Retraction

Retraction: Sports Teaching Practice Innovation Mode Based on Big Data Technology (J. Phys.: Conf. Ser. 1852 022023)

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The authors of the article have been given opportunity to present evidence that they were the original and genuine creators of the work, however at the time of publication of this notice, IOP Publishing has not received any response. IOP Publishing has analysed the article and agrees there are enough indicators to cause serious doubts over the legitimacy of the work and agree this article should be retracted. The authors are encouraged to contact IOP Publishing Limited if they have any comments on this retraction.

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Sports Teaching Practice Innovation Mode Based on Big Data Technology

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Abstract. The arrival of the era of big data provides a new vision and broad thinking for college sports education. This article mainly studies the innovation mode of sports education practice based on big data technology. Through questionnaire survey, interview, comparative analysis, field survey, mathematical statistics, this article aims to explore the purpose, means, measures and ways of application of big data in public sports education, test the effectiveness and provide suggestions develop public sports education course, enrich the theoretical research system of public sports , broaden the theoretical research scope of big data application and promote big data The development of interdisciplinary theory with public sports education.

Keywords: Big data, Practice Education, Big Data Teaching Practice, Innovative Mode

1. Introduction
With the continuous strengthening of the state's emphasis on the health of the whole people, educators, sports scholars and the majority of front-line sports education teachers in our country are also constantly improving and updating the relevant knowledge and ideas. In recent years, the concept of big education, the concept of sports education and the concept of health have become a hot academic topic. From previous studies, we can see that the Grand View of education is a kind of modern education view which adapts to the development of science. The concept of big health is the overall concept of healthy China's development. Compared with the traditional sports education view, the concept of general sports education is more generalized, and school sports education is an important part of health education. Big data is a derivative of the vigorous development of the Internet. As an objective quantitative existence, big data can provide a powerful reference for people to make decisions and actions. The opportunity is to collect and analyze the data of students' sports behavior in public sports education courses.

Reyes thinks: the application of big data analysis technology in teaching is still in the enlightenment stage, and it will take some time for it to be effective. The value of big data has been proved [2]. Dubey believes: with the rapid development of science and technology and the continuous...
penetration of Internet technology in human life, big data technology will be applied in various fields, and will soon open a new era of human work, life and thinking. Sports workers should keep pace with the pace of the times and explore the application of sports in various fields under the background of big data to change [3].

The purpose of this article is to analyze the purpose, means and measures, application approaches and application effects of big data in public sports education, in order to find out the role and deficiency of big data in the application of public sports education, and to provide suggestions for the development of public sports.

2. Sports Education Teaching Under Big Data Technology

2.1 Big Data Related Concepts

Big data can not be defined as big data only from the volume, but also from the big value of data to understand what is big data. We need special data processing software to mine the potential huge value of big data and apply it to our production and life [4-5].

(1) Volume: there are even larger units of measurement up there. Faced with these units of measurement, we may be unfamiliar with how much capacity they represent. Usually, the original size of a photo we take with a mobile phone is 2-3mb, and the capacity of a mobile hard disk is basically hundreds of GB or several TB, 1GB = 1024MB, 1TB = 1024gb, 1PB = 1024tb, 1eb = 1024 Pb, 1BB = 1024 EB, equivalent to 1PB, which can store more than 500 million photos. Such a huge unit of measurement can not be stored only by computer hard disk, but also by cloud data.

(2) Variety: structured data refers to data with unified structure and can be represented by numbers, such as financial system and database; unstructured data refers to data that cannot be represented by unified structure and number, such as web page, picture, audio, video, etc.; semi structured data refers to the data form of both in [6]. At present, unstructured data is becoming the main form of data.

(3) Value: the data value density is relatively low. Big data is huge, but there are many valuable information mixed. Filtering is needed to extract information and extract essence.

(4) Velocity: data generation and processing are very fast. The daily wechat, microblog and other applications we use have strong instantaneity, and a large amount of data also needs to be quickly transmitted in a short time. In addition, personalized push of news, shopping and other software reflects this feature. Through the user's historical visit records, we can quickly judge and recommend different content suitable for users.

(5) Veracity: the authenticity of data, that is, accurate and reliable data. Big data is collected from a large number of data. Due to the large base number, the impact of accidental sample on the results is reduced, and the accuracy of data is improved by eliminating the subjective judgment and error of the sifter. These characteristics determine that the future prediction based on the data itself is better than the traditional statistics [7].

2.2 Application Significance of Big Data in Sports Education

(1) Promoting the Formation of Students' Habit of Physical Exercise

According to the national physique monitoring, the healthy physique of Chinese teenagers has been declining for 10 consecutive years. Among the students aged 7-19, the decline of college students is the most serious. Therefore, it is imperative to cultivate college students' sports habits and promote their physical health growth under the new situation. The intelligent wearable devices and other technologies in public sports education courses to urge students to strengthen extracurricular physical activities through sports bracelets, aiming at cultivating students' physical exercise habits and promoting students to achieve lifelong sports awareness [8].

(2) Promote the Improvement of Students' Physical Health
In recent years, improving students' physical health is one of the important goals of school sports education. One university public sports education course is different from most universities is to take students' physical health test as one of the components of public sports education course. Generally speaking, the failure rate of students' physical health test in a university is decreasing year by year. Especially after the application of big data, the overall score has increased significantly, which indicates that with the increasing attention of physical health problems in recent years, the physical health level of the school has also improved. Combined with the interview survey and the actual situation, it is confirmed that one of the important purposes of big data application in public sports education course is health.

(3) Monitoring of Students' Extracurricular Activities
In the past, it is difficult to monitor the extracurricular physical exercise of each student. However, it has become possible and inevitable trend to collect and analyze the amount, intensity, time and other data of students' extracurricular sports activities by using information technology such as intelligent wearable devices and big data, so as to guide and supervise students' extracurricular exercise [9]. Thus, the application of big data provides opportunities and great convenience for students, teachers, parents and school administrators to monitor and manage students' extracurricular physical exercise.

(4) Promoting the Informatization and Modernization of sports education Classroom
The development trend of modern education is inevitable. Sports classroom informatization refers to the use of science and technology in the classroom, so as to promote the achievement of teaching objectives. However, due to the particularity of outdoor class, the achievement of information-based classroom is larger than that of indoor class [10]. Applying big data to the curriculum of public sports education is also an important measure to actively respond to the call of the government and promote the informationization and modernization of sports education classroom.

3. sports education course Application Big Data Technology Experiment

3.1 Research Object
The research object of this article is the application of big data in the public sports education course in a university.

3.2 Interview Method
In this article, in the form of face-to-face interview combined with telephone interview, we interviewed the experts on public sports education course, sports education and information education in a sports university, so as to provide strong guidance for the writing of the paper.

3.3 Questionnaire Survey
Big data in a university one of the purposes of the application of the public sports education course is to promote students' exercise habits. the research object of this scale is refer to a university student, in which the school for a sophomore courses in the traditional public sports teaching, and is adopted in the freshman of public sports course application of big data, and a freshman and sophomore public sports course teaching of school teachers and the environment.

Collect the list and student number of all freshmen and sophomores respectively, and organize them into EXCEL documents according to each department. Then, the random number table method of Excel is used to extract the number of students in each department according to the proportion, and the extracted list is sorted into the survey sample.

3.4 Reliability Test
According to the characteristics of the scale, Cronbach α coefficient was used to calculate the
reliability of the collected data, and the reliability was compared with the original scale.
In this study, Excel 2003 and spss19.0 data processing software were used to process and analyze all the data collected for this study, and relevant results were obtained.

4. Experimental Results of Applying Big Data Technology in sports education course

4.1 Refer to the Number of Daily Exercise Steps per Student in a University

Table 1. Number of steps per person per day

|       |      |      |      |      |      |
|-------|------|------|------|------|------|
|       |1     |5     |10    |20    |30    |
|First  |9376  |11473 |7031  |13524 |8135  |
|Second |10554 |7819  |14638 |10846 |8492  |

As shown in Table 1 and figure 1, the maximum number of daily exercise steps per capita in the first month is 13524, and the minimum is 7031 steps; in the second month, the maximum number of daily exercise steps per capita is 14638, and the minimum is 7819 steps. On the whole, from the first month to the second month, the number of daily exercise steps per capita showed an increasing trend, which showed that the average daily exercise steps of sports education learning evaluation reached 12000 steps per day, which had a positive guiding effect on students' Extracurricular self exercise.

4.2 Students’ Physical Health Test Results and Their Relationship with Extracurricular Independent Exercise Steps

(1) Vital Capacity Test Results
Figure 2. Comparison of students' vital capacity scores

As shown in Figure 2, the number of freshmen and sophomores passing the vital capacity test is the most, among which 75.81% of freshmen pass and 75.28% of sophomores pass. By comparison, the number of students passing the examination is 53%. The excellent rate and good rate of vital capacity test of sophomores were 6.89% and 13.52%, respectively, which were 2.82% and 2.14% ahead of freshmen. The failure rate of sophomores decreased by 4.43% compared with freshmen. Through the situation that the pass rate, good rate and excellent rate of vital capacity score increase, while the failure rate decreases, it shows that the vital capacity level of sophomores applying big data sports education teaching mode is on the rise.

(2) 50 Meter Run Test Results

The 50 meter race is a sport which can reflect the ability of fast running and reflection. The main factors that affect the performance of this index are the explosive strength of legs, displacement speed, quick reflection ability and body coordination ability.

Table 2. Distribution of students' scores in the 50-meter race

|       | Excellent | Good  | Pass  | No pass |
|-------|-----------|-------|-------|---------|
| Freshman | 4.07%     | 11.38%| 75.81%| 8.74%   |
| Sophomore | 6.89%    | 3.52% | 75.28%| 4.31%   |

As shown in Table 2, the passing rate of freshmen and sophomores is 79.76% and 87.49% respectively, and the passing rate of sophomores is 7.73% higher than that of freshmen. The excellent rate and good rate of 50 meter test results of sophomores are 2.53% and 3.41%, which are greatly improved compared with freshmen. Through the comparison of the two, it can be seen that the passing rate of sophomores in the 50 meter running test has been greatly improved, the failure rate has been greatly reduced, and the excellent rate and good rate have increased, which shows that the quality of sophomores such as fast running ability, leg explosive power.

5. Conclusions

The purpose of big data application in university public sports education course is to promote the formation of students' physical exercise habits, improve students' physical health level, realize the monitoring of students' extracurricular physical exercise, and achieve the informatization and modernization of public sports classroom. The application of big data in public sports education course optimizes the management of public sports education course through three ways: public sports
education, extracurricular independent exercise and physical health test. It basically realizes the monitoring of students' independent exercise and completes the visualization of students' physical health level. The application of big data in the public sports education course of the college promotes the students' behavior of going out of the dormitory and entering the sports area, which has a positive and compulsory guiding role in the students' physical exercise behavior.

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