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The Role of Physical Education in Holistic Student Development

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A B S T R A C T
Physical education plays a vital role in the holistic development of students by promoting physical, mental, emotional, and social well-being. It helps improve physical fitness, coordination, and healthy lifestyle habits while reducing the risk of obesity and other health-related issues. Beyond physical benefits, participation in sports and structured activities enhances self-discipline, confidence, teamwork, leadership, and decision-making skills. Physical education also contributes to emotional balance by reducing stress, anxiety, and academic pressure, thereby supporting better concentration and classroom performance. Through regular engagement in physical activities, students learn values such as cooperation, respect, perseverance, and responsibility, which are essential for personal growth and social adjustment. Therefore, physical education is not merely a recreational subject but an important component of education that supports the all-round development of students and prepares them to lead balanced, productive, and healthy lives in society.

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1. Introduction

Physical education is much more than exercise or sports practice. It is a planned educational process that uses movement, games, exercise, and health-related learning to support the overall growth of students. In school settings, physical education helps learners improve physical fitness, motor skills, emotional stability, sportsmanship, healthy behavior, and social adjustment. In this sense, it should not be viewed as an "extra" subject, but as a meaningful part of education itself (Central Board of Secondary Education [CBSE], 2018, Bailey, 2006). Education cannot be limited to academic achievement alone. A student may perform well in examinations, yet still struggle with discipline, stress, confidence, teamwork, or healthy living. Research shows that school-based physical education and physical activity can support concentration, memory, classroom behavior, and academic performance without harming learning time. In many cases, physical activity is either positively related to academic outcomes or shows no negative effect at all, which challenges the old belief that time spent on physical education reduces academic success (Rasberry et al., 2011, Ahamed et al., 2007). This broader understanding leads to the idea of holistic student development. Holistic development means nurturing the whole child—body, mind, emotions, values, and social behavior—rather than focusing only on intellectual growth. School health and physical education frameworks also describe student well-being as physical, mental, emotional, social, and even moral development working together. Well-designed physical education contributes to these domains by building physical competence, self-discipline, confidence, cooperation, and responsible participation (CBSE, 2016, UNESCO, 2015). The connection between the body and the mind is central to physical education. When students move, play, cooperate, solve movement problems, and participate in structured activities, they do not develop physically alone; they also learn emotional control, communication, respect for rules, and teamwork. Reviews of the literature show that physical activity and physical education can support affective, social, and cognitive growth when they are well taught and

inclusive. In this way, physical education becomes a bridge between physical health and personal development (Bailey, 2006, Biddle & Asare, 2011). The purpose of this paper is to explain the meaning and scope of physical education and to show how it contributes to the holistic development of students. It argues that physical education is an essential part of schooling because it supports balanced growth in physical, mental, emotional, and social dimensions, helping students become healthier, more confident, more disciplined, and better prepared for life beyond the classroom (UNESCO, 2015, CBSE, 2018).

2. Meaning and Scope of Physical Education

Physical education may be defined as a structured teaching–learning process in which physical activities are used as the medium for education. Its purpose is not only to strengthen the body but also to improve human performance, develop movement skills, build healthy habits, and shape behavior. In school textbooks and curriculum documents, physical education is described as education through movement, aimed at the holistic development of the learner. This means that movement is not treated as mere activity; it is used intentionally for educational growth (CBSE, 2018). It is also important to distinguish physical education, sport, and physical activity, because these terms are often confused. Physical activity is the broadest term and refers to any bodily movement that uses energy, including walking, cycling, play, and routine daily activity. Sport refers to organized or informal forms of physical activity, often involving rules, competition, recreation, or games. Physical education, however, is different because it is a planned, progressive, and curriculum-based learning experience provided through the school system. In other words, physical education is educational by design, while sport and general physical activity may or may not be (UNESCO, 2015, Trudeau & Shephard, 2008). The scope of physical education is broad and includes several important components. Exercise is one major part, as it helps improve strength, endurance, flexibility, posture, and overall health. Games are also central because they encourage enjoyment, participation, coordination, creativity, and social interaction. Sports provide opportunities for learning rules, discipline, teamwork, leadership, and fair play. Together, these forms of movement help students gain physical competence as well as confidence in participation (CBSE, 2018, Bailey, 2006). Another important element is fitness training, which develops the body's capacity to work efficiently and stay healthy. Physical education programs often aim to improve cardiorespiratory endurance, muscular strength, flexibility, balance, and neuromuscular coordination. At the same time, recreational activities make physical education enjoyable and inclusive, allowing students of different abilities and interests to participate meaningfully. This recreational dimension is important because students are more likely to remain active throughout life when activity is associated with enjoyment and positive experience (CBSE, 2018, UNESCO, 2015).

Physical education also includes health education, which teaches students the knowledge and habits needed for a healthy lifestyle. This may include personal hygiene, posture, nutrition, safety, emotional control, stress management, and awareness of the value of regular physical activity. Thus, the subject connects action with understanding: students do not only perform movement, they also learn why healthy living matters. This educational role makes physical education different from casual play or unstructured exercise (CBSE, 2016, CBSE, 2018). Because of this wide scope, physical education should be recognized as an essential part of the school curriculum. UNESCO's quality physical education framework clearly states that physical education should be positioned as a core curricular area, not a marginal activity, and that policy should clearly distinguish it from sport and general physical activity. Likewise, school curriculum documents emphasize that health and physical education contribute directly to the physical, mental, emotional, and social growth of learners. When schools treat physical education seriously, they support the development of healthier and more balanced students (UNESCO, 2015, Michael et al., 2021). The meaning of physical education goes far beyond physical training. It is a purposeful educational discipline that uses movement to develop the whole person. Its scope covers exercise, games, sports, fitness training, recreational activities, and health education, making it one of the most comprehensive subjects in the school curriculum. By helping students grow physically, mentally, emotionally, and socially, physical education becomes a powerful foundation for holistic development (Bailey, 2006, Biddle & Asare, 2011).

3. Concept of Holistic Development

Meaning of holistic development

Holistic development means the overall and balanced growth of a student in all important areas of life, rather than focusing only on academic achievement. It recognizes that education should develop the whole person by nurturing the body, mind, emotions, relationships, values, and character. In this sense, a student is not viewed only as a learner of subjects, but as a complete human being who needs physical, intellectual, emotional, social, and moral growth for a meaningful life (Mahmoudi et al., 2012).

Dimensions of holistic growth

Physical development

Physical development refers to the growth of the body, including strength, stamina, flexibility, posture, coordination, fitness, and general health. It is the foundation of active living and supports students in performing daily tasks effectively and confidently. Holistic education considers physical growth essential because a healthy body supports healthy learning and participation in school life (Mahmoudi et al., 2012; Strong et al., 2005).

Mental development

Mental development includes the growth of thinking ability, concentration, memory, reasoning, creativity, and problem-solving. A holistically developed student is expected not only to know facts, but also to think clearly, learn actively, and apply knowledge wisely. Holistic education therefore values intellectual growth together with other dimensions of life (Mahmoudi et al., 2012).

Emotional development

Emotional development refers to understanding feelings, controlling emotions, building self-confidence, managing stress, and developing a positive attitude. A student who is emotionally developed can respond to success and failure in a balanced way and maintain healthy self-esteem. Holistic education gives importance to emotional well-being because emotional stability strongly affects learning, behavior, and relationships (Mahmoudi et al., 2012).

Social development

Social development involves learning how to cooperate, communicate, work in groups, respect others, take responsibility, and build healthy relationships. It prepares students to live successfully in society. Research on physical education and sport has shown that school activities can support cooperation, leadership, communication, responsibility, and prosocial behavior among children and youth (Opstoel et al., 2020).

Moral development

Moral development means the growth of values such as fairness, honesty, discipline, respect, responsibility, and sportsmanship. It helps students distinguish right from wrong and behave ethically in school and society. Research has shown that appropriately designed physical education experiences can support students' moral reasoning and ethical behavior (Mouratidou et al., 2007).

Need for balanced personality development in students

Balanced personality development is necessary because students need much more than academic knowledge to succeed in life. A student may perform well in examinations, but without health, emotional control, social adjustment, and moral values, that success remains incomplete. Holistic development helps create confident, disciplined, cooperative, thoughtful, and responsible individuals. It supports the formation of a balanced personality in which body, mind, emotions, and character grow together in harmony (Mahmoudi et al., 2012; Opstoel et al., 2020).

4. Role of Physical Education in Physical Development

Improves physical fitness

Physical education plays a major role in improving students' physical fitness. Through regular exercise,

games, and sports, students develop cardiovascular fitness, muscular fitness, endurance, and body efficiency. Scientific guidelines consistently show that regular physical activity is essential for children's healthy development and long-term health (Bull et al., 2020; Strong et al., 2005).

Develops strength, stamina, flexibility, and coordination

Physical education activities such as running, jumping, stretching, balancing, and structured exercise help students build muscular strength, endurance, flexibility, and coordination. These qualities are important not only for sports but also for daily functioning, injury prevention, and healthy growth. Evidence-based recommendations for school-age youth show that varied, developmentally appropriate physical activity improves muscular strength, endurance, and overall fitness (Strong et al., 2005; Bull et al., 2020).

Promotes healthy growth and body posture

Physical education contributes to healthy growth by encouraging movement during important years of physical development. It helps students strengthen bones and muscles, maintain functional movement, and develop proper posture through regular activity and body awareness. When students are physically active, they are more likely to grow in a healthy and balanced way (Strong et al., 2005; Bull et al., 2020).

Helps in controlling obesity and lifestyle diseases

One of the important roles of physical education is to reduce sedentary behavior and help control overweight, obesity, and the early risk factors of lifestyle diseases. Regular physical activity in childhood helps regulate body weight and lowers the risk of chronic health problems linked with inactivity. Research-based youth activity recommendations emphasize that regular moderate-to-vigorous activity is strongly associated with better health outcomes and improved adiposity control (Strong et al., 2005; Bull et al., 2020).

Builds motor skills

Physical education helps students develop motor skills such as running, jumping, throwing, catching, balancing, and body control. These fundamental skills are necessary for participation in sports, recreation, and everyday movement. They also increase confidence and readiness for lifelong physical activity. Research shows that structured, curriculum-based physical education can significantly improve motor competence in children and adolescents (Lorås, 2020).

Encourages healthy habits and an active lifestyle

Physical education builds habits that often continue beyond school. Students learn the value of exercise, movement, teamwork, and disciplined daily routines. When they enjoy physical activity in school, they are more likely to remain active later in life. Global physical activity guidelines stress that regular movement in childhood is essential for lifelong health and well-being (Bull et al., 2020).

Improves immunity and general health

Regular physical activity contributes to general health by supporting healthy body systems and improving resistance to illness over time. Active students usually experience better physical functioning, stronger health profiles, and improved overall well-being than inactive students. Because of this, physical education serves as an important school-based means of promoting health and protecting students from inactivity-related health risks (Bull et al., 2020; Strong et al., 2005).

5. Role of Physical Education in Mental and Cognitive Development

Enhances concentration and attention

Physical education improves concentration and attention by activating the body and the brain together. After physical activity, students often become more alert, attentive, and ready to learn. Reviews of school-based physical activity and cognition have found positive relationships between movement and attention-related outcomes in children (Donnelly et al., 2016; Rasberry et al., 2011).

Improves memory and learning capacity

Movement-based activity supports memory and learning by stimulating brain processes associated with

cognition. Students who are physically active often show better cognitive functioning, which can help them process, store, and recall information more effectively. Research suggests positive associations among physical activity, physical fitness, and cognitive functioning in children (Donnelly et al., 2016).

Increases classroom performance

Physical education can positively influence classroom performance by improving readiness to learn, on-task behavior, and academic engagement. Importantly, research shows that increasing physical activity in school does not harm academic achievement and may support it. Systematic reviews have reported that school-based physical activity is either positively related to academic performance or has no harmful effect on it (Rasberry et al., 2011; Donnelly et al., 2016).

Reduces mental fatigue

Students often feel mentally refreshed after physical activity. Physical education provides a break from continuous academic work and helps reduce mental tiredness, boredom, and passive classroom behavior. By refreshing the mind through movement, it allows students to return to studies with better energy and focus (Rasberry et al., 2011).

Stimulates brain function through movement

Physical education stimulates brain function because movement is closely linked with neural activity, brain structure, and executive functioning. Studies reviewed in major scientific summaries suggest that physical activity has a positive influence on cognition as well as brain structure and function in children (Donnelly et al., 2016).

Develops decision-making and problem-solving skills

Physical education is not only physical; it also demands quick thinking. During games and sports, students must observe, decide, plan, react, and solve problems in real time. They learn how to judge situations, choose strategies, and respond under pressure. Research on personal and social development in physical education identifies decision-making and problem-solving as important developmental themes fostered through such activities (Opstoel et al., 2020).

Supports creativity and alertness

Physical education encourages creativity because many movement situations require imagination, strategy, adaptation, and spontaneous response. Dance, team games, skill practice, and movement challenges help students think in flexible ways. At the same time, regular physical activity improves alertness, which supports more active participation in both classroom and school life (Donnelly et al., 2016; Rasberry et al., 2011).

Physical education plays a vital role in the holistic development of students because it supports the growth of the whole child. It strengthens the body, sharpens the mind, improves emotional balance, develops social qualities, and nurtures moral values. In the area of physical development, it improves fitness, motor skills, posture, health habits, and disease prevention. In the area of mental and cognitive development, it enhances concentration, memory, classroom performance, decision-making, and brain functioning. Therefore, physical education should not be treated as an extra subject, but as an essential part of education for building healthy, balanced, capable, and responsible students (Bull et al., 2020; Donnelly et al., 2016; Mahmoudi et al., 2012).

6. Role of Physical Education in Emotional Development

Reduces stress, anxiety, and depression

Physical education gives students a healthy outlet for tension. When students run, play, stretch, and take part in games, their bodies release energy and their minds feel lighter. Regular participation in physical activity has been associated with lower stress, less anxiety, and fewer depressive feelings among students (Bailey, 2006; Fu et al., 2023).

Promotes emotional stability

Physical education helps students become calmer and more emotionally balanced. Through regular

movement and structured activity, students learn to regulate their moods and respond to situations in a healthier way. This emotional balance is an important part of overall student well-being (Bailey, 2006; Gordon & Doyle, 2015).

Builds self-confidence and self-esteem

When students learn new skills, improve their performance, and see progress in themselves, they begin to feel more confident. Success in games, exercise, and movement activities helps them develop a stronger sense of self-worth and belief in their abilities (Fu et al., 2023; Haugen et al., 2011).

Teaches self-control and patience

In physical education, students cannot always win immediately or master a skill in one day. They must practice, wait, listen, and control their emotions during both success and difficulty. This process teaches patience and self-control in a natural and practical way (Gordon & Doyle, 2015; Richards et al., 2021).

Helps students handle success and failure

Physical education places students in real-life situations where they experience both victory and defeat. These moments teach them how to celebrate success with humility and accept failure without giving up. This helps build emotional maturity and resilience (Bailey, 2006; Gordon & Doyle, 2015).

Gives joy, relaxation, and emotional release

For many students, physical education is one of the happiest parts of the school day. It allows them to move freely, enjoy play, laugh with friends, and take a break from academic pressure. This joy and relaxation support healthier emotional development (Bailey, 2006).

Encourages a positive attitude

By taking part in physical education, students learn to stay hopeful, keep trying, and approach challenges with a better mindset. As they improve through effort, they begin to see the value of optimism and perseverance in daily life (Gordon & Doyle, 2015; Richards et al., 2021).

7. Role of Physical Education in Social Development

Promotes teamwork and cooperation

Physical education teaches students that they cannot always work alone. In team games and group activities, they learn to cooperate, support one another, and work toward a common goal. This strengthens the spirit of teamwork (Bailey, 2006; Koh et al., 2016).

Develops communication skills

Students must talk, listen, give signals, and understand instructions during physical activities. These repeated interactions improve their communication skills and help them express themselves more effectively in group situations (Koh et al., 2016; SHAPE America, 2024).

Teaches leadership and responsibility

Physical education often gives students chances to lead warm-ups, guide teammates, organize play, or take responsibility for equipment and rules. These experiences help students develop leadership qualities and a sense of responsibility (Richards et al., 2021; SHAPE America, 2024).

Encourages friendship and unity

Physical education brings students together through shared activity. By playing, practicing, and solving problems together, they form friendships and feel more connected to their classmates. This sense of unity improves the school environment (Bailey, 2006; Koh et al., 2016).

Builds respect for others

In games and sports, students learn to respect teammates, opponents, teachers, referees, and different abilities. They begin to understand that every person deserves fairness and dignity, whether they win or lose (Ludwiczak & Bronikowska, 2022; SHAPE America, 2024).

Promotes social adjustment

Physical education helps students mix with others, follow group expectations, and adjust to different social situations. This is especially helpful for students who may struggle to interact confidently in classroom settings (Bailey, 2006; Richards et al., 2021).

Helps students learn discipline and group behavior

Students in physical education must wait for turns, follow instructions, obey rules, and behave properly in a group. These habits improve discipline and help students function better in school and society (Koh et al., 2016; SHAPE America, 2024).

Encourages inclusion and participation

A good physical education program gives every student an opportunity to participate, regardless of ability, background, or confidence level. This builds a culture of inclusion and teaches students to accept and value differences among people (Richards et al., 2021; SHAPE America, 2024).

8. Role of Physical Education in Moral and Character Development

Teaches honesty and fair play

Physical education teaches students to play honestly, avoid cheating, and respect the true spirit of the game. Through sports and activities, they learn that fairness is more important than winning at any cost (Ludwiczak & Bronikowska, 2022; Bailey, 2006).

Develops discipline and punctuality

Coming on time, wearing the proper uniform, following activity routines, and completing tasks regularly all help students become more disciplined. Physical education encourages habits that are useful not only in sports but in life as well (Bailey, 2006; Koh et al., 2016).

Promotes respect for rules and authority

Students learn to follow rules, accept decisions, and respect the authority of teachers, coaches, and officials. This builds a sense of order and teaches that rules exist to ensure fairness and safety (Ludwiczak & Bronikowska, 2022; SHAPE America, 2024).

Encourages sportsmanship

Sportsmanship is one of the greatest lessons of physical education. Students learn to play with dignity, treat others kindly, and behave properly whether they win or lose. This shapes their moral outlook and behavior (Bailey, 2006; Ludwiczak & Bronikowska, 2022).

Builds perseverance and determination

Physical education teaches students not to quit easily. Repeating drills, practicing difficult skills, and trying again after failure help build determination and inner strength (Gordon & Doyle, 2015; Bailey, 2006).

Instills values like tolerance, responsibility, and commitment

By participating in physical education, students learn to tolerate differences, take responsibility for their actions, and remain committed to team goals and personal improvement. These values become part of their everyday character (Koh et al., 2016; Richards et al., 2021).

Shapes character through competition and cooperation

Physical education provides real experiences of challenge, struggle, teamwork, and decision-making. Through these experiences, students slowly build character. They learn courage in competition and kindness in cooperation, both of which are essential for becoming responsible human beings (Bailey, 2006; Gordon & Doyle, 2015).

9. Role in Healthy Lifestyle Formation

Physical education plays a major role in helping students build a healthy lifestyle from an early age. It does not only teach games and exercises; it also teaches students how to care for their bodies, value movement, and understand health in everyday life (Bailey, 2006; Trigueros et al., 2019).

Creates awareness about health and hygiene

Through physical education, students learn the importance of cleanliness, personal hygiene, warm-up and cool-down habits, safe exercise practices, and body care. This awareness helps them understand that health is not accidental; it is built through daily habits and responsible choices (Bailey, 2006; Trigueros et al., 2019).

Encourages regular exercise habits

When students participate regularly in PE classes, they become more familiar and comfortable with physical activity. Repeated participation increases the chance that exercise becomes a habit rather than a burden. Research has shown that PE participation is positively associated with active lifestyles and healthier movement behaviors during adolescence and later life (García-Hermoso et al., 2023; Martins et al., 2022).

Promotes balanced diet and nutrition awareness

Physical education also creates opportunities to discuss food, energy, hydration, and nutrition. Students begin to understand that exercise and diet work together. School-based health and nutrition interventions have been shown to improve healthy eating awareness, and PE can strengthen these lessons by connecting food choices to performance, fitness, and well-being (Trigueros et al., 2019; Van Cauwenberghe et al., 2010).

Prevents addiction to screens and sedentary lifestyle

One important contribution of PE is that it moves students away from prolonged sitting and excessive screen dependence. Sedentary behavior and screen-heavy routines are associated with poorer health outcomes in children and adolescents, while regular activity helps counter these patterns (Carson et al., 2016; García-Hermoso et al., 2023).

Helps in time management and routine building

Physical education teaches discipline through schedules, practice, attendance, and consistency. Students learn to manage time for exercise, rest, study, and recovery. Although this is often an indirect benefit, PE helps students experience the value of routine and self-management in daily life (Trigueros et al., 2019; Bailey, 2006).

Supports lifelong wellness practices

A good PE program does not aim only at short-term school performance; it encourages habits that can continue into adulthood. When students enjoy activity and understand its value, they are more likely to remain active throughout life, which supports long-term physical and mental wellness (Bailey, 2006; García-Hermoso et al., 2023).

10. Importance of Physical Education in School Life

Physical education is an essential part of school life because it makes education more complete and meaningful. School is not only for intellectual learning; it is also a place where students grow physically, emotionally, socially, and morally. PE supports this broader educational purpose (Bailey, 2006; Trudeau & Shephard, 2008).

Makes school education more balanced

If school focuses only on books, tests, and classroom lectures, student development becomes one-sided. PE balances academic learning with bodily movement, play, teamwork, and health education, making schooling more holistic (Bailey, 2006).

Breaks monotony of classroom learning

Long hours of classroom study can create boredom, stress, and mental fatigue. PE gives students a refreshing break through movement and activity, which helps restore energy and interest in learning (Donnelly & Lambourne, 2011; Bailey, 2006).

Increases student participation and motivation

PE often attracts students who may not always shine in academic subjects. It gives them another space to participate, perform, and feel successful. Positive PE experiences can increase motivation, confidence, and willingness to engage in school life more broadly (Bailey, 2006; Trigueros et al., 2019).

Improves attendance and school engagement

Students who are physically active and engaged in school programs often show better school connection. Research also shows that attendance and other protective school factors relate to stronger academic outcomes, and PE can support this connection by making school more enjoyable and meaningful (Cosgrove et al., 2018; García-Hermoso et al., 2023).

Identifies talent in sports and athletics

Physical education helps schools identify students with special talent in games, athletics, and movement-based skills. These talents can later be developed through coaching, competitions, and specialized support, giving students additional opportunities for growth and achievement (Bailey, 2006).

Builds school spirit and culture

Sports days, team events, inter-house competitions, and PE activities create unity, enthusiasm, and collective identity in schools. They foster belonging and pride, which are important for a positive school culture (Bailey, 2006).

Supports all-round development of learners

Overall, PE supports the development of the whole learner. It connects health, discipline, confidence, cooperation, enjoyment, and learning, making it one of the most valuable components of school education (Bailey, 2006; Trudeau & Shephard, 2008).

11. Physical Education and Academic Achievement

Physical education is often wrongly seen as separate from academic success. In reality, a growing body of research shows that physical activity and school-based PE are either positively related to academic achievement or at least not harmful to it (Rasberry et al., 2011; Trudeau & Shephard, 2008).

Positive relation between physical activity and academic success

Systematic reviews have found a generally positive or neutral relationship between school-based physical activity and academic performance. This means that giving time to PE does not reduce learning; in many cases, it supports it (Rasberry et al., 2011; Trudeau & Shephard, 2008).

Better concentration leads to better results

Regular movement improves attention, concentration, and readiness to learn. When students are more focused in class, they are better able to understand lessons and complete academic tasks effectively (Donnelly & Lambourne, 2011; Rasberry et al., 2011).

Active students show improved discipline in studies

Physical education teaches rule-following, practice, self-control, patience, and perseverance. These qualities often carry over into study habits, helping students become more disciplined in academic work (Cosgrove et al., 2018; Bailey, 2006).

PE refreshes mind and improves productivity

PE helps students release stress and mental fatigue. After movement, many students return to class with a fresher mind, which can improve productivity, alertness, and classroom participation (Donnelly & Lambourne, 2011).

Better health reduces absenteeism

Students who are physically active often enjoy better overall health, and better health can contribute to improved school attendance. Lower absenteeism gives students more opportunities to learn and perform well academically (Cosgrove et al., 2018; Trudeau & Shephard, 2008).

12. Challenges in Effective Physical Education

Although physical education is highly valuable, its implementation in many schools remains weak. The problem is often not the importance of PE, but the lack of support, planning, and resources needed to deliver it properly (Nathan et al., 2018).

Lack of trained physical education teachers

Many schools do not have qualified PE teachers. As a result, PE periods may be taken by untrained staff, reducing the quality, safety, and educational value of the program (Nathan et al., 2018).

Inadequate playgrounds and facilities

A proper PE program needs open space, courts, grounds, and safe environments. In many schools, especially crowded or underfunded ones, such facilities are limited or absent (Nathan et al., 2018).

Low importance given to PE compared to academics

In many education systems, PE is treated as secondary to "main" academic subjects. This mindset reduces investment, planning, and seriousness toward physical education, even when evidence shows PE supports academic and holistic development (Bailey, 2006; Nathan et al., 2018).

Limited time in school timetable

Even where PE exists, schools often allocate too little time to it. When PE is irregular or too short, students do not receive enough exposure to gain meaningful health and educational benefits (Nathan et al., 2018; Trudeau & Shephard, 2008).

Lack of equipment and funding

Without sports materials, fitness tools, and proper funding, PE becomes restricted and repetitive. Poor funding also affects teacher development, infrastructure maintenance, and activity variety (Nathan et al., 2018).

Gender stereotypes in participation

Gender bias remains a serious challenge in physical education. In some settings, boys are encouraged more strongly than girls, while girls may be pushed away from certain activities through stereotypes about strength, sport, or body image. This limits equal participation and confidence (Pautu et al., 2025).

Urban schools facing space problems

Urban schools often struggle with limited land and overcrowding, which restricts games, sports, and movement-based learning. This creates a structural disadvantage for quality PE delivery (Nathan et al., 2018).

Lack of awareness among parents and institutions

Some parents and school administrators still view PE as playtime rather than education. This lack of awareness weakens support for PE despite clear evidence of its health, social, and academic value (Bailey, 2006; Nathan et al., 2018).

13. Measures to Improve Physical Education

To make physical education truly effective, schools and policymakers must treat it as an essential subject rather than an optional activity. Improvement requires policy support, trained personnel, inclusive practices, and stronger awareness among all stakeholders (Nathan et al., 2018; Bailey, 2006).

Make PE compulsory in schools

Physical education should be a compulsory part of the curriculum at all levels. Making it mandatory ensures that every student receives opportunities for physical development, health learning, and active

participation (Trudeau & Shephard, 2008; Nathan et al., 2018).

Provide trained instructors

Schools should appoint qualified PE teachers who understand child development, exercise science, safety, and inclusive pedagogy. Well-trained teachers are central to effective PE delivery (Nathan et al., 2018).

Improve sports infrastructure

Safe playgrounds, open spaces, indoor halls where possible, and basic sports equipment are necessary. Without infrastructure, PE cannot function effectively, no matter how good the policy is (Nathan et al., 2018).

Allocate proper time in timetable

PE must receive adequate time in the school schedule. A token weekly period is not enough. Consistent and sufficient time is essential for building skills, habits, and health benefits (Trudeau & Shephard, 2008; Nathan et al., 2018).

Encourage equal participation of boys and girls

Schools must actively remove gender barriers and create an inclusive environment in which both boys and girls feel encouraged, respected, and equally capable of participation (Pautu et al., 2025).

Organize regular sports events and fitness programs

Sports days, fitness challenges, inter-school events, and regular activity programs can increase enthusiasm, participation, and a culture of movement in schools (Bailey, 2006).

Integrate health education with PE

PE becomes stronger when linked with lessons on hygiene, nutrition, rest, lifestyle habits, and mental well-being. This integration helps students understand health in a practical and meaningful way (Van Cauwenberghe et al., 2010; Trigueros et al., 2019).

Increase government and institutional support

Policies alone are not enough; they need funding, monitoring, and institutional commitment. Governments and school systems should support PE through curriculum design, teacher recruitment, and infrastructure development (Nathan et al., 2018).

Build awareness among parents and teachers

Parents and teachers should be made aware that PE is not a distraction from education but a support for better health, discipline, engagement, and academic functioning. Awareness campaigns and school communication can strengthen this understanding (Bailey, 2006; Rasberry et al., 2011).

14. Conclusion

Physical education plays a very important role in the holistic development of students. It is not limited to improving physical fitness or teaching games and sports; rather, it contributes to the growth of the whole personality. Through regular participation in physical activities, students develop strength, endurance, flexibility, coordination, and healthy habits that support their physical well-being. A healthy body creates the foundation for a healthy and active life. At the same time, physical education also promotes mental and emotional development. It helps students reduce stress, improve concentration, and build self-confidence. Participation in sports and exercise teaches them how to manage success and failure, control emotions, and remain disciplined in different situations. These qualities are essential for facing the challenges of academic life and the outside world. Physical education encourages social and moral growth. Team games and group activities teach cooperation, leadership, respect, responsibility, and sportsmanship. Students learn to follow rules, value fairness, and work together toward common goals. These experiences shape their character and prepare them to become responsible and active members of society. Physical education should never be treated as a secondary or optional part of education. It is an essential component of the school curriculum because it supports the balanced development of body, mind, and character. A true education system must focus not only on academic achievement but also on

the overall growth of the learner. Schools should give physical education equal importance with other core subjects and provide proper facilities, trained teachers, and regular opportunities for participation. Only then can education truly fulfill its purpose. In fact, holistic development remains incomplete without physical education, because it is one of the strongest means of shaping healthy, confident, disciplined, and well-rounded individuals.

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