

# Discussion on the Construction of College Students' Psychological Crisis Intervention Platform Based on Big Data Technology

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**Abstract**—At present, the system of psychological crisis intervention platform in Colleges and universities is backward, which can not fully meet the current needs of students' psychological crisis intervention. The previous psychological crisis intervention platform system technology is backward, at the same time, it lacks the dynamic management of students' psychology, the level of data analysis is low, and the sharing of data information is slow. Therefore, the application of big data technology to the psychological crisis work in Colleges and universities can deeply mine the data information from a large number of student data information, provide powerful data support for college psychological workers, and improve the efficiency and effectiveness of college psychological intervention.

**Keywords**-Big data technology; college student; Psychological crisis; Platform construction; system model

## 1 INTRODUCTION

This paper mainly analyzes the psychological crisis intervention of college students, proposes to use big data technology to establish the psychological crisis intervention system of colleges and universities, to form an intelligent and real-time mental health intervention platform, to provide more psychological consultation for students, to improve the digital development of psychological crisis intervention of colleges and universities, and to more efficient and effective psychological system management and construction <sup>[1]</sup>. Strengthen the construction of student psychological database and perfect the data information model <sup>[2]</sup>. The application of big data technology to the psychological intervention platform can promote the system improvement of the psychological intervention platform, and improve the processing speed of the mental health intervention platform <sup>[3]</sup>.

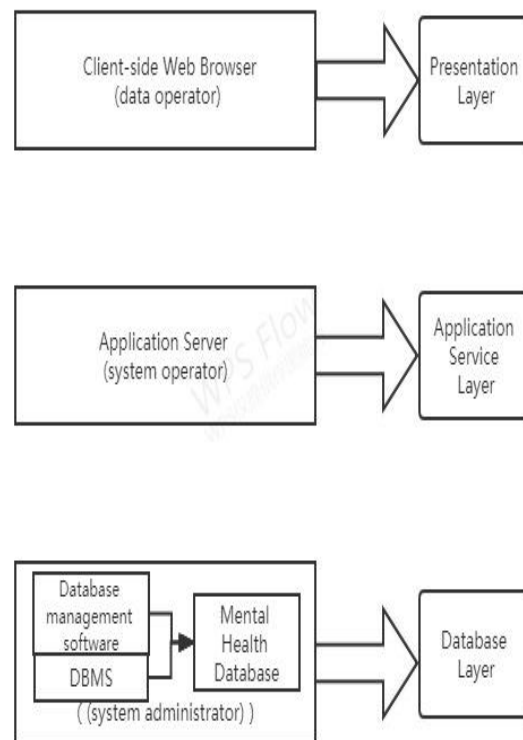
## 2 BUILD A BIG DATA PSYCHOLOGICAL CRISIS INTERVENTION PLATFORM

Applying big data technology to psychological crisis intervention in colleges and universities can improve students' information management comprehensively <sup>[4]</sup>. Big data technology can collect and process students' behavior, psychological state, interpersonal relationship, network activities and other information, analyze and extract students' psychological state information

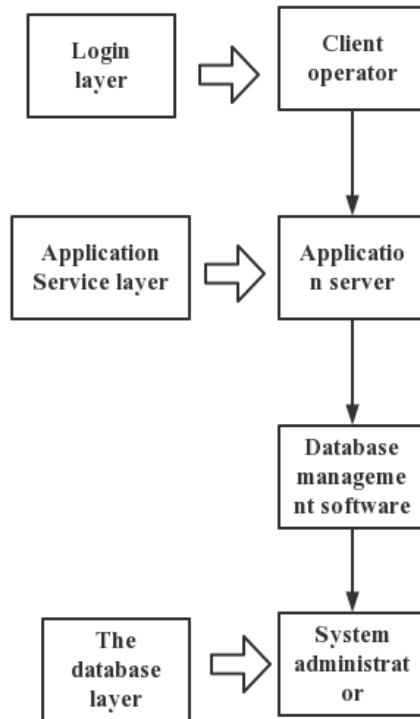
to deal with psychological crisis, constantly improve the prediction of college students' psychological crisis, and can quickly deal with psychological crisis [5].

## 2.1 Construct psychological data feedback system

Through the analysis results obtained on the big data psychological intervention platform, only feedback to professional psychological staff can maximize the value of data results. The psychological data feedback system mainly includes three aspects [6]. First, the school should actively establish mental health professionals and build a psychological counseling and rehabilitation center [7]. The school will make full use of data information mainly from the perspective of students' mental health education and psychological crisis intervention, which will further improve the understanding of students' mental health. In this way, it can help psychologists further optimize and design the intervention scheme according to the analysis results and the psychological situation of colleges and universities, especially for some people with serious psychological problems [8]. The college level mainly gives targeted guidance and attention to students according to the guidance of the mental health center [9]. In the class, the psychological committee is the best to understand the students' psychological state, and it is easier to intervene and deal with the students, and can report the students' psychological information to the college in time [10].



**Figure 1.** Three-layer b/s architecture layer



**Figure 2.** Schematic diagram of psychological crisis intervention platform

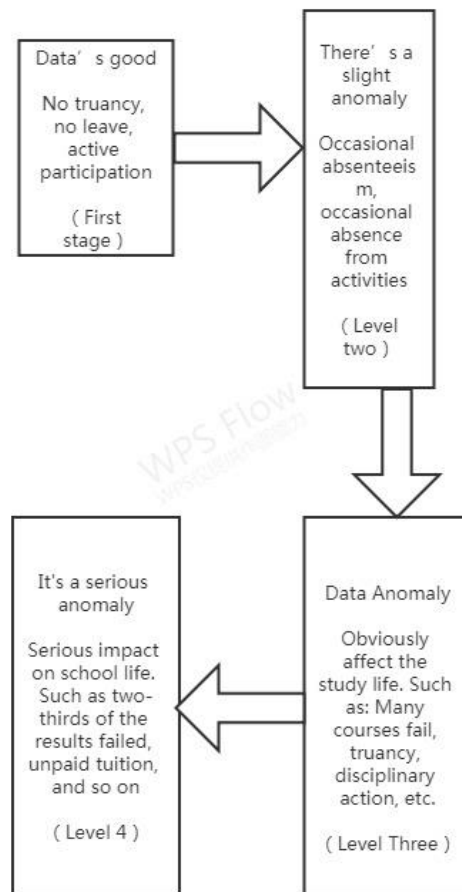
## 2.2 Establish psychological data collection platform

At present, colleges and universities have intelligent campus systems, including student scores, elective courses, activity information, dormitory management and other functions. In the mental health management, it is necessary to check and explore students' mental health status regularly <sup>[11]</sup>. At this point, big data technology allows students to extract relevant information on different platforms and software. In the psychological intervention platform of the past, there is information barriers and data sharing between modules can't, can't quickly grasp the students' psychological tendency, the introduction of the technology of data management pattern will change the psychology, through the system to extract the scattered, broken, false data, to get a lot of valuable information, help the students in mental health intervention to master more about relevant information and data <sup>[12]</sup>. By studying students' external performance, big data technology discovers the deep rules hidden under information, and analyzes and predicts students' behavior patterns and psychological conditions from various dimensions.

## 2.3 Improve the management system of psychological crisis intervention

The wide range of College Students' information data widely exists in all aspects of colleges and universities. If schools want to analyze students' behavior, they should obtain information through a special software platform to observe students' behavior and psychological status.

Therefore, colleges and universities should attach great importance to the construction of psychological crisis intervention platform and reasonably apply big data technology to the management mechanism of the platform [13]. At the same time, a big data collection and management team composed of schools, schools, classes and psychological members has been established to actively promote the establishment of psychological crisis intervention system in Colleges and universities, so as to make the intervention management system operate stably and clarify the intervention objectives [14]. Colleges and universities need to pay attention to the collection and analysis of information data by the big data plan, further clarify the responsibility of data collection and the scope of use of data collection in Colleges and universities, so as to protect students' privacy and safety, which will affect their study and life. And for the collected data of each unit of higher vocational students and data in the platform for the corresponding format conversion into the library, then put forward 4-level early warning classification data, as shown in figure 3.



**Figure 3.** Level 4, classified data

### 3 BIG DATA PSYCHOLOGICAL CRISIS INTERVENTION SYSTEM

Big data technology is a comprehensive analysis based on the daily behavior data of the target object [15]. Therefore, by associating the daily life and behavior attributes of the target object, it can not only analyze whether students have mental health problems, but also quickly carry out psychological crisis intervention. The construction of big data psychological crisis intervention platform is strongly related to the education system of colleges and universities [16]. Therefore, colleges and universities should carry out comprehensive psychological monitoring on students, establish students' psychological information files, carry out unified and scientific management of students' basic information, and comprehensively and deeply grasp students' mental health status [17]. Big data technology has a great impact on the daily life of college students, so it is easier for big data to grasp the psychological situation of students, find problems as soon as possible, put forward solutions, provide strong data support for psychological crisis intervention, promote the comprehensive construction of psychological crisis intervention system in Colleges and universities, and maintain students' mental health [18].

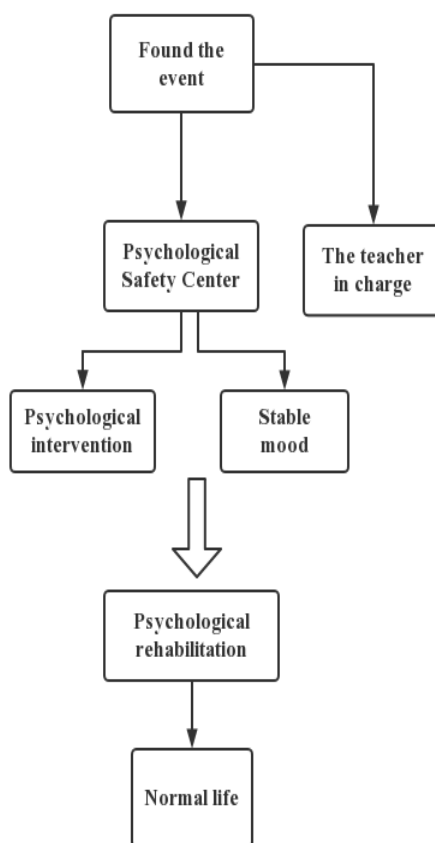
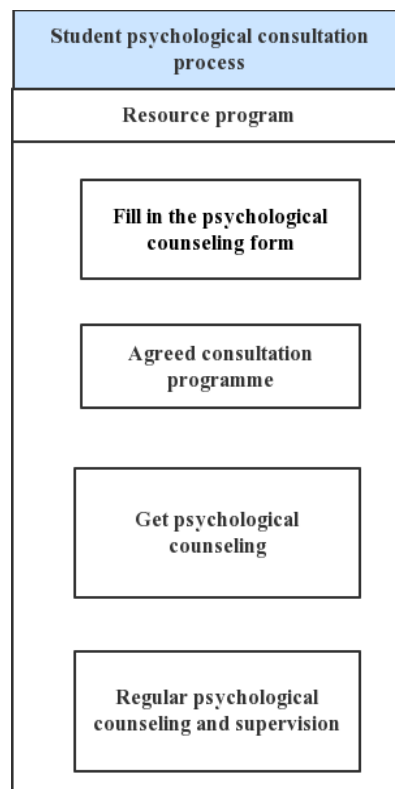


Figure 4. Mental health processing flow chart

In the construction of psychological crisis intervention system, colleges and universities should actively choose psychological talents. They should not only have solid psychological knowledge, but also have good practical ability. More importantly, they should be able to quickly grasp the use of big data psychological crisis intervention system, so as to explain and implement the results of big data analysis, so as to organically combine psychological crisis intervention work with mental health personnel, and give full play to the advantages of psychological crisis intervention system.

Test the whole system psychological intervention, at the same time, the system hardware, software, operators as a whole, to test the system's mental health problems, safety measures are perfect, in order to test the system can protect the safety of the system from infringement, and psychological testing system can work normally under the overload.



**Figure 5.** Construction process of big data technology psychological intervention platform

#### 4 CONCLUSION

In the current college students' psychological crisis intervention platform construction, not only should make full use of big data technologies, system construction of psychological platform, and to establish students psychological database, unified management and records of the students' psychological files and data information, so as to timely and accurate

understanding of the students' psychological condition, and improve the efficiency of the psychological crisis. Therefore, university psychological staff must have solid theoretical knowledge and excellent psychological counseling ability. At the same time, colleges and universities make use of big data technology to carry out psychological intervention, and constantly deepen the value information and data sharing of students' psychological crisis, and further improve the mental health level of colleges and universities. Therefore, the application of big data technology to the construction of psychological crisis intervention platform can promote the digital development of psychological intervention platform, so as to provide decision-making for college psychological intervention platform.

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## REFERENCES

- [1] Xu YINGhua. The application of big data technology in mental health education: A review of the affability hypothesis: A Big data analysis of regional personality influencing health [J]. Chinese science and technology papers,2020,15(12):1465.
- [2] Zhang Xiaoxiang, ZHAO Lu. Based on large data perspective of college students accurate funding new mode and new way to study [J]. Journal of electronic world, 2020 (13): 38 and 39, DOI: 10.19353 / j.carol carroll nki DZSJ. 2020.13.017.
- [3] Zhao Jingyi, Zhao Yujie, ZHOU Tong. Effects of wechat platform and physical exercise on mental health and sleep quality of college students [J]. Chinese school health, 2020, 9 (3): 448-450. The DOI: 10.16835 / j.carol carroll nki. 1000-9817.2020.03.036.
- [4] Wu Wenjun, Xiang Xiaoping. The Relationship between peer Interaction and Mental Health of College Students: The Mediating Role of Interpersonal Competence [J]. Chinese journal of health psychology, 2020, 28 (4) : 585-591. The DOI: 10.13342 / j.carol carroll nki CJHP. 2020.04.023.
- [5] Jia Bei. Thoughts on data science and big data technology professional training from the perspective of discipline integration [J]. College Education,2020(01):166-169.]
- [6] Peng J X. Data analysis and feedback system construction of college students' mental health in the context of big data [J]. Digital technology and application, 2019, 5 (11): 216-217. The DOI: 10.19695 / j.carol carroll nki cn12-1369.2019.11.113.
- [7] Zhang Xue, Chang Xiaoli. Positive psychology horizon, poor college students mental health education, reflection and improvement [J]. Journal of higher education in jiangsu province, 2019 (5): 119-124. The DOI: 10.13236 / j.carol carroll nki jshe. 2019.05.021.
- [8] Lu Xiaolong, Wang Kun. The Influence of Extracurricular Physical Exercise on College Students' Psychological Capital, Mental Health and Social Adaptability [J]. Chinese school health, 2019, 40 (03) : 392-395. The DOI: 10.16835 / j.carol carroll nki. 1000-9817.2019.03.021.
- [9] Ma C. An empirical study on mental health level of post-2000 college students -- based on data analysis of nearly 20,000 first-year students of 2018 [J]. Ideological and theoretical education, 2019 (03) : 95-99. The DOI: 10.16075 / j.carol carroll nki/g4.2019.03.017 cn31-1220.
- [10] Wu Yuanzheng. Big data under the perspective of university students' psychological crisis intervention mechanism to build [J]. Science Tribune (ten-day), 2018 (23): 178-180. The DOI: 10.16400 / j.carol carroll nki KJDKZ. 2018.08.085.

- [11] Shi Li, Ni Bin. Big data technology for the development of the industry "Internet + sports health" promoting effect [J]. Journal of zhongzhou university, 2018, 35 (02): 66-69. The DOI: 10.13783 / j.carol carroll nki/g4.2018.02.013 cn41-1275.
- [12] Xu Wenming, LIANG Qinsheng. Application and research of big data technology in mental health education [J]. Journal of jiaxing university, 2017, 35(04):96-100.
- [13] Wang Xinqiang, Xie Qian, Zhang Dajun, Liu Mingfan. Research on the Relationship between mental health and mental health [J]. Psychological science, 2016, 33 (6): 6. 1296-1301 DOI: 10.16719 / j.carol carroll nki. 1671-6981.20160603.
- [14] Qu Xiaomin. [J]. Population journal, 2016, 38 (02): 49-60, DOI: 10.16405 / j.carol carroll nki. 1004-129 - x. 2016.02.005.
- [15] Gao Shuang, ZHANG Xiangkui, XU Xiaolin. A meta-analysis of self-esteem and mental health of college students: a case study of Chinese college students [J]. Advances in psychological science, 2015, 23(09):1499-1507.
- [16] Leiming. Construction of psychological health education psychology: Connotation, research object and discipline system [J]. Journal of sichuan university of science and technology (social science edition), 2014, 29(03):31-42.
- [17] Liu Yan-ling, Pan Yan-gu, Tang Ling. Based on psychological quality of college students' mental health education curriculum system construction [J]. Journal of southwest university (social science edition), 2014, 40 (03): 93-97. The DOI: 10.13718 / j.carol carroll nki XDSK. 2014.03.014.
- [18] Zhou Chunyan, GUO Yongyu. The influence of family social class on college Students' mental health: The Mediating role of just world belief [J]. Chinese journal of clinical psychology, 2013, 21 (4): 636-640. The DOI: 10.16128 / j.carol carroll nki. 1005-3611.2013.04.017.