

Effects of Comprehensive Fitness Activities on Female College Student's Body Fit

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Abstract: This paper uses experimental methods to perform a comprehensive fitness intervention for 30 female college student's script in the University of Beijing Normal University, and the five health care norms were measured before and after experimenting and experiments. The comparative exercise of the health body body of the comprehensive fitness exercise female college students' tissue, and the effect of the integrated fitness exercise was physically appropriate and the effect of the body's physical and gas was significantly observed.

Keywords: Female college students; Body fit; Comprehensive fitness activities

1. Introduction

According to the data released by the Ministry of Education website in 2012, the total number of female college students in China has exceeded 30 million, accounting for 51.64% of the total number of university students nationwide, and growing at a rate of 3.7% per year. This is one aspect of my society's gradual progress. reflect. [1]However, due to the rapid increase in the number of female college students, the employment situation they face is becoming more and more severe. For this reason, many female college students put their time and energy into their studies, and some female college students are not interested in sports activities, resulting in The time spent on physical exercise is getting less and less, so the results of the 2014 National Physical Fitness Monitoring show that the physical condition of female college students in China has been declining year by year. [2] In addition, due to the lack of physical exercise, a reasonable way to vent their emotions, many female college students also have problems in their psychological aspects. In this regard, this article uses the scientific and efficient and interesting comprehensive fitness program provided by the National Sports General Administration to improve the physical fitness of female college students.

2. Objects and Methods

2.1. Experimental object

The 30 female students with higher body fats were selected from the Beijing Normal University.

2.2. Method

2.2.1. Literature method

The author inquired about the relevant research results in China in the past 10 years, and summarized the three aspects of female college students' physical fitness intervention methods, intervention time frequency and evaluation methods, and formed a 3,000-word literature review. This group provides targeted reference and reference for the future study of intervention methods for female college students' healthy fitness.

2.2.2. Expert consultation law

After summarizing and summarizing the research results of the predecessors, we interviewed Mr. Baoke (teacher of the Sports and Physical Education Institute of Beijing Sport University) and Tang Donghui (teacher of mathematical statistics analysis), and finally accepted the guidance of the instructor Ren Yuanchun. The opinion produced a questionnaire and identified the training plan.

2.2.3. Experimental research method

Using the comprehensive fitness program developed by the National Sports General Administration Research Institute, the subjects were exercised three times a week for 60 minutes, including aerobic training, strength training, flexible training, balance training, etc., and then before and after 12 weeks. After 24 weeks, the subjects were divided into height, weight, endurance (YOYO endurance running), flexibility (sitting body flexion), body composition (percentage of body fat), and maximum strength (squat).

2.2.4. Mathematical statistics

The recorded data were processed, compared and analyzed using SPSS 18.0 statistical software, and all data were expressed by mean ± standard deviation. Using correlation analysis, P < 0.05 indicates significant correlation, and P < 0.01 indicates significant correlation.

3. Results and Analysis

3.1. The effect of comprehensive fitness exercise on the body composition of female college students

In this trial, we borrowed a bioelectrical impedance analysis instrument from the school. This is a reliable and

accurate anthropometric technique. After intervention, measurement analysis: Many female college students have slightly reduced their weight or maintained their previous levels. However, the measurement of precision instruments found that their body fat ratio has a significant downward trend, indicating that comprehensive fitness exercise can reduce the body fat content of female college students, and has a very good effect on improving the body shape and training muscle strength of female college students.

Table 1. Body Fat Ratio % (fat / body weight)

	Before intervention	Intervention for three months	Intervention for six months	P
female	30.48±6.25	30.60±7.05 ^{aa}	29.42±7.15 ^{aab}	0.000

Note: a is p<0.05 compared with pre-training; aa is compared with pre-training, P<0.01; b is p<0.05 compared with three months after training; bb is compared with three months after training, P<0.01;

The data of this study were analyzed using one-way ANOVA using spss18.0 software.

3.2. The effect of comprehensive fitness exercise on female college students' muscle strength

We use more isotonic exercises in the comprehensive fitness method we use. The strength of the upper limbs can be tested by bench press. The strength of the lower

limbs can be tested by squatting. The core strength can be tested by a one-minute sit-up. The three can be re-placed by whole body strength. Here we choose squat as an example, through data analysis. It is concluded that after comprehensive fitness training, the upper and lower limbs of female college students and core strength have been improved, and the comprehensive fitness movements have higher requirements for strength than dance cheerleading and aerobics. Therefore, after The effect of muscle strength improvement of students in comprehensive fitness training is more obvious. as the picture shows:

Table 2. Muscle strength (squat unit: kg)

	Before intervention	Intervention for three months	Intervention for six months	P
Squat	20±2.5	30 ±3 ^{aa}	40±5 ^{ab}	0.000

3.3. The effect of comprehensive fitness exercise on the flexibility of female college students

Comprehensive fitness requires a high degree of flexibility for the body, and flexibility training has a great influence on the shaping of female college student's body shape, the strength of exercise, speed and other physical

qualities, the prevention of sports injuries and the improvement of the quality of movement. After a period of training, the physical flexibility of female college students has been significantly enhanced, indicating that it has played a role in shaping the body to some extent. The results are as follows:

Table 3. Flexible (sitting position flexion unit: cm)

	Before intervention	Intervention for three months	Intervention for six months	P
female	14.81 ±6.65	17.63 ±5.21 ^{aa}	18.56 ±5.41 ^{aab}	0.000

3.4. The effect of comprehensive fitness exercise on female college students' cardiorespiratory endurance

The so-called YOYO test is to require players to engage in intermittent reentry runs at an increasing rate between two markers that are 20 meters apart. The player has an interval of 5 seconds after passing each 2×20 meters, and the rhythm is controlled by the sound signal played by the recorder. The total is divided into 15 levels, and the speed of the tester needs to increase as the level in-

creases. The tester can't stop and end the test. The changes of cardiopulmonary function can be tested through different levels of YOYO endurance running. Through data analysis, it is found that the lung activity of the experimental subject has also increased, so the female college students who participated in the experiment can be drawn. The cardio endurance has been greatly improved and the body's tolerance to fatigue has been enhanced. The results are as follows:

Table 4. Yo-yo

	Before intervention	Intervention for three months	Intervention for six months	P
female	5—7	6—1 ^{aa}	6—3 ^{aab}	0.000

4. Conclusion

As the female college students exercise, their body fat ratio is gradually reduced, which makes them more embarrassing, more rational body composition, can effectively prevent some chronic diseases, and can prevent symptoms such as malnutrition and obesity. Increased flexibility, muscle strength, and muscular endurance have given them a foundation for achieving a variety of body movements and improving athletic performance, as well as greatly improving physical fitness such as sensitivity, coordination, and speed. And through long-term exercise, the cardiopulmonary function of most female college students has been improved, which provides an effective guarantee for delaying aging of internal organs, promoting physical health, and improving immunity.

This study solves some existing problems related to fitness and can provide a reasonable fitness program for college students' scientific exercise, thus improving the physical fitness of college students. However, it is not excluded that there will be shortcomings such as small sample size and short experimental period. Therefore, in the subsequent research practice, the sample size will be further increased, the experimental period will be extended, and the monitoring of each stage will be completed. Therefore, it can better verify the accuracy of the research results, and provide accurate and theoretical basis for the active promotion of comprehensive fitness and the improvement of college students' physical fitness.

Because this study is a group exercise using comprehensive fitness methods, it proves that this method can be carried out by relying on the school fitness community to form a comprehensive fitness activity model suitable for

female college students, and then form a college sports club to promote female college students. The activity mode of sports participation has a demonstration effect on colleges and universities nationwide, which helps to improve the health fitness of female college students nationwide and contributes to the improvement of national health.

5. Outlook

After six months of experimental intervention, our team received a satisfactory result, successfully helping 30 subjects to complete the fat reduction plan, in addition to improving their flexibility, skeletal muscle content and cardiopulmonary function. But recalling the whole process, it is more appropriate to describe it with pain and happiness, because the teacher and the coach who are the subjects are not only responsible for the training of the train three times a week, at least one hour each time, but also in the usual supervision. Their diet and routine are cumbersome, but I find it very meaningful to be able to successfully improve their physical fitness and make them form a good exercise. Next, we will share our successful experience in the form of CD-ROM to other universities in the country for reference, and strive to help them establish a comprehensive training camp for college students in their respective schools, and do their meager efforts to improve the fitness of their school students.

References

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