

Tracing the Trajectory: The Evolutionary Application and Optimisation of Blended Learning Models in Psychiatric Nursing

Qingjie Ma¹, Hang Zhang¹, Yuxuan Xie¹, Weiting Liu^{1,2*}, Jin Cong^{1,2*}

¹School of Nursing, Anhui University of Chinese Medicine, Hefei 230012, Anhui, China

²Key Laboratory of Geriatric Nursing and Health, Anhui University of Chinese Medicine, Hefei 230012, Anhui, China

*Corresponding authors: Jin Cong, congjin@ahtcm.edu.cn; Weiting Liu, liuweiting1213@126.com

Copyright: © 2026 Author(s). This is an open-access article distributed under the terms of the Creative Commons Attribution License (CC BY 4.0), permitting distribution and reproduction in any medium, provided the original work is cited.

Abstract: *Objective:* To review the current application status of online-offline blended teaching in psychiatric nursing courses, clarify the theoretical foundations, practical key points, and existing challenges of this teaching model, and provide references for the reform of psychiatric nursing course teaching. *Methods:* We reviewed many studies from China and other countries about blended teaching in psychiatric nursing. We focused on how the model is built, how teachers use it, its results, and the difficulties. *Results:* Blended teaching helps students learn more theory, improve practical skills, and become better at caring for patients with kindness. But there are still problems like course content not connecting well, weak technology support, and teachers needing more training. *Conclusion:* Blended teaching fits psychiatric nursing well because of the subject's special needs. We need to fix the current problems so this teaching method can be used more widely and effectively.

Keywords: Psychiatric nursing; Blended teaching; Online-offline integration; Course construction; Teaching effectiveness

Online publication: May 31, 2026

1. Introduction

Psychiatric nursing is an important part of nursing. It requires nurses to have good professional knowledge, communication skills, and psychological care abilities. In recent years, the number of people with mental health problems has continued to increase, making psychiatric nursing education more important than before. The quality of psychiatric nursing courses can directly affect nursing students' future work ability and the quality of care they provide to patients. However, traditional teaching methods still have some problems. Most classes mainly focus on teachers giving lectures and students listening. Although students can learn theoretical knowledge, they often have few chances to practice what they learn. As a result, many students

find it difficult to deal with real patients when they enter clinical settings, especially when communicating with patients or providing psychological support^[1]. At the same time, psychiatric nursing is a challenging job. Nurses not only need to care for patients with different mental health conditions but also need to cope with the emotions of patients and their family members. This often brings a lot of pressure. Therefore, it is very important for nursing education to combine theoretical learning with practical training^[2]. In recent years, nursing education in China has actively promoted the concept of “New Medical Science.” This approach encourages closer cooperation between schools and hospitals and supports the use of new teaching methods. It also aims to train nursing students with stronger professional skills and comprehensive abilities. In addition, the Undergraduate Nursing Education Standards emphasize the importance of practical ability, humanistic care, and the use of information technology in teaching. Under this background, blended teaching has become a popular teaching method in psychiatric nursing education because it is flexible and can meet different learning needs^[3]. Blended teaching combines online learning with face-to-face classroom activities. Students can study learning materials online at their own pace and then participate in classroom discussions, skills training, and clinical practice activities offline. This teaching method helps students understand knowledge more deeply and improve their practical abilities^[4]. Many studies have shown that blended teaching can increase students’ interest in learning and improve their confidence. In psychiatric nursing courses, students can first learn theories and clinical cases online and then practice communication skills and teamwork through classroom activities, simulations, and group discussions^[5,6]. Many students believe that this learning method is more interesting and helps them better understand psychiatric nursing knowledge. It is especially useful for developing communication skills, empathy, and emergency response abilities. Recent studies in medical education have also found that blended teaching can improve students’ communication skills, teamwork ability, and self-confidence. Through videos, online learning tasks, and scenario simulations, students can repeatedly practice in a safe learning environment and reflect on their performance. This helps them prepare for real clinical situations more effectively^[6,7]. In addition, blended teaching provides teachers with more ways to teach and assess students. Teachers can better understand students’ learning progress and identify problems in time. This helps improve teaching quality and strengthens the connection between classroom learning and clinical practice. Therefore, reviewing and summarizing the design, implementation, and evaluation of blended teaching in psychiatric nursing courses is meaningful. It can provide useful references for nursing education reform and help improve the quality of psychiatric nursing education and patient care^[8].

2. Teaching requirements and challenges of psychiatric nursing courses

2.1. Professional characteristics of psychiatric nursing

Psychiatric nursing is a very general area, and its professional aspects are multi-dimensional knowledge and competence. On one hand, psychiatric nursing not only explains the basic notions of mental health and mental health, but also multiple levels such as humanistic care, communication skills, crisis intervention, and ethics, placing extremely high demands on the integration of theory and practice^[9]. Students need not only to master the basic knowledge of mental disorders, assessment tools, and intervention methods but also to possess keen observation and clinical judgment skills to make scientific decisions in the complex and variable clinical environment of psychiatry^[10]. Moreover, psychiatric nursing requires that nurses care by humanistic considerations, that they know patients’ psychological needs, are friendly to them and care about

them, and that they have good nurse-patient relationships. This sets higher standards for communication skills, empathy, and self-management abilities^[9].

The main competencies of psychiatric nurses include mental disorder assessment, crisis management, patient communication and support, and professional supervision. For example, students need to systematically learn and master the assessment process for mental disorders, risk assessment and management, recognition of psychiatric symptoms, and nursing intervention techniques, enabling them to implement effective crisis interventions when patients exhibit self-harm, suicidal, or aggressive behaviors^[11]. In addition, psychiatric nursing schools are highly focused on communication skills, requiring students to be patient, understanding, and professional in conversations with patients and their relatives, and to alleviate anxious, fearful, and lonely patients to encourage recovery.

In addition to basic literacy, psychiatric nursing also suggests the use of full-fledged knowledge. Students need to possess interdisciplinary knowledge, such as psychology, sociology, law, and ethics, and be able to flexibly apply this knowledge in clinical practice^[12,13]. In the actual teaching process, combining theoretical learning with clinical training and employing diversified teaching methods such as role-playing, case analysis, and scenario simulation helps students transform theoretical knowledge into practical abilities^[10,14]. At the same time, psychiatric nursing courses also try to learn self-discovery and teamwork abilities in a group and to improve communication and coordination abilities in multi-disciplinary teams^[15].

Summarizing, psychiatric nursing courses have pros and cons with the same focus on theory and practice, with ability and literacy, and have the ability to analyze, communicate, and collaborate with humans based on the competence of having the skills necessary to cope with psychiatric nursing.

2.2. Limitations of traditional teaching models

The teaching methodology of psychiatric nursing education is usually based on teacher lectures, where students are generally passive participants and do not have the opportunity for active participation and interaction. By this approach of learning, it is not necessary to learn students' real abilities and emotions, nor is it realistic for modern nursing education to learn their full abilities. Bloom's Taxonomy of Educational Objectives emphasizes an approach to the development of cognitive, affective, and psychomotor fields. However, traditional teaching models overly focus on theoretical explanation, leading to insufficient cultivation of students' practical operation and clinical thinking abilities, affecting their future comprehensive competence in the field of psychiatric nursing^[1]. In addition to the practical aspects, training in psychiatric nursing comes with additional constraints such as venue, faculty, and patient resources. Due to a low psychiatric clinical internship duration and limited faculty and patient resources, students do not have much opportunity to gain an actual experience in clinical practice, and it is very difficult to get a deeper understanding of the core contents, such as psychiatric nursing, communication skills, and human services in practice. Research has found that single classroom lectures cannot help students deeply understand abstract concepts in psychiatric nursing, nor can they effectively enhance practical abilities such as communication, decision-making, and clinical reasoning^[5]. As a result, there is an increasing interest in developing more flexible, diverse, and student-centered teaching models to enhance students' general literacy and clinical skills.

2.3. The need for blended learning in psychiatric nursing curricula

The teaching content of psychiatric nursing courses combines theoretical depth with the complexity of

clinical practice, requiring teaching models to be flexible and adaptable to meet students' dual needs for knowledge and skills^[16]. Single-mode teaching methods are no longer sufficient for the current development of psychiatric nursing. Research points out that psychiatric nursing education faces challenges in helping students overcome stereotypes about patients with mental disorders and improving their actual care abilities, urgently needing to introduce new teaching models to promote students' correct understanding and positive attitudes towards patients with mental disorders^[17]. The blended teaching model by online and offline means can provide more space to systematically learn about theoretical knowledge and practice in practice. In-clinic courses can provide flexible learning time and resources to increase autonomous learning performance; in-clinic and online practices and interactive sessions can be provided, such as role-playing help deepen students' understanding of theoretical knowledge and exercise their clinical decision-making abilities and emotional coping skills in real situations^[10,18].

Moreover, psychiatric nursing courses place great emphasis on students' thinking and teamwork abilities. It turns out that structured objective video scenes are better developed than structured:Objective Structured Video Examination (OSVE) and role-playing teaching methods can effectively promote the integration of theory and practice among students, enhance their clinical reasoning and self-assessment abilities, and simultaneously boost students' confidence and adaptability through simulated patient interactions^[10]. Teleprecepting is a new, additional teaching tool since it allows students to take part in various medical settings beyond geographic constraints. Particularly in specialized fields such as psychiatric nursing, online guidance and teamwork further hone students' communication and collaborative skills^[19]. Therefore, the blended teaching model not only serves the need for flexible and diverse teaching on psychiatric nursing courses but also helps us to improve students' independence, critical thinking, and teamwork skills.

2.4. Current application status of blended teaching in psychiatric nursing

Many domestic institutions have conducted practical explorations of blended teaching in psychiatric nursing, forming differentiated teaching models and implementation pathways. Typical cases are summarized as follows. See **Table 1** for details:

Table 1. Practical exploration of mixed teaching of psychiatric nursing in domestic institutions

Institution Name	Teaching Model	Online Resource Format	Offline Practice Methods	Core Outcomes
Nursing School of a University of Traditional Chinese Medicine ^[20,21]	Model based on experiential teaching method, case teaching combined with mind mapping method	Classroom teaching video viewing, Classroom Pai platform, film appreciation	Scenario simulation, experience sharing (themed speeches), case analysis, social practice, clinical clerkship	Effectively improves student grades, empathy, and teaching quality Effectively stimulates student interest and confidence, and compensates for the shortcomings of traditional teaching through multi-dimensional interaction and contextualized teaching
Nursing School of a Medical University ^[16,22]	Model based on BOPPPS teaching model / "Online theory + Offline" blended model	Modular courses (videos, cases, assessments) provided by smart education platforms	Scenario simulation, case discussion, and clinical training	

Institution Name	Teaching Model	Online Resource Format	Offline Practice Methods	Core Outcomes
Nursing Department of a Vocational and Technical College ^[23]	Model based on SPOC + DingTalk group blended model	Smart Vocational Education Cloud platform courses, DingTalk online Q&A	Targeted review, reflection, and preview arrangements, evaluation of teaching and learning, etc.	Improves students' autonomous learning ability, increases their enthusiasm and participation in the course, enhances online teaching quality, and simultaneously raises their willingness to work in psychiatry

In both cases, the blended teaching in home institutions is digitalized, contextualized, and heterogeneous, but different levels of practice are observed between institutions of different levels. Undergraduate institutions place more emphasis on the application of virtual simulation technology and the cultivation of higher-order thinking skills, while vocational colleges tend to focus on job skill training and school-enterprise collaborative education^[24].

3. Theoretical foundations and construction pathways for blended learning models

3.1. Theoretical foundations of blended teaching

Blended teaching in psychiatric nursing is mostly based on two theories. One is constructivist learning theory, and the other is adult learning theory. These theories help us build the online and offline mixed teaching model. Constructivist theory believes students should build knowledge by themselves instead of just listening. They learn better when they interact with others, do things actively, and think about what they have done. In psychiatric nursing classes, teachers often use case studies, role-playing, group discussions, and educational films. These activities really help students connect what they learn from books with real nursing work^[25]. For example, students first look at theory videos online at home. Then in class or hospital practice, they do simulations with fake patients. This combination works well and improves their thinking and practical skills^[26]. The other theory — adult learning theory — says that grown-up students learn best when the content is useful for their real life and they can control their own study. Most students in psychiatric nursing are already in higher grades or graduate level. They have some hospital experience and know how to manage their time. They want to learn things that can help them in future jobs. So blended teaching is very suitable for them. Students can watch videos whenever they want, read materials at their own speed, and then talk with teachers and classmates during offline classes. This way, they slowly mix theory with real practice. After doing practice, they are encouraged to think about what they did, which helps them get better at communication, empathy, and making decisions. In short, these two theories are very important for blended teaching in psychiatric nursing. They make students more active in learning and help them practice skills many times.

3.2. Construction elements of the blended teaching model for psychiatric nursing courses

The blended teaching model uses both online and offline classes to help students improve theory and

practical skills at the same time. For the online part, teachers use MOOCs, short videos, and simulation tools. These are good for teaching basic knowledge, discussing cases, and doing some interactive activities. Some studies found that watching videos and doing online learning can make students more confident when facing psychiatric nursing problems. They become better at understanding symptoms like delusions, show more empathy to patients, and learn to work in teams^[5]. Online tests based on real problems also help students think more deeply and connect knowledge with actual clinical work^[27]. For the offline part, students do more hands-on practice. They use role-playing and scenario simulations to experience real situations. This helps them improve communication skills, empathy, and the ability to make decisions quickly. It also lets them apply what they learned in class to difficult patient cases^[10,28]. Through these practice activities, students can think about what a nurse should and should not do, reflect on their own actions, and get better at working with others. These things are very important for becoming a good psychiatric nurse^[29]. Generally speaking, online classes are used for theory and case discussion because it is convenient and saves time. Offline classes are better for skill training, learning how to handle emotions, and building professional qualities. Teachers should check students' progress throughout the whole course using exams, case reports, skill tests, and learning journals. When online and offline parts are well combined, and different evaluation methods are used, the teaching quality becomes better and the whole model can keep improving^[6,10,27].

3.3. Teaching team and management mechanisms

To do blended teaching well in psychiatric nursing, we need a good teaching team and proper management. It is better to have different kinds of professionals in the team, such as psychiatrists and experienced nurses. This team can give students both theory knowledge and real practical skills. For example, when doing simulations or case discussions, psychiatrists can help students recognize difficult mental symptoms, while nursing teachers teach them how to provide care and talk with patients. When everyone works together, the teaching becomes much more practical and useful for students^[30]. Also, to work in a multidisciplinary team, students can better understand team ownership and practical performance of their work, and better understand teamwork skills for their future work. Regarding course management and quality monitoring, there is a scientific and comprehensive management policy. On the one hand, clear teaching goals and evaluation requirements need to be defined, and course implementation has to be monitored regularly through regular teaching feedback, student self-assessment, and peer review. Online teaching data analysis services can be used to monitor students' learning progress and participation in real time, quickly find problems that are taught and improve. On the other hand, course quality monitoring should focus on professional teachers' training. Regularly organizing teaching team members to participate in capacity-building activities such as simulated teaching and scenario drills promotes experience exchange and professional growth among team members^[31]. By team collaboration and good management, it is possible to make it possible to support the online-offline blended teaching model of psychiatric nursing courses without losing teaching effectiveness.

4. Practical application of blended learning in psychiatric nursing courses

4.1. Development and utilisation of online teaching resources

Building an online-offline blended teaching model for the psychiatric nursing course is among the top points of effectiveness in making an online teaching model more effective. For the first part, MOOCs and micro-courses in psychiatric nursing should cover the main topics such as disease knowledge, nursing, and communication. Study suggests that some of the online teaching methods such as virtual simulation, case analysis are diversified, and scenario simulation can not only compensate for the lack of clinical practice opportunities but also significantly improve students' problem-solving abilities, clinical thinking, and communication skills^[32,33]. Online Teaching Sites may also be used for learning some ideas, or practice in a similar way. Teachers can concretize abstract psychiatric nursing theories by recording high quality course videos, designing online tests and situation situations, thereby enhancing students' understanding and application abilities^[34,35,36].

And if there is sufficient enough of a learning community, we also promote teacher-student interaction as well as peer communication. The online learning community will share and discuss hard problems, and teach and motivate students. Research indicates that in an online environment, teachers can effectively stimulate students' active learning and deep engagement through caring communication, role modeling, and emotional investment, creating a positive learning atmosphere^[37]. Meanwhile, through group discussions, collaborative tasks, and peer assessments, students can collectively solve problems encountered in learning, improving teamwork and communication skills^[33]. Online communities can be constructed with learning management (e.g. Moodle) to manage course resources with centralized knowledge, automatically track learning progress, and provide immediate feedback on learning results, thereby providing technical support for personalized teaching and differentiated guidance^[38].

Finally, online teaching resources for psychiatric nursing should focus on scientific content, variety of forms and interaction. Through MOOCs, micro-courses and virtual simulations as well as on-line collaborative learning communities, online learning will not only be possible within the time and space constraints of traditional teaching but will also lead to improvements in the professional skills of students and knowledge, paving the way for more accurate implementations of the blended teaching model.

4.2. Innovation and optimisation of offline practical teaching

In-person practical teaching is a crucial component of psychiatric nursing in the long run, and it should encourage students to think better, adapt, and practice. In recent years scenario simulation based on real cases has proved to be an effective approach for improving students. Real psychiatric clinical cases could be modelled as patients to role-play and manage emergencies in an environment of safe and controlled settings that enable students to make better decisions with regard to clinical reasoning and self-confidence. For example, standardized patient simulation helped to improve students with regard with learning satisfaction and self-confidence. Students think that this simulation environment is real, practical, and safe, contributing to the cultivation of critical thinking and decision-making abilities^[39]. In addition to scenario simulation, scenario simulation can be used to encourage theoretical knowledge

and practical operation, enhancing students' communication and adaptability in complex mental health situations^[10].

Organizing psychiatric clinical practice and training nurses. Clinical practice allows students to chat with real patients and understand better how mental disorders are treated and communicated. Recent studies show that face-to-face clinical practice helps students to overcome fear and discomfort of psychiatric practice, gradually building professional confidence and positive career identity^[40,41]. In terms of skills training, adopting diversified teaching methods such as role-playing and OSVE not only improves students' clinical reasoning and self-assessment abilities but also enhances their emotional engagement and adaptability through simulated interactions with real patients^[10,42].

Besides the above, practical teaching of psychiatric nursing always introduces new ideas such as nursing skills boot camps, simulation and group discussions. For example, psychiatric nursing skills Boot Camps use the fishbowl method, simulated sounds and learning cafés to increase students' empathy and to reduce stigmatising attitudes towards people with mental disorders^[43]. During instruction, teachers share patient's clinical case sharing, reflection, and role playing to make the students more professional and ethical and make them more conscientious to care for them^[44,29].

In summary, on-line practical teaching at Psychiatric Nursing course could be beneficial for students to make better decisions about their clinical thinking, flexibility, and practice, with situations simulation, clinical internships, and diversified skills, thereby increasing student understanding and practice as well as high confidence in psychiatric nurses' practice.

4.3. Integration and dynamic adjustment of the teaching process

In the online-offline blended teaching model of the Psychiatric Nursing course, teaching interactions and dynamic adjustment are performed to increase teaching efficiency and meet students' needs. Learning data may reveal the learning performance of the teaching levels in the online, e.g., accessing on-line learning sites, completing assignments, discussing, etc., so that online/offline teaching content and speed can be varying. For instance, it is observed that in blended teaching models students learn to balance and resolve online and offline teaching. From student learning data, teachers can instantly discover difficulties that student students may face in a particular stage and adjust their teaching content, such as increasing on-line resources or adapting offline topics to students' learning needs^[45].

Also feedback and personalized instruction. Full-texting can offer teachers with multiple feedback channels, like online quizzes, assignments and conversations. On-line assessment with student learning, teachers can provide periodic tests and personalized tutoring. Research showed that dynamic changes and personalized teaching based on data analysis can improve the motivation for students to learn self-regulation and self-confidence. In the study on self-regulated learning behaviour, cluster analysis of students' behavior on-line learning revealed that students' learning strategies and goals are changing as they come up in courses. Teachers adjusted teaching strategies accordingly, effectively promoting student learning outcomes^[46].

By the above dynamic adjustment and integration, blended teaching may adapt better to the difficulty of the Psychiatric Nursing course and the differences of students for teaching purposes.

5. Evaluation of blended teaching effectiveness and existing problems

5.1. Teaching effectiveness evaluation indicators and methods

Evaluation of teaching quality for the online-offline blended teaching model in Psychiatric Nursing requires a multi-level and heterogeneous evaluation system in order to evaluate students' learning and ability improvements. Knowledge is also a major component of evaluation systems measured through course theory exams, online exams and classroom questioning. Research has showed that VR simulation teaching in psychiatric nursing schools can help students higher on theory knowledge than traditional teaching^[47]. In addition, some teaching models (like PBL, team learning and blended flipped classrooms) can also improve students' theoretical and practical performances^[48,49].

The second critical part is skill operation ability. The skill is often measured using scenario simulation, SP training, and internship. Standard patient simulation can be used to improve students' abilities in coping with difficult mental health situations as well as to improve their practical skills and thinking^[50,39]. The development of VR and virtual simulation platforms provide an opportunity to objectively evaluate skill operation capabilities to continuously train and assess students' behaviors and emergency responses in a safe environment^[47,51].

Communication and humanistic care are all desirable characteristics of psychiatric care and often teacher and student, peer, performance or journaling. A multi-evaluation model helps students to describe their development and failure in communication and human care from multiple perspectives.

In terms of evaluation type, blended teaching model provides formative and summative evaluation. Formative evaluation is pre-class, classroom participation, online discussion, periodic assignments and skill evaluation. Sective evaluation is final theoretical and skill evaluations, general ability evaluations, etc. Multi-dimensional assessment usually uses quantitative indicators (e.g., exam scores, operation scores, etc.) and qualitative indicators (including reflective reports, clinical survey, satisfaction survey) for evaluation, scientific rigor and completeness of evaluation^[52,53]. Additionally, information technology tools (e.g., online teaching and intelligent assessment) are being deployed to teaching effectiveness assessment (eases and efficiencies in evaluation)^[54,55].

To conclude, improving blended teaching performance for psychiatric nursing needs a multi-dimensional indicator system consisting of knowledge, skills, communication, and humanistic care. It may also need multiple evaluation techniques, such as self-assessment, peer evaluation, teacher evaluation, and clinical performance, in order to gain overall positive, objective, dynamic feedback for student learning outcomes, which can be used as a scientific ground for continuously optimized teaching models and students' skills.

5.2. Analysis of the advantages of blended teaching

The blended teaching model, which combines online and offline teaching, has many advantages for psychiatric nursing courses. Firstly, blended teaching might increase the students' knowledge and practice. Systematic reviews and meta-analyses show that the nursing students who take blended courses improve their knowledge and skills more than those who teach either on a traditional or purely online basis, particularly in knowledge acquisition (standardized mean difference = 0.73) and skill training (standardized mean difference

= 0.86)^[56]. The critical thinking ability and mental health can also be enhanced by blended teaching and students generally like the teacher. Similarly, research in the field of psychiatric nursing finds that innovative blended teaching designs (such as flipped classrooms, case discussions, role-playing, etc.) not only optimize students' academic performance but also effectively reduce learning task burden and improve learning efficiency^[57].

Second, teaching improves students' self-guided learning. Students can learn online for their own learning, rely on rich digital resources for self-testing and consolidation, and bring more learning momentum and self-management^[58,59]. For example, blended teaching based on Small Private Online Courses (SPOCs) has improved students' independence and motivation in medical courses, resulting in improved performance^[60]. Besides a blended teaching, students' learning motivation, participation, and satisfaction are all enhanced with invested attention towards self-driving learning^[45,61].

Blended teaching, allowing students to "self- manage their professional status and human behavior." Offline teaching, facilitating students to systematically learn theory and by practice, case studies and peer interaction and feel professional status or humanistic. Students learn about the issues and challenges in psychiatric nursing and are more sensitive to the patients' psychological and social needs and to their professional prestige or humanism. Moreover, blended teaching creates a multi-dimensional interaction between teachers and students and students with an encouraging learning environment and team spirit^[62].

In summary, blended teaching model, both online and off-line, with better teaching design and learning may be useful not only for students' theory and knowledge, self-directedness, professional identity and awareness of humanistic care, but also for high-quality students of psychiatric nursing.

5.3. Main problems and challenges

There are some issues and challenges with the online-offline blended teaching model of psychiatric nursing courses. Among them is that it is the hardest task of the teaching team to develop and maintain online teaching resources. Course content needs to be updated due to clinical realities and student requirements, the stability, interactivity and diversity of the technological platform require a great amount of human and material investment. Other issues and challenges are that the teachers need to be professional, and they need to have been trained in the knowledge of information technology to teach in an effective manner. This is an especially challenging task for some teachers with long teaching experience and little experience with information technology. And the technical support of teaching platforms is also important to maintain the smooth pace of teaching activities.

Second, students' self-discipline and learning motivation. In a blended teaching model, students need to complete a relatively large number of online learning tasks under relatively free supervision. Some students do not have self-management skills, such as low motivation and late time. Some students are unable to learn from a new teaching session (like roleplaying and case analysis) in which they do not take part.

Third, the teachers are not enough. However, thanks to the domestic context, this results also have local meaning, namely: inadequate institutional support (most universities do not provide funds or policies

to support blended teaching, so they do not invest enough in infrastructure to support blending teaching), students knowledge (urban vs rural students have older ages than rural students) and low clinical teaching resource (high-quality hospitals in first-tier cities are very resource-rich, and remote schools do not have internship opportunities and do not yield proper teaching equity). Local issues, as well, also raise issues about implementing blended teaching and which policies and resources have to be adopted.

Finally, we are still developing our evaluation system for blended teaching. Evaluation criteria, weight allocations, and linkers between online and offline teaching are some things that need to be better optimized. Current evaluation works are focused on knowledge acquisition instead of improving the students' overall qualities, such as real-world operation and communication. However, it is still hard to bring in and easily link online and online teaching content, and the scientific rigor and clarity of teaching effectiveness evaluation need to be improved. Therefore, more efforts are needed in teaching resource building, teacher training, student management, and evaluation systems to support the overall development of the blended teaching model in psychiatric nursing.

6. Conclusion

As medical education models evolve, it is becoming critical to improve the online blended teaching model of psychiatric nursing courses. As seen by the systematic review in this paper, blended teaching not only alleviates the gap in knowledge transmission, in practice and in teaching, and among teachers, but also enables students to learn more flexible and personalized learning paths. The availability of free courses and in-person learning of online courses allow students to fully learn theoretical knowledge from themselves, and online practice training and interaction also allow students in practice to apply theory to situations in real life.

Subjective and practical results of the blended teaching model have been shown to be highly informative, self-directed, and clinical comprehensive for psychiatric nurses. Recent results have shown that in a blended teaching, students are not only able to improve their theoretical score, but they are able to make major improvements with regard to communication, critical thinking, coordination. The blended teaching approach can bring a high quality psychiatric nurses' talentedness and practical ability, as well as the potential for versatile abilities in modern medical education.

However, as a systematic teaching tool, blended teaching has a number of issues in practice. One is not sharing the teaching resources, making digital teaching papers and case libraries, some teaching staff are not able and capable to make the new model systematic enough to support systematic training and support of the teaching staff. The students come from self-discipline and information-information communities. Some students cannot adapt to blended learning which has a negative impact on teaching performance.

Different studies may make different contributions as to how to develop this work in a continuous manner; some of them emphasize that blended teaching will increase the learning success, while others suggest that over-reliance on online teaching will reduce the emotional information and immediate feedback between teachers and students. Therefore, courses should combine disciplinary characteristics and students'

needs, adapt the online versus offline portion of teaching, balance theory/practice, and maximize the full benefits of blended teaching.

Blended teaching is a new teaching model for psychiatric nursing courses. It has to be approached to provide solutions to challenges in order to allow the continuous optimization and use of this model for clinical nursing education. Examples include: better teacher training, more technical assistance for online resources, better course content integration (e.g., integrating online theory modules with offline practice), and regular teaching effectiveness tests to further improve the model. Policies: governments and educational institutions should provide effective policies, such as funding for digital infrastructure development, providing guidelines for blended teaching standards, and encouraging school-enterprise collaboration to improve the sharing of clinical practice resources, and thereby adapt to the reform requirements of “New Medical Science” education.

Future work in psychiatry is still to come. Research authors suggest that high-quality courses, learning resources, and a wide teaching evaluation system can be achieved to improve course and teaching quality. Alongside higher training and support for teaching students, better information understanding and new teaching abilities are also needed at the policy level. Top-level design can improve the sharing and sharing of quality resources, as well as ensure institutional policies that encourage blended teaching to thrive. Future work can also be developed to address the trend of intelligent transformation of psychiatric nursing education: for instance, using AI-based personalized emotion recognition training in online courses. As AI affective computing technologies mature (e.g. emotion recognition models based on face expressions, natural language processing, physiological signals), personalized online training systems can be designed for psychiatric nursing students: real-time monitoring of students’ emotional states (anxiety, frustration, empathy fatigue, etc.) during simulated communication and providing personalized feedback and interventions (eases, cognitive restructuring, or dynamic shifting of virtual patient emotions). Future randomized controlled trials may compare the long-term benefits of AI-enhanced blended teaching with traditional blended teaching in reducing clinical anxiety and improving real communication performance, tackling ethical problems.

Overall, developing and developing the blended teaching model for psychiatric nursing courses is both a natural choice for a more modern medical education as well as a chance for psychiatric nurses to develop more talent. Only by studying theory, experimentation and mechanism can there be high sustainable development for psychiatric Nursing training, providing excellent talent support for mental health and public health.

Ethics approval and consent to participate

1. A Study on the Construction of a Blended Online and Offline Teaching Model for the Course Psychiatric Nursing (2023xjjy_yb013);
2. ”Thousand Sails Competing” — Navigator for Silver-Age Health Guardianship, Anhui University of Chinese Medicine, Training Program Project(S202510369011).

Disclosure statement

The authors declare no conflict of interest.

References

- [1] Jia Z, Balinas JM, 2004, Teaching Strategies in Psychiatric Nursing Based on Bloom's Taxonomy of Educational Objectives. *Cureus*, 16(4): e57759. <https://doi.org/10.7759/cureus.57759>
- [2] Keykha R, Seyedfatemi N, Mousavizadeh SN, et al., 2025, Mental Health Nurses' Experiences of Caring for Inpatients with Severe Mental Disorders: A Qualitative Study. *BMC Psychiatry*, 25(1): 621. <https://doi.org/10.1186/s12888-025-07024-7>
- [3] Wei YB, Wei TS, Lu YN, et al., 2025, Exploration of OBE-Based Integrated Practical Teaching in Nursing under the New Medical Education Paradigm. *Journal of Henan Medical College*, 37(6): 703–707.
- [4] Shao QY, 2025, Application of Blended Learning Based on the BOPPPS Teaching Model in Traditional Chinese Medicine Nursing Education for Psychiatric Care. *Journal of Chinese Medicine Management*, 33(6): 140–142.
- [5] Seed Ahmed M, Soltani A, Zahra D, et al., 2025, Remote Online Learning Reimagined: Perceptions and Experiences of Medical Students in a Post-pandemic World. *BMC Medical Education*, 25(1): 215. <https://doi.org/10.1186/s12909-025-06815-6>
- [6] Chen MC, 2024, Blended Learning for Enhancing Nursing Students' Confidence in Managing Psychiatric Nursing Problems. *Nursing Education Perspectives*, 45(3): E10–E11. <https://doi.org/10.1097/01.NEP.0000000000001211>
- [7] Shan Y, Zhou XM, Qi WW, 2023, Application of a Blended Teaching Approach Integrating Psychological Situational Dramas and Flipped Classrooms in the Course of Psychiatric Nursing. *Shanghai Nursing*, 23(12): 74–77.
- [8] Pan Q, Zhu XL, Wu XM, et al., 2022, Practical Research on Blended Teaching Models Incorporating Ideological and Political Elements into Courses: Taking "Psychiatric Nursing" as an Example. *Journal of Tonghua Normal University*, 43(6): 16–21.
- [9] Choi HB, 2024, Concept Analysis of Psychiatric Nursing Competency in Psychiatric Nursing. *Archives of Psychiatric Nursing*, 2024(52): 130–137. <https://doi.org/10.1016/j.apnu.2024.07.016>
- [10] Khalil AI, Alqhtani SS, 2025, Translating Theory into Practice: Students' Lived Experiences on the Utilisation of OSVE and Role-play for Acquiring Psychiatric Nursing Competencies. *Journal of Medicine and Life*, 18(4): 364–374. <https://doi.org/10.25122/jml-2024-0383>
- [11] Tan X, Pan M, Wan Z, et al., 2024, Current Status and Needs of In-service Training for Psychiatric Nurses in 24 Provinces of China: A Cross-sectional Survey. *Frontiers in Psychology*, 2024(15): 1376274. <https://doi.org/10.3389/fpsyg.2024.1376274>
- [12] Sheikhabaeddinzadeh E, Ashktorab T, Ebadi A, 2022, Technical Competency Required by Postgraduate Psychiatric Nursing Students: A Qualitative Research. *Journal of Education and Health Promotion*, 2022(11): 320. https://doi.org/10.4103/jehp.jehp_1479_21
- [13] Sheikhabaeddinzadeh E, Ashktorab T, Ebadi A, 2025, Meta Competency, Prerequisites Improving the Postgraduate Psychiatric Nursing Students' Clinical Competency: A Qualitative Study. *Journal of Education and Health Promotion*, 2025(14): 207. https://doi.org/10.4103/jehp.jehp_1864_23

- [14] Li Y, 2024, Application and Feasibility Study of Case-based Teaching Combined with Role-playing in Psychiatric Nursing Education. *Heilongjiang Medicine*, 37(4): 819–821.
- [15] Wu CS, Chen MF, Hwang HL, et al., 2023, Effectiveness of a Nursing Board Game in Psychiatric Nursing Course for Undergraduate Nursing Students: An Experimental Design. *Nurse Education in Practice*, 2023(70): 103657. <https://doi.org/10.1016/j.nepr.2023.103657>
- [16] He YN, Duan ZY, Cui XL, 2025, First-Class Undergraduate Course in Psychiatric Nursing: Construction and Practice Exploration of Blended Teaching Model. *Journal of Yanbian University of Science and Technology*, 48(6): 140–142.
- [17] Lai CY, 2021, Creative Theory in Psychiatric & Mental Health Nursing, Alternative Teaching Model, and a New Breakthrough in Psychiatric Home Care Nursing. *Hu Li Za Zhi*, 68(1): 4–5. [https://doi.org/10.6224/JN.202102_68\(1\).01](https://doi.org/10.6224/JN.202102_68(1).01)
- [18] Li SR, Zhang JL, Zhao YJ, et al., 2023, Application of a Blended Teaching Model in Clinical Placement Education for Psychiatric Nursing. *Journal of Clinical Psychosomatic Medicine*, 29(6): 135–139.
- [19] Johnson D, Gatewood E, Ling A, et al., 2021, Teleprecepting: A Timely Approach to Clinical Education during COVID-19. *Journal of the American Association of Nurse Practitioners*, 34(1): 153–159. <https://doi.org/10.1097/JXX.0000000000000567>
- [20] Niu P, Wang LL, Lei WY, 2025, Research on Ideological and Political Education in Experiential Courses for Psychiatric Nursing. *Health Vocational Education*, 43(17): 77–80.
- [21] Xie FY, 2024, Application of Case-Based Teaching Combined with Mind Mapping in Traditional Chinese Medicine Psychiatric Nursing Practice Instruction. *Journal of Chinese Medicine Management*, 32(23): 125–127.
- [22] Yi X, Peng Y, Feng LM, 2025, Evaluation of the BOPPPS Teaching Model in Psychiatric Nursing Education. *Life Science Instruments*, 23(4): 111–113 + 117.
- [23] Pan L, Lin AQ, Ma HL, 2022, Application of SPOC+DingTalk Group-Based Blended Teaching Model for “Golden Courses” in Psychiatric Nursing. *Henan Agriculture*, 2022(3): 25–28.
- [24] Long LZ, Xiang H, 2025, Research and Reflections on Outcomes-Based Psychiatric Nursing Curriculum in Higher Vocational Education. *Knowledge Window (Teacher Edition)*, 2025(3): 99–101.
- [25] Arkan B, Bostanlı A, 2024, Teaching Psychiatric Nursing with Films during the COVID-19 Pandemic: A Qualitative Study. *Journal of Psychiatric and Mental Health Nursing*, 31(6): 1073–1082. <https://doi.org/10.1111/jpm.13059>
- [26] Huang SY, Liu J, Yu SS, et al., 2022, Application and Effectiveness Evaluation of Blended Learning in Psychiatric Nursing Education. *Journal of Guizhou University of Chinese Medicine*, 44(2): 88–92
- [27] Baloyi OB, 2023, Development of Higher-order Thinking Skills in Nursing Students through Online Problem-based Assessment. *Health SA*, 2023(28): 2423. <https://doi.org/10.4102/hsag.v28i0.2423>
- [28] Li SJ, Li F, Zeng MR, et al., 2025, Analysis of the Application Effectiveness of Scenario Simulation Teaching Method in Psychiatric Clinical Nursing Education. *Chinese Journal of Continuing Medical Education*, 17(9): 63–67.
- [29] Thomson AE, Smith N, Karpa J, 2022, Strategies Used to Teach Professional Boundaries in Psychiatric Nursing Education. *Issues in Mental Health Nursing*, 43(10): 895–902. <https://doi.org/10.1080/01612840.2022.2083737>
- [30] Tong K, McMahan E, Reid-McDermott B, et al., 2021, SafePsych: Improving Patient Safety by Delivering High-

- impact Simulation Training on Rare and Complex Scenarios in Psychiatry. *BMJ Open Quality*, 10(3): e001533. <https://doi.org/10.1136/bmjopen-2021-001533>
- [31] Cardona L, Barreto M, Grodberg D, et al., 2021, Cognitive-behavioural Therapy Training for Multidisciplinary Inpatient Psychiatric Teams: A Novel Curriculum using Animated Simulations. *Journal of Child and Adolescent Psychiatric Nursing*, 2021, 34(3): 181–190. <https://doi.org/10.1111/jcap.12318>
- [32] Alsharari AF, Salihu D, Alshammari FF, 2025, Effectiveness of Virtual Clinical Learning in Nursing Education: A Systematic Review. *BMC Nursing*, 24(1): 432. <https://doi.org/10.1186/s12912-025-03076-y>
- [33] Yang Y, Chen H, Sun H, 2024, Nursing Undergraduate Students' Experiences and Perceptions of Blended Learning in Paediatric Nursing: A Mixed Methods Study. *SAGE Open Nursing*, 2024(10): 23779608241274214. <https://doi.org/10.1177/23779608241274214>
- [34] Kim M, Jeong GH, Park HS, et al., 2021, Impact of the COVID-19 Pandemic on Women's Health Nursing Clinical Practicums in the Spring 2020 Semester in the Republic of Korea: A Nationwide Survey Study. *Korean Journal of Women Health Nursing*, 2021, 27(3): 256–264. <https://doi.org/10.4069/kjwhn.2021.09.17.1>
- [35] Su XY, He JP, Li HM, et al., 2024, Observation on the Application Effect of a Blended Teaching Model Supported by Micro-lectures and Nursing Students' Standardised Patients in Psychiatric Nursing Education during the Post-pandemic Era. *Heilongjiang Medicine*, 48(4): 441–444.
- [36] Pan L, Lin AQ, Ma HL, 2022, Application of a Hybrid “Golden Course” Teaching Model Based on SPOC + DingTalk Groups in Psychiatric Nursing Education. *Henan Agriculture*, 2022(3): 25–28.
- [37] Frangieh J, Sarver LC, Hughes V, 2024, Caring: The Heart of Online Nursing Education—An Integrative Review. *Journal of Professional Nursing* 2024(52): 40–49. <https://doi.org/10.1016/j.profnurs.2024.03.008>
- [38] Chamane N, Thompson R, Goldstone S, 2021, Designing and Piloting of a Mobile Learning Curriculum for Quality Point-Of-Care Diagnostics Services in Rural Clinics of KwaZulu-Natal, South Africa. *Frontiers in Reproductive Health*, 2021(3): 728309. <https://doi.org/10.3389/frph.2021.728309>
- [39] Dawood E, Alshutwi SS, Alshareif S, et al., 2024, Evaluation of the Effectiveness of Standardised Patient Simulation as a Teaching Method in Psychiatric and Mental Health Nursing. *Nursing Reports*, 14(2): 1424–1438. <https://doi.org/10.3390/nursrep14020107>
- [40] Heunis JC, Kigozi-Male NG, Maeko M, et al., 2025, Mental Health in Nursing Education: Perspectives of Learning Facilitators and Students in South Africa. *BMC Nursing*, 24(1): 997. <https://doi.org/10.1186/s12912-025-03606-8>
- [41] Wenzel C, Melrose S, Lane A, 2022, Clinical Instruction in Mental Health Nursing: Students' Perceptions of Best Practices. *International Journal of Nursing Education Scholarship*, 19(1): 20210147. <https://doi.org/10.1515/ijnes-2021-0147>
- [42] Tan SL, Zhang YM, Yu YF, 2024, Application of Case-based Learning with Role-playing in Psychiatric Nursing Education. *Journal of Chengdu University of Traditional Chinese Medicine (Education Science Edition)*, 26(2): 60–64.
- [43] Ghaljeh M, Ghaljaei F, Rezaee N, et al., 2025, Implementation of a Psychiatric Nursing Boot Camp to Improve Empathy and Reduce Stigma towards Psychiatric Patients among Nursing Students. *Journal of Education and Health Promotion*, 2025(14): 214. https://doi.org/10.4103/jehp.jehp_2043_23
- [44] Thomson AE, Karpa J, Smith N, 2024, Psychiatric Nurse and Educator Perspectives on Professional Boundaries in

- Nursing Education: An Interpretive Description Study. *Journal of Professional Nursing*, 2024(52): 80–85. <https://doi.org/10.1016/j.profnurs.2024.03.011>
- [45] Tang Q, Zhang T, Jiang L, 2023, Influence of Blended Instruction on Students' Learning Effectiveness: The Role of Flow. *Education and Information Technologies (Dordr)*, 28(2): 1891–1909. <https://doi.org/10.1007/s10639-022-11224-z>
- [46] Taub M, Banzon AM, Zhang T, 2022, Tracking Changes in Students' Online Self-Regulated Learning Behaviours and Achievement Goals Using Trace Clustering and Process Mining. *Frontiers in Psychology*, 2022(13): 813514. <https://doi.org/10.3389/fpsyg.2022.813514>
- [47] Moyer JE, 2023, Virtual Reality Simulation Applications in Pre-Licensure Psychiatric Nursing Curricula: An Integrative Review. *Issues in Mental Health Nursing*, 44(10): 984–1001. <https://doi.org/10.1080/01612840.2023.2243330>
- [48] Wang X, Yang L, Du M, et al., 2025, Six Teaching Methods on the Effectiveness of Community Nursing Education for Nursing Students in China: A Systematic Review and Network Meta-analysis. *Nurse Education in Practice*, 2025(84): 104323. <https://doi.org/10.1016/j.nepr.2025.104323>
- [49] Si QL, Kun H, Quan LL, et al., 2024, Innovative Integration of the “W + Flipped Classroom” and “B + BOPPPS” Teaching Models for Enhanced Learning Outcomes. *BMC Medical Education*, 24(1): 1050. <https://doi.org/10.1186/s12909-024-06034-5>
- [50] Wong WC, Wu TCM, 2025, Effects of a Standardised Patient-Based Simulation on Generation Z Nursing Students' Management of Patients With Dementia: A Mixed-Method Study. *Nursing Education Perspectives*, 46(4): E31–E33. <https://doi.org/10.1097/01.NEP.0000000000001418>
- [51] Wang J, Jiang Y, Yang J, et al., 2025, Application of Virtual Simulations in the Practical Teaching of Clinical Microbiology Laboratory Courses. *BMC Medical Education*, 25(1): 1024. <https://doi.org/10.1186/s12909-025-07603-y>
- [52] Li Y, Li X, Liu Y, et al., 2024, Application Effect of BOPPPS Teaching Model on Fundamentals of Nursing Education: A Meta-Analysis of Randomised Controlled Studies. *Frontiers in Medicine (Lausanne)*, 2024(11): 1319711. <https://doi.org/10.3389/fmed.2024.1319711>
- [53] Cruz CFDS, Araújo DCSA, Santos CTJ, et al., 2024, Effectiveness of Teaching and Evaluation Methods of Clinical Competencies for Pharmacy: A Systematic Review. *Current Pharmaceutical Teaching and Learning*, 16(12): 102182. <https://doi.org/10.1016/j.cptl.2024.102182>
- [54] Yao N, 2022, Epistemic Neural Network Based Evaluation of Online Teaching Status during Epidemic Period. *Evolutionary Intelligence*, published online, 1–8. <https://doi.org/10.1007/s12065-022-00789-w>
- [55] Chen J, Lu H. Evaluation Method of Classroom Teaching Effect Under Intelligent Teaching Mode. *Mob Netw Appl.* 2022;27(3):1262-1270. <https://doi.org/10.1007/s11036-022-01946-2> <https://pubmed.ncbi.nlm.nih.gov/40477593/>
- [56] Niu Y, Xi H, Liu J, et al., 2023, Effects of Blended Learning on Undergraduate Nursing Students' Knowledge, Skills, Critical Thinking Ability and Mental Health: A Systematic Review and Meta-analysis. *Nurse Education in Practice*, 2023(72): 103786. <https://doi.org/10.1016/j.nepr.2023.103786>
- [57] Shan Y, Zhou X, Qi W, et al., 2023, Innovations in Teaching during the COVID-19 Pandemic: Comparisons of the Impacts of Different Teaching Approaches in Psychiatric Nursing on Undergraduate Nursing Students. *BMC*

Medical Education, 23(1): 827. <https://doi.org/10.1186/s12909-023-04819-8>

- [58] Duan A, Jiang F, Li L, et al., 2024, Design and Practice of Blended Teaching of Internal Medicine Nursing Based on O-AMAS Effective Teaching Model. *BMC Medical Education*, 24(1): 580. <https://doi.org/10.1186/s12909-024-05588-8>
- [59] Tong DH, Uyen BP, Ngan LK, 2022, The Effectiveness of Blended Learning on Students' Academic Achievement, Self-study Skills and Learning Attitudes: A Quasi-experimental Study in Teaching the Conventions for Coordinates in the Plane. *Heliyon*. 8(12): e12657. <https://doi.org/10.1016/j.heliyon.2022.e12657>
- [60] Fan YT, Liu YQ, Yang Y, 2022, Application of the Small Private Online Course-based Blended Teaching Model in Human Parasitology Teaching. *Chinese Journal of Parasitology and Parasitological Medicine*, 34(4): 417–419. <https://doi.org/10.16250/j.32.1374.2022169>
- [61] Almohammadi NH, Elnugomi NM, Atta Elmannan AA, et al., 2025, Perspectives of Medical Students in Using Blended Learning: A Thematic Analysis. *Advances in Medical Education and Practice*, 2025(16): 837–847. <https://doi.org/10.2147/AMEP.S515941>
- [62] Frederick KD, Havrda DE, Scott D, et al., 2023, Assessing Student Perceptions of Blended and Online Learning Courses in Pharmacoeconomics, Management, and Leadership. *American Journal of Pharmaceutical Education*, 87(4): ajpe9001. <https://doi.org/10.5688/ajpe9001>

Publisher's note

Bio-Byword Scientific Publishing remains neutral with regard to jurisdictional claims in published maps and institutional affiliations.