

The Influence of Sports Modern Dance on the Psychological Health of College Students

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Abstract

The aim aimed to conduct a research on the impact of modern sports dance on college students' mental health. This study selected 200 non-sports major students from a school in a certain province that did not offer sports dance as the research subjects. Secondly, 100 students were randomly selected from another college in the province to take sports dance courses as an experimental group for a three-month study and training of sports dance courses. Randomly select 100 people from schools that have never offered sports dance as a control group, the control group did not take sports dance courses, but only underwent routine learning and exercise. The experimental period was three months, and the experimental group and the control group were measured with two mental health self-assessment scales before and after the experiment, after statistical analysis, the conclusion was drawn as follows: (1) Sports dance has a promoting effect on the mental health level of college students. (2) Sports dance can improve the physiological condition of college students. (3) Sports dance can improve the interpersonal skills of college students. (4) Sports dance can effectively resist the psychological barriers of college students. Sports dance is a very beneficial physical activity for the mental health of college students, by conducting sports dance teaching, students' social communication ability can be improved, self-confidence can be cultivated, and psychological problems can be prevented. Sports dance teaching, from a subconscious level, increases students' ability to withstand stress and is an effective way to improve their mental health level. This study could also helped to educational institutions to give importance on sports modern dance to increase psychological health of students.

Keywords: Sports Dance; College Student; Mental Health.

Introduction

In recent years, the physical and mental health issues of college students have gradually become a hot topic of concern in today's society. Strengthening the physical fitness of college students, promoting health levels, cultivating lifelong physical education awareness, and actively participating in physical exercise behaviour habits are the tasks that need to be completed in college physical education (Bailey, 2006; Winnick & Porretta, 2016). As a group, college students are influenced by various factors during their growth process, especially in their daily learning and life, they often face various psychological pressures, when various psychological pressures accumulate together, over time, they can cause psychological obstacles, and mental health is the foundation of academic achievement, career success, and happiness in life. The mental health of college students is an important content of psychological education in universities (Hunt & Eisenberg, 2010; Odriozola-González et al., 2020). Research has shown that physical exercise can help improve the mental health status of college students, currently, there are many sports events offered on university campuses, and sports dance is deeply loved by college students for its charm of fitness and shaping. With

the increasing demand for talent in society, the development model of higher education is constantly undergoing reform, facing educational changes, many educational problems such as information overload, diverse values, lack of faith, and employment pressure have caused great psychological burden to current college students, especially for relatively sensitive and vulnerable college students, psychological problems are more prominent.

According to data, in the past 10 years, about 10% to 30% of students in universities have various levels of psychological health problems, such as sensitivity, depression, entanglement, anxiety, terror, paranoia, coercion, hostility, etc., those issues will also become a hot topic of concern and research in higher education and even in the entire society. There have been studies in China that explore the impact of physical exercise on the mental health of college students from the perspective of exercise prescriptions, but there have been no reports on the use of a combination of sports dance and psychological cognition to intervene in students' mental health levels. Sports dance is a dance that combines competitive sports with artistic performance, it integrates art, sports, music, clothing, etc., and is a sports activity that takes body movements and dance as the basic content, with pairs or groups working

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together, it has both entertainment and fitness functions, as well as competitive performances. Sports dance includes modern dance with smooth, gentle, free and easy dance steps, beautiful dance postures, orderly ups and downs, dignified, implicit, stable and elegant style; 10 different dance steps of modern dance or Latin dance are used to weave a variety of patterns in combination with unpredictable formation, which harmoniously integrates music, dance posture, formation, clothing, patterns and practitioners, realizing a more lively group dance, therefore, sports dance is known as a model of health and beauty by the world, and is a universal "emotional language" in the world. Sports dance has its own unique role and characteristics in psychological health intervention, as its educational effects, competitive performances, and fitness effects differ from other dance and other sports events due to its unique style and characteristics (Zheng, Liu, & Liu, 2021). Based on previous discussion, research aimed is to check the influence of Sports Modern Dance on the Psychological Health of College Students in China.

The study findings significance denigrations in the appreciated contributions they make to our understanding of the positive effects of sports dance on the psychological health of college students. The study highlights how engaging in sports dance, as a moderate-intensity aerobic exercise, not only enhances students' physical well-being but also has a profound impact on their mental health. By alleviating symptoms of depression and anxiety, improving interpersonal skills, and fostering social integration, sports dance emerges as a promising intervention in mental health programs for college students. These findings hold practical implications for educational institutions and mental health professionals, suggesting that integrating sports dance into college curricula and extracurricular activities can be an effective strategy for promoting students' overall well-being. Moreover, by recognizing physical activity as a complementary component to traditional psychological interventions, this research underscores the importance of holistic approaches to mental health care. By collaborating with fitness centres or dance studios, colleges and universities can create a supportive environment that nurtures students' mental and physical health. The results also significant for other researchers and policy makers.

Literature Review

As the social demand for talents, higher education development model and therefore reform facing education change, many education problems such as super

quantitative information, values, lack of faith, employment pressure to the current college students caused great psychological load, especially the relatively sensitive and fragile female college students, psychological problems are more prominent. According to the data, in the past 10 years, about 10% to 30% of the students in colleges and universities have various mental health problems of different degrees, such as sensitivity, depression, entanglement, anxiety, terror, paranoia, compulsion, hostility, etc., which will also become the focus of attention and research in college education and even the whole society. In China, the effect of physical exercise on the mental health of college students from the perspective of exercise prescription, while the intervention of students' mental health level has not been reported. Sports dance is a dance combining competitive sports and artistic performance (Dyck & Archetti, 2020). It integrates art, sports, music, clothing and so on. It is a sport with body movement dance as the basic content of double or collective cooperation, with both the function of entertainment and fitness, and competitive performance. Sports dance includes Latin dance with smooth steps, soft and easy, graceful, undulating, dignified, reserved, elegant style; bold, bold movements, varied speed, varied, passionate, passionate, bold, romantic Latin dance; using 10 different steps of modern dance or Latin dance, combined with varied formations to integrate music, dance, formation, costumes, patterns and practitioners, realizing more vivid group dance, therefore, sports dance is known as "healthy" and "beautiful" model, is the "emotional language" in the world.

When they are faced with more complex environments and opportunities, there are significant differences between their psychological characteristics and those of boys, whose characteristics are as follows: the establishment of the concept of love. As many students enter the university and have a strong sense of self-independence, they hope to get rid of the discipline and bondage of parents and teachers, and desire to get the respect and goodwill of people. Some students think that the pressure of study is not big, or do not pay attention to learning, cannot find confidence in learning, trying to get some psychological compensation through the communication with the opposite sex; some students in the physical mature drive, have a hazy curiosity and desire to the opposite sex. However, due to the lack of life experience and the incorrect understanding of love, many female college students have been frustrated in the process of love, and some of them have negative emotions, pessimism and even suicide and other emotional reactions. Change in self-awareness. In the crowd, they

will pay more attention to their own image, pay attention to the evaluation of people and themselves. They hope to achieve self-realization and self-improvement through hard study. They begin to pay attention to the publicity of personality and self-embodiment, and they also pay special attention to the evaluation of themselves from the outside world. Changes in interpersonal communication and social adaptability. Contemporary college students have great problems in interpersonal adaptation, and the emergence of psychological problems of female college students is directly related to their mastery of skills and knowledge in interpersonal communication. 4. High anxiety is prevalent among contemporary female college students. [Dou, Jia, and Ge \(2021\)](#) It seeks to investigate the psychological boundaries of inventive dance choreography, a condition that exists between mental illness and psychological issues. According to research, spontaneous dance is a free dance that uses the human body as a material carrier, and it is a dance style in which dancers translate their ideas into dance movements to convey what they are thinking inside. Discuss how unplanned dance movements and framework might help promote potential inventiveness in dance makers. Simultaneously, psychologists' theoretical concepts are completely validated and augmented and used to the growth and enhancement of spontaneous dance creativity. In addition, we have demonstrated via psychological research that spontaneous dancing is a crucial method ([Dou, X.2021](#)) ([Dou et al., 2021](#)). Based on the present study, this article picks 200 kids as the study's object from an institution in a province that does not teach sports dancing. Secondly, 100 students were randomly selected from another college in the province as the experimental group to study and train the sports dance course for three months. From 100 schools, they were randomly selected as the control group. The control group did not take dance sport courses, but only conducted regular learning and exercise. In order to avoid the interference of age factors, this paper mainly selected sophomore students as the research object, and the age distribution is all between 18-22 years old. Among them, there are 90 boys and 110 girls. The experiment was three months, and the experimental group and the control group were measured by the mental health self-evaluation scale twice before and after the experiment. After statistical analysis, the conclusion was as follows: (1) sports dance has a promoting effect on the mental health level of college students.(2) Sports dance can improve the physiological condition of college students.(3) Sports dance can improve the interpersonal skills of college students.(4) Sports dance can effectively resist the

psychological barriers of college students ([Gaudreau, 2016](#); [Yang & Zhang, 2023](#)). Sports dance is a very beneficial to the mental health of college students, through the development of sports dance teaching, improve students' social communication ability; cultivate self-confidence, so as to prevent psychological problems ([Guo & Zhang, 2022](#); [Li & Shi, 2021](#); [Olvera, 2008](#)). Sports dance teaching is an effective way to increase students' ability to resist pressure and improve their mental health level ([Carless & Douglas, 2011](#)).

Research Framework Development

Sports psychology is an important research field of psychology, which is paid more and more attention by psychologists and sports workers, and people's awareness of physical exercise and mental health is also improving ([Horn, 2008](#); [Swann, Moran, & Piggott, 2015](#)). Throughout the research on the relationship between sports and mental health, it focuses on the influence of physical exercise on self-concept, the improvement and improvement of physical exercise, the prevention of mental diseases by physical exercise and the related mechanism of physical exercise ([Fernández-Bustos et al., 2019](#); [Gill, Williams, & Reifsteck, 2017](#); [Ströhle, 2009](#)). However, the forms of physical exercise are various, the content is rich and colourful, each project has its own project characteristics, its psychological impact on human beings and the improvement of physical self-esteem level is also different. As per the study of [Lindwall et al. \(2012\)](#) Aerobic exercise can reduce the degree of anxiety and depression, and has a good therapeutic effect on long-term mild to moderate anxiety and depression, while anaerobic exercise only has a regulatory and therapeutic effect on depression. Common aerobic exercise includes sports dance, aerobics, jogging, swimming, cycling and so on. Sports dance belongs to aerobic exercise, so it has a good regulation effect on anxiety and depression ([Falkai et al., 2022](#); [Vrinceanu et al., 2019](#)). Mental health refers to a continuous mental state, is a complex concept, so far, its specific meaning is not unified-standard and specific discussion. Western psychologists' understanding of mental health is as follows: the United Nations World Health Organization (WHO) definition: mental health not only refers to the absence of mental illness or metamorphosis, good individual social adaptation, but also the perfection of personality and the full play of psychological potential, but also to play the best state under certain objective conditions ([Auerbach et al., 2016](#)). As shown in [Figure 1](#):

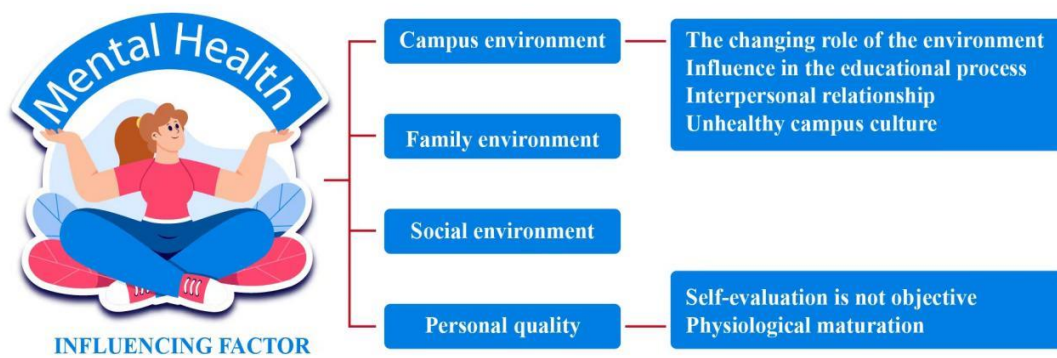


Figure 1. The Impact of Dance on the Mental Health of College.

Research Methods

Research Subjects

This study selected 200 non-sports major students from a school in a certain province that did not offer sports dance as the research subjects. Secondly, 100 students were randomly selected from another college in the province to take sports dance courses as an experimental group for a three-month study and training of sports dance courses. Randomly select 100 people from schools that have never offered sports dance as a control group, the control group did not take sports dance courses, but only underwent routine learning and exercise. In order to avoid the interference of age factors, the author mainly selected sophomore students as the research subjects, with an age distribution ranging from 18 to 22 years old. Among them, there are 90 male students and 110 female students (Sun & Ge, 2022).

Introduction and Evaluation of the Scale

Introduction to SCL-90 scale

The author adopts the Mental Health Symptom Checklist 90 (SCL-90), It is one among the most well-known mental health testing scales in the world and the most extensively used outpatient assessment scale for mental illnesses as well as mental disorders, we will assist you in understanding your mental health level from ten aspects. This scale consists of 50 items, including people's perception, psychological processes, lifestyle habits, interpersonal relationships, and other aspects. It is a relatively comprehensive mental health scale; these 50 projects reflect people's psychological states in 8 different aspects. This scale adopts a 5-level rating system for each item on a daily basis, where the self-evaluator evaluates the situation described by the item at five levels: "no (0), mild, moderate, heavy, and severe (5)".

The scoring method of this scale is: The total score is the total score of 50 items. The critical point of this scale is 150

points, which means that the total score of the participants on the psychological self-assessment scale exceeds 150 points, indicating that the participants may have some psychological problem. The total average score is the average score of 50 items in the questionnaire. If the factor score exceeds 2 points, it is considered positive. If the total number of positive items exceeds 40 points, it indicates that the subject may have psychological problems and further diagnosis is needed (Cousin & Poisson, 2022).

Experimental Process

This study randomly selected 200 college students as participants for a three-month period of sports dance training, before and after the course learning, SCL-90 questionnaire surveys were conducted on the experimental group and the control group of college students, respectively.

This experiment will be divided into three stages, namely the pre-test stage, intervention stage, and post-test stage; the specific implementation process will be introduced as follows:

Pre-test stage: The pre-test period for the subjects was in February 2022. As the subjects belonged to different schools, the initial measurement of the mental health scale was conducted twice, and all subjects completed the SCL-90 scale test on a computer. The experimental group was tested in the computer room of Honghe University, while the control group was tested in the computer room of that university. We invite graduate students majoring in psychology to take the lead in this test, the entire test was completed in a quiet and comfortable environment, and participants can raise their hands to ask questions if they have any questions. I myself and graduate students majoring in psychology are responsible for all tests, while teachers from other schools are responsible for on-site discipline for tests. After the test, I and the psychology students jointly completed the data entry and carefully checked the data to ensure the accuracy of the input (Lee, 2021).

Intervention phase: The experiment started from March to June 2022 and ended for a total of 3 months. The three-month sports dance training content specifically includes: (1) The teaching objectives, requirements, technical features, and introduction to dance music of the compulsory courses of sports dance major, totaling 4 class hours; (2) Specialized movements and specialized skill training (rhythm, hand position, basic movements), totaling 4 class hours; (3) Learning and training of designated steps for a total of 4 class hours; (4) Latin dance learning and training, 8 class hours in total; (5) The study and training of standard dance lasts for a total of 8 class hours, supplemented by a certain amount of extracurricular training. The entire training focuses on practical teaching, with theoretical teaching interspersed throughout the practical process. Adopting a diversified teaching model, namely: Classroom teaching, extracurricular training and reading, watching videos. Post-test stage: The pre-test time for the subjects was July 2022. At the designated end time of the experiment, both the experimental group and the control group were retested using the Mental Health Self-Assessment Scale.

The organization of the test was the same as before, after the test was completed, I and psychology students organized and entered the data together to ensure the accuracy of the data for later statistics and analysis.

Experimental Data Statistics

This experiment used SCL-90 software and SPSS statistical software to statistically analyze the test results of all participants. The characteristic of SCL-90 software is that after the subjects answer the questions, the software automatically generates scores for each factor and the total score for mental health. Finally, we will input the total score of the participants' mental health self-assessment scale and the sub scores of ten factors into SPSS 13.0 software for data statistical analysis (Ha & Lee, 2021).

Research Results

Psychological Health Status of College Students in the Province Before the Experiment

The test results of the mental health of college students in the province before the experiment are shown in Table 1.

Table 1

Statistical Table of Psychological Health Status of Subjects before and after the Experiment

Mental Health Self Assessment Scale	Number of male students (n=)%	Number of female students (n=)%	Survey population (n=200)%
Total score<150 points	73 74%	77 72	150 74
Total score>150 points	25 26	25 28	50 26

The results showed that 74% of students had a total score of less than 150 on the Mental Health Self Assessment Scale, and 26% had a total score of more than 150 on the Mental Health Self Assessment Scale. From this proportion, it can be seen that the mental health level of college students in the province is not at a high level as predicted earlier, and there are still some students who have mental health problems. In order to further compare the mental health levels of the experimental group and the control group, compare the total average score and number of positive items that reflect the overall mental health level of the two groups of subjects, as well as the

average scores of various factors in the Mental Health Self Assessment Scale, the specific results are shown in Tables 2 and 3 (Kim & Kim, 2021).

The results in Table 2 show that there is no significant difference in the total average score of the psychological health self-assessment results between the experimental group and the control group in this study, nor is there a significant difference in the number of positive items. That is to say, the overall performance of the psychological health level of the experimental group and the control group participants was at the same level before the experiment.

Table 2

Comparison Results of Total Mean Score and Positive Item Number Ratio Between the Experimental Group and the Control Group Before and After the Experiment

	Experimental Group		Control Group		P
	Average	Standard Deviation	Average	Standard Deviation	
Total score	2.02	0.34	2.15	0.46	>0.05
Positive item score	27	1.36	29	17	<0.05

The statistical results in Table 3 show that there is no significant difference in the average scores of each factor between the two groups, that is to say, before receiving sports dance training, there was no significant difference in the statistical results of the two groups of college students' psychological health self-assessment scale in 10 factors: "somatization", "compulsive symptoms",

"interpersonal sensitivity", "depression", "anxiety", "hostility", "terror", "paranoia", "psychoticism", and "other", the two groups have similar levels of mental health. In summary, Tables 2 and 3 comprehensively analyzed the psychological health levels of the experimental group and the control group before sports dance training from both the overall and local measurement results.

Table 3

Comparison Results of Factor Mean Scores Between the Experimental Group and the Control Group on the Mental Health Scale Before the Experiment

	Experimental Group (N=100)	Control Group(N=100)	P
Somatization	1.85±0.45	1.25±0.36	0.421
Coercive relationship	1.52±0.46	1.47±0.75	0.396
Sensitivity to interpersonal relationships	1.25±0.45	2.36±0.72	0.156
Depressed	1.58±0.56	1.85±0.34	0.236
Anxious	1.48±0.45	1.74±0.36	0.456
Hostile	1.78±0.74	2.45±0.62	0.752
Terror	2.36±0.14	1.75±0.34	0.489
Paranoia	1.23±0.41	2.41±0.48	0.369
Psychiatric	2.46±0.42	1.74±0.42	0.451
Other	00.46±0.36	2.39±0.41	0.236

Psychological Health Status of College Students in the Province After the Experiment

After three months of training, we conducted a quantitative comparative analysis of the psychological health status of the participants again. Firstly, the statistical results of the psychological health status of all participants are shown in Table 4.

Table 4 shows that a total of 188 people with a total score of less than 150 in the scale test, accounting for 94%, is

much larger than the total number of people with mental health before the experiment, which is 146. It is worth noting that some of these students have greatly improved their mental health after receiving sports dance training. However, in order to further verify that experimental intervention is an important influencing factor, it is necessary to compare and analyze the total scores measured by the mental health scale between the experimental group and the control group, the specific comparison results are shown in Table 5.

Table 4

Statistical Table of Psychological Health Status of Subjects after the Experiment

Mental Health Self Assessment Scale	Number of male students (n=)%	Number of female students (n=)%	Survey population (n=200)%
Total score<150 points	90 94	98 94	188 94
Total score>150 points	8 7	4 7	12 7

Table 5

Comparison Results of Total Average Scores and Positive Items Between the Experimental Group and the Control Group After the Experiment

	Experimental Group		Control Group		P
	Average	Standard Deviation	Average	Standard Deviation	
Total score	1.53	0.54	2.45	0.26	>0.05
Positive item score	20.22	13.42	27	14	<0.05

From Table 5, it can be seen that the total mean score ($M=1.53$) of the experimental group is smaller than that of the control group ($M=2.45$), and both obtained $P<0.05$ after independent sample T-test. The mean number of positive items in the experimental group ($M=20.22$) was also lower than the mean number of positive items in the control group ($M=27$), and both obtained $P<0.05$ after independent sample T-test. That is to say, there is a very significant difference in the total average score and the number of positive items between the two groups, the psychological health level of the experimental group students is significantly higher than that of the control group students, indicating that sports dance training has greatly improved the psychological health level of college students. The comparison results from the above table show that the scores of various factors in the experimental group's mental health self-assessment scale are lower than those in the control group, and there are highly significant differences in the five factor items of "somatization", "interpersonal sensitivity", "depression", "anxiety", and "hostility" compared to the control group.

Before the experiment, we compared the mental health levels of the experimental group and the control group, and there was no significant difference in the 10 factor items between the two groups. However, after experimental intervention, the total mean score and total number of positive items measured on the mental health scale in the experimental group were higher than those in the control group, at the same time, there were significant differences in scores between the five factor items and the control group, indicating that sports dance courses are beneficial for improving the mental health level of college students.

The Impact of Sports Dance on the Physical and Mental Health of College Students

In this study, the experimental group showed significant differences in the five factors of "somatization", "interpersonal sensitivity", "depression", "anxiety", and "hostility" after the experiment compared to before and after the experiment, there is no significant difference in other factors, indicating that sports dance plays an important role in promoting the mental health level of college students, this result can be analyzed from the following aspects.

Sports Dance Can Improve the Physiological Condition of College Students

As is well known, actively participating in physical exercise can enhance the physical health of the body, enhance physical fitness, and resist diseases, sports dance belongs to the category of sports, and its function of strengthening the

body has been increasingly confirmed by scientific research. The research results on physiology, biochemistry, and other aspects of sports dance show that sports dance is a moderate intensity aerobic exercise (Honrado, Bay, & Lam, 2021).

Studies have shown that the metabolic rate of the human body increases by 60% - 80% when the modern dance such as waltz and tango is performed for 10 minutes in general, while the metabolic rate increases more when the Latin dance such as cha cha and samba is performed for 10 minutes in general. Some studies have also shown that if athletes engage in high-intensity sports dance for half an hour, it is equivalent to walking a day's distance, which means that people can achieve the effect that takes a long time to achieve in a shorter time, according to some experts, the amount of exercise required to perform three consecutive sports dances is equivalent to the amount of exercise required for long-distance running (10-12 km/h), swimming (50-60 m/min), and cycling (25-30 km/h). Sports dance also has a very important function of improving people's metabolic function, because during the process of sports dance, the body will secrete some special substances, these substances will keep people in their optimal mental state. In addition, sports dance can improve the cardiovascular function of growing college students.

This study is similar to previous research results, although we measured the psychological level of participants using the Mental Health Scale, this scale also reflects their physical characteristics in one dimension. After three months of practice, this study improved the physical condition of college students, enabling former otaku men and women to step out of their homes, communicate with more people, make more friends, and engage in more physical exercise, the results of exercise are not only reflected in the absence of any physiological discomfort in the body, but also in the psychological impact of a healthy constitution, it is precisely because of the positive impact on the body that college students can avoid symptoms such as headaches and poor sleep when self-evaluating their body, this is exactly what the results of this study reflect, after the experimental intervention, the "somatization" factor scores of the experimental group were lower than those of the control group, there was a significant difference in scores between the experimental group and the control group, indicating that sports dance exercise is beneficial for the physical health of college students.

Sports Dance Can Improve College Students' Interpersonal Skills

Interpersonal communication skills play an extremely important role in people's lives. From birth to adulthood,

people are all in the process of interacting with others, through interaction, we make more friends, and through communication with others, we gain happiness and growth. At the same time, it may also bring some sadness, whether it is sadness or happiness, which makes our lives rich and colourful. If a person lives in this world, or only lives in their own world and cannot see what is happening outside, how lonely we are, when encountering happy things, there is no one to share them with, and when encountering misfortunes, there is no family or friends to share them with, over time, we will reach the edge of psychological breakdown, in such extreme situations, events like the Magazire incident will often occur. Human beings live in groups. In the Primitive Society, we live in groups to resist the harm of foreign animals; In today's society, we achieve both material and spiritual balance through collective life, so interpersonal communication is a necessary means of our daily lives.

The results of this study also show that there is a significant difference in the "interpersonal sensitivity" factor between the experimental group and the control group after the experiment, indicating that sports dance promotes the interpersonal communication ability of college students, thereby improving their mental health level. After entering university, students need to quickly adapt and integrate into collective life, and it is not easy to respect each other's way of life, perhaps barriers arise due to language, culture, and lifestyle habits, and more importantly, the inability to adapt to this collective life, isolating oneself from communication with others, and living in one's own world, which seriously affects learning and mental health, over time, serious psychological illnesses can develop. However, the unique communicative function of sports dance allows ethnic minorities who are skilled in singing and dancing to leverage their strengths and quickly form good friendships with other students, so sports dance has extraordinary significance in improving the interpersonal communication skills of college students (Copado-Aguila et al., 2021).

Sports Dance Can Effectively Resist the Psychological Barriers of College Students

Every individual hopes to be able to lead their own lives, whether it is in life, study, or work, every individual hopes that every event we have done can be successful, however, there are many unsatisfactory aspects in real life, and often we are constrained by various factors such as society and school, unable to fully showcase ourselves and meet our inner needs, over time, it is inevitable to develop pathological psychology such as loss and depression. If these psychological problems are not resolved in a timely manner, some psychological diseases will form.

Psychological barriers are no longer a new concept for modern office workers and college students. With the rapid development of China's economy, this generation of young people is facing various pressures in life, study, work, and family, they don't have time to take a break from their emotions, to freely move around in nature, and to face many real-life problems. As for the college student community, I don't have time to freely move around in nature, and I can't let go of many real-life problems. For college students, how to face the pressure of finding a job, how to bravely face the girls and boys they like, and express themselves; How to learn a compulsory course that one does not like; How to get along with classmates with different personalities? If these problems are not handled properly, they may lead to anxiety, and in severe cases, it can lead us into depression and unable to extricate ourselves.

This study shows that, after sports dance training, there was a significant difference in the scores of "depression" and "anxiety" factors between the experimental group and the control group, because sports dance can improve people's ability to withstand large stimuli and alleviate mental stress. Previous studies have shown that long-term moderate to low intensity exercise can alleviate mental stress, eliminate anxiety, treat depression, and have no other psychological side effects. It is a safe rehabilitation method for depression. As for the reason why sports dance can improve depression and anxiety symptoms, Peng Jie believes that sports dance has a good regulatory effect on the central nervous system, which can increase the intensity of neural processes during exercise, increase the excitability of the cerebral cortex, and focus attention, thus, the human body exhibits high muscle strength and strong athletic ability; It can balance the excitation and inhibition of neural processes, enhance the coordination ability of the central nervous system, and effectively prevent various neurological diseases; Effectively eliminate various fatigue caused by excessive use of the brain, alleviate tense emotions in the human body, improve vitality, and thus withstand significant stimuli and mental pressure. This study also agrees with the statement that music with distinctive rhythm and rhythm can stimulate people's cerebral cortex and make people have beautiful, cheerful and exciting emotions; And in sports dance learning and practice, we can freely combine dance movements, this characteristic is in line with the pursuit of relaxation and mental stress among college students, eliminating anxiety, treating depression, and having no other psychological side effects. It is a safe rehabilitation method for depression. As for the reason why sports dance can improve the symptoms of depression and anxiety, Peng Jie

believes that sports dance has a good regulatory effect on the central nervous system. During exercise, it can increase the intensity of the neural process, increase the excitability of the cerebral cortex, and focus attention, so that the human body shows great muscle strength and strong athletic ability; It can balance the excitation and inhibition of neural processes, enhance the coordination ability of the central nervous system, and effectively prevent various neurological diseases; Effectively eliminate various fatigue caused by excessive use of the brain, alleviate tense emotions in the human body, improve vitality, and thus withstand significant stimuli and mental pressure. This study also agrees with the statement that music with distinctive rhythm and rhythm can stimulate people's cerebral cortex and make people have beautiful, cheerful and exciting emotions; And in sports dance learning and practice, we can freely combine dance movements, which is in line with the psychological characteristics of college students pursuing a relaxed and lively atmosphere (Van Duijn, 2021).

Discussion and Implications

Sports dance is a sport that is well known for its physical fitness function (Abbott & Barber, 2011; Allender, Cowburn, & Foster, 2006). However, the positive impact of sports dance on mental health has not been taken seriously and has only been continuously recognized by scholars and researchers. Before the experiment in this study, the psychological health self-assessment scale measurements of the control and experimental groups showed that the proportion of college students with mental health was not as high as we expected, and a considerable number of students were still on the edge of mental health, which needs to be paid attention to by educators. Therefore, improving the psychological health level of college students is particularly important (Pedrelli et al., 2015). Psychologists have put forward many laws of people's psychological activities and behaviours through continuous efforts. By understanding the laws of people's psychological activities, they have explored methods to prevent psychological diseases, making great contributions to improving people's mental health level. At present, various universities have also basically popularized psychology courses and set up psychological counselling rooms, which is a commendable thing. However, in addition to doing these tasks well, schools can also carry out sports dance teaching to improve students' social communication skills, cultivate self-confidence, and prevent psychological problems. Sports dance teaching, from a subconscious level, increases students' ability to

withstand stress and is an effective way to improve their mental health level (Szymanska & Wilinski, 2020).

Can exercise the will quality; enhance the self-confidence of female college students (Arzu, Tuzun, & Eker, 2006). In order to complete the movements of sports dance correctly according to the music rhythm, we must remember the essentials of the movements and respond quickly. And in the dance to highlight the beauty of the human body line and posture beauty, action beauty and so on. Due to the characteristics of sports dance, the improvement of endurance is an important guarantee that practitioners can complete the movement, found after a period of practice, 70% feel their body change, sports dance to a certain extent, the effect of fitness weight loss, beauty is the nature of a woman, they feel their skin is better, figure shape, confidence has been great improvement. Generate a good emotional experience, relieve the mental pressure of female college students. Because female college students have a higher anxiety tendency than boys, from the society, study, life, employment, emotion and other aspects of the pressure, so that they become mental tension, inferiority and fear mood, mood fluctuations, mental pressure is also very big. Sports dance can express emotion in the beautiful melody, exchange ideas, mutual communication, enrich the students' cultural life, improve the interpersonal skills, show their body, line and curvilineaceous, and can eliminate fatigue, improve the cerebral cortex, excitement and inhibition to a new balance, make the enthusiasm of body and mind to rest. Dredge the thoughts and feelings of female college students, improve interpersonal skills. Sports dance is a sport that men and women matching each other. Through contact, it can enhance the social communication ability of female college students, so as to improve the relationship between students. Lack of necessary understanding between male and female students and communication, the relationship between mutual indifference, more likely to produce loneliness and interpersonal barriers, through the practice of sports dance, can build a communication platform for male and female college students, not only enrich the students spare life, at the same time eliminate the gap between men and women, strengthen mutual understanding. Cultivate the elegant temperament of female college students and enhance their aesthetic values. Sports dance in action, music, human body, clothing contain beauty, is in line with the nature of female college students love beauty, it is also the main factors to attract them, because they feel the beauty, showing their youth and beauty, show is not only the form of beauty, but also a kind of inner spiritual beauty, their temperament in the beauty, get sublimation, in the sublimation of the interpretation of incisively and vividly.

Above results implications from the theoretical perspective highlighted the importance of sports dance in improving the psychological health of college students. The study demonstrates that sports dance, as a moderate-intensity aerobic exercise, positively impacts both physical and mental health. By engaging in sports dance, college students experienced improvements in their physiological condition, enhancing their overall well-being and resilience against stress. Sports dancing also promoted improved communication and social integration among students by helping them strengthen their interpersonal skills. In addition, the study found that sports dancing assisted in removing psychological obstacles and lessening depressive and anxious feelings. The results of this study support the incorporation of sports dancing as a viable intervention in mental health programs aimed at college students and add to the body of information on the therapeutic advantages of physical activity for mental health. Other researchers may be able to use the research to further their own investigations in the future. In practical terms, the findings provide insightful information for academic institutions and mental health specialists. Sports dancing instruction might be included into college courses or extracurricular activities as a useful way to improve students' general wellbeing. The results show that providing sports dancing as a choice for physical activity has the potential to enhance students' social skills, physical health, as well as mental health. This emphasizes the value of incorporating holistic mental health treatment strategies, where physical activities like sports and dance are acknowledged as a complimentary component to conventional psychological therapies. In order to provide accessible sports dance programs and to foster students' mental and physical wellness, colleges and universities might work with fitness centres or dance studios. These results may also be utilized by mental health professionals to encourage the use of sports dancing in therapeutic interventions, giving college students a pleasurable and effective means of easing the symptoms of anxiety and depression. The research could also help to educational institutions to know about the importance of mental health by increasing importance on physical education.

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Conclusion

Sports dance has become an important component of campus culture. The education administrative department should strengthen the macro management of sports dance entering the campus, and further promote the popularization and improvement of sports dance among college students. In this study, 200 college students were randomly selected as subjects for a three-month dance sport training, and the SCL-90 questionnaire was administered in the experimental and control group before and after the course. The test results of all subjects were analysed by SCL-90 software and SPSS statistical software. The SCL-90 software features that the software automatically forms the score of each factor and the total score of mental health. Finally, we entered the overall score of the mental health self-rating scale as well as the sub-scores of 10 components into the SPSS13.0 program for data statistical analysis. Following the trial, there were substantial variations in the "interpersonal sensitivity" factor between the experimental and control groups, which indicated that sports dance promoted the interpersonal skills of college students and thus improved their mental health level. After students entering the university, to quickly adapt and into the collective life, respect each other's way of life is not easy, perhaps because of language, culture, life habits gap, more serious is unable to adapt to the collective life, closed up not to communicate with others, live in their own world, thus serious impact on learning and mental health, over time, will form a serious mental illness. In the process of sports dance teaching, teachers to their own good image infection students, optimistic, confident, healthy, energetic teachers will give students a very good example, enable students prepared to imitate, wanting to change, as a result, being a sports dancing instructor, you must first be healthy, happy, confident, and have a good attitude in order to assist students, as well as must constantly study hard, starting from practice, discusses more help students for enhance their mental health and body self-esteem of effective teaching methods and methods.

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