balance-based decision making.

It is concluded that YinYang BDL can be a global scientific basis for organizational modeling, offering an alternative to Western logic and becoming an integrative framework for balance-based decision making. (Garcia-puchades & Chiva-bartoll, 2019) Marking a significant shift, they criticized the dominance of instrumental approaches that have traditionally viewed physical education as merely a means to achieve physical goals. They offered a new orientation through Bernard Suits' play philosophy and Object-Oriented Philosophy, which position play as an intrinsically valuable activity and play a role in the subjectification of learners. These findings suggest that theoretical paradigms in physical education are increasingly oriented toward the meaning, experience, and internal value of physical activity. (Artikel, 2025).

Paradigm shifts are also evident in curriculum development. Research (Haojun, 2024) revealed that Outcome-Based Education (OBE) can improve students' physical, social, and cognitive abilities through holistic assessment. These findings indicate that physical

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education is now moving toward a more structured, outcome-based curriculum oriented toward competency development. This demonstrates the role of educational philosophy in shaping a modern curriculum that emphasizes not only physical activity but also character development and social skills. (Gumilar et al., 2025).

On the other hand, studies by (Weng, 2024) emphasizes that the philosophy of physical education cannot be separated from the concept of lifelong learning. By exploring Paul Lengrand's thinking, this study demonstrates that physical education is an integral part of the educational process that continues throughout human life. This perspective broadens the understanding that physical activity is not only related to learning in school but is a human need throughout the entire life cycle.

From the perspective of global scientific trends, bibliometric studies by (Mara, 2022) This illustrates that research in the philosophy of sport and physical education is experiencing rapid growth in various countries. The United States is noted as the most productive country, while issues such as sport ethics, bodily experience, play, morality, and educational values are the most frequently researched topics. This condition indicates that research in the philosophy of science in physical education is increasingly established and recognized internationally, and serves as a reference in developing physical education theory and practice in various contexts. (Yulianto & Azizah, 2025).

A multidisciplinary approach is also an important characteristic in the study of the philosophy of science. (Venema et al., 2018) demonstrates that understanding humanity, morality, and identity requires a dialogue between philosophy, theology, and science. The implications of transhumanism and technological developments suggest that physical education must view humans not only from a physical perspective, but also from an ethical, spiritual, and social perspective. Thus, the future direction of physical education research increasingly demands cross-disciplinary integration.

Finally, the research (Zhang, 2016) enriches the paradigm of philosophy of science by introducing an Eastern epistemological framework through Yin-Yang logic and Bipolar Dynamic Logic. Although not directly focused on physical education, this approach is relevant because it offers an analytical and decision-making model that can be used in educational management, organizational planning, and complex problem-solving within learning systems. This integration of Eastern epistemologies demonstrates that physical education research is not solely developed within the Western tradition but also opens up space for alternative, more holistic frameworks of thought.

Overall, these findings indicate that the transformation of physical education research is heavily influenced by the diversity of evolving philosophical paradigms. Modern physical education is increasingly moving toward a pluralistic, humanistic, and transdisciplinary perspective, where philosophy is no longer merely a conceptual foundation but also serves as the basis for curriculum development, learning methods, and research orientation. This diversity of approaches demonstrates that philosophy of science plays a crucial role in charting the future of physical education research globally.

5. CONCLUSION

Based on the results of a bibliometric analysis and systematic literature review (SLR) of research publications from 2015–2025, it can be concluded that the philosophy of science paradigm plays a strategic role in transforming the direction and character of Physical Education research. This study demonstrates that research in Physical Education is no longer solely oriented toward a positivistic approach and measurement of physical aspects, but has evolved toward a more holistic, reflective, and multidisciplinary paradigm.

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The synthesis of seven selected articles demonstrates a growing integration of ontological, epistemological, and axiological aspects in Physical Education research. The philosophy of play emphasizes the intrinsic value of physical activity in developing students' subject matter, while the Outcome-Based Education (OBE) approach demonstrates a shift toward an outcomes-based curriculum that emphasizes cognitive, social, and moral dimensions in a balanced manner.

The concept of lifelong physical education broadens the meaning of physical activity as a continuous necessity in human life, beyond just the context of formal schooling. Bibliometric findings also reveal that the discourse on the philosophy of science in Physical Education is developing globally and is dominated by interdisciplinary approaches, linking philosophy with pedagogy, ethics, social science, and even theology. Furthermore, the inclusion of Eastern frameworks such as Yin-Yang logic enriches epistemological perspectives and opens up space for more balanced and contextual decision-making models in the development of Physical Education.

Overall, this study concludes that the transformation of Physical Education research is underpinned by a paradigm shift from an instructional-instrumental approach to a humanistic, transdisciplinary, and meaning-oriented approach. Philosophy of science serves not only as a theoretical foundation but has become the primary framework for curriculum development, methodology, and value orientation in Physical Education. Therefore, strengthening the integration of the philosophical science paradigm is crucial for the development of more mature, relevant Physical Education research that contributes to holistic human development.

6. AUTHORS' NOTE

The authors declare that this research has no conflicts of interest. This article is original work, has not been previously published, and is not currently under review in any other journal or scientific forum. The entire research process was conducted in accordance with applicable ethical standards for research and scientific publication.

7. REFERENCES

Ajar, M., & Jasmani, P. (2015). *Journal of Physical Education , Health and Sport*. *2*(2), 76–88.

Angga, P. D., & Sari, A. J. (2025). Deep Learning: Bagaimana Implementasinya Pada Pembelajaran Pendidikan Jasmani, Olahraga dan Kesehatan (PJOK)? *Jurnal Ilmiah Profesi Pendidikan*, *10*(2), 1373–1391. https://doi.org/10.29303/jipp.v10i2.3227

Artikel, I. (2025). *Model sport education sebagai transformasi pedagogi dalam pendidikan jasmani : Suatu tinjauan bibliometrik The sport education model as pedagogical transformation in physical education : A bibliometric review Abstrak*. *4*, 115–134.

Ayu, I. G., Laxsmi, M., Nuryaganiy, H. P., & Suwiwa, I. G. (2025). *MENGENAL DASAR-DASAR PENJAS (SEJARAH , KONSEP , DAN*. *2*(1), 210–217.

Garcia-puchades, W., & Chiva-bartoll, O. (2019). A Philosophy of Physical Education Oriented toward the Game as an Object . Showing the Inexhaustible Reality of Games through Bernard Suits ' Theory Games through Bernard Suits ' Theory. *Sport, Ethics and Philosophy*, *00*(00), 1–14. https://doi.org/10.1080/17511321.2019.1630476

Gumilar, C., Thoriq, A., & Mardiyansah, M. (2025). *Peran Filsafat Pendidikan dalam Membentuk Kurikulum Merdeka Belajar dalam Pengembangan Teori dan Praktik*

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p- ISSN 2776-608X e- ISSN 2776-5970

Pendidikan di Indonesia Universitas Muhammadiyah Jakarta , Indonesia Universitas Pamulang , Indonesia.

Haojun, Z. (2024). Reshaping physical education curricula through the outcome-based education philosophy. *International Journal of Evaluation and Research in Education*, *13*(4), 2536–2543. https://doi.org/10.11591/ijere.v13i4.28673

Holistik, J. (2024). *1,2,3,4*. *8*, 132–144.

Husaeni, D. F. Al. (2022). Bibliometric Using Vosviewer with Publish or Perish (using Google Scholar data): From Step-by-step Processing for Users to the Practical Examples in the Analysis of Digital Learning Articles in Pre and Post Covid-19 Pandemic. *Asean Journal of Science and Engineering*, *2*(1), 19–46. https://doi.org/10.17509/ajse.v2i1.37368

Ilmi, T., Asri, C., & Rakhmat, C. (2024). *Pemikiran Filsafat Ilmu dalam Konteks Olahraga*. *7*, 8702–8709.

Mara, U. T. (2022). *THE PHILOSOPHY OF SPORT AND PHYSICAL EDUCATION : FOUR DECADE PUBLICATION TRENDS VIA SCIENTOMETRIC EVALUATION*. *7989*, 437–449. https://doi.org/10.17309/tmfv.2022.3.20

Mujtahidin, M., & Oktarianto, M. L. (2022). *Metode Penelitian Pendidikan Dasar : Kajian Perspektif Filsafat Ilmu*. *9*(1).

Penelitian, J. (2022). *All Fields of Science J-LAS*. *2*(2), 323–337.

Perdima, F. E., Abdullah, K. H., Karimi, A., & Dehasen, U. (2023). *Edu Sportivo*. 203–214.

Rachmawati, R. (2024). *Pengenalan Metode Systematic Literature Review (SLR)*. 1–30. https://elsa.brin.go.id/akun

Shah, S. H. H., Lei, S., Ali, M., Doronin, D., & Hussain, S. T. (2020). Prosumption: bibliometric analysis using HistCite and VOSviewer. *Kybernetes*, *49*(3), 1020–1045. https://doi.org/10.1108/K-12-2018-0696

Society, R. I., & Fadli, M. R. (2021). *HUBUNGAN*. *31*(1), 130–161. https://doi.org/10.22146/jf.42521

Standal, Ø. F. (2016). Habits, skills and embodied experiences: a contribution to philosophy of physical education. *Sport Ethics and Philosophy*, *10*(3), 269–282. https://doi.org/10.1080/17511321.2016.1220972

Supriyatni, D., Nopembri, S., Yuliarto, H., Paramitha, S. T., Ramadhan, M. G., & Purnomo, E. (2025). *Bibliometric analysis of physical education learning in inclusive schools : trends , contributions , and research impact Análisis bibliométrico del aprendizaje de la educación física en escuelas inclusivas : tendencias , contribuciones e impacto de la investigación Authors How to cite in APA Keywords Resumen Palabras clave*. *2025*, 773–787.

Telaumbanua, R., Hidayat, Y., & Rahmat, A. (2025a). *Peran Media Audiovisual Dalam Pembelajaran Bulutangkis : Systematic Literature Review Dan Bibliometric Analysis*. *6*(4), 1703–1723.

Telaumbanua, R., Hidayat, Y., & Rahmat, A. (2025b). *SPRINTER : Jurnal Ilmu Olahraga Efektivitas Media Audio Visual dalam Pembelajaran Bulutangkis : Systematic Literature*

Review. *6*(1).

Ummah, E. S., Narjis, K., & Niswah, L. (2023). *Analisis Bibliometrik Metode Montessori Berbasis Data Scopus*. *4*(2), 464–475. https://doi.org/10.37985/murhum.v4i2.189

Venema, B. D. R., Mcknight, S., Ware, F. L., Of, H., & Huyssteen, J. W. V. A. N. (2018). *Meanings and Transformations of Humanity in Theology , Philosophy , and Science*. *44*(4), 379–382. https://doi.org/10.1111/rsr.13639

Viani, A. I., Tasyaina, D., Siregar, P., & Logistik, F. (2024). *Analisis Bibliometrik Dengan Penerapan Metode SWOT Menggunakan Aplikasi VOSVIEWER*. *1*, 56–67.

Warni, H., & Mangkurat, U. L. (2024). *MULTILATERAL: Jurnal Pendidikan Jasmani dan Olahraga*. *23*(4), 7–20.

Weng, S. (2024). *A p l '*.

Yulianto, A. G., & Azizah, A. N. (2025). *Eksplorasi Filsafat Ilmu Dalam Pendidikan Jasmani : Menuju Pemahaman Yang Holistik*. *04*(01), 22–31.

Zhang, W. R. (2016). YinYang bipolar dynamic organizational modeling for equilibrium-based decision analysis: Logical transformation of an indigenous philosophy to a global science. *Asia Pacific Journal of Management*, *33*(3), 723–766. https://doi.org/10.1007/s10490-016-9480-1

DOI: http://dx.doi.org/10.17509/xxxx.xxx
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