



Reconstructing Physical Education in Indonesia: a critical sociological approach to structural inequality and inclusivity

Reconstruyendo la Educación Física en Indonesia: un enfoque sociológico crítico sobre la desigualdad estructural y la inclusividad

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Abstract

Introduction: Physical education (PE) in Indonesia is increasingly recognized as a platform for holistic student development, yet systemic inequalities continue to restrict access and inclusion, particularly for students with disabilities and those in underserved areas.

Objective: This study aims to reconstruct the discourse and structure of PE in Indonesia by adopting a critical sociological approach focused on structural inequality and inclusive practice.

Methodology: A systematic literature review was conducted following PRISMA guidelines across five major academic databases (Scopus, Web of Science, SAGE, Taylor & Francis, and Google Scholar). The review targeted English-language peer-reviewed articles from 2015 to 2025. Inclusion criteria emphasized studies engaging with sociological frameworks and inclusive physical education within the Indonesian context. A total of 8 studies were analyzed using thematic synthesis.

Discussion: Findings highlight key barriers including insufficient teacher training, inconsistent policy application, and infrastructural deficits. Positive developments were noted in adaptive pedagogies such as movement games and localized professional development. These reflect emerging inclusive practices but require structural reinforcement.

Conclusion: The review advocates for systemic reforms in PE, calling for policy alignment, critical pedagogy, and sustained investment in inclusive teacher training. A sociological reorientation of PE can transform it into a space of equity, empowerment, and full student participation.

Keywords

Inclusive education, Physical Education, structural inequality, teacher training, disability inclusion.

Resumen

Introducción: La educación física (EF) en Indonesia se reconoce cada vez más como una plataforma para el desarrollo integral del alumnado. Sin embargo, las desigualdades estructurales continúan restringiendo el acceso y la inclusión, especialmente para estudiantes con discapacidad y aquellos que viven en zonas marginadas.

Objetivo: Este estudio tiene como objetivo reconstruir el discurso y la estructura de la EF en Indonesia adoptando un enfoque sociológico crítico centrado en la desigualdad estructural y las prácticas inclusivas.

Metodología: Se realizó una revisión sistemática de la literatura siguiendo las directrices PRISMA en cinco bases de datos académicas (Scopus, Web of Science, SAGE, Taylor & Francis y Google Scholar). La revisión se centró en artículos revisados por pares, publicados entre 2015 y 2025, en idioma inglés. Se analizaron ocho estudios mediante una síntesis temática.

Discusión: Los hallazgos evidencian barreras significativas, como la falta de formación docente inclusiva, la aplicación inconsistente de políticas y el déficit de infraestructuras. También se destacan avances positivos en pedagogías adaptadas, como los juegos motores, que promueven la participación inclusiva.

Conclusión: El estudio aboga por reformas sistémicas en la EF que integren pedagogías críticas, alineación política y formación docente inclusiva. Un enfoque sociológico puede transformar la EF en un espacio de equidad, empoderamiento y participación plena del alumnado.

Palabras clave

Educación inclusiva, Educación física, desigualdad estructural, formación docente, discapacidad.

Introduction

Physical Education (PE) is an essential component of holistic school curricula that promotes physical health, social integration, and overall developmental benefits for students. Globally, inclusive education has gained recognition as a critical focus, particularly through the lens of the United Nations Sustainable Development Goals (SDG), specifically SDG 4.5, which aims to ensure inclusive and equitable quality education for all (Leal et al., 2023; Lourenço et al., 2023). However, despite the acknowledged potential of PE to create a supportive environment for all students, it can be characterized by exclusivity, particularly for those with disabilities, girls, and other marginalized groups (Gani et al., 2023; Utami, 2025). This systemic exclusion raises critical questions about societal structures and the educational policies that underpin them.

In Indonesia, the challenges surrounding PE are multifold. There are significant limitations concerning the curriculum, teacher preparedness, and infrastructure (Wibowo et al., 2024). Reports indicate an inadequate number of trained physical education teachers, which affects the quality of PE instruction and the implementation of inclusive practices (Budiman et al., 2024; Burhaein et al., 2020). Structural inequalities manifest profoundly; students with disabilities often face barriers that hinder their accessibility to PE programs (Andriana & Evans, 2021; Gani et al., 2023). Moreover, gender disparities and disparities between urban and rural areas further complicate the landscape, limiting equitable access to physical education across demographics (Hiskya et al., 2025; Mahendra et al., 2020). Relevant policies exist, such as the Permendikbud outlining approaches for inclusive education; however, they remain inadequately implemented within the PE framework (Gani et al., 2023; Swadesi et al., 2021).

Previous studies show that literature of PE in Indonesia has mainly dealt with curriculum development and physical health outcomes. Yet, there remains a significant hole in sociological analyses focused specifically on how institutional arrangements and the dominant social norms maintain exclusions at a PE level. Research reveal that there has been little empirical and theoretical exploration on the sociological aspects of inequality in the Indonesian PE environment (Mahendra et al., 2020; Sari et al., 2025). This lack of a critical sociological framework hampers understanding of the broader implications of systemic inequities and their impact on educational opportunities in PE.

The existing body of literature provides insights into various issues surrounding educational access and participation (Andriana & Evans, 2021; Gani et al., 2023; Mahendra et al., 2020; Utami, 2025). However, studies still lack a holistic perspective that integrates the implications of social constructs on educational policies and practices. The use of traditional games and movement activities in PE has shown potential in increasing engagement among students (Dimyati et al., 2022; Friskawati & Stephani, 2021; Priyono et al., 2021), yet how these practices fit into an inclusive curricular approach remains under-explored. Furthermore, while interdisciplinary teaching methods have been recognized for their effectiveness in fostering comprehensive education, their implementation remains low within Indonesian PE, highlighting a further source of inequity in the educational experience for students (Budiman et al., 2024).

Empirical studies have pointed out that the educational structures often reflect and reinforce societal inequalities, creating barriers to equitable participation in PE programs (Easterbrook & Hadden, 2021; Hiskya et al., 2025; Swadesi et al., 2021). These obstacles are associated with the students' socio-economic status gender identity and disability and impact their access to learning resources. Furthermore, the systemic problems in teacher preparation and the access to adaptive physical education programs suggest structural limitations that need to be tackled (Burhaein et al., 2020; Mahendra et al., 2020; Sari et al., 2025).

In light of the changes in the Indonesian education system, it is timely to examine PE curriculum and whether it addresses transitional PE needs of all students. This includes taking care not to just teach in a way that is more inclusive, but also to encourage an environment that encourages respect and understanding of diversity among their peers (Andriana & Evans, 2021). Creating frameworks for professional development for PE teachers that encompass inclusivity principles and practical strategies is essential for systemic change (Mahendra et al., 2020; Swadesi et al., 2021; Utami, 2025).



A critical-sociological perspective grounded in an analytical apparatus that thematizes e.g. Bourdieu's theory of social reproduction is required for the analysis of the exclusion and marginalization mechanisms highlighting the everyday PE's practice and policies. Bourdieu's notions of habitus, field and capital might help to explain the ways in which social structures reproduce educational inequalities, and PE in particular, where conventional forms of practice can be discriminatory of those with impairments and exclude marginalised groups such as disabled students. This theoretical perspective highlights the fact that schools are not just for the dissemination of information, but for the reproduction of sociopolitical structures that keep those who are already on the margins in the peripheries (Kayam & Mishani-Uval, 2020). Through examining the attitudes and experiences of those with disabilities in PE, such as reported in PE contexts, researchers may consider how systemic biases influence frameworks for curriculum and pedagogy by positioning learners who are diverse in less welcoming or less accessible ways (Beyazoğlu, 2021). For example, any involvements of teachers with inclusion are closely related to their training and support, which suggests structural changes in attempting to promote inclusion in the educational field (Kim, 2023).

This paper seeks to analyse the discourse and structure of PE in Indonesia as informed by critical sociology emphasis to the nuances of structural inequalities and the possibilities of inclusion in PE in Indonesia. Through a sociological lens, this study uses disparities in PE to illustrate the important role significant inequalities can play in the ways in which students participate and succeed in physical education, and potentially experience success in school more generally. It is also positioned to promote better policy reforms, better teacher preparation programs, and the development of inclusive curricula to meet the needs of a wide variety of all students (including students whose voices have been traditionally silenced) (Блавт, 2022). This attention is important, not just because of the objective of achieving equity across Indonesian physical education, but also because such a focus can contribute to generating an inclusive idea of how physical education can be a potential to bring about social change and to facilitate integration.

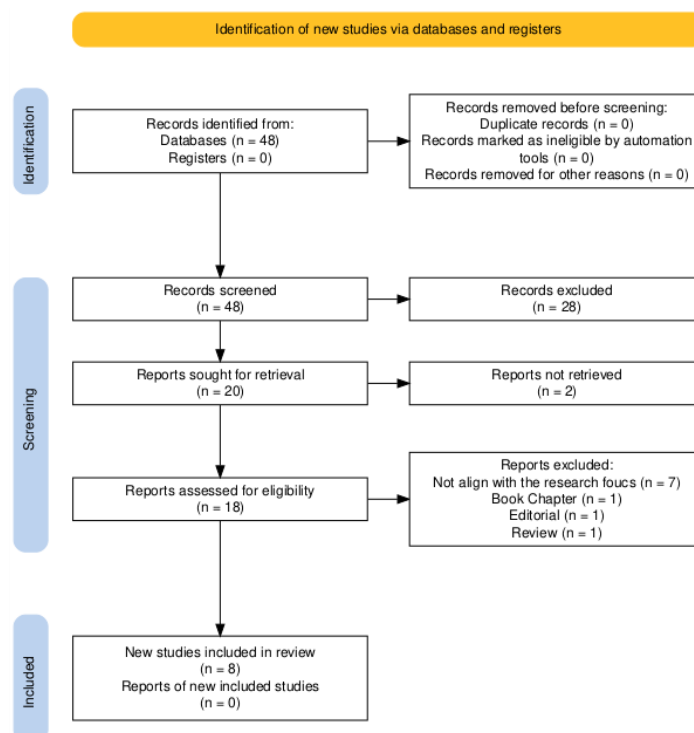
Method

This study adopted a Systematic Literature Review (SLR) guided by the PRISMA (Preferred Reporting Items for Systematic Reviews and Meta-Analyses) protocol to ensure methodological transparency, rigor, and replicability. The review aimed to synthesize peer-reviewed research that critically examines the relationship between physical education (PE), inclusivity, and structural inequality, particularly through a sociological lens.

A structured search was conducted across five leading academic databases: Scopus, Web of Science, Taylor & Francis Online, SAGE Journals, and Google Scholar. The search covered the period from 2019 to 2025, reflecting the most recent decade of scholarship relevant to inclusive physical education and sociological critiques in the Indonesian. Only peer-reviewed articles written in English were considered.

Search terms were developed using Boolean operators and included combinations of the following keywords: "Inclusive Physical Education in Indonesia", "Disability in Physical Education in Indonesia", "Disability-Inclusive Education in Indonesia", "Inclusive PE Practices in Indonesia".

Figure 1. PRISMA 2020 Flow Diagram Illustrating the Selection Process of Studies Included in the Systematic Review.



The screening process was conducted in accordance with the PRISMA (Preferred Reporting Items for Systematic Reviews and Meta-Analyses) guidelines. A total of 48 records were initially identified through database searches, with no additional records retrieved from other registers. At the identification stage, no duplicate records or ineligible records were removed.

After the title and abstract screening, 28 records were excluded due to irrelevance to the research focus. The remaining 20 reports were sought for full-text retrieval, but 2 reports could not be retrieved, resulting in 18 reports assessed for eligibility.

Following the eligibility assessment, 10 reports were excluded based on the following criteria: 7 were not aligned with the research focus, 1 was a book chapter, 1 was an editorial, and 1 was a review article.

As a result, 8 studies met the inclusion criteria and were included in the final review. The PRISMA flow diagram (Figure 1) visually summarizes the stages of identification, screening, eligibility, and inclusion throughout the review process.

Table 1. Eligibility Criteria for Study Selection

Criteria Type	Description
Inclusion Criteria	Published between 2015 and 2025 in peer-reviewed journals
	Written in English
	Focused on physical education related to inclusion, disability, or inequality in Indonesia
	Engages with sociological or critical theoretical frameworks (e.g., critical pedagogy, social reproduction, disability studies)
Exclusion Criteria	Conducted in school or community PE settings
	Studies focusing only on physical or physiological outcomes (e.g., motor skills, fitness measures)
	Lacks engagement with inclusive education or sociological analysis
	Non-peer-reviewed sources such as opinion pieces, editorials, or blogs
	Non-English publications
	Studies outside the context of physical education or irrelevant to inclusivity and structural inequality

A standardized data extraction form was used to systematically gather essential information from each selected study, including: publication details, research design, theoretical framework, population focus, inclusivity dimensions (e.g., disability, gender, socioeconomic status), and key findings relevant to structural barriers or inclusive practices in PE.

To ensure methodological quality, qualitative studies were evaluated using the Critical Appraisal Skills Programme (CASP) checklist, while quantitative and mixed-methods studies were assessed using the Joanna Briggs Institute (JBI) critical appraisal tools. This dual appraisal ensured the inclusion of methodologically sound studies.

Thematic synthesis was employed to analyze the findings, structured around core sociological concepts such as structural inequality, educational exclusion, and inclusive practice. Special attention was given to how physical education environments, teacher practices, institutional norms, and policy frameworks contribute to either inclusion or exclusion of marginalized learners, especially those with disabilities.

Studies were categorized based on the dominant theoretical approach, the dimensions of inequality addressed (e.g., disability, class, gender), and the educational setting (e.g., mainstream schools, inclusive schools, or community-based programs). This approach allowed for a comprehensive mapping of how sociological theory intersects with physical education practice in Indonesia and comparable contexts.

As this review was based exclusively on existing literature, no ethical approval was required. All sources were cited appropriately in accordance with academic integrity standards.

Results

Overview Selected Studies:

Table 2. Summary of Selected Literature

No.	Author(s) & Year	Context	Study Design	Participants	Key Findings	Implications for PE Inclusivity
1	(Sari et al., 2025)	PE teachers in Pekanbaru, Indonesia	Quantitative (instrument validation)	120 PE teachers with experience teaching students with disabilities	PE teachers generally had positive attitudes toward teaching students with disabilities. Validated PEATID III showed strong reliability and validity.	Supports the use of PEATID III to guide inclusive teacher training and policy development tailored to local educational needs.
2	(Utami, 2025)	Inclusive classrooms in Bandung, Indonesia	Qualitative (interview-based)	16 PE teachers from several schools	Teachers' perspectives were shaped by confusion over regulatory changes and deep-rooted local cultural beliefs. Community discussion spaces helped bridge this divide.	Highlights the importance of culturally grounded professional development and policy clarity for inclusive PE implementation.
3	(Burhaein et al., 2020)	Special Needs Schools (SLB) in Indonesia	Qualitative (phenomenological)	26 APE teachers (ages 28–39)	Teachers implementing the K-13 curriculum focused on scientific approaches, authentic assessment, and contextual challenges of special needs settings.	Emphasizes the importance of curriculum support, teacher preparation, and specialized approaches for APE within inclusive education.
4	(Priyono et al., 2021)	SLB Gelora Karya, Majalengka, West Java	Quantitative (quasi-experimental)	28 students with moderate intellectual disabilities	Games significantly improved gross motor skills. Simple, structured play helps students develop physically, socially, and emotionally.	Demonstrates that adapted games are effective tools to foster motor and holistic development in students with intellectual disabilities.
5	(Dimiyati et al., 2022)	Two special schools in Karawang, Indonesia	Mixed-method	40 students with disabilities (20 intervention, 20 control)	Movement games significantly improved physical fitness and mental health during COVID-19. Participants found the program fun and educational.	Shows the dual benefit of movement games for both physical and mental well-being, reinforcing the value of inclusive, engaging methods in PE.
6	(Hiskya et al., 2025)	Elementary schools at Indonesia–Papua New Guinea border	Quantitative (correlational)	160 students and 40 PE teachers	Learning environment and sports facilities significantly influenced student motivation and PE outcomes. Motivation mediated these relationships.	Highlights the role of equitable infrastructure and motivational strategies to improve PE learning quality in underserved border regions.



7	(Andriana & Evans, 2021)	Inclusive public primary schools	Qualitative	7 students with intellectual disabilities	Students desired positive social relationships but faced barriers due to rigid processes and lack of adaptive approaches in PE.	Emphasizes need for flexible, socially inclusive PE curricula that reflect student voices and remove structural constraints.
8	(Swadesi et al., 2021)	PE teaching practices with students with disabilities	Qualitative	PE educators	Found limitations in learning tools and evaluation instruments tailored for students with disabilities.	Encourages development of inclusive instructional and assessment strategies in PE to better serve diverse student needs.

The literature review uncovers the extent of research activity on the issues and developments pertaining to PE in Indonesia, and in particular, PE in inclusive settings. Combined, the eight included studies provide a range of methodological approaches, from qualitative, quantitative, and mixed methods designs, illustrating the complex nature of inclusive education and its interaction with physical activity, teacher capability, and student outcomes.

There is a strong focus on the knowledge, attitudes and preparedness of TAs and PE teachers to teach children with disabilities. For example, (Sari et al., 2025) confirmed the PEATID III instrument that the attitude of students of Indonesian PE teachers in teaching children with disabilities has generally been positive. This research underscores value of having valid and sensitive measuring instruments to guide teacher preparation and policy reforms. Likewise, (Utami, 2025) investigated perspective of teacher from a qualitative standpoint and revealed the tension between national regulatory change and local cultural norm. The study highlighted the importance of community networks of support in addressing these deficits and fostering inclusive practices in PE contexts.

This discussion is also extended by the literature dealing with curriculum implementation. (Burhaein et al., 2020) studied the practice of APE Teachers planning the K-13 curriculum in special schools. The results were mixed, however: Teachers were enthusiastic and worried, arguing that they needed more training and tools. However, (Swadesi et al., 2021) revealed fundamental inadequacies in learning resources and assessment approaches adopted in inclusive PE, and demanded the development of more responsive teaching strategies to overcome this diversity of student needs.

There's also a focus on the students' experience. Andriana and Evans (2021) offered a rare perspective on the perspectives of students with intellectual disabilities in inclusive public schools. The study also illuminated their yearning for social engagement and supportive learning, as well as structural impediments that constrain meaningful engagement. Supporting this, (Priyono et al., 2021) and (Dimiyati et al., 2022) investigated ensuring physical fitness improving and socio-emotional development of disabled students by developing the movement games. Both studies indicated the advantages of structured play and activity-based interventions, particularly given the limitations of the COVID-19 pandemic.

Finally, research by (Hiskya et al., 2025) focused on systemic disparities in geographically disadvantaged areas. Carried out in the primary school contexts of the Indonesia-PNG borderland, this research suggested that learning environment and physical activity resources are important determinants of students' motivation and PE learning achievement. The findings make a case for just infrastructure funding and inclusive school culture, especially in under-supported border contexts.

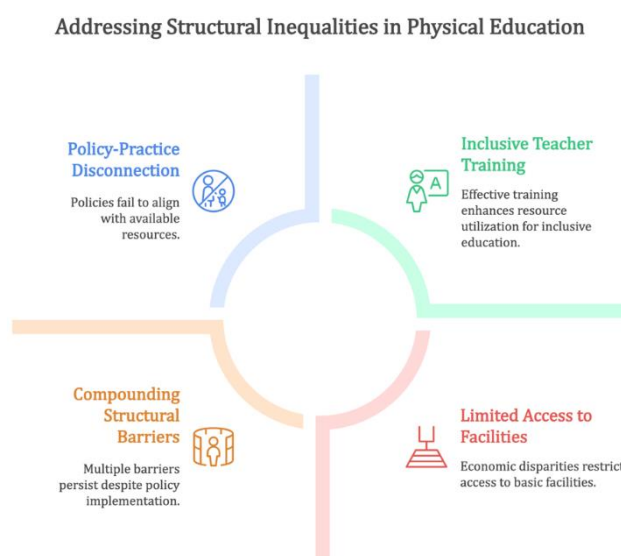
Combined, these reports present a nuanced image of inclusive PE within the nation of Indonesia. They emphasize the role of teacher readiness, school support, student exposure, and socio-cultural issues. Above all, they highlight strong calls for pedagogical and structural reforms to ensure equity, inclusion, and attention to the all students in physical education.

Structural Inequalities in Physical Education

Structural inequalities in Physical Education (PE) in Indonesia reflect deep-rooted challenges that hinder equal access to quality learning experiences, particularly for students in rural, marginalized, or under-resourced communities. These disparities span across infrastructure, teacher preparation, and policy implementation, contributing to the exclusion of students with disabilities and those from disadvantaged backgrounds. The following visual summary outlines the key dimensions of these structural

barriers and highlights the urgent need for systemic reform in creating a more inclusive and equitable PE environment.

Figure 2. Structural Inequalities in Physical Education



Structural disparities in Physical Education (PE) in Indonesia have hampered equal opportunities to sports facilities and resources for students, more particularly for those who live in rural and border areas. Schools in these disadvantaged areas are generally deprived of the basic facilities that can impede on a quality delivery of PE (Razali et al., 2024; Wibowo et al., 2024). It has been reported that rural based public government funded schools may struggle to sustain their sports amenities and equipment due to a lack of financial resources, thus restricting students' physical activity in the process (Hiskya et al., 2025; Letshokotla et al., 2024). Additionally, in spite of the limited resources, the lack of adaptive equipment makes it difficult for students with disabilities to take part in PE classes (CÜLHA & DEMİRTAŞ, 2023; Swadesi et al., 2021). The inequitable distribution of resources, therefore, which is an outcome of economic disparities, perpetuates the educational divide among different sub-populations, and does little to provide children with access to the physical activity necessary to develop a healthy body and strong social ties.

The holes in teacher training only further the inequities that exist in PE. There has been a significant lack of training related to inclusive pedagogies among Indonesian teachers, resulting in poor support for students with diverse needs. This has been confirmed in terms of a policy-practice gap in the domain of inclusive education, given that there are frameworks that are supposed to be consistently uphold but are not in practical terms (Utami, 2025; Блаут, 2022). Teachers often work in difficult socio-economic backgrounds with limited resources and inadequate training to deal with the challenges that diversity in their classes demands, resulting in the reproduction of inequalities in PE settings (Burhaein et al., 2020; CÜLHA & DEMİRTAŞ, 2023; Sari et al., 2025). The unskillful preparation of teachers limits the possibilities of including spaces in education, fundamental for attending to diverse students, especially those in vulnerable situations.

Secondly, the lack of synchrony between policies and curriculum serves as an influential barrier to inclusive PE practices. Indonesia advocates for inclusive education with such policies as the K-13 curriculum in place, but these policies may not always be applied consistently and are sometimes in tension with local cultural beliefs about disability and gender (Burhaein et al., 2020; Sun et al., 2020). This no-aligned focus leads to inadequately designed forms of schooling which give little or less priority to integrated learning processes for children with disabilities and for those belonging to underprivileged communities (Rohrbacher & Hasselhorn, 2023; Swadesi et al., 2021). These policies, which apply to all

students in the state or district, are too broad in terms of scale and scope and they do not provide individually targeted strategies for implementation at the local level. As a result, their potential to positively influence student engagement and achievement is reduced.

It is the interaction between these structural inequalities that highlights the system nature of the problems confronting PE in Indonesia. Students from rural or border regions and those who live in extreme disadvantage have compounding factors working against their engagement in education and reflect such realities within a heterogeneous society (Bann et al., 2021; Hiskya et al., 2025). These inequities mirror worldwide conversations on education equity that stress both multi-dimensional responses towards the causes of marginalization, up to and including financial, infrastructural, and cultural factors (Melesse et al., 2020). It is essential to work towards equitable access to sport and physical activity as these experiences play a critical role in building resiliency, health and social connection for young people.

To address these inequities, a comprehensive approach to policy, curriculum, and teacher education needs to acknowledge students' lived experiences in the context of PE. This calls for investments not only in physical infrastructures but also in comprehensive programs training educators that focus on inclusive teaching and adaptive strategies (Dimiyati et al., 2022; Sari et al., 2025; Блавт, 2022). Régime de soutien Mécanismes d'accompagnement Lenoir : Le soutien doit ainsi permettre aux professionnels de l'éducation et aux établissements scolaires de gérer efficacement la diversité et de développer un système scolaire plus inclusif.

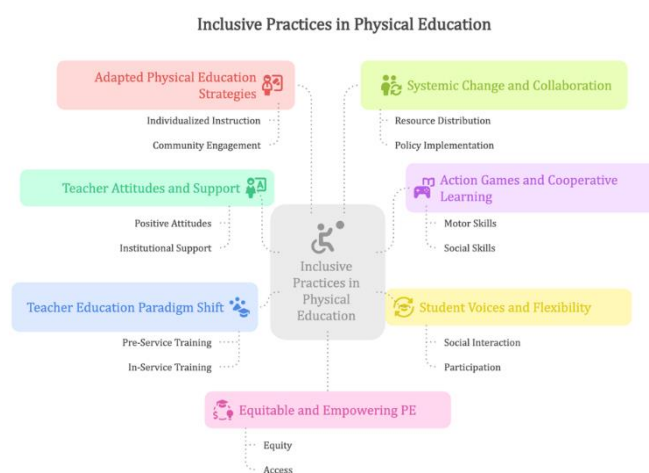
In sum, for structural inequalities in PE practices to be further addressed there needs to be a critique of current policies and pedagogical rationales (de Andrade et al., 2023; Nanjarí-Miranda & Fernández-Ver-gara, 2024). Holistically understanding the ways that socioeconomic status impacts access to education allows stakeholders to address not only the conversation around PE as well as pedagogical practice at different levels of education and have a place to work for change. This focus on reform will serve to close the gulf that exists between policy intention and what takes place in the classroom, ultimately building a more equitable and inclusive education space (CÜLHA & DEMİRTAŞ, 2023; Utami, 2025).

In conclusion, by examining structural inequities in PE, this analysis underscores the importance of systemic change to ensure access, teacher training, and policy coherence. Targeted interventions can greatly enrich the learning experiences of the marginalized students, increasing their involvement, satisfaction, and success in PE. In the future, collaboration between the government, educators, and local community.

Inclusive Practices and Emerging Pedagogies

Creating an inclusive environment in Physical Education (PE) requires more than just policy it demands a shift in pedagogical approaches, teacher attitudes, and classroom practices. While there is growing awareness and willingness among educators to embrace inclusion, many still face structural and systemic barriers that limit effective implementation. Inclusive pedagogies, adaptive games, and student-centered strategies offer promising pathways to bridge these gaps. The following visual summary outlines key dimensions of inclusive practices and emerging pedagogical trends that aim to create equitable and engaging PE experiences for all students, especially those with disabilities or from marginalized backgrounds.

Figure 3. Inclusive Practices in Physical Education



Teacher attitudes for inclusion in PE are essential for the educational setting for students with disabilities in Indonesia (Wibowo et al., 2024). Inbang and Musa (2035) reported the result showing a significant increase in positive attitudes towards people living with HIV at work with peer group support and professional development programme. Recent research findings have shown that there is an increase in positive attitudes of teachers towards people living with HIV at work as a result of community-based peer support and professional development programme (Gani et al., 2023; Sari et al., 2025). Unfortunately, such positive changes are somewhat stifled by the structural and systemic aspects of schools that prevent substantive enactment of inclusive practices. Educators, meanwhile, feel prepared in their level of preparedness to implement inclusive approaches but limited in resources, training, and institutional support to use them optimally (Burhaein et al., 2020; Li & Tan, 2022; Utami, 2025). To accomplish this, it is necessary to confront these structural challenges so that educators themselves can feel more positive and more well equipped professionally.

In addition, the use of action games and active interventions in the PE class has been recommended as a good practice of improving intervention effectiveness of motor and social skills in all children, including children with disabilities. Games of this kind encourage physical exercise and establish a joyous and funny context for amusement and engagement (Dimiyati et al., 2022; Priyono et al., 2021). Inclusive pedagogies which are fun and simple can improve the levels of students' interactivity and facilitate the social skills required in the context of the peers (Burhaein et al., 2020). Rather than focusing primarily on competition, these pedagogical strategies encourage cooperation and mutual help resulting in inclusive learning environments where all students believe that they have the right to feel valued and to contribute to learning (Dimiyati et al., 2022).

Other voices of children with disabilities also shed more light on a critical demand of true inclusion in PE. Numerous students tell us how much they miss social interaction and involvement in sports and physical activity, evidence that the emotional and social needs of students are not being met in education as we know it (Andriana & Evans, 2021; Kim, 2023). Yet, rigidity in the structures of the school system often prevents them from being able to independently exert their agency within PE lessons. This inflexibility originates from the deep-rooted attitudes and practices that place emphasis on the values of traditional norms over the fluid needs of inclusive education (Li & Tan, 2022). The voices of these students are therefore crucial in guiding and restructuring the pedagogical practices of PE, and the importance of their involvement in the discourse of inclusion cannot be overstated.

Physical education needs to change paradigms in order to perform inclusive practices effectively and it should be open to the different needs of the students and to the changing Indonesian educational situation. Inclusive philosophies should be included in the whole teacher-training program to help teacher to understand and met the particular challenges that student with disabilities present in the classroom (Alhumaid, 2023; Swadesi et al., 2021). This integration is not only about meeting minimum standards of inclusive education but rather it is about actively embracing the principles of inclusion that critique

current teaching and societal practices (Burhaein et al., 2020; Gani et al., 2023). In-service training programmes that target and empower teachers, as well as increase the effectiveness of inclusion in PE will consequently help shape a more positive teacher identity, and improve learning experiences for all students (Sari et al., 2025).

Furthermore, inclusion practices can be enhanced by adopting adapted physical education methods. Research has shown that physical educators using adaptive methods can design individualized instruction to address the learning of a variety of students (Swadesi et al., 2021). Through the focus on cooperative learning and value of shared experiences, PE can create an atmosphere in which all students, regardless of their capabilities, can learn and succeed. This technique is based on the understanding the social interaction in physical education is crucial for the students' feelings of being in a community and being partners (Dimyati et al., 2022).

Finally, the educators and students, a both suffer the structural limitations that need to be addressed with full strategy that makes evident the urgency of change in PE practices. Barriers need to be identified and removed if the tendency of exclusions and marginalizations within the education both sectors is to be eliminated (Alhumaid, 2023; Hiskya et al., 2025; Utami, 2025). This will necessitate a commitment from education authorities, schools and communities to improve resource distributions, provide comprehensive teacher training, and make classroom practice consistently reflect policy reform for inclusion.

Overall, the relationship of teacher attitudes, the adapted application of movement games, and the voice of students with disabilities provide the vital components for nurturing inclusive PE practices. Adapting these tactics provides a level of consideration for how to achieve equal education, thus contributing to the debate and practice of inclusion in schools (Andriana & Evans, 2021; Kim, 2023). By prioritizing the experiences and needs of all children, and especially marginalized populations, physical education can be reconceptualized as a base for equity, access, and collective empowerment an aspiration that all students are included, valued, and entitled to flourish.

Theoretical Reflection: A Critical Sociological Lens

The application of a critical sociological lens, in particular using social reproduction theory and critical pedagogy, exposes barriers embedded in discussions and practices related to inclusion in Physical Education (PE). Specifically, social reproduction theory theorizes that educational systems perpetuate social inequities through the generational transmission of cultural, social, and economic capital (May, 2024). In PE, this indicates that the dominant hegemony will often favor certain abilities, which has the effect of socially and physically dividing young people with disabilities or who are disadvantaged. These continued inequities imply a crucial need to question how PE norms and expectations can maintain exclusion, rather than promote participation among all students.

The hidden curriculum is a key part of this social reproduction. Norms within PE practices, such as a focus on competitive sport and the celebration of physical prowess, contribute to a 'reiteration of societal standards' that challenge and marginalize students who do not fulfil these idealised standards. For instance, students with disabilities may frequently be sidelined or perceived as less able, leading to disengagement from physical activities which may improve their social, emotional and physical health. Such tacit messages not only influence how students experience PE, but also reflect wider cultural stories told about issues of disability and ability which end up hindering the promotion of inclusive PE spaces (Mahendra et al., 2020; Wibowo et al., 2024). Therefore, we need to become more aware of this hidden curriculum in order to deconstruct the barriers of exclusion.

Additionally, critical pedagogy, as defined by importantes like Paulo Freire, promotes an education manner that supports students to question oppressive systems and the role of an active participant in the learning process (Acevedo, 2022). Within PE, this pedagogy enables us to challenge such normative practices and to imagine the PE space as one of counter-hegemonic practice for both teacher and pupil (Leal et al., 2023). Through re-envisioning PE to value inclusionality and deliberately adapting practice, educators can develop spaces where disabled children are able to claim identities and disrupt the norm (Pickard, 2020). This latter approach encourages teachers' work and teachers themselves to exploit PE as a site desiring social transformation: where otherwise disabling meanings of disability can be reframed and celebrated, not demonised.



The importance of movement games and active interventions in fostering inclusivity cannot be emphasized enough (Dimyati et al., 2022). These pursuits not only develop students' gross motor skills, but also promote the social interactions necessary for developing peer and community relationships (Flynn, 2025). When designed by teachers to be inclusive and fun, inclusive games allow all pupils to participate fully in PE. These inclusive practices are consistent with those of critical pedagogy in which students can build their concepts of physical activity with others together through the social process of learning. By framing these activities as core components of PE, teachers have the power to challenge deficit discourses and establish inclusive learning experiences that respect and celebrate various abilities (Gani et al., 2023; Li & Tan, 2022).

The voice of the children, notably those with impairments (hereafter referred to as children), needs to be included in discussions about PE to affirm the importance of their contribution to inclusive practices. Empirical work points out that a lot of students wish to experience connection, engagement, and the relational aspects of PE (Greiner, 2022). In asserting a right to full participation, these students question assumptions about ability and agency and suggest the need to develop inclusive policies that recognize their requirements and aspirations. This student centred methodology is consistent with the tenets of critical pedagogy acknowledging learners' perspectives and experiences as intrinsic to the impetus for education reform (Beyazoglu, 2021; Kayam & Mishani-Uval, 2020).

For educators this means using a reflexive and critical stance when interpreting PE, this involves moving from traditional models, which only replicate exclusion. By offering professional development in critical disability studies teacher may be able to build the skills required to design flexible PE that caters for all learners (Goodley et al., 2019). This shift requires a move from the homogenization of the one sized fits all model to an understanding of the complex needs that are experienced in classrooms; where every student feels acknowledged and confident to engage (Andriana & Evans, 2021; Kim, 2023).

Addressing the structural barriers hindering the implementation of inclusive PE requires the authorities responsible for education to advocate to bring about a system wide change to build a culture of inclusivity at all levels. After all, policies should not be left on paper, but should be implemented to develop an inclusive framework basis for the classroom (Miao, 2024). This includes a commitment from decision-makers to ensure resources, teacher development, and frameworks of what is to be learned are aligned with the charge to create equitable education for all students, most especially children with disabilities (Hiskya et al., 2025).

On the whole, assuming a critical sociology of PE position in PE offers opportunities for further addressing matters of inequality in PE and in so doing assists in providing a valuable understanding with which to challenge structured educational exclusions (Burhaein et al., 2020; Swadesi et al., 2021). If PE is able to use critical pedagogy to contest dominant narratives and structures then it can be a site of resistance where traditional norms are challenged and radical inclusive practices are sought (Acevedo, 2022). From this point of view, the power of PE to not only serve as a way of physical development, but also act as a tool of social justice is evident.

In sum, the meeting of critical sociological theory with applied PE practice emphasises the need for informed and equitable practice that is also necessarily inclusive. The HCPRE model With the combination of social reproduction, hidden curriculum, and civic engagement in PE, the Hidon model in PE as a theoretical framework should be the impetus with which we can rethink and rejuvenate inclusive education. Teachers can create spaces that mainstream the voices of oppressed and/or marginalized students by implementing critical pedagogical approaches, thus working toward more just and equitable educational systems.

Discussion

The systematic review conducted in this study reveals critical insights into the persistent structural inequalities embedded within Indonesia's physical education (PE) system, particularly regarding inclusivity for students with disabilities. Across the eight selected studies, three dominant themes emerge: (1) the influence of teacher preparedness and attitudes, (2) infrastructural and policy limitations, and (3) the transformative potential of inclusive pedagogies.



First, the role of teacher attitudes and competencies stands out as a foundational element influencing the success of inclusive practices. Sari et al. (2025) validated the PEATID III instrument, confirming that many PE teachers in Indonesia possess generally positive attitudes toward inclusion. However, these attitudes are often hindered by limited professional development and systemic barriers in school environments. Similarly, (Utami, 2025) found that teachers struggled with regulatory confusion and lacked training, underscoring the need for culturally grounded support systems and policy clarity.

Second, infrastructural disparities significantly shape the accessibility and quality of PE in marginalized regions. Hiskya et al. (2025) highlighted the unequal distribution of sports facilities in border schools along the Indonesia–Papua New Guinea boundary, where poor infrastructure and limited resources undermine student motivation and participation. The same systemic issue was reported by (Swadesi et al., 2021), who emphasized deficiencies in inclusive learning tools and evaluation mechanisms, which leave teachers without effective instruments to accommodate diverse learner needs.

Third, inclusive pedagogies especially the use of movement games emerged as practical and effective tools for fostering participation, particularly among students with disabilities. Both (Priyono et al., 2021) and (Dimiyati et al., 2022) demonstrated that movement-based interventions improved students' motor and mental health outcomes, supporting the integration of adapted games as a core strategy for inclusion. These activities also created spaces of joy, collaboration, and social bonding, aligning with broader goals of inclusive and holistic education.

Student voices also played a critical role in exposing the gap between policy rhetoric and lived experience. Andriana & Evans (2021) illustrated that students with intellectual disabilities desire meaningful engagement and peer connection, yet often face rigid structures and cultural stigma that limit their agency. These experiences validate the need for student-centered and socially inclusive curricula that directly address structural exclusion.

Despite these promising developments, the implementation of inclusive PE remains uneven and limited by larger systemic conditions. Burhaein et al. (2020) found that even when curricula such as K-13 mandate inclusion, the realities of special needs schools reveal gaps in teacher preparation and contextual adaptation. As such, there is a disconnect between national policy frameworks and the actual capabilities of teachers and institutions.

Limitations of this study lie in its reliance on peer-reviewed English-language publications, which may omit local perspectives documented in Indonesian or grey literature. The findings are also limited to the thematic synthesis of qualitative and mixed-methods data, without empirical generalizability.

Future research should expand to include participatory action research and longitudinal studies involving students with disabilities, teachers, and community stakeholders. Additionally, comparative studies between regions (urban vs. rural) or between mainstream and special schools could further elucidate how structural inequality manifests across diverse educational settings. Researchers should also explore how culturally embedded practices and beliefs intersect with inclusive pedagogical approaches in PE.

Conclusions

This study critically examined the structural inequalities embedded within Indonesia's physical education (PE) system using a systematic literature review informed by a sociological lens. The analysis of eight studies highlighted pervasive challenges in teacher training, infrastructure, policy implementation, and curriculum design, which collectively hinder inclusive practices in PE. While there is growing awareness and willingness among educators to adopt inclusive strategies especially through adaptive games and active movement approaches such efforts remain constrained by systemic limitations. Structural inequalities disproportionately affect students with disabilities, particularly in rural and border regions where educational resources are scarce.

The discussion reveals how hidden curricula and social reproduction mechanisms within PE settings reinforce exclusionary norms. Movement games, community-based teacher support, and student-centered engagement emerged as key strategies to foster inclusion. However, institutional transformation



is essential for sustained impact. Addressing these challenges requires a coordinated effort involving teacher development, curriculum reform, and policy alignment.

Ultimately, this research underscores the urgency of reimagining PE as a platform for social justice. By applying a critical sociological framework, the study offers a pathway for education stakeholders to foster equity and inclusivity in Indonesian PE. A systemic shift is necessary to ensure that every student, regardless of ability or background, has the opportunity to thrive in physical education.

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