

Study on the Internalization of Confucian Renxue Thought and The Core Values of Socialism” (No. 20BKS150).

* * * * *

A PSYCHOLOGICAL PERSPECTIVE ON THE IMPACT OF PHYSICAL EDUCATION ON STUDENTS’ PSYCHOLOGICAL DISORDERS IN HIGHER EDUCATION

Ruiying Zhang¹ & Dongmei Cong^{2*}

¹*Liaoning Institute of Science and Technology, Benxi 117004, China*

²*Shenyang Normal University, Shenyang 110034, China*

Background: As an important group in national construction, students’ overall development planning and mental health have an important impact. However, due to the limitations of their own cognitive level and the difficulty of psychological adjustment, it is difficult for students to rely on themselves to relieve their negative emotions and solve their psychological problems. Therefore, they often need to rely on the positive intervention of external environmental conditions to alleviate their psychological problems. However, due to the avoidance of psychological problems, college students mostly focus on their own psychological digestion when facing the changes and pressures of the surrounding environment, and parents are difficult to detect such subtle psychological changes. Therefore, psychologically sensitive students are vulnerable to influence and interference, making impulsive behaviors, causing psychological barriers and related psychological problems and negative emotions. At the same time, depression, fear, obsessive-compulsive anxiety, hypochondriacs, neurasthenia and other common negative emotions will also make them show a certain psychopathological state. Psychological disorder refers to various abnormal psychological processes and behavior patterns of individuals due to physiological, psychological or social reasons, resulting in actions that are difficult to conform to social norms. The most common symptoms of patients with psychological disorders are anxiety, fear and social anxiety. The different degrees of their etiology make the behavioral mechanisms they show different, mainly due to the lack of self-confidence and security of anxiety patients. The individual’s psychological barriers will make them have a large deviation in their thinking mode, and to a certain extent, they will be transformed into group psychological barriers. Research shows that sports can improve individual emotional state, enhance cognitive function, improve personality characteristics, eliminate psychological barriers and other aspects to achieve good results. Therefore, it is necessary to explore the alleviating effect of college physical education on students’ psychological barriers in order to achieve positive intervention on their psychological health.

Objective: The study uses a psychological perspective to explore the mechanisms of the impact of university physical education on students with psychological disorders, i.e. to help teachers develop multiple intervention strategies for students with psychological disorders when teaching physical education, i.e. to actively intervene in multiple aspects of students’ psychological characteristics, such as cognitive goals, skill goals and affective goals, knowledge and skill goals, process and method goals, affective attitude and values goals mental health goals, social adjustment goals, etc. The aim is to achieve positive interventions in all aspects of physical education, to reduce negative emotions and to improve the psychological condition of students on the basis of a good grasp of their psychological rules.

Subjects and methods: In traditional physical education designs, teachers focus more on physical fitness and other physical health goals, while neglecting the mental health and social adjustment of students, leaving students’ perceptions of physical education only superficial. The study used students suffering from psychological disorders in a university as research subjects, and firstly collected basic information on their psychological conditions before the test experiment began, and then invited them to participate in the physical education experiment. The study was randomly divided into a psychological intervention group and a teaching routine group. Both groups adopted the same teaching activities, except that the teachers in the psychological intervention group designed their teaching and set their teaching objectives on the basis of learning psychological theories and grasping the causes and manifestations of students’ psychological disorders, while the teaching routine group conducted the experiment under normal teaching activities. The experimental period was three weeks, and the improvement of the psychological disorders of the university students under different physical education teaching designs was compared and analysed with the help of the Eysenck Questionnaire (EPQ) during the experiment, and the relevant data were tallied using Excel software and SPSS20.0 software.

Results: Before and after teaching, EPQ was used to evaluate the improvement of students’ learning

psychological disorder. The four subscales of P, E, N and L respectively represent the four parts of the EPQ questionnaire, namely, psychosis, introversion, nervousness and concealment or lying. The results showed that the scores of E subscale in the psychological intervention group were significantly higher than those in the teaching routine group ($P < 0.05$), while the scores of P, N and L subscale were significantly lower than those in the teaching routine group ($P < 0.05$).

Table 1. Comparison of EPQ scores between the two groups after intervention

Project	Psychological intervention group	Teaching routine group	<i>t</i>	<i>P</i>
P (Psychosis)	4.52±2.56	5.87±2.94	-7.582	<0.05
E (Inward and outward)	13.48±3.78	9.74±4.53	8.316	<0.05
N (Neurotic)	9.13±4.92	11.37±4.15	-6.105	<0.05
L (Cover up or lie)	11.34±3.73	12.35±3.67	-3.122	<0.05

At the same time, the statistics and collection of relevant data on the negative emotional problems of the subjects during the experiment were carried out, and the scoring data were quantified from low to high with a score of 1-5 in the five-point system. The results are shown in Table 2. The experimental results show that the negative emotion of the psychological intervention group has been alleviated to a large extent in five dimensions, and its score has decreased from 3-4 points before the experiment to 1-2 points after the experiment. The effect of emotional relief is significantly better than that of the conventional teaching group.

Table 2. Improvement of negative emotions of the subjects

Negative emotions	Psychological intervention group		Teaching routine group	
	Before	After	Before	After
Conflict				
Anxious	3.20±1.13	1.23±1.07	3.21±1.11	3.17±1.02
Depressed	4.18±0.07	2.01±0.05	4.19±0.10	3.22±0.14
Uneasy	3.65±1.26	1.39±1.25	3.55±1.23	3.52±1.20
Fear	3.22±1.14	1.55±1.12	3.23±1.16	3.18±1.14
Negative emotions	3.77±0.39	1.08±0.32	3.75±0.28	3.62±0.29

Conclusions: To give full play to the intervention of psychology-related theories on students' psychological conditions in the original physical education, to grasp the etiology and degree of performance of their psychological disorders, to enrich classroom organization by adopting cooperative teaching forms, to enhance classroom teaching effects, to attract and divert students' anxious attention, and to help them improve their cognitive processes, emotional processes and will processes. The results of the experiment show that the teaching programmed designed by the PE teachers who have learnt the psychological theory can effectively alleviate the degree of students' psychological barriers and improve their recognition and self-confidence.

* * * * *

RESEARCH ON THE INFLUENCE OF VIRTUAL REALITY LEARNING ENVIRONMENT ON LEARNING ENGAGEMENT

Zhenyang Su

School of Education, Huanggang Normal University, Huanggang 438000, China

Background: After the COVID-19 epidemic, the learning style of students has changed greatly, and online learning and mixed learning have become popular. Therefore, a series of learning problems have arisen, such as weak learning motivation, less interaction, poor learning effect, and there are difficulties in carrying out experimental learning. As a new technology, virtual reality technology can create a virtual learning environment for students and facilitate them to carry out online learning, especially experimental learning. However, compared with other learning environments, the study on the impact of virtual reality learning environment on learning engagement is not deep. The main purpose of this study is to explore students' learning engagement and influencing factors in the virtual learning environment, and to provide