Scientific and Social Research, 2026, Volume 8, Issue 5
http://ojs.bbwpublisher.com/index.php/ssr
Online ISSN: 2981-9946
Print ISSN: 2661-4332

The Challenges and Responses of Generative AI for Mental Health Teachers in Chinese Institution of Higher Education

Xinyi Li*

Department of Student Affairs, Hubei Normal University, Huangshi, Hubei, China

**Author to whom correspondence should be addressed.*

Abstract: The rapid development of generative artificial intelligence technology is profoundly reshaping mental health education in colleges and universities, which has systematically challenged the professional identity, professional practice, and emotional care of mental health teachers. Based on the practice of mental health education in colleges and universities, this paper systematically analyzes the specific application forms of generative AI in the work of mental health teachers in colleges and universities, and deeply discusses its core challenges to the professional development of mental health teachers, including: the professional pressure of teachers' role transformation, the potential threat of students' subjective development, the algorithm limitation and cultural deviation of emotional support, and the ethical dilemma of the boundary between data security and man-machine responsibility. Finally, the paper puts forward a coping path based on "AI-assisted and teacher-led", and constructs a three-dimensional coping framework from the individual level, organizational level and technical level to help mental health teachers realize the role transformation from "passive pressure" to "active adaptation" in the wave of technology, and finally reduce the incidence of students' psychological crisis and improve the quality of mental health education.

Keywords: Generative artificial intelligence; Mental health teachers in institutions of higher education; Ethical risk; Man-machine cooperation

Online publication: June 5, 2026

1. Introduction

Currently, the psychological stress of college and university students is becoming more and more serious, with frequent depression, anxiety, interpersonal adaptation disorder, and extreme crisis events. However, the mental health service in Chinese institutions of higher education has faced structural problems, such as the shortage of teachers, imbalance between students' demand and supply, heavy workload, and lagging crisis warning [1].

With the technical advantages of natural language interaction, text analysis, emotion recognition, personalized content generation, and all-weather response, generative AI is widely regarded as an important technical starting point to alleviate the shortage of psychological service resources in colleges and universities [2]. Nevertheless, most of the current research focuses on the "empowerment" exploration of psychological education by AI technology, and less on the professional challenges faced by mental health teachers as the core subject. Previous studies have shown that the deep use of AI technology may lead to problems such as students' privacy leakage, teachers' technical dependence, insufficient cultural adaptability, and ethical issues [3].

Therefore, this study focuses on the practice of Chinese universities and colleges, systematically analyzes the key challenges that generative AI brings to mental health teachers, and tries to construct a set of coping paths suitable for mental health education in universities and colleges in China.

2. The specific application forms of generative AI in the work of mental health teachers in institutions of higher education

The work of mental health teachers in Chinese institutions of higher education usually includes psychological tests, teaching, counselling, crisis intervention, daily education management, and so on. Generative AI technology can play an auxiliary role in these fields.

2.1. From "one-way teaching" to "man-machine collaboration" teaching form reconstruction

In the mental health course, generative AI can be used as an auxiliary tool to help teachers improve teaching efficiency and effect. In the lesson preparation stage, teachers can use generative AI to generate cases, discussion topics, and quizzes quickly. In class, AI can enhance the students' interactive experience. For example, in class discussion, teachers can introduce AI as a "virtual participant" to simulate different viewpoints and positions, which can stimulate students' critical thinking. After class, teachers can use AI to analyze students' feedback and homework, identify common problems, which can provide a basis for subsequent teaching adjustments.

2.2. From artificial service to man-machine collaboration counselling mode innovation

Before counselling, generative AI can assist teachers in collecting information and assessing risk. For example, Xiaoling, an AI psychological counseling robot piloted by Jinling Institute of Science and Technology, can refer students who need professional intervention to human consultants on time before counseling. In counselling, AI can assist consultants in recording and formulating intervention plans. After counselling, the teacher can input the desensitized conversation content into AI to generate a summary of the consultation record, thus saving the paperwork time [4].

2.3. The paradigm shift of crisis intervention from passive response to active early warning

Before the crisis warning, AI analyzes students' multidimensional data in the campus information system, including psychological counseling records, academic performance, and the use of social platforms, then forms a graded warning list for teachers' reference. In crisis intervention, AI can assist teachers with resource allocation and process follow-up. After the crisis, AI can help teachers to quickly obtain information about

students and previous intervention records, and generate a crisis intervention plan. The comprehensive mental health platform constructed by Jinling Institute of Science and Technology improved the recognition rate of crisis events by 27.5% and realized the transformation from "passive response" to "active prevention."

2.4. Transformation of daily management from experience-driven to data empowerment

In daily mental health education and management, generative AI can help teachers to grasp the students' state more accurately and carry out their work more efficiently.

First, AI can help establish dynamic student psychological files. Teachers can use AI to integrate multi-dimensional data, such as psychological counseling records and psychological evaluation results, to form a three-dimensional portrait of students' psychological state. Research shows that using machine learning to analyze multimodal data can effectively identify students' mental health risks [5].

Second, AI can assist in the creation and accurate push of mental health science content. Generative AI can help teachers to create popular science content, such as WeChat official account articles and short video scripts, and achieve differentiated push according to the characteristics of different student groups, thus enhancing the pertinence of publicity work.

3. The main challenge of generative AI to mental health teachers in universities in China

3.1. Professional stress in teachers' role transition

The integration of generative AI profoundly reshapes the work scope, professional demands, and role orientation of university mental health teachers. Studies have indicated that the embedding of AI technologies will replace part of traditional work tasks, requiring teachers to redefine their core values and professional functions [6].

Nevertheless, most university mental health teachers still lack sufficient knowledge and skills related to artificial intelligence. They have not received systematic training on how to interpret AI-generated early warning reports effectively or how to use AI tools to improve counseling efficiency. Research has found that college teachers generally experience various forms of distress—from cognitive to emotional anxiety—when faced with conversational generative AI technologies [6]. This lack of technical literacy may lead teachers to either reject AI excessively or depend on it blindly, both of which can hinder improvements in educational and service quality.

It is also important to note that over-reliance on AI may weaken teachers' emotional involvement and humanistic care. When students feel that their counselors lack empathy, they are more likely to turn to artificial intelligence for emotional relief and become less willing to seek help from teachers. In the long run, vulnerable and high-risk students may receive only algorithmic responses instead of genuine human support, which creates potential risks for psychological crisis intervention.

3.2. Potential threats to students' subjective development

The fundamental goal of mental health education is to cultivate students' ability to cope with developmental challenges independently. However, the overuse of generative artificial intelligence may weaken students' critical thinking and intrinsic motivation to some extent.

In previous mental health courses, teachers usually used the case teaching method to guide students

to master psychological adjustment skills through role-playing. This method effectively enhances students' participation and stimulates their learning initiative. Studies have shown that individuals who rely on artificial intelligence to complete tasks often cannot acquire corresponding cognitive abilities because they rely on intelligent tools to think [7]. When students become overly dependent on generative artificial intelligence, their ability to solve problems independently and adjust their emotions will be affected, and the development of technology may limit students' long-term mental health.

More importantly, excessive addiction to AI interaction may further reduce students' time and motivation for face-to-face social interaction, and their social avoidance, AI dependence, and social ability will further decline.

3.3. Algorithm limitations and cultural bias constraints on emotional support

The core risks of AI's application in college mental health education are the ambiguity of technical boundaries and the lack of professional judgment. Although the current large-scale language models show strong performance in language understanding, they are essentially text generation systems and lack certain reasoning ability. Studies have shown that the results of generative artificial intelligence in clinical diagnosis are less authentic than those of human diagnosis [8].

A more worrying problem is "excessive adaptation of artificial intelligence." Algorithms tend to follow users' views rather than give constructive and objective feedback, which may weaken students' ability to cope with complex interpersonal relationships [9]. There are practical cases showing that AI chatbots not only fail to recognize the early warning signals of suicide, but also provide specific self-harm operation methods [10]. For mental health teachers, the AI system may underestimate the risk, or it may issue unnecessary alarms frequently, both of which will bring serious consequences.

Furthermore, overuse of AI may lead students to treat algorithmic interactions as a substitute for counseling, potentially causing them to avoid professional help during critical periods. Hence, universities must establish a clear boundary and a coordination mechanism between the use of AI tools and professional intervention.

3.4. Ethical issues around data security and where to draw the line between humans and machines

Mental health data are highly sensitive and private, mainly including psychological test results, consultation records, and interview records. Any data leakage may lead to serious consequences. Although the artificial intelligence early warning system improves the accuracy of crisis identification, it also greatly increases the risk of information leakage.

It is found that college students are very sensitive to the privacy protection of mental health data. Some students do not even want to consult offline for fear of information leakage [11]. If students do not trust the AI system to process their data safely, their willingness to use these tools and the degree of self-disclosure will be significantly reduced. Therefore, colleges and universities need to balance the relationship between technology application and students' right to know and autonomy, so that students can trust the AI system.

The subject of responsibility in traditional psychological services is relatively clear, but after the introduction of artificial intelligence, the responsibilities among technology developers, platform operators, and university institutions have become blurred. For example, when AI gives inappropriate suggestions because of the deviation of the algorithm, there is no clear answer to who should bear the responsibility.

Artificial intelligence cannot bear legal and moral responsibilities independently. When facing these problems, mental health teachers are prone to fall into an ethical dilemma.

4. Coping strategies: Exploring how humans and AI can work together in mental health education

Facing the opportunities and challenges brought by generative artificial intelligence, mental health teachers in colleges and universities need to find a balance between technology use and humanistic care. This study attempts to construct an integrated framework from three dimensions: individual, organization, and technology, so as to explore a development path that conforms to the educational law and does not deviate from the goal of psychological education.

4.1. Personal level: Rebuilding teachers' ability and identity

In the face of the impact of generative artificial intelligence, how to adapt to the psychological health of teachers in colleges and universities at the personal level mainly includes three aspects: one is to cultivate artificial intelligence literacy, the other is to accept the emotional anxiety brought by technology, and the third is to reposition their professional identity.

First of all, artificial intelligence literacy is the basic ability of teachers to adapt to the technical environment. Teachers should not only know how to operate, but also understand the basic principles, functional boundaries, and internal limitations of generative AI, know how to effectively guide AI with hints, and make a critical evaluation of the content generated by AI; at the same time, they should be able to identify the ethical risks and make reasonable and responsible professional judgments. Once mental health teachers are proficient in operation and can make critical professional judgments, it lays the foundation for man-machine cooperation.

Second, the cultivation of technical ability must be based on emotional acceptance. Training that only pays attention to technology and ignores teachers' emotional experience usually cannot produce sustainable results [10]. Dishari (2026) shows that university teachers usually encounter three types of emotional distress: anxiety, distrust, and cognitive dissonance in the process of integrating artificial intelligence [12]. Ignoring this emotional training will hinder teachers from truly accepting and effectively using artificial intelligence tools. Therefore, training should give priority to creating a psychological safety environment for teachers, so that they can face rather than suppress technical anxiety.

Finally, rebuilding professional identity is the key goal for teachers to adapt to technology. Generative artificial intelligence assists some work, which means that the professional value of teachers needs to be repositioned. This study suggests that mental health teachers should change from "knowledge authority" in the past to dual roles: AI collaborators and emotional supporters. This change will not belittle the professional value of teachers, but will enable them to concentrate on giving full play to the unique advantages of human beings, such as deep empathy, value judgment, the establishment of therapeutic relationships, and crisis intervention. AI handles standardization tasks such as information integration, preliminary screening, and document assistance, while teachers leave more time for core educational work that requires human wisdom, emotional insight, and moral decision-making. In the AI era, the core competitiveness of mental health teachers is no longer better than AI in knowledge, but in the professional field of being people-centered, making achievements that algorithms cannot achieve.

4.2. Organizational level: Institutional support and ecological construction of universities

The individual capability reshaping and emotional adjustment of teachers can only be effectively implemented with institutional support at the organizational level. As employers and administrative managers of teachers, universities are obligated to provide systematic institutional guarantees to facilitate teachers' adaptation to the AI era.

In terms of training system development, universities should establish a hierarchical and progressive AI literacy training system for mental health teachers. Sichuan University launched a comprehensive AI literacy training program for faculty in 2026 and proposed a "four-stage and ten-dimensional" teacher AI literacy framework. This framework defines a clear teacher growth trajectory, covering four progressive roles: trend interpreters, tool practitioners, integration innovators, and educational pioneers [13]. It is highly consistent with the three-dimensional academic structure of AI literacy, which includes understanding AI principles and functional boundaries, mastering operational skills and critically evaluating AI-generated outcomes, and identifying ethical risks to deliver responsible professional judgments. Training design should adhere to the "emotion-first" principle, helping teachers acknowledge and accept technological anxiety before cultivating their technical capabilities [10].

In terms of ethical norms and institutional construction, universities need to formulate clear guidelines for AI application in mental health services. Tsinghua University released the Guiding Principles for the Application of Artificial Intelligence in Education and Teaching in 2025, putting forward five core principles: responsibility and integrity, data security, prudence and critical thinking, as well as fairness and inclusiveness. The guidelines emphasize that AI serves only as an auxiliary tool, while teachers and students remain the principal subjects of teaching and education [14]. This framework provides valuable references for the construction of AI ethical norms in campus mental health services. International research also suggests that mental health professionals need to establish a systematic ethical decision-making framework in the AI era, covering core dimensions such as autonomy and informed consent, privacy and transparency, justice and inclusiveness, as well as professional integrity and accountability [15].

In terms of career development guarantee, universities should integrate AI literacy into teachers' professional evaluation systems. The UNESCO framework for teachers' AI competency indicates that practitioners should develop human-centered AI thinking, master relevant ethical norms, and integrate artificial intelligence into professional practices [16]. Meanwhile, universities are supposed to provide sufficient time and resource support for teachers' AI application, avoiding additional occupational burdens brought by technological introduction.

4.3. Technological level: Boundary setting for human-AI collaboration

The inherent design of technology directly determines the quality and safety of human-machine collaboration. Universities need to prudently define technical boundaries when selecting and deploying AI tools for campus mental health services.

First of all, the positioning of generative artificial intelligence in mental health practice should be clear: it is an auxiliary tool, not a substitute. The results given by AI can only be used as a professional reference, not as a final conclusion, and users must be clearly reminded that the final judgment needs people to check. Hunan Normal University put forward a set of dual protection mechanisms of "AI empowerment+manual supervision" in the AI psychological education mode of "Lushan Psychological Care." This mechanism emphasizes that AI provides support for traditional psychological work, while the

core tasks of deep empathy, value guidance, and complex crisis intervention still need to be undertaken by professionals [17]. Internationally, Smith et al. (2026) also pointed out that the ethical framework of AI mental health applications must clearly distinguish between algorithms and what tasks professionals should do [18]. Especially in high-risk scenarios such as crisis assessment and diagnosis suggestions, AI tools should actively prompt users to seek professional help.

Secondly, universities need to formulate a set of standardized operational procedures for AI collaborative work. The "Xinbao" intelligent psychological body developed by Wenzhou Vocational and Technical College has established the operation process of "monitoring-intervention-feedback." The online system will respond to early warning information in time, provide emergency resources, and guide teachers to intervene offline. Teachers will conduct 48-hour follow-up visits to high-risk cases, forming a working mode of real-time monitoring of AI and precise manual intervention [19]. Similarly, Hunan Normal University has also built an intervention system, and the AI response-manual intervention-expert consultation is a three-level progressive process [17]. This standardized process can not only give full play to the operational efficiency of AI tools, but also ensure that teachers' professional judgment is always in the dominant position.

Finally, data privacy and security protection are the bottom lines that must be kept during the use of AI. Interactive data generated during student-AI conversations contains highly sensitive personal psychological information. The Interim Measures for the Administration of Anthropomorphic Artificial Intelligence Interactive Services, drafted by the Cyberspace Administration of China in 2025, stipulates stricter purpose restrictions for emotional personal data, prohibiting unauthorized model training and data analysis [20]. In practical application, Hunan Normal University adopts federated learning and data desensitization technologies to strictly protect user privacy [17]. Additionally, mental health teachers must receive systematic data protection training to prevent unintentional privacy leakage. As Smith et al. (2026) highlighted, AI-based mental health applications should maximize technological effectiveness while preserving users' right to know and personal autonomy [18].

5. Conclusion

The development of generative AI has brought the potential for profound change to university mental health education. It shows great promise in expanding educational pathways, optimizing teaching processes, and improving service efficiency. At the same time, it places higher demands on teachers' professional roles, competencies, and ethical judgment.

For mental health teachers, AI can assist with information processing, extend service reach, and optimize resource allocation. But it cannot replace the care and connection that a real person brings to a student. The essence of mental health work lies in the encounter between lives and the dialogue between hearts—and this essence will not change with the introduction of technology.

The future is not determined by technology itself, but by how teachers understand and choose to use it. Only by holding firm to the educational mission in the midst of technological change, and by preserving value rationality within instrumental rationality, can generative AI truly serve the mental health and development of students.

Funding

Outcome of the 2025 Hubei Normal University Student Ideological and Political Work Project (No.2025SZB04)

Disclosure statement

The author declares no conflict of interest.

Reference

[1] Zhang X, Li H, Wang M, 2025, Structural Dilemmas of University Mental Health Services and Countermeasures. Chinese Journal of Clinical Psychology, 33(3): 456–462.

[2] Al-Razgan M, Alfarraj O, Al-Mahmoud S, 2025, How Generative Artificial Intelligence Transforms Teaching and Influences Student Wellbeing in Future Education. Frontiers in Education, 2025(10): 1594572.

[3] Mu Y, Li Q, Wang Z, et al., 2026, Semantic Stability, Response Strategies, and Bias Analysis of Generative Artificial Intelligence in Psychological Health Education. Journal of Psychological Science, 49(2): 258–270.

[4] Blease C, Rodman A, 2024, Generative Artificial Intelligence in Mental Healthcare: An Ethical Evaluation. Current Treatment Options in Psychiatry, 12(1): 5.

[5] Lin H, Jia J, Guo Q, et al., 2021, User-level Psychological Stress Detection from Social Media Using Deep Neural Networks. Proceedings of the 2021 ACM International Conference on Multimedia, 4165–4173.

[6] Peng R, Wu Q, 2023, Technical Anxiety of University Teachers Under ChatGPT Intelligent Technology: Reality Representation, Formation Mechanism and the Corresponding Measures. Journal of Chongqing University of Arts and Sciences (Social Sciences Edition), 2023(5): 118–128.

[7] Huang J, 2025, Cognitive Offloading with Generative AI: The Role of Critical Thinking in Learning Outcomes. Computers & Education, 2025(228): 105231. https://doi.org/10.1016/j.compedu.2025.105231

[8] Blease C, 2025, Comparing Generative Artificial Intelligence and Mental Health Professionals for Clinical Decision-making with Trauma-exposed Populations: Vignette-based Experimental Study. JMIR Mental Health, 2025(12): e80801.

[9] Cheng M, Lee C, Khadpe P, et al., 2026, Sycophantic AI Decreases Prosocial Intentions and Promotes Dependence. Science, 391(6792): 1–46.

[10] Merkebu J, 2026, Humanizing AI Training for Health Professions Educators. Medical Teacher, 48(3): 360–363.

[11] Zhu Y, 2026, The Conflict between Need and Fear: How Privacy Concerns Moderate the Influence of Depression on University Students' Acceptance of AI Music Therapy. Frontiers in Psychology, 2026(17): 1768759.

[12] Dishari S, 2026, Teaching in the Age of Generative AI: A Qualitative Analysis of Faculty Identity, Emotion, and Assessment Concerns. Journal of Artificial Intelligence and Technology, 2026(6): 270–283.

[13] Sichuan University, 2026, Empowering Future Teachers! Sichuan University Launches Comprehensive AI Literacy Training Program for Teachers.

[14] Tsinghua University, 2025, Guiding Principles for the Application of Artificial Intelligence in Education and Teaching.

[15] Giordano NA, 2025, Ethical Decision-Making Guidelines for Mental Health Clinicians in the Artificial Intelligence (AI) Era. Healthcare, 13(23): 3057. https://doi.org/10.3390/healthcare13233057

[16] Miao F, Cukurova M, 2024, UNESCO AI Competency Framework for Teachers. UNESCO Publishing.

[17] Hunan Normal University, 2026, ”Lushan Xinyu” AI+ Promotes the High-quality Development of University Psychological Education. National University Ideological and Political Work Network. https://stustar.hunnu.edu.cn/info/1017/78070.htm

[18] Smith WR, Earp BD, Buck B, 2026, Seven Desiderata for Ethical Frameworks for AI Mental Health Agents. The American Journal of Bioethics, 26(2): 83–86. https://doi.org/10.1080/15265161.2025.2608637

[19] Wenzhou Polytechnic, 2025, Intelligent Integration and Multi-dimensional Collaboration: AI “Xinbao” Independently Developed by Wenzhou Polytechnic is Fully Launched. China Education Online. https://zhijiao.eol.cn/detail/2025/05/08/1746671336_25377.html

[20] Cao Y, 2026, Promoting the Standardized Development of AI Medical Health. Health News. https://jkb.com.cn:9080/news/view/2026/0119/508491.html