



Correlates of Bullying Behavior Among Children and Adolescents in Physical Education: A Systematic Review

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Background and Objective: Bullying is notably prevalent among children and adolescents, especially within the context of physical education (PE) environments. Understanding the underlying factors that trigger bullying behavior is essential in designing strategies to prevent bullying and formulating more effective interventions in PE. There is a lack of integrated findings regarding the wide range of correlates of bullying behavior among children and adolescents within the PE context. Therefore, this systematic review aimed to synthesize the correlates of bullying behavior among children and adolescents within the context of PE.

Methods: We conducted a systematic search across four databases (EBSCOhost, PubMed, Scopus, Web of Science) for relevant studies published before August 2023. Two reviewers independently examined the articles, assessed their methodological quality, and performed data extraction.

Results: A total of 23 articles met the inclusion criteria. It is found that demographic, physical movement, physical appearance, psycho-cognitive, teacher-related, and contextual factors emerged as six prominent influential factors affecting adolescent bullying behavior. Specifically, demographic factors mainly encompassed age and gender; physical movement factors primarily include physical activity, sedentary behavior, physical exercise, and sports competence; physical appearance factors primarily include being overweight, too thin, too tall, or too short; psycho-cognitive factors chiefly involved cognitive empathy, motivation, enjoyment of physical activity; teacher-related factors primarily comprised activity choices, teachers competence, controlling style, autonomy support; and contextual factors primarily cover desolate climate, perceived caring climate, strong sense of competition and winning setting.

Conclusion: The results indicate that bullying is a complex and multifaceted behavior primarily determined by demographic, physical movement, physical appearance, psycho-cognitive, teacher-related, and contextual factors. Future studies need to enhance the diversity of research samples and comparative studies on the factors influencing bullying behavior among children and adolescents in different countries. Additionally, a more extensive range of intervention studies addressing bullying behavior among children and adolescents is warranted.

Keywords: bullying behavior, physical education, children, adolescents, psycho-cognitive factors, sports competence

Introduction

Bullying has been identified as a harmful social behavior, characterized by repeated aggressive actions or intentional harm inflicted upon others.¹ It can be classified into two main types: traditional forms, which occur face-to-face, and electronic bullying, commonly known as cyberbullying.² Traditional bullying mainly includes physical bullying (pushing, hitting), verbal harassment (name-calling, teasing), rumor spreading, and social exclusion (intentionally excluding a person from a group). Over the past few years, cyberbullying has captured media attention as another form of bullying victimization through the use of electronic devices (instant messaging, websites, chat rooms).³

More recently, bullying has garnered widespread concern worldwide due to its significant impact on children and adolescents, affecting them physically, socially, and psychologically. The physical aspect of bullying involves aggressive

behavior such as hitting, pushing, and other forms of harmful acts, leaving visible marks and scars on the victims. Additionally, from a social perspective, bullying is associated with adverse outcomes, such as decreased school attendance and poor academic achievement.⁴ Besides, the psychological aspect is equally concerning, as children and adolescents who experience bullying are more like to suffer anxiety and suicide ideology. Notably, evidence indicates that the influence of bullying experienced in childhood would even extend into adulthood, leading to long-lasting and far-reaching negative consequences.⁵

It is widely acknowledged that the PE context is a typical environment where bullying behavior frequently occurs.⁶ The engagement in competitive play and physical contact during PE, such as dodgeball,⁷ is more likely to elicit aggressive behaviors, making vulnerable students susceptible targets for bullying.^{8,9} According to recent data from the Global School-based Student Health Survey, the proportion of bullying victimization in PE contexts varies between 35.54% and 45.21%.¹⁰ Another empirical evidence indicates that approximately 28% of students have reported being bullied in PE settings.¹¹ These findings underscore the significance of addressing bullying in PE environments and highlight the need for effective intervention strategies to foster a safer and more inclusive learning space for children and adolescents.

In the past few years, several reviews have delved into the factors influencing bullying incidents in PE settings. A specific review focusing on children with visual impairments revealed that they were primarily subjected to bullying by their peers (93%), followed by their teachers (50%), and paraeducators (7%).¹² Another scoping review indicates that individual, peer, school, and family-level factors trigger bullying in PE.¹³ In addition, Jiménez-Barbero et al,⁶ employed a mixed method to evaluate the associations of PE with school violence and bullying, highlighting the important role of PE teachers in preventing and/or encouraging bullying. Indeed, these studies offered comprehensive perspectives to look into bullying incidents in PE. However, there is a lack of integration of findings regarding the wide range of correlates of bullying in children and adolescents. As such, the objective of this review was to systematically examine the correlates of bullying in PE among children and adolescents.

Materials and Methods

Literature Sources and Search Strategy

A two-step search strategy was adopted to identify relevant studies. According to the PRISMA statement,¹⁴ relevant studies were identified for inclusion through a search across four electronic databases (EBSCO host, PubMed, Scopus, Web of Science). Our search strategy involved the following key words: (“bully*” OR “victimization” OR “bully victim” OR “aggression” OR “harassment” OR “violen*” OR “exclusion” OR “exclude” OR “teas*”) AND (“physical education” OR “PE”) AND (“adolescent” OR “teenager” OR “children” OR “youth”). The initially obtained records were imported into the EndNote X9 data management system and subsequently reviewed and organized independently by two authors. In the case of any discrepancies arising during this process, the ultimate decision was reached through a consensus discussion based on the intervention of a third reviewer.

Inclusion and Exclusion Criteria

The inclusion criteria were as follows: 1) studies focused on bullying and PE; 2) studies with participants among children and adolescents aged 5–17 years, or those with a mean age within this specified range;¹⁵ 3) the articles published in peer-reviewed journals; and 4) studies published in English. Studies were excluded if they 1) were not related to “bullying”; 2) studies conducted outside the area of PE; 3) focused on unhealthy or special populations (eg, individuals were diagnosed with attention-deficit/hyperactivity disorder, developmental coordination disorder, or other chronic diseases or disabilities and professional athletes); 4) were non-empirical studies; 5) were dissertations, conference articles and abstracts, reviews and correspondence, and unpublished articles.

Quality Assessment

To assess the quality of the included studies, the Standard Quality Assessment Criteria was employed in this review.¹⁶ These criteria enable us to evaluate the quality of papers using a checklist for both quantitative and qualitative studies, which has been previously adopted to assess the methodological quality of earlier systematic reviews in similar fields.¹⁷

Quality checklists addressed the research question, study design, sampling strategy and data analysis. Each article was evaluated for each criterion or aspect of the checklist, attributing 2 points if the study meets it, 1 point if it partially meets it, or 0 if it was not met. Two reviewers (Zhuang Zhou and Xiaogang Zhou) independently assessed all studies. In cases of uncertainty or disagreement, resolution was achieved through the involvement of a third reviewer. According to the guidelines, all the studies with a quality score above 0.75 (conservative cut-off point) meet the inclusion level. All quality scores are displayed in [Appendix A](#).

Results

The initial database search yielded 3360 publications. Following the removal of duplicates, 2887 articles remained. Subsequent to the screening of titles and abstracts, 89 articles were identified. After removing non-access and non-English studies, 70 articles were found. Further refinement through the full texts, and 23 articles were finally included after excluding studies with age discrepancies, special populations, and irrelevant articles ([Figure 1](#)).

A thorough extraction of data was conducted for each study, encompassing many elements such as the names of the authors and the year of publication, country of origin, the major topic, details about the samples (including participant demographics such as age and sample size), the study design employed, the measuring methods utilized, and the primary findings of the study. The data were taken from each article utilizing Microsoft Excel 2019. The table in [Appendix B](#) presents the main details of each included study.

Demographic Factors

Seven studies examined the association between gender and age and bullying behaviors.^{9,18–23} Regarding age, Borowiec et al found that younger students were more likely to experience physical or verbal bullying in PE.¹⁹ Given gender

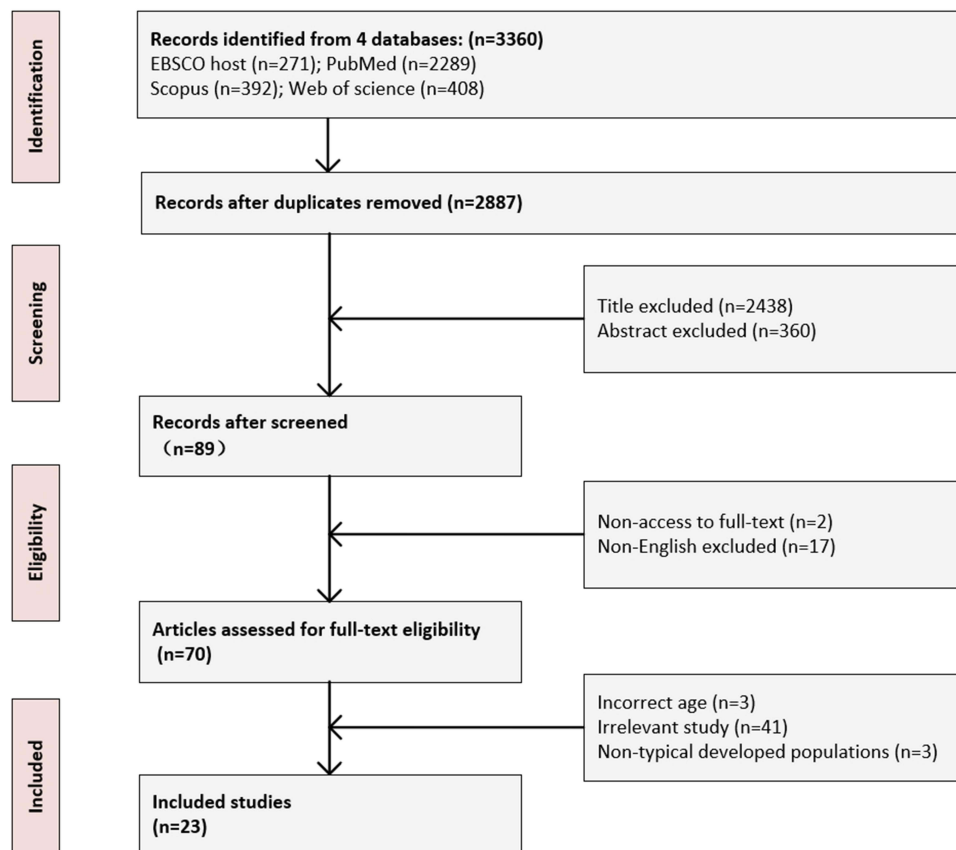


Figure 1 Flow diagram of the study selection process.

differences, studies have consistently demonstrated that boys are more likely to bully others^{9,18–20} and be bullied^{9,19,22} in PE. In addition, studies with intervention programs suggested that girls demonstrated a more substantial decrease in both aggression²³ occurrence and victimization¹⁸ incidents compared to boys. Furthermore, the reasons for including or excluding peers during PE team selection vary by gender. Girls are often rejected due to low popularity during team selection or partner allocation, while boys are excluded for functional reasons like being perceived as poor in sports competence.²¹

Physical Movement Factors

Five studies examined the relationship between bullying behaviors and physical movement factors (such as physical activity, sedentary behavior, physical exercise, and sports competence).^{24–28} Participation in physical activity was associated with verbal and physical victimization,²⁴ as well as cyber-victimization.²⁵ Arufe-Giráldez et al found that sedentary students are more prone to encounter relational bullying.²⁴ In addition, according to Greco,²⁶ psychoeducational activities combined with physical activity and team sports may promote resilience and self-efficacy in male adolescents and reduce aggression and bullying victimization in PE. Furthermore, Jachyra²⁷ reported that non-dominant individuals often faced regular bullying due to their capabilities in physical movement. Similarly, Bentez-Sillero et al²⁵ and O'Connor and Graber²⁸ found that individuals with lower levels of sports competence tend to be bullied.

Physical Appearance Factors

Five studies provided compelling evidence of the significant correlation between physical appearance and bullying within the context of PE classes.^{9,19,22,27,29} Jachyra²⁷ found that individuals who frequently faced regular bullying primarily due to their physical appearance. Shehu²² reached a similar conclusion, highlighting the importance of body shape in explaining both peer aggression and victimization in the context of PE. Saġin⁹ further highlighted that students who deviate from the perceived norm of physique, including being overweight, too thin, too tall, or too short, were often targeted for bullying in PE classes. Borowiec et al¹⁹ support the above findings by noting that students who are overweight or obese are more likely to be verbally victimized or socially excluded. Intriguingly, O'Brien Richardson's exploration²⁹ revealed a prominent theme pertaining to hair-related harassment, encompassing physical touching of hair and verbal comments regarding hairstyles during PE classes. Overall, these findings underscore the various physical appearance factors in trigger bullying behavior within PE classes.

Psycho-Cognitive Factors

A total of 10 studies offered evidence of the correlation between psycho-cognitive factors and bullying within the context of PE.^{11,20,25,26,28,30–34} Greco²⁶ stated that enhanced resilience and self-efficacy reduce the possibility of performing aggression and being bullied. Similarly, Montero-Carretero and Cervelló³² found that greater resilience exerts a negative predictive influence on victimization. Gano-Overway's¹¹ findings revealed a negative correlation between cognitive empathy and bullying behavior. Granero-Gallegos et al²⁰ noted that low motivation increases disruptive conduct. Montero-Carretero and Barbado et al³³ reported a similar finding that self-determined motivation negatively predicts bullying perpetration and victimization.

In addition, Benítez-Sillero et al²⁵ proposed that enjoyment of physical activity might be associated with a reduced tendency to engage in cyberbullying. On a related note, Gråstén et al³⁰ indicated that violence and bullying were reduced among students in the intervention group with moderate to vigorous physical activities. The study conducted by Han and Park³¹ suggested a correlation between school-related stress and heightened aggression, with stress in the school setting identified as a mediating factor in the reduction of aggression in PE classes.³¹ To some extent, this supports O'Connor et al's²⁸ conclusion that fear can prevent pupils from helping bullied peers and feeling safe in PE. Evidence also suggested that students' perceptions of a teacher's controlling style and bullying victimization were positively correlated.^{32,33} Furthermore, according to Sánchez-Alcaráz et al,³⁴ the perception of personal and social responsibility inversely predicts violent attitudes in PE. Overall, these emphasize the crucial role of various psycho-cognitive factors within the context of PE.

Teacher-Related Factors

Eight studies examined the relationships between teacher-related issues and bullying in PE classes.^{9,20,28,32,33,35–37} According to Sağın et al,⁹ PE teachers play a crucial role in reducing or increasing peer bullying in classes. The interaction between teachers and students, how PE teachers speak to students during sessions, their constancy and determination, the behavior they model for students, and activity selections could be determinants of bullying.⁹ Given teachers' response to bullying, PE teachers intervened more for overweight girls than average-weight females. However, this was not the case with male targets.³⁶ Consistent with the findings of Hein et al,³⁵ Granero-Gallegos et al²⁰ found that when students view their teacher as competent, aggressive behavior decreases. In addition, Montero-Carretero and Barbado et al³³ found that students' perceptions of a controlling style were positively correlated with bullying and negatively correlated with autonomy-supportive style in PE. In the same line, Montero-Carretero and Cervelló³² and Valero Valenzuela et al³⁷ also found that PE teachers can prevent bullying by encouraging autonomy and avoiding a controlling teaching style. O'Connor and Graber²⁸ found that PE teachers' insufficient awareness of bullying, and unsuitable combat methods contributed to bullying. Also, they pointed out that students who believed PE teachers addressed physical aggression and ignored most verbal bullying may convey the information that vocally tormenting others is acceptable, which may encourage recurrent verbal aggressiveness.²⁸

Contextual Factors

A total of seven studies provided compelling evidence of the noteworthy correlation between contextual factors and bullying within the setting of PE classes.^{9,11,19,22,27,28,38} Jachyra²⁷ demonstrated how a desolate social climate can foster dominant male students' teasing, insulting, and intimidation. Building upon this, Borowiec et al¹⁹ maintained that insufficient peer support increases the risk of PE bullying. In addition, a negative correlation was evident between the perceived caring climate and instances of bullying behavior.¹¹ Based on these findings, Oliveira et al³⁸ reported an 85.7% decrease in verbal aggression and complete eradication of physical aggression in cooperative PE games. Of note, it is revealed that bullies and victims are more likely to emerge in environments characterized by a strong sense of competition and a drive to win.⁹ Meanwhile, instances of peer aggression and harm within PE classes correlate with various contextual variables, such as failure to serve a volleyball, sporty wearing, and so forth.²² Furthermore, O'Connor and Graber²⁸ found that locker room bullying may be more common due to the absence of teacher monitoring.

Discussion

This review highlighted the significant impact of demographic factors, specifically gender and age, on shaping bullying behavior among children and adolescents. Our findings revealed a distinct phase of increased bullying incidence within a specific age range, with younger individuals being more susceptible to bullying compared to their older counterparts. This observation aligns with Park et al's work,³⁹ which established a significant correlation between adolescents' aggressive behavior and age. This trend may be attributed to the existence of a curvilinear relationship between age and victimization,⁴⁰ revealing victimization rates reaching their zenith between the ages of 12 and 15.⁴¹ However, the relationship between particular forms of bullying and different ages exhibited inconsistency within literature. Some studies suggested that bullying often shifts towards more indirect or subtle forms as adolescents grow older,⁴² while others reported no age-based difference in physical, verbal, and relational victimization.⁴³ These disparities might be attributed to cognitive developmental differences. Younger children's challenges in distinguishing multifaceted behaviors between aggressive and non-aggressive behaviors. The challenges faced by younger children in distinguishing multifaceted behaviors may hinder their ability to discern between aggressive and non-aggressive actions.⁴⁴

Regarding gender, our finding revealed that boys exhibited a higher frequency of being both bullying perpetrators and victims in the context of PE.^{9,18–20,22} The forms of bullying experience exhibited gender-based variations. Boys faced a greater likelihood of being subjected to physical bullying in PE classes compared to girls,¹⁹ a trend further supported by Jesina et al.⁴⁵ The competitive and physically interactive nature of PE may potentially serve as a trigger for aggressive and bullying behaviors, particularly within the male population.⁴⁶ By contrast, girls were socialized to be more passive and social, while boys were expected to be aggressive and dominant.⁴⁷ This could be attributed to the impact of how boys

shape and define their sense of masculinity within the dynamics of relationships among male peers, particularly in PE settings.²⁷

Our research underscored a significant association between physical appearance factors, especially body weight, and the occurrence of bullying. This finding is consistent with the prior study, indicating that a prominent factor leading to individuals being subjected to bullying involves their bodies did not “measure up”, thereby resulting in their exposure to ritual bullying and shaming.^{48,49} A meta-analysis revealed that both overweight and obesity are risk factors for being a victim of bullying.⁵⁰ Notably, obesity stood out as a predictor of bullying involvement among both boys and girls.⁵¹ Specifically, in comparison to boys with an average weight, those classified as obese boys demonstrated a 1.66 (95% CI 1.04 to 2.66) times more likely to be overt bullies and 1.54 (1.12 to 2.13) times more likely to be overt victims.⁵¹ Furthermore, it was observed that males categorized as obese or overweight reported a twofold increase in both physical and relational victimization, while obese females demonstrated a threefold increase in engaging in relational bullying.⁵² When it comes to bullying behavior, this particular phenomenon could partially be explained by size dominance, where overweight boys and girls might establish a sense of dominance over others due to increased body size.⁵³ By contrast, the intricate phenomenon of being targeted as a victim of bullying, particularly noticeable among obese girls, their increased susceptibility to being victims of bullying in comparison to girls with average weight can be explained by their deviation from appearance ideals.⁵¹ Moreover, this connection extends to encompass disabilities such as sight, hearing, or speech problems,⁵⁴ and other aspects of physical appearance, as evidenced by appearance-related conditions such as skin diseases like psoriasis and atopic dermatitis.⁵⁵

Our research found that psycho-cognitive factors, such as resilience, affective empathy, and mental health outcomes like anxiety and depression play a crucial role in bullying behavior. Individuals with lower levels of resilience exhibited an increased tendency to engage in bullying behaviors. Conversely, individuals who lacked resilience were also more susceptible to becoming targets of bullying.⁵⁶ Another study revealed a negative correlation between cognitive empathy and bullying behavior.¹¹ Inconsistent with our findings, a discernible discrepancy has been identified concerning the association between affective empathy and bullying engagement. Specifically, Jolliffe and Farrington (2006)⁵⁷ revealed a significant correlation between low affective empathy and bullying among females, but not for males. Intriguingly, a subsequent study conducted by the same researchers, highlighted that low affective empathy, while independently linked with bullying behaviors among males, yet no such relationship was established among females.⁵⁸ These nuanced observations underscore the complex interplay of empathetic dimensions and gender dynamics in the context of bullying behaviors. Moreover, it is revealed that the level of psychological characteristics such as affective empathy, self-efficacy, and social responsibility did not have a significant influence on defending behavior.⁵⁹ Besides, psychological issues such as anxiety and depression, among young students are linked with increased risk for school hassles.⁶⁰ Notably, Scarpa et al, (2012)⁶¹ emphasized the unfavorable consequences of bullying on students’ enjoyment of PE, which is also reinforced in the research conducted by Jiménez-Barbero et al.⁶ Corroborating these observations, Skues et al⁶² discerned that students who were bullied by their peers at school tended to report lower levels of self-esteem, reduced connectivity to their peers, teachers, and school, as well as less motivation in school performance. The multifaceted connection between psycho-cognitive factors and bullying gained partial clarity through the exploration of traits such as negative affectivity.⁶³

Our research has unveiled the pivotal role of physical movement factors, including physical activity, sedentary behavior, and motor skills, in shaping bullying behavior. This correlation aligns with prior research. For instance, Storch et al⁶⁴ found a negative association between peer victimization and physical activity, especially for the frequency of PE.⁶⁵ Furthermore, empirical evidence suggests that excessive sedentary behavior is associated with a 21% higher bullying victimization, including both traditional (22%) and cyberbullying (20%).⁶⁶ Increased sedentary behaviors seem to hinder the development of interpersonal relationships, pro-social behavior, and conflict resolution abilities,⁶⁷ given that friendships function as a protective factor against bullying victimization,⁶⁸ thereby making them susceptible to various forms of bullying.⁶⁹ Additionally, a strong connection has been identified between poor performance in PE and bullying victimization, particularly with the duration and frequency of victimization.⁷⁰ This observation could be attributed to the close link between poor motor skills and deficient social skills,⁷¹ making individuals with deficits in social abilities more

susceptible to peer victimization.⁷² This observation is particularly pronounced among overweight or obese girls, as those with less motor skills are more likely to encounter bullying victimization during PE lessons.^{50,73}

In PE settings, it is important to consider the interactions of diverse contextual factors. Our findings suggested that within PE settings, desolate climate,²⁷ perceived caring climate,¹¹ strong sense of competition and winning,⁹ and lack of peer support in PE,¹⁹ specifically for failure to serve volleyball or sporty wearing,²² as well as in locker room environment,¹¹ were associated with bullying behaviors. Consistent with our research, it is found that contextual factors such as cooperative learning settings can lead to a significant decrease in bullying,⁷⁴ as evidenced by a study suggesting that cooperative games seem to mitigate bullying occurrences within PE classes.³⁸ Furthermore, instances have been reported in the locker room where actions such as pulling down peers' pants in front of others, making fun of classmates, and hitting others with towels have occurred.⁷⁵ In addition, it is revealed that boys who embodied masculinities with characteristics that did not match the requirements of the social setting were marginalized.⁷⁶ This phenomenon could be explained by the fact that competition could promote comparison between equals victory at any price, and it is also likely to promote demotivation profiles in students.⁷⁷ However, studies are heterogeneous regarding how to operationalize contextual variables.⁷⁸ This may include school organizational characteristics (school size, teacher-students ratio), sociodemographic characteristics of students (ethnic, gender ratios), environment/climate of school (support/cohesion), and even broader community context of city or country,⁷⁹ as Diez Roux (2001)⁸⁰ highlighted that contextual variables may be apparent at both group and individual levels. Given the measure characteristics of most included studies in our review, variables like school size, teacher-student ratio, gender ratio, and community elements are hard to determine. As a result, the present review's contextual factors are limited to peer and individual levels within the PE environment. We emphasize that even though contextual characteristics may not be as easily measured as other variables in instruments, they are essential elements that cannot be overlooked in PE classes.

Our findings indicate that teacher-related factors play a significant role in bullying behaviors. Based on the results of the included studies, we can infer that PE educators play an important role in the decrease or increase of bullying in class.⁹ Notably, teacher factors are multifaceted, including teachers' competence, controlling style, and autonomy support. In alignment with our research, it has been revealed that teacher-related factors, such as the selection of overly competitive activities, might inadvertently encourage exclusion behaviors. Furthermore, empirical evidence indicated that the teaching style in PE, particularly emphasizing teachers' autonomy support, holds the potential to lead to a decrease in occurrences of verbal abuse and hurtful incidents.⁸¹ Also, the controlling style, especially for the way teachers are set up and coached increases the likelihood that students will take the opportunity to bully their peers.⁷ This occurrence may partially be attributed to PE teachers' restricted perception of bullying behavior, which may lead to inadequate awareness of real bullying behavior within PE classes.⁸² On the one hand, evidence suggests that PE activities often require some level of physical contact, thereby making it challenging for teachers to recognize that some of the physical contact is actually bullying.⁷ On the other hand, teachers are often unaware that activity choices can encourage bullying behavior.⁷

To the best of our current knowledge, this represents the first systematic review delving into the correlates of bullying behavior among children and adolescents within the PE contexts. It comprehensively addresses various aspects and variables associated with bullying within the context of PE. Factors such as students' physical movement and appearance were examined, emphasizing their significance in formulating effective programs to prevent and address bullying behaviors in PE settings.

Nevertheless, it is important to acknowledge some limitations. Firstly, this systematic review exclusively focused on English-language publications, potentially leading to the exclusion of pertinent articles published in languages other than English. Additionally, the multifaceted nature of bullying behavior may introduce an additional potential limitation. Owing to inherent limitations within the original literature, some relevant correlates might not have been fully addressed.

Implication and Conclusion

This review underscores the critical importance of addressing bullying within physical education practices. Specifically, heightened attention is warranted for younger students, particularly boys, who exhibit increased vulnerability to bullying. Encouraging students to actively participate in additional physical activities is emphasized to enhance their sports

competence, effectively mitigating the risk of bullying. Moreover, students are advised to prioritize maintaining a healthy physique and selecting appropriate attire for their physical education classes. Additionally, to optimize the learning environment, we advocate for physical education teachers to enhance the enjoyment of their classes, fostering increased student engagement and reducing the occurrence of bullying. It is essential for teachers to refrain from overly controlling teaching styles and, instead, concentrate on cultivating a safe and caring social environment.

In conclusion, this systematic review has provided valuable insights into the correlates of bullying behavior among children and adolescents in the context of PE. The review revealed significant associations between demographic factors, notably gender and age, indicating that young boys are more susceptible to perpetrating and experiencing bullying. Moreover, physical movement factors, such as physical activity, sedentary behavior, and sports competence, were found to be associated with various forms of victimization. Remarkably, the influence of physical appearance emerged as a significant contributor to bullying behaviors, with body shape and appearance-related factors playing a substantial role in victimization experiences. Furthermore, psycho-cognitive factors, such as resilience, motivation, and empathy, demonstrated their relevance in understanding bullying dynamics. Additionally, the impact of teacher-related factors and contextual elements within the PE environment on bullying behaviors was evident.

Future studies should consider a more diverse range of languages and cultural contexts to provide a comprehensive understanding of the correlates of bullying behavior among children and adolescents in PE. Such insights can guide the development of targeted interventions and strategies to create safe and supportive environments within PE settings.

Disclosure

The authors report no conflicts of interest in this work.

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