## INFLUENCE OF SPORT DANCE COURSES ON FEMALE COLLEGE STUDENTS

INFLUÊNCIA DE CURSOS DE DANÇA ESPORTIVA EM ESTUDANTES UNIVERSITÁRIAS

INFLUENCIA DE LOS CURSOS DE DANZA DEPORTIVA EN LAS ESTUDIANTES UNIVERSITARIAS

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## ABSTRACT

Introduction: Dance sport is a project that integrates art and sport. In it, female students can exercise and improve their self-conscious sports skills with music. Objective: Study the effects of special sport dance courses on the physical health of female college students. Methods: 108 female college students were selected as volunteers for the experiment, the experimental statistics and observations were performed from the aspects related to shape, flexibility and body composition. Results: The female college students who were trained in the special sports dance course significantly improved their shape, flexibility and body composition. Conclusion: Considering the current scenario of continuous decline of college students' physical health, this paper discusses the positive role of optional sport dance courses in improving college students' physical fitness from the aspects of form, flexibility, and body composition, and other related factors. *Level of evidence II; Therapeutic studies - investigation of treatment outcomes.* 

Keywords: Dancing; Body Composition; Students; Women's Health.

### RESUMO

Introdução: A dança esportiva é um projeto que integra arte e esporte. Nela, as estudantes podem exercitar e melhorar suas habilidades esportivas autoconscientes com a música. Objetivo: Estudar os efeitos dos cursos especiais de dança esportiva sobre a saúde física das estudantes universitárias. Métodos: Foram selecionadas 108 estudantes universitárias como voluntárias para o experimento, as estatísticas e observações experimentais foram realizadas a partir dos aspectos relacionados à forma, flexibilidade e composição corporal. Resultados: As alunas universitárias que foram treinadas no curso especial de dança esportiva melhoraram significativamente sua forma, flexibilidade e composição corporal. Conclusão: Considerando o cenário atual de declínio contínuo da saúde física das estudantes universitárias, este trabalho discute o papel positivo dos cursos optativos de dança esportiva na melhoria da aptidão física das estudantes universitárias a partir dos aspectos da forma, flexibilidade e composição corporal. Conclusão: Considerando o cenário atual de declínio contínuo da saúde física das estudantes universitárias, este trabalho discute o papel positivo dos cursos optativos de dança esportiva na melhoria da aptidão física das estudantes universitárias a partir dos aspectos da forma, flexibilidade, e composição corporal, além de outros fatores relacionados. **Nível de evidência II; Estudos terapêuticos - investigação dos resultados do tratamento.** 

Descritores: Dança; Composição Corporal; Estudantes; Saúde da Mulher.

### RESUMEN

Introducción: La danza deportiva es un proyecto que integra arte y deporte. En él, los alumnos pueden ejercitarse y mejorar sus habilidades deportivas con música. Objetivo: Estudiar los efectos de los cursos especiales de danza deportiva en la salud física de las estudiantes universitarias. Métodos: Se seleccionaron 108 estudiantes universitarias como voluntarias para el experimento, se realizaron estadísticas experimentales y observaciones de los aspectos relacionados con la forma, la flexibilidad y la composición corporal. Resultados: Las universitarias que recibieron formación en el curso especial de danza deportiva mejoraron notablemente su forma, flexibilidad y composición corporal. Conclusión: Teniendo en cuenta el escenario actual de continuo deterioro de la salud física de las estudiantes universitarias, este artículo analiza el papel positivo de los cursos optativos de danza deportiva en la mejora de la forma física de las estudiantes universitarias, este relacionados. **Nivel de evidencia II; Estudios terapéuticos - investigación de los resultados del tratamiento.** 

Descriptores: Baile; Composición Corporal; Estudiantes; Salud de la Mujer.

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Relevant national policies point out that "strengthen physical education, firmly establish the idea of health first, ensure students' physical education courses and extracurricular activity time, improve the quality of physical education, strengthen mental health education, and promote students' physical and mental health, physical fitness, and strong will" and "promote the construction of schools with sports characteristics, focus on promoting colleges and universities to strengthen physical exercise for college students, widely carry out extracurricular physical exercise activities, and vigorously cultivate students' sports interests, sports skills, and sports habits".<sup>1</sup> As a form of sports, sports dance has high aesthetic value and fitness entertainment value, and sports dance integrates sports, dance and music, which is conducive to physical and mental health.<sup>2</sup> The integration of dance elements in sports can not only

INTRODUCTION



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strengthen the body and enhance the body's immunity, but also cultivate temperament, relieve stress, and play a good role in regulating mental health. As an "elegant" way of movement that combines dance and sports elements, sports dance training has a positive significance for the health of female college students. Through sports and dance sports, female college students have shown positive changes in living habits, study habits, social optimization, and even body shape, resilience, and composition. Under this general environment strategy, the emphasis on physical education curriculum teaching has been comprehensively improved.<sup>3</sup> In China, sports dance is an imported product, entering China for a long time Decades of development, now has a certain mass base. But in the traditional Chinese literature On the basis of transformation, the development of domestic sports dance has also encountered many problems, such as " save great harmony, seek Small differences, the unity of man and nature, the pursuit of harmony, comity, conform to nature, implicit, the mean " is China The principles and ideas of traditional culture, especially the Chinese people, with implicit beauty, are also lasting Since the unique way of thinking of the Chinese nation is a kind of good beauty pursued by everyone De, this thought has been deeply rooted and imperceptibly penetrated into every field of life. Compared with the relatively bold and enthusiastic sports dance abroad, and the explosive power of passion, It is in a great contrast to the traditional thought of Chinese modesty and implication. With the advancement of global integration, China's traditional culture is bound to be a certain integration Western culture improves the development problem of sports dance. In preserving the traditional culture at the same time to promote the sustainable development of sports dance culture. Sports dance is a combination of art and sports, and students can exercise their bodies and improve their conscious motor ability in music.<sup>4</sup>Through sports dance training, female college students can obtain a healthy psychological state while exercising a healthy body, thereby generating positive behavior, shaping a strong character and optimistic attitude to life, and accumulating the competitive advantage of psychological capital for the future path of becoming a talent.<sup>5</sup> Combined with the current situation of the continuous decline of college students' physical health, it is discussed that the special course of sports dance has a positive effect on improving the physical fitness of female college students from the aspects of body shape, body flexibility and body composition.<sup>6</sup> As an "elegant" way of movement that combines dance and sports elements, sports dance training has a positive significance for the health of female college students.<sup>7</sup>Through sports and dance sports, female college students have shown positive changes in living habits, study habits, social optimization, and even body shape, resilience, and composition. In this study, the research method of comprehensive evaluation of guantitative data provides data basis for the effectiveness of training in the tested sample group, and provides theoretical basis and empirical reference for the in-depth development of sports dance training.<sup>8</sup>

### **RESEARCH OBJECT AND RESEARCH METHOD**

#### Subjects of study

In order to quantitatively determine the impact of sports dance training on the physical fitness of female college students, the research subjects of this survey selected 108 female college students who participated in the special training of sports dance in the class of 2019 of school A, and the training period was 6 months. The mean age of the participants was (18.3±0.93) years, the average height was (161.4 ± 2. 96) cm, the average weight was (48.19±2.31) kg, the flexibility was (1.71 ± 0.07) cm, and the lung capacity was (2200±321) ml.

#### **Research Methods**

Literature Research Method: More than 20 papers on related topics were downloaded and analyzed through the CNKI website, and compared and analyzed as a reference for this study.

Test method: With the help of physical fitness testing equipment ("Liaoning Tiankang" test system), the height, weight, lung capacity, standing long jump and other items of the study subjects before the official start of the course and at the end of the course were tested, and data were collected; The body composition of the study subjects was tested using the Korean VENUS5.5 body composition tester and the measurement data was recorded.<sup>9</sup>

Mathematical statistics: The statistical software SPSS 20.0 was used to compare the relevant physical health data of the two-stage test. With the help of physical fitness testing equipment, this study measured and recorded the height, weight, flexibility, lung capacity, standing long jump and other indicators of the subjects before the official start of the training cycle of the dance sport system and after the end of the system training cycle, and accurately collected and sorted out each data. The CareBo 810 body composition tester was used to test the body composition values of the study subjects and recorded the measurement data; With the help of the mathematical statistics software SPSS 20.0, the relevant physical health data of the research subjects before and after training was compared.<sup>10</sup>

The study is Purely observational studies which no need to registry ID of ICMJE, and all the participants were reviewed and approved by Ethics Committee of Jilin Normal University, China (NO. 2021027)

#### **EXPERIMENTAL RESULT AND ANALYSIS**

# Basic situation of changes in the physical shape of female college students

By counting the test data of female college students corresponding to the two classes before and after the training of the special course of sports dance, it can be found that the weight and height indicators related to body shape other than the age indicators that are not affected by sports factors have obvious fluctuations, and the fluctuations of body weight indicators are prominent (p<0.05), and the height index is marked with changes, but not obvious, and still shows no difference (p>0.05). The specific data are shown in Table 1. By comparing the data, it can be concluded that after the training of the special course of sports dance, female college students get happiness and improvement from the process of watching and learning sports dance, and students naturally feel excited, for the maintenance and regulation of female college students' body shape has a positive effect, through sports dance training courses, can strengthen the attractiveness of female college students to maintain beautiful body lines, so as to maintain a relatively good state in the daily diet, living habits and other aspects of the course, further strengthen the pursuit of sports and beauty in the sports dance course itself.

By comparing the experimental test data, it can be judged that: After systematic cycle training of sports dance, the research subjects received an all-round improvement of physical and mental happiness and self-quality in the learning process of sports dance training. Therefore, comprehensive and systematic sports dance training has positive value for the improvement and regulation of female college students' physical shape, and achieving a certain cycle of sports dance sports can strengthen the intention of female college students to pursue body curves, and at the same time promote female college students to maintain a more positive state in activities, diet, social interaction and other aspects outside the course, and further strengthen the relationship between sports dance and beauty.

Table 1. Comparison of body morphological data of the subjects before and after the course (N=60 x $\pm$ s).

Group	Age	Height (cm)	Body weight (kg)
After the course	18.7±1.27	159.5±1.96	45.7±2.53*
Before the course	18.4±1.27	159.4±1.96	47.9±3.21
Average Difference	0.3	0.1	2.88

Concentrate:\* p<0.05.

Taking the weight statistics as the original data for before and after comparison, and using SPSS 20.0 to quantify and analyze the parameters, it was found that the weight index of the study subjects showed a significant correlation with training. The weight fluctuation of the study subjects was obvious, indicating that sports dance had obvious weight loss effect.

# Data analysis of physical resilience changes in female college students

At the beginning and end of the sports dance training cycle, the measurement data of the standing long jump of the study subjects were obtained respectively, so as to measure the fluctuation and change of the data and measure the fluctuation of the physical toughness of the study subjects. Table 2 shows that after the special cycle training of physical dance, the physical toughness of the study subjects was significantly improved. Therefore, special training in sports dance can improve the flexibility of the body of female college students, improve the function of soft tissues around sports joints, and the toughness and elasticity of muscles, ligaments and tendons. The relationship between physical toughness and health is extremely close, and the improvement of flexibility has a positive effect on enhancing the body's coordination, better exerting strength, speed and other qualities, improving skills and techniques, preventing sports injuries, and improving physical health.

## Basic information on changes in body composition of female college students

With the help of the instrument to carry out the data statistics and analysis of the body composition of the research subjects, the statistical summary of data collection before and after the special training course of sports dance is obtained, as shown in Figure 1, through data comparison, it can be seen that the influence of sports dance course training on the two reference points of female college students' body composition is obvious. Fat weight and proportion decreased significantly, lean body mass and proportion increased significantly, these two indicators for evaluating physical health from the perspective of body composition has a good reference, it is foreseeable that after a longer period of special training in sports dance, the body composition of female college students will develop in a more favorable direction.

After a certain period of periodic sports dance exercise, the two indexes of fat mass and lean body mass of the study subjects changed significantly, fat weight and body fat percentage decreased significantly, and lean body mass and lean body content increased significantly.

The above two indicators have a good physiological basis and basis for evaluating physical health from the perspective of body composition. Considering the long-term nature of the exercise cycle on body composition changes, the longer the periodic dance sport training, the more likely the body composition of female college students to improve in a more positive direction. 
 Table 2. Data comparison related to the physical toughness of the study subjects before and after training.

Physical Toughness	Long jump indicator/cm	Body forward bending/cm
Before training	158.4±13.91	9.555±2.56
After training	162.7±26.27	11.518±2.37
Average Difference	4.3±0.13	2

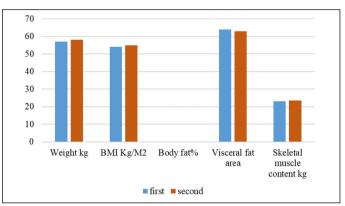


Figure 1. Comparison of body composition data of study subjects before and after the course.

#### CONCLUSIONS

This paper studies the effects of sports dance training on the physical form, toughness, composition, and psychological changes of female college students, and concludes as follows.

This paper has been trained by the special course of sports dance, which has a positive effect on the maintenance and regulation of female college students' body shape, and through the sports dance training course, it can strengthen the attractiveness of female college students to maintain beautiful body lines, so as to maintain a relatively good state in terms of daily diet and living habits outside the course. After the training of the special course of sports dance, the female college students' body flexibility is significantly enhanced, and the enhancement of flexibility helps to improve the flexibility of joints, improve the function of soft tissues around joints and the stretchability of muscles, ligaments and tendons. The special course on sports dance has a positive effect on the improvement of body composition of female college students. After the training of dance, the psychological adjustment of the study subjects has improved, and this change indirectly promotes the improvement of other indicators of the study subjects, and will also promote the comprehensive and balanced development of the study subjects during their school studies.

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