

BENEFITS OF THE OPTIONAL KUNG FU COURSE ON UNIVERSITY STUDENTS' PHYSICAL HEALTH



ORIGINAL ARTICLE
ARTIGO ORIGINAL
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BENEFÍCIOS DO CURSO OPCIONAL DE KUNG FU SOBRE A SAÚDE FÍSICA DOS ESTUDANTES UNIVERSITÁRIOS

BENEFICIOS DEL CURSO OPCIONAL DE KUNG FU EN LA SALUD FÍSICA DE LOS ESTUDIANTES UNIVERSITARIOS

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ABSTRACT

Objective: This paper examines the benefits of the optional Kung Fu course on students' physical health. **Methods:** Specific strategies promoting elective Kung Fu courses in Chinese universities are presented after analyzing the current situation of university students' psychophysical health. **Results:** According to the characteristics of martial arts students, providing effective sports intervention is an important demand for educators. Its development is also an important feature of modern sports and medicine. **Conclusions:** According to the analysis of the general physical status of Chinese college students at the current stage, students in ordinary colleges and universities should pay more attention to the importance of sports activities for students' physical quality and mental health education when participating in sports activities. **Level of evidence II; Therapeutic studies - investigation of treatment results.**

Keywords: Kung Fu; Student Health; College Students; Public Health.

RESUMO

Objetivo: Este documento analisa os benefícios do curso optativo de Kung Fu sobre a saúde física dos estudantes. **Métodos:** As estratégias específicas em promoção de cursos eletivos de Kung Fu nas universidades chinesas são apresentadas após análise da situação atual da saúde psicofísica dos estudantes universitários. **Resultados:** De acordo com as características dos estudantes de artes marciais, proporcionar uma intervenção esportiva eficaz é uma demanda importante para os educadores. Seu desenvolvimento é também uma característica importante do esporte e da medicina moderna. **Conclusões:** De acordo com a análise do estado físico geral dos estudantes universitários chineses no estágio atual, os estudantes das faculdades e universidades comuns deveriam prestar mais atenção à importância das atividades esportivas para a qualidade física e a educação da saúde mental dos estudantes quando participam de atividades esportivas. **Nível de evidência II; Estudos terapêuticos – investigação de resultados de tratamento.**

Descritores: Kung Fu; Saúde do Estudante; Saúde Pública.

RESUMEN

Objetivo: Este trabajo analiza los beneficios del curso optativo de kung-fu en la salud física de los estudiantes universitarios. **Métodos:** Se presentan las estrategias específicas para promover los cursos electivos de Kung Fu en las universidades chinas tras analizar la situación actual de la salud psicofísica de los estudiantes universitarios. **Resultados:** De acuerdo con las características de los alumnos de artes marciales, proporcionar una intervención deportiva eficaz es una demanda importante para los educadores. Su desarrollo es también una característica importante del deporte y de la medicina moderna. **Conclusiones:** Según el análisis del estado físico general de los estudiantes universitarios chinos en la etapa actual, los estudiantes de las universidades ordinarias deberían prestar más atención a la importancia de las actividades deportivas para la calidad física y la educación de la salud mental de los estudiantes cuando participan en actividades deportivas. **Nivel de evidencia II; Estudios terapéuticos – investigación de resultados de tratamiento.**

Descriptor: Kung Fu; Salud del Estudiante; Salud Pública.



DOI: http://dx.doi.org/10.1590/1517-8692202228052021_0530

Article received on 12/11/2021 accepted on 12/22/2021

INTRODUCTION

According to the National Students' physical health monitoring data, in recent years, China's College Students' physique shows a downward trend, the number of students with weak physique is rising, and more and more students fail the physique test.¹ According to the analysis of the overall physical health status of contemporary college students, it can be found that a large proportion of college students are overweight and seriously obese.² The current situation of students' physical fitness is not optimistic, strength, speed, endurance, flexibility, balance and

so on are showing a downward trend.³ As a main content of exercise physiology, health fitness includes cardiopulmonary function, skeletal muscle strength and endurance, body composition, etc.⁴ In the past two decades, the physical quality of Chinese college students has been showing a slow decline. College students are senior talents in the future construction of the country, their physical quality and health level directly affect their living standards and work efficiency, and also an important factor affecting social development.⁵

As a traditional project with high popularity in Chinese physical education curriculum, Wushu can attract students to participate in both policy oriented promotion and students' own love of Wushu curriculum. College students have their own characteristics and laws in terms of physical health status, influencing factors and health intervention mechanism. Serious and in-depth investigation and Research on these characteristics and laws is a necessary and basic work to improve students' physical health as a whole, and also an urgent requirement to cultivate high-quality teachers. How to bring traditional martial arts spirit into college physical education, cultivate college students' national spirit and improve their physical fitness through traditional martial arts teaching and exercise is not only a historical task of school education, but also an important topic for traditional martial arts education to keep up with the progress of society. College physical education is the most direct and effective way to promote the physical health of college students, but also an important means to promote the all-round development of students. Comprehensively improving college students' physical quality and physical condition is of great significance to improve social productivity and promote social and economic development. From the perspective of the spiritual connotation and function of traditional Wushu, this paper analyzes the influence of Wushu elective course on students' physical health.

The factors of College Students' physical health problems

Unscientific lifestyle

In the new era, the implementation of China's health promotion plan in schools is basically student-centered, rarely screening, feedback and promoting the physical health of college martial arts students. Martial arts students in Colleges and universities are ignored in the actual health promotion plan. Colleges and universities lack of concern and care for the health level of martial arts students. They do not evaluate and monitor the physical health of martial arts students in Colleges and universities. They rarely provide corresponding solutions and strategies for the health needs of martial arts students. Under the background of the rapid improvement of China's social economy and the quality of national life, especially the popularity of the Internet and computers, the wide spread of all kinds of network information on the Internet not only improves the efficiency of people's work and the convenience of life, but also restricts college students to follow the normal life communication with others. It is rare for colleges and universities to provide physical examination and community health service for students of martial arts team every year. According to the characteristics of college martial arts students, it is an important demand for today's educators to provide effective sports intervention to prevent diseases and convenient medical security platform.

Imbalance between self pressure and external pressure

"Combination of medicine and physical education" as a new concept of sports and medical integration and interweaving in the new era, its development is also an important feature of sports and modern medicine. Through the use of sports fitness, physical therapy function and healthy physique standard, it can promote the organic integration of medicine and physical education. For the martial arts students who are under great pressure, the guidance of medical institutions on their pathological reactions is limited, and the body alertness can not be detected. Especially in recent years, the number of sub-health patients of martial arts majors in Chinese universities is gradually increasing, which leads to the decline of physical health level year by year. It is urgent to improve the physical quality and health awareness of martial arts majors in Chinese universities. Schools pay too much attention to the enrollment rate, in order to improve students' performance, constantly compress the time of physical education curriculum, and extend students' learning time.

This kind of behavior of the school will not only increase the burden of students' schoolwork, but also affect the healthy development of students' body and mind, and have a negative impact on students. In the new era, we should carry out physical fitness monitoring for martial arts majors in Colleges and universities, which is shared by full-time and part-time staff, medical institutions and rehabilitation institutions. While learning martial arts, we should organize martial arts majors to carry out sports health care activities from time to time, and make health care plans according to the physical examination, so as to carry out detailed and scientific research on the situation of martial arts majors in Colleges and universities Guidance and advice.

Although the injury rate of Wushu Athletes in the training field is higher than that in the competition field, in a certain training period, the time of training in the training field is much longer than that of the competition field. The beneficial structure of motor functional plasticity is shown in Figure 1.

Through the investigation of the injury time of Wushu athletes. The injury of athletes is mainly caused in the process of sports training, the incidence of training is 76%. The injury rate was 20%. Injury caused by other reasons in spare time accounted for 4%. Therefore, the prevention and treatment of sports injury focuses on the period of sports training, as shown in Table 1.

Specific strategies of Wushu elective course promotion in Colleges and Universities

Make clear the teaching thought for the purpose of improving health

According to the analysis of the overall physical condition of Chinese college students at the present stage, students in ordinary colleges and universities should pay more attention to the importance of sports activities to students' physical quality and mental health education when participating in sports activities. Therefore, students' health education should be taken as the main starting point of the course in Wushu elective classes in colleges and universities, so as to reduce the number of confrontation practice exercises among students as much as possible, strengthen students' study of basic skills of Wushu Sanda, enable students

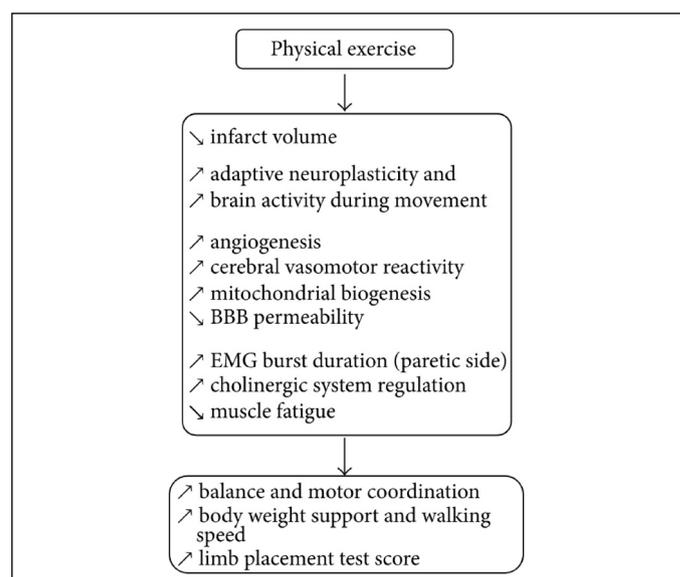


Figure 1. The beneficial structure of the plasticity of motor functions.

Table 1. Types of sports injury data of martial arts athletes.

Injury stage	Number of injured	Proportion (%)
Train	38	76
Match	10	20
Amateur	2	4

to master the basic movement requirements of Wushu Sanda activities and emphasize the importance of students' Wushu moral education activities. According to the problems existing in the physical health of Wushu majors in colleges and universities, it is impossible to provide complete physical health monitoring and health promotion services for Wushu majors by relying solely on school resources. To ensure the physical health and long-term work of Wushu majors in colleges and universities, schools should actively cooperate with the Physical Fitness Testing Center, interact with the Physical Fitness Monitoring Center and use its effective resources to provide scientific health guidance to Wushu majors in colleges and universities. When carrying out physical education tests in colleges and universities, the workers of supervision institutions should arrive at the test sites to supervise and publicize the test results. In order to facilitate the popularization of knowledge and health consultation, schools and physique monitoring centers should build an integrated, diversified and scientific health service platform for martial arts students, actively prevent and intervene the bad habits of martial arts students, and formulate effective exercise prescriptions and nutrition prescriptions, so as to provide comprehensive and scientific health services for martial arts students in colleges and universities.

Setting up scientific and reasonable teaching content

Wushu Sanda is rich in routines and techniques. As an item that should be taught completely in the public physical education class of ordinary colleges and universities, it is necessary to adjust the contents of Wushu elective courses reasonably. When choosing the teaching contents of courses, appropriate changes and adjustments should be made in combination with the overall physical health of the students in the teaching class. In addition to some simple basic movements and practical skills, advanced teaching should be realized on the basis of Wushu Sanda, so as to fully mobilize the flexibility and participation of students in all parts of their bodies. Nowadays, students majoring in Wushu are not enthusiastic about participating in physical fitness monitoring, so it is necessary to improve the enthusiasm of students majoring in Wushu according to their actual situation, provide scientific physical exercise programs and exercise prescriptions for students majoring in Wushu, adopt scientific health monitoring methods, and actively formulate appropriate "combination of medicine and body" programs. Figure 2 defines the classification of injuries in Wushu training.

Schools should establish a long-term physical health intervention mechanism for junior Wushu students, regard the consistency of medical services and sports as the core of health work for Wushu students, and actively provide medical monitoring and exercise prescription schemes around the health conditions of Wushu students, so as to realize the combination of health monitoring and long-term exercise intervention.

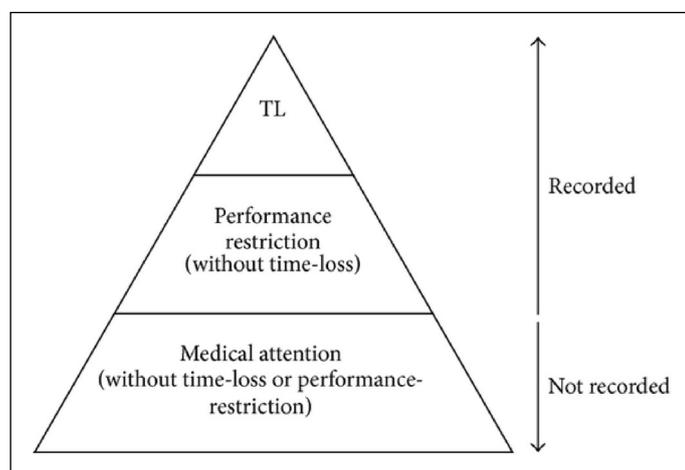


Figure 2. Classification of injury definition levels in martial arts training.

In addition to formulating complete and reasonable classroom teaching contents, teachers should also refer to the advantages of Wushu Sanda classroom teaching activities in improving the interaction and communication between teachers and students, actively guide students to master the correct basic Wushu Sanda skills and actions, and participate in classroom practice activities to learn with students, which can cultivate students' interest and enthusiasm in learning. If the mass distribution of each rigid body is assumed to be uniform, the inertial parameters of the rigid body required in Table 3 can be calculated by using the inertial parameters obtained in Table 2.

At present, the physical health of college students is not optimistic, especially overweight and obesity, which put forward more complicated conditions for setting the exercise intensity of classroom content. Therefore, in the actual teaching process, teachers should choose the exercise mode with less exercise intensity and mainly aerobic exercise to help students actively reduce fat. The diversity, attraction and complexity of physical education teaching content can make people experience a variety of emotional experiences in different degrees. Sports pleasure is a more significant positive effect of sports, which makes it easier for students to keep on exercising and promote health, and makes it easier for everyone to get a positive mental health state.

Table 2. Inertial parameters of each part of the experimenter's body.

Position	Quality (kg)	Rotary inertia
Foot	0.84	120.33
Shank	3.21	211.51
Thigh	9.75	243.85
Trunk	32.09	3356.88
Neck	7.48	290.41

Table 3. Inertial parameters of each rigid body.

Human link	Quality (kg)	Rotary inertia
Toe	0.28	53.14
Support side lower leg	2.45	268.10
Swing leg	2.44	268.11
Support side thigh	9.41	378.48
Swing side thigh	9.39	378.48

CONCLUSIONS

The long-term intervention mechanism to enhance students' physical health is not perfect, which is caused by family reasons, social reasons and school reasons. The spirit of traditional Wushu is the crystallization of Chinese traditional culture, which represents the endless mental outlook of the Chinese nation for thousands of years. In the process of its formation and development, it has poured extensive efforts of people's labor, enriched students' spiritual life, and played a direct role in cultivating students' will quality, essence, spirit, spirit and moral sentiment in college physical education. It is imperative to monitor the physical health of Wushu majors in Chinese colleges and universities. We should optimize the physical health plan of Wushu majors in colleges and universities, build a physical health service platform, enhance the awareness of disease prevention, improve the evaluation criteria of physical health, and comprehensively promote the combination of medicine and physical education. In order to form a long-term intervention mechanism to enhance students' physical health, it is necessary to promote close cooperation among family, society and schools. Schools should conscientiously implement the guiding ideology of health first, pay more attention to physical fitness test, and fully implement it in physical education class, so that students can fully understand the importance of physical fitness test.

ACKNOWLEDGEMENT

This is a phased achievement for 2017 Shaanxi College Students Innovation and Entrepreneurship Training Program of Establishing

& Promoting of Martial Arts Platform for College Students in the Internet Plus Era.

The author declare no potential conflict of interest related to this article

AUTHORS' CONTRIBUTIONS: Each author made significant individual contributions to this manuscript. Pengsheng Chen: writing and execution.

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