

group used routine training. Analyze and compare the remission of cognitive impairment between the two groups before and after training. Mini-mental State Examination (MMSE) was used to evaluate before and after teaching (3 months), including memory, attention, comprehension and time orientation. The total score was 0-30, and the score was proportional to the ability. Relevant data are calculated and counted by Excel software and SPSS20.0 software.

**Results:** After training, the two groups were compared within the group, and both groups were significantly improved compared with that before training ( $P < 0.05$ ). There was no significant difference between the two groups before training ( $P > 0.05$ ), and the score of the experimental group was significantly higher than that of the control group after training ( $P < 0.05$ ). See Table 1.

**Table 1.** Comparison of MMSE scores of mathematics teachers before and after training

Scoring method	Teaching time	Control group	Experience group
MMSE	Before teaching	12.6	11.6
	After teaching	20.6	22.8

**Conclusions:** With the rapid development and wide application of mathematics and the high penetration of mathematics, mathematics education has been paid more and more attention. The Ministry of education has repeatedly stressed the need to vigorously develop secondary vocational schools and their education, including mathematics education. Mathematics education in secondary vocational schools also undertakes the obligation of imparting practical knowledge and skills to students and paying attention to the role of mathematics as a tool, which is also an important goal or value of our education. The results of this study showed that the two groups were significantly improved after training ( $P < 0.05$ ). There was no significant difference between the two groups before training ( $P > 0.05$ ), and the score of the experimental group was significantly higher than that of the control group after training ( $P < 0.05$ ). It shows that our country should pay attention to the improvement of the quality of mathematics teachers in secondary vocational schools. Pay attention to the training of secondary vocational students' interest and self-confidence in mathematics. Pay attention to the reform of mathematics teaching materials in secondary vocational schools.

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## EXPLORATION ON THE INFILTRATION PATH OF MENTAL HEALTH EDUCATION IN COLLEGE PHYSICAL EDUCATION

Zhihao Cui & Zhiang Wang\*

*Faculty of Physical Education, Pingdingshan University, Pingdingshan 467000, China*

**Background:** With the gradual increase of life pressure, people's physical and mental health is increasingly threatened. Strengthening physical education teaching has gradually received active attention from all walks of life, and realizing the development of students' physical and mental health has also become an important subject for the innovation of physical education in colleges and universities. At present, the status and role of mental health education in schools are becoming more and more prominent, but some colleges and universities are limited by human, material, financial and other practical factors, which affect the smooth development of mental health education and teaching. Under the people-oriented concept of modern physical education, the goal of physical education in colleges and universities is gradually changing to carry forward the meaning of human life and value. Colleges and universities are committed to shaping students' ideal personality, following the law of physical and mental development, aiming to establish students' independent consciousness and cultivate students' innovation and creativity, fully tap and make use of the resource advantages of college physical mental health, and organically integrate mental health education and physical education, these measures have very important practical significance. The significance of mental health education in college physical education mainly includes three aspects. The first is to lay a foundation for students' mental health. Physical exercise can not only promote physical function and accelerate blood circulation, but also enable people's body organs to have sufficient nutrients and oxygen. In addition, a good nervous and functional system is both the physiological basis for the development of mental health and the prerequisite for ensuring mental health. Second, it is conducive to adjusting emotions and eliminating inner obstacles. Moderate physical exercise can not only weaken students' psychological barriers, but also vent their negative emotions. At present, many scholars have pointed out that exercise can effectively improve the psychological state and have a good prevention

and control effect on mental diseases. Third, it is conducive to the cultivation of psychological quality and will quality. This process can make students deeply experience the true meaning and value of life, cultivate students' good pressure resistance, self-control and rule awareness, and help students establish excellent psychological quality.

**Objective:** With the rapid development of the global economy, the social demand for talents is becoming more and more diversified and strict, and more and more people gradually have different mental health problems due to the pressure of all aspects of society. In today's society, the demand for talents in all walks of life is growing, and the requirements are also getting higher and higher. It requires not only excellent professional knowledge and skills, but also healthy physical and psychological quality. As the future of the motherland and the foundation of social talents, college students should not only have a healthy physique, but also have a healthy psychological state. Accordingly, this paper analyzes the penetration of mental health education in college physical education, and studies the improvement of students' mental health according to the penetration path.

**Subjects and methods:** 200 students with negative psychological emotions in many colleges and universities in a city were selected as the research objects, and the psychological Symptom Checklist 90 (SCL-90) was used to investigate the mental health level of college students. According to the statistical results of the questionnaire, the respondents were divided into normal group, mild group, moderate group and severe group. In recent years, SCL-90 has been widely used in the investigation of mental health problems and clinical diagnosis in China, with high reliability and validity. Relevant data are calculated and counted by Excel software and SPSS20.0 software.

**Results:** With the decline of physical condition or mental health level, except for the score of sports ability cognition, the score of the other four aspects decreased gradually. This shows that the higher the college students' cognitive structure of their own body, the better their physical condition and the higher their mental health level. See Table 1.

**Table 1.** Analysis of the influence of body cognitive structure on college students' mental health

	Mental health group	Mild disorder group	Moderate disorder group	Severe disorder group
Physical self-worth	16.1±2.39	15.2±2.08	14.5±3.24	14.2±5.71
Athletic ability	14.2±2.17	15.8±1.55	16.3±2.24	17.5±3.52
Physical condition	15.8±4.19	14.6±2.34	14.1±2.41	13.8±4.41
Physical attractiveness	16.4±1.51	15.8±2.59	15.1±2.48	14.8±3.54
Physical quality	16.7±2.94	15.6±1.42	14.9±2.71	14.2±4.12

**Conclusions:** College students, as the foundation of future talents in China, have a healthy physique and a good mentality, which plays an important role in the future development of the country. At present, college students in China generally have certain mental health problems, and college physical education teaching activities have a very significant impact on the development of students' mental health, especially sports have a positive impact on students' mental health. Therefore, in the process of physical education teaching in colleges and universities, teachers should effectively guide and play an active role in students' mental health education. Teachers can choose different contents, methods and means to carry out students' mental health education purposefully, so as to achieve the dual development of students' physical and mental health.

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## THE INFLUENCE OF THE COORDINATED DEVELOPMENT MECHANISM OF DIGITAL CULTURE INDUSTRY IN TOURISM ON ALLEVIATING TOURISTS' PSYCHOLOGICAL ANXIETY

Puhong Qin

*Shanghai Institute of Visual Arts, Shanghai 201620, China*

**Background:** Anxiety is a kind of abnormal psychological bad mood, which is mainly caused by excessive worry about the future, fate, life safety and other irritability, including anxiety, panic, tension, anxiety and other psychological manifestations. Medical psychologists believe that anxiety usually refers to people's