

Teaching Strategies for Mental Health Education in Physical Education Classes

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Abstract: With the growing societal demand for the holistic development of students, physical education (PE) courses have increasingly become a vital platform for promoting both physical and mental well-being. This paper begins by defining the core concepts of physical education and mental health education, and systematically analyzes the key factors influencing students' mental health development. Drawing on psychological development theories and physical education pedagogy, it constructs a multidimensional and dynamic model for mental health education. Focusing on the systematic integration of teaching content, the diversification of instructional methods, and the establishment of scientific evaluation mechanisms, the study explores strategic approaches to the design of mental health education in PE classes. Special emphasis is placed on the transformation of the teacher's role, the mechanisms through which peer interactions enhance learning, and the practical impact of optimizing the learning environment on providing psychological support to students. The research aims to promote a more systematic, personalized, and scientific approach to mental health education in PE, enhance students' emotional regulation, self-efficacy, and social adaptability, and offer theoretical and practical insights for the development of school-based mental health education in the new era.

Keywords: Physical Education Curriculum; Mental Health Education; Teaching Strategies; Teacher Roles; Peer Interaction; Environmental Optimization

1. Introduction

Students' mental health is a fundamental component of their overall development. School-based physical education is not only responsible for fostering physical fitness but has also gradually become an essential vehicle for delivering mental health education. Currently, students face increasingly diverse and complex psychological challenges. PE courses demonstrate unique advantages in improving emotional regulation, enhancing psychological resilience, and fostering supportive social relationships. In-depth research into the theoretical foundations and practical strategies of mental health education within PE can enrich the curriculum and improve instructional quality, while also supporting the development of a healthy school culture. Given the positive impact of PE on students' mental and social adaptability, it is of great theoretical and practical significance to explore the systematic design and implementation pathways of related teaching strategies. Promoting the integrated and innovative development of physical and mental health education has become a critical direction in contemporary educational reform.

2. Theoretical Foundations of Culture and Mental Health Education in Physical Education Curriculum

2.1 Conceptual Definitions of Physical Education Curriculum and Mental Health Education

As a vital component of the school education system, the physical education (PE) curriculum undertakes the dual task of promoting students' physical and mental development. Its core lies not only in cultivating students' motor skills and physical fitness but also in regulating their psychological states and fostering socio-emotional development through physical activity. Within the PE curriculum, the connotation of mental health education includes the optimization of psychological functions, the cultivation of emotional regulation skills, and the enhancement of psychological adaptability, with a strong emphasis on the deep integration of physical exercise and psychological experience. The

physiological arousal induced during physical activity provides a biological foundation for emotional release and cognitive regulation, thereby promoting positive self-perception and the formation of healthy behavioral patterns. Through structured physical activities, the PE curriculum establishes a practical platform for psychological adjustment, making mental health education both concrete and systematic ^[1].

Furthermore, mental health education within the PE curriculum presents a multi-dimensional and integrative character, balancing the development of emotional, cognitive, and behavioral aspects of psychological structure. It goes beyond the simple delivery of psychological knowledge, serving instead as a process through which students explore and develop their own strategies for psychological regulation via physical practice. This process reflects the interaction between physiological functions and psychological mechanisms, such as the release of neurotransmitters triggered by exercise, emotional self-regulation, and social interaction experiences—critical junctures in shaping mental health. By deliberately designing physical activity scenarios and teaching tasks, the PE curriculum activates students' internal psychological resources, enhances their psychological resilience, self-efficacy, and social adaptability, and highlights the practical innovation and comprehensive value of mental health education.

2.2 Analysis of Key Factors in Students' Mental Health Development

The development of students' mental health involves a complex system of multiple levels and influencing factors. Among them, emotional regulation ability is a central element and a key indicator of an individual's level of psychological adaptation. Effective emotional management enables students to recognize, understand, and adjust their emotional responses, thereby improving their psychological resilience when facing stress and setbacks. Additionally, self-awareness directly affects an individual's capacity to perceive and control their psychological state, facilitating introspection and self-reflection, and providing cognitive support for psychological adjustment. The quality of interpersonal relationships in the social environment—especially teacher-student interactions and peer support—forms the environmental foundation for students' psychological development, enhancing their sense of belonging and security, which contributes to psychological stability.

From a physiological and psychological interaction perspective, physical fitness serves as a crucial biological basis for mental health, positively affecting neural function regulation and endocrine balance. Exercise-induced neurotransmitter and endorphin release helps alleviate anxiety and depressive symptoms and improves cognitive functioning. Psychological resilience—the ability to adapt to adversity—can be developed through challenging tasks and teamwork in physical activities, thereby strengthening students' capacity to cope with complex environments. A comprehensive scientific analysis of these key elements facilitates the development of highly targeted and personalized mental health education strategies, offering both theoretical support and practical guidance for integrating mental health education into the PE curriculum.

2.3 Construction of a Mental Health Education Model in the Physical Education Curriculum

The construction of a mental health education model within the PE curriculum must be based on the in-depth integration of psychological development theories and physical education teaching theories, resulting in a multidimensional and dynamically evolving system. This model centers on enhancing students' psychological competence and defines a clear set of objectives for mental health education, covering essential psychological dimensions such as emotional regulation, social skills, and self-efficacy. Course design focuses on organically combining the goals of mental health education with those of physical education, ensuring systematic and continuous implementation through scientifically integrated content and structured module design.

The diversification of teaching methods constitutes an essential part of the model. Experiential teaching, scenario-based simulations, and cooperative learning are incorporated into the instructional process to stimulate students' active participation and intrinsic motivation, thereby improving their practical application of psychological skills ^[2].

The model also reflects innovation in its assessment system, which combines dynamic, formative evaluations with multidimensional outcome assessments. This allows for real-time monitoring of students' psychological development and enhances the precision and relevance of teaching feedback. The model underscores the professional transformation of the teacher's role: teachers are not only instructors of motor skills but also facilitators of mental health promotion. Through systematic training,

teachers are equipped with the psychological literacy and instructional support skills necessary for effective mental health education.

In addition, the model pays attention to optimizing the teaching environment by creating a supportive and motivating classroom atmosphere, thus ensuring a strong foundation for students' psychological development. The multi-level and multidimensional characteristics of the model embody both the scientific nature and the innovative practices of mental health education in the PE curriculum, advancing the modernization of teaching concepts and methods.

3. Teaching Design Strategies for Mental Health Education in Physical Education Classes

3.1 Systematic Integration and Modular Design of Teaching Content

The design of teaching content must be closely aligned with the diverse needs of students' mental health development, aiming to construct a systematic knowledge structure that integrates theory with practice. Through modular design, mental health-related topics are scientifically divided into key components such as emotional regulation, self-efficacy, stress management, and social skills. This approach not only ensures a clear hierarchy of teaching content but also enables precise intervention targeting various dimensions of psychological competence. Each module is guided by explicit mental health objectives, combining physical training with psychological experience to promote comprehensive development of mental functions within specific physical activity contexts, thereby fostering both cognitive and emotional growth.

The modular design offers flexibility and adaptability, allowing for dynamic adjustment and optimization based on individual differences and developmental stages, thereby providing personalized support for diverse psychological needs. The teaching content system emphasizes the integration of physiological mechanisms and psychological processes, deepening students' understanding of how physical activity enhances mental health. Logical connections between modules enable the progressive realization of mental health education goals, transforming physical education from a singular skill-based training model into a multidimensional psychological support system and significantly enhancing the scientific, systematic, and practical value of instruction ^[3].

Moreover, the systematically integrated teaching content stresses a balance between theoretical foundations and practical application, encouraging students to internalize mental health theories as specific skills and behavioral patterns in physical activity. This design enriches the content of physical education and effectively grounds mental health education, providing solid support for the development of students' comprehensive physical and psychological competencies.

3.2 Diversified Teaching Methods and Adaptation to Individual Differences

Diversification of teaching methods is key to the effectiveness of mental health education and must fully consider students' individual psychological characteristics and diverse developmental needs by adopting flexible and innovative instructional strategies. Experiential learning, as a core method, enhances students' awareness and application of mental health skills through physical participation and situational simulation, promoting deep integration of emotional regulation and self-reflection. Cooperative learning and group interaction provide an authentic and challenging platform for the development of social skills, boosting students' intrinsic motivation and sense of team belonging. This approach overcomes the limitations of traditional skill-focused physical education and facilitates multidimensional intervention in mental health education.

To address individual differences, the design of teaching methods emphasizes personalized adaptation by adjusting the pace, difficulty, and content of activities in accordance with students' psychological traits, learning styles, and developmental stages. Teachers should flexibly employ diverse strategies such as guided discussions, emotional regulation training, role-playing, and situational guidance to stimulate students' self-efficacy and psychological resilience, encouraging continuous progress along their path of psychological growth. This integration of diversified and individualized methods reflects a respect for students' agency and a dual focus on the scientific and humanistic aspects of mental health education.

Furthermore, innovation in teaching methods is also reflected in interdisciplinary integration and technological support. Drawing on theories from psychology, pedagogy, and related disciplines, and incorporating modern technologies such as virtual reality scenarios and psychological assessment

software, enhances interactivity and experiential depth. This creates a rich and dynamic learning environment that reinforces the effectiveness and lasting impact of mental health education.

3.3 Scientific Construction of Evaluation Mechanisms and Optimization of Feedback

A scientific and systematic evaluation mechanism is a core component in ensuring the quality and effectiveness of mental health education within physical education classes. Its design should integrate both formative and summative assessments. Formative evaluation focuses on dynamically tracking students' psychological states and behavioral performance through diverse tools such as self-report questionnaires, peer feedback, teacher observation, and psychological measurements. These tools allow for comprehensive and real-time monitoring of students' psychological development, ensuring effective supervision and timely adjustment of the teaching process. Summative evaluation, on the other hand, emphasizes the achievement of teaching objectives by combining quantitative indicators and qualitative analysis to assess improvements in students' emotional regulation, social skills, and psychological adaptability, thereby providing accurate evidence of teaching outcomes ^[4].

The optimization of feedback mechanisms highlights timely analysis and intervention based on assessment data, building a closed-loop feedback system to support the dynamic adjustment and continuous improvement of teaching strategies. By regularly summarizing and analyzing evaluation results, teachers can identify strengths and shortcomings in the instructional process and make targeted optimizations to content and methodology, thereby maximizing individualized support. In addition, the inclusion of student self-feedback mechanisms promotes internalization of psychological awareness and the development of self-regulation skills, enhancing students' engagement and sense of responsibility.

Multidimensional and dynamic evaluation and feedback strategies not only improve instructional precision and effectiveness but also provide strong support for the sustained advancement of mental health education in physical education classes. This mechanism embodies the innovation and progressiveness of modern educational assessment principles, lays a scientific foundation for comprehensive improvement in students' psychological quality, and drives physical education toward higher quality, greater individualization, and continuous development.

4. Interactive and Support Strategies for Promoting Students' Mental Health in Physical Education Classes

4.1 Transformation of Teachers' Roles and Enhancement of Psychological Support Competence

With the continuous advancement of educational concepts, the role of physical education (PE) teachers is undergoing a significant shift—from being mere transmitters of skills to becoming facilitators of mental health. This transformation reflects the diversified and integrated development trend of physical education functions. Modern PE teachers are expected not only to possess solid motor skills and professional knowledge but also to have a systematic understanding of mental health theories and practical techniques. They should be capable of keenly identifying students' psychological needs and providing timely and effective emotional support and positive psychological guidance. The enhancement of teachers' psychological support competence encompasses various aspects, including emotional recognition, effective communication, psychological counseling, and crisis intervention. This enables teachers to sensitively detect psychological changes in students during daily teaching, and to create a safe, trusting, and inclusive classroom environment, thereby promoting the coordinated development of students' physical and mental well-being ^[5].

Furthermore, the deepening of teachers' roles is also reflected in their function as guides and motivators for students' psychological growth. Through positive role modeling and constructive feedback, teachers can stimulate students' self-regulation abilities. The conscious integration of mental health concepts and strategies into teaching design and implementation helps establish a psychologically safe and supportive classroom atmosphere, enhances students' sense of self-efficacy and belonging, and facilitates the development and accumulation of psychological resources. Meanwhile, continued participation in systematic mental health training and professional development helps teachers maintain professional sensitivity and practical effectiveness, while advancing the scientific, systematic, and standardized development of mental health education in PE curricula. The comprehensive improvement of teachers' psychological support competence not only enriches the content and depth of physical education but also serves as an important safeguard for enhancing

students' overall psychological quality, embodying the educational value and social responsibility of contemporary PE.

4.2 Facilitation Mechanism of Peer Interaction in Mental Health Education

As a core component of students' social support systems, peer relationships play an irreplaceably positive role in PE classes. Active peer interaction not only strengthens students' sense of social belonging and identity but also significantly enhances their emotional expression and psychological adjustment abilities. Through teamwork, competitive games, and cooperative tasks, students develop communication skills, conflict management, and empathy in real social scenarios, forming positive interaction patterns and healthy interpersonal networks. This peer interaction mechanism provides a realistic and effective social support environment for mental health education, allowing students to feel the power of group support during physical activity, thus reinforcing the development of psychological adaptability resources^[6].

The positive influence of peer interaction extends beyond emotional aspects and operates through both cognitive and behavioral pathways. According to group dynamics and social identity theory, students acquire effective psychological regulation strategies and emotional management skills through observation, imitation, and internalization of social norms. The cultivation of a supportive peer culture and the establishment of a positive group environment contribute to the achievement of mental health education goals and help build a social ecosystem that fosters individual psychological growth. Purposefully guiding and optimizing peer interaction through teaching design—such as organizing targeted team-building activities and emotional regulation exercises—can help construct a supportive peer network and deepen the social function and educational effectiveness of mental health education.

Moreover, promoting diverse peer relationships with a focus on inclusivity and diversity can help students expand their social circles, enhance cross-cultural understanding and emotional empathy, and improve overall psychological resilience. Through the peer support mechanism, mental health education in PE classes can achieve deeper and more lasting social impacts.

4.3 Environmental Optimization and Classroom Atmosphere Building

As a crucial external factor influencing students' psychological states and learning outcomes, the optimization of the teaching environment is essential to the effectiveness of mental health education in PE classes. The classroom environment includes not only the safety, comfort, and functional arrangement of the physical space but also the quality of the emotional atmosphere and interpersonal relationships. A supportive and inclusive atmosphere can stimulate students' participation, alleviate anxiety and stress, and promote psychological adjustment and the accumulation of mental resources. Reasonable spatial layouts, scientifically designed sports facilities, and motivational visual design collectively contribute to a safe, open, and vibrant learning environment.

The construction of a positive classroom atmosphere focuses on enhancing students' psychological sense of security and social support. By using motivational language, role modeling, and emotional guidance, teachers help build a culture of respect and cooperation, facilitating students' emotional expression and open communication, and enhancing group cohesion and a sense of belonging. Environmental optimization should also include reducing distractions such as noise and poor lighting, thereby promoting effective interactions and emotional resonance between teachers and peers, and forming an ecosystem that supports mental health. Systematic design should integrate the physical environment with mental health goals, enhancing the functionality and humanistic care of the teaching space to maximize students' physical and mental potential and improve the effectiveness of mental health education.

Additionally, environmental optimization must meet the personalized needs of different students, creating a fair and friendly educational atmosphere that provides strong support for students' holistic development.

5. Conclusion

Based on psychological development and physical education theories, this paper constructs a systematic and dynamic model for mental health education in PE classes. It proposes teaching design strategies that encompass content integration, methodological diversity, and scientific assessment, and

emphasizes the transformative role of teachers, the peer support mechanism, and the optimization of the classroom environment in promoting students' mental health. Future research could further deepen the personalized application of the model, explore interdisciplinary teaching approaches, strengthen the auxiliary function of technological tools in mental health education, and focus on the differentiated expression of mental health needs in multicultural contexts. These efforts would advance the continuous innovation and practical upgrading of mental health education in PE classes and support students' holistic and healthy development.

References

- [1] Gao Yucai, Liang Luying, Wang Tongxin, et al. *Reflections and Prospects: An Exploration of the Development Path of School Physical Education under the Vision of "Mental Health" in Health Education Based on the New Curriculum Standards* [C] // Chinese Society of Sports Science. *Abstract Collection of the 13th National Sports Science Congress — Thematic Reports (School PE Sub-Forum)*. School of Physical Education, Shandong Normal University; Faculty of Education, Shandong Normal University, 2023: 1848–1850.
- [2] Zhang Qing, Xiao Xiuchun. *A Study on the Integration of Physical Education and Mental Health Education in China under the Background of "Education through Physical Activity"* [C] // Chinese Society of Sports Science. *Abstract Collection of the 13th National Sports Science Congress — Thematic Reports (School PE Sub-Forum)*. Dujiangyan No. 81 Juyuan High School, 2023: 661–663.
- [3] Zhu Juanxian. *The Impact of Extracurricular Physical Activities on Students' Mental Health under the "Double Reduction" Policy* [C] // International Academician Working Committee of China International Science and Technology Promotion Association. *Proceedings of the 2023 Academic Forum on Curriculum Education Exploration (Volume I)*. Yushui No. 4 Primary School, Xinyu City, Jiangxi Province, 2023: 557–559.
- [4] Li Jing. *Investing Emotion and Strengthening Teachers' Methods for Implementing Health Education — A Brief Analysis of the Application of Mental Health Education in PE Classes* [J]. *Physical Education Teaching*, 2023, (S1): 201.
- [5] Wang Jing, Dai Bin, Gou Tingting. *Tutorial on Physical Education and Health in Vocational Colleges* [M]. Chongqing University Press: 2022-09-240.
- [6] Yang Lijian. *On Strengthening the Psychological Quality of Students in Junior High School PE Teaching* [J]. *Sporting Goods and Technology*, 2020, (05): 127–128.