

# The Experimental Study of the Impact of Rock Climbing Teaching to College Students' Depression and Anxiety

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**Abstract.** With the step of our society become more and more quickly, the college students face more and more social pressure. According to the survey, in recent years the rates of the college student who have depression or anxiety psychology gradually increase, which seriously affected College students physical and mental health. Rock climbing as an important part of the university sports curriculum, it higher requires students' physical and psychological quality, according to study rock climbing, and students can not only exercise and keep fit but also enhance their self-confidence and initiative. Therefore, in order to have a better research on the influence of P.E. Classes on depression and anxiety of the college students' psychological, based mainly on the climbing teaching as an example, using the method of comparative test study how to promote the comprehensive development of college students by means of physical education class teaching.

**Keywords:** Rock climbing sports class, college student, depression.

## 1. Introduction

With the development of College Students' psychological problems are becoming more and more serious, this problem also attaches importance to the education department. At present, college students' psychological problems in two common symptoms of depression and anxiety is, it will not only affect the students' daily life and learning, and if things go on like this, but also on the students' physical and mental damage. Therefore, to take effective measures to alleviate the anxiety and depression of college students psychological state is very important. Rock climbing as a part of university physical education curriculum, can not only improve the students' physical quality, but also has the important significance for the students' psychological health.

## 2. First, object of student and research method.

### 2.1 object of study

This study selected a junior college students as part of the study, most of these students are aged between 22-25, for they are about to enter the social and psychological pressures show more obvious. To ensure that this study has some representation, the number of this study is to determine the 60 people, including 38 boys, 22 girls.

### 2.2 research method

In order to better the impact on College Students' anxiety and depression in rock climbing sports teaching method, this research mainly uses the comparative research method, then according to the comparison of experimental results between SDS and SAS results. SDS 20 project was evaluated by 1 - 4 grade score. Add the score of each question is coarse, coarse points multiplied by 1.25, four to five homes in the integer points to obtain the standard. The critical value of depression rating as the standard score of 53 points, the higher the score, the more obvious the tendency to depression. SAS is the 20 projects, was evaluated by 1 - 4 grade score, statistical methods is the same as SDS. The critical value is a standard score of 50 points, the higher the score, the more obvious the tendency of anxiety. The test-retest reliability method measured SDS reliability coefficient was 0.87, the SAS reliability coefficient was 0.92. Structure of conformance coefficient SDS was 0.91, SAS was 0.89, which illustrate the validity of the letter of the two has a higher scale.

First, we study subjects were randomly divided into two groups, one was treated as the experimental group to receive the rock climbing sports courses, and another group is a control group for comparison, the number of each group were 30, the initial research for 10 weeks, the experimental group learn rock climbing courses 3 times a week, learning is the main content of the foundation rock climbing training, muscle flexibility training, endurance training and psychological quality training. While the control group without any physical exercise, only in accordance with the psychological research center plans to ask psychological division were treated by traditional conversation method.

### 3. Second, result and analysis

#### 3.1 Result

Table 1: Experimental results table

group	SDS			
	Before the experiment	After the experiment	T	P
experimental group	47.73 ±4.57	42.85 ±4.62	2.371	0.016*
control group	47.77 ±3.86	46.61 ±5.53	0.588	0.477

Experimental results from the table we can see that, students in the experimental group after the study of rock climbing course for a period of time, the SDS data is lower than the control group there is a very significant difference, which means

Table 2: After the experiment two groups of students SDS and SAS data comparison table

group	SDS	SAS
Experimental group	42.85 ±4.62	44.61 ±6.19
Control group	46.61 ±5.53	46.33 ±5.51
T	2.306	0.774
P	0.020*	0.380

Table 2 are two groups of students SDS and SAS data comparison table , we can see from Table 2 , there are obvious differences between the two groups of SDS data , indicating that by climbing teaching relieve depression psychology student talk than traditional methods. But compared to the data for SDS, SAS data between the two groups of students is not particularly evident, indicating that climbing teaching and talk therapy of these two methods in terms of ease students' anxiety and no significant psychological effect. Therefore, in the coming time, the school psychology research departments still have to continue to tap new ways to ease the anxiety of college students psychological, thereby promoting student health.

#### 3.2 Conclusions and suggestions

Through systematic learning and training for a period of time, psychological test data of the students in the experimental group has changed apparently. This shows that the rock climbing sports course of study will have a certain role to ease the students' psychological depression. The reason why, mainly because of the learning process in rock climbing can make the brain and systemic blood circulation to speed up the students, good to development of the patient's intelligence and creativity, disperse the attention of the patients, making them get rid of out of distress events. At the same time, rock climbing training on the students' will and psychologically can have the effect of exercise, after climbing the learning, can enable students to dare to break through the self, march forward courageously. Thus, in order to further promote the healthy development of students' body and mind, colleges should improve the attention of the sports teaching, and encourage students to participate actively in the future, to pay attention to the students "body", "heart" of the synchronous development.

Although the rock climbing course students can ease the students' psychological depression to a certain extent, but from the analysis, we can see, effect of rock climbing course learning to alleviate the anxiety of students is not obvious. Therefore, to explore the new method to relieve the anxiety of students has become a major topic of the Department of university psychological research. In addition, although the rock climbing sports lessons can relieve students' psychological depression to a certain extent, the effect is even beyond the traditional talk therapy, but this does not mean that the learning in the physical education curriculum can completely replace the talk therapy. On the contrary, only the two combined, which will be better for mental health service for college students.

In addition, in order to make the rock climbing course teaching in the study of mental health role into full play out, must be screened those suitable for improving the mental health level of physical exercise as the teaching content. Rock climbing sports teachers from the perspective of pedagogy, sports science and psychology to select and integrate them. In order to exert their function, cultivating students' knowledge of sports and health, regulation of learning, working and living in the tense mood and emotion, to improve the mental health of students.

#### **4. Conclusion:**

Along with the education department attach importance to the psychological problems of college students continue to improve, how to take effective measures to ease the students' psychological, to promote the healthy development of college students has become a major issue faced by the relevant departments of colleges and universities. From the analysis, we can see, through the rock climbing sports teaching, not only can improve students' physical quality, but also has the important significance to enhance the psychological quality. Therefore, in the future, colleges and universities must improve in sports teaching quality of attention, so as to better promote the all-round development of students.

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