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The experiences of trans, gender-diverse, and non-binary students in school-based health and physical education: a scoping review and meta-synthesis of empirical literature

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ABSTRACT

Background and Aim: Current literature highlight the barriers trans, gender-diverse, and non-binary students experience to participation in Health and Physical Education (HPE) in school settings, however, the research meta-synthesizing the existing research is limited. This scoping review explores and synthesizes existing empirical literature identifying what is known about the experiences of trans, gender-diverse, and non-binary students in the school-based learning area of HPE.

Methods: In alignment with the PRISMA-ScR framework, the JBI manual for evidence synthesis, this scoping review drew on Arksey and O Malley's five-stage framework. Six databases were used with literature search conducted on 9 June, 2025. Included empirical studies were written in English, peer-reviewed, full-text accessible online, with no restrictions to date or location, and relevant to the research question. Charted data was first meta-synthesized deductively using a modified three-level socio-ecological framework, and further meta-synthesized inductively using thematic analysis within the three levels.

Results: Ten studies were included in the final synthesis with four studies using qualitative methodologies, four cross-sectional, and two using mixed-methods approaches. Findings were meta-synthesized across three levels of barriers, with structural barriers included binary policies, limited curriculum inclusivity, and inconsistent application of supportive practices. Interpersonal barriers included peer bullying, misgendering, and lack of educator support, whilst individual barriers included emotional distress, gender dysphoria, and withdrawal from HPE participation. Collectively, these barriers were interconnected and reflect broader systematic issues of exclusion for trans, gender-diverse, and non-binary students.

Conclusions: The findings highlight how trans, gender-diverse, and non-binary students face multi-layered and ongoing challenges in accessing safe and inclusive HPE in schools in line with human rights obligations. These challenges are significantly informing the poor mental health of trans, gender-diverse, and non-binary students, including their long-term educational engagement and outcomes. Current inclusion practices are often reactive and inconsistent in nature, placing burden on already vulnerable students.

KEYWORDS

trans students; educational barriers; health and physical education; human rights; socio-ecological model

Introduction

Health and Physical Education (HPE) is central in the holistic development of individuals in shaping health, enhancing resilience, and creating strong social connections (Işıkgoz et al., 2025). Yet for trans, gender-diverse and non-binary students, it can be a space of discomfort, scrutiny, and exclusion (Kettley-Linsell et al., 2024; Kwok

& Kwok, 2022; Neary & McBride, 2024). Devís-Devís et al. (2018) found that HPE was reported as the most negative subject for 24 out of 25 trans participants. This negativity was linked to school sport policies that failed to recognize gender diversity, largely due to entrenched cisgenderism and heteronormativity within school sport cultures (Devís-Devís et al., 2018).

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Schools have been identified as key settings where trans, gender-diverse, and non-binary students are disproportionately exposed to discrimination compared to their cisgender peers (Bower-Brown et al., 2023; Hill et al., 2021; Peter et al., 2021). This disparity is shaped by the persistent presence of cisnormativity and cisgenderism within school structures, including gendered uniforms, binary toilets, segregated sports teams and broader policies that uphold binary gender norms (Day & Brömdal, 2024; Francis et al., 2022; Hill et al., 2021). These elements contribute to harmful experiences such as exclusion and non-affirming staff, negatively impacting safety, learning outcomes and school attendance (Bower-Brown et al., 2023). Similarly, Peter et al. (2021) found that transphobia and exclusion remain prevalent in schools, significantly impacting the sense of belonging and wellbeing among gender-diverse students. Together with Bower-Brown et al. (2023), these studies highlight how these factors collectively negatively impact the schooling engagement, belonging, learning outcomes, and wellbeing of trans, gender-diverse, and non-binary students.

A large scale Canadian national climate survey found that Two-Spirit, lesbian, gay, bisexual, transgender and queer (2SLGBTQ) students, including trans and non-binary youth, remained significantly more likely to experience verbal, physical and online harassment than their cisgender, heterosexual peers (Peter et al., 2021). While some progress has been made since the first survey in 2011, the report documented persistent exclusion, unsafe school environments, and a lack of consistent inclusive school policies (Peter et al., 2021). Such findings underscore the importance of examining specific school contexts, like HPE, where existing research suggests such discrimination may be significantly pronounced (Peter et al., 2021).

Within this context, HPE plays a distinct role as students typically participate in HPE weekly. It is a learning area that is often associated with the reinforcement of cisgenderism and marginalization of those who do not conform to binary gender norms (Day & Brömdal, 2024; Dowling et al., 2012). Physical education (PE) has been identified as one of the most common contexts for verbal and physical harassment of trans, gender-diverse,

and non-binary students (Williamson & Sandford, 2018). Despite growing awareness of gender diversity in school settings, there is limited research exploring the specific experiences of trans, gender-diverse, and non-binary students in HPE contexts (Williamson & Sandford, 2018). Within the Australian context, where the authors are located, national frameworks like the Australian Curriculum (Assessment and Reporting Authority, n.d.) and Australian Professional Standards for Teachers (Australian Institute for Teaching and School Leadership, 2018) promote inclusive and supportive environments, however, there is a lack of guidance on best practice in supporting trans, gender-diverse, and non-binary students in HPE. Given this is a global scoping review, it is important to consider international frameworks. For example, the Incheon Declaration and Framework for Action for the implementation of Education 2030, outlines the global commitment to ensuring inclusive and equitable quality education and to promote lifelong learning opportunities for all (United Nations Educational, Scientific and Cultural Organization, 2016). This declaration advocates for gender-sensitive policies, inclusive curriculum and safe learning environments, reinforcing the global agenda for inclusive and affirming education for all gender identities (United Nations Educational, Scientific and Cultural Organization, 2016).

This scoping review therefore seeks to explore, map and synthesize the existing literature relating to the experiences of trans, gender-diverse, and non-binary students in school-based HPE contexts across primary, middle and secondary school settings. HPE not only encompasses physical education and sport but also sex education, health promotion and wellbeing. The scoping review includes all aspects of HPE, including curriculum design, policy and facilities.

As trans rights and health scholars and educational professionals, with one author identifying as non-binary and pansexual, and the other as cisgender, heterosexual and a trans-ally, we appreciate the challenges trans, gender-diverse, and non-binary students experience navigating HPE contexts and in school settings. Similarly, we understand the role schools, educational staff, and peers play in facilitating or hindering the needs of trans, gender-diverse, and non-binary

students, in turn informing their experiences in HPE settings. Although the body of research concerning trans, gender-diverse, and trans students' educational experiences have expanded in the recent years, it remains disjointed across disciplines and methodologies, pursuing a scoping review is an appropriate approach to synthesize and highlight the evidence base.

Research question

As an emerging area of educational research, the following review question was developed in collaboration with a senior research librarian: *What is known in the literature about the experiences of trans, gender-diverse, and non-binary students in the school-based learning area of Health and Physical Education?* This research question was philosophically underpinned by the United Nations Convention on the Rights of the Child and the Yogyakarta Principles stressing the obligations state parties have to ensure they are safe, inclusive, affirming and meet the needs of their student populations, regardless of their gender identity, experience or expression (International Commission of Jurists & International Service for Human Rights, 2007; International Service for Human Rights & ARC International, 2017; United Nations Office of the High Commissioner for Human Rights, 1989).

Theoretical framework

This scoping review is guided by a modified socio-ecological framework (Clark et al., 2017; White Hughto et al., 2018) which conceptualizes the experiences of trans, gender-diverse, and non-binary people being shaped by factors operating across three interconnected levels: structural, interpersonal and individual. Originally adapted to explore the health disparities among trans populations, this model has been successfully applied across various contexts, including healthcare and correctional systems (Clark et al., 2017; White Hughto et al., 2018), trans youth contexts, including in education with trans, gender-diverse and non-binary students and other vulnerable school cohorts (Day & Brömdal, 2024; Leslie et al., 2025; Watson et al., 2024). Therefore, these applications demonstrate this model's

relevance in identifying and addressing the multi-level barriers faced by trans, gender-diverse, and non-binary populations within HPE.

At the structural level, the model considers school wide policies, curriculum and institutional norms (Day & Brömdal, 2024). In the context of trans, gender-diverse, and non-binary students, structural barriers may include binary dress codes that restrict gender expression, sex-segregated sports or force students to participate in teams misaligned with their gender identity and curriculum which lacks representation of gender diversity (Clark et al., 2017; Day & Brömdal, 2024; Francis et al., 2022; White Hughto et al., 2018; Williams & Brömdal, 2024).

At the interpersonal level, the focus is on relationships and the interactions between students, peers and educators (Day & Brömdal, 2024). For trans, gender-diverse, and non-binary students, this may involve experiences of misgendering, teachers choosing to use incorrect pronouns and 'dead names', bullying or lack of peer support (Fuentes-Miguel et al., 2023; Kettley-Linsell et al., 2024; Kwok & Kwok, 2022; Neary & McBride, 2024; Wilkinson & Penney, 2025; Williams & Brömdal, 2024). Positive interpersonal dynamics such as teachers who model inclusive language and foster respectful peer interactions (Fuentes-Miguel et al., 2023; Williams & Brömdal, 2024) are crucial in creating affirming environments that support participation and wellbeing (Clark et al., 2017; White Hughto et al., 2018).

The individual level accounts for personal coping strategies, identity management and behavioral responses (Day & Brömdal, 2024). Trans, gender-diverse, and non-binary students avoid changing in communal locker rooms, opt out of participating in HPE that draw attention to their bodies or suppress their identity to avoid conflict or scrutiny (Kettley-Linsell et al., 2024; Neary & McBride, 2024). These adaptive behaviors, while protective, can lead to disengagement from HPE, reduced self-confidence and diminished educational outcomes (Day & Brömdal, 2024; Kosciw et al., 2020; Manley et al., 2024; Palmer & Greytak, 2017). Understanding these individual responses in relation to broader structural and interpersonal contexts is essential for developing inclusive practices that support full participation (White Hughto et al., 2018).

By applying this dynamic and modified framework, this scoping review meta-synthesizes findings across structural, interpersonal and individual levels to provide a comprehensive overview of the barriers that trans, gender-diverse, and non-binary students face in HPE settings (see [Figure 1](#)). This framework also supports the identification of gaps in the existing literature and highlights implications for future research, policy and practice.

Methods and analytical framework

Drawing on the modified and dynamic socio-ecological model, the scoping review sought to explore and meta-synthesize the diverse experiences of trans, gender-diverse, and non-binary students in HPE settings, an approach suited to underexplored areas (Khalil et al., 2016). The review followed Joanna Briggs Institute (JBI) guidelines for scoping reviews (Peters et al., 2020) and is reported in line with the PRISMA Extension for Scoping Reviews (PRISMA-ScR) guidelines (Tricco et al., 2018).

Scoping reviews are designed to map the breadth of literature on a given topic, clarify key concepts and identify gaps in knowledge (Munn et al., 2022). This methodology is appropriate when the research area is emergent, (Khalil et al., 2016) this reflects the current state of literature on trans, gender-diverse, and non-binary students in HPE. By synthesizing existing literature, a scoping review can provide a foundational

understanding of how these students experiences are represented, what themes are present and where future research is needed (Munn et al., 2022).

This review was guided by the foundational framework developed by Arksey and O'Malley (2005), which outlines five key stages in conducting a scoping review. Identifying the research question, finding relevant studies, selecting studies, charting the data and collating, summarizing and reporting the results (Arksey & O'Malley, 2005). To ensure clarity and consistency in defining the scope of the review, the JBI guidelines were followed, including the use of population, concept and context (PCC) (Peters et al., 2020).

Eligibility criteria

The PCC framework provides a structured approach to determining which studies are relevant to the review by focusing on the population, concept and context of interest (Peters et al., 2020).

Participants

The population included in this review were trans, gender-diverse, or non-binary students. Perspectives and lived experiences of this population (including past or current experiences) regarding HPE settings were in focus. Research presenting the perspectives of parents/guardians or those working in the schooling settings were considered if it related to the lived experiences of

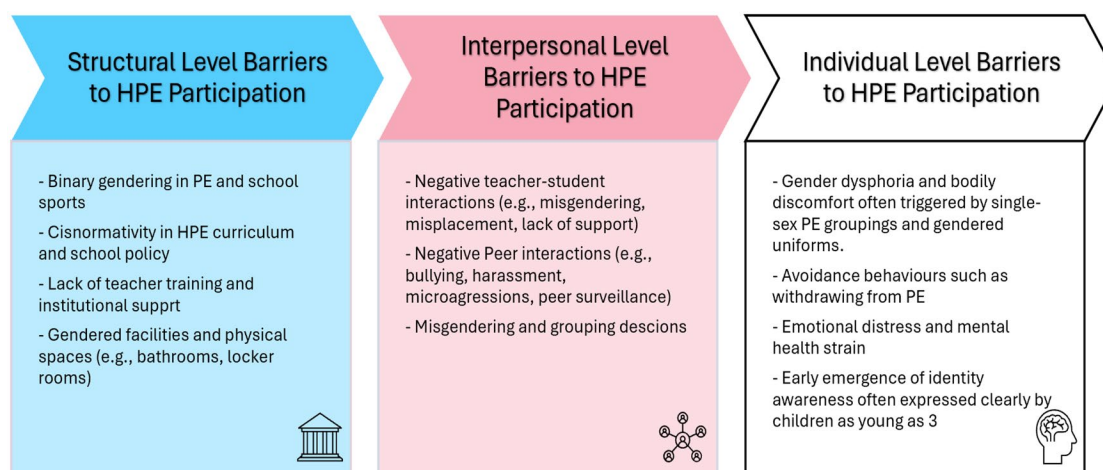


Figure 1. Conceptual framework of structural, interpersonal, and individual barriers to trans, gender-diverse, and non-binary students' participation in HPE.

trans, gender-diverse, or non-binary students themselves in HPE contexts. Articles discussing broader LGBTQI+ populations were only included when trans, gender-diverse, or non-binary specific data could be clearly identified.

Concept

This scoping review focused on peer-reviewed empirical research that explores the experiences of trans, gender-diverse, and non-binary students within the learning area of HPE. Relevant topics included physical education, sex education, respectful relationships, life skills, and school sport.

Context

Studies were included if they were conducted in primary, elementary, middle, secondary and/or high school settings in any geographical location. Studies were excluded if they focused on early childhood settings or post-secondary education.

Types of evidence sources

Eligible sources were peer-reviewed empirical studies written in English. No publication date or geographical restrictions were applied. Studies were included if they provided data specifically on the lived experiences of trans, gender-diverse, or non-binary students, and relevant to the research question.

Search strategy

In consultation with the research librarian, and as recommended by JBI, a comprehensive and systematic search strategy was used to identify relevant literature (Peters et al., 2020). The search was developed in consultation with a senior research librarian, also identifying as gender-diverse. Their lived expertise together with the two authors, ensured the inclusion of appropriate terminology and sensitivity to the topic. The search string was tested multiple times and refined prior to the final search. The following six databases were used for this review: ERIC, EBSCOhost Megafile Ultimate, Scopus, PubMed, Informit and PROQUEST. The final search across the six databases was conducted on 9 June 2025 to ensure consistency in the availability of search

results. A search log documenting databases searched, and number of results was maintained (Table 1).

Screening procedure

All articles were screened in line with the PRISMA ScR three-step screening procedure (Tricco et al., 2018), the first screening process identified citations through selected databases. These were exported into EndNote and duplicates removed to then be exported to the JBI Sumari platform. The second stage screening resulted in titles and abstracts being assessed for eligibility against the pre-determined inclusion/exclusion criteria. Articles that did not meet the eligibility criteria were excluded. For the third stage, full-text screening of the remaining articles was assessed for eligibility against the set inclusion/exclusion criteria. Only studies that met all inclusion criteria were included for data extraction and synthesis (see Figure 2).

Quality appraisal

The quality and bias of the 10 peer-reviewed articles were appraised using the JBI online critical appraisal checklists (Joanna Briggs Institute, 2020), which are tailored to different study designs to ensure rigorous assessment. For qualitative studies, the JBI checklist assessed criteria such as congruity between research methodology and research questions, data collection methods and representation of the participants (Lockwood et al., 2015). Cross-sectional studies were appraised using the analytical cross-sectional studies checklist, evaluating aspects such as sample selection, measurement validity, and control of confounders (Moola et al., 2020). The mixed-methods studies were evaluated using a combination of both the qualitative and the cross-sectional checklists. To ensure a rigorous process, both authors independently conducted quality appraisal for each of the included articles, and discussed any discrepancies arising throughout the process. Importantly, in line with scoping review methodology, all studies were retained for analysis regardless of their quality rating (Joanna Briggs Institute, 2020; Peters et al., 2020).

Table 1. Search strategy.

Database	Search string
ERIC	(transgender OR "non-binary" OR "gender-diverse" OR "gender non-conforming" OR "gender-queer" OR "gender fluid") AND (student* OR pupil*) AND (experience* OR learning OR "quality of life" OR challenge* OR "lived experience" OR "school experience" OR "academic outcome" OR "emotional outcome" OR "social outcome" OR interaction* OR bullying OR isolation OR health* OR wellbeing OR "missing school" OR support*) AND ("health and physical education" OR HPE OR "physical education" OR PE OR "sex education" OR "physical activity" OR "school sport" OR "life skills subject" OR "life orientation subject") AND ("primary school" OR "secondary school" OR "middle school" OR "high school").
EBSCOhost megafail ultimate	(transgender OR "non-binary" OR "gender-diverse" OR "gender non-conforming" OR "gender-queer" OR "gender fluid") AND (student* OR pupil*) AND (experience* OR learning OR "quality of life" OR challenge* OR "lived experience" OR "school experience" OR "academic outcome" OR "emotional outcome" OR "social outcome" OR interaction* OR bullying OR isolation OR health* OR wellbeing OR "missing school" OR support*) AND ("health and physical education" OR HPE OR "physical education" OR PE OR "sex education" OR "physical activity" OR "school sport" OR "life skills subject" OR "life orientation subject") AND ("primary school" OR "secondary school" OR "middle school" OR "high school").
Scopus	(transgender OR "non-binary" OR "gender-diverse" OR "gender non-conforming" OR "gender-queer" OR "gender fluid") AND (student* OR pupil*) AND (experience* OR learning OR "quality of life" OR challenge* OR "lived experience" OR "school experience" OR "academic outcome" OR "emotional outcome" OR "social outcome" OR interaction* OR bullying OR isolation OR health* OR wellbeing OR "missing school" OR support*) AND ("health and physical education" OR HPE OR "physical education" OR PE OR "sex education" OR "physical activity" OR "school sport" OR "life skills subject" OR "life orientation subject") AND ("primary school" OR "secondary school" OR "middle school" OR "high school").
PUBMED	(transgender OR "non-binary" OR "gender-diverse" OR "gender non-conforming" OR "gender-queer" OR "gender fluid") AND (student* OR pupil*) AND (experience* OR learning OR "quality of life" OR challenge* OR "lived experience" OR "school experience" OR "academic outcome" OR "emotional outcome" OR "social outcome" OR interaction* OR bullying OR isolation OR health* OR wellbeing OR "missing school" OR support*) AND ("health and physical education" OR HPE OR "physical education" OR PE OR "sex education" OR "physical activity" OR "school sport" OR "life skills subject" OR "life orientation subject") AND ("primary school" OR "secondary school" OR "middle school" OR "high school").
Informit (A + Education)	(transgender OR "non-binary" OR "gender-diverse" OR "gender non-conforming" OR "gender-queer" OR "gender fluid") AND (student* OR pupil*) AND (experience* OR learning OR "quality of life" OR challenge* OR "lived experience" OR "school experience" OR "academic outcome" OR "emotional outcome" OR "social outcome" OR interaction* OR bullying OR isolation OR health* OR wellbeing OR "missing school" OR support*) AND ("health and physical education" OR HPE OR "physical education" OR PE OR "sex education" OR "physical activity" OR "school sport" OR "life skills subject" OR "life orientation subject") AND ("primary school" OR "secondary school" OR "middle school" OR "high school").
PROQUEST	(transgender OR "non-binary" OR "gender-diverse" OR "gender non-conforming" OR "gender-queer" OR "gender fluid") AND (student* OR pupil*) AND (experience* OR learning OR "quality of life" OR challenge* OR "lived experience" OR "school experience" OR "academic outcome" OR "emotional outcome" OR "social outcome" OR interaction* OR bullying OR isolation OR health* OR wellbeing OR "missing school" OR support*) AND ("health and physical education" OR HPE OR "physical education" OR PE OR "sex education" OR "physical activity" OR "school sport" OR "life skills subject" OR "life orientation subject") AND ("primary school" OR "secondary school" OR "middle school" OR "high school").

The agreed quality appraisal scores are outlined in [Table 2](#).

Strategy for data charting and analysis

A structured data charting process was used to extract key information from each article (see [Table 2](#)). For each article, the following data were extracted: 1) lead author, year, country; 2) study aim, design, quality rating; 3) participants, educational setting; and 4) key findings and recommendations. This charting framework was organized into a matrix format to systematically compare and synthesize study characteristics and results, as recommended by Arksey and O'Malley (2005), for scoping reviews.

The data meta-synthesis for this scoping review was conducted using both a deductive and

inductive analyses. First, a deductive analysis was used to categorize the literature according to three pre-determined levels of the modified socio-ecological model developed by Clark et al. (2017) and White Hughto et al. (2018). This framework was used to analyze ten articles, drawing on three interconnected levels: structural, interpersonal and individual, demonstrating how diverse barriers, including stigma, operate and shape the experiences of trans, gender-diverse, and non-binary students in HPE settings (see [Figure 1](#)).

Within each of these three levels, an inductive thematic analysis, based on the framework of (Braun & Clarke, 2019; Clark & Kosci, 2022) was used to develop subthemes from the data through the process of close and repeated reading of each article. This process involved reading and

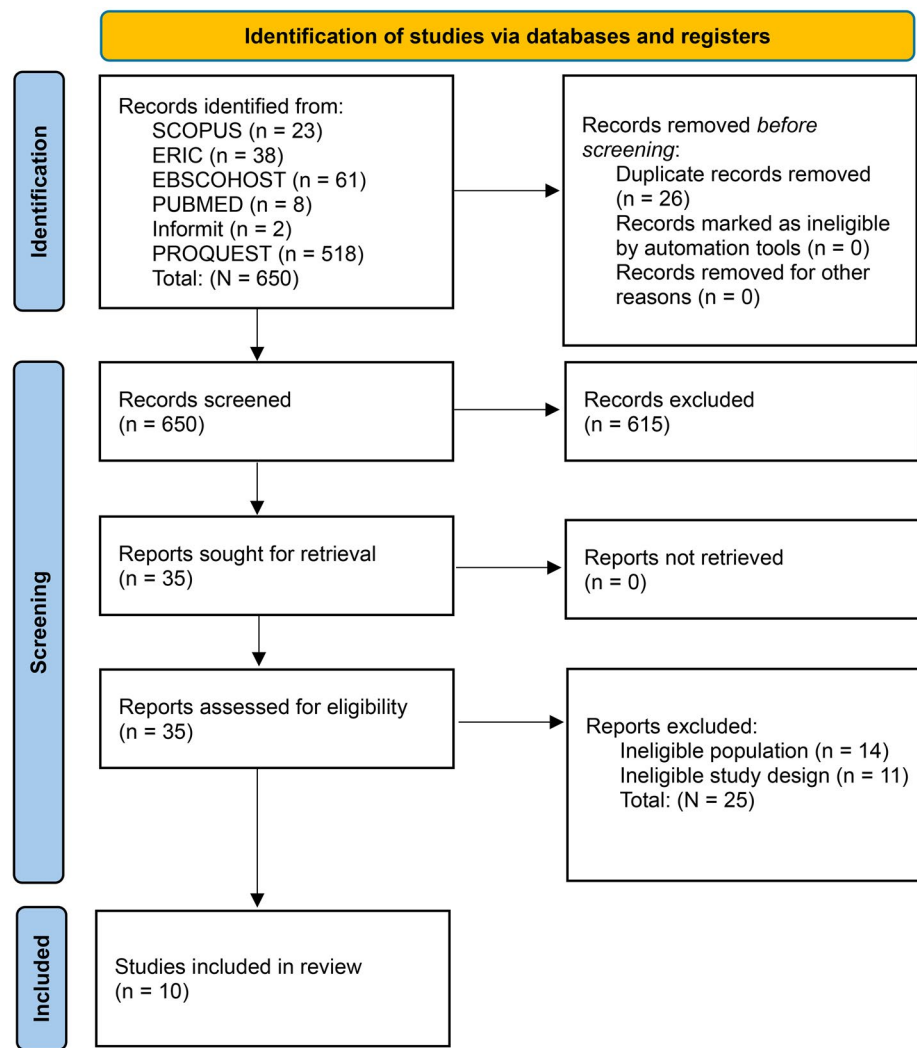


Figure 2. PRISMA flow diagram of review search for research question.

re-reading the findings, discussion and conclusion sections of each study to ensure thorough familiarization with the data (Braun & Clarke, 2019; Clark & Kosci, 2022). The six-step process of thematic analysis was followed including: 1) becoming familiar with the data; 2) generating initial codes; 3) developing initial themes; 4) reviewing the themes; 5) defining and naming the themes and 6) writing the report (Braun & Clarke, 2019). During this process, recurring ideas and insights were manually noted, enabling the identification of patterns and subthemes that were not pre-determined by the socio-ecological framework (Braun & Clarke, 2019; Clark & Kosci, 2022). These subthemes were then organized within the three socio-ecological levels to build a comprehensive meta-synthesis of the literature (Braun & Clarke, 2019; Clark & Kosci, 2022).

Results

All articles were screened in line with the PRISMA ScR three-step screening procedure (Tricco et al., 2018), the first screening process identified citations through databases ($n=650$). These were exported into EndNote and duplicates removed to then be exported to the JBI Sumari platform. The second stage screening resulted in 650 titles and abstracts being assessed for eligibility against the pre-determined inclusion/exclusion criteria. Here, 615 articles were excluded due to not meeting the eligibility criteria. If any uncertainties arose related to the eligibility criteria, both reviewers discussed these until an agreement was met. For the third stage, 35 full-text articles were assessed for eligibility against the set inclusion/exclusion criteria. Out of the 35 articles, 25

Table 2. Characteristics of peer-reviewed articles ($n=10$).

Lead author (year); country	Aim; study design; quality rating	Participants; educational setting	Key Findings and recommendations
Clark and Kosciw (2022); USA	To examine LGBTQ youth participation in school sports and its relationship to psychological well-being. Large-scale online survey. Quality rating: 8/8	15 813 LGBTQ students (aged 13–20). Secondary schools across the USA.	Sports participation was strongly linked to better well-being and school belonging for all students. However, trans and non-binary students participated significantly less than their cisgender peers. Barriers to participation included fear of discrimination, lack of inclusive facilities, gendered uniforms and unsafe environments. Recommendations: Create safe, inclusive sport environments and addressing barriers such as gendered facilities and discrimination. Provide training to school sport and physical activity professionals to create inclusive environments for trans and non-binary youth.
Ellis and Bentham (2021); New Zealand	To explore inclusion of LGBTIQ perspectives in school-based sexuality education. Exploratory survey study. Quality rating: 6/8	73 participants aged 16–19 years. Secondary schools in Aotearoa/New Zealand.	Most students received sexuality education, but inclusion of gender and sexual diversity was limited. Trans and non-binary students often felt unseen and unacknowledged in HPE, leading to exclusion and alienation. Relationships with teachers and peers were strained by misrecognition, lack of understanding, and fear of being outed. Recommendations: Enhanced teaching training and consistent implementation of inclusive guidelines is needed to support systematic change and ensure trans and non-binary students are recognized, respected and meaningfully included in HPE spaces.
Fuentes-Miguel et al. (2023); Spain	To examine the concept of 'trans generosity' through the lived transition of a trans student in a PE and school context. Narrative ethnography. Quality rating: 10/10	One trans male student (Lucas) aged 15–19. Rural secondary school in Valencia, Spain.	Lucas's HPE teacher (Jorge) actively supported his transition and advocated at the institutional level for Lucas. Lucas's visibility transformed his school into a narrative environment that affirmed gender diversity and enabled his identity development. Lucas's presence and acceptance at school helped create a more open and supportive environment. This made other students, like Irene, feel safer to come out and be themselves. Recommendations: Embed queer-trans pedagogy in PE teacher training and PE school policy.
Kaja and McGuire (2024); USA	To determine trends in participation on team sports, physical activity lessons, among trans and gender-diverse adolescents from 2016 to 2019. Cross-sectional analysis of two surveys. Quality rating: 6/8	9 th and 11 th grade students (2016: $N=18$ 885. 2019: $N=80$ 456). Public secondary schools.	Trans and gender-diverse youth consistently participated less than cisgender peers in sports and physical activity. Despite Minnesota's inclusive policies, trans and gender-diverse youth continued to participate less than their cisgender peers in sports and physical activity. These gaps may contribute to broader health disparities, including mental and physical health concerns among trans and gender-diverse youth. Recommendations: Develop specific strategies to engage trans and gender-diverse youth in physical activity and address participation disparities. Create safer and more welcoming sport and physical activity spaces to reduce barriers such as bullying and perceived lack of safety. Strengthen gender-inclusive policies.
Kettley-Linsell et al. (2024); United Kingdom, England	To explore trans and non-binary young adults' retrospective experiences of PE. Mixed-methods design. Quality rating, qualitative: 10/10 Quality rating, cross-sectional: 4/8	Thirty trans and non-binary individuals aged 18–25 from across the UK. Various secondary schools.	PE was highly gendered and distressing for many trans and non-binary students, whom experienced microaggressions (whispering, staring) and being labeled 'freaks' by their peers. Challenges included gendered uniforms, changing rooms, bullying and binary-based teaching. Highlighted the lack of teacher intervention, reinforcing peer-led cisnormativity. Recommendations: Reform PE policy and space design; provide teacher training on inclusivity; reduce gender segregation in curriculum.
Kulick et al. (2019); USA	To examine how LGBTQ identities, facility safety and school culture affect youth sports participation and safety. Cross-sectional survey. Quality rating: 8/8	1 406 High school students. Secondary schools in Michigan USA.	LGBTQ+ youth reported lower sports participation and safety compared to non-LGBTQ+ peers. Perceived lack of safety, particularly in bathrooms and locker rooms, was a key factor mediating this disparity. Trans and gender-diverse students reported the lowest levels of perceived safety and the greatest challenges in accessing and participating in physical activity. Gendered facilities such as locker rooms and bathrooms were significant barriers to trans and gender-diverse students' participation in physical activity. Recommendations: Gender-neutral bathrooms and locker rooms to increase safety and access for trans and gender-diverse students, implement inclusive policies that affirm gender diversity and protect trans and gender-diverse youth in physical activity.

(Continued)

Table 2. Continued.

Lead author (year); country	Aim; study design; quality rating	Participants; educational setting	Key Findings and recommendations
Kwok and Kwok (2022); Hong Kong	To examine Chinese trans students' experiences of sexuality education in Hong Kong and the impact of transprejudice. Qualitative study. Quality rating: 10/10	8 trans students (aged 16–20). Secondary schools and community college.	Trans students felt omitted, misgendered, and bullied in sexuality education. Sexuality education focused on reproduction, abstinence and heterosexual relationships, presenting gender as binary and fixed. Participants described teachers as unprepared, dismissive or even hostile toward gender-diverse students. Sexuality education lessons often led to emotional distress, feelings of isolation, and reinforced stigma trans students faced elsewhere in school. Peer support networks and rights-based education were empowering but trans students had to find these themselves. Recommendations: Reforming the Hong Kong secondary school sexuality education curriculum to include gender diversity, along with comprehensive educator training.
Neary and McBride (2024); Ireland	To understand trans and gender-diverse young people's experiences of PE and school sports and critique individualized inclusion strategies. Qualitative study and arts-based workshops Quality rating: 7/10	19 trans and gender-diverse young people aged 15–24. Secondary schools or alternative education settings.	Trans and gender-diverse students experienced being 'included' through exclusion, e.g. being allowed to opt out, but not actively supported, participants took part in their self-identified gender groups but were unable to receive accolades. Binary gender norms were deeply embedded in sport and PE structures. Trans and gender-diverse students described the accommodations made, such as being able to wear different uniforms, made them feel more visible to their peers. Recommendations: More beyond binary frameworks, use universal design principles, promote system-level equity-focused approaches.
Neary (2024); Ireland	To explore how trans and gender-diverse children navigate primary school. Focusing on intersections of age and agency, and reconsidering the potential of sex education. Qualitative study. Quality rating: 8/10	Parents of 11 trans children (aged 5–13) and 6 educators in 2017. Follow-up with 5 parents and 2 children in 2022. Primary schools in the Republic of Ireland.	Trans and gender-diverse children demonstrated sophisticated understanding of gender from a young age. Age-related assumptions constrained agency and inclusion. Schools often resisted social transitions and relationships, and sexuality education was gender-segregated and focused on biological sex. Children were told they were accepted but then excluded from activities and discussions. Recommendations: Child-centered, inclusive sexuality education and listening to trans and gender-diverse children's voices.
Wilkinson and Penney (2025); England	To explore trans and non-binary students' perspectives on gendered grouping and curriculum provision in secondary school PE. Mixed-methods study. Quality rating, qualitative: 10/10 Quality rating, cross-sectional: 6/8	36 trans and non-binary students. Students were from 14 secondary schools in England.	Most trans and non-binary students preferred mixed-sex PE grouping as single-sex grouping caused dysphoria and exclusion. Trans and non-binary students described PE and changing rooms as spaces of discomfort and heightened attention, where their bodies and identities were closely watched by peers. Schools rarely asked trans students about their preferences for grouping or participation, reinforcing feelings of invisibility and powerlessness. Recommendations: Flexible grouping structures, a more inclusive PE curriculum and trans-emancipatory policies are needed.

were excluded due to not meeting the inclusion criteria. A total of 10 peer-reviewed articles were included in the final review (see Figure 2).

Study size and demographics

The 10 included studies varied widely in sample size. Large scale studies such as Clark and Kosciw (2022) and Kaja and McGuire (2024) analyzed data from over 15,000 students and 80,000 students, respectively. In contrast, studies such as that by Fuentes-Miguel et al. (2023), followed a single trans student's journey. Participants across the studies were predominantly trans and gender-diverse youth, ranging in age from early childhood to young adulthood. Most studies focused on secondary school students aged 13–20,

with some including retrospective accounts from young adults up to age 25 about their school HPE experiences (Kettley-Linsell et al., 2024). Neary (2024) included primary-aged children (5–13) and their parents, commenting on their child's experiences of gender expression and school navigation.

The studies reviewed were conducted across a range of HPE contexts, including related areas such as physical education (PE), sex education, respectful relationships development, school sport, and life skills. Most studies took place in secondary schools, where trans, gender-diverse, and non-binary students' experiences in PE and school sports were explored (Clark & Kosciw, 2022; Ellis & Bentham, 2021; Fuentes-Miguel et al., 2023; Kaja & McGuire, 2024; Kettley-Linsell et al., 2024;

Kulick et al., 2019; Kwok & Kwok, 2022; Neary & McBride, 2024; Wilkinson & Penney, 2025). Nine articles focused on the lived experiences of trans, gender-diverse, or non-binary youth, capturing their perspectives on physical education, school sport, and sexuality education (Clark & Kosciw, 2022; Ellis & Bentham, 2021; Fuentes-Miguel et al., 2023; Kaja & McGuire, 2024; Kettley-Linsell et al., 2024; Kulick et al., 2019; Kwok & Kwok, 2022; Neary & McBride, 2024; Wilkinson & Penney, 2025). One study (Neary, 2024) explored the voices of parents and educators, with some follow-up input from children, exploring the experiences of trans children and their access to inclusive sex education.

With no limitations on geographical location, articles from a range of countries were included in this review. Three studies were conducted in the U.S. while two studies were conducted in Ireland and England, respectively, and one article each from Hong Kong, New Zealand and Spain, respectively. Similarly, although no date restrictions were set, all but one article was published in the last four years (2021–2025), with one published in 2019 (Kulick et al., 2019), suggesting this is an emerging area of research. Table 2 summarizes the characteristics of the articles, including their key findings and recommendations.

Study design, methodology and quality appraisal

The 10 studies included in this review utilized a range of research methodologies. Four studies used quantitative methods, relying on large-scale survey data to examine patterns in participation, safety, and well-being among trans, gender-diverse, and non-binary students (Clark & Kosciw, 2022; Ellis & Bentham, 2021; Kaja & McGuire, 2024; Kulick et al., 2019). Four studies were qualitative in nature, using interview, ethnography or arts-based methods to explore the lived experiences of trans, gender-diverse, and non-binary students (Fuentes-Miguel et al., 2023; Kwok & Kwok, 2022; Neary, 2024; Neary & McBride, 2024). Two studies used mixed-methods approaches, combining an online survey with follow up interviews to explore retrospective experiences of PE among trans, gender-diverse, and

non-binary students (Kettley-Linsell et al., 2024; Wilkinson & Penney, 2025).

To determine the quality of the included studies, each article was assessed by both reviewers using the JBI online critical appraisal tools for qualitative (Lockwood et al., 2015), and cross-sectional designs (Moola et al., 2020). As outlined in Table 2, all empirical studies in this review scored above 75% on their respective checklists, with most rated as high quality. Four studies achieved full scores (Clark & Kosciw, 2022; Fuentes-Miguel et al., 2023; Kulick et al., 2019; Kwok & Kwok, 2022), while six studies scored moderately (Ellis & Bentham, 2021; Kaja & McGuire, 2024; Kettley-Linsell et al., 2024; Neary, 2024; Neary & McBride, 2024; Wilkinson & Penney, 2025). No studies were excluded based on quality appraisal outcomes.

Following the presentation of key study characteristics, the analysis examined how each article addressed barriers across the structural, interpersonal and individual levels, as informed by the modified socio-ecological model (Clark et al., 2017; White Hughto et al., 2018). An inductive analysis, following (Clark & Kosciw, 2022; Braun & Clarke, 2019) was conducted resulting in the development of a number of subthemes. Three subthemes within the structural level, two within the interpersonal level and one within the individual level. These subthemes provided an in-depth understanding of the literature beyond the initial modified socio-ecological levels (Clark et al., 2017; White Hughto et al., 2018).

All articles discussed the structural barriers, such as institutional policies, gender-segregated curriculum and binary systems in PE and sexuality education (Clark & Kosciw, 2022; Ellis & Bentham, 2021; Fuentes-Miguel et al., 2023; Kaja & McGuire, 2024; Kettley-Linsell et al., 2024; Kulick et al., 2019; Kwok & Kwok, 2022; Neary, 2024; Neary & McBride, 2024; Wilkinson & Penney, 2025). Five articles examined interpersonal barriers, including peer bullying, misgendering and inconsistent teacher support, though some also described affirming educators who advocated for trans, gender-diverse, and non-binary students (Fuentes-Miguel et al., 2023; Kettley-Linsell et al., 2024; Kwok & Kwok, 2022; Neary & McBride, 2024; Wilkinson & Penney,

2025). Four articles investigated the individual-level barriers, such as gender dysphoria, concealment of identity and emotional distress (Kettley-Linsell et al., 2024; Kwok & Kwok, 2022; Neary, 2024; Neary & McBride, 2024). These categories and themes are examined in further depth in the sections that follow.

Structural level barriers

Structural level barriers refer to the societal norms, institutional policies and systemic practices (Clark et al., 2017; White Hughto et al., 2018) that shape the educational experiences of trans, gender-diverse, and non-binary students within HPE. These barriers are embedded in PE and school sports, through rigid gender norms, cis-normative curriculum, policies and physical spaces (Kettley-Linsell et al., 2024; Kulick et al., 2019). These often operate invisibly to reinforce cisnormativity and binary gender expectations (Kettley-Linsell et al., 2024; Kulick et al., 2019). In the context of HPE, these structures regulate who is seen, who is included and who is permitted to participate authentically (Kettley-Linsell et al., 2024). For trans, gender-diverse, and non-binary students, structural barriers manifest in multiple ways, including gender-segregated classes, binary activity offerings and the regulation of gender expression through uniforms and dress code expectations (Kettley-Linsell et al., 2024). As Kettley-Linsell et al. (2024) note, institutional features such as uniform rules and curriculum, create pressure for students to represent themselves in incomplete ways, live inauthentic lives and conform to binary norms. Across the articles, three recurring subthemes were identified titled: 1) binary gendering in PE; 2) cisnormativity in curriculum and policy; and 3) lack of teacher training and institutional support.

Binary gendering in PE

One of the most persistent structural issues identified across the included studies was the organization of PE classes and activities according to binary gender categories. Students were compelled to participate according to their birth-assigned sex and excluded those whose gender identities do not conform to this framework (Kettley-Linsell

et al., 2024; Kulick et al., 2019; Neary & McBride, 2024; Wilkinson & Penney, 2025). A non-binary participant, (Charlie, 25) stated, “there wasn’t any consideration given to gender diversity... the sports you got to do were decided by whatever your assigned gender was” (Kettley-Linsell et al., 2024, p. 460). In their study, Kettley-Linsell et al. (2024) found that the rigid structure of gendered PE classes often forced trans, gender-diverse, and non-binary students to choose between misgendering themselves or opting out entirely, leading to feelings of isolation and exclusion. Neary and McBride (2024) similarly found that gendered classification in PE and sport lead to withdrawal or exclusion from recognition systems. One parent reflected on their son’s experience, “James is never going to get an award at sports because they can’t say ‘for the boys’ because he doesn’t play on the boys’ team” (Neary & McBride, 2024, p. 598).

Sex- and gender-segregated changing rooms and bathrooms were places trans, gender-diverse, and non-binary students felt unsafe or were spaces that were inaccessible. Leading to feelings of distress, avoidance, or exclusion from PE and sport. Kulick et al. (2019) found that trans students felt significantly less safe in locker rooms and bathrooms than their cis peers. These feelings of unsafety mediated their participation in sports, with lower rates of involvement and higher distress (Kulick et al., 2019). Similarly, Kettley-Linsell et al. (2024) described changing rooms as ‘hostile and violent’ spaces. One participant said, “...would a chicken feel comfortable in a fox’s den?” (p. 465). Even when gender-neutral options were provided, they often led to isolation. A trans man commented, “there is a female space...where everyone is talking...a male space... where everyone is talking... and then you’re kind of just in your own space and can’t go into either” (Kettley-Linsell et al., 2024, p. 465). This experience underscores how structural solutions can inadvertently reinforce exclusion.

Additionally, Wilkinson and Penney (2025) reported that nearly all trans, gender-diverse, and non-binary students preferred mixed-sex and gender grouping in PE, citing distress and gender dysphoria when forced into single-sex and gender classes. A trans student (Year 11) in the study

shared, “single-sex grouping kind of makes me feel dysphoric because I don’t identify as the sex of my class” (Wilkinson & Penney, 2025, p. 11). Kulick et al. (2019) further demonstrated that sex-segregated sports and facilities contributed to lower participation rates and feelings of unsafety among trans youth.

Moreover, Clark and Kosciw (2022) reinforce this, showing that trans males and non-binary students were the least likely to participate in school sports, largely due to the rigid gender binary of team structures. They noted that school team sports were almost always separated along the gender binary, which excluded students who did not identify as strictly male or female. Kaja and McGuire (2024) similarly found that despite Minnesota’s codified gender-inclusive policies in the U.S. trans and gender-diverse students participated in sports at half the rate of their cisgender peers, suggesting that binary structures persist even in progressive policy environments.

Cisnormativity in curriculum and policy

School policies and curriculum frequently reflect cisnormative assumptions, failing to accommodate gender diversity. This systematic oversight was particularly evident in Neary’s (2024) study which found that relationship and sexuality education was deeply entrenched in cis-heteronormative conditions where trans, gender-diverse, and non-binary children were rendered invisible and incomprehensible. The invisibility was also echoed in parental accounts, where one parent shared, “I asked how they taught RSE and they said ‘we just use the curriculum’. But the curriculum was awful. Focused entirely on penises and vaginas, especially in the Catholic version” (Neary, 2024, p. 628). Another parent explained how the solution to relationship and sexuality education, was to withdraw her son from the lesson, “the principal said to me ‘Justin could not come in on that day, or could leave the room?’ and I said ‘no way, that’s going to draw huge attention to him. I wouldn’t even have thought of it’” (Neary, 2024, p. 627).

Even when sexual and gender diversity was included in the curriculum, its implementation was often falling short. Ellis and Bentham (2021) found only one-third of their participants reported that their sexuality education included

information about sexual relationships between people who were gender-diverse. Moreover, when such content was present, it was superficial or tokenistic. Here, one participant stated, “it was mentioned but they didn’t go into it” (Ellis & Bentham, 2021, p. 715). Kwok and Kwok (2022, p. 558) demonstrated that trans students in Hong Kong were actively silenced in sexuality education, where one 19-year-old trans boy shared, “trans information was never mentioned... as though trans kid simply do not exist.”

Kettley-Linsell et al. (2024) found that PE curriculum is structured around binary gender norms, with little room for gender diversity. In line with this, Clark and Kosciw (2022) found that only 4.8% of trans and gender nonconforming students reported that their school had a policy allowing them to participate on teams aligned with their gender, ultimately reinforcing cisnormative assumptions about who belongs in sport. Kaja and McGuire (2024, p. 685) similarly noted that even in a state with inclusive policies, “sizeable participation disparities seem status quo”, suggesting that policy alone is insufficient without cultural and curricular change. In contrast, Fuentes-Miguel et al. (2023) described a school that implemented a Trans Accompaniment Protocol, to protect gender-diverse students and their rights, and adjusted internal documents to reflect one trans student’s affirmed gender. However, they also highlighted resistance from some staff, showing that cisnormativity can persist even with supportive policy frameworks.

Lack of teacher training and institutional support

The articles in this theme highlight, how the lack of teacher training and professional development can further exacerbate the HPE curriculum shortcomings in inclusive practices. Where there is lack of adequate training and support, educators may unintentionally reinforce exclusionary practices, leaving students to fill critical gaps in their knowledge to themselves. On this topic, participants in Ellis and Bentham (2021) reflected this reality, stating, “we (the students) taught our teacher about nonbinary” and “teachers just have a lack of understanding and information about gender identity” (p. 716). Kwok and Kwok (2022) similarly found that educators lacked professional

codes or training to support trans students, with some actively avoiding trans-related topics. A 17-year-old trans boy reflected on this matter, “I raised a question about surgery for trans people... the teacher’s response was that altering the body through medical help was not ‘natural’, according to God’s will” (Kwok & Kwok, 2022, p. 559). Consistent with this, Neary (2024) documented teacher reluctance in supporting trans students, often citing age-based assumptions, where schools delayed action until students were older or more ‘certain’. This ultimately undermined student agency and reinforcing adult-centric control over gender expression. These patterns collectively illustrate how the absence of teacher preparedness not only limits inclusive educational practices. It creates an environment where trans, gender-diverse, and non-binary students are misinformed, marginalized and denied autonomy over their own identities.

Together, these findings show that structural barriers within HPE not only shape how trans, gender-diverse, and non-binary students are included in policy and curriculum but also set the conditions for how they are treated in everyday school life. These broader frameworks directly influence the interpersonal experiences students have with teachers and peers, which are explored in the next section.

Interpersonal level barriers

Interpersonal level barriers refer to the social dynamics and interactions between trans, gender-diverse, and non-binary students and their peers, teachers and school staff, that hinder participation and inclusion in HPE. According to Clark et al. (2017) and White Hughto et al. (2018) these barriers include verbal harassment, physical violence, rejection, and other forms of mistreatment that occur in social relationships. In HPE settings, these barriers can manifest through peer surveillance, misgendering, bullying and exclusion (Kettley-Linsell et al., 2024; Kwok & Kwok, 2022; Neary & McBride, 2024; Wilkinson & Penney, 2025). Two key sub-themes were developed for this main theme and include: 1) teacher-student interactions; and 2) peer interactions. These sub-themes illustrate the pervasive

and often invisible ways in which trans, gender-diverse, and non-binary students are made to feel unsafe, unwelcome, or invisible in HPE settings.

Teacher-student interactions

Findings from the articles suggest that interactions between trans, gender-diverse, and non-binary students and their teachers were central to shaping students’ everyday experiences of inclusion or exclusion in HPE settings. Across several studies, students described teachers as both potential allies, but also significant sources of emotional harm through misrecognition, passive exclusion or interpersonal uncertainty (Kwok & Kwok, 2022; Neary & McBride, 2024; Wilkinson & Penney, 2025).

Teachers sometimes also misgendered students or placed them in groups that contradicted their gender (Kwok & Kwok, 2022). Teachers also failed to intervene when students were excluded (Neary & McBride, 2024) or avoided engaging with gender-diverse topics out of discomfort or fear of making mistakes (Wilkinson & Penney, 2025).

In Kwok and Kwok (2022), Lok-Sum a trans girl, described being placed in a boys’ group during sexuality education, which led to feelings of discomfort and distress: “I was misgendered in a group with only boys and was perceived as a boy. It was very awkward, and most of the time very distressing” (p. 559). This act was not a result of policy but of interpersonal decision-making in the classroom, where the teacher failed to consult or recognize Lok-Sum’s needs. Similarly, Neary and McBride (2024) documented how Esme, a trans girl, was excluded from a regional sports event due to her teacher’s failure to clarify which team she could join, “I wasn’t allowed on the girls’ team, and I wouldn’t go on the boys’. No one told me what I was meant to do. The teacher yelled at me, and later said, ‘well you have to do something, don’t you?’” (p. 598). In Esme’s case, her repeated experiences of being unsupported by her PE teacher ultimately influenced her decision to leave the school. This experience highlights the lack of personal support from her teacher and a failure to advocate for her student’s participation. Moreover, Wilkinson and

Penney (2025) commented on how non-binary students are a source of fear and anxiety for PE teachers, partially rooted in the imagined difficulty of accommodating them in line with their needs within existing cisnormative structures. Echoing this, Fuentes-Miguel et al. (2023) followed a trans student's journey, that of Lucas. Here Lucas reflected on some difficult moments with a particular teacher, whom refused to call him by his name. However, in contrast to this difficult moment, Lucas also reflected on a positive and affirming relationship he had with his PE teacher, Jorge, whom offered him support during his transition. Jorge not only used Lucas's correct name and pronouns, but he also validated his gender and experience in front of his peers, helping him feel seen and respected within the school.

This contrast between teacher interactions illustrates the powerful role educators can play in either affirming or undermining TGND students' sense of belonging and safety in HPE settings.

Peer interactions

Peer interactions are also a powerful force in shaping how trans, gender-diverse, and non-binary students experience inclusion or exclusion in HPE settings. Peers often reinforce binary gender boundaries by observing, commenting on, or socially penalizing those who do not conform to expected norms of masculinity or femininity (Kwok & Kwok, 2022; Neary & McBride, 2024; Wilkinson & Penney, 2025). Trans, gender-diverse, and non-binary students described feeling highly visible in their bodies and actions, particularly in activities such as team sports, changing clothes, or participating in gendered classroom discussions (Kwok & Kwok, 2022; Wilkinson & Penney, 2025).

In Neary and McBride (2024), Seamus, a trans student, in a single-gender school was permitted to wear tracksuit bottoms instead of a skirt. Though intended as an inclusive solution, this made him feel more visibly out of place. He reported "everybody's looking at me because I am wearing the wrong uniform...I know it was supposed to make me feel more comfortable but it

really didn't" (Neary & McBride, 2024, p. 601). This experience highlights how although accommodations were made, it reinforced a sense of being visibly different, particularly when peers silently marked his difference through stares and whispers. The same study also documents direct peer harassment. Here, Shane, a trans boy, described being laughed at and disturbed while changing for PE in the accessible toilet, "I have had some people try and knock at the door and laugh at me when I was in there before" (Neary & McBride, 2024, p. 600). Together, these examples reflect how peer judgment can intensify feelings of exposure and anxiety and social isolation for trans, gender-diverse, and non-binary students.

Participants in Kettley-Linsell et al. (2024) further described being subjected to intense peer surveillance and social pressure to perform gender in-line with cis-heteronormative expectations. Students who failed to conform, were marked as outsiders or 'freaks' and targeted through micro-aggressions such as whispering, laughing and starting. As Jo, a non-binary participant, explained, "every session you had your popular girls and your 'freaks' as they lovingly dubbed us. They made us know we were different" (Kettley-Linsell et al., 2024, p. 462). In the same study, Sam, a trans participant described how normative gender expectations were reinforced through peers, "you will dress like this, you will look like this, you will act like this, you will not be queer" (Kettley-Linsell et al., 2024, p. 462). Despite the harm caused to these students, school staff rarely addressed these incidences. As Karter, a non-binary student, recalled, "all we were told was to toughen up and deal with it, and the individuals making comments, were never dealt with" (Kettley-Linsell et al., 2024, p. 463). This neglect contributed to a sense of helplessness and normalized a culture of peer-enforced cisnormativity within PE.

However, Fuentes-Miguel et al. (2023) offered a contrasting picture. Lucas, a trans student, became a source of support and representation for his peers, including helping other students like Irene to 'come out' as bisexual and feel affirmed. Lucas reflected on the lack of role models in his own experience and the power of visibility, "When I said to myself 'I'm coming out,' I

had no previous example to refer to in the school... Now, if someone comes after me, he could say: ‘Someone has already done it’” (Fuentes-Miguel et al., 2023, p. 1141).

Together, these accounts reveal how peer and teacher dynamics can function both as mechanisms of exclusion and as potential sources of affirmation and support in HPE settings in schools. These social interactions not only shape external experiences but also leave a lasting internal impact. Contributing to emotional distress, gender dysphoria and other individual-level challenges explored in the next section.

Individual level barriers

According to White Hughto et al. (2018) individual-level barriers can be understood as the internal effects of broader social marginalization. Stigma and discrimination function as external social stressors, that, when internalized, manifest in personal challenges such as gender dysphoria, and/or emotional distress (Clark et al., 2017; White Hughto et al., 2018) all of which directly impact on an individual’s well-being and participation. These social stressors are often intensified in HPE settings where students may feel unsafe, hyper-visible or erased altogether. For example, Martin, a trans boy, recalled the stress of using a disabled toilet located in a visible area of the PE hall, “It was so out in the open and you feel even more vulnerable than you already are” (Neary & McBride, 2024, p. 8). This experience reflects the embodied anxiety and hyper-awareness that trans, gender-diverse, and non-binary students report in school and associated HPE spaces.

The articles, describe how trans, gender-diverse, and non-binary students opted out of gendered school activities to preserve their safety or comfort. More specifically, Neary and McBride (2024) described how Tom, a trans boy, remained ‘stealth’ at his new school and avoided PE entirely to prevent being outed. Tom’s father viewed this as a form of inclusion through exclusion. Similarly, several participants in the study by Kettley-Linsell et al. (2024) commented on their fear of being outed leading many of them to feign illness or hand in sick notes to avoid PE altogether. These

patterns of avoidance illustrate how school structures often compel trans, gender-diverse, and non-binary students to remove themselves completely from participation in HPE settings. One sub-theme was developed for this main theme and explores gender dysphoria. This sub-theme illustrates the cumulative toll of gender dysphoria, invisibility and restricted gender expression often manifested as intense emotional distress.

Gender dysphoria

Gender dysphoria and bodily discomfort, particularly in PE and sex education, was prevalent in multiple studies (Kwok & Kwok, 2022; Neary, 2024; Wilkinson & Penney, 2025). In Neary (2024), Eavan described her son Fred’s ongoing struggle, “he was holding it together in school and coming home and having these huge melt-downs” (p. 623). Years later, the distress for Fred remained, “it’s like a denial but there’s turmoil... to even say the words is too much for him... it seeps out of him” (Neary, 2024, p. 623). Similarly, in Kwok and Kwok (2022), a trans boy, Ming-sum, shared, “I felt like I was left out and unable to fit in” (p. 558). Parallel to this, in Neary (2024), a parent of Jason (aged 5) reflected on a moment of emotional distress for Jason, “she [sic] just sat on me sobbing, I’m a boy, I’m a boy. I said ‘it’s okay, you’re a boy and that’s all that matters’” (p. 622). This highlights how even well-meaning support can be complicated by unintentional misgendering. These accounts reveal how sustained emotional strain, stemming from marginalization and unrecognized gender experiences can profoundly affect the mental health of trans, gender-diverse, and non-binary students.

In Wilkinson and Penney (2025), non-binary students also expressed distress about being forced into single-sex grouping. One participant noted, “I’m non-binary so single-sex grouping make me feel dysphoric and out of place” (Wilkinson & Penney, 2025, p. 11). Similarly, Kwok and Kwok (2022), had multiple participants link their distress to bodily changes and misalignment with their gender. A trans boy, Lok-ting aged 16, shared, “going through puberty was terrifying...I had frequent panic attacks when coping with gender dysphoria” (Kwok & Kwok, 2022, p. 558). Another powerful illustration of this was

presented in Neary's (2024) study where gender dysphoria emerged in the early years through self-awareness. Here, Fred, at the age of three, clearly articulated the disconnect between his internal and external gender experience, and told his mother, "on the outside I'm a girl but on the inside I'm a boy. I'm not a tomboy" (Neary, 2024, p. 622). This statement captures the internal experience of dysphoria and affirms that such discomfort is not only prevalent but can manifest from a very young age. As seen across these studies, gender dysphoria are persistent barriers that impact trans, gender-diverse, and non-binary students' ability to feel safe, affirmed and comfortable in HPE settings.

Discussion

This scoping review explored and meta-synthesized existing empirical literature exploring the complex and multi-layered barriers that trans, gender-diverse, and non-binary students experience within school-based HPE contexts. The findings reveal that these challenges occur at structural, interpersonal and individual levels. Drawing on the modified socio-ecological model (Clark et al., 2017; White Hughto et al., 2018) the review illustrates that trans, gender-diverse, and non-binary students' experiences in HPE are not only shaped by personal identity struggles, but also by unsupportive peer interactions, untrained educators, and school structures that continue to uphold rigid and cisgenderist norms. Parallel to this, it is important to highlight and situate this debate and this scoping review's findings within a human's rights lens. More specifically, the Universal Declaration of Human Rights affirms that all people have the right to education (Article 26), and to be free from discrimination while engaged in education (Article 2) (United Nations, 1948). Similarly, Yogyakarta Principles (International Commission of Jurists & International Service for Human Rights, 2007; International Service for Human Rights & ARC International, 2017) stress the importance to uphold the right to education without discrimination based on gender identity or expression. Principle 16 specifically states that educational institutions must ensure access, safety, inclusion

and respect for all learners, regardless of their gender identity and experience (International Commission of Jurists & International Service for Human Rights, 2007).

Taking this human rights lens into account, at the structural level, all ten studies highlighted how the organization of HPE grouping, facilities and structures continue to reflect cisnormative and binary assumptions about gender. These include gendered uniforms, sex-segregated sporting teams and gendered changing spaces (Kwok & Kwok, 2022; Neary & McBride, 2024; Wilkinson & Penney, 2025). The ways in which HPE curriculum are structured globally often fail to accommodate gender diversity, forcing trans, gender-diverse, and non-binary students to choose between visibility and safety. A few studies noted that even where policies existed to protect gender-diverse students, they were not inconsistently applied (Kaja & McGuire, 2024; Neary, 2024; Neary & McBride, 2024). More specifically, these policies rely on the discretion of individual staff and/or institutional leadership to implement them effectively. This reliance on individual staff or institutional leadership results in variable and inequitable experiences for trans, gender-diverse, and non-binary students and leads to what participants described as being included in ways that are simultaneously exclusionary (Kwok & Kwok, 2022; Neary & McBride, 2024; Wilkinson & Penney, 2025). In these cases, inclusion appeared conditional and superficial, as students were often forced to navigate policies that affirm their identity in theory but fell short in practice (Wilkinson & Penney, 2025). This is due to lack of enforcement, inadequate staff training and/or conflicting institutional values (Day & Brömdal, 2024; Manley et al., 2024).

The review also found that many policies such as uniform flexibility rules were applied *reactively* rather than *proactively*. Rather than embedding gender diversity within the HPE curriculum design, schools tended to respond to individual students, which placed the burden of inclusion on an already vulnerable young person (Fuentes-Miguel et al., 2023; Neary & McBride, 2024). This finding also aligns with broader critiques of inclusion frameworks that individualize trans students' needs instead of incorporating

gender diversity as an integrated norm of school structures. For example, Omercajic and Martino (2020) argue, trans-affirmative policies often frame inclusion in terms of individual requests for safe spaces and recognition, rather than addressing structural barriers. Without this, inclusion for trans, gender-diverse, and non-binary students remain symbolic and tokenistic, rather than meaningful. Such practices intensify the sense of exclusion for trans, gender-diverse, and non-binary students, who are already positioned within a structurally vulnerable group. Overall, HPE curriculum and school policies often reinforce gender conformity rather than disrupting it (Johnson et al., 2024), therefore sustaining barriers for trans, gender-diverse, and non-binary students to experience a gender-affirming HPE space in schools.

These harmful findings echo some of the findings also found in the national research report *Writing Themselves In 4* (Hill et al., 2021), where almost 64.3% of trans women, 54.4% of trans men and 44.6% of non-binary participants reported missing days of school due to feeling unsafe or uncomfortable. In Canada, *Still in Every Class in Every School* (Peter et al., 2021) similarly found that 2SLGBTQ students remain at heightened risk of harassment, exclusion and absenteeism with inconsistent application of inclusive policies. This survey highlighted that despite a decade of advocacy and some policy improvements since the first survey in 2011, school environments continue to reflect entrenched homophobia, biphobia and transphobia. Particularly, where policies are not embedded at the systematic level. Both reports reinforce that policy frameworks alone are insufficient without systematic whole-school approaches that consistently implemented. These statistics not only align with the findings in the studies in this review but underscore how the structural barriers are not isolated instances. Rather, they indicate a systematic failure to uphold the educational rights of trans, gender-diverse, and non-binary youth. Principle 16 of Yogyakarta Principles (International Commission of Jurists & International Service for Human Rights, 2007) highlights that access to education is a fundamental right and failure to ensure inclusive and affirming learning spaces

constitutes a breach of international human rights obligations.

At the interpersonal level, the studies revealed how negative peer and teacher-student interactions shaped trans, gender-diverse, and non-binary students' sense of safety and belonging. Trans, gender-diverse, and non-binary students reported bullying, misgendering, exclusion from sports teams, and silencing of their identities and experiences (Kettley-Linsell et al., 2024; Kwok & Kwok, 2022). In some cases, teachers either failed to intervene or contributed to harm by refusing to use students' affirmed names, and pronouns, or by upholding binary grouping practices, even when alternative structures were available (Neary & McBride, 2024). These findings reinforce the importance of teacher training, accountability but also their agency in how to make the classroom inclusive and affirming through different means, including relevant picture books (Bedford et al., 2025). This is consistent with Peter et al. (2021) who found that in Canadian schools, positive interpersonal experiences were often dependent on individual educators rather than being built into institutional culture. This results in highly inconsistent levels of support for 2SLGBTQ students (Peter et al., 2021). When educators affirmed students' identities and experiences, and proactively adjusted class structures, students described increased feelings of safety, inclusion and wellbeing (Fuentes-Miguel et al., 2023; Wilkinson & Penney, 2025).

This reflects broader critiques emphasizing the importance of positive teacher-student relationships and positive peer dynamics in fostering safe and inclusive environments for trans, gender-diverse, and non-binary students. For example, Martino et al. (2022) emphasized that interpersonal relationships, particularly with supportive staff and peers, can significantly buffer the effects of institutional exclusion. However, the authors also highlighted that such support is often inconsistent and relies heavily on the discretion and values of individual staff, further stressing the need for professional development in fostering inclusive and affirming HPE environments (Martino et al., 2022). As also argued by Bartholomaeus and Riggs (2017), effective inclusion of trans, gender-diverse, and non-binary

students require a whole school approach that addresses not only curriculum and staff training but addresses school policies and physical spaces too. These findings show that affirming teachers can make a difference at the interpersonal level, but sustained systematic change is essential for educational equity. This echoes previously discussed human rights obligations, which requires schools to actively uphold students' rights to safe, inclusive and nondiscriminatory education (International Commission of Jurists & International Service for Human Rights, 2007; International Service for Human Rights & ARC International, 2017; United Nations Office of the High Commissioner for Human Rights, 1989).

At the individual level, barriers such as gender dysphoria, emotional distress and strategies of concealment were consistently reported across the included studies (Kettley-Linsell et al., 2024; Kwok & Kwok, 2022; Neary, 2024; Neary & McBride, 2024; Wilkinson & Penney, 2025). Individual level responses such as withdrawal from HPE or emotional shutdown were not isolated behaviors, but rather the embodied consequences of structural and interpersonal exclusions. For example, avoidance strategies like pretending to be sick, or completely opting out of HPE (Kettley-Linsell et al., 2024; Neary & McBride, 2024) may function as protective behaviors, allowing trans, gender-diverse, and non-binary students to safeguard their sense of identity and experiences when faced with potential misgendering, exposure or peer scrutiny. While these actions may offer short-term relief, they can lead to long-term exclusion from HPE, and schooling as a whole, exacerbating existing disparities in mental and physical health outcomes (Clark & Kosciw, 2022). These findings align with a Canadian climate survey that documented similar patterns, where hostile or non-affirming school climates were linked to increased absenteeism, reduced participation in school life and poorer well-being outcomes for 2SLGBTQ (Peter et al., 2021). The emotional impact of these barriers was evident across a wide age range, from primary school children to secondary school students. This suggests that internalized distress can begin early and endure into adolescence and beyond. For instance, accounts from parents in Neary (2024) and

Neary and McBride (2024) detailed severe emotional distress and internal conflict among young children navigating environments that fail to affirm their identities and experiences. These findings challenge the notion that gender identity and experiences is a transient 'phase' of development, and rather requires affirmation and support from early childhood.

Gender dysphoria was also identified as a central barrier at the individual level, particularly in relation to gender-segregated activities and the visibility of gendered bodies in PE settings (Kwok & Kwok, 2022; Wilkinson & Penney, 2025). This aligns with prior research showing that school environments act as key sites of gender regulation. A place where students are routinely subjected to peer and institutional pressures to conform to normative gender expectations and pressures that can produce intense internal distress and feelings of misrecognition (Payne & Smith, 2013). The mental health implications of this are significant, with some participants describing panic attacks, prolonged emotional turmoil and feelings of erasure (Kwok & Kwok, 2022; Neary, 2024; Neary & McBride, 2024). These findings resonate with broader literature showing that emotional distress is not simply an individual response but often the internalized result of persistent social stressors such as stigma, misrecognition and concealment (Meyer, 2003). Furthermore, Bailey et al. (2024) found that trans young people reported the highest levels of mental ill health associated with minority stressors, particularly feeling unsafe at school, home or in their communities. This study also highlighted how negative school climates exacerbate mental health risk, whereas inclusive, affirming environments have a protective effect. Underscoring that emotional distress is not merely a personal reaction but a response to sustained social and institutional stressors (Bailey et al., 2024).

Trans, gender-diverse, and non-binary students in this scoping review described how avoidance of PE, fear of being 'outed', and emotional shutdown were common responses to school environments that rendered their identities unsafe or invisible. Finally, the presence of gender dysphoria and emotional strain was not purely a function of personal identity and experiences but was shaped by

environmental conditions. Participants described how unsafe changing facilities, gendered groupings and cisnormative curriculum made their identities feel hyper-visible or completely invisible. This suggests that individual distress is not a private issue but a socially produced outcome, reinforcing the need for institutional change (Kwok & Kwok, 2022; Neary, 2024; Neary & McBride, 2024). This is consistent with existing literature where trans youth have consistently reported the need for safe and gender-affirming bathrooms and locker rooms yet often face barriers such as fear of being outed when using designated gender-neutral facilities (Sava et al., 2021). Gender neutral facilities are often placed in inaccessible or stigmatizing locations, such as school basements and nurse's offices, which can lead to feelings of isolation, frustration and concern for personal safety (Porta et al., 2017). Furthermore, school toilets have been identified by both school policy makers and school staff as common sites of bullying and victimization of trans youth, reinforcing the emotional toll of everyday school environments (Francis et al., 2022). Similar patterns have emerged in Canadian schools, where washrooms and locker rooms were reported as among the least safe spaces for 2SLGBTQ students (Peter et al., 2021). While policy makers and staff in Perth, Western Australia, support gender neutral bathrooms as an anti-bullying measure, their implementation is hindered by financial, spatial and cultural barriers, along with concerns around privacy and parental resistance (Francis et al., 2022). These structural inadequacies not only fail to affirm trans students' identities and experience but actively contribute to the emotional strain they experience within school settings. Education systems that neglect to affirm gender diversity and uphold binary structures, violates students' rights to safety, dignity and full participation in HPE and schools overall (International Commission of Jurists & International Service for Human Rights, 2007; International Service for Human Rights & ARC International, 2017; United Nations Office of the High Commissioner for Human Rights, 1989).

Beyond the immediate barriers experience in HPE, the harms faced by trans, gender-diverse,

and non-binary students can have profound and long-term consequences on their health, educational outcomes and socioeconomic trajectories. Tebbe et al. (2024) highlight that trans, gender-diverse, and non-binary students who experience stigma, discrimination and non-affirming environments are at a higher risk for developing depression, anxiety and other mental health challenges, which can persist into adulthood. The absence of supportive social networks and feelings of isolation further exacerbate these risks for trans, gender-diverse, and non-binary students (Peter et al., 2021). Lower levels of mental health among trans, gender-diverse, and non-binary students have also been associated with serious long-term outcomes, including suicidal behavior, substance abuse and future physical and mental health (Peter et al., 2021). Collectively, these findings indicate that the exclusion, discrimination and inadequate support trans, gender-diverse, and non-binary students receive within HPE at school not only impact immediate well-being and mental health but can also influence their long-term health outcomes.

In summary, this scoping review reveals that the barriers faced by trans, gender-diverse, and non-binary students in HPE are deeply embedded within educational structures, social interactions and individual experiences. These challenges are not isolated incidences but reflect broader systematic issues that go against international human rights obligations (International Commission of Jurists & International Service for Human Rights, 2007; International Service for Human Rights & ARC International, 2017; United Nations Office of the High Commissioner for Human Rights, 1989). Addressing these issues requires a whole school approach, one that affirms gender diversity, embeds inclusive practices and ensures that all students can access education safely and equitably. Achieving this is not the responsibility of educators alone, rather it demands collective action from policy-makers, government leaders, school staff and advocates to build globally inclusive and supportive educational environments (United Nations, 2024).

Limitations

This scoping review was designed to explore and synthesize the specific barriers faced by trans, gender-diverse, and non-binary students in school-based HPE settings. While the methodology aimed to ensure focus and rigor, five key limitations should be acknowledged. First, many of the included studies relied on participants' recall of accounts that involved emotional experiences in their past schooling contexts. This can lead to the possibility of memory recall bias. Zurbriggen et al. (2021) found that adolescents recalling past emotional experiences often reconstruct the original experience based on their school related beliefs and attitudes, rather than the original emotional experience. This can potentially distort how such experiences are remembered and reported. Second, this review included only studies published in English, this may introduce language bias. Excluding non-English publications can limit the generalizability and applicability of findings and may unintentionally limit publications published in other languages and contexts from non-English speaking regions (Jüni et al., 2002). Although some evidence suggests that such exclusions may not drastically alter outcomes, they do risk narrowing the global scope and diversity of perspectives represented in the literature (Jüni et al., 2002). Similarly, the deliberate focus on empirical articles potentially excluded important research, whilst focusing on peer-reviewed work may have also excluded relevant grey literature such as government and NGO research reports, theses, and other research outputs outside academia. Finally, studies that did not disaggregate trans, gender-diverse, and non-binary students from broader LGBTQIA+ studies were excluded. While this allowed for a more focused analysis, it may have led to the omission of relevant studies where such data were embedded but not separated.

Despite these limitations, this review followed a transparent and rigorous screening and analysis process and aimed to center the voices and experiences of trans, gender-diverse, and non-binary students in HPE contexts within primary, middle and/or secondary schools. The identified limitations highlight the need for future research to disaggregate gender identity data, incorporate

multiple languages and prioritize real-time data collection methods to reduce memory recall bias.

Conclusions

This scoping review mapped and meta-synthesized the existing literature on the barriers faced by trans, gender-diverse, and non-binary students in HPE settings across primary, middle and secondary school settings. Using a modified socio-ecological framework (Clark et al., 2017; White Hughto et al., 2018) and thematic analysis (Clark & Kosciw, 2022; Braun & Clarke, 2019), the findings highlighted that barriers exist at structural, interpersonal and individual levels. This included exclusionary practices, limited educator training, peer discrimination and emotional withdrawal. While some inclusive practices were identified, they were typically isolated and reliant on the individual educators and students to implement and seek, rather than embedded within the broader school system. Such systematic shortcomings constitute a failure to meet human rights obligations, the Universal Declaration of Human Rights guarantees the right to education (Article 26) and freedom from discrimination in educational settings (Article 2) (United Nations, 1948). While Principle 16 of the Yogyakarta Principles emphasize the duty of schools to ensure safe, inclusive and respectful environments for all students, regardless of the student's gender identity, experience or expression (International Commission of Jurists & International Service for Human Rights, 2007).

Beyond immediate barriers in HPE, the harms experienced by trans, gender-diverse, and non-binary students can have profound and long-term consequences, affecting mental health and overall well-being. Experiences of stigma, discrimination and non-affirming environments increase the risk of depression anxiety and other mental health challenges that can persist into adulthood (Tebbe et al., 2024). Additionally, the absence of supportive social networks further exacerbates these risks, including thoughts of self-harm or suicide (Peter et al., 2021; Phillips et al., 2024).

The current literature is limited regarding cultural and geographical diversity due to the inclusion of literature written only in English. This

limits the generalizability of findings and highlights the need for further research that captures the experiences of trans, gender-diverse, and non-binary students in diverse cultural contexts. There is also a need for a whole school approach that incorporates inclusive policy development, curriculum reform and further professional learning for HPE teachers to support gender diversity and equitable participation and access. Without systemic change, trans, gender-diverse, and non-binary students will continue to face educational environments that undermine their well-being and limit their engagement in HPE. Future efforts must prioritize collaborative approaches involving policymakers, educators, families and trans, gender-diverse, and non-binary students to create a lasting and meaningful change to HPE.

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Ethical statement

Although this article does not contain any studies with human participants or animals performed by any of the authors, the Australian Association for Research in Education's *Code of Ethics* was adhered to ensure that the scoping review was conducted in an ethically sound manner (Australian Association for Research in Education (AARE), 2014).

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References

- Arksey, H., & O'Malley, L. (2005). Scoping studies: Towards a methodological framework. *International Journal of Social Research Methodology*, 8(1), 19–32. <https://doi.org/10.1080/1364557032000119616>
- Australian Association for Research in Education (AARE). (2014). *AARE code of ethics*. <https://www.aare.edu.au/assets/documents/policies/AARE-Code-of-Ethics.pdf>
- Australian Institute for Teaching and School Leadership (2018). Australian professional standards for teachers (Revised ed.). <https://www.aitsl.edu.au/teach/standards>
- Bailey, S., Newton, N., Perry, Y., Davies, C., Lin, A., Marino, J. L., Skinner, R. S., Grummitt, L., & Barrett, E. (2024). Minority stressors, traumatic events, and associations with mental health and school climate among gender and sexuality diverse young people in Australia: Findings from a nationally representative cohort study. *Journal of Adolescence*, 96(2), 275–290. <https://doi.org/10.1002/jad.12274>
- Bartholomaeus, C., & Riggs, D. W. (2017). Whole-of-school approaches to supporting transgender students, staff, and parents. *International Journal of Transgenderism*, 18(4), 361–366. <https://doi.org/10.1080/15532739.2017.1355648>
- Bedford, A., Brömdal, A., Kerby, M., & Baguley, M. (2025). Just how radical is radical: Children's picture books and trans youth. *Children's Literature in Education*, 56(1), 17–33. <https://doi.org/10.1007/s10583-023-09537-9>
- Bower-Brown, S., Zadeh, S., & Jadv, V. (2023). Binary-trans, non-binary and gender-questioning adolescents' experiences in UK schools. *Journal of LGBT Youth*, 20(1), 74–92. <https://doi.org/10.1080/19361653.2021.1873215>
- Braun, V., & Clarke, V. (2019). Reflecting on reflexive thematic analysis. *Qualitative Research in Sport, Exercise and Health*, 11(4), 589–597. <https://doi.org/10.1080/2159676X.2019.1628806>
- Clark, C. M., & Kosciw, J. G. (2022). Engaged or excluded: LGBTQ youth's participation in school sports and their relationship to psychological well-being. *Psychology in the Schools*, 59(1), 95–114. <https://doi.org/10.1002/pits.22500>
- Clark, K. A., White Hughto, J. M., & Pachankis, J. E. (2017). "What's the right thing to do?" Correctional healthcare providers' knowledge, attitudes and experiences caring for transgender inmates. *Social Science & Medicine*, 193, 80–89. <https://doi.org/10.1016/j.socscimed.2017.09.052>
- Assessment and Reporting Authority. (n.d.). Student diversity. <https://www.acara.edu.au/curriculum/student-diversity>
- Day, M., & Brömdal, A. (2024). Mental health outcomes of transgender and gender diverse students in schools: A systematic literature review. *International Journal of Transgender Health*, 0(0), 1–21. <https://doi.org/10.1080/26895269.2024.2359934>
- Devís-Devís, J., Pereira-García, S., López-Cañada, E., Pérez-Samaniego, V., & Fuentes-Miguel, J. (2018). Looking back into trans persons' experiences in heteronormative secondary physical education contexts. *Physical Education and Sport Pedagogy*, 23(1), 103–116. <https://doi.org/10.1080/17408989.2017.1341477>
- Dowling, F., Fitzgerald, H., & Flintoff, A. (Eds.) (2012). Equity and difference in physical education. In *Youth Sport and Health: A Narrative Approach* (1st ed.). Routledge. <https://doi.org/10.4324/9780203132883>
- Ellis, S. J., & Bentham, R. M. (2021). Inclusion of LGBTIQ perspectives in school-based sexuality education in Aotearoa/New Zealand: An exploratory study. *Sex Education*, 21(6), 708–722. <https://doi.org/10.1080/14681811.2020.1863776>

- Francis, J., Sachan, P., Waters, Z., Trapp, G., Pearce, N., Burns, S., Lin, A., & Cross, D. (2022). Gender-neutral toilets: A qualitative exploration of inclusive school environments for sexuality and gender diverse youth in Western Australia. *International Journal of Environmental Research and Public Health*, 19(16), 10089. <https://doi.org/10.3390/ijerph191610089>
- Fuentes-Miguel, J., Pérez-Samaniego, V., López-Cañada, E., Pereira-García, S., & Devís-Devís, J. (2023). From inclusion to queer-trans pedagogy in school and physical education: A narrative ethnography of trans generosity. *Sport, Education and Society*, 28(9), 1132–1145. <https://doi.org/10.1080/13573322.2022.2073437>
- Hill, A. O., Lyons, A., Jones, J., McGowan, I., Carman, M., Parsons, M., Power, J., & Bourne, A. (2021). Writing themselves in 4: The health and wellbeing of LGBTQA+ young people in Australia (Monograph Series No. 124). Australian Research Centre in Sex, Health and Society, La Trobe University.
- International Commission of Jurists & International Service for Human Rights. (2007). *Yogyakarta Principles - Principles on the application of international human rights law in relation to sexual orientation and gender identity*. http://yogyakartaprinciples.org/wp-content/uploads/2016/08/principles_en.pdf
- International Service for Human Rights & ARC International (2017). *The Yogyakarta Principles plus 10*. International Service for Human Rights and ARC International. <http://yogyakartaprinciples.org/principles-en/>
- Işıkgöz, M. E., Şahbudak, M., Deveci, M. E., & Öztunç, M. (2025). Challenges and successes in promoting gender equality through physical education and sports: A systematic review. *BMC Public Health*, 25(1), 2117. <https://doi.org/10.1186/s12889-025-23373-0>
- Joanna Briggs Institute (2020). *Critical Appraisal Tools*. JBI. <https://jbi.global/critical-appraisal-tools>
- Johnson, A., Mullens, A., Burton, L., Sanders, T., & Brömdal, A. (2024). Pretty Bi for an Ally: A critical autoethnography. *Journal of Bisexuality*, 24(4), 574–602. <https://doi.org/10.1080/15299716.2024.2360896>
- Jüni, P., Hohenstein, F., Sterne, J., Bartlett, C., & Egger, M. (2002). Direction and impact of language bias in meta-analyses of controlled trials: Empirical study. *International Journal of Epidemiology*, 31(1), 115–123. <https://doi.org/10.1093/ije/31.1.115>
- Kaja, S. M., & McGuire, J. K. (2024). Gender-related disparities in sport, physical activity, and physical activity lessons in Minnesota from 2016 to 2019. *The Journal of Adolescent Health: Official Publication of the Society for Adolescent Medicine*, 75(4), 683–685. <https://doi.org/10.1016/j.jadohealth.2024.01.029>
- Kettley-Linsell, H., Sandford, R., & Coates, J. (2024). “Like putting a puzzle piece in the wrong spot”: Transgender and non-binary experiences of physical education. *Gender and Education*, 36(5), 453–469. <https://doi.org/10.1080/09540253.2024.2358194>
- Khalil, H., Peters, M., Godfrey, C. M., McInerney, P., Soares, C. B., & Parker, D. (2016). An evidence-based approach to scoping reviews. *Worldviews on Evidence-Based Nursing*, 13(2), 118–123. <https://doi.org/10.1111/wvn.12144>
- Kosciw, J. G., Clark, C. M., Truong, N. L., Zongrone, A. D. (2020). *The 2019 National School Climate Survey: The experiences of lesbian, gay, bisexual, transgender, and queer youth in our nation's schools*. New York: GLSEN. https://www.glsen.org/sites/default/files/2021-04/NSCS19-FullReport-032421-Web_0.pdf
- Kulick, A., Wernick, L. J., Espinoza, M. A. V., Newman, T. J., & Dessel, A. B. (2019). Three strikes and you're out: Culture, facilities, and participation among LGBTQ youth in sports. *Sport, Education and Society*, 24(9), 939–953. <https://doi.org/10.1080/13573322.2018.1532406>
- Kwok, D. K., & Kwok, K. (2022). Navigating transprejudice: Chinese transgender students' experiences of sexuality education in Hong Kong. *Sex Education*, 22(5), 552–566. <https://doi.org/10.1080/14681811.2021.1969908>
- Leslie, R., Oberg, G., Townley, D. C., Westphal, M. T., Rogers, M. L., & Brömdal, A. (2025). School Can't: A conceptual framework for reframing school refusal and recognising school related stress/distress. *British Journal of Sociology of Education*, 0(0), 1–19. <https://doi.org/10.1080/01425692.2025.2552132>
- Lockwood, C., Munn, Z., & Porritt, K. (2015). Qualitative research synthesis: Methodological guidance for systematic reviewers utilizing meta-aggregation. *International Journal of Evidence-Based Healthcare*, 13(3), 179–187. <https://doi.org/10.1097/XEB.0000000000000062>
- Manley, J., Brownlow, C., & Brömdal, A. (2024). Supporting the health and wellbeing of trans autistic school-aged youth: A systematic literature review. *International Journal of Transgender Health*, 25(3), 439–455. [https://doi.org/10.1080/26895269.2027.231739210.1080/26895269.2024.2317392\[39055630\]](https://doi.org/10.1080/26895269.2027.231739210.1080/26895269.2024.2317392[39055630])
- Martino, W., Omercajic, K., & Kassen, J. (2022). “We have no ‘visibly’ trans students in our school”: Educators’ perspectives on transgender-affirmative policies in schools. *Teachers College Record: The Voice of Scholarship in Education*, 124(8), 66–97. <https://doi.org/10.1177/01614681221121522>
- Meyer, I. H. (2003). Prejudice, social stress, and mental health in lesbian, gay, and bisexual populations: Conceptual issues and research evidence. *Psychological Bulletin*, 129(5), 674–697. <https://doi.org/10.1037/0033-2909.129.5.674>
- Moola, S., Munn, Z., Tufanaru, C., Aromataris, E., Sears, K., Sftcu, R., Currie, M., Lisy, K., Qureshi, R., Mattis, P., & Mu, P. (2020). Systematic reviews of etiology and risk. In E. Aromataris, C. Lockwood, K. Porritt, B. Pilla, & Z. Jordan (Eds.), *JBI Manual for Evidence Synthesis* (pp. 252–311). JBI. <https://doi.org/10.46658/JBIMES-24-06>
- Munn, Z., Pollock, D., Khalil, H., Alexander, L., McInerney, P., Godfrey, C. M., Peters, M., & Tricco, A. C. (2022). What are scoping reviews? Providing a formal definition of scoping reviews as a type of evidence synthesis. *JBI Evidence Synthesis*, 20(4), 950–952. <https://doi.org/10.11124/JBIES-21-00483>
- Neary, A. (2024). Intersections of age and agency as trans and gender diverse children navigate primary school: Listening to children in (re)considering the potential of

- sexuality education. *Sex Education*, 24(5), 617–631. <https://doi.org/10.1080/14681811.2023.2238634>
- Neary, A., & McBride, R.-S. (2024). Beyond inclusion: Trans and gender diverse young people's experiences of PE and school sport. *Sport, Education and Society*, 29(5), 593–606. <https://doi.org/10.1080/13573322.2021.2017272>
- Omercajic, K., & Martino, W. (2020). Supporting transgender inclusion and gender diversity in schools: A critical policy analysis. *Frontiers in Sociology*, 5(5), 27. <https://doi.org/10.3389/fsoc.2020.00027>
- Palmer, N. A., & Greytak, E. A. (2017). LGBTQ student victimization and its relationship to school discipline and justice system involvement. *Criminal Justice Review*, 42(2), 163–187. <https://doi.org/10.1177/0734016817704698>
- Payne, E., & Smith, M. (2013). LGBTQ kids, school safety, and missing the big picture: How the dominant bullying discourse prevents school professionals from thinking about systemic marginalization or ... why we need to rethink LGBTQ bullying. *QED: A Journal in GLBTQ Worldmaking*, 0(1), 1–36. <https://doi.org/10.1353/qed.2013.0012>
- Peter, T., Campbell, C. P., Taylor, C. (2021). *Still in every class in every school: Final report on the second climate survey on homophobia, biphobia, and transphobia in Canadian schools*. Egale Canada Human Rights Trust. <https://egale.ca/awareness/still-in-every-class/>
- Peters, M. D. J., Marnie, C., Tricco, A. C., Pollock, D., Munn, Z., Alexander, L., McInerney, P., Godfrey, C. M., & Khalil, H. (2020). Updated methodological guidance for the conduct of scoping reviews. *JBI Evidence Synthesis*, 18(10), 2119–2126. <https://doi.org/10.1112/jbies-20-00167>
- Phillips, T. M., Austin, G., Sanders, T., Martin, M., Hudson, J., Fort, A., Excell, T., Mullens, A. B., & Brömdal, A. (2024). Depression and thoughts of self-harm or suicide among gender and sexually diverse people in a regional Australian community. *Health Promotion Journal of Australia: Official Journal of Australian Association of Health Promotion Professionals*, 35(4), 1231–1243. <https://doi.org/10.1002/hpja.855>
- Porta, C. M., Gower, A. L., Mehus, C. J., Yu, X., Saewyc, E. M., & Eisenberg, M. E. (2017). “Kicked out”: LGBTQ youths’ bathroom experiences and preferences. *Journal of Adolescence*, 56(1), 107–112. <https://doi.org/10.1016/j.adolescence.2017.02.005>
- Sava, L. M., Earnshaw, V. A., Menino, D. D., Perrotti, J., & Reisner, S. L. (2021). LGBTQ student health: A mixed-methods study of unmet needs in Massachusetts Schools. *The Journal of School Health*, 91(11), 894–905. <https://doi.org/10.1111/josh.13082>
- Tebbe, E. A., Bell, H. L., Cassidy, K., Lindner, S., Wilson, E., & Budge, S. (2024). “It’s loving yourself for you”: Happiness in trans and nonbinary adults. *Psychology of Sexual Orientation and Gender Diversity*, 11(3), 397–412. <https://doi.org/10.1037/sgd0000613>
- Tricco, A. C., Lillie, E., Zarin, W., O’Brien, K. K., Colquhoun, H., Levac, D., Moher, D., Peters, M. D. J., Horsley, T., Weeks, L., Hempel, S., Akl, E. A., Chang, C., McGowan, J., Stewart, L., Hartling, L., Aldcroft, A., Wilson, M. G., Garritty, C., ... Straus, S. E. (2018). PRISMA extension for scoping reviews (PRISMA-ScR): Checklist and explanation. *Annals of Internal Medicine*, 169(7), 467–473. <https://doi.org/10.7326/M18-0850>
- United Nations. (2024). Education. Retrieved 8 August 2025 from <https://sdgs.un.org/topics/education>
- United Nations (1948). *Universal Declaration of Human Rights*. <https://www.un.org/en/about-us/universal-declaration-of-human-rights>
- United Nations Educational, Scientific and Cultural Organization. (2016). Education 2030: Incheon declaration and framework for action for the implementation of sustainable development Goal 4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all. <https://unesdoc.unesco.org/ark:/48223/pf0000245656>
- United Nations Office of the High Commissioner for Human Rights. (1989). Convention on the rights of the child. United Nations Office of the High Commissioner for Human Rights. <https://www.ohchr.org/en/professionalinterest/pages/crc.aspx>
- Watson, J., Bryce, I., Phillips, T. M., Sanders, T., & Brömdal, A. (2024). Transgender youth, challenges, responses, and the juvenile justice system: A systematic literature review of an emerging literature. *Youth Justice*, 24(1), 88–112. <https://doi.org/10.1177/14732254231167344>
- White Hughto, J. M., Clark, K. A., Altice, F. L., Reisner, S. L., Kershaw, T. S., & Pachankis, J. E. (2018). Creating, reinforcing, and resisting the gender binary: A qualitative study of transgender women’s healthcare experiences in sex-segregated jails and prisons. *International Journal of Prisoner Health*, 14(2), 69–88. <https://doi.org/10.1108/ijph-02-2017-0011>
- Wilkinson, S. D., & Penney, D. (2025). “It makes me feel dysphoric”: transgender and non binary students’ perspectives of gendered grouping practices and curriculum provision in secondary school physical education in England. *Pedagogy Culture and Society*, 0(0), 1–22. <https://doi.org/10.1080/14681366.2025.2509269>
- Williams, N., & Brömdal, A. (2024). Knowledge and dispositions of caring professionals in school settings regarding trans, gender diverse and non-binary students: A scoping review of empirical research. *International Journal of Transgender Health*, 0(0), 1–31. <https://doi.org/10.1080/26895269.2024.2387662>
- Williamson, R., & Sandford, R. (2018). “School is already difficult enough...”: Examining transgender issues in physical Education. *Physical Education Matters*, 13(3), 57–61.
- Zurbriggen, C. L. A., Jendryczko, D., & Nussbeck, F. W. (2021). Rosy or blue? Change in recall bias of students’ affective experiences during early adolescence. *Emotion (Washington, D.C.)*, 21(8), 1637–1649. <https://doi.org/10.1037/emo0001031>