https://asml.ui.ac.ir/

Archives in Sport Management and Leadership
Vol. 3, No. 2, 2025, pp. 48 - 60

Designing a Model for Promoting Quality of School Physical Education Using a Qualitative Approach

Mehdi Khatibzadeh[1], Zahra Rouhani[2] Ehsan Tatari[3]

1. Department of Physical Education, Farhangian University, Tehran, Iran
mehdi.khatibzadeh@cfu.ac.ir
2. Department of Physical Education, Farhangian University, Tehran, Iran
ZahraRouhani404@cfu.ac.ir (Corresponding Author)
3. Department of Physical Education, Farhangian University, Tehran, Iran
E.tatari@cfu.ac.ir

Article Info

Article type:
Research Article

Received:
18 Aug 2025
Accepted:
31 Oct 2025
Published online:
20 Dec 2025

Abstract

This study aimed to design a contextualized model for enhancing the quality of physical education classes by identifying the conditions, effective factors, and improvement strategies. This qualitative research was conducted using grounded theory methodology, following the approach of Strauss and Corbin (1998). The participants included 15 physical education teachers with academic, educational, and executive backgrounds who were selected through purposive and snowball sampling until theoretical saturation was reached. Data were collected via semi-structured interviews and analyzed using a three-stage coding process: open, axial, and selective. The resulting grounded theory was extracted based on the Bohm (2004) model, which is a modified version of the Strauss and Corbin model. The results showed that the causal factors influencing the quality of physical education lessons include school sport infrastructure, teacher deployment and distribution, teacher performance appraisal, challenges of teacher professional competence, student engagement and attitudes, and instructional practices in PE lessons. Contextual factors were classified into two dimensions: socio-cultural determinants and policy and governance factors, with economic factors identified as intervening variables affecting the quality of physical education classes. The strategies for enhancing quality were identified across six areas: professional development of PE teachers, Enhancement of Physical Education Curriculum Implementation, comprehensive student assessment in PE, expansion and modernization of PE infrastructure, innovative pedagogical approaches in PE, alignment with educational outcomes of PE, and strengthening instructional supervision in PE. The consequence of implementing these strategies included physical health outcomes, psychosocial benefits, economic impact of school PE, and promotion of lifelong physical activity.

Keywords: Grounded Theory Approach, Physical Education, Professional Development, Quality Enhancement

Cite this article: Khatibzadeh, M., Rouhani, Z., & Tatari, E. (2025). Designing a model for promoting quality of school physical education using a qualitative approach. *Archives in Sport Management and Leadership*, *3*(2), 48 - 60. doi: 10.22108/asml.2025.146365.1097

2981-0523 Published by University of Isfahan

Introduction

Global statistics and extensive research evidence indicate that over 85% of children and adolescents are classified as physically inactive (Samahti et al., 2024). This phenomenon is recognized as an emerging public health crisis, contributing to a range of issues in the younger generation, including overweight and obesity, low cardiorespiratory fitness, high blood pressure, chronic inflammation, and lipid metabolism disorders (Silva Bento et al., 2021). Adding to this worrying trend, the destructive effects of the COVID-19 pandemic have created serious challenges in children's motor and social behaviors. These challenges include a decline in group interaction skills, the prevalence of postural abnormalities, a tendency toward a sedentary lifestyle, and an increasing interest in digital games (Rohi et al., 2023).

In light of these conditions, physical education (PE) is considered not merely a practical course but a key instrument for promoting health, social development, strengthening physical literacy, and even improving academic performance (Naderi et al., 2020; An et al., 2021). By integrating movement, play, interaction, and participation, PE provides a unique platform for fostering life skills, increasing self-esteem, and building a lifelong commitment to sports (Ershad et al., 2022b). This immense potential, however, can only be realized when PE is delivered through cohesive planning, effective implementation and evaluation, adequate equipment, and competent teachers.

In recent decades, the position of physical education has been strengthened in the country's national educational policy documents. However, field evidence shows that the quality of students' learning experiences in this subject is not uniform or at a desirable level (Razavi et al., 2014). Studies indicate that the success of PE depends on a combination of organizational, educational, managerial, human, and cultural factors. Weakness or inefficiency in any of these areas leads to a decline in overall quality (Rohi et al., 2023; Vafaei Moghadam et al., 2018). For example, a shortage of financial resources, weak physical infrastructure, outdated curriculum content, weaknesses in evaluation, negative attitudes of some stakeholders, and a lack of targeted policymaking are among the main challenges to the optimal implementation of this subject (Ershad Iranji et al., 2022b; Rajabi et al., 2021). A systematic and comprehensive review of research evidence between 2000 and 2020 indicates that Quality Physical Education (QPE) programs in elementary schools are influenced by seven key areas: governmental leadership and policymaking, curriculum content, the role of school administrators, organizational management systems, teachers, parental involvement, and community engagement. Among these areas, the role of physical education teachers—including their level of expertise, professional training, job motivation, and ability in instructional planning—has the greatest impact on students' attitudes towards physical education, physical activity patterns, mental health, and academic performance (Kingston et al., 2023). Asland et al. (2024) have reported that the shift from traditional approaches to socio-cultural and collaborative learning methods, while promising for educational reform, has been met with resistance, mistrust, and implementation difficulties. The professional beliefs and culture of teachers, the school's structure, educational policies, and socio-cultural conditions all influence the successful implementation of the physical education curriculum (Russo et al., 2025; Hao & Yang, 2023). These findings confirm that enhancing the quality of PE cannot be achieved through a single intervention but requires a systemic, multi-layered approach.

Based on the studies reviewed, it can be concluded that enhancing the quality of PE is a multidimensional, complex, and context-dependent phenomenon. It is shaped by the dynamic interplay among organizational structures, human resources, socio-cultural contexts, and educational policies. Furthermore, the rapid growth of knowledge, accelerating technology, and global developments act as external influencing factors that necessitate flexibility and essential changes and reforms in curriculum content and planning. Therefore, a scientific analysis of the quality of PE requires a comprehensive and systemic approach that can examine the various dimensions of this phenomenon in relation to one another.

Moreover, enhancing the quality of instruction in this subject should be based on the perceptions of teachers—as the primary actors in its implementation—and should employ methods that allow for the extraction of a localized and practical theory. In this regard, the grounded theory approach is a suitable tool for this purpose, particularly due to its ability to identify complex and context-dependent processes. From

real empirical data, this method can propose a rich model for analyzing the current situation and offering improvement strategies.

In conclusion, despite recent advancements in policy-making, the quality of PE in Iranian schools continues to face significant structural, curricular, human, and implementation challenges. The absence of a comprehensive and validated model that encompasses all influential dimensions and offers practical solutions constitutes a critical research gap. The present study, by providing such a model, can lay the groundwork for a fundamental transformation in the quality of PE in Iranian schools, thereby helping to cultivate a healthy, active, and capable generation.

Research Methods

Research Design

This study adopted a qualitative research design based on the grounded theory approach proposed by Strauss and Corbin (1998). The aim was to design a model for enhancing the quality of physical education (PE) lessons in schools through an in-depth analysis of field data.

Participants

The study population consisted of physical education teachers with relevant academic, educational, and executive experience. The sampling process was conducted using a combination of purposive and snowball sampling methods. In qualitative research, sampling continues until theoretical saturation is achieved. In the present study, data saturation occurred after the twelfth interview, confirming that no new information was emerging. A total of 15 PE teachers participated in the study. A summary of participants' demographic characteristics is presented in Table 1.

Table 1- Details of participants

Features	Categories	Count
Gender	Female	8
	Male	7
Education	PhD	4
	Master's (MSc)	8
	Bachelor's (BSc)	3
Field of Study	Sports Management	5
	Exercise Physiology	5
	Sport Injures and Corrective Exercise	2
	Motor Behavior	1
	Sport Sciences	2
Years of Service	10-15	3
	15-20	7
	20-25	4
	25-30	1
Managerial Experience	With managerial experience	9
	Without managerial experience	6

Data Collection Instrument

Data were collected using semi-structured interviews. The interview protocol was developed around three main themes:

1. The current state and challenges of physical education (causal and contextual conditions),
2. Strategies for improving the quality of PE (action-oriented and operational strategies), and
3. Consequences and outcomes of improving the quality of physical education in schools.

Data Collection Procedure

All interviews were conducted face-to-face in a quiet and comfortable setting. Before beginning each interview, the research objectives were explained to the participants, and informed consent was obtained. Permission for audio recording was also granted by each participant.
The duration of the interviews ranged between 45 and 60 minutes, depending on each participant's level of knowledge and engagement. The interviews were conducted by the main researcher, while transcription was carried out with the assistance of a research aide**.**
After transcription, the interview texts were sent back to participants for verification and accuracy checking**.** Data collection was carried out over a period of three consecutive months and continued until theoretical saturation was reached after the twelfth interview.

Data Analysis

Data analysis was conducted manually and concurrently with data collection through three stages of coding: open, axial, and selective coding**.**

- During open coding**,** meaningful units were extracted from the interviews and categorized into initial concepts.

- In axial coding**,** relationships among the categories were identified within the paradigmatic framework of Strauss and Corbin (1998)**,** which includes causal conditions, contextual conditions, intervening conditions, strategies, and consequences.

- Finally, in selective coding**,** the core category of "Enhancing the Quality of Physical Education*"* was identified, and all other categories were integrated around it to form the theoretical narrative.

Analytical Model

Data analysis was designed and implemented based on the modified Bohm model (Bohm, 2004). This model represents a revised version of Strauss and Corbin's framework, emphasizing three key principles:

1. Dynamic interaction between data collection and analysis**,**

2. Iterative movement between coding and theorizing**,** and

3. Continuous interpretation of data within their real and contextual environment**.**

Accordingly, the researcher employed the constant comparative method**,** continuously comparing new data with emerging findings and redefining concepts throughout the process. Data interpretation occurred through an iterative and reflective movement between data, concepts, and their interrelationships**,** ensuring that the emerging theory was deeply grounded in empirical evidence.

Trustworthiness and Credibility

To ensure the validity and reliability of the analysis, member checking and peer debriefing were employed. Field notes, continuous comparisons among interviews, and category cross-checking were used to enhance interpretive validity and internal consistency of the findings.

Final Model

Finally, the comprehensive model for enhancing the quality of physical education lessons in schools was developed by integrating the results of the three coding stages within Bohm's theoretical framework. The final model identified and organized the causal, contextual, intervening, strategic, and Consequential factors influencing PE quality improvement in an integrated and systemic structure.

Findings

According to the results obtained from Table 2 in the first step of data analysis, 140 key points were extracted from the interviews and identified as open codes. In the second step, the identified open codes were categorized into five main axes: causal factors, contextual and intervening factors, strategies, and consequences. Subsequently, the open codes were categorized according to the aforementioned four axes into 20 sub-categories: school sport infrastructure, teacher deployment and distribution, teacher performance appraisal, challenges of teacher professional competence, student engagement and attitudes, and instructional practices in PE lessons (causal factors); socio-cultural determinants and policy and governance factors (contextual factors); Financial Constraints in PE (intervening factors); professional development of PE teachers, Enhancement of PE Curriculum Implementation, comprehensive student assessment in PE, expansion and modernization of PE infrastructure, innovative pedagogical approaches in PE, alignment with educational outcomes of PE, and strengthening instructional supervision in PE (strategies); and physical health outcomes, psychosocial benefits, economic impact of school PE, and promotion of lifelong physical activity (consequences).

Table 2- Axial Coding

Core Constructs	Sub-Categories	Open Codes
causal factors	School Sport Infrastructure	• Poor quality of some school sports facilities and equipment • Unfair and inappropriate distribution of equipment in schools • Insufficient awareness of standards for selecting sports equipment • Safety status of school sports facilities and equipment
	Teacher Deployment and Distribution	• Inappropriate distribution of PE teachers within the province • Implementation of transfers outside regulations • Prevalence of favoritism in the organization of PE teachers in special schools
	Teacher Performance Appraisal	• Inadequate supervision and evaluation of PE teachers' work. • Lack of distinction between active and inactive teachers.
	Challenges in Teacher Professional Competence	• Teachers' insufficient awareness of the curriculum content. • A lack of sufficient expertise in various sports disciplines. • A tendency for PE teachers to favor certain sports, particularly football. • Teachers' failure to focus on teaching fundamental movements in the elementary grades. • Teachers' lack of enthusiasm for their work in the PE classroom. • Low motivation among teachers to participate in training courses. • Limited creativity among PE teachers in the classroom.
	Student Engagement and Attitudes	• Students' interest in and need for playing in PE classes • Low interest and desire of upper secondary school students especially twelfth-grade, in PE • Wasting of PE teacher's energy to organize students' moral challenges • Students' preference for unstructured play without rules or challenges • Lack of perceived need to learn sports knowledge
	Instructional Practices in PE Lessons	• Inappropriate and teacher-centered teaching methods • Lack of diversity in teaching and warm-up methods • Improper evaluation in PE

Core Constructs	Sub-Categories	Open Codes
contextual factors		• Lack of time to improve physical fitness factors • Wasting time preparing students • Insufficient number of PE sessions per week
	Socio-Cultural Determinants	• Changes in students' lifestyles • Weak sports culture among families and in society • Negative family views towards sports activities • Excessive focus on the university entrance exam) and related matters in education • Lack of awareness among education department managers regarding the importance and status of PE • Interference of school principals in grading PE • Low awareness of families regarding the importance of PE • Insufficient media support for student sports
	Policy and Governance Factors	• Lack of attention to school sports in macro-level policymaking. • Prioritization of educational activities over nurturing and PE activities within the country's education system. • Insufficient attention of student sports by organizations and institutions responsible for the nation's sports.
intervening factors	Financial Constraints in PE	• Insufficient funds for sports projects • Financial weakness of families • Lack of funds in schools • Teachers' involvement in other jobs
	Professional Development of PE Teachers	• Providing in-service courses in a scientific and practical manner • Mandating teachers to participate in training courses • Creating motivation for PE teachers • Attending to the needs of PE teachers • Granting special awards to winners of the best teaching methods festival and scientific and specialized competitions • Greater focus on PE teachers as the main of quality improvement • Optimal holding of periodic competitions such as scientific and specialized competitions based on the guide for teachers • Educating and briefing school principals on their duties in implementing PE programs • Improving the quality of PE teacher training courses • Holding high-quality scientific seminars • Attention to the recruitment process for employing capable individuals • Appreciating active and dynamic teachers • Issuing multi-year appointments for PE teachers • Formulating regulations for employing teachers in special schools
	Enhancement of PE Curriculum Implementation	• Using the guidebook in teaching PE • Preparing localized content based on the facilities of provincial schools • Paying attention to the sequence of skill instruction in different grades • Providing guidebooks for PE teachers • Preparing attractive and practical educational packages and designing new movement games based on the guidebook

Core Constructs	Sub-Categories	Open Codes
Strategies		• Summarizing the content of the guidebook and extracting the more important and simpler headings • Holding book analysis sessions • Proper execution of morning exercise • Holding inter-school sports Olympiads with maximum student participation • Holding creative programs such as exercise with parents and competitions for students and teachers • Paying attention to community-wide and culturally common sports • Selecting and focusing on teaching a specific sport throughout the academic year
	Comprehensive Student Assessment in PE	• Performing evaluations simply and based on content • Determining evaluation content and communicating it to schools • Implementing evaluations as a process • Implementing initial evaluations • Measuring student progress in evaluations • Announcing test materials to students and providing effective practice • Considering cognitive, attitudinal, and psychomotor domains in evaluations • Implementing evaluations using teacher-made tests
	Expansion and Modernization of PE Infrastructure	• Attention to marking sports fields in schools • Maximum utilization of unused places and equipment • Provision of a places for jump rope • Utilizing vocational schools' capacity to produce some sports equipment • Designing BMI curves in schools • Attention to the safety of sports facilities, especially smaller ones • Creating punching bags, Illinois agility tests, volleyball squares, etc., in the school yard • Procuring equipment based on educational content • Procuring inexpensive equipment such as jump ropes and reaction balls for use during class breaks • Producing creative and handmade tools by utilizing the capacity of students and parents • Allocating budget for upgrading school sports spaces • Attention to proper maintenance of sports equipment in schools • Having lockers and a PE room in schools • Distributing sports equipment based on statistics and Educational Cycle • PE teacher's oversight of all school sports facilities • Procuring PE assessment tools for schools • Exchanging sports equipment between schools • Utilizing sports spaces of adjacent schools • Attracting financial aid from philanthropists for procuring sports equipment • Considering the opinions of PE experts in schoolyard design
		• Teaching Sports Skills (Feedback) Through Play • Using lesson plans and instruction based on the guidebook • Selecting teaching methods based on the type of school and student characteristics

Core Constructs	Sub-Categories	Open Codes
consequences	Innovative Pedagogical Approaches in PE	• Implementing indigenous and local games in schools • Simultaneous attention to education and play in the classroom • Using station exercises to improve physical fitness • Teaching scientific and knowledge-based points to students in PE classes • Assigning homework to students to create handmade tools such as resistance bands and dumbbells • Involving students in securing the school's sports environment • Using student-centered teaching methods • Using music in PE classes • Teacher's neatness and appropriate attire • Teacher's professional personality and behavior • Time management in PE class
	Alignment with Educational Outcomes of PE	• Enhancing students' physical fitness, physical literacy, and physical and mental health. • Improving students' fundamental skills and basic movements. • Advancing students' sports skills. • Promoting students' positive attitudes towards sports activities and lifelong participation. • Focusing on students' vitality and happiness. • Teaching ethics, skills, and socio-cultural manners. • Encouraging students' interest in sports activities. • Motivating students to engage in more sports activities. • Educating students about the importance and benefits of exercise. • Addressing postural anomalies. • Teaching discipline and rules. • Facilitating communication between PE teachers and parents, leveraging their capacity to assist in PE lessons. • Identifying and guiding athletic talents. • Assisting students with psychological issues and social harms.
	Strengthening Instructional Supervision in PE	• Stronger and increased supervision and inspection of PE class implementation • School principal's supervision of PE class implementation in schools • Preparation of a reporting form for the principal on the PE teacher's performance • Promoting the "Superior School" plan in the field of PE • Supervision of the school principal's performance regarding PE class
	Physical Health Outcomes	• Enhancing physical fitness and physical literacy • Reducing students' postural abnormalities • Preventing chronic diseases such as diabetes and high blood pressure
	Psychosocial Benefits	• Developing social skills • Releasing internal emotions and promoting students' mental health • Students' vitality and satisfaction
	Economic Impact of School PE	• Economic savings • Reducing healthcare costs

Core Constructs	Sub-Categories	Open Codes
	Promotion of Lifelong Physical Activity	• Identifying and guiding sports talents • Shifting from a passive to an active lifestyle • Increasing students' interest in physical activities

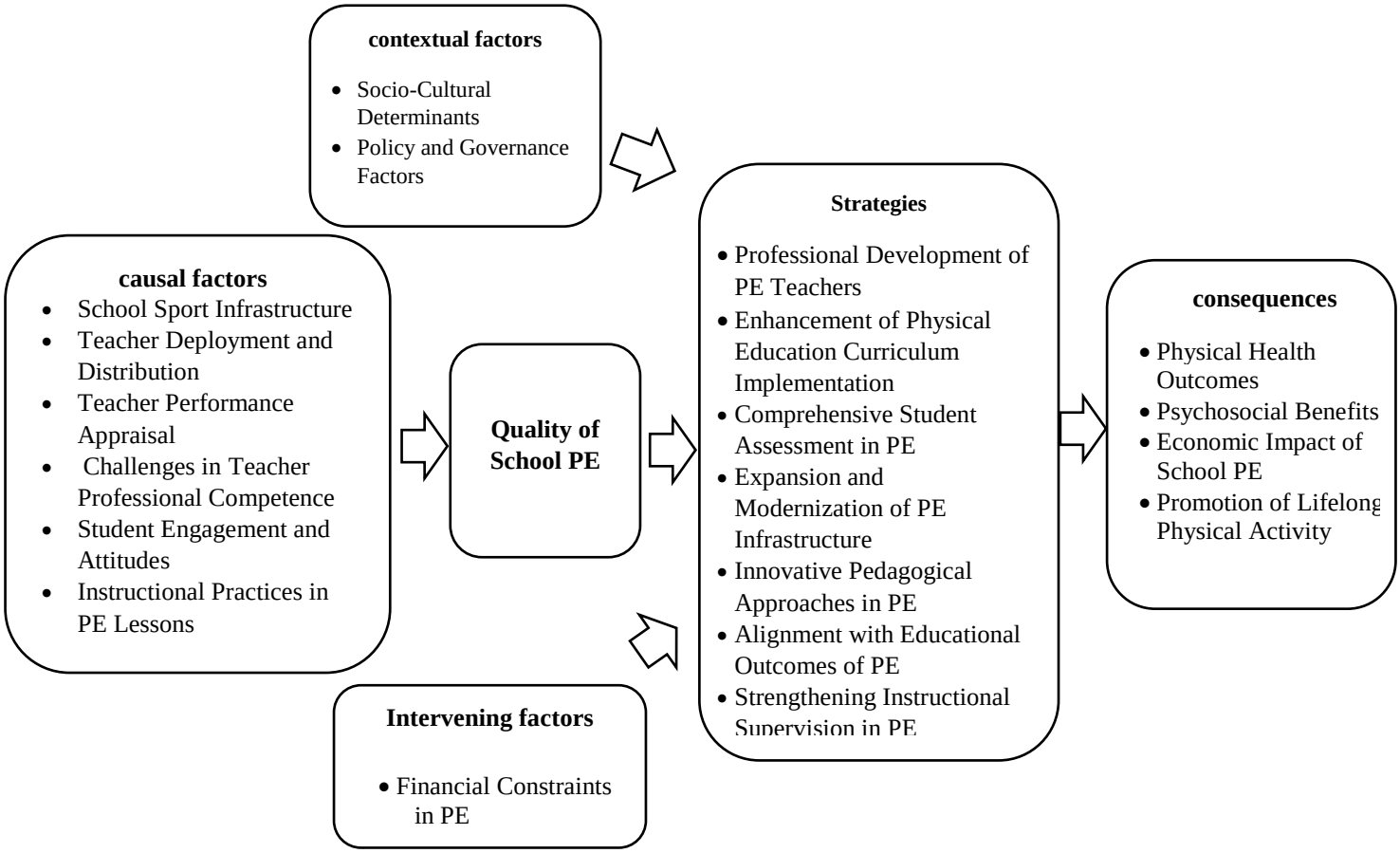

Figure 1. Quality Model for School PE

Discussion

Studies consistently show that participation in physical activity decreases with age. While students' general attitudes toward sports are favorable (Phillips & Silverman, 2015), positive perceptions of school PE lessons tend to decline after high school, largely due to curriculum design and delivery (Yıldızer & Munusturlar, 2022). This indicates that quality enhancement in PE is essential to sustain students' interest in lifelong physical activity.

The findings of this research revealed several causal factors influencing the effectiveness of PE implementation. The most critical factor is the condition of school facilities and equipment. Limited per capita sports space, particularly indoor facilities, along with low-quality and insufficient equipment, significantly undermine teaching effectiveness. Consistent with prior studies (Mohayya et al., 2024; Rajabi et al., 2021; Vafaei-Moghadam et al., 2018), the inadequacy of infrastructure and equipment has been recognized as a major obstacle. This underscores the need for schools to be equipped with standard and diverse resources to meet students' needs. Another critical dimension is Teacher Professional Competence and Teacher Performance Appraisal. Weak organizational structures, lack of merit-based deployment, and insufficient differentiation between active and inactive teachers reduce professional motivation. As highlighted in Nasseh et al. (2025) and Brojeni et al. (2016), systematic appraisal of teachers' performance, alongside mechanisms for recognizing and rewarding creativity and effectiveness, can significantly enhance teacher motivation and professional growth. Failure to address these issues, as identified in interviews, has

gradually diminished teacher morale in schools. Instructional practices in PE Lessons also face challenges due to time limitations. Currently, only two hours per week are dedicated to PE, which is widely considered insufficient for achieving physical, cognitive, and affective objectives. An et al. (2021) suggest incorporating active breaks, extracurricular programs, and behavioral skills training to increase opportunities for student activity before, during, and after school. This aligns with findings from the current research that emphasize the need for restructured instructional strategies to maximize learning outcomes.

The findings of the present study indicate that socio-cultural and political factors function as critical contextual conditions influencing the quality of PE implementation. At the same time, economic constraints act as intervening factors, limiting the realization of objectives despite the presence of supportive cultural and political conditions. Specifically, insufficient funding, weak allocation of financial resources, and ineffective execution of extracurricular programs hinder the implementation of strategic plans into practice. Previous research also indicates that among cultural and social factors, the family, as the primary social institution supporting individuals, can influence all social interactions, especially at younger ages. Politically, the lack of attention to PE and school sports in the country's macro-level policies significantly impacts the quantitative and qualitative decline of sports and physical activity in schools. Insufficient attention from the mass media to school PE and the weak perspectives of some education officials are other general and crucial factors that directly affect the quantitative and qualitative decline of PE and sports in schools, and indirectly influence other factors such as family, school, and the PE teacher. In this regard, Varahram et al. (2024) stated that in student sports, the lack of policies, strategic guidelines, lack of coordination among the various institutions, organizations, and executive bodies related to sports, insufficient material and human resources in various sports fields, and sometimes parallel activities and inadequate supervision over sports activities are the most significant shortcomings of student sports.

The strategies identified in this study for quality enhancement of PE focus on six key areas: professional development through in-service training, feedback systems, and motivation, improving educational resources and content, reforming PE assessment to emphasize process-oriented and holistic evaluation, expanding school facilities and equipment, diversifying teaching methods, and strengthening supervision and support systems.The advancement of specialized human resources can be achieved by holding high-quality in-service training courses and requiring teachers to participate in these courses based on their professional and occupational needs. Furthermore, motivating teachers through incentives and appreciating those who participate in festivals, competitions, and extracurricular programs is crucial. Paying attention to teacher specialization and employing efficient and capable personnel can also significantly impact quality improvement. Employing systematic strategies, including improving the hiring process, continuous professional development, and strengthening organizational support structures, is among the most important components of increasing teachers' efficiency and job satisfaction (Sami & Labbaf, 2023). To provide and enhance educational content and resources, efforts must be made to ensure content quality and accessibility for all teachers. The teacher's guide provides PE teachers with rich and consistent content. Therefore, informing teachers about the importance of using a unified textbook and emphasizing the sequential teaching of skills across different grades will alleviate their confusion and ensure the coordinated achievement of PE objectives in schools. To improve the evaluation of PE in schools, factors such as the implementation of standardized tests across all grades, process-oriented evaluation, initial evaluation, informing students about test materials, providing effective exercises, and assessing cognitive, attitudinal, and psychomotor domains should be considered. In this regard, the research findings of Ershad Iranji et al. (2022a) concerning the extent to which the national curriculum document addresses student evaluation in PE indicate relative, yet imbalanced and inconsistent, attention to the components of PE evaluation. Taslimi and Babooee (2017) also pointed out that in our country, evaluation, as one of the most important pillars of the curriculum, has not yet taken its true form, and national standards have not been defined for it. This is despite the fact that, according to the results of the present study and the research of Jafari Harandi et al. (2017) and Ershad Iranji et al. (2022b), evaluation has been identified as a factor for improving the quality of PE, which should receive more attention. Improving teaching methods and strategies is also a strategy for enhancing the quality of PE. This approach is directly related to the PE teacher's skills in the classroom and stems from their expertise in teaching skills and providing effective and varied exercises, considering the lesson's objectives. The teacher's artistry in choosing an appropriate teaching method can significantly impact the quality of the classroom.

Time management, neatness, appropriate sports attire, and their personality and behavior with students present them as suitable athletic role models to the students. Nastaran Brojeni et al. (2016) also stated that improving teachers' skills and educational levels, their awareness of PE objectives, their ability to convey them correctly to students, their teaching methods, and having a guidebook are influential in promoting and enhancing the quality of PE. In this regard, Wood and Hall (2015) emphasized in their research that school PE should be more based on joy and move away from a formal classroom setting towards play and entertainment. It is evident that the more we move from a formal classroom environment to a recreational one, the more effective PE will be in schools. Perceived autonomy support from physical education teachers directly and significantly enhances students' autonomous motivation (Eidipour & Hallaji, 2024). In this context, Russo et al. (2025) also stressed that PE teachers can promote students' well-being by considering individual differences and creating inclusive, comprehensive, and enjoyable classes. Layne & Hastie (2014) also analyzed the educational needs of students in school PE. They consider physical, psychological, motivational, and educational factors to be among the most important factors necessary for developing PE lesson plans. The results of the present study also show that attention to the objectives of PE in schools is one of the most important strategies for improving the quality of PE.

Finally, the outcomes of quality enhancement extend beyond academic achievement. Improved PE contributes to students' physical and mental health, social interaction, economic benefits through reduced healthcare costs, and the promotion of a broader culture of physical activity. In this regard, Opstoel et al. (2025) also stated that PE has a positive effect on the growth and development of students' individual and social skills.

Conclusion

Based on the findings of this research, improving the quality of PE requires a multidimensional approach that simultaneously encompasses environmental, structural, human, and educational factors. The model designed in this study introduces a comprehensive set of causal, contextual, interventional, and strategic factors within a holistic framework, which can serve as a basis for reforming macro-level educational planning and policymaking. Factors such as the condition of physical spaces and sports equipment, methods of organizing and evaluating teachers, the extent of administrative support, and parental attitudes, along with content structure, teaching methods, and assessment, are considered key elements influencing the quality of PE implementation. On the other hand, the lack of a coordinated approach between educational policymakers and school implementers is an obstacle to achieving the goals of this subject. Economic factors, particularly in deprived areas, also pose serious challenges in realizing policies and optimally implementing educational programs. Budget shortages for PE, weak resource allocation, and unstable financial support have caused many strategies to remain at the planning stage and not reach implementation. Meanwhile, sustained financial support for equipment, teacher training, and extracurricular activities can help strengthen the implementation infrastructure of PE.

The results indicate that upgrading sports facilities and equipment, empowering teachers, reviewing evaluation methods, and strengthening educational content are among the most important operational axes of this model. Furthermore, attracting family participation, changing managers' attitudes, and utilizing media in promoting sports culture can also play a key role in the success of these strategies. These strategies, if implemented harmoniously and with structural support, can contribute to the growth of social skills, improvement of physical and mental health, reduction of treatment costs, increase in educational efficiency, and promotion of a culture of sport for all in society.

Acknowledgments

The authors would like to express their sincere appreciation to all the PE teachers who generously devoted their time and shared their valuable insights, thereby enriching the quality and depth of this study. Their collaboration and constructive contributions played a significant role in the successful completion of this research.

Conflicts of Interest

The authors report no conflicts of interest in this work.

Funding
This work was supported only by the authors.

Declaration of generative AI and AI-assisted technologies in the writing process
During the preparation of this work the authors used ChatGPT, and Gemini Pro in order to improve language and readability of certain parts of the article.

References
Asland, E., Nyberg, G., & Barker D. (2024). Enacting a new physical education curriculum: a collaborative investigation. *Sport, Education and Society*, *30*(7), 841-854. https://doi.org/10.1080/13573322.2024.2367752

An, R., Liu, J., & Liu, R. (2021). State laws governing school physical education in relation to attendance and physical activity among students in the USA: A systematic review and meta-analysis. *Journal of Sport and Health Science, 10*(3), 277-287. https://doi.org/10.1016/j.jshs.2020.09.004

Bohm, A. (2004). *Theoretical Coding: Text Analysis in Grounded Theory A Companion to Qualitative Research*. Publications.

Eidipour, K., & Hallaji, M. (2024). The Mediating Role of the Students' Autonomy Motivation in the Relationship between Physical Education Teachers' Autonomy Support and Reducing Students' Fear of Failure. *Archives in Sport Management and Leadership*, *2*(2), 43-50. https://doi.org/10.22108/asml.2024.142632.1049

Ershad Iranji, T., Safania, A., Frahani, A., & Nikbakhsh, R. (2022a). The attention of the National Curriculum Document of the Islamic Republic of Iran to assessment in physical education. *Quarterly of Educational Measurement, 13*(50), 33-54. https://doi.org/10.22054/jem.2023.64560.3321 (In Persian).

Ershad Iranji, T., Safania, A. M., Farahani, A., & Nikbakhsh, R. (2022b). Pathology of Physical Education Assessment in the High Schools of Iran. *Research on Educational Sport, 10*(27), 185-212. https://doi.org/10.22089/res.2021.10949.2127 [In Persian]

Jafari Harandi, R., Sajadi, S. A., Kordlu, H., & Ali Mohammadi, H. (2017). Evaluation of influencing factors in the quality of physical education lessons from the point of view of sports teachers Case study: Kashan city. *Journal of Teaching and Learning Researches, 12*(50), 1-22. https://sanad.iau.ir/fa/Article/941304 (In Persian).

Hao, X., & Yang Y. (2022). Healthy physical education curriculum model and students' extracurricular, sports participation -test based on the trans-contextual model of motivation. *BMC Public Health, 22*, 2079. https://doi.org/10.1186/s12889-022-14483-0

Kingston, Ú., Adamakis, M., Lester, D., & Costa, J. (2023). A Scoping Review on Quality Physical Education Programmes and Their Outcomes on Primary-Level Pupils. *International Journal of Environmental Research and Public Health*, *20*(4), 3575. https://doi.org/10.3390/ijerph20043575

Layne, T. E., & Hastie, P. A. (2014). Analysis of teaching physical education to second-grade students using sport education. *International Journal of Primary, Elementary and Early Years Education*, *44*(2), 226–240. https://doi.org/10.1080/03004279.2014.914551

Mohayya, M., Ehsani, M., Saffari, M., & Norouzi, R. (2024). Compilation a model for the development of educational sports of Iran. *Sport Management Journal*, *16*(1), 117-129. https://jsm.ut.ac.ir/article_96291.html?lang=en (In Persian).

Naderi, S., Bahrami, Sh., & Esmaeeli, M. (2020). Presentation the model of strategies for improving the effectiveness of sports teaching methods in primary schools in Iran with a grounded theory approach. *Research on Educational Sport, 8*(20): 159-78. https://doi.org/10.22089/res.2019.7775.1723 (In Persian).

Nasseh, M.; Taghipour Jahromi, F.; Khoshbakhti, J. & Rezai, M. (2025). Identifying the influencing factors on improving the quality of physical education teaching. Teaching and Learning Research, 22(1), 45-60. https://doi.org/10.22070/tlr.2025.18738.1551 (In Persian).

Nastaran Brojeni, E., Nastaran Brojeni. I., & Honari, H. (2016) Identifying Existing Problems in Isfahan Schools of Physical Education and Comparing the Perspectives of Principals, Experts and Teachers of Isfahan Schools of Physical Education. *Journal of Modern Approaches to Sport Management, 4*(14), 83-94, http://ntsmj.issma.ir/article-1-809-en.html (In Persian).

Opstoel, K., Prins, F., Haerens, L., Tartwijk, J., & De Martelaer, K. (2025). Transferring responsibility in primary school physical education: Experiences of five teachers participating in a professional development programme, *Teaching and Teacher Education*, *153*. https://doi.org/10.1016/j.tate.2024.104844

Phillips, S. R., & Silverman, S. (2015). Upper Elementary School Student Attitudes Toward Physical Education. *Journal of Teaching in Physical Education*, *34*(3), 461-473. https://journals.humankinetics.com/view/journals/jtpe/34/3/article-p461.xml

Rajabi, F., Safania, M. A., & Nazari, H. (2021) An Analysis of Physical Education Infrastructure in the Iranian Education System. *Journal of Curriculum Studies*, *16*(61), 151-174. https://www.jcsicsa.ir/article_138551.html (In Persian).

Razavi, M.H., Rohani, Z., & Ghanbari Firouzabadi, A. R. (2014). An Analysis of Factors Affecting promotion of Physical Education Classes in Schools. *Research in Sport Management and Motor Behavior*, *10*(19), 69-80. https://msb.journals.umz.ac.ir/article_833.html?lang=fa (In Persian).

Rohi, A., Yektayar, M., & Khodamoradpoor, M. (2023). The Challenges of Teaching Physical Education Lessons in Schools after Coronavirus in the Horizon of 2026. *Research on Educational Sport*, *11*(30), 219-51. https://res.ssrc.ac.ir/article_3513.html?lang=en (In Persian).

Russo, G., Masini, A., Dallolio, L., & Cecikiani, A. (2025). Primary and middle school students' views on inclusive physical education: Perceptions, practices, and future directions. *Heliyon*, *11*, e41232. https://doi.org/10.1016/j.heliyon.2024.e41232

Silva Bento, A. F. Paulino da; P´aez, L. C.; Manuel de Mendonça Raimundo A. (2021). High-intensity interval training in high-school physical education classes: Study protocol for a randomized controlled trial. *Contemporary Clinical Trials Communications*, *24*, 1-6. https://doi.org/10.1016/j.conctc.2021.100867

Samahati, G., Javadipour, M. Rezaee, A. A., & Hatami, H., (2024). Design and Validation of Physical Education Curriculum Model with Blended Learning Approach in Elementary School. *Sport Management Journal*, *17*(2), 190-210. https://jsm.ut.ac.ir/article_96947.html (In Persian).

Sami, A., & Labbaf, A. H. (2023). Presentation the Model of Empowerment in Physical Education Teachers. *Archives in Sport Management and Leadership*, *1*(1), 15-29. https://doi.org/10.22108/jhs.2023.137554.1023

Strauss, A., & Corbin, J. (1998). *Basics of qualitative research: Techniques and procedures for developing grounded theory* (2nd ed.). Sage Publications.

Taslimi. Z, & Babooee. H. (2017). Coordinated and Focused Evaluation of Physical Education in Schools: A Qualitative Study Research in educational sports. *Research on Educational Sport*, *6*(14), 45-66. https://doi.org/10.22089/res.2017.4239.1306 (In Persian).

Vafaei Moghadam, A., Dousti, M., Fakhri, F., & Jafari, M. (2018). Obstacles to sport development in Mazandaran province schools. *Journal of Sport Management and Motor Behavior*, *14*(28), 167-182. https://msb.journals.umz.ac.ir/article_1983.html?lang=en (In Persian).

Varahram, B., Amirnejad, S., & Al-Sadat Manani, M. (2024). An Investigation into obstacles and solutions for the development of physical education in schools within Iran's educational system: A Qualitative Study. *Research on Educational Sport*, *12*(34), 151-172. https://doi.org/10.22089/res.2024.15178.2400 (In Persian).

Wood, C., & Hall, K. (2015). Physical education or playtime: which is more effective at promoting physical activity in primary school children?. *BMC Research Notes*, *8*(12), 12- 28. https://doi.org/10.1186/s13104-015-0979-1

Yıldızer, G., & Munusturlar, S. (2022). Differences in Perceived Physical Literacy Between Teachers Delivering Physical Education in Schools: Classroom Teacher's vs Physical Education Teachers. *Physical Education and Sport Pedagogy*, *27*(6), 626-639. https://doi.org/10.1080/17408989.2021.1932784