Croup	Number of cases	SA	S
Group	Number of Cases —	Before care	After care
Observation group	75	60.24±3.15	41.28±3.09
Control group	75	60.38±3.22	58.69±3.51
t	-	0.730	18.412
Р		0.440	0.000

**Conclusions:** Depression is a relatively common mental disorder in clinical practice, and long-term emotional or mood changes are its typical clinical features. According to a recent report of the World Health Organization, the burden of disease caused by this disease ranks third among all diseases, only after cardiovascular events and malignant tumors. At the same time of treatment, it is necessary to cooperate with active and effective nursing intervention to strengthen the control of their depression. The research results show that percussion ensemble training is an effective psychological counseling auxiliary therapy, which can effectively alleviate the symptoms of depression patients, and good research results have been obtained.

\* \* \* \* \*

## THE EFFECTORS OF DIFFERENT EXERCISE TRAINING INTERVENTIONS ON COLLEGE STUDENTS WITH ANXIETY AND DEPRESSION

### Bing Zhang<sup>1\*</sup> & Zhongmin Yu<sup>2</sup>

#### <sup>1</sup>Institute of Physical Education, Huanggang Normal University, Huangzhou 438000, China <sup>2</sup>Huanggang Institute of Education Science, Huangzhou 438000, China

**Background:** The psychological problem of college students is becoming serious, so how to intervene and help solve the problem is the schools and society should seriously consider today. Higher education is also trying to change the situation. Among the psychological problems of college students, depression and anxiety are the serious ones. Studies have shown that the incidence of anxiety and depression among college students has been increasing year after year. Anxiety has become a more common mental illness among college students. This brings trouble to the life and study of college students, and meanwhile adds a certain burden to the body.

**Objectives:** To explore the exercise methods of anxiety intervention for college students, this paper takes aerobics and football exercise as examples to analyze its effects. 100 cases of students majoring in physical education in a certain school were selected and divided into groups by drawing lots, with 50 cases in the observation group and 50 cases in the control group.

**Subjects and methods:** The study was for 100 cases of college students with anxiety in physical education in a school. The group ingesting of 100 people was decided by drawing lots, of which 50 were in the experimental group (football group) and 50 were in the control group (aerobics group). Anxiety diagnostic criteria: (1) the presence of autonomic neurological symptoms and motor inactivity; (2) persistent or often no fixed content and clear objects. Clinical performance mainly has the following points: fear, nervousness, uneasiness, etc.; Experimental group: 22 male college students, 28 females, age distribution between 17 and 20 years old, the average age is ( $18.27\pm1.54$  years old), grade distribution is: 20 cases of freshman students, 20 cases of sophomores, 10 cases of junior students. Control group: Male college students and female college students each 25 cases, age distribution between 18-21 years old, the average age of ( $20.47\pm0.45$  years), grade distribution is: 18 cases of freshman students, 19 cases of sophomores, 13 cases of junior students. There was no significant difference in age, sex, and grade composition of college students in the experimental and control groups (P>0.05).

Interventions include normal elective courses, sports clubs including aerobics and football, exercise time of 60 minutes each time, frequency of 1 time per week, and the experimental cycle of 12 weeks. Both groups of college students maintained moderate intensity training, by monitoring the student's heart rate (120 to 150 times/min), so that the participant's training intensity is maintained in the medium range, and can be monitored every 15 min. According to the experimental tolerance, the amount of exercise can make appropriate increase. Exercise Intensity: Moderate-intensity exercise can promote improvements in mental health and others. Studies have shown that continuous regular moderate-intensity exercise, with a duration of about 20-60 min, can help people with emotional distress and improve bad moods. Aerobic exercise has an

improved effect on physical fitness and consciousness, which helps to improve one's state and change people's negative mentality. If the intensity of exercise is too low, neither can achieve the role of sports intervention emotions, nor can it play a stimulating effect on physical fitness. However, excessive exercise intensity will also have a negative effect. Exercise time: The duration of each exercise was determined to be 1 h, and the results of the study and analysis on improving anxiety and exercise time showed that the effective exercise time to improve anxiety must be greater than 20 min. The optimal duration of exercise to improve anxiety ranges from 20-60 min. Exercising three times a week allows anxious people to relax during exercise and may relieve the mood, but it does not lead to physical fatigue. Once a week, aerobic exercise, oxygen intake does not change much, and is prone to fatigue. Students are very likely to be injured in sports. If you do aerobic exercise twice a week, the effect is still not obvious, muscle soreness, fatigue will be reduced. Exercise more than 5 times a week is excessive, and possibility of injury will be higher. You will have physical fatigue, but no significant change occurs in metabolic capacity. Anxiety relief effect will be greatly reduced. The American Society of Sports Medicine (ACSM) believes that exercising three to five times a week can maximize anxiety and have a more positive and effective impact on people's mental health.

Evaluation criteria is that the depression self-assessment scale SDS and the anxiety self-assessment scale SAS compared the average scores of college students in quality of life, depression and anxiety. Anxiety and depression scored 1-100 points, with a score of 50-60 mild depression, 60-70 for severe depression, and more than 70 for moderate anxiety. The same criteria are used for depression classification. It means that if the score is higher, the student has higher levels of depression or anxiety. The quality-of-life score involves four aspects, namely, mental function, material life, body function, social function. The scores range from 0-100 in all areas, and a higher score means the student recovers better. Data processing was carried out using SPSS 20.0 software, and t-testcase was used for depression, anxiety, quality of life score, and the level of significance was alpha-0.05.

**Results:** Comparing the quality-of-life scores (social function, physical function, material life, psychological function) of the two groups of college students before the exercise intervention, the difference was not significant (P>0.05), and the two groups showed that the experimental group of college students had a social function score, material life score, body function, and psychological control group. The differences were statistically significant (P<0.05), See Table 1.

		Before exerci	se		After exercise			
	Experimental group	Control group	t	Р	Experimental group	Control group	t	Р
Social function	65.74±1.98	64.71±1.53	2.2784	>0.05	95.31±2.38	71.85±2.37	50.0783	<0.05
Material	63.07±1.63	62.78±1.95	0.5349	>0.05	93.74±2.69	72.65±1.68	50.1876	<0.05
Body function	64.79±1.68	64.91±1.76	0.5190	>0.05	96.78±1.12	70.13±2.67	68.2758	<0.05
Psychological function	63.81±2.01	63.29±1.39	0.5973	>0.05	94.31±2.09	70.29±2.19	51.3240	<0.05

Table 1. Comparison of quality-of-life scores before and after exercise for college students in the experimental and control groups.

Comparing the depression and anxiety scores of the two groups of college students before and after exercise intervention, the difference was not significant (t=1.0582, 1.3751; P>0.05), and the depression scores and anxiety scores of the post-exercise experimental group were lower than those of the students in the control group (t=44.6957, 48.3714; P<0.05), as Table 2 illustrates.

 Table 2. Comparison of depression anxiety scores before and after exercise in the experimental and control groups.

		Before exercise				After exercise			
Project	Experimental group	Control group	t	Р	Experimental group	Control group	t	Р	
Depression score	65.48±2.97	65.94±1.98	1.0682	>0.05	26.89±2.58	51.38±3.18	44.9071	<0.05	
Anxiety rating	62.18±1.97	61.98±3.47	1.4197	>0.05	25.64±3.69	52.94±1.62	48.3852	<0.05	

From Table 3 and Table 4, the quality-of-life score (social function score, material life score, body function score, mental function score) was higher than that of aerobics group, and lower on depression and anxiety scores than aerobics students, with statistical significance (P<0.05), which suggests that football can better alleviate anxiety and depression among college students compared to aerobics exercise. We can see

that there was no significant difference in SAS scores (*P*>0.05) in the pre-experimental mild and moderate anxiety groups, while after the experiment, the moderate anxiety control group and the experimental group showed significant changes in the SAS score. Anxiety scores decreased in the experimental group, with significant differences from pre-experimental values, and the same as the comparison with the control group. Anxiety levels improved significantly after the experiment. Comparing the average scores of the SAS test every two weeks, you can see a significant decrease in the associated scores after four weeks, and the SAS score was still significantly lower after the experiment. The score of mild anxiety decreased less than the level of moderate anxiety. In the last two weeks of the experiment, moderate anxiety decreased to the maximum effect. Therefore, exercise intervention can improve anxiety to a certain extent, and the effect of moderate anxiety improvement is more obvious. At the beginning of the semester, non-physical students were tested for anxiety and classified according to the frequency of their exercise, in four main categories: non-exercise groups, once a week, twice a week. The degree of characteristic anxiety in different categories of students was observed to determine the effect of exercise on the relief and intervention of traits anxiety.

Table 3. Comparison of SAS scores before and after the experiment for mildly anxious students (x±s).

Project	Before the experiment	2	4	6	8	After the experiment
Control group (n-20)	53.12±2.59	52.23±1.68	52.95±3.47	55.26±1.28	51.27±2.64	55.71±3.12
Experimental group (n-20)	54.39±3.27	54.13±2.38	54.32±3.52	51.72±2.65	52.36±1.34	51.03±3.71 <sup>*</sup>

 Table 4. Comparison of SAS scores before and after the moderate anxiety student experiment (x±s).

Project	Before the experiment	2	4	6	8	After the experiment
Control group (n-12)	65.71±2.82	66.32±1.74	66.82±2.68	66.61±1.86	66.79±3.29	65.68±1.34
Experimental group (n-12)	65.49±1.84	66.42±2.52	65.57±3.57	63.56±2.14	62.91±1.59	62.16±2.57**

The study found that the frequency of different exercises in non-physical students varied in the degree of anxiety, the degree of different categories of significant lying, the highest degree of non-exercise, the lowest is two times a week group. Through the analysis of variance, there are significant differences between the three groups, and the specific data analysis is shown in Table 5.

Table 5. Any	ciety levels	of different	sports free	uencies for	non-physical	students.
Tuble 5. An				acheres ior	non physica	Juduciics

The frequency of motion	Do not exercise	Once a week	Twice a week
Anxiety level	42.58±6.84	41.97±6.43	36.57±7.94

After data analysis, it was shown that there was a significant low negative correlation between the "anxiety" degree and the frequency of sports, and that regular participation in physical activities could improve mood, bring positive effects, and have a positive effect on anxiety and regular participation in sports, and intervene and alleviate anxiety.

**Conclusions:** When interfering with the sports of anxious college students, we need to pay attention to the following aspects: First, when carrying out sports exercise for college students with anxiety, we should pay attention to the following points: Second, the persistence of sports is needed, and students need to adhere to it. Since moderate-intensity exercise can speed up blood circulation throughout the body and help relieve psychological stress, persisting in exercise, long-lasting exercise can be effective lying and improving. Sports can be a degree of distraction, from long-standing problems or circumstances to be freed from. It is also a way to make them more passionate about sports. Furthermore, it is necessary for colleges and universities to establish mental health files of anxious students, including mental health, quality, function, sports interest, etc.

### \* \* \* \* \*

# THERAPEUTIC EFFECT OF MUSIC ON MENTAL ILLNESSES IN COLLEGE STUDENTS

### Bin Liu & Jiawei Wan

Department of music, Nanchang Institute of Technology, Nanchang 330044, China