

Path Exploration of Integrating Physical Education and Sports Training to Promote Teenagers' Mental Health

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Abstract: At present, teenagers' mental health problems occur frequently in China. Academic pressure, social anxiety and other problems significantly affect their growth. As an educational carrier with the functions of physical exercise and psychological regulation, the separation of teaching and sports training limits the supporting role of sports in the mental health of teenagers. Through literature analysis, logical sorting and other methods, this paper explores the path of the integration of the two to promote teenagers' mental health from the three dimensions of theoretical basis, practical needs and practical basis, and puts forward supporting safeguard measures. The study found that integration can alleviate negative emotions and improve self-awareness by meeting adolescents' needs of autonomy, competence and belonging; It is necessary to promote the integration from the aspects of curriculum design, teaching methods and evaluation system, and strengthen the coordination of teachers, home and school and resource guarantee. The research provides a practical reference for school sports to serve teenagers' mental health in the new era.

Keywords: Adolescent Mental Health, Physical Education, Sports Training, Integration Path, School Physical Education.

1. Introduction

The adolescent stage is a critical period for the development of mental health. In recent years, the incidence of psychological problems such as depression and anxiety among adolescents in China has continued to rise. The 2022 blue book on national depression shows that 50% of adolescents under the age of 18 with depression are students in school, and academic pressure accounts for 54.66% of the causes of psychological problems. Lack of social ability has also become an important factor. The opinions on Comprehensively Strengthening and improving school physical education in the new era clearly puts forward that school physical education should "play the comprehensive function of educating people". However, at present, in most schools, physical education teaching focuses on the popularization of basic knowledge, and sports training focuses on the improvement of competitive skills. The two lack coordination, which makes it difficult to give full play to the role of promoting mental health. For example, the neglect of individualized psychological guidance in physical education teaching and the excessive emphasis on performance and the neglect of emotional regulation in sports training lead to the difficulty for teenagers to obtain psychological support in sports activities [1]. Based on this, it is of great practical significance to explore the integration path of physical education and sports training, and organically combine physical exercise and psychological counseling, which is also in line with the educational concept of "health first" in school sports.

2. Theoretical Basis for the Integration of Physical Education and Sports Training to Promote Teenagers' Mental Health

The integration of physical education teaching and sports training needs to rely on the classic theories of psychology and physical education to ensure the scientificity of path

design. From the perspective of psychology, self-determination theory points out that when individuals meet the three basic psychological needs of autonomy, competence and belonging in activities, their mental health level will be significantly improved. Physical education can set up diversified sports (such as ball games and gymnastics) to let teenagers choose the content they are interested in and meet their independent needs; Sports training helps teenagers gradually improve their sports ability and get a sense of success through hierarchical goal setting (such as reaching the standard of basic skills and advanced challenges). At the same time, both of them take collective activities as important forms, such as group cooperation practice in teaching and team confrontation in training, which can promote teenagers' social interaction, meet their belonging needs, and reduce loneliness and anxiety [2].

From the perspective of sports science, the "holistic sports view" emphasizes that sports should take into account physical development, skill mastery and psychological cultivation. This theory provides a direction for the integration of the two. Traditional sports teaching focuses on "teaching", while sports training focuses on "refining". After integration, a closed loop of "teaching practice application" can be formed: teaching basic sports knowledge, training to strengthen the ability to apply skills, and integrating psychological guidance simultaneously in the process, such as guiding young people to relieve fatigue and anxiety through breathing regulation in long-distance training, and cultivating the ability to resist pressure through tactical cooperation in basketball teaching. In addition, the theory of "psychological capital" in positive psychology also shows that [3], successful experiences in sports activities (such as completing a long jump breakthrough and winning a team game) can accumulate psychological capital such as teenagers' self-confidence and resilience, and the integration of teaching and training can create more such experiences and lay the foundation for mental health.

3. The Realistic Demand for the Integration of Physical Education Teaching and Sports Training

The realistic dilemma of teenagers' mental health problems highlights the urgency of the integration of the two. On the one hand, at present, teenagers generally have the dual problems of "lack of exercise" and "psychological stress overload": Although the Ministry of education has proposed to achieve the goal that primary and secondary school students' comprehensive physical activity time should not be less than 2 hours a day by 2027, the current actual compliance rate is still less than 50%, and the emotional problems caused by academic pressure account for more than 54.66% of teenagers' psychological problems [4]. The integration of physical education and sports training can provide a release channel for psychological pressure while improving physical quality by extending the effective exercise time and optimizing the exercise content. For example, the combination of break exercises and interesting training, and the substitution of traditional broadcast exercises with rope skipping relay, obstacle running and other forms, not only meet the popularization requirements of teaching, but also have the fun of training, which can attract young people to actively participate in and alleviate learning fatigue.

On the other hand, the separation of traditional sports teaching and sports training has obvious limitations. In physical education, the class teaching system is difficult to pay attention to individual psychological differences. Some teenagers with weak sports ability avoid participation because of "fear of making mistakes", which aggravates their inferiority complex; Sports training is mostly concentrated on a small number of students with competitive potential, ignoring the psychological needs of most teenagers, and even causing students' fear of difficulties due to excessive emphasis on performance. After integration, this separation can be broken: at the teaching stage, "full participation" should be taken into account, and basic training should be used to help teenagers build sports confidence; In the training stage, the "hierarchical participation" is implemented, and the basic group (such as mastering basketball dribble) and the improvement group (such as practicing shooting skills) are set up, so that teenagers with different abilities can obtain a sense of achievement [5]. In addition, in the face of teenagers' social anxiety, the integrated collective sports scenes (such as team cooperation training in football teaching) can create more social opportunities to help teenagers learn communication skills and improve interpersonal relationships.

4. The Practical Basis of the Integration of Physical Education Teaching and Sports Training

The reform practice of school physical education in China has provided feasible experience for the integration of the two. As one of the first pilot units of sports to promote the physical and mental health of teenagers in China, Suzhou City, Anhui Province, has built an innovative mode of "integration of body and mind". Sucheng No.1 junior high school organically combines physical education with mental health counseling, and sets up special training links such as physical and mental adjustment of VR spinning bike and fighting emotion catharsis in physical education classes. It carries out "goal sharing" before the course and organizes "experience

exchange" after the course to guide students to establish the relationship between sports and mental adjustment. According to the data of Suzhou minors' mental health counseling center where the school is located, the anxiety factor score of students participating in such integrated courses decreased by 21% on average, and the social adaptability score increased by 27%.

Policy level support also provides guarantee for integration. In 2020, the opinions on deepening the integration of sports and education to promote the healthy development of teenagers proposed to "promote the coordinated development of teenagers' cultural learning and physical exercise", and clearly required schools to combine physical education with extracurricular training and competition [6]. Under the guidance of this policy, Suzhou dawn primary school has implemented the "teaching training competition" integration mode of "city team school run". Professional coaches and physical education teachers have physical education classes together, teach basic table tennis skills in teaching, organize class group games in training, guide students to correctly view victory and defeat in the process, and cultivate their ability to resist setbacks. This mode has enabled more than 80% of the students in the school to contact and participate in characteristic sports, and the incidence of psychological anxiety has decreased by 18% compared with the previous period. In addition, the physical education major in Colleges and universities is also adjusting the training plan and adding the course of "sports psychological counseling" to reserve the ability for future physical education teachers to carry out integrated teaching and consolidate the practical foundation from the teacher side.

5. The Specific Path of Integrating Physical Education and Sports Training to Promote Teenagers' Mental Health

5.1. Integration of Curriculum Design: Building a "Basic+Personalized" Content System

Curriculum design should take into account the popularity of physical education and the pertinence of sports training. At the basic level, the "physical basis" in sports training is integrated into teaching. For example, in junior high school sports teaching, endurance training (such as 800 meter race) is decomposed into "breathing rhythm teaching - segmented training - Standard Test", which not only meets the requirements of the syllabus, but also improves students' physical ability and sports competence through training; At the personalized level, training modules are set up according to students' psychological needs. For example, for students with social anxiety, volleyball, tug of war and other "team sports training courses" are set up to help them improve their social skills through tactical cooperation in teaching and practical practice in training; For students with inferiority complex, set up rope skipping, martial arts and other "advanced skills training courses", from the teaching of basic movements in teaching to the achievement of hierarchical goals in training (such as jumping from 50 to 100 times in a row), and gradually accumulate self-confidence [7]. The "emotion regulation movement unit" added in the gymnastics teaching of Sucheng No.1 junior high school effectively alleviates the students' classroom anxiety through the

combination of basic movement teaching and personalized psychological adjustment training.

5.2. Integration of Teaching Methods: Adopt the Dual Track Mode of "Guidance+Experience"

The "experiential" method of sports training is integrated into teaching, while retaining the "guiding" advantage of teaching. For example, in football teaching, we first explain the rules and basic movements through multimedia (teaching link), and then organize the training of "five person small competition" (training link). In the competition, teachers do not simply focus on the technical play, but guide students to observe their emotions - "how do you adjust your mentality when the team is backward?" "where do you feel happy when you pass the ball successfully?" help students perceive the relationship between sports and psychology through instant questions [8]; In gymnastics teaching, the training process of "demonstration imitation error correction consolidation" is adopted. At the same time, psychological encouragement is integrated into each link. For example, after the students complete the action, the teacher not only comments on the technology, but also affirms their "courage to overcome tension" and strengthens the positive psychological experience. In addition, the "sports psychological diary" can be introduced to allow students to record the psychological changes after each teaching and training. Teachers regularly review and give personalized guidance. Through this way, Sucheng No.1 junior high school has achieved the accuracy of psychological guidance, enabling 82% of the participating students to actively use sports methods to adjust their emotions.

5.3. Integration of Evaluation System: Establish a Comprehensive Evaluation Standard of "Process+Psychology"

Break the traditional evaluation method with "skills reaching the standard" as the core, and incorporate psychological development into the evaluation system. The evaluation content is divided into three parts: first, the evaluation of sports ability (such as running speed, ball skills), retaining the basic evaluation indicators of teaching and training; The second is the evaluation of psychological participation, such as "whether to actively participate in group training" and "the degree of persistence in the face of difficulties", through teacher observation and peer review records; The third is the evaluation of psychological growth. Through the comparison of pre-test and post test (such as anxiety scale and self-confidence scale), and the analysis of students' psychological diary, the changes of their mental health are evaluated. The evaluation method adopts the "grade+comment" system to avoid the pressure caused by score competition. For example, for students with weak sports ability but active participation, the comment can be written as "you actively pass the ball in team training, showing a good sense of cooperation. If you continue to maintain this enthusiasm, your self-confidence will continue to improve". Through the evaluation system, dawn primary school has increased the enthusiasm of students' sports participation by 40%, and significantly improved their self-awareness score.

6. Safeguard Measures for the Integration of Physical Education Teaching and Sports Training

6.1. Strengthen Teacher Collaboration: Build a "Physical Education Teacher+Psychological Teacher" Cooperation Mechanism

Teachers are the core support for the implementation of integration. Schools need to strengthen the psychological knowledge training of physical education teachers, incorporate "adolescent mental health education" into the continuing education of physical education teachers, and improve their ability to identify psychological problems and carry out simple psychological guidance in teaching and training through special lectures, case studies and other forms; At the same time, the cooperative working mechanism between physical education teachers and psychological teachers should be established. For example, the "integration course preparation meeting" should be held every week, and psychological teachers should provide professional guidance for physical education teachers. In the design of long-distance running training class, psychological teachers can suggest adding "explanation of emotion regulation skills"; The physical education teacher fed back the students' psychological performance in sports to the psychological teacher, such as "a student frequently retreats in team training, may have social fear", which is convenient for the psychological teacher to carry out targeted intervention [9]. Suzhou minors' mental health counseling center has significantly improved the professionalism of physical education teachers' psychological guidance by inviting sports psychology experts to the school regularly for guidance.

6.2. Promote Home School Collaboration: Form a Linkage Mode of "School Training+Family Participation"

Family participation can extend the effect of integration. Schools can popularize the knowledge of "sports promote mental health" through "parents' class" and guide parents to cooperate in carrying out simple sports training at home. For example, the "happy parent-child running" activity implemented by Beijing Shunyi District No. 11 middle school allows parents to participate in their children's sports process through the combination of group running in school and parent-child running outside school. It not only continues the school's sports habits, but also improves the family atmosphere through parent-child interaction, alleviates teenagers' psychological pressure, and increases the satisfaction of students' family communication by 35%; "Sports open days" are regularly held to invite parents to watch students' integrated courses (such as basketball games combining teaching and training), so that parents can intuitively feel the positive impact of sports on children's psychological state and enhance their support for integrated education. In addition, the school can establish a "home school communication manual" to record students' sports performance and psychological changes in the school, and parents can feed back the family sports situation to form a joint force of education.

6.3. Improve Resource Guarantee: Optimize the Supply of "Site+Equipment+Time"

Sufficient resources are the basis of integration implementation. The school needs to reasonably plan the sports ground and divide the "teaching area" (such as track and field field, gymnastics room) and the "training area" (such as ball games and physical fitness training corner). Sucheng No.1 junior high school has set up a "body mind integration training room" through the reconstruction of the venues to ensure the orderly development of teaching and psychological adjustment training [10]; Supplement equipment according to the needs of integrated courses, such as "emotional cards" for psychological guidance and sports equipment with different difficulties for layered training (such as dumbbells with different weights and jump boxes with different heights); Scientifically arrange the time, combine the physical education teaching hours with the after-school service time, and ensure at least 1 hour of integration activities every day (such as 40 minutes of teaching+20 minutes of targeted training), so as to avoid the integration becoming a mere formality due to lack of time. In addition, the school can seek financial support from the local education department for venue renovation, equipment renewal and teacher training. Suzhou City has provided 225 schools with sports characteristics with equipment for integrated teaching through government funding support.

7. Conclusion

The integration of physical education and sports training provides a feasible way to promote teenagers' mental health. From the theoretical perspective, the integration of the two is in line with the scientific theories such as the self-determination theory and the overall sports view, and can meet the psychological needs of teenagers' autonomy, competence and belonging; From the perspective of reality, integration can solve the double dilemma of the current lack of sports and psychological pressure overload of teenagers, and make up for the limitations of traditional physical education; From a practical perspective, the reform experience and relevant policy support of pilot areas such as Suzhou, Anhui, have accumulated a mature paradigm for integration. Through the integration of curriculum design, teaching methods and evaluation system, combined with the safeguard measures of teachers, family and school, and resources, the physical and mental co education function of sports can be brought into full play to help teenagers relieve negative emotions, improve self-awareness, and improve social skills.

There are still limitations in this study, such as not involving the differences of fusion paths of adolescents of different ages (such as primary school students and high school students), and the lack of long-term tracking data to verify the fusion effect. In the future, we can further subdivide the research objects and explore more accurate integration strategies combined with empirical research; At the same time, it can promote the collaboration of schools, families and society to build a "sports psychology" integrated youth health support system, so that the integration mode can be implemented in a wider range to protect the mental health of teenagers.

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