tourists to get close to nature and experience local characteristic culture and characteristic ecological landscape. Rural tourism refers to the characteristic tourism industry developed by using local ecological resources and the psychology of urban residents yearning for local life. It is not only an important means of poverty alleviation in rural areas, but also an effective way to improve the income of rural residents. Therefore, the development of tourism economy can not only improve the level of China's national economy, but also improve the income level of residents in rural areas. At present, the development time of China's tourism industry is still short, so there are still many problems in the development process. For example, the work enthusiasm of relevant staff in the tourism industry is not high, the attitude towards tourists is not friendly enough, the communication is not in place, and the management system of scenic spots is not in place. These problems have greatly hindered the development of tourism economy. Applying industrial and organizational psychology to the tourism industry, improving the enthusiasm of staff and cultivating the communication skills between staff and tourists can effectively improve the tourism experience of tourists and promote the development of tourism industry and tourism economy.

**Objective:** To apply industrial and organizational psychology to the tourism industry, improve the enthusiasm of staff, cultivate the communication skills between staff and tourists, improve the tourism experience of tourists, and promote the development of tourism industry and tourism economy.

Research objects and methods: 500 tourists were selected as the research objects by stratified cluster sampling. Among the 500 tourists, 207 were male and 293 were female. According to industrial and organizational psychology and the current situation of tourism industry, a questionnaire is compiled. There are 20 items in the questionnaire. The score of each item is 1 - 5, and the full score is 100. The higher the score, the more satisfied tourists are with the tourism experience.

**Research design:** According to industrial and organizational psychology and the current situation of tourism, a questionnaire was compiled. The questionnaire includes questions based on industrial and organizational psychology, tourism model and traditional tourism model. Each tourism mode has 20 items. The score of each item is 1 - 5, and the full score is 100. The higher the score, the more satisfied the tourists are with the tourism experience. Collect the questionnaire, count and analyze the data.

Methods: The corresponding data were processed by software SPSS 17.0.

**Results:** The questionnaire survey results show that tourists' satisfaction with the tourism model based on industrial and organizational psychology is significantly higher than that of the traditional tourism model (P < 0.05), as shown in Table 1.

Table 1. Tourist ratings

Project —	Proportion of people (%)			
	20-40	41-60	61-80	81-100
Tourism model based on industrial and Organizational Psychology	15.4	22.3	48.6	13.7
Traditional tourism model	1.6	15.2	33.7	49.5
t	0.141	2.758	2.462	0.135
Р	0.001	0.035	0.032	0.003

Conclusions: At present, the development time of China's tourism industry is still short, so there are still many problems in the development process. These problems have greatly hindered the development of tourism economy. The research applies industrial and organizational psychology to the tourism industry, improves the enthusiasm of staff, cultivates the communication skills between staff and tourists, improves the tourism experience of tourists, and then promotes the development of tourism industry and tourism economy.

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## ANALYSIS ON THE OPTIMIZATION STRATEGY OF PHYSICAL EDUCATION CURRICULUM TO STUDENTS' MENTAL HEALTH EDUCATION IN HIGHER VOCATIONAL COLLEGES

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Background: Higher Vocational Colleges continuously cultivate a large number of high-quality and practical talents for the society. With the development of society and economy, society has higher requirements for talents, which not only requires talents to have rich theoretical knowledge and strong practical ability, but also requires talents to have high psychological quality and pressure resistance. Therefore, the psychological quality of higher vocational college students is also the focus of education. Excellent psychological quality can not only maintain the mental health level of higher vocational college students at a high level and avoid various psychological diseases, but also enable students to face various problems in life and learning more calmly, which is of great significance to students' learning and training. In recent years, the speed of social development has been accelerating, and the competition has begun to become more and more fierce. Students in higher vocational colleges should not only face the pressure of learning, but also face the pressure from life, employment, interpersonal communication, economy and so on. Under many pressures, college students in higher vocational colleges are prone to psychological problems, such as anxiety, depression and so on. If the anxiety of higher vocational college students is moderate, it can make students have a sense of crisis, and then help students concentrate and improve learning efficiency. However, if anxiety is excessive, it will affect students' mental health, lead to problems and obstacles in students' interpersonal communication and self-regulation ability, reduce students' psychological tolerance and anti-frustration ability, and then produce bad psychology such as inferiority complex, impulse, fear, cowardice and so on. In addition, excessive anxiety will also lead to the loss of learning motivation of higher vocational college students, and further lead to the increase of students' academic pressure, resulting in the loss of self-confidence, mental tension, insomnia, examination anxiety and other problems. Therefore, alleviating the anxiety of higher vocational college students and improving their mental health level are of great significance to students' study, life and future development.

Physical education curriculum is the main means to alleviate students' anxiety in higher vocational colleges. Through physical exercise, students' psychological quality can be improved, so that students can vent their accumulated emotions, and then improve students' physical and mental health. However, the traditional physical education curriculum in higher vocational colleges lacks attention to theoretical courses, and the practical teaching of physical education curriculum is not implemented in strict accordance with the requirements. Therefore, most students are not interested in physical education practice and only regard physical education as a course of relaxation and entertainment. Based on the above reasons, the traditional physical education curriculum in higher vocational colleges cannot play the function of improving students' mental health, so it needs to be improved and optimized. Based on the perspective of educational psychology, this paper puts forward the optimization strategy of physical education curriculum for students' mental health education in higher vocational colleges, hoping to give full play to the discipline advantages of physical education curriculum, alleviate students' anxiety and depression, improve students' mental health level, and then contribute to students' healthy development.

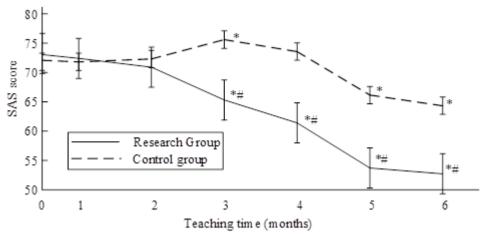
**Objective:** Based on the perspective of educational psychology, this paper puts forward the optimization strategy of physical education curriculum for students' mental health education in higher vocational colleges, hoping to give full play to the discipline advantages of physical education curriculum, improve students' physical quality, alleviate students' anxiety and depression, improve students' mental health level, and then contribute to students' healthy development.

Research objects and methods: 160 students were selected from a higher vocational college by stratified cluster sampling. Among the 160 students, 81 were male and 79 were female. The students came from different majors, aged 18 - 24 years old. Self-rating Anxiety Scale (SAS) was used to evaluate students' anxiety, Self-rating Depression Scale (SDS) was used to evaluate students' depression, and students' learning efficiency was evaluated according to their professional course scores.

**Study design:** 160 students were randomly divided into study group and control group, with 80 students in each group. For the students in the research group, the improved physical education teaching methods are adopted, including paying attention to the theoretical teaching of physical education, improving the teaching content, improving the teaching environment, changing the teaching methods according to the students' psychological status and so on. The students in the control group used the traditional teaching method. After 6 months of teaching, the SAS, SDS scores and student scores of the two groups were compared.

Methods: The corresponding data were processed and analyzed by software SPSS 17.0.

**Results:** After teaching, the SAS score and SDS score of the two groups decreased significantly (P < 0.05), while the academic achievement increased significantly (P < 0.05); The SAS, SDS scores and academic performance of the students in the study group were significantly better than those in the control group (P > 0.05). The SAS scores of the two groups of students are shown in Figure 1.



**Figure 1.** The degree of anxiety of the two groups of students.  ${}^*P < 0.05$  compared with that before teaching; # It means that compared with the Control group at the same time, P < 0.05

Conclusions: Under many pressures, college students in higher vocational colleges are prone to psychological problems, such as anxiety, depression and so on. Excessive anxiety will affect students' mental health, lead to problems and obstacles in students' interpersonal communication and self-regulation ability, reduce students' psychological tolerance and anti-frustration ability, and then produce bad psychology such as inferiority complex, impulse, fear, cowardice and so on. Physical education curriculum is the main means to alleviate students' anxiety in higher vocational colleges, but the traditional physical education curriculum cannot fully alleviate students' anxiety, so it needs to be improved. Based on educational psychology, this paper puts forward some strategies to improve the teaching mode of physical education, including paying attention to the theoretical teaching of physical education, improving the teaching content, improving the teaching environment, changing the teaching methods according to the students' psychological status and so on. The improved physical education curriculum can give play to the discipline advantages, improve students' physical quality, alleviate students' anxiety and depression, improve students' mental health level, and then contribute to students' healthy development.

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## RESEARCH ON THE REFORM AND INNOVATION OF HIGHER MATHEMATICS TEACHING FROM THE PERSPECTIVE OF EDUCATIONAL PSYCHOLOGY

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**Background:** Compared with primary mathematics and secondary mathematics, the objects and methods of higher mathematics are more complex and the difficulty of learning is relatively high. Generally speaking, the coverage of higher mathematics includes calculus, algebra, geometry and other disciplines. The contents include sequence, limit, calculus, spatial analytic set and linear algebra. Advanced mathematics is a basic subject that postgraduates of engineering, science and finance must master. The most prominent feature of higher mathematics is its high abstraction, strict logic and wide application. Therefore, mathematics is also a way of thinking logic. The process of learning mathematics is also a process of training and cultivating students' thinking logic. The progress of human science, technology, art and social level is inseparable from mathematics. Therefore, higher mathematics should be paid attention to in higher education.

As the basic education for the all-round development of national education, mathematics plays an important role in the development of education, economy and science and technology. At present, there are many problems in higher mathematics education, which cannot adapt to the development of the times, and the teaching mode is relatively backward. The problems in higher mathematics education are as follows: the teaching mode is relatively traditional and single, which cannot mobilize students' learning enthusiasm and initiative, resulting in low teaching quality and low students' interest in higher mathematics courses. In addition, the traditional teaching concept of higher students is relatively backward. In teaching, students are only allowed to learn formulas, concepts and other contents rigidly, rather than practical application. For various reasons, it is difficult for contemporary college students to adapt to the teaching form and content of higher mathematics, resulting in a very high proportion of make-up examination and re study.