

Development and Design of Physical Health Software for College Students

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Abstract

In order to improve the physical health level of college students, this study takes the intelligent program of physical health promotion of college students as the research object, takes the students of the College of Arts and Science of Yangtze University as the investigation object, through literature data method, questionnaire method, expert interview method, case analysis method, The computer programming method and mathematical statistics method investigated the needs of students in the College of Arts and Science of Yangtze University in terms of physical health promotion. On the basis of the needs of different physical exercise groups for physical health promotion, the intelligent program of physical health promotion was proposed, and the feasibility of the physical health software proposed by this research was demonstrated through a questionnaire survey. In order to further put forward the implementation countermeasures of intelligent physical health promotion of college students, and develop the physical health software of college students, for the realization of intelligent physical health promotion of college students to provide a strong theoretical basis and practical guarantee.

Keywords

College students; Physical health; Big data; Intelligent; promote.

1. Development background

In the teaching of college students' physical education course, college students' physical fitness test is a very important link. It plays a very important role in analyzing the test results, drawing conclusions and making decisions. At the same time, it is also an important indicator of the health level of college students and the construction of school sports facilities. It will affect the school PE teaching curriculum arrangement, PE teaching content arrangement, extracurricular sports activities and the construction and management of school sports facilities.

2. Software development

In this development background, we designed a college students physical health software, this software is mainly used in college students physical health and school sports facilities management and other aspects. The software has beautiful interface, simple operation, stable running and easy to use. The software has the following main functions: In 2007, China issued the "national student physique health standard". However, there are still many problems in the implementation of the standard. In order to further enhance the physical health level of college students, improve their physical condition, and comprehensively promote the development of college students, the "College students physical health data analysis software" (hereinafter referred to as the "platform") is designed.

(1) Construction of college students' physical health analysis system

a. After logging in the system according to the student's information, the management personnel will input the student's gender, age, physical health data, past medical history and

other information. After data entry, the management will conduct centralized operation analysis and management, conduct preliminary unified management according to the documents and database, and then conduct classified management according to the information entry.

b. The manager invokes the data analysis results of students, and directly puts the data analysis and evaluation results in the system authority design module, and provides corresponding prescriptions for students according to their interests and hobbies.

(2) The principle of college students' physical health analysis system

This platform builds college students' physical health analysis system based on deep learning in binary classification of vector support machine, in which the corresponding output is the feature extracted from the model and serves as the input of the next layer until the model reaches the end condition position.

(3) Operation mechanism of college students' physical health analysis system

a. College students' physical health analysis system is a "closed loop" system with feedback mechanism, which runs the college students' physical health analysis system through scientific circulation.

b. The platform detects and tracks the physical health data of college students, generates the physical health analysis report of college students through the evaluation mechanism, and provides personalized exercise prescriptions for students according to their interests and hobbies.

(4) The realization of college students' physical health analysis system

a. College students' physical health data analysis system software is a customer service center with physical examination information as the main line. Health Guide group is the link of college students physical health data analysis system software.

b. Through strengthening the monitoring of college students' physical health, knowing their physical health status at any time, scientific intervention of college students' physical exercise and timely feedback of college students' physical health level and other strengthening measures to promote sports management and security activities, realize the guiding ideology of college students' health as the first.

(5) Innovation of college students' physical health analysis system

a. Promote the integration of artificial intelligence application and college students' physical health.

b. Open up the health promotion channel of schools-home-community-medical-government linkage.

c. Provide exercise prescriptions that can be scientifically self-applied.

d. Application components are connected to the database to reduce burden and improve performance.

e. It is very convenient to maintain and update the system.

3. The application analysis of college students' physical data analysis software

(I) Field application of products

After processing and microprocessing, the software is put into use for undergraduate students, and the students' physical measurement data is entered into the system on the spot, and the physical examination report is obtained and archived and managed with the data of physical monitoring of college students. The response is very good, which can achieve the purpose

beyond our expectations. Moreover, the data analysis software is easy to operate. Data analysis is precise and detailed.

(2) Application effect analysis of products

This software is mainly used to test students' physical health. It is the latest scientific and advanced health examination software with physical examination information as the main line, customer service as the center and health guidance as the link. This software has powerful analysis function, greatly volatilizing its practicability. The software can compare the data with the standard level of college students and analyze the results. The comprehensive detection and analysis of the comprehensive customer service can find the health problems among college students in time and give the best solution immediately, which reduces the risk of disease among college students, improves the ability to predict the future, and also improves the emphasis on health of college students. Reduce the school's worry and workload, the software at a low cost to play its huge role, in the construction of "data unity", "model unity", "application unity" college students physical health testing center, through the data analysis of various physical testing indicators of college students, the realization of public physical education teaching practice.

4. Social and economic benefit analysis

(1) Social benefit analysis

At present, with the rapid development of the national economy and the gradual improvement of social living standards, the report to the 19th National Congress of the CPC stated that "socialism with Chinese characteristics has entered a new era, and the principal contradiction in Chinese society has transformed into the contradiction between unbalanced and inadequate development and the people's ever-growing needs for a better life". People's pursuit of a better life needs both material and spiritual satisfaction, but the premise of these is to have a healthy body, in order to meet the growing needs of a better life, people begin to pay high attention to their own physical health, in the education industry, the analysis of students' physical health software is not complete, even there are many gaps. Compared with schools in developed first-tier cities, fitness is a fashion in schools, and many people go to gyms for fitness. However, due to the lack of timely data statistics, they often exercise blindly, which may cause damage to the body in severe cases. In some small and medium-sized cities, people's awareness of fitness is insufficient. It is difficult for teachers to grasp students' health status in a timely manner, which will bring risks to students' physical health, which means there is great potential to promote physical fitness data analysis software in schools. According to the construction target of "Healthy China 2030", the number of people who regularly participate in physical exercise will reach 435 million by 2030. Under the guidance and support of national policies, benefiting from the improvement of residents' income level and the continuous cultivation of fitness atmosphere, the domestic college students' physical data analysis software market is expected to further expand.

(2) Economic benefit analysis

Currently, for some apps in the market, such as Huawei, Mi Band, Footwalk and other apps, most of them can also detect a series of functions, such as heart rate and blood pressure, but they cannot accurately judge the health status of students. At this time, the physical monitoring software launched can not only provide detection functions, but also provide corresponding suggestions according to the detection results. Therefore, it has a certain market initiative. Not only the physical examination data of college students for admission and physical examination data of each academic year, but also the fragmented physical health can be detected. More data can be added. Every year, the phenomenon of sudden death in physical education classes occurs in various schools. Teachers and students themselves can know the health status of students in

real time, which provides the basis for teachers to carry out education and teaching in an orderly manner. Moreover, it can effectively prevent various sudden cardiac death caused by physical reasons of students, and the market prospect is relatively sufficient.

5. Conclusion and prospect

In the process of research on physical health at home and abroad and related research on the intelligent promotion of physical health at home and abroad, this research obtains a lot of frontier information of big data + physical health or smart sports + physical health, fully understands the future development trend of this field, the arrival of generations of big data, Internet +, cloud computing, etc. The integration of cloud platform and artificial intelligence with college students' physical health work is the general trend. The intelligent program of college students' physical health promotion proposed in this research -- "Internet" detection of smart wearable devices, "information" teaching of physical health knowledge system and "intelligent" feedback of exercise prescription follow-up service platform have not been fully tested. They are all talked on the basis of relevant theories, hoping to carry out specific practical research on relevant issues in the future. After mastering relevant basic knowledge and operational experience, we will devote ourselves to the study of big data + physical health issues, and explain the specific practice of smart wearable devices, information teaching and exercise prescription follow-up service platform. It provides a powerful theoretical basis and practical guarantee for the realization of intelligent promotion of college students' physical health.

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