Teaching and Learning in Nursing 20 (2025) e452–e459

Contents lists available at ScienceDirect

Teaching and Learning in Nursing

journal homepage: www.journals.elsevier.com/teaching-and-learning-in-nursing

Research

Zombie apocalypse simulation: elevating mental health nursing education

Sasha Bryan*, Emily E.L. Brooks

Health and Social Sciences, Mental Health Nursing, Bournemouth University, Bournemouth, BH8 8GP, United Kingdom

ARTICLE INFO

Article History:
Accepted 11 December 2024

Keywords:
Simulation-based learning
Mental health nursing
Critical thinking
Clinical practice readiness
Curriculum integration

ABSTRACT

Background: The dilution of mental health nursing (MHN) skills is a growing concern in nursing education. Simulation-based learning (SBL) offers a potential solution to enhance MHN-specific competencies.
Aim: This study aims to evaluate the effectiveness of SBL in improving MHN students' confidence, clinical decision-making, and readiness for practice through an innovative mass casualty zombie apocalypse scenario. It addresses the dilution of MHN skills in nursing education and demonstrates how SBL can better prepare students for real-world mental health care challenges.
Methods: This mixed-methods study assessed the impact of SBL on MHN students' skills in assessment, risk management, and clinical decision-making. Quantitative data were gathered using Likert scale questionnaires, and qualitative data were obtained from open-ended questions. Both sets were analyzed to evaluate changes in student confidence and reflections on the simulation experience.
Results: Pre- and postquestionnaires showed significant improvements in student confidence, clinical decision-making, and readiness for practice. Qualitative feedback highlighted enhanced critical thinking and key MHN skills.
Conclusions: SBL enhances MHN students' competence, bridging theory-practice gaps and improving mental health care outcomes.
© 2025 The Authors. Published by Elsevier Inc. on behalf of Organization for Associate Degree Nursing. This is an open access article under the CC BY license (http://creativecommons.org/licenses/by/4.0/)

Key Points

- **Confidence and Competence**: SBL enhances student perceived confidence and competence in critical MHN skills, improving overall patient care and safety.
- **Critical Thinking**: The integration of SBL fosters critical thinking, essential for effective problem-solving and decision-making in MHN practice.
- **Educational Integration**: The study emphasises the need to embed targeted MHN simulations into nursing curricula to counteract curriculum genericism and better prepare students for specific MHN scenarios.

Background

The role of mental health nursing (MHN) on a global scale has gained increasing attention due to the rising prevalence of mental health conditions and the need for specialized care. According to the World Health Organization (WHO), mental health conditions have become a leading cause of disability worldwide, contributing to a significant burden on healthcare systems (WHO, 2020). Globally, MHN plays a critical role in addressing these challenges by providing care that is both compassionate and evidence-based, often in resource-limited environments. However, the profession faces obstacles, including workforce shortages, skill dilution, and insufficient training, which undermine its effectiveness in meeting the growing demand for mental health services (Piot et al., 2018). These issues are not unique to any one country but are part of a broader global healthcare crisis.

In the United Kingdom (UK), concerns about the diminishing scope of MHN are especially pronounced. The trend toward genericism in MHN has been widely criticized for narrowing the skill sets of mental health nurses, thereby compromising their ability to deliver specialized care (Warrender et al., 2024). The movement '#Mental Health Deserves Better' emerged in response to this issue, drawing attention to the need for focused mental health care and the preservation of MHN's unique identity. The Royal College of Nursing (RCN) reports that 63% of its 951 committee members have expressed concerns over the dilution of MHN roles (Jones, 2023). This shift threatens the essential MHN competencies, including communication,

*Corresponding author.
E-mail address: sbryan@bournemouth.ac.uk (S. Bryan).

https://doi.org/10.1016/j.teln.2024.12.009
1557-3087/© 2025 The Authors. Published by Elsevier Inc. on behalf of Organization for Associate Degree Nursing. This is an open access article under the CC BY license (http://creativecommons.org/licenses/by/4.0/)

resilience, non-judgementalism, and clinical decision-making—skills vital for assessing and managing care in complex mental health scenarios (Warrender et al., 2023).

Postpandemic data has highlighted the increasing complexity of mental health needs, with a surge in referrals and heightened demands on mental health services globally (WHO, 2022). In response to these challenges, it is crucial for educational institutions to produce highly skilled mental health nurses who are well-prepared to meet the diverse needs of patients. One proposed method to achieve this is through the integration of simulation-based learning (SBL), which has been recognized for its effectiveness in bridging theoretical knowledge with clinical practice (Alexander et al., 2018).

SBL enables the application of educational theories within a safe, controlled environment, allowing students to develop clinical competence while minimizing the distance between theoretical learning and real-world application (Walters et al., 2017). SBL can significantly enhance students' professional integration by offering hands-on experience that simulates real clinical scenarios (Koukourikos et al., 2021). This method encourages active learning and provides opportunities for students to refine their techniques and learn from mistakes in a supportive setting (Goh et al., 2021). While SBL has proven beneficial in various nursing specialties, its application in MHN remains a topic of debate. The inherent challenges of authentically replicating complex mental health conditions and interventions in a controlled environment have raised concerns about its efficacy in preparing MHN students for clinical practice (Piot et al., 2018). Despite these challenges, there is a growing consensus to integrate simulation more closely with classroom instruction, enhancing the educational outcomes for MHN students. This approach would allow for a more seamless transition from theoretical knowledge to practical skills, a critical factor in addressing the global shortage of well-trained mental health professionals (Happell et al., 2020).

The Nursing and Midwifery Council (NMC) mandates rigorous standards for nursing professionals, including intellectual capabilities, psychomotor skills, and appropriate values and attitudes (NMC, 2018). However, the current NMC Future Nurse Standards (2018) primarily emphasize generic adult-nursing proficiencies, potentially marginalizing essential MHN competencies. Alongside this, International Council of Nurses (ICN) (2024) signify that the lack of consensus for globalized MHN practice contributes to unclear responsibilities and subpar education. This gap identifies the need for a robust and comprehensive MHN education framework, both nationally and globally. Reflecting this deficiency, many MHN students report feeling marginalized due to insufficient mental health content in core curricula, which adversely affects their professional identity (Buescher and McGugan, 2022). This deficit in focused MHN education contributes to lowered confidence, increased self-doubt, and a lack of motivation among aspiring MHN. Thus, enhancing the integration of SBL into MHN curricula is crucial not only for closing educational gaps but also for ensuring that future MHN are adequately prepared to meet the diverse and complex needs of their patients.

This study aims to explore MHN students' experiences with SBL through a mass casualty zombie apocalypse scenario. This is to address the gap in the literature that MHN education falls short of effectively preparing MHN students for practice (NMC 2018; ICN 2024; Warrender et al. 2024). The primary goal is to offer integrated MHN specific simulation into the curriculum to enable students to explore and practice integral MHN skills such as communication, therapeutic relationships, MSE and risk assessments, and de-escalation techniques in a safe environment where mistakes can be challenged and amended without risk of harm or jeopardy of care. This is essential as MHN are not often afforded the opportunity to practice key MHN skills prior to entering the clinical arena (Koukourikos et al.,2021; Buescher and McGugan, 2022). The day was conducted alongside paramedic and adult nursing students, each field of practice remained independent, however all students shared the same space and theme and conducted their own SBL simultaneously to emulate a mass causality incident. In the wake of the Manchester Arena Bombing, healthcare students should be more prepared and confident in responding to major incidents (Skryabina et al., 2020).

The zombie theme entwined a sense of fun into the mechanism of how MHN skills are implemented. Students were pushed out of their comfort zone, but a controlled, safe environment was maintained. It was important that students felt comfortable and confident to take risks and learn/embed skills. Thus, the jovial atmosphere encouraged enjoyment whilst the processes of dealing with MHN crisis and how to assess remained reflective of real-world practice. If situations such as the Manchester Arena Bombing are closely recreated, there is a risk this would be traumatizing for students and risk them rescinding in their skill set rather than feeling confident to practice new skills.

Effectively teaching and applying mental health simulation is a critical aspect of MHN education. Simulating complex scenarios through immersive learning addresses these educational challenges globally, enhancing students' readiness for real-world practice and improving healthcare outcomes for individuals with mental health conditions.

Theoretical framework

The theoretical framework for this study is rooted in Kolb's (1984) Theory of Experiential Learning (Fig. 1), which includes four stages: concrete experience, reflective observation, abstract conceptualization, and active experimentation. Experiential learning theory posits that individuals learn best through direct experience and reflection, and these principles align seamlessly with SBL, which provides opportunities to practice all four stages.

Kolb's model underpins the simulation design (Fig. 2). Locke (2019) emphasizes that effective learning occurs only when learners can execute all four stages of the model. In this study, the experiential learning cycle was repeated twice, allowing students many opportunities to apply theoretical knowledge in practical scenarios. This interactive process facilitates deeper learning and skill development, enhancing confidence in skills intrinsic to MHN.

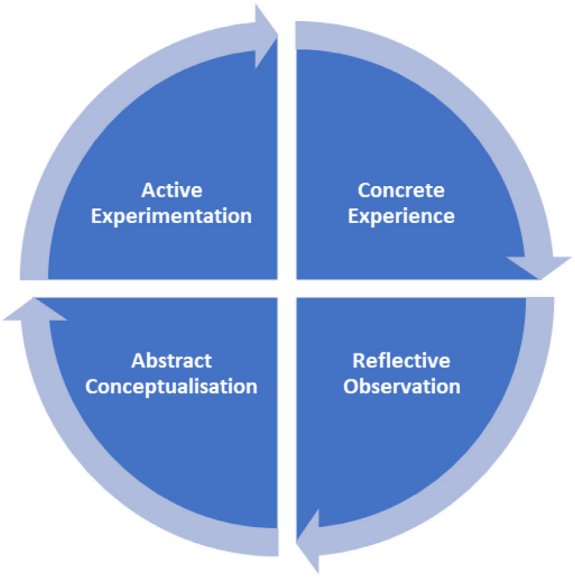

Fig. 1. Kolb's Experiential Learning Cycle.

Fig. 2. Adapted Kolb's Experiential Learning Cycle.

This adaptation of Kolb's model supports the simulation by integrating concrete experiences (e.g., managing a person presenting with psychosis during a simulated apocalypse), reflective observations (e.g., postsimulation debriefs), abstract conceptualisations (e.g., linking experiences to MHN theories), and active experimentation (e.g., applying new strategies in a second simulation). Students engaging in this comprehensive learning cycle can deepen their understanding, improve clinical decision-making, and enhance their readiness for real-world practice.

Material and methods

This small-scale mixed-method study was conducted to evaluate how MHN-specific simulation can support skill development in assessment, risk management, and clinical decision-making, with a view toward integrating simulation into the MHN curriculum. The study aimed to respond to concerns raised by the Royal College of Nursing (Jones, 2023; Warrender et al., 2024) about the dilution of core MHN competencies.

Study design

This study utilized a single-group pretest post-test design with a mixed-methods approach to evaluate the effectiveness of the SBL intervention, gathered on the day of the simulation event. The questionnaire design followed guidelines from the *Nepal Journal of Epidemiology* (Regmi et al 2017), which emphasize clear, reliable questionnaire structuring and online deployment to support accurate, unbiased data collection. Following the questionnaires development, the study was presented to the ethics committee, who deemed the study as service evaluation. The design was also shared with multiple professionals within the university.

Quantitative data

The quantitative component used a confidence Likert scale ranging from 1 ('not confident') to 10 ('very confident') to measure students' confidence levels across four MHN skills areas:

1. Making clinical decisions
2. Assessing individuals presenting to mental health services
3. Managing the care of individuals with mental health issues
4. Managing clinical risk

Quantitative data were analyzed in Excel, which allowed for descriptive statistics and comparative analysis of pre- and postsimulation scores.

Qualitative data

Qualitative insights were obtained through three presimulation and three postsimulation open-ended questions, allowing participants to provide more detailed reflections on their simulation experience. These responses were thematically analyzed manually to identify key themes and patterns in student perceptions, contributing additional insights to the quantitative findings.

Trustworthiness of the qualitative data

To ensure the trustworthiness of the qualitative data, a rigorous approach was applied to data collection and analysis. The open-ended responses were manually coded and thematically analyzed to identify recurring patterns and key themes. Thematic analysis was conducted by multiple researchers to enhance consistency and reduce potential bias, ensuring that the findings accurately reflected participants' perspectives. Additionally, the use of detailed debriefing sessions allowed for further validation of the students' experiences and reflections. The iterative process of data review and cross-checking strengthened the credibility and reliability of the qualitative findings.

Thematic analysis

The thematic analysis followed a holistic, narrative approach to identify key themes from the qualitative data. Initially, we familiarized ourselves with the data by reading the open-ended responses. Rather than using detailed coding, we focused on understanding the broader context and meaning of the participants' reflections, aligning with Maxwell's (2012) narrative approach. This allowed us to identify recurring patterns and overarching themes that reflected the students' experiences of the simulation. These themes were reviewed and refined to ensure they captured the diversity of student perspectives and accurately represented the data. Finally, the themes were clearly defined and named to represent the students' perceptions of their simulation experience. Multiple researchers were involved in the analysis to ensure consistency and reduce bias. This narrative approach ensured that the findings provided a comprehensive, holistic understanding of the simulation's impact on students' confidence and readiness for practice.

Debrief sessions

Debriefing was conducted via a "hot debrief" model based on Edinburgh Emergency Medicine's "STOP 5: STOP for 5 Minutes" approach, providing structured reflection points during and after the simulation to reinforce learning (Walker 2018).

Participants

Convenience sampling was used to recruit N = 60 MHN students, all of whom participated in the simulation event, with 12 students completing both the pre- and postquestionnaires (20% response rate). Participants were drawn from Bachelor of Science (BSc) and Master of Science (MSc) MHN programs, as well as the Registered Nurse Degree Apprenticeship (RNDA) programme.

Simulation structure and standards

The simulation adhered to Healthcare Simulation Standards of Best Practice (International Nursing Association for Clinical

Simulation Learning (INACSL) 2021, ensuring an environment that accurately reflects MHN clinical contexts. This standards-based approach aimed to enhance participants' learning and retention of core MHN skills, contributing to an educational model that meets the needs highlighted in current MHN education standards.

The MHN simulation

In the SBL, students were immersed in a narrative of a zombie apocalypse, where they interacted with Alex, a character experiencing urgent distress and delusions of curing the apocalypse. They started by analyzing a prerecorded crisis call from Alex to grasp his mental state and the seriousness of his situation. Subsequently, in a transformed underground car park serving as a pop-up hospital (Fig. 3), students were introduced to Alex by a paramedic and instructed to conduct Mental State Examinations (MSEs), review historical notes, and formulate initial care plans in groups. Following initial interaction participants engage in a debrief. During this time Alex absconds and is brought back under Section 136 (GOV.UK 1983) by a police officer, prompting students to adjust and reassess his condition in a subsequent session marked by heightened distress and psychosis. Throughout this immersive experience, students actively engage in a structured learning process that includes practical experiences, reflective observation, conceptual understanding, and active experimentation. They critically reflect on their actions and decisions in a final debrief, integrating theoretical insights from Alex's historical notes, and reflecting on their care plans in response to evolving scenarios. Key themes emerge around assessing Alex's psychological state, recognising distress and psychosis, formulating risk assessments, managing the care of a person with poor mental health, and making clinical decisions under pressure while collaborating with interdisciplinary teams.

Results

Feedback from pre- and postquestionnaires was analyzed to assess student perceptions and learning outcomes, specifically focusing on confidence, clinical decision-making, and readiness for practice.

All participants completing the questionnaires reported an increase in confidence in key MHN skills, as seen in Fig. 4, with large improvements in clinical decision making and managing clinical risks.

Presimulation questionnaire

The open-ended questions, summarized in Table 2, were administered to ascertain student prior experience of MHN simulation.

Postsimulation questionnaire

The questionnaire responses are summarized below in Table 3. The intended learning outcome and key MHN skills have been reflected within the responses in the questionnaire. Moreover, the responses highlighted a readiness for clinical practice.

The results of the thematic analysis identified several key themes from both pre- and postsimulation questionnaires. These themes reflect significant changes in students' experiences, confidence, and clinical decision-making because of the simulation. Below is a detailed breakdown of the identified themes:

Presimulation questionnaire

The presimulation questionnaire aimed to gather insights into the students' prior experiences with MHN simulation. The responses, summarized in Table 2, revealed several key themes:

- **University clinical skills and practice placements:** Many students shared their experience with clinical skills sessions at the university and practice placements. They felt these experiences were helpful but not always specific to MHN practice.
- **Preparedness for practice:** Students expressed mixed feelings about their preparedness for real-world MHN practice. Some felt well-prepared, while others noted that simulations offering real-life scenarios could provide invaluable learning experiences that foster readiness for practice.
- **Desired skills and knowledge:** Participants highlighted the need to gain confidence, the ability to work under pressure, effective collaboration, and specialized MHN simulations. Many also expressed interest in developing skills for assessments and managing mental health crises.

Fig. 3. Image of setting for SBL.

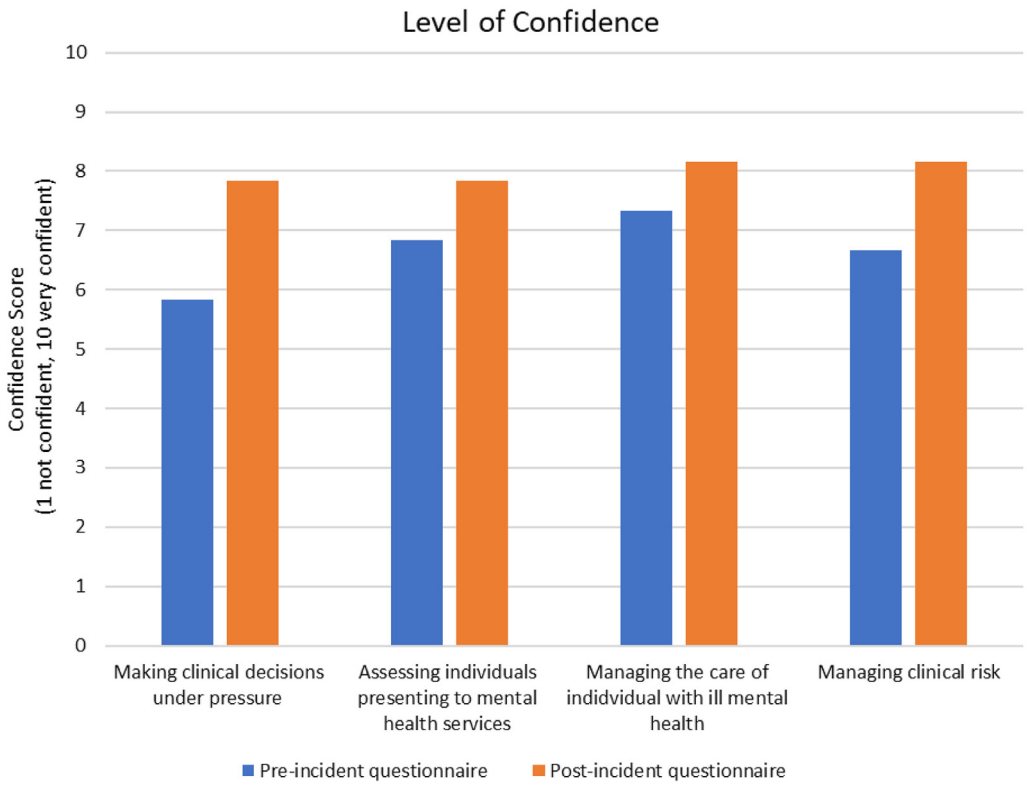

Fig. 4. Likert scale reponses.

Postsimulation questionnaire

The postsimulation questionnaire provided deeper insight into students' reflections on their experiences following the simulation. The key themes are summarized in Table 3:

- **Enjoyable learning experience:** The simulation was described as both enjoyable and challenging. The use of a realistic "mass casualty zombie apocalypse" scenario, although light-hearted, effectively simulated high-pressure mental health situations.
- **Preparedness for clinical practice:** Postsimulation, students reported feeling more prepared for practice, with several stating they felt "quietly confident" or "very prepared." One student mentioned, "I can better understand how to deal with different scenarios under pressure," emphasizing the practical skills learned.
- **Critical thinking and decision-making:** Qualitative data analysis highlighted participant's development in "prioritizing" care in a crisis, whilst acknowledging the newfound confidence to "work in a high stress environment doing MSEs and risk assessments."
- **Skills gained:** Thematic analysis revealed significant acquisition of skills, particularly in verbal de-escalation, communication, risk management, teamwork, and conducting MSEs. These are essential skills for MHN practice but often underrepresented in general nursing education.

Discussion

The findings from this study indicate that SBL significantly enhances MHN students' confidence and practical skills, supporting the integration of MHN-specific training into the nursing curriculum to better prepare students for clinical practice (Buescher & McGugan, 2022). The "mass casualty zombie apocalypse" scenario provided a unique setting that mirrored the demands of high-stakes mental health practice. This thematic approach allowed students to engage with complex scenarios in a simulated environment, facilitating skill development in areas such as communication, clinical decision-making, and crisis intervention. This improvement is particularly significant, given that students demonstrated a two-point increase in confidence for clinical decision-making and a 1.5-point increase in managing clinical risk from pre- to postsimulation (Table 1). These results support previous findings that SBL is effective for bridging the gap between theoretical learning and practical application (Alexander et al., 2018; Goh et al., 2021).

Students' qualitative responses provided rich insights into their experience, with many describing the simulation as both "challenging" and "enjoyable." The balance between a light-hearted theme and serious skill development allowed students to engage more freely, fostering an environment conducive to learning. One student explained, "The atmosphere was fun, but we still learned serious

Table 1
Analysis of mean score from Fig. 4

Likert scale question	Presimulation	Postsimulation	Increase in mean score
1. Making clinical decision	**5.83**	**7.83**	**2**
2. Assessing individuals presenting to mental health services	**6.83**	**7.83**	**1**
3. Managing the care of individuals with mental health issues	**7.33**	**8.16**	**0.83**
4. Managing clinical risk	**6.66**	**8.16**	**1.5**

Table 2
Summary of key themes from presimulation questionnaire

Question	Summary of key themes
What has your experience of MHN simulation been? How well do you feel MHN simulation prepares you for practice? What skills and knowledge would you like to gain from MH simulation?	• University clinical skills • Practice placements • Very well prepared • Real life scenarios • Invaluable • Readiness • Confidence • Working under pressure • Working collaboratively • Assessments • MHN specific simulations

skills for MHN practice." Such sentiments support the argument by Walters et al. (2017) that engaging and immersive simulations can help students build essential skills while mitigating the anxiety often associated with high-pressure environments. Another participant highlighted the realism of the experience, noting, "Our patient was very realistic and definitely someone we would meet in practice," which aligns with literature showing that realism in SBL improves skill transferability to clinical settings (Koukourikos et al., 2021).

Thematic analysis of the qualitative data identified key areas of skill acquisition, particularly around verbal de-escalation, communication, teamwork, and conducting mental state examinations (MSEs). These skills are critical for MHN yet often underrepresented in general nursing education, a point emphasized in critiques of the Nursing and Midwifery Council's (NMC) standards for lacking MHN-specific proficiencies (Warrender et al., 2024; NMC, 2018). Participants expressed increased readiness for clinical practice, with some reporting they felt "quietly confident" or even "very prepared" to enter the field, and one student noted, "I can better understand how to deal with different scenarios under pressure." This echoes findings by Alfaro-Lefevre (2015) that SBL cultivates critical thinking and resilience, especially when students engage in challenging simulations.

Additionally, the open-ended responses showed that students valued the learning outcomes and felt that the simulation had effectively prepared them for real-world practice. Statements such as "working with others, prioritizing tasks, and dealing with crisis situations" illustrate the depth of skill development gained through the SBL format. Several students emphasized the benefit of practicing in "less-than-ideal environments," reinforcing Happell et al.'s (2020) point that SBL's controlled yet immersive setting allows MHN students to practice adaptability and problem-solving, which are often essential in mental health practice.

The increased confidence in areas such as managing clinical risk and clinical decision-making further suggests that SBL is an effective pedagogical approach in MHN education. The immersive, multidisciplinary setting not only challenged students but provided a framework for active learning, which literature suggests is essential for clinical readiness (Goh et al., 2021). Some students, however, felt that the experience could be improved by reducing group sizes, as smaller groups may allow for more individualized feedback and hands-on experience.

Considering the postpandemic surge in mental health service demands and the increasing complexity of patient needs, there is a strong case for integrating SBL more robustly into MHN curricula (WHO, 2022). By aligning SBL content with MHN-specific skills such as verbal de-escalation, MSE, and risk assessment, educational programs can better prepare students to meet these demands and address the professional confidence gaps that persist among new practitioners (Buescher & McGugan, 2022; Warrender et al., 2023).

The positive results of this study align with the broader recognition that MHN requires specialized training to maintain effective care delivery. Given the NMC's generic approach to nursing proficiencies, MHN-specific SBL represents an opportunity to address the perceived erosion of MHN competencies and foster a unique professional identity (NMC, 2018; ICN, 2024). As one student noted, "It was a really good experience that built my confidence in doing MSEs and risk assessments," further emphasizing the effectiveness of tailored SBL in building MHN students' perceived competencies.

Table 3
Summary of key themes from postsimulation questionnaire

Question	Summary of key themes
How was your experience of mental health simulation?	• Enjoyable learning style • Smaller groups needed • Realistic actor and scenario seen in practice • Found to be challenging • Positive experience **Participant quotes:** 1. *'Really enjoyable, and a good learning experience.'* 2. *'It was really good; our patient was very realistic and definitely someone we would meet in practice.'*
Following this simulation, how prepared do you feel for practice?	• Feeling very prepared • A bit more prepared • Quietly confident **Participant quotes:** 1. *'I can better understand how to deal with different scenarios under pressure.'* 2. *'I feel very prepared.'*
What skills and knowledge do you feel you have gained following this mental health clinical simulation?	• Gaining confidence • Communication skills • Verbal de-escalation skills • Dealing with crisis situations • Teamwork • Mental state examinations **Participant quotes:** 1. *'Communication, working with others, prioritising.'* 2. *'How to work in a high stress environment doing MSEs and risk assessments.'* 3. *'Dealing with crisis situations.'* 4. *'What it would be like to work in less-than-ideal environments.'*

In summary, this study's findings display the potential of SBL to significantly enhance MHN students' preparedness for clinical practice. The demonstrated increase in confidence across multiple skill areas aligns with global calls for more targeted MHN education to meet the needs of diverse, complex patient populations (WHO, 2020; Happell et al., 2020). By offering a safe space to practice and refine critical MHN skills, simulation can empower students to navigate real-world challenges effectively, contributing to better outcomes for individuals with mental health conditions.

Areas for improvement

In exploring areas for improvement, students participating in the simulation highlighted the potential benefits of smaller group sizes to enhance the learning experience. One student noted that smaller groups would facilitate more personalized feedback and greater opportunities for active participation among all students. This suggestion signifies the importance of tailoring the learning environment to ensure individual attention and engagement, which could significantly enhance the effectiveness of SBL in MHN education.

Limitations and future directions

Although the simulation day saw approximately 60 MHN students participate only 12 completed both pre- and postfeedback surveys, resulting in a smaller-than-anticipated sample size. This limited sample size could affect the generalizability of the study's findings and suggests a need for more robust data collection strategies in future studies. To address this, efforts should focus on expanding participation and ensuring a more representative sample of students, which would strengthen the validity, reliability, and applicability of the results. Nonetheless, this smaller sample size indicates effective recruitment without undue pressure arising from the lecturer-student power dynamic. The findings in this paper are in their infancy, however they set a promising foundation as this project continues to annually develop with the university.

Another critical consideration is the long-term impact of SBL on students' skills and confidence. While immediate feedback from participants was positive, the study did not assess whether these gains were sustained beyond the simulation event. Future research could incorporate longitudinal assessments to track students' progress and confidence in real clinical settings over time. This approach would provide valuable insights into the enduring benefits of simulation in MHN education and its role in preparing students for professional practice.

Furthermore, to optimize the integration of SBL into the MHN curriculum, there is a need for deeper and more consistent incorporation across different scenarios. Regular exposure to varied simulations can reinforce theoretical knowledge and practical skills, fostering continuous development among students. Moreover, integrating feedback mechanisms and interactive improvements based on student input will be crucial in refining and enhancing the educational outcomes of these simulations. This approach not only supports effective learning but also ensures that SBL meets the evolving needs of MHN students in preparing them for the complexities of clinical practice.

Conclusion

This study underscores the critical role of SBL in preparing MHN students to meet practical and professional standards outlined in national guidelines. According to the Nursing and Midwifery Council (NMC) Future Nurse Standards (2018), nursing education must cultivate core competencies, including effective communication, clinical decision-making, and risk assessment, which are integral to MHN practice. The findings indicate that SBL effectively bridges theoretical knowledge and clinical skills, enhancing student confidence and readiness in areas such as mental state examinations and de-escalation techniques. This aligns with literature indicating that SBL fosters active learning and allows students to refine their techniques in a safe environment (Alexander et al., 2018; Koukourikos et al., 2021). However, challenges like group size and sample representation limit SBL's potential; smaller groups and a broader participant base would better align with the NMC's emphasis on individualized learning and competency-based assessments. Participants noted that smaller groups facilitate more personalized feedback, echoing concerns about the dilution of MHN roles and competencies (Jones, 2023; Warrender et al., 2024). Therefore, embedding MHN-specific SBL within curricula is essential to meet NMC standards and respond to the unique demands of modern mental health practice, particularly considering the increasing complexity of mental health needs and the global shortage of well-trained mental health professionals (WHO, 2022). Ultimately, integrating SBL into MHN curricula is vital for closing educational gaps and ensuring future MHN practitioners are adequately prepared to meet the diverse and complex needs of their patients.

Funding

The project was funded by the Bournemouth University, initiated by the Head of Paramedic Science.

Sasha Bryan and Emily Brooks are the sole authors of these paper and shared equal roles and responsibilities in the creation of this work.

Ethical and governance approvals

The research ethics committee deemed that the study was a service evaluation and formal ethical review was not required. The findings of the simulation were considered service evaluation as the project was an established part of the university. Ethical standards and privacy protection were adhered to during the evaluation; participants were invited to take part and could leave the project at any stage, data collected as part of the evaluation was anonymized and data was stored safely. Evaluation of teaching standard practice in the university. All subjects gave their informed consent for inclusion before they participated in the study.

This paper is based on research that was conducted 2024 and no new data were collected for this evaluative paper. All the prior research discussed in this paper was conducted according to the guidelines of the Declaration of Helsinki and discussed with the Human Research Ethics Committees of the respective institutions in which projects were undertaken.

Data availability statement

Data supporting reported results can be requested from the authors.

Declaration of competing interest

The authors declare that they have no known competing personal relationships or financial interests that may have influenced the study reported in this paper.

CRediT authorship contribution statement

Sasha Bryan: Writing – review & editing, Writing – original draft, Visualization, Validation, Supervision, Software, Resources, Project administration, Methodology, Investigation, Funding acquisition, Formal analysis, Data curation, Conceptualization. **Emily E.L. Brooks:**

Writing – review & editing, Writing – original draft, Visualization, Validation, Supervision, Software, Resources, Project administration, Methodology, Investigation, Funding acquisition, Formal analysis, Data curation, Conceptualization.

Acknowledgments

We extend our gratitude and thanks to Bournemouth University, the Paramedic Science team, the Clinical Skills team, our professional volunteers, Arts University Bournemouth drama students, and Bournemouth University mental health, adult nursing, and paramedic science students for their invaluable contributions and support.

References

Alexander, L., Sheen, J., Rinehart, N., Hay, M., & Boyd, L. (2018). Mental health simulation with student nurses: A qualitative review. *Clinical Simulation in Nursing, 14*, 8–14. doi:10.1016/j.ecns.2017.09.003.

Alfaro-Lefevre, R. (2015). *Critical Thinking, Clinical Reasoning, and Clinical Judgment E-Book: Critical Thinking, Clinical Reasoning, and Clinical Judgment E-Book (6th Edition).* USA: Elsevier Health Sciences.

Buescher, T., & McGugan, S. (2022). Standing out on the margins: using dialogical narrative analysis to explore mental health student nurse identity construction and core modules. *Issues in Mental Health Nursing, 43*, 1–11. doi:10.1080/01612840.2022.2037174.

Goh, Y.-S., Owyong, J. Q. Y., Seetoh, Y.-T. M., Hu, Y., Chng, M.-L., & Li, Z. (2021). Exploring pedagogies used in undergraduate mental health nursing curriculum: An integrative literature review. *International Journal of Mental Health Nursing, 30*(1), 47–61. doi:10.1111/inm.12816.

GOV.UK. (1983). *Mental Health Act 1983*. UK: Statute Law Database. https://www.legislation.gov.uk/ukpga/1983/20/contents.

Happell, B., Waks, S., Horgan, A., Greaney, S., Manning, F., Goodwin, J., Bocking, J., Scholz, B., Hals, E., Granerud, A., Doody, R., Platania-Phung, C., Griffin, M., Russell, S., MacGabhann, L., Pulli, J., Vatula, A., Browne, G., van der Vaart, K. J., … Biering, P. (2020). It is much more real when it comes from them": The role of experts by experience in the integration of mental health nursing theory and practice. *Perspectives in Psychiatric Care, 56*(4), 811–819. doi:10.1111/ppc.12496.

International Council of Nurses (ICN). (2024). *ICN_MentalHealthNursingGuidelines-2024_EN_web.pdf*. https://www.icn.ch/sites/default/files/2024-07/ICN_MentalHealthNursingGuidelines-2024_EN_web.pdf. Accessed 28th October 2024.

International Nursing Association for Clinical Simulation Learning (INACSL). (2021). *Healthcare Simulation Standards of Best Practice® in multiple languages*. https://www.inacsl.org/healthcare-simulation-standards-of-best-practice-multiple-languages. Accessed 28th October 2024.

Jones, S. (2023). *Is mental health nursing being diluted? | Blogs | Royal College of Nursing*. July 27, UK: The Royal College of Nursing; The Royal College of Nursing. https://www.rcn.org.uk/news-and-events/Blogs/is-mental-health-nursing-being-diluted-270723.

Kolb, D. A. (1984). *Experiential Learning: Experience as the Source of Learning and Development* (1st edition). New Jersey, USA: Prentice Hall.

Koukourikos, K., Tsaloglidou, A., Kourkouta, L., Papathanasiou, I. V., Iliadis, C., Fratzana, A., & Panagiotou, A. (2021). Simulation in Clinical Nursing Education. *29*(1), 15–20. doi:10.5455/aim.2021.29.15-20.

Locke, H. J. (2019). The use of simulation and experiential learning to practice prenatal care management within a doctor of nursing practice program. *Doctor of Nursing Practice Papers, 18*, 1–18. https://ir.library.louisville.edu/dnp/20.

Maxwell, J. A. (2012). *Qualitative Research Design: An Interactive Approach* (Third edition). (p. 41). USA: SAGE Publications, Inc.

Nursing and Midwifery Council (NMC), 2018. *nmc-code.pdf* [online]. Available from: https://www.nmc.org.uk/globalassets/sitedocuments/nmc-publications/nmc-code.pdf [Accessed 12 April 2024].

Piot, M.-A., Dechartres, A., Guerrier, G., Lemogne, C., Layat-Burn, C., Falissard, B., & Tesniere, A. (2018). Effectiveness of simulation in psychiatry for initial and continuing training of healthcare professionals: protocol for a systematic review. *BMJ Open*, *8*(7),1–7. https://doi.org/10.1136/bmjopen-2017-021012

Regmi, P. R., Waithaka, E., Paudyal, A., Simkhada, P., & Teijlingen, E. van. (2016). Guide to the design and application of online questionnaire surveys. Nepal Journal of Epidemiology, 6(4), Article 4. https://doi.org/10.3126/nje.v6i4.17258

Skryabina, E. A., Betts, N., Reedy, G., Riley, P., & Amlôt, R. (2020). The role of emergency preparedness exercises in the response to a mass casualty terrorist incident: A mixed methods study. *International Journal of Disaster Risk Reduction*, *46*, 101503. https://doi.org/10.1016/j.ijdrr.2020.101503

Walker, C. (2018, November 1). *Edinburgh Emergency Medicine - "STOP 5: STOP for 5 Minutes" – Our Bespoke Hot Debrief Model*. Edinburgh Emergency Medicine. https://www.edinburghemergencymedicine.com/blog/2018/11/1/stop-5-stop-for-5-minutes-our-bespoke-hot-debrief-model. Accessed 28th October 2024.

Walters, B., Potetz, J., & Fedesco, H. (2017). Simulations in the classroom: an innovative active learning experience. *Clinical Simulation in Nursing, 13*, 609–615. doi:10.1016/j.ecns.2017.07.009.

Warrender, D., Connell, C., Jones, E., Monteux, S., Colwell, L., Laker, C., & Cromar-Hayes, M. (2024). Mental health deserves better: resisting the dilution of specialist pre-registration mental health nurse education in the United Kingdom. *International Journal of Mental Health Nursing, 33*(1), 202–212. doi:10.1111/inm.13236.

Warrender, D., Ramsay, M., & Hurley, J. (2023). Mental health nurse education: A contemporary view in the debate between generic and specialist approaches. *Mental Health Practice, 26*(5), 20–25. doi:10.7748/mhp.2023.e1663.

World Health Organisation (2020). Mental Health ATLAS 2020. Retrieved 22 October 2024, from https://www.who.int/publications/i/item/9789240036703

World Health Organisation (WHO) (2022). COVID-19 pandemic triggers 25% increase in prevalence of anxiety and depression worldwide. https://www.who.int/news/item/02-03-2022-covid-19-pandemic-triggers-25-increase-in-prevalence-of-anxiety-and-depression-worldwide. Accessed 24th April 2024.