

Effect of Aerobics on Physical and Mental Health of Students Majoring in Aerobics in Jiangxi Normal University

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ABSTRACT. With the rapid development of modern civilization, the overall social environment is also running at a high speed. The fierce social competition pressure erodes the study and life of college students in various fields. More and more people realize that improving college students' physical and mental outlook is the necessary condition and foundation for their progress and growth in many aspects. Healthy physique and good attitude are the key to the success of modern students and adults. The research shows that college students' sports in the field of comprehensive quality can promote their psychological health. Aerobics is not only popular in Colleges and universities in China, but also a favorite sport for college students. It also has something to do with the students' love of fashion and sports. By means of statistical data, experimental inquiry, questionnaire survey and literature collation, this paper chooses male and female college students majoring in sports performance in Jiangxi Normal University as the object of inquiry, and explores the related effects of Students' physical and mental health and aerobics, so as to make a contribution to the popularization of Aerobics in Colleges and universities in China. It provides a theoretical basis for promoting college students to participate in aerobics and improving their comprehensive quality and mental outlook.

KEYWORDS: Aerobic, Physical and Mental Health, Aerobic exercise

1. Introduction

Aerobics is a popular sport, which is popular among the masses. It is a kind of sports that combines group exercise, dance, music, fitness and entertainment. It is not only a few simple movements in series, but also a complex and diverse project combining sports and art. According to its exercise function, aerobics can be divided into mass aerobics and competitive aerobics. Mass aerobics has the characteristics of simple and easy to learn, repeatable, slow movement speed and appropriate exercise intensity. Competitive aerobics has the characteristics of complexity, non repetition, fast speed and high intensity. The popularity of aerobics is relatively high. Because aerobics is a sport for talented and happy people, it can reduce mental pressure

through practice. In the process of practice, it is easy to make people intoxicated and unable to extricate themselves from it. After practicing aerobics, the body and mind will be more healthy. Long time of moderate intensity exercise, can control weight, and prolong life, so aerobics is to update and improve the comprehensive quality of the exercise practitioners.

2. Characteristics of Aerobics

2.1 Highly artistic

The artistic characteristics of Aerobics lie in that it can fully reveal its own artistic characteristics of "health, strength and beauty". People have been pursuing the artistic elements of "health, strength and beauty", which is the most perfect state of comprehensive quality, and aerobics shows these three characteristics completely. This is also a reason why many people like to practice aerobics. In the aerobics competition, Aerobics movements will show the full artistic characteristics of "health, strength and beauty" to give the audience the enjoyment of beauty. Aerobics is also an aerobic exercise. The reason why we choose to practice aerobics is that it can make people have strength and make them beautiful. Aerobics has a strong sense of rhythm, strong coordination, full of rhythm, and is easy to promote, and has relatively low requirements for the venue. In the exercise experience of aerobics, the trainer's mood can be pleased and their artistic temperament can be edified. Aerobics is also a sport worthy of further study. It can train and arrange our artistic achievements. After all, it has a harmonious posture and dynamic rhythm. In the sports experience, not only the movement of the body, but also the coordination of multiple parts of the body, and the perfect integration of "Sports" and "art". The health, strength and high-performance choreography of the show left a deep impression on the audience. Aerobics athletes should have enough strength and excellent comprehensive quality. After all, they have to show their strong posture, coherent layout and amazing works in the fierce competition.

2.2 Strong rhythmicity

Rhythm and melody is the key part of aerobics. After all, music can trigger the setting off and construction of atmosphere. It can stimulate people's emotions. Set off the atmosphere of Aerobics performance and trigger the emotional fluctuation of the audience. Another strong rhythm and characteristic of aerobics. Such a clear strong music rhythm makes Aerobics movements can be outstanding display. The perfect combination of dynamic rhythm melody and fashion posture is favored by ordinary people. The dynamic music rhythm makes the experience of Aerobics practice more energetic and passionate. And the strong concert makes the audience feel more atmosphere.

2.3 It has a very general fit

Aerobics has the characteristics of adapting to various ways. Sports venues and equipment have no special threshold, suitable for all sizes. There is no age or gender. The special threshold of comprehensive quality and ability. Therefore, people of all ages, classes and genders can join in the exercise of aerobics, find the most suitable exercise style and feel the interest of aerobics. For example, the selection of low intensity suitable for the elderly aerobics exercise, through the exercise of aerobics can make the elderly become younger and happy, have a healthy body, happy mental state. This is also the purpose of the middle-aged and old people's low-intensity exercise of aerobics; aerobics is a sport with outstanding physical strength and competitiveness, and it is also very suitable for young people to study and train. After all, the comprehensive quality of young people is based on a certain age. High intensity of Aerobics load intensity, the body can accept. Young people can choose competitive aerobics. Competitive exercise aerobics can be sure that it will become very difficult. After all, competitive aerobics movement changes greatly, consumes more energy. The difficulty is relatively large, the threshold of comprehensive quality will also have certain requirements. Competitive aerobics is a professional sport, which is difficult for ordinary people. In the practice experience, the period of time required is relatively long, ordinary people can shape the shape of the body through the exercise of aerobics, and the improvement of comprehensive quality can also be realized in the practice experience. Therefore, aerobics has been widely used.

3. Research results and analysis

Some male and female college students majoring in Aerobics in Qingshanhu campus of Jiangxi Normal University were tested intermittently in the second half of 2018. Test every week. It is found that all the indexes of students' body have been improved after practicing aerobics. The following relevant data can be obtained from the summary data report table

This data is from the male and female students of Qingshanhu campus who are majoring in Aerobics in Jiangxi Normal University Physical Education College. By collecting and sorting out the experimental data and comparing the data before and after, we can get the following table:

3.1 The change of students' comprehensive quality by practicing Aerobics

3.1.1 Change of comprehensive physical quality

It can be seen from table 1 "comparison of basic indexes of Aerobics in the next semester of 2018 before and after training". It can be seen that aerobics can not only exercise the muscle fiber tissue of students in various parts, but also promote the progress of students in other sports projects, and also can improve the body strength and lung capacity. Proper aerobics training can enable students with poor physique

to carry out aerobic breathing, accelerate metabolism, and resist fatigue. The resistance is strengthened to reduce the incidence rate of diseases among N students. Therefore, the improvement of comprehensive quality is related to the exercise of aerobics.

Table 1 Comparison of basic indexes of Aerobics before and after training in the second half of 2018

Indicators (male / female)	Before training (male / female)	After training (male / female)	P(male / female)
Vital capacity / ml	3135±334/2841±178	3258±298/3012±312	<0.01
Diastolic blood pressure / mmHg	72.3±7.52/75.96±8.21	69.35±8.00/70.44±8.95	<0.05
50 m / S	7.21±0.78/8.65±1.22	7.00±1.11/8.23±1.03	>0.11
80 m / S	251.11±15.79/254.36±15.88	245.24±15.42/248.67±15.03	<0.01
Standing long jump / cm	169.58±8.25/157.26±7.33	174.9±10.12/165.97±9.52	<0.01/<0.05
Solid ball / M	5.61 0.76/4.66±0.87	6.35±1.23/4.92±5.06	<0.05
Sit ups / time	32.99±8.63/28.19±7.25	41.56±10.23/32.48±9.54	<0.01
Overhanging leg raising / time	10.33±50.92/7.41±1.12	18.01±4.35/14.06±15.22	<0.01

3.1.2 Aerobics training changes the body shape of College Students

Table 2 Changes of body shape after aerobics exercise (unit: cm)

Stage	waist	hip	thigh	calf	upper arm
Before training	68.54±0.2	90.43±0.7	49.76±0.6	33.42±0.14	23.05±0.44
After training	65.26±0.1	88.52±0.3	48.21±0.5	33.21±0.14	23.1±0.3
T	3.27	0.93	1.55	0.21	0.01
P	<0.01	<0.01	<0.01	<0.05	<0.05

From table 2, we can see that before and after the exercise, the waist, buttocks, legs, arms and other indicators have changed in various degrees. Long term training reduces the body fat rate of students. The index with P value less than 0.05 indicates that there is significant difference before and after.

Summary table 1 and table 2 can be obtained: aerobics is the integration of Anthropology and physiology. Through integration, muscle fibers of all parts of the body can be exercised more evenly and strongly, students can make balanced progress, the protein and other elements of fiber and other muscle cell tissues change significantly, muscle fiber tissue increases, blood circulation and metabolism are increased. Therefore, the practice of aerobics has a positive significance for comprehensive quality.

3.2 The improvement of the mental outlook of college students in our country after joining in the exercise of Aerobics

Table 3 Comparison of mental health of male and female aerobics elective students in Jiangxi Normal University in the second semester of 2018

Stage	Before training	After training	P
Somatization	2.23±0.26	1.63±0.05	0.645
Obsessive compulsive symptoms	2.03±0.32	52.39±5.18	0.989
Interpersonal sensitivity	2.02±0.35	19.68±1.71	0.239
depressed	2.10±0.30	68.98±2.96	0.889
anxious	2.17±0.26	89.23±2.90	0.872
hostile	2.12±0.41	0.77±0.04	0.783
terror	1.94±0.40	48.82±2.21	0.788
paranoia	1.98±0.42	30.30±1.55	0.850
psychotic	1.65±0.26	19.16±2.24	0.537
population	183.29±11.24	17.34±2.80	0.988

From the above table data before and after the comparison, we can see that the students' indicators have changed. Mental health is getting better. The following conclusions can be drawn from the table

3.2.1 Changes in self-confidence after aerobic exercise

Learning aerobics course can improve your comprehensive quality, outstanding reputation, effectively update people's initial cognition and understanding of you, build trust and establish self-confidence. Continuous practice of Aerobics experience will train students to bear hardships and stand hard to fight spirit, indomitable training needs to persevere in consciousness, in the aerobics exercise psychological state will relax, will gradually change towards peace.

In the practice experience, many difficulties need to be overcome in order to gradually establish developed confidence. For example, in the experience of practicing aerobics, there is a big problem with the coordination of classmates. If the teacher does not adjust, he can not successfully complete the movements with his current coordination. At this time, the teacher will formulate a set of relatively simple movements for him, and encourage and support him. The difficulty is reduced, the movement becomes simple, so the student's action completion degree will be higher. It promotes the communication between teachers and students, stimulates his strong interest in practicing aerobics, and in the experience of completing relatively simple Aerobics movements, with the encouragement and help of teachers and classmates, he has learned to overcome difficulties, make himself no longer shrink back in the face of difficulties, strengthen his recognition of himself and enhance his self-confidence.

Therefore, aerobics has positive significance for college students to establish self-confidence.

3.2.2 The effect of Aerobics on interpersonal relationship

Most of the students' anxiety, fear, depression and dissatisfaction will be allocated to the melody and the aerobics movement itself in the experience of practicing aerobics. Then you will not think of the worry you have in your jumping experience. You will feel very comfortable physically and mentally, and will enjoy and be happy, so that all the dissatisfaction of the body can be dredged. In the experience of aerobics training trip will know a variety of people, is conducive to students to exchange harmonious and outstanding interpersonal relationship.

Therefore, aerobics students will have a positive and sunny attitude, but also help students form a harmonious interpersonal relationship.

3.2.3 The role of Aerobics in artistic temperament

In aerobic aerobics, the music rhythm and graceful movements of aerobics are organically integrated. Let the person of all kinds of character, can adjust the best mood condition, full of passion, stretch action. The rhythm of music gives people a sense of comfort and relaxation, so that students accept a happy feeling and passion, and the role of various understanding makes students pursue and shape the beauty. This shows that under the background of Aerobics dynamic music, students will be more likely to be satisfied with and enjoy the experience of being encouraged and vented. Students' experience of pursuing, shaping and feeling beauty is satisfied, and their students' quality and artistic temperament can be sublimated.

Therefore, aerobic aerobics exercises, so that students enhance awareness and artistic accomplishment has a positive impact.

4. Conclusions and suggestions

4.1 Conclusion

Aerobic exercise is a group sports and entertainment activities. In recent years, aerobics education is the key component of colleges and universities in our country, the pace of innovation in Colleges and universities in China continues to accelerate, has become an irreplaceable key part of physical education in Colleges and universities.

Aerobics has many advantages, such as relieving psychological pressure and not having bad temper to various diseases. Beautiful rhythm, strong rhythm, and coordinated pace can change your focus from anxious to other positive emotions.

Aerobics can maintain and improve students' physical state and body shape. It can not only improve students' comprehensive quality and mental outlook, but also strengthen students' comprehensive quality and physical function activity, enhance aerobic respiration and promote metabolism. Through the practice of aerobics,

students can form a strong sense of quality and healthy and cheerful personality, so as to update students' interpersonal relationship and promote the harmonious coexistence of students' mental and physical health and interpersonal communication

4.2 Suggestions

To get out of the scars of failure and build outstanding practice and progress, we need a strong sense of career goals. Success and failure are always accompanied on the road of life. People can't always succeed, and stumbling and stumbling are common. God has never optimized and never let go. Only when we always keep a positive and sunny attitude can we finally succeed. Happy life will not leave.

The practice of aerobics can stimulate the enthusiasm of students. It can make the relationship between students and teachers more equal, democratic and harmonious. To realize the transformation of real education activities, improve students' cultural quality and comprehensive quality, and improve students' physical quality, at the same time, it can also help students create the concept of lifelong sports, and lay an indelible foundation stone for the future 50 years of healthy and sustainable national work.

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