## Research on the application of sports APP in College Physical Education

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Abstract: As an important way to carry out liberal education, the quality of physical education is closely related to the overall development of talents. In recent years, the problems of physical education have become more and more obvious, which are not conducive to the cultivation of universities. Students' interest in sports also directly affects the improvement of college students' physical quality. Sports APPS can have a profound impact on people's physical activity. They are simple, portable, versatile and popular with fitness enthusiasts. The physical education also needs to explore and summarize, to try and innovate, to open up and forge ahead, and to dare to bring a variety of modern educational means into the physical education classroom teaching. It is the product and trend of the times to combine the application of mobile phone sports APP software with college sports teaching. The combination of the two will bring more fresh teaching means to college sports teaching and achieve a good effect.

Physical education in universities is the last stage for students to receive physical education in universities, and it is also the key period for cultivating good physical education consciousness. Therefore, as physical education teachers, they should use scientific methods and means in the teaching process to cultivate students' interest in sports, so as to improve their physical quality. How to give full play to the role of physical education, train high-quality talents, and develop the society in an all-round way is an important topic in college physical education. With the progress of science and technology, the society has put forward higher request to the talent's innovation ability. Sports application has entered a period of vigorous development. Sports APPS have become increasingly popular with the public, with 248 million downloads, according to the market research institute. In this context, sports applications need to seize the opportunity to constantly update and improve. In view of the insufficiency of the teaching content and the teaching method, the sports APP is introduced into the teaching class in the university sports teaching. The method has the advantages of low cost and remarkable effect. Real-time data can effectively improve the enthusiasm of college students to exercise, thus improving their physical quality.

## 1. Overview of sports APP

#### 1.1. Connotation

APP are mobile APPS, specifically for smart phones and mobile devices.

#### 1.2. Classification

According to its function, it can be divided into two categories: fitness applications (strength training, Yoga, etc.) and sports applications (running, cycling, hiking, etc.). The fitness APP guides users through training programs and videos on science, including diet and other knowledge. The sports APP offers a range of data parameters, such as track, distance, time, speed and altitude, smart phone based GPS modules and accelerometer science, to display data such as calorie consumption.

#### 1.3. Function

Fitness applications are mainly used for weight loss and fitness training for women and strength training for men. Sports APPS are used primarily for running, such as Nike Running, an exercise APP from Nike that accurately records data and is used to motivate runners. The APP aims to make the running experience more personal and inspiring for participants.

#### 1.4. Characteristics

## 1.4.1. Information is easily recorded and stored

Relevant health information is timely known through APP, which can be used to inquire about the first aid method in case of emergency. Drug prices can be obtained through channels before buying drugs. Even some APP can be used even if there is no network. You only need to download the database to a mobile device, and you do not need to connect to the Internet to use it.

#### 1.4.2. It is convenient to interpersonal transmission

Compared with other media, mobile apps have the advantage of active participation. First, most users download apps to mobile devices because of their personal interests or through recommendations from friends and merchants. In other words, users voluntarily access information and data. Therefore, users have a higher degree of participation and information transfer rate. Second, mobile APPS are logged in by the user, unlike the advertisements that pop up on the web. That is to say, the user accepts the APP voluntarily according to their own needs, which is difficult to achieve by other media.

## 2. Problems in the application of sports APP in college physical education

The survey found that many college students have sports apps installed in their mobile phones, which lays a good foundation for the application of Sports Apps in college physical education teaching, but sports teachers still have few teaching applications of sports APPS. Many teachers do not fully exploit its advantages.

## 2.1. Lack of mobile teaching resources

The application of sports APP in college physical education class needs abundant mobile teaching resources. However, in the current college physical education curriculum system, teaching resources are still dominated by tradition. Even if there are some online course resources and mobile teaching resources, it is seldom integrated with sports APP. Therefore, when carrying out sports APP teaching based on mobile Internet, the adaptability of mobile teaching resources is relatively poor and cannot effectively meet the needs of sports APP sports teaching. Although the existing sports APPS can provide some assistance and guidance for students' independent physical

exercise, there are relatively few targeted and characteristic learning resources compared with the professional learning of students' physical education courses and resources of varying quality.

## 2.2. Sports APPS cannot meet the needs of students' mobile learning and Training

The development of mobile learning needs not only mobile internet, but also mobile devices with high hardware parameters, which requires high configuration of smart phone. On the one hand, when physical education teachers carry out outdoor physical education, the running of sports APP in college students' mobile phones needs to pay the corresponding "flow" cost; On the other hand, students' smart phones can't be compatible with the running of some sports apps. The mobile learning resources of physical education teachers are usually in the form of video, animation, and so on. If the compatibility is not enough, the classroom teaching of physical education is bound to be subject to many restrictions.

### 2.3. The small application space of sports APP in PE class

Although college students are enthusiastic about the application of sports APP, it is mainly in the part after class, and less in the classroom. On the one hand, many sports APPS are developed for user-oriented activities; on the other hand, teachers have relatively limited space in the classroom. At present, the application of sports APP in college physical education is mainly the function of counting steps, the chart analysis of sports frequency and the recording of dynamic data. In addition, students do not wear smart devices in physical education classes, carrying a smart phone. Therefore, the application space of sports APP in classroom teaching is relatively limited, and its application mode should be optimized and adjusted.

## 3. Research on the application of mobile APP in Physical Education

# 3.1. Physical education is an outdoor activity, which leads to the low level of information teaching.

With the development of digital sports in China, the information level of physical education needs to be improved urgently. Sports mobile APP is a good carrier to improve the level of sports information. The designer can combine the sports mobile APP with the sports information teaching platform to develop the campus sports mobile APP. In addition to the basic functions of the information teaching platform, the following modules can be added: basic module, teaching module, interest tribe module, communication and discussion module, and campus list module.

The basic module records the basic movement data, the administrator and the physical education teacher may inquire the student in the backstage movement. The teaching module can invite the school teacher to record each item of the course, and let the students learn their favorite sports skills anytime and anywhere. You can set up the message function below the video. Activists want to ask you questions, and the physical education teachers will answer the questions below, so as to realize the interaction between teachers and students and truly become the close relationship between students and PE teachers. The interest tribe module allows campus sports associations to set up sports interest tribes and sports clubs on the platform, attracting more sports fans to join and promoting contacts and communication. The communication and discussion module provide a platform for students to share their sports history, experience and skills. The campus list module is based on student sports data and is advertised by a minimum of students per week. Not only will it be possible to identify students who exercise regularly, but it will also encourage other students to participate more frequently in physical activities.

### 3.2. Mobile phone App for sports enters PE class

In order to integrate the sports mobile APP into the sports curriculum, it is necessary to deal with conflicts between exercisers, sports classes and sports teachers. This can only be done with wearable mobile devices. Before the class, students can use the sports mobile phone APP to inquire about some sports methods and means, and enrich theoretical knowledge. According to the training courses provided by the sports mobile phone APP, the physical fitness is enhanced, the sports awareness is improved, and the purpose of preview before class is achieved. The premise of using the sports mobile application in the classroom is the deep integration with the information teaching platform: The sports mobile application installed by the sports teacher can know all the students' sports information in the background, and pay attention to it constantly. According to the data of the center rate and the mileage of the students, we choose the proper amount of exercise and exercise load to achieve the goal of scientific exercise. Through the system background, teachers can understand the daily exercise of students, analyze the characteristics of students' exercise and physical condition, and choose different exercise methods and intensity according to different students to achieve the teaching effect. In training students' endurance, flexibility or strength, teachers can use the APP to teach, and teachers can guide and correct mistakes. Students need to practice freely in PE classes. Teachers can arrange tasks and set goals in the APP for PE classes. Each student is required to complete the corresponding exercises before class, so as to fully mobilize the enthusiasm of students. The free exercise stage can improve classroom efficiency and enable students to achieve appropriate exercise. In physical education, we should improve the quality of teaching. After class, teachers can assign assignments to students using the sports mobile APP. For example, before the next class, they need to complete certain exercises or complete some courses through several practices, in order to achieve the role of after-class supervision. At the last stage of teaching evaluation, teachers should take the students' data in and out of the classroom as the reference standard to evaluate the results.

#### 4. Conclusion

Mobile APPS are increasingly being used by a large number of students, especially university students. The sports application program is suitable for the university sports teaching. Real-time monitoring data, a large number of pictures, video and music resources can effectively promote the cultivation of college students' physical exercise habits.

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