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Global Research Trends and Theoretical Perspectives on Character Education in Physical Education: A Bibliometric Analysis (2001–2025)

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Abstract

Character education has become a global priority, with physical education (PE) strategically fostering respect, teamwork, and perseverance. However, its implementation remains inconsistent, and comprehensive bibliometric studies are still limited. This study aims to analyze global research trends on character education in PE from 2001 to 2025 through bibliometric methods using RStudio 4.5.1. Findings indicate an annual growth rate above 12%, led by the United States, Indonesia, and the United Kingdom, with extensive collaboration networks across America, Europe, and Asia. Keyword analysis highlights the dominance of values education, social learning theory, and experiential learning, alongside emerging themes such as digital PE, gamification, and inclusive pedagogy. Teachers appear as key transformative agents through professional development and reflective practice. Regional variations are evident: Europe emphasizes teacher professionalization, while Asia focuses on primary school character education. Overall, PE is affirmed as a vital arena for life skills, citizenship, and social participation.

Keywords: Character Education, Physical Education, Bibliometric Analysis

1. Introduction

Character education has become a central theme in contemporary education, with physical education (PE) offering unique opportunities to foster respect, teamwork, and perseverance (Barba-Martin et al., 2020; Kirk, 2019). Sports and physical activities enable students to practice moral decision-making and strengthen virtues through lived experiences (Agboola & Tsai, 2012). However, research reveals inconsistencies in its implementation and assessment across educational contexts (Pérez-Ordás et al., 2021; Yoon & Armour, 2017). Findings are often fragmented due to diverse conceptual frameworks and teaching strategies in different cultures (Bailey et al., 2009; Casey & Goodyear, 2015; Quennerstedt, 2019). Many PE teachers also lack sufficient training and resources to effectively integrate moral education (Baldwin et al., 2007).

Bibliometric evidence shows a surge in publications since 2020, spanning developed and developing nations such as the US, UK, Australia, Indonesia, and Brazil (Barker et al., 2017; Cervantes & Meaney, 2013; Downward et al., 2018). The urgency arises from social challenges, including declining youth moral engagement and increasing behavioral problems in schools (Calderón-Almendros et al., 2024; Ward et al., 2021). Global educational reforms highlight character development as essential for preparing ethical citizens (Muhtar et al., 2021; Pozo et al., 2018). Its integration with social-emotional learning and behavioral interventions underscores the need for evidence-based approaches (Dhuli et al., 2022; Kosak et al., 2024).

Despite growing interest, comprehensive bibliometric studies mapping global research on character education in PE remain limited (Camerino et al., 2019; Kirk, 2019). Few reviews address intersections with inclusive education, sustainable development, or culturally responsive pedagogy (Alcalá et al., 2019; Harvey et al., 2014).

This study aims to conduct a bibliometric analysis of global research trends on character education in PE (2001–2025), focusing on publication patterns, theoretical frameworks, pedagogical models, keyword evolution, collaboration networks, and future research direction.

2. Methods

Figure 1 Methodology used (Danvila-del-Valle et al., 2019)

2.1 Research Design

This study applies a bibliometric research design using the RStudio application version 4.5.1 (<https://posit.co/download/rstudio-desktop/>) to map and quantitatively evaluate scientific publications on physical education, sports, and character development from 2001 to 2025. This design systematically identifies trends, collaborations, and thematic evolutions.

2.2 Procedures

This dataset was retrieved from Scopus (<https://www.elsevier.com/products/scopus>). Cleaning of unstructured or messy data included removing duplicates, verifying metadata, and preparing files for bibliometric analysis using OpenRefine (<https://openrefine.org/>). The data was then entered into RStudio for analysis.

Table 4. Documents obtained from searches in the databases

2.4 Data Analysis

Bibliometric indicators were analyzed using Bibliometrix in RStudio by analyzing six research questions on relevant biblioshiny output, ensuring comprehensive insights.

Table 1. Research Questions

3. Results and Discussion

Figure 1. Main Information

Research on character education in physical education (PE) has shown consistent growth from 2001 to 2025, with an annual increase above 12%. The United States leads the field with nearly 400 publications, followed by Indonesia (~300), the United Kingdom (>250), and Australia (~160). China, Spain, and Canada contribute between 100-150 works, while Turkey, Malaysia, and Greece publish fewer than 100. These trends highlight the US as a global driver and emphasize strong Asian involvement, particularly from Indonesia and China. Collaboration networks demonstrate extensive partnerships across North America, Europe, and Asia, with leading journals including *Physical Education and Sport Pedagogy* and the *Journal of Teaching in Physical Education*.

Regarding theoretical frameworks, values education, social learning theory, and experiential learning dominate, with character education and life skills emerging as central themes. Recent trends indicate a shift toward inclusive and technology-based approaches, particularly digital PE and inclusive pedagogy.

Teachers are consistently identified as transformative agents positioned strategically in conceptual structures central to character formation. Research increasingly emphasizes their professional development and reflective practice, moving beyond instructional roles to shaping pedagogical beliefs and agency. Contextual analysis reveals that secondary education is the most studied level, although primary, higher education, and teacher training contexts also appear prominently. Regional differences are evident: European research highlights teacher professionalization, while Asian studies emphasize character education in primary schools.

Innovative approaches such as gamification, sport-based interventions, and digital PE are increasingly adopted, particularly since 2018. Finally, PE is strongly linked to value transfer in life skills, citizenship, and civic engagement. A thematic evolution is observed from a focus on self-discipline toward broader goals of social participation and digital citizenship. Overall, PE emerges as a strategic platform for fostering moral values, life skills, and civic responsibility across diverse educational and cultural contexts.

4. Conclusion

The bibliometric analysis reveals significant growth in character education research within physical education (2001–2025), led by the United States, Indonesia, and the United Kingdom. Findings highlight the dominance of values education, social learning theory, and experiential learning, alongside shifts toward inclusive and technology-driven pedagogy. Teachers emerge as key transformative agents, while regional variations show distinct priorities. Overall, physical education is affirmed as a strategic platform for cultivating life skills and citizenship.

References

- Agboola, A., & Tsai, K. C. (2012). Bring Character Education into Classroom. *European Journal of Educational Research*, volume-1-2012(volume1-issue2.html), 163–170. <https://doi.org/10.12973/EU-JER.1.2.163>
- Alcalá, D. H., Garijo, A. H., Pérez-Pueyo, Á., & Fernández-Río, J. (2019). Cooperative Learning and Students' Motivation, Social Interactions and Attitudes: Perspectives from Two Different Educational Stages. *Sustainability (Switzerland)*, 11(24). <https://doi.org/10.3390/SU11247005>
- Bailey, R., Armour, K., Kirk, D., Jess, M., Pickup, I., & Sandford, R. (2009). The educational benefits claimed for physical education and school sport: An academic review. *Research Papers in Education*, 24(1), 1–27. <https://doi.org/10.1080/02671520701809817>
- Baldwin, S. C., Buchanan, A. M., & Rudisill, M. E. (2007). What teacher candidates learned about diversity, social justice, and themselves from service-learning experiences. *Journal of Teacher Education*, 58(4), 315–

327. <https://doi.org/10.1177/0022487107305259>

- Barba-Martín, R. A., Bores-García, D., Hortigüela-Alcalá, D., & González-Calvo, G. (2020). The application of the teaching games for understanding in physical education. Systematic review of the last six years. *International Journal of Environmental Research and Public Health*, 17(9). <https://doi.org/10.3390/IJERPH17093330>
- Barker, D., Wallhead, T., & Quennerstedt, M. (2017). Student learning through interaction in physical education. *European Physical Education Review*, 23(3), 273–278. <https://doi.org/10.1177/1356336X16640235;PAGE=STRING:ARTICLE/CHAPTER>
- Calderón-Almendros, I., Moreno-Parra, J. J., & Vila-Merino, E. S. (2024). Education, power, and segregation. The psychoeducational report as an obstacle to inclusive education. *International Journal of Inclusive Education*, 28(11), 2424–2437. <https://doi.org/10.1080/13603116.2022.2108512>
- Camerino, O., Valero-Valenzuela, A., Prat, Q., Sánchez, D. M., & Castañer, M. (2019). Optimizing education: A mixed methods approach oriented to Teaching Personal and Social Responsibility (TPSR). *Frontiers in Psychology*, 10(JUN), 440169. <https://doi.org/10.3389/FPSYG.2019.01439/BIBTEX>
- Casey, A., & Goodyear, V. A. (2015). Can Cooperative Learning Achieve the Four Learning Outcomes of Physical Education? A Review of Literature. *Quest*, 67(1), 56–72. <https://doi.org/10.1080/00336297.2014.984733>
- Cervantes, C. M., & Meaney, K. S. (2013). Examining Service-Learning Literature in Physical Education Teacher Education: Recommendations for Practice and Research. *Quest*, 65(3), 332–353. <https://doi.org/10.1080/00336297.2013.773533>
- Danvila-del-Valle, I., Estévez-Mendoza, C., & Lara, F. J. (2019). Human resources training: A bibliometric analysis. *Journal of Business Research*, 101, 627–636. <https://doi.org/10.1016/j.jbusres.2019.02.026>
- Dhuli, K., Naureen, Z., Medori, M. C., Fioretti, F., Caruso, P., Perrone, M. A., Nodari, S., Manganotti, P., Xhufi, S., Bushati, M., Bozo, D., Connelly, S. T., Herbst, K. L., & Bertelli, M. (2022). Physical activity for health. *Journal of Preventive Medicine and Hygiene*, 63(2), E150–E159. <https://doi.org/10.15167/2421-4248/jpmh2022.63.2S3.2756>
- Downward, P., Hallmann, K., & Rasciute, S. (2018). Exploring the interrelationship between sport, health and social outcomes in the UK: Implications for health policy. *European Journal of Public Health*, 28(1), 99–104. <https://doi.org/10.1093/eurpub/ckx063>
- Harvey, S., Kirk, D., & O'Donovan, T. M. (2014). Sport Education as a pedagogical application for ethical development in physical education and youth sport. *Sport, Education and Society*, 19(1), 41–62. <https://doi.org/10.1080/13573322.2011.624594>
- Kirk, D. (2019). Precarity, critical pedagogy and physical education. *Precarity, Critical Pedagogy and Physical Education*, 1–202. <https://doi.org/10.4324/9780429326301>
- Kosak, L.-A., Harandian, K., Bacon, S. L., Fitzpatrick, C., Correale, L., & Pagani, L. S. (2024). Active Child, Accomplished Youth: Middle Childhood Active Leisure Fuels Academic Success by Emerging Adulthood. *Children (Basel, Switzerland)*, 11(9). <https://doi.org/10.3390/children11091140>
- Muhtar, T., Supriyadi, T., Lengkana, A. S., & Cukarso, S. H. I. (2021). Character Education in Physical Education Learning Model: A Bibliometric Study on 2011–2020 Scopus Database. *International Journal of Human Movement and Sports Sciences*, 9(6), 1189–1203. <https://doi.org/10.13189/SAJ.2021.090613>
- Pérez-Ordás, R., Nuviala, A., Grao-Cruces, A., & Fernández-Martínez, A. (2021). Implementing Service-Learning Programs in Physical Education; Teacher Education as Teaching and Learning Models for All the Agents Involved: A Systematic Review. *International Journal of Environmental Research and Public Health* 2021, Vol. 18, Page 669, 18(2), 669. <https://doi.org/10.3390/IJERPH18020669>
- Pozo, P., Grao-Cruces, A., & Pérez-Ordás, R. (2018). Teaching personal and social responsibility model-based programmes in physical education: A systematic review. *European Physical Education Review*, 24(1), 56–75. <https://doi.org/10.1177/1356336X16664749>
- Quennerstedt, M. (2019). Physical education and the art of teaching: transformative learning and teaching in physical education and sports pedagogy. *Sport, Education and Society*, 24(6), 611–623. <https://doi.org/10.1080/13573322.2019.1574731>
- Ward, P., Mitchell, M. F., van der Mars, H., & Lawson, H. A. (2021). Chapter 3: PK12 school physical education: conditions, lessons learned, and future directions. *Journal of Teaching in Physical Education*, 40(3), 363–371. <https://doi.org/10.1123/JTPE.2020-0241>
- Yoon, K., & Armour, K. M. (2017). Mapping physical education teachers' professional learning and impacts on pupil learning in a community of practice in South Korea. *Physical Education and Sport Pedagogy*, 22(4), 427–444. <https://doi.org/10.1080/17408989.2016.1268589>

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