

Exercise Prescription in College Physical Education

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Abstract

Exercise prescription teaching model can efficiently solve the contradiction of technology teaching and theory teaching in the exercise sports teaching of Beijing universities and promote and realized the integrated teaching in and out of courses. Making the definition of exercise prescription as its entry point, the paper discusses the application of exercise prescription by analyzing the concept and model of exercise prescription teaching in order to promote the teaching quality, teaching effect and the revolution of exercise sports teaching in universities.

Keywords

Exercise Prescription; Physical Education; College.

1. Introduction

With the deep development of exercise prescription theory, researches on exercise prescription have been improved a lot both at home and abroad. exercise prescription is more and more applied in health exercises and exercise sports teaching fields from recovery field. The task of exercise prescription in health exercises and exercise sports teaching fields develops into pursuing for health both in mind and body from sole fitness. More and more researches of exercise prescription are carried out on health exercises, exercise sports teaching as well as pursuing for health both in mind and body. It is especially true in some universities focusing on scientific research of exercise sports. They have obtained some achievements, which objectively provides advantages to carry out exercise prescription teaching in universities. Currently, health assessment and physical fitness test indexes of exercise prescription aiming at health exercises has been simplified, so is the standard of exercise intensity. Therefore, the application program of exercise prescription should also be simplified. The simplified application program efficiently broadens the application object and application range of exercise prescription, which is beneficial to carry out among students with different physical condition. The programmed exercise prescription information also provide teachers and students in universities with great application conditions[1].

2. The definition of exercise prescription

The complete concept of exercise prescription can be summarized as : according to examined medicine material, the health, physical power and cardiovascular function of exercisers or patients engaged in exercise sports, exercise prescription stipulates appropriate sports, time and frequency in the form of prescription by combining their individual features such as environment, exercise hobbies and son on. It also point out matters need attention in exercises in order to take exercises according to the plan and reach the purpose of keeping fitness or curing illness.

2.1 The concept of exercise prescription teaching

Exercise prescription teaching means that teachers formulate strongly targeted teaching contents and methods according to the physical fitness and health condition of students in different classes. It's a kind of teaching method by combining students' autonomous learning and autonomous monitoring of constitution with scientific knowledge about health. Exercise prescription teaching changes exam-oriented education into quality-oriented education and the overall development of students' health both in mind and body by exerting their roles of subjects and mobilizing their enthusiasm for sports exercise[2].

2.2 The concept of exercise prescription teaching model

Exercise prescription teaching mode is a full set of methodology summarized from teaching activity of sports exercise in order to reach some specific goal. It is established under the theoretical instruction of improving students' health. It is a relatively stable frame structure and active program of teaching activity of sports exercise. It is a working way of school exercise sports with relatively strong research features. Exercise prescription teaching mode aims to finish the main tasks of sports exercise teaching by taking exercise prescription teaching as its main method and solve problems relating to students' constitution development by means of exercise prescription teaching. It is the materialization of sports exercise teaching as well as the summary of sports exercise teaching experience.

3. The application of exercise prescription

3.1 The effect comparison between exercise prescription teaching and traditional sports exercise teaching

Exercise prescription teaching carry out the whole teaching process by combining calisthenics, track and field, basketball as well as health and fitness facilities. All those items possess fitness objective, so it has obvious experiment teaching results. The reason is that exercise prescription teaching is characterized by strong targeted, scientific and practical features, which can not only meet the need of teaching but also meet the need of taking exercising. However, traditional sports exercise teaching more focuses on the technology teaching of exercise sports items and place more emphasis on unilateral "teaching" or "learning", which doesn't have a strong direction of fitness. After finishing experiments, it is proved by comparing changes of each body index[3].

3.2 The application of exercise prescription teaching in exercise sports teaching in universities

Exercise prescription teaching accords with discriminatory principle which can efficiently improve students' sports level. When it comes to selecting teaching contents, methods and exercise load, exercise prescription teaching takes students' physical condition into consideration, which efficiently motivates students' consciousness and enthusiasm to take exercise and then improves exercise effect. It is proved by experiments that exercise prescription teaching can efficiently enhance students' physical fitness and improve the teaching condition that students with a good physical fitness can eat well, while students with a bad physical fitness cannot eat well. Exercise prescription teaching indeed puts "teaching students in accordance with their aptitude" into practical teaching.

3.3 The strong targeted exercise prescription teaching can efficiently improve students' physical constitution

Exercise prescription teaching formulates corresponding "exercise prescription" according the real physical fitness condition of students in experimental groups. It also implements appropriate exercise load and timely adjusts their exercise intensity. Students' constitutions are obviously improves by teaching experiments, which conforms to some related research results at home.

Table 1. The comparison of students' constitutions after experiments (N=240 people)

12 minutes running	Mark	Experimental class	Control class
2800meters	100	18	8
2600meters	90	21	12
2400meters	80	62	55
2200meters	70	19	25
2000meters	60	0	16
<2000meters	<60	0	4

3.4 Exercise prescription teaching integrates adaptation, enjoyment and scientificity

Exercise prescription teaching integrates adaptation, enjoyment and scientificity which can motivate students' initiative in study and cultivate their consciousness in taking exercise sports exercise. It is beneficial to form a habit of taking a lifelong exercise sports exercise. Exercise prescription teaching takes sports type, exercise intensity, exercise time and exercise frequency in to full consideration, which not only makes teaching on the basis of science but also avoids over fatigue and receives great learning effect. The strong targeted exercise prescription teaching can improve students' interest in learning, motivate their enthusiasm for learning by appropriately arranging their learning and exercising. It is good to motivate students' subjective initiative in learning and form a good habit. Exercise prescription teaching can timely adjust "exercise prescription" by analyzing, summarizing and feeding back after class, which conforms to the development of students' constitution and their health in mind and body[4].

3.5 Exercise prescription teaching can more efficiently improve the effect of course teaching

The application of exercise prescription teaching model can motivate students' enthusiasm and initiative in learning. it is proved by experiments that exercise prescription teaching formulated according to students' real constitution condition is quite strong targeted. Meanwhile, exercise prescription teaching places emphasis on students' knowledge education of scientific exercise. Moreover, college students have strong rationality and autonomy, so they can use scientific exercise method after they realize what they are short in their own constitution condition, which will more improve their enthusiasm and initiative in learning[5].

Table 2. The excellence rate comparison of students' physical fitness test between experimental class and comparison class (N=120 people)

Content	Standing long jump	100 m running
Before the implementation of the experimental class	50	62
%	42	52
Before the implementation of the control class	55	64
%	46	53
After the implementation of the experimental class	101	89
%	84	74
After the implementation of the control class	75	67
%	63	56

In the process of implementing exercise prescription, teachers should timey communicate with students both in and out of class, which can not only meet students' different exercise sports demands and motivate their interests in exercise sports, but also guarantee the scientificity and effectiveness of exercise sports exercise. It is beneficial to cultivate students' idea of scientific exercise sports exercise,

form a good habit of taking sports exercises and finally reach the target of lifelong education sports exercise.

Table 3. The questionnaire of carrying out exercise prescription teaching model by college teachers

Content	N	%
Cultivating students' Lifelong Physical Education consciousness	17	56
Improving students' physique	22	73
The improvement of students' initiative and positive exercise	28	93
Promoting and expanding the level of PE. Teachers	21	70
Promoting the reform and development of School's Physical Education	18	60
Promoting the concept of health and scientific knowledge of physical exercise	25	83

We can see that college teachers play a positive role in carrying out exercise sports teaching model. Better achievements are obtained in some universities, which proves that exercise sports teaching model can exert an important role in college exercise sports teaching. It possesses some practical and guided value, which can be popularized and used.

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