

## **Exploration on Innovative Methods of College Students' Mental Health Education under the Background of Big Data**

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**Abstract:** With the rapid development of modern information technology, more and more high-tech technologies are applied to the mental health education of college students. Big data has played an important role in improving the effect of mental health consultation and treatment due to its large number, diverse types, fast processing speed, low value density, authenticity and reliability, etc. In the process of education of college students' mental health, it has also been paid more and more attention by educators and scholars. Based on the development of big data, this paper mainly explores what aspects of education can be innovated in the psychological health of college students in the new era, in the hope of promoting the psychological health of college students' education.

### **1. Introduction**

University is a very special time, during the period of university, students need to deal with the relationship between classmates and teachers, but also improve their professional ability and social communication ability. The college students who out of the family in the free state also can appear a lot of problems in psychological development. Dealing with these psychological problems is very important for college students to study normally and form a correct outlook on life and values. With the development of the times and changes in the social environment, some traditional educational thinking and methods are no longer suitable for today's college students' mental health education, while the arrival of the era of big data provides a new path for us to innovate and develop education of college students' mental health.

### **2. Opportunities for education innovation in college students' mental health under the background of big data**

#### **2.1 Provide data support for mental health education**

Big data can not only collect and sort out a large amount of data, but also make multiple use of the collected data, so that we can save time and cost in the process of data collection. At the same time, in the process of applying big data to the education of college students' mental health, big data can analyze the collected data, update the latest information, ensure the timeliness of information collection, make the information constantly improved, and provide sufficient information guarantee for the work of education of college students' mental health. By using big data, we can timely collect, sort out and analyze information such as students' late return, recent dietary status and learning styles. With the support of these data, we can observe the life rules of students in school. By comparing with the data of normal state, we can analyze the state of students in a certain period of time and facilitate the consultation and treatment of mental health.

#### **2.2 Targeted, can develop personalized treatment plans for students**

Big data can not only collect the overall data of college students' mental health development, but also collect individual students' mental health development information with the help of advanced information processing technology of big data, and at the same time ensure the confidentiality of information. Students can use big data technology to establish their own mental health development platform, record their own information in this platform. Through the processing of these

information by big data, the formation of data curves and other forms of expression, and presented intuitively, so that college students can have a clear understanding of their psychological changes within a period of time. School counseling agencies can also use the data as a basis to develop personalized problem solutions for students who need mental health counseling.

### **2.3 Improve work efficiency and save work cost**

Big data can achieve rapid collection, collation and analysis of data, and the results presented are also clear and visible, real and reliable. Traditional information collection requires us to collect information on the spot, and the data sorting and analysis should also be done manually. After using big data, we can get relevant data through online collection and the data can be sorted and analyzed through cloud computing, which greatly saves the time and cost of work, so that mental health educators have enough time and energy to develop a mental health education program for college students.

## **3. Challenges faced by college students' mental health education under the background of big data**

### **3.1 Confidentiality of student information**

Based on data collection, big data is introduced into the construction of education of college mental health. It is inevitable to collect the personal information of the students, including basic information such as the student's name and grade, and more confidential information such as the student's phone number and family status. The collection of such information should first seek the consent of students, cannot be forced. In addition, after collecting students' information, how to ensure that such information is not illegally stolen by others is also the key difficulty of school work.

### **3.2 Impact on the position of teachers**

With the application of big data technology to the mental health education of college students, more and more work is carried out by big data. In the past, the teaching mode of one-way teaching by teachers has changed. Teachers' collection, collation and analysis of student information can reflect the professionalism of a teacher or a psychological counselor. Now these jobs are replaced by big data, and big data will also give advice through analysis of information, which doubt people about the professional competence of the teacher. Some students think that these tasks are replaced by big data. When conducting psychological counseling, they only care about data analysis and neglect the importance of teacher guidance. The authority of teachers is challenged.

## **4. Innovative methods of college students' mental health education under the background of big data**

### **4.1 Establish a mental health education information big data analysis platform**

Data analysis is the focus of mental health education. Data collection is the basis of mental health education. Each university establishes a proprietary big data information analysis platform, which can track the mental health status of college students. The staff engaged in mental health education consultation should not only be able to analyze the current mental health status of the students, but also be able to predict the development trend of the students' mental health in the future, so as to be able to comprehensively understand the students' mental health status. The establishment of a big data information analysis platform can enhance the objective evaluation of students' psychological development and reduce the intervention of subjective factors. When a student is found to have a problem, the big data platform can prompt the problem and give relevant suggestions. According to the seriousness of the problem, the system can grade it, and the staff can take corresponding measures to the student. Conduct mental health education.

## **4.2 Innovative mental health education model based on big data**

Although the emergence of big data can bring a lot of convenience to the mental health education of colleges and universities, it also has a certain impact on the traditional way of education. Therefore, in the context of big data, colleges and universities must reform the way of mental health education. Innovation. First of all, college teachers must change their past educational thinking and use big data to change the concept of mental health education and carry out reform and innovation. For example, teachers can establish a public platform for mental health education that belongs to their own curriculum, uploading relevant materials related to the course to facilitate students to find and learn; strengthen the teaching of case analysis, enhance students' ability to analyze cases, and master theoretical knowledge in case analysis.

## **4.3 Promote students to improve mental health education awareness**

Based on the current research situation, we found that although mental health consultation institutions have been established in various colleges and universities in various ways, the utilization rate is not high, mainly because students do not pay attention to their mental health development. And caused by it. Introducing big data into college students' mental health education, the ultimate beneficiary is college students, the main body is also students. To give full play to the role of big data in mental health education, it is inseparable from the active participation of college students. Colleges and universities should encourage college students to make full use of big data technology to check their mental health status during school. On the one hand, they can improve school teaching information and equipment, and on the other hand, they can promote the healthy development of students' psychology.

## **4.4 Introducing big data in the construction of mental health service institutions**

At present, all colleges and universities have basically established specialized mental health service institutions for students. In the era of big data development, the construction of mental health education service institutions must also keep pace with the times, and it is necessary to introduce big data into its construction. First of all, we need to organize a professional team that can skillfully use big data, responsible for data collection and organization, so that the information presented by the data is true and reliable. Secondly, we need to organize a team of professional consultants with expertise. Mastering a high level of professionalism requires a certain understanding of big data. Therefore, for the original team of psychological counselors in colleges and universities, we need to train them in big data, so that they can use big data to educate students about mental health.

## **5. Conclusion**

In the context of big data, the development of college students' mental health education faces many challenges while gaining greater development opportunities, but the role of big data in college students' mental health education is positive. We must establish a mental health education big data analysis platform, establish a student psychological information database to continuously improve the psychological health education mechanism of colleges and universities, promote the reform and innovation of the education model, and enable students to pay more attention to their own mental health development, thus making the psychology of colleges and universities The development of health education keeps pace with the times and develops to a higher stage, ultimately achieving the mental health development of college students.

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