

INVESTIGATION OF UNIVERSITY STUDENTS' PERCEPTION OF SPORTS MOTIVATION AND HEALTH



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INVESTIGAÇÃO SOBRE A PERCEPÇÃO DA MOTIVAÇÃO ESPORTIVA E SAÚDE DOS ESTUDANTES UNIVERSITÁRIOS

INVESTIGACIÓN SOBRE LA PERCEPCIÓN DE LA MOTIVACIÓN DEPORTIVA Y LA SALUD DE LOS ESTUDIANTES UNIVERSITARIOS

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ABSTRACT

Introduction: There are few studies relating the perceived value of exercise among college students and their sports motivation, but many studies in related fields have explored the relationship between cognition and motivation, which helps us to study the relationship between college students' interpretation of the value of exercise and their motivation to exercise. **Objective:** Investigate the relationship between perceived sports motivation on college students' health. **Methods:** Based on sport and health promotion theory, this paper established a model of sports health promotion, analyzing its impact on sports motivation and the health of college students. **Results:** The higher college students' internal and external motivation, the higher their physical health test scores. College students' physical health needs to be improved to boost their sports motivation and overall physical quality. **Conclusion:** The decline in physical quality of University Students is affected by several factors; one of the most important reasons is lack of physical exercise. Therefore, promoting physical exercise for university students is one of the main measures to improve their physical health. **Level of evidence II; Therapeutic studies - investigation of treatment outcomes.**

Keywords: Physical fitness; Students; Motivation; Student Health.

RESUMO

Introdução: Há poucos estudos relacionando a percepção do valor do exercício físico entre os estudantes universitários e sua motivação esportiva, porém muitos estudos em campos relacionados exploraram a relação entre cognição e motivação, o que nos ajuda a estudar a relação entre a interpretação do valor do exercício físico dos estudantes universitários e a motivação para a sua prática. **Objetivo:** Investigar a relação entre a percepção de motivação esportiva sobre a saúde dos estudantes universitários. **Métodos:** Com base na teoria do esporte e da promoção da saúde, este documento estabeleceu um modelo de promoção da saúde esportiva, analisando o seu impacto na motivação esportiva e na saúde dos estudantes universitários. **Resultados:** Quanto mais elevada for a motivação interna e externa dos estudantes universitários, mais elevadas serão as suas notas nos testes de saúde física. A saúde física dos estudantes universitários precisa de ser melhorada de uma forma geral, a fim de estimular a sua motivação desportiva e melhorar a sua qualidade física geral. **Conclusão:** O declínio da qualidade física dos Estudantes Universitários é afetado por diversos fatores, uma das razões mais importantes é a falta de exercício físico. Por conseguinte, a promoção do exercício físico para os estudantes universitários é uma das principais medidas para melhorar a sua saúde física. **Nível de evidência II; Estudos terapêuticos - investigação dos resultados do tratamento.**

Descritores: Aptidão física; Estudantes; Motivação; Saúde do Estudante.

RESUMEN

Introducción: Existen pocos estudios que relacionen el valor percibido del ejercicio entre los estudiantes universitarios y su motivación deportiva, sin embargo, muchos estudios en campos relacionados han explorado la relación entre la cognición y la motivación, lo que nos ayuda a estudiar la relación entre la interpretación de los estudiantes universitarios del valor del ejercicio y su motivación para hacer ejercicio. **Objetivo:** Investigar la relación entre la motivación deportiva percibida y la salud de los estudiantes universitarios. **Métodos:** Basándose en la teoría de la promoción del deporte y la salud, este trabajo estableció un modelo de promoción de la salud en el deporte, analizando su impacto en la motivación deportiva y la salud de los estudiantes universitarios. **Resultados:** Cuanto mayor es la motivación interna y externa de los estudiantes universitarios, mayores son las puntuaciones obtenidas en las pruebas de salud física. Es necesario mejorar la salud física de los estudiantes universitarios en general para estimular su motivación deportiva y mejorar su calidad física global. **Conclusión:** La disminución de la calidad física de los estudiantes universitarios se ve afectada por varios factores, uno de los más importantes es la falta de ejercicio físico. Por lo tanto, promover el ejercicio físico de los estudiantes universitarios es una de las principales medidas para mejorar su salud física. **Nivel de evidencia II; Estudios terapéuticos - investigación de los resultados del tratamiento.**

Descritores: Aptitud Física; Estudantes; Motivación; Salud del Estudiante.



INTRODUCTION

The physical health of young students is directly related to the national quality. In recent years, although the level of nutrition and development of teenagers has been continuously improved, some indexes of physical fitness of teenagers have continued to decline.¹ Exercise is the basic means of sports and the core of people's sports activities. Physical exercise attitude is the individual's attitude towards external sports activities, which can be divided into physical exercise behavior attitude and physical exercise goal attitude.² The cognition of exercise value is based on the level of cognition and sports experience. On this basis, the combination, assimilation and adaptation of various factors in the process of education make the cognition of physical exercise value constantly surpass its original set trend, and constantly affect people's evaluation, choice and behavior of physical exercise.³ Exercise motivation refers to the needs or needs that can be met through physical exercise. It is the psychological motivation for people to participate in and maintain exercise behavior, and it is also the direct cause of physical exercise behavior.⁴ In a certain situation, motivation will be affected by different factors, and individual's cognition of these factors will often change their behavior.⁵ Health is the foundation of life, happiness and productivity, the most important core competitiveness of citizens, society and the country, and the foundation and guarantee for all people to enhance their physique and healthy life.⁶ At present, college students' cognition of the value of physical exercise has been greatly improved, but affected by a variety of factors, college students' participation in physical exercise is not high.⁷

How to make students improve their interest in sports learning, master the methods of sports learning, produce positive values and stimulate students' motivation is very important. As the organizer and director of physical education, teachers guide the general direction of physical education and affect students' enthusiasm for Physical Education.⁸ The decline of College Students' physical health is related to many factors, among which the lack of physical exercise is one of the main reasons.⁹ Therefore, promoting college students to actively participate in physical exercise is the main measure to improve their physical health. The significant influence of self-determination need and ability need on College Students' exercise behavior decreases with the addition of social motivation, pleasure motivation and ability motivation, which indicates that psychological need satisfaction has a partial mediating effect on exercise motivation and exercise behavior. The higher the internal and external motivation of college students, the higher their physical health test scores.¹⁰ College Students' physical health needs to be comprehensively improved, so as to stimulate the level of college sports motivation and comprehensively improve their physical quality.

College Students' cognition of the value of physical exercise

Health promotion refers to the process of improving people's physical and mental health through comprehensive factors such as education, culture and environment. The essential difference between sports health promotion and other ways of promotion lies in the emphasis on the formation of healthy sports consciousness through sports intervention, so as to form a healthy sports lifestyle and improve the health level. The more positive the sports attitude is, the stronger the internal and external motivation is. Motivation is an implicit behavior between human beings and the outside world that can not be directly observed by others, while practice is an explicit behavior that can be observed by others. The effect characteristics of behavior activities are the results of behavior.¹¹ The effect of physical exercise is a gradual accumulation process, not once and for all.

The purpose of sports health promotion is to cultivate people to form good sports consciousness and behavior habits, absorb the positive energy brought by sports, and encourage positive and healthy attitude towards life. School physical education is an important foundation of lifelong physical education.

The significance of sports health promotion lies in setting up different activities and courses for different groups of people, actively advocating and mobilizing people to come out from home and participate in sports health promotion activities. The higher the improvement level of post exercise processing speed, the lower the scores of active participation and spirit, and the lower the increase of fatigue. The relationship between the diversified governance subjects of adolescent physical health public service is shown in Figure 1.

It improves the cognitive level in sports practice and theory. The variables of different training factors in the motion image of the subject are calculated by using the following formula:

$$E_R^j = \sqrt{\sum_{u=1}^U \phi_u^j}, j \in (1, M), i \in (1, H) \quad (1)$$

$$\phi_u^j = (S_u^i - S_R^i)^2$$

If one parameter is determined arbitrarily, an infinite number of regression models will be obtained. For each regression model, calculate the measured values and predicted values of reaction variables of each observed object:

$$w_j^i = \frac{1}{\sum_{j=1}^k \frac{(EP_{LR}^{ij})^2}{1}}, j \in (1, k) \quad (2)$$

When the skin is regarded as a homogeneous membrane, the permeability coefficient can be deduced from the law of diffusion:

$$(x_{LT}^i, y_{LT}^i) = \sum_{j=1}^k w_j^i (x_{RTj}^i, y_{RTj}^i) \quad (3)$$

Calculated by the following formula:

$$HWt = \frac{\sum_{i=1}^N D_i(x)}{N} \quad (4)$$

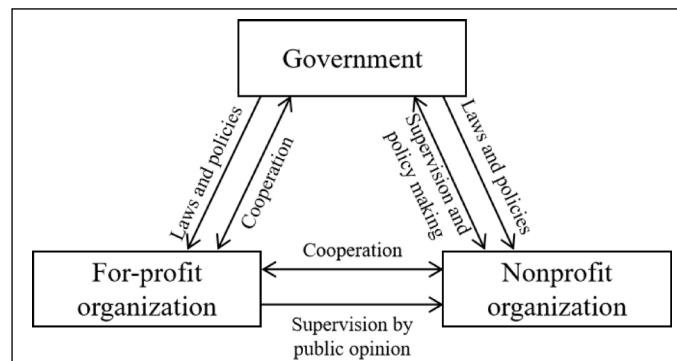


Figure 1. The relationship between the diversified governance bodies of public services for youth physical health.

Students majoring in physical education should have considerable advantages in time and intensity of exercise, so the acquired exercise plays a very important role in physical fitness, and the effect of exercise on physical fitness is also very obvious. The health effects and physique enhancement of college students' physical exercise are influenced by exercise prescription, and the physical, psychological and social health effects and physique enhancement of college students with different intensity of physical exercise are significantly different. Although students with different physical health grades have such a trend in exercise intensity, there is no significant difference. This may be because there may be some measurement errors depending on the amount of perspiration after each exercise. There is a significant positive correlation between exercise motivation and exercise behavior and physical health, which suggests that students have more active exercise behavior with stronger exercise opportunities. However, logically speaking, exercise motivation can not directly produce physical health, so the influence of exercise motivation on physical health may be produced by influencing exercise behavior. Sports motivation plays an important role in students' participation in physical exercise and physical exercise, and has an important impact on students' physical health.

An analysis of the relationship between exercise motivation and college students' physical health

According to students' psychological motivation to participate in physical exercise and physical exercise, they can be divided into internal motivation and external motivation. If an individual feels some obstacles in his past behavior experience, it will also affect his later behavior. For each individual, every behavior will be accompanied by different feelings, which may be positive or negative. The better the quality of mental health, the higher the level of physical health. If students have a high sense of self-efficacy, they can improve their self-confidence in completing physical exercise. In order to ensure the expected harvest, they can enhance their motivation to exercise, increase their exercise behavior and improve their physical health. Environmental factors result in different scores of sports motivation and attitude towards physical exercise among college students of different genders and different home addresses. Women's scores are slightly lower than men's in terms of sports motivation and attitude towards physical exercise, which may be related to the fact that most girls are weak in physical fitness and unwilling to participate in sports. The essential attribute and sociological significance of sports determine that sports play its unique role in providing people with social support.

Education and exercise are carried out through the interaction between people in stadiums and gymnasiums, which often appears in the form of groups. Along with life activities, a variety of information will be generated, and various irrelevant information will often overlap. Therefore, in order to detect specific information, it is often necessary to eliminate the interference of irrelevant biological information. Because the physiological state and pathological state of organisms are affected by many factors. The basic elements of the integrated service system for adolescents' physical health are shown in Figure 2.

The sports situation has a significant predictive power on the physical health and mental health quality of college students. College education should put students' physical and mental health first, and attach importance to public physical education class teaching and extracurricular sports activities. Health promotion refers to the process of improving people's physical and mental health through comprehensive factors such as education, culture and environment, and promoting people to maintain and improve their own health. The dimensions and overall reliability coefficient of the health-related index field evaluation system are shown in Table 1.

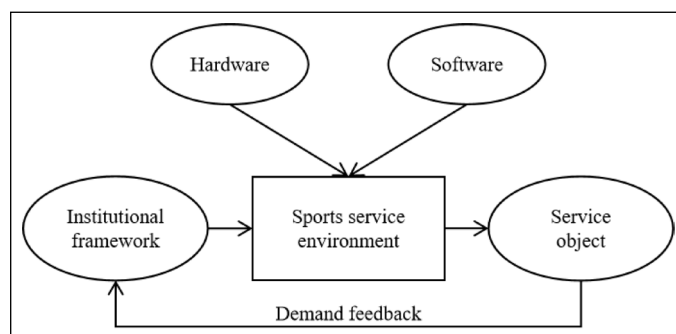


Figure 2. The basic element structure of the integrated service system for adolescent physical health.

Table 1. Dimensions and overall reliability coefficients of the health-related finger field evaluation system.

Dimension	Number of indicators
Activity ability	17
Somatic function	8
Emotional character	9
Memory function	5
Healthy behavior	7
Social adaptability	6

Applying the sports model to the input method, the system chooses a string that is most likely to be generated by solving the following decision function:

$$D_i = a + \sum_{j=1}^n b_j p_j + r_i Y + u \quad (5)$$

The probability of a sentence can be written as conditional probability multiplication of 3 tuples:

$$D_i = a + \sum_{j=1}^n b_j \ln(p_j) + r_i \ln(Y) + u \quad (6)$$

Wherein the probability of each 3-tuple is estimated by:

$$\ln(D_i) = a + \sum_{j=1}^n b_j \ln(p_j) + r_i \ln(Y) + u \quad (7)$$

The essential difference between sports health promotion and other ways of promotion lies in emphasizing the formation of healthy sports consciousness through sports intervention, thus forming a healthy sports lifestyle and improving the health level. Along with life activities, a variety of information will be produced, and various irrelevant information will often overlap. Therefore, in order to detect specific information, it is often necessary to eliminate the interference of irrelevant biological information. Because the physiological state and pathological state of organisms are affected by many factors. The measurement of biological information is carried out on living organisms, and is often carried out in complex environments. Physical exercise is a special social and cultural activity, which is characterized by strong direct participation, fierce competition and frequent interpersonal communication, as well as various activities.¹³ After health promotion infiltrated into non-medical and health fields, physical education has gradually become the main means and way of health promotion. College sports workers should strengthen organizational leadership and guidance, and take effective measures to guide college students to carry out scientific physical exercise.

CONCLUSIONS

Physical exercise behavior of college students has a positive predictive effect on physical health. Students with higher physical health level have stronger fun motivation, ability motivation, health motivation and social motivation. College students' motivation of physical exercise is related to their persistence, frequency, time and intensity, and there is a strong correlation between their motivation of physical exercise and their behavior. Good eating behavior is of great significance to maintain the level of physical fitness, which is the basis of promoting physical health. Good sports habits are the key to improve physical fitness and an effective means to improve physical health. The theory and method of defense and treatment advocated by sports thought will also play a positive role in avoiding and getting rid of psychological diseases. College students' physical and mental health is not optimistic, while sports can promote college students' physical and mental health, and there is a significant correlation between physical health and mental health quality. Students with different levels of physical health have relatively

strong health motivation, but fun motivation and ability motivation have stronger predictive effect on physical health. The school should pay full attention to college students' physical exercise, set up college students' physical education class, and improve the venues and facilities for college students' physical exercise.

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