



Challenges and Relief Strategies of Students' Psychological Work in Higher Vocational Colleges under the Background of Digital Intelligence

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Abstract. With the rapid development of digital intelligence economy, students' psychological work in higher vocational colleges is facing a series of new challenges and opportunities. Problems such as the impact of bad network information, the lack of awareness of data processing, and the simplification of education methods are gradually emerging. Integrating digital intelligence technology with mental health education and using big data and artificial intelligence technology to broaden the ways of psychological education are particularly important for improving students' psychological quality and promoting their all-round development. This paper makes an in-depth study of psychological education in Higher Vocational Colleges under the background of digital intelligence, analyzes the challenges and opportunities brought by digital intelligence to psychological work in higher vocational colleges, and puts forward preliminary countermeasures.

Keywords: Digital Intelligence Background; Higher Vocational Colleges; Psychological Education; Challenges; Coping Strategies

1 Introduction

With the rapid development and wide application of information technology, digital intelligence has become an important symbol of today's society, and the psychological education of higher vocational colleges has also been deeply affected by the wave of digital intelligence. It not only provides a new method for psychological education in higher vocational colleges, but also brings a series of new challenges. How to effectively deal with these challenges in the context of digital intelligence and enhance the effectiveness of psychological education is a major issue that higher vocational colleges need to face.

2 Overview of Digital Intelligence Background

Digital intelligence, that is, digital intelligence, refers to the process of using modern information technology, especially big data, cloud computing, artificial intelligence, Internet of things and other digital intelligent technologies, to innovate and change the education content, teaching methods, management mode and service system, such as digital teaching resources, intelligent teaching tools, online learning platform, personalized learning path, intelligent counseling and support, etc. This educational model aims to improve the quality and efficiency of education and teaching, realize the optimal allocation of educational resources, promote educational equity, and cultivate talents to meet the requirements of the new era.

For example, through big data analysis, students' learning situation can be accurately evaluated, and personalized learning suggestions can be provided for students; Through the big data of school canteen consumption, determine the "low consumption target" and provide assistance. In terms of students' psychological work, digital intelligence technology also has great potential [8].

3 Challenges Faced by Psychological Work in Higher Vocational Colleges under the Background of Digital Intelligence

3.1 Negative Impact of Massive Network Information

In the era of digital intelligence, the speed and scope of information dissemination have been greatly improved, but it also provides convenience for the dissemination of bad network information. In order to win traffic, many we media take out of context, distort facts, and even spread some negative and harmful information without a bottom line. Higher Vocational College Students' cognitive thinking, emotion, consciousness and concept are still in an unstable stage, and are vulnerable to the influence of the external environment. The spread of these bad information has affected the establishment of students' correct world outlook and values, caused great harm to their mental health, and even led to their imitation and violence, leading to crime.

Accurate information recommendation is in line with people's interests and concerns, but it also enables students to see the information they expect, thus forming a personal information island [3]. In addition, some Internet rumors and false information will mislead students' judgment, making them unable to comprehensively view and analyze problems, and then produce negative emotions such as anxiety and panic. Another example is that some bloggers continue to market their personal designs of "lying flat and rotten, and easily realizing financial freedom", which leads to students' wrong expectations and great anxiety.

3.2 Complexity and Diversity of Students' Characteristics in Z Era

As the "indigenous people" of the Internet, z-era students were born in the era of big data and enjoyed the convenience brought by the network. At the same time, their psychology was also affected by the network technology, showing complexity and diversity. In today's era, the increasing access to information, excessive reliance on and strong trust in the network have deepened the gap between students and the real world, making some students' academic and interpersonal pressure more and more serious, resulting in anxiety, depression and other problems, and their mental health is worrying.

With the advent of the digital intelligence era, it brings more psychological challenges to the students in Z era. For example, how to deal with information overload, distinguish between reality and virtual and other new problems. The characteristics of their strong self-awareness and weak collective rule awareness increase the difficulty of psychological work in higher vocational colleges.

3.3 Insufficient Awareness of Data Information Processing

In the era of big data, psychological education in higher vocational colleges needs to process and analyze a large number of student data more efficiently in order to better understand students' psychological status and needs. However, the mental health education methods adopted by most higher vocational colleges are still relatively traditional, and they are not good at using digital intelligence technology to actively find students' problems. This makes it difficult for psychological education to be professional and accurate, and some psychological teachers' awareness of data processing is low, so they can not adjust students' psychological work methods through data analysis.

At the same time, because some teachers' awareness of data information processing is weak, higher vocational colleges are also prone to data islands, data inconsistencies and other problems in the work of psychological education. These problems not only affect the efficiency of psychological education, but also limit the innovative development of psychological education.

3.4 Simplification of Mental Health Teaching Methods

In the data age, higher vocational colleges need to pay more attention to the innovation and diversity of teaching methods in order to meet the needs of students. However, at present, many higher vocational colleges still use traditional teaching methods in psychological work, such as classroom teaching, group discussion and so on. Although these methods can help students understand mental health knowledge to a certain extent, they are not interactive and interesting enough to stimulate students' interest in learning [5]. The rise rate of the classroom is getting lower and lower, and the educational effect of the course is getting worse and worse.

Due to the poor effect of the first classroom of teaching, students in the second practice classroom, although participating in mental health practice activities, did not

really master the knowledge and skills of mental health. Facing the challenges in life, the psychological capital is still low, which can not effectively improve the students' psychological adjustment ability.

3.5 Imperfect Service Management System

A perfect service management system is conducive to the orderly implementation of psychological education and the maximization of efficiency. In the context of digital intelligence, the importance of the organizational structure and system architecture of psychological service in higher vocational colleges is becoming more and more obvious. For example, the lack of a clear division of responsibilities and overall planning mechanism has led to poor work cohesion between departments; Due to the imperfect service management system, higher vocational colleges are also facing the problem of insufficient resources in psychological education. Some higher vocational colleges lack professional mental health teachers and counselors, and lack necessary mental health education facilities, such as psychological counseling room, psychological activity room, psychological evaluation software, etc., which make it difficult to carry out mental health work in depth and limit the effectiveness of psychological education.

4 Relief Strategies of Psychological Education in Higher Vocational Colleges under the Background of Digital Intelligence

4.1 Build a Digital Intelligence Platform and Establish Students' Information Database

Accelerate the construction of big data intelligent platform, share data information, and collect, analyze and warn [9]. Higher vocational colleges can use big data technology to integrate student information, such as campus post bar, confession wall, tweet comments, etc., to monitor students' psychological status in real time, analyze and deal with it in time, and establish and update students' mental health files. Use big data to mine more diverse data sources, analyze more diverse data content, and mutually verify, supplement and exclude the collected information to reflect the most real psychological state of students. In this way, we can not only deeply understand the characteristics and needs of students, but also provide targeted support for psychological education [7].

In addition, we should improve students' data recognition ability and actively create a healthy network psychological culture. Higher vocational colleges can develop multiple education platforms, such as the linkage between the mental health center and the network education counselor studio to organize campus activities and improve students' network literacy; Actively update information through the campus official website, video number and other platforms to attract students' attention and improve

students' information identification ability; Use big data technology for information screening and filtering to reduce the impact of bad information on students.

4.2 Reshape Digital Intelligence Thinking and Improve Teachers' Awareness of Data Processing

Higher vocational colleges should do a good job in the publicity and education of big data and intelligent technology, improve teachers' awareness of data processing through multiple ways, form big data thinking, and master digital processing technology. Teachers should consciously improve their "digital quotient", have the initiative and rational judgment thinking of big data transformation, collect, analyze, verify, study and judge big data, form a working mode with data, basis and evidence, make data expression a normal state of teachers' work, and create a good digital intelligence atmosphere.

To improve the processing awareness of digital intelligence data, higher vocational colleges need to increase the investment of mental health education resources, strengthen the construction of teachers and the professional training of big data, and cultivate a group of mental health education teachers with professional knowledge and skills, so as to ensure the scientific, safe and rational use of data, avoid the excessive exposure of students' personal information, and avoid the over correction of digital doctrine.

4.3 Broaden the Field of Digital Intelligence and Strengthen the Application of Digital Technology

Higher vocational colleges can make full use of artificial intelligence technology, but also should continue to introduce the psychological evaluation system to accurately understand the students' mental health status. Artificial intelligence technology is used to dynamically monitor and track the mental health status of students, so as to find and deal with students' problems in time [10]. Through the psychological evaluation, we can find the potential psychological risks of students, design personalized psychological education programs, and provide the basis for early warning and intervention for the follow-up education work [4].

Attach importance to the combination of information technology and mental health education, and establish an online psychological counseling platform. Taking advantage of the anonymity and concealment of the network, online micro lectures on different topics, online psychological live broadcasting rooms, and psychological interaction lecture halls are set up to enable students to obtain professional guidance through the network and solve psychological problems to a certain extent. In addition, public accounts, microblogs, websites and app development are used to better grasp students' mental health data and improve education programs.

4.4 Excavate Digital Intelligence Resources and Improve Mental Health Curriculum Education System

Use the big data platform to mine digital intelligence teaching resources. For example, making full use of Internet platforms such as short videos, xiaohongshu, B station and microblog can greatly improve the interest of mental health courses and timely understand the cognitive behavior patterns of contemporary college students. The new digital intelligence resources not only expand the space-time dimension of education and teaching, so that mental health education can go out of the traditional classroom, psychological counseling room and other physical space [2]. Students can use the Internet to obtain mental health knowledge on microblog, wechat official account, short video and other platforms anytime and anywhere, but also make full use of digital intelligence technology to carry out education and teaching activities. Before and after teaching, students can do pre-test and post test through learning platforms such as smart tree, MOOC or questionnaire stars to timely understand their learning situation. Based on all data analysis results, it provides decision-making basis for curriculum design optimization, teaching method improvement and students' mental health intervention

Use digital intelligence technology to create a real experience environment and enrich mental health education courses [1]. In addition to normal classroom teaching, teachers can use online resources such as video, audio, VR and AI to increase interaction with students. They can also use small programs and games to learn mental health education knowledge, enrich teaching forms, create an interesting and experiential learning environment, avoid too rigid mental health education courses and student management, and truly enable students to actively participate in learning and continuously improve their psychological quality.

4.5 Give Full Play to the Effectiveness of Digital Intelligence and Improve the Service System of Psychological Education

Play the role of big data intelligent education, and build a "four-dimensional, five-level" psychological education system. Relying on modern information technology and using the concept of "big data+mental health", we will mine digital intelligence resources in the two dimensions of curriculum teaching and practical activities, and play the role of digital intelligence platform in the two dimensions of consulting service and crisis prevention. Using the five levels of school college class dormitory student, through the integration of students' psychological dynamic data, daily screening results and monthly record data, students' mental health files are established to focus on students' personalized psychological growth [6].

At the same time, by using the Internet, big data, artificial intelligence and other modern technical means, the quality video open courses, resource sharing courses and national quality online open courses are widely used to establish the teaching and Research Office of psychological education and the college students' psychological crisis supervision room, innovate the way of psychological education, carry out psy-

chological work in a targeted manner, and constantly protect the students' mental health.

5 Conclusion

With the continuous development of technology, digital intelligence psychological education will become the mainstream trend of psychological education in higher vocational colleges. Although the psychological work in higher vocational colleges is facing many challenges under the background of digital intelligence, through our continuous exploration and practice, higher vocational colleges are bound to break through the challenges, and carry out psychological work in a more accurate and efficient manner, so as to promote students' mental health level and comprehensive development.

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References

1. Yanhang Mai, Xiaoxia Jiang&Yuhang Sheng.(2024)Research and Practice on teaching reform of educational statistics under the background of digital intelligence era.Higher Education Forum (07), 57-61.
2. Yu Bai, Liping Wang, Ailing Shi,&Huijuan Bai.(2024) The exploration and practice of the teaching reform of College Public Mathematics Basic Course under the background of digital intelligence education.Research on innovative education, 12 (9), 7.
3. Ping Mei.(2024)The path innovation of Higher Vocational Students' mental health education under the background of media integration.Journal of Taiyuan City Polytechnic (11), 171-173.doi:10.16227/j.cnki.tytc.2024.0675.
4. Ding Cai.(2020). Research on the Analysis of Mental Health Data and the Construction of Feedback System for Vocational College Students under the Background of Big Data. Journal of Jiamusi Vocational College (08), 161-162.
5. Lihao Wang, Na Li&Ruiyuan Shen.(2024). Research on mental health education of Higher Vocational College Students under the background of big data Scientific and technological style, (15),153-154.
6. Ping Wang.(2024). Path analysis of integrating mental health education into university student management under the background of big data.Shanxi Youth (13), 70-72.
7. Guoxia Peng.(2024). Research on the Development Path of Psychological Health Education in Higher Vocational Education under the Background of Digital Transformation.Public Relations World (19), 24-26.
8. Ostermann Thomas,Röer Jan Philipp & Tomasik Martin J..(2021).Digitalization in psychology: A bit of challenge and a byte of success.Patterns(10),100334-100334.

9. Mint Husen Raya Aditama,Dewo Agung Nugroho Narosaputra & Syafrida Selfiardy.(2024).Integrating digital intelligence into mental health interventions: Problems, evaluation, recommendations.Psychiatry Research,116205-116205.
10. Sandhya Bhatt.(2024).Digital Mental Health: Role of Artificial Intelligence in Psychotherapy...Annals of neurosciences, 09727531231221612.

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