



Vol.6 Special Issue No.1 (2023)

Journal of Applied Learning & Teaching

ISSN : 2591-801X

Content Available at : <http://journals.sfu.ca/jalt/index.php/jalt/index>

The Street: Enhancing self-confidence and activities of daily living assessment experience in nursing students through drama-based learning

Aby Mitchell^A

A

Senior Lecturer in Nursing Education. Kings' College London, London, UK

Barry Hill^B

B

Associate Professor of Nursing and Critical Care, Northumbria University, Newcastle Upon Tyne, UK

Georgiana Assadi^C

C

Lecturer in Mental Health Nursing, Kings College London, London, UK

Keywords

Drama-based teaching;
narrative nurse education;
self-confidence;
storytelling.

Abstract

This study investigated the impact of a drama-based patient pathway, 'The Street', on pre-registration nursing students' perceived self-confidence and experience in assessing activities of daily living (ADL). Utilising an interpretative constructivist approach and narrative inquiry, the study involved 80 students specialising in various nursing fields, with focus groups held after the sessions. Key themes emerged, including authenticity, the story, practice learning, and practice application. The findings suggest that 'The Street' can enhance students' self-confidence and holistic assessment experience, thus contributing to the development of teaching and learning resources in nursing education.

Correspondence

aby.mitchell@kcl.ac.uk ^A

Article Info

Received 31 July 2023

Received in revised form 3 October 2023

Accepted 10 October 2023

Available online 11 October 2023

DOI: <https://doi.org/10.37074/jalt.2023.6.S1.5>

Introduction

In today's dynamic healthcare environment, innovative teaching methodologies are essential to prepare nursing students for the complexities of patient care. One such method gaining prominence in nursing education is simulation, which provides a safe and controlled environment for students to practice and hone their skills. This article explores a unique approach to simulation called 'The Street', which utilises drama-based patient pathways to enhance the learning experience of student nurses, particularly when assessing activities of daily living (ADLs). Our study aims to assess the impact of an immersive, interactive, and engaging teaching approach, 'The Street,' on nursing students' perceived self-confidence and overall experience in competently and confidently performing ADL assessments. By evaluating the influence of this modality, we seek to explore the potential benefits and challenges of incorporating 'The Street' into nursing curricula, furthering the ongoing discourse on best practices in nursing education.

Activities of daily living

Activities of daily living (ADLs) encompass the fundamental tasks essential for an individual's ability to function independently, including eating, bathing, dressing, and mobilising (Roper et al., 2000). Assessing ADLs is a crucial aspect of nursing care, as it serves to evaluate a patient's functional status, detect potential changes in their condition, and inform appropriate interventions (Roper et al., 2000). Nurses often act as the primary observers of variations in a patient's functionality and independence, making their role in ADL assessment indispensable (Mooney and O'Brien, 2006). Therefore, it is imperative for nursing students to not only grasp the theoretical foundations of ADL assessment but also to develop proficiency in its practical execution, ensuring their ability to provide comprehensive, patient-centred care.

The Street simulation

'The Street' is an innovative drama-based simulated learning experience employed within nursing, midwifery, and health programmes at a UK university. The simulation features a complex network of interconnected characters, similar to a television drama, with relationships established through family ties, friendships, or work affiliations. This study aimed to integrate the character of Brenda Brown into the simulation scenario for enhanced learning outcomes.

Brenda Brown

Brenda Brown (Figures 1 and 2) is a 70-year-old woman who resides alone in her house on 'The Street'. She is a widow with chronic obstructive pulmonary disease (COPD) and has a pet budgie named Reggie. Despite her medical condition, Brenda maintains mobility and independence. A specialised COPD nurse visits her periodically for consultations. Brenda

is a smoker, drinks brandy to help her sleep at night, and leads a sedentary lifestyle with no regular exercise. Brenda presents herself as well-groomed and in good health. She is retired and enjoys spending time with her grandson Jaden, who occasionally visits her. Her daughter, however, lives at a considerable distance. In her retirement, Brenda finds pleasure in playing the piano and likes an occasional Gin and Tonic, and sometimes a brandy, with her grandson.



Figure 1: Brenda Brown.

Self-confidence and drama-based patient pathways

Self-confidence in nursing students is a critical attribute, as it reflects their belief in their ability to competently perform tasks and effectively manage situations associated with nursing care (Bandura, 1997). This is especially crucial when assessing activities of daily living (ADLs), which include essential self-care tasks such as personal hygiene, mobility, and nutrition (World Health Organization, 2001). A strong sense of self-confidence allows nursing students to make informed decisions, communicate assertively with patients and colleagues, and adapt to the ever-changing healthcare environment (Levett-Jones et al., 2010). Furthermore, self-confident nursing students are more likely to exhibit resilience when facing challenges, ultimately improving the quality of care they provide to patients (Mackintosh-Franklin, 2020).

As in other clinical and theoretical domains, self-confidence, encompassing knowledge and skills, is vital for students to ensure they can provide safe and effective care (McCabe et al., 2015). Students develop self-confidence by building their



Figure 2: Brenda Brown at home.

knowledge and competence in both theoretical and clinical learning environments (Herron et al., 2019). Conversely, a lack of self-confidence in specific skills can impede a student's ability to manage stress and tackle challenging or difficult situations, not only as learners but also once professionally qualified (Lundberg, 2008).

Various pedagogical approaches have been employed to support students' self-confidence, such as role-play and sharing stories in the development of clinical and assessment skills (Lundberg, 2008). Narrative pedagogy involves the use of narrative storytelling, a well-suited philosophical approach to nursing education (Bruner, 1991), and is widely acknowledged as a powerful educational strategy in higher education for active learning through practice (Yocom, 2020; Myonghwa & Jeong, 2020). Within the narrative framework, storytelling promotes deep learning by encouraging learners to think creatively, challenge assumptions, and question behavioural norms (Santos et al., 2011). Often used in controlled classroom environments with 'real-life' clinical scenarios, nursing students are exposed to moral dilemmas and problem-solving exercises that facilitate the exploration of personal and professional roles and identity (Gazarian et al., 2014), ultimately fostering confidence in practice (McCabe et al., 2015).

Narrative and storytelling methods for educational purposes have been highly valued by nursing students for building self-confidence (Urstad, 2018; Waugh & Donaldson, 2016; Petty, 2017). However, challenges in implementing storytelling

in nursing education exist, such as maintaining narrative authenticity and student engagement (Urstad et al., 2018). Moreover, most research to date focuses on student-made digital stories (Park & Jeong, 2020; Urstad et al., 2018).

Drama-based Patient Pathways (DBPP) can be effectively integrated into simulated learning environments to create a realistic depiction of a patient's healthcare journey. This innovative method employs drama and professional actors to translate theoretical concepts into practical experiences. A "patient pathway" is a healthcare term that delineates the trajectory a patient follows from initial referral through to ongoing care. This path provides a strategic structure and process for managing a patient's treatment plan (NHS, 2014). The DBPP approach is designed to close the gap between the textbook representation of a patient and the actual patient experience. It allows for a more engaging presentation of the patient by creating an interactive format that puts the patient's journey into context.

There is a need for more in-depth knowledge on the effective use of DBPP in nursing education, the experiences of student nurses using tools similar to DBPP, and the impact of this pedagogical approach on students' perceived self-confidence in holistic assessment skills. Consequently, this study had two primary aims: 1) to explore the influence of DBPPs on first-year undergraduate nursing students' perceived self-confidence in performing ADL assessments and 2) to investigate the students' experiences using DBPP in their learning.

A participant information sheet was provided, along with written information about the study, supported by an animated video. This covered topics such as anonymity, confidentiality, publication, recording of focus groups, and the participant's right to withdraw from the study at any time without consequences. Participants were informed that their participation or lack thereof would not impact their academic results. All participants provided written consent before participating in the study.

Study methods

Study design

The study was grounded in a constructivist and sociocultural learning theoretical approach, which posits that individuals actively construct their own knowledge and that reality is shaped by learners' experiences (Piaget & Inhelder, 1972; Vygotsky, 1978). This theoretical framework aligns well with the use of DBPP. It supports the notion that reflective practice enables learning to occur through direct engagement in authentic situations and via interactions among participants within a social context (Vygotsky & Kozulin, 1986). A qualitative method and post-intervention design were employed to gain insights and foster a deeper understanding of the phenomenon under investigation (Tariq & Woodman, 2013).

Setting and participants

The study was conducted at a large college of nursing (1,600 students) within a university in London, England. An opportunistic sample of ten class groups, comprising first-year adult, child, and mental health nursing students, was selected. To be eligible for inclusion in the study, students had to attend the same session on the same day. Following the presentation of audio-visual study information, researchers invited a total of 278 students to participate. Ultimately, 80 students agreed to partake in the focus groups, determining the final sample size.

Demographic overview

The participant population in this study exhibited a diverse demographic composition. Female students constituted 80% of the sample, while male students represented the remaining 20%. A significant proportion, 70%, were aged 24 years or older. Notably, 56% of participants had more than a year's prior experience in the healthcare sector, enriching the collective perspectives and insights drawn from the study.

Ethical considerations

Ethical approval for this study was obtained from the University Research Ethics Committee prior to the commencement of data collection. The research team adhered to ethical guidelines outlined by the British Educational Research Association (BERA, 2018) to ensure the protection of participants, their confidentiality, and the integrity of the research process.

Participants were provided with a detailed information sheet outlining the study's aims, objectives, and their rights as participants. Written informed consent was obtained from all participants before their inclusion in the study, ensuring they had a clear understanding of the study's purpose and the potential benefits and risks associated with participation.

All data collected during the study were anonymised to protect the identity of the participants. No identifiable information was included in the research findings or published materials, ensuring the confidentiality of individual participants. Additionally, any information shared during the focus group discussions was treated as confidential by the research team.

Participation in the study was entirely voluntary, and students were informed that their decision to participate or not would not impact their academic results. Participants were also informed that they had the right to withdraw from the study at any time without consequence.

The research team carefully considered the potential risks and benefits associated with participation in the study. The primary benefit of the study was the potential for the research findings to inform future nursing curricula and improve the learning experience for nursing students, especially in ADL assessments. Potential risks were minimal, with the

most significant risk being the potential for participants to feel uncomfortable or stressed during the focus group discussions. To mitigate this risk, the facilitators were trained to create a supportive environment and to address any concerns raised by the participants during the discussions.

The intervention

The intervention arm comprised three phases: pre-instructional, instructional, and post-instructional activities:

The pre-instructional phase

During the pre-instructional phase, the university's established pedagogical framework (Figure 3) was utilised, and researchers developed materials for students to access during the 'Investigate' stage of their learning. This phase included the 'flipped classroom' as a pre-session activity. The flipped classroom is an innovative teaching approach that inverts the traditional educational model by providing direct instruction outside the classroom and promoting active learning, problem-solving, and collaboration within the class (Bergmann & Sams, 2012). Students engage with pre-recorded lectures, readings, or other instructional resources before attending class, which allows for more in-class time dedicated to interactive activities such as discussions, group work, and practical exercises (Bishop & Verleger, 2013).

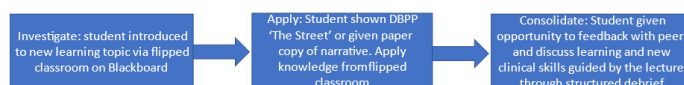


Figure 3: Pedagogy for session.

As a result, the flipped classroom model seeks to enhance understanding, critical thinking, and knowledge application by enabling more personalised guidance and support from the teacher during class time (Fulton, 2012). This approach also encourages students to assume greater responsibility for their learning and promotes peer collaboration, both of which contribute to improved learning outcomes (Abeysekera & Dawson, 2015).

After receiving study information and providing consent, ten teaching sessions were conducted simultaneously, with seven delivered face-to-face and three via a virtual learning platform. Five of these classes (out of the ten teaching sessions) viewed the DBPP in class, irrespective of the delivery method (face-to-face or virtual), while the other five received a narrative transcript (paper copy) of the case study depicted in Figure 4.

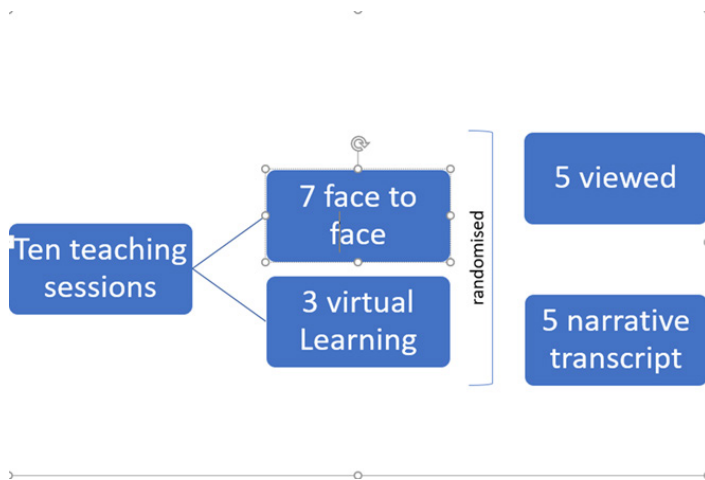


Figure 4: Intervention.

The instructional or teaching phase

During the instructional or teaching phase, students were randomly assigned using a random number generator to one of ten evenly distributed groups. In these groups, they would either engage with the DBPP of Brenda in class or be provided with a paper-based case study transcript of the Brenda scenario to interact with in class. The DBPP or paper case study was presented in class, either through a face-to-face session or virtually via a virtual learning environment (VLE). Both the paper case study group and the DBPP group received the same pedagogical approach and instructional elements during the session, as illustrated in Figure 1.

The post-instructional phase

In the post-instructional phase, data were collected and analysed using narratives that described the student experiences of the simulated activities. This phase involved collecting data to evaluate learning outcomes and analysing it to develop themes and discussions. The post-instructional phase was a critical step in assessing the impact of the educational intervention and programmes learning outcomes.

Data collection

Data were collected immediately following the intervention. Ten focus groups, each consisting of eight students and lasting 45 minutes, were conducted to gather student experiences and perspectives. All participants had received the intervention. The groups were facilitated either in person or online by a researcher or the group's lecturer, who had been prepared by the research team prior to the focus group sessions. To encourage reflections and discussions about the learning experience, the focus groups employed eight structured prompts based on the Plus-Delta model (Cheng et al., 2021) (Figure 5). Participants' views and opinions were recorded and transcribed verbatim.



Figure 5: Focus group prompts using the Plus-Delta model.

Data analysis and trustworthiness

Focus group data were analysed using Braun & Clarke's (2006) six-step approach (familiarisation with the data, coding, generating themes, reviewing themes, defining and naming themes, and writing up) to identify key themes that shape the phenomenon of interest. The researchers individually familiarised themselves with the data and utilised the prompts from the focus groups to provide a broad framework for coding the transcripts. Subsequently, the data were analysed line-by-line by the researchers to uncover themes and connections between them. An illustration of the process, from quotes to subthemes and then key themes, can be found in Figure 6 and Table 1. The analysis was conducted through a recursive and iterative process, comparing, and connecting the coding, subthemes, and key themes.



Figure 6: Overarching themes and subthemes.

Table 1: An example of the process from quotes to nodes and then themes.

Quotes	Subthemes	Key Themes
‘Thinking outside of the box, the video helped me pick up on the not-so-obvious things that she did not say i.e., environment’	Emotional response fostered by detailed design and presentation of the scenario	Authenticity
‘Makes the class interact – really good’	Learner preferences and engagement fostered by implementation of the scenario	Practice learning
‘The video is very useful to help you on placement to assess and communicate with a patient’.	Curiosity fostered by enquiry-based approach and presentation of the scenario	Practice application
‘The scenario was difficult to assess and there was not enough information’.	Cognitive response fostered by curiosity and presentation of scenario	Story

To ensure the trustworthiness of the analysis, the research team followed multiple steps, as suggested by Nowell et al. (2017). The team held regular meetings to discuss and refine the themes, thereby ensuring the reliability of the analysis. The robustness of the findings was also guaranteed as all researchers engaged with the raw data and discussed all ideas and hypotheses about the themes until a consensus was reached. Credibility and dependability were enhanced through prolonged engagement with the data and researcher triangulation. Transferability is facilitated by the detailed description of the experiences analysed.

In terms of reflexivity, the research team acknowledged their own experiences, values, and interests as educators in higher education, clinicians, and arts practitioners. The research team collectively agreed upon the upper-level themes presented in the paper.

Findings

A total of 80 students participated in the focus groups. Their experiences with the DBPP were characterised by four primary themes: authenticity, the narrative, practice-based learning, and practical application.

Description of themes

‘Authenticity’ was identified as the impact of learning experiences (DBPP) on students’ sense of identity and engagement in their studies. Both internal and external authenticity contributed to meaningful learning, enabling students to make sense of past experiences and gain a deeper understanding of nursing practice. The ‘narrative’ theme highlighted the empowering role of storytelling and engagement with a story, allowing students to think in diverse ways, challenge assumptions, and question behavioural norms (Yocom, 2020). The ‘practice-based learning’ theme encapsulated the scenario’s purpose and how the story’s authenticity encouraged learners to envision themselves in potential real-world situations and contemplate their responses to such circumstances. Nursing education should reflect clinical practice, offering students opportunities to experience highly complex, dynamic situations in a

safe, facilitated environment. Lastly, ‘practical application’ bridged the ‘theory-practice gap’ by facilitating knowledge transfer and the sharing of previous lived experiences from situations that could be recalled, blurring the boundaries between classroom and clinical practice.

Authenticity

The DBPP generated strong emotional engagement due to the scenario’s authenticity. The DBPP not only depicted reality but added an extra dimension of realism and relevance, making the story feel closer to a real-life situation: “Thinking outside the box, the video helped me pick up on the not-so-obvious things that she didn’t say, such as the environment”.

While the DBPP enhanced the student experience, the paper copy was, conversely, found to lack additional details that would have facilitated a more comprehensive holistic assessment. As a result, it provided a suboptimal learning experience, with less enthusiasm and more subdued discussion afterwards. Moreover, the paper scenario was comparatively more challenging to engage with and required more effort from the participants, who would have preferred to visually examine the patient for greater context: “I would have preferred to see the video to observe her behaviour and pick up on any additional information”.

The visual and audio content of the video appeared to increase participants’ internal authenticity (internal values), enhancing their emotions and fostering empathy towards ‘Brenda’ and her health and wellbeing: “I liked the way she was open about the death of her husband”. Some participants recognised Brenda’s vulnerability from the video: “I felt sorry for her” and commented on her loneliness. They seemed able to apply this to the then-COVID-19 pandemic climate and identified loneliness as a key factor: “Brenda could feel extra lonely because of the Covid pandemic; it’s very concerning, she is alone”.

Furthermore, the participants praised the external authenticity of the video, which led to a more meaningful learning experience: “It’s good that she doesn’t give all the information. If you are sitting with a patient, you need to ask questions and discuss important points; this always happens in my experience”; “this was a realistic representation and something we are likely to experience when qualified.” On the other hand, some participants in the paper scenario group acknowledged that a visual stimulus would have been helpful for easier interpretation and assessment; “the scenario would have been improved with more detail to look at, this would help me with my assessment”.

The story

Although the students valued the DBPP, the video appeared to foster a heightened emotional response and compassion from the students. They expressed feelings of concern, anxiety, and worry for Brenda, particularly those who had viewed the video. However, this level of compassion and empathy did not translate from the paper version of the

scenario: "A video would have led to a better understanding of what the patient meant"; "I would have preferred to see the video to observe her behaviour and pick up on any additional information"; "the scenario was difficult to assess, and there was not enough information available".

For students who had watched the video, the narrative enabled them to explore personal and professional roles in their lives, constructing their own understanding and professional identity: "Improved confidence to complete ADLs. Not just what we see and hear"; "I was able to relate to the actual person, her mannerisms, what she looked like, and what her living room looked like".

The use of video seemed to change the role of the storyteller: "I enjoyed Brenda's flowing conversation; she was natural and personable". With the paper version, some students appeared more focused on the text and theoretical perspectives, obscuring the personal message. In contrast, the students with the video were urged to take more responsibility for Brenda's care. For these students, Brenda was a real patient, and they treated her accordingly: "The scenario helped me to be more patient-centred. I thought she was real".

However, the video was not only beneficial in fostering empathy but also as a pedagogical and didactic tool: "You remember more if you watch something, but videos can be over-complicated if English is not your first language. A video and written scenario would be much easier". Some students suggested that both a script and video would have been helpful to assist with learning convenience, contextualisation, and interpretation of different types of speech: "A script and video would have been the gold standard". This idea was also mentioned by students in relation to accommodating different learning styles: "The descriptions were easier to pick up on because they were written down".

Practice learning

The lifelike nature of the scenario allowed students to immerse themselves in a real-world situation. The learner-centred approach transformed learning, making it interactive while remaining anchored in a clinical context. This facilitated a form of collective learning in which students became co-constructors of knowledge, encouraging and motivating one another: "Feel more prepared for a real situation". Through the pre-session work, students felt able to apply some of their prior knowledge to Brenda's video in class and the task at hand. This demonstrated a transmission, mobilisation, and acquisition of knowledge for the students.

The students found the narrative around different aspects of Brenda's care beneficial in highlighting the integration of multi-professional roles: "The complexities of managing a patient like that". They commented on how the DBPP provided them with insights into multidisciplinary care, some aspects of which surprised them: "Gave perspective on different parts of the nurse's role".

Peer-to-peer learning was emphasised by the students exposed to the DBPP video. They felt that this approach helped them communicate as a group and generate ideas from one another. The DBPP also highlighted areas for development and gaps in current knowledge, both individually and collectively. Some students felt that they initially "missed certain aspects of the video" and benefited from viewing the video twice. This was less apparent in the paper scenario. Several students explained that "Brenda made the assessment easier", but some of the ADL parameters were implied and not explicit: "I didn't know what information was relevant".

They felt that there were still many unanswered questions, particularly around activities related to sexual health and washing and dressing. Although Brenda appeared well-kept, these gaps forced the students to make assumptions. However, they reported that: "these assumptions fuelled in-class discussions, allowing for the sharing of views and sense-making".

Practice application

Some students described how theoretical perspectives were integrated into the investigative activity prior to the session, thereby combining theory and practical application: "The assessment of Brenda could start even before she spoke in terms of washing and dressing and how she looked"; "understanding the whole patient and what help they need".

Additionally, some students expressed aspects of knowledge transfer from practice learning to practice application. Their deeper understanding of the topic from the DBPP provided new insights that could potentially be applied in similar situations within clinical practice: "I feel I am able to make judgments and assessments".

Several students commented on their own gaps in knowledge and understanding: "Helped to build my confidence"; "practical and confidence-building". Some students with previous healthcare experience noted that they had: "No prior knowledge of the ADL assessment and enjoyed learning a new skill in a practical way"; improved my confidence and highlighted areas I need to work on".

Some students reported that the DBPP video would enable stronger recall of the scenario and learning, which could be applied to future practice: "I will be able to recall the visual images and the key information". They felt that the name Brenda would resonate with them, and her specific health and long-term conditions would serve as a reference point when encountering similar patients in practice: "Helpful to visualise this when assisting an actual patient".

Several students who had viewed the DBPP video expressed a desire for more sessions like this and a longer video in the future. Others highlighted the potential benefits of having a 'real' patient in the room to ask questions for clarity on some of the ADL parameters.

Discussion

This study aimed to explore the influence of DBPP on the reported perceived self-confidence of student nurses in assessing activities of daily living. Our findings suggest that students exposed to The Street DBPP reported an increase in perceived self-confidence and a decrease in anxiety when the DBPP was embedded in a learning session. Participants in the DBPP arm reported experiencing a richer learning environment where authenticity and realism fostered engagement, promoted ownership, and encouraged a deeper understanding of the experienced situation. Students enjoyed the lesson and engaged with the topic through peer discussion and group work in class. When students provided feedback regarding the 'patient', those exposed to the DBPP displayed higher instances of positive feedback and emotional response. Arguably, better learning takes place when linked to an emotional response (Tyng et al., 2017).

The Street focuses on individual patients and their healthcare journey. The quality of the script, acting, and authenticity of the video provides an essential bridge between theory and practice. The topics are highly relevant to nursing students, and the videos are situated in environments much like those the students will experience in practice. Today's students are considered 'digital scholars' (Weller, 2011) who use technology in all academic studies, and higher education institutes strive to implement digital and immersive learning tools into pedagogical programmes (HEE, 2020). This study strengthens the knowledge about the benefit of drama and patient-focused storytelling in higher education as a pedagogical strategy to enhance the practical application of clinical skills. DBPP can better prepare students for specific clinical situations, challenging and consolidating ideas on their support for individuals (patients) with varying needs.

As reported previously, the power of drama and film depicting patient stories seems to be in the way that it contributes to lifelong learning and prepares students for the professional role, enabling the practice of skills in a safe environment (Oh et al., 2012; Raga-Chardi et al., 2016). In the UK, first-year student nurses are likely inexperienced in real-life nursing situations and do not attend clinical placements until later on in the curriculum. Anxiety is often high, particularly before the first clinical placement, and driven by lack of experience, compounded by fear of making mistakes and the first-time application of skills (Sun et al., 2016). Some studies have explored if intervention strategies decreased anxiety and helped students to foster self-awareness to deal with these feelings when in clinical practice (Moscartolo, 2009; Ganzer & Zaudered, 2013). The DBPP triggered emotional engagement due to the resemblance to everyday situations encountered in nursing. Other studies have found that cognitive processes might be positively affected by emotions, including an impact on emotional memory, increased attention, memory, and motivation for learning (Um et al., 2012; Seli, 2016) – an essential element within the sociocultural learning context (Vygotsky, 1978). However, the extent of application to practice depends on the participants' level of engagement and contribution to the social context (Um et al., 2012; Seli, 2016).

Confidence is one of the most vital factors for being able to apply knowledge and competence (Back et al., 2016). Self-confidence gives the feeling of self-assurance arising from the appreciation of a person's own ability. Confidence at the novice level can improve curiosity, exploration, and proficiency to see patients as 'wholes' rather than parts (Benner, 1984). The comments in the ten focus groups showed that the students with the video demonstrated increased engagement in learning through visualising the patient and their environment. Addressing different learning styles can improve engagement, understanding of the content, and practical application of skills transferable to the clinical setting (Herron et al., 2019). In this study, students who had the video specifically commented that the DBPP was engaging and particularly helpful for visual learners.

In a similar study by Herron et al. (2019), comparing the use of video case study scenarios and paper scenarios, it was also found that there was no statistically significant difference in self-confidence between the two approaches. However, the use of video case studies improved student satisfaction with the sessions when compared with paper scenarios. Furthermore, students exposed to the video case study rather than the paper case study had higher levels of knowledge after the session, which may likely lead to a deeper understanding of the taught topic. As identified in our paper, student feedback singled out the visualisation aspect of the video case study as a learning aid.

The theory-practice gap remains a challenge in nurse education (Gallagher, 2004; Urstad et al., 2018). Innovative pedagogies and teaching strategies that facilitate active learning could encourage students' ability to apply theoretical and practical knowledge to increase perceived self-confidence and clinical reasoning (Gibson et al., 2015; Kavanagh & Szweda, 2017; Kim & Kim, 2015). This study did not set out to assess learning, focusing on the reported self-confidence of students and efficacy. However, DBPP seemed to impact engagement and might enhance the learning process. The effect of DBPP on learning should be further explored when implemented in nurse education settings. In addition, more evidence is needed for the link between self-confidence and learning outcomes/skills in practice. Further research should include a design aimed at capturing the effect of DBPPs and self-confidence on student nurse learning outcomes.

The feedback from students regarding the use of DBPPs shows that the use of The Street in nursing education can improve the quality and enrichment of taught sessions. Furthermore, it highlighted high levels of student satisfaction, which were linked to student levels of enjoyment and engagement with the session. However, there is a need to have more evidence about the sustainability of the effect. Overall, the evidence for the use of DBPPs in nursing education sessions is promising due to their effect on increasing students' perceived self-confidence, reducing anxiety surrounding the topic, increasing student satisfaction, increasing engagement, and increasing knowledge.

Limitations

This study has some limitations. Pedagogic research is perceived as a complex issue due to the blurred boundaries between researchers and participants (Regan et al., 2012). As researchers in the study work in an educational institute and given that some staff who taught the sessions also facilitated focus groups, participants may have offered socially conformant answers (Green & Thorogood, 2018). Online focus groups, while supporting students' response confidence, may have reduced response depth compared to in-person interactions. The convenience sampling method could potentially restrict the findings' generalisability. The study's reliance on self-reported confidence levels might not reflect actual clinical performance and could result in response bias. There was no assessment of the long-term effects of DBPP on students' self-confidence or the influence of variables such as experience, culture, or language proficiency. Lastly, the study failed to evaluate the real-world application of acquired knowledge and learning outcomes, necessitating future research in this area.

Conclusions and recommendations

The use of DBPPs could serve as a valuable pedagogical tool for nurse education. Employing authentic learning content with a strong emphasis on patient stories seems to engage students, providing opportunities for learning and application of skills. Integrating DBPPs as a standard learning activity across the curriculum could become an essential component of nurse education. Further work should evaluate the impact of DBPPs on student performance and other healthcare professionals in assessing activities of daily living.

To gain deeper insights into the application of DBPPs in higher education, future implementation and research should encompass various aspects of healthcare programmes. These include modules that assist with the development of clinical skills and self-confidence, focusing on the application of theory and ethics, interprofessional learning events, and simulations. Additionally, it is worth exploring the incorporation of DBPPs in other higher education programmes where the 'rehearsal' of core skills is a crucial learning activity. Further research on the effectiveness and combination of DBPPs in nurse education is necessary to solidify the role of this pedagogy in nursing curriculums for the future workforce. This research should also explore the long-term effects of DBPPs on students' self-confidence, learning outcomes, and the transfer of knowledge and skills to real-world clinical settings.

Based on this research's findings, several recommendations are made to enhance teaching and learning in higher education using simulation approaches. By integrating multimedia elements, accommodating diverse learning styles, promoting peer-to-peer learning, and embedding real-world context, a more engaging and authentic learning experience can be created. Encouraging self-reflection, bridging theory and practice, and exposing students to multi-professional perspectives will aid in knowledge transfer and enhance comprehension of patient management

complexities. Additionally, enabling multiple exposures to materials, facilitating interaction with real patients, and continually refining simulation scenarios based on student feedback will optimise the use of simulation approaches. These recommendations aim to equip students with valuable experience, empathy, and confidence in applying their knowledge to real-world situations.

References

- Abeysekera, L., & Dawson, P. (2015). Motivation and cognitive load in the flipped classroom: Definition, rationale and a call for research. *Higher Education Research & Development*, 34(1), 1-17.
- Advance HE. (2020). *Flipped learning*. <https://www.advance-he.ac.uk/knowledge-hub/flipped-learning>
- Bandura, A. (1997). *Self-efficacy: The exercise of control*. W H Freeman and Company.
- Benner, P. (1984). *From novice to expert: Excellence and power in clinical nursing practice*. Pearson Education.
- Bergmann, J., & Sams, A. (2012). Flip your classroom: Reach every student in every class every day. *International Society for Technology in Education*.
- Bishop, J. L., & Verleger, M. A. (2013). The flipped classroom: A survey of the research. *ASEE National Conference Proceedings*, 30(9), 1-18.
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3(2), 77-101.
- Bruner, J. (1991). The narrative construction of reality. *Critical Inquiry*, 18(1), 1-21.
- Fulton, K. (2012). Upside down and inside out: Flip your classroom to improve student learning. *Learning & Leading with Technology*, 39(8), 12-17.
- Gallagher, P. (2004). How the metaphor of a gap between theory and practice has influenced nursing education. *Nurse Education Today*, 24, 263-268.
- Ganzer, C. A., & Zauderer, C. (2013). Structured learning and self-reflection: Strategies to decrease anxiety in the psychiatric mental health clinical nursing experience. *Nursing Education Perspectives*, 34(4), 244-247.
- Gazarian, P., Fernberg, L., & Sheehan, K. (2014). Effectiveness of narrative pedagogy in developing student nurses' advocacy role. *Nursing Ethics*, 23(2), 132-141.
- Gibson, C., Dickson, C., Lawson, B., Kelly, H., & McMillan, M. (2015). Learning to deal with the crisis in the home: Part 1 – Developing community simulation scenarios. *British Journal of Community Nursing*, 20(11), 536-540.
- Herron, E., Powers, K., Mullen, L., & Burkhart, B. (2019). Effect of case study versus video simulation on nursing students'

- satisfaction, self-confidence, and knowledge: A quasi-experimental study. *Nurse Education Today*, 79, 129-134.
- Kavanagh, J., & Szweda, C. (2017). A crisis in competency: The strategic and ethical imperative to assessing new graduate nurses' clinical reasoning. *Nurse Education Perspectives*, 30(2), 57-62.
- Kim, J., & Kim, E. (2015). Effects of simulation on nursing students' knowledge, clinical reasoning, and self-confidence: A quasi-experimental study. *Korean Journal of Adult Nursing*, 27(5), 604-611.
- Levett-Jones, T., Lathlean, J., Higgins, I., & McMillan, M. (2010). The duration of clinical placements: A key influence on nursing students' experience of belongingness. *Australian Journal of Advanced Nursing*, 28(1), 8-16.
- Lundberg, K. (2008). Promoting self-confidence in clinical nursing students. *Nurse Educator*, 33(2), 86-89.
- Mackintosh-Franklin, C. (2020). Developing resilience in nursing students. *British Journal of Nursing*, 29(3), 158-162.
- McCabe, D., Gilmartin, M. L., & Goldsamt, L. (2016). Student self-confidence with clinical nursing competencies in a high-dose simulation clinical teaching model. *Clinical Simulation in Nursing*, 12(6), 200-208. <https://doi.org/10.1016/j.ecns.2016.01.004>
- Moscaritolo, L. (2009). Interventional strategies to decrease nursing student anxiety in the clinical environment. *Journal of Nursing Education*, 48(1), 17-23.
- Park, M., & Jeong, M. (2020). Digital story-based education: An innovative way to learn evidence-based practice. *The Journal of Continuing Education in Nursing*, 51(11), 501-503.
- NHS (2014) *Elective care guide. referral to treatment pathways: A guide for managing efficient elective care*. https://www.nhs.uk/fileadmin/Files/Documents/Referral_to_Treatment_Pathways__second_edition_.pdf
- Mooney, M., & O'Brien, F. (2006). Developing a plan of care using the Roper, Logan and Tierney model. *British Journal of Nursing*, 15(16), 887-892.
- Oh, J., Kang, J., & De Gagne, J. (2012). Learning concepts of cinenurducation: An integrative review. *Nurse Education Today*, 32(8), 914-919.
- Petty, J., & Treves, R. (2017). Development of a digital storytelling resource to support children's nursing students in neonatal care. *Nursing Children & Young People*, 29(2), 32-37.
- Piaget, J., & Inhelder, B. (1972). *Psychology of the child*. Basic Books.
- Raga-Chardi, R., Iglesias-Parra, M., García-Mayor, S., Kaknani, S., García-Guerrero, A., & Morales-Asencio, J. (2014). Acquiring competence in oncology nursing skills through the use of film: A study protocol. *International Journal of Nursing Knowledge*, 27(1). <https://doi.org/10.1111/2047-3095.12066>
- Roper, N., Logan, W., & Tierney, A. (2000). *Model of nursing based on activities of living*. Churchill Livingstone.
- Seli, P., Wammes, J., Risko, E., & Smilek, D. (2016). On the relation between motivator and retention in educational contexts: The role of intentional and unintentional mind wandering. *Psychonomic Bulletin and Review*, 23, 1280-1287.
- Sun, F-K., Long, A., Tseng, Y. S., Huang, H-M., You, J-H., & Chiang, C-Y. (2016). Undergraduate student nurses' lived experiences of anxiety during their first clinical practicum: A phenomenological study. *Nurse Education Today*, 37, 21-26.
- Tariq, S., & Woodman, J. (2013). Using mixed methods in health research. *JRSM Short Reports*. <https://doi.org/10.1177/2042533313479197>
- Tyng, C., Amin, H., Saad, M., & Malik, A. (2017). The influences of emotion on learning and memory. *Frontiers in Psychology*, 8, 1454.
- Um, E., Plass, J. L., Hayward, E. O., & Homer, B. D. (2012). Emotional design in multimedia learning. *Journal of educational psychology*, 104(2), 485.
- Urstada, K., Ulfsby, K., Brandeggen, T., Bodsberg, K., Jensen, T., & Tjoflåt, I. (2018). Digital storytelling in clinical replacement studies: Nursing students' experiences. *Nurse Education Today*, 71, 91-96.
- Vygotsky, L., & Kozulin, A. (1986). Thought and language. MIT Press. *Studies in Second Language Acquisition*, 11(3), 331-332. doi:10.1017/S0272263100008172
- Vygotsky, L. S. (1978). *Mind in society: Development of higher psychological processes*. Harvard University Press.
- Waugh, A., & Donaldson, J. (2016). Students' perceptions of digital narratives of compassionate care. *Nurse Education in Practice*, 17, 22-29.
- Weller, M. (2011). *The digital scholar: How technology is transforming scholarly practice*. Bloomsbury Academic.
- World Health Organization. (2001). *International Classification of Functioning, Disability and Health (ICF)*. World Health Organization.

Yocom, D., Bashaw, C., Proce, D., & Cook, M. (2020). Perceptions of digital storytelling in the classroom. *Teaching and Learning in Nursing, 15*(3).

Young, T., Rohwer, A., Volmink, J., & Clarke, M., (2014) What are the Effects of Teaching Evidence-Based Health Care (EBHC)? Overview of systematic reviews. *PLoS ONE, 9*(1), e86706. <https://doi.org/10.1371/journal.pone.0086706>.

Copyright: © 2023. Aby Mitchell, Barry Hill, and Georgiana Assadi. This is an open-access article distributed under the terms of the Creative Commons Attribution License (CC BY). The use, distribution or reproduction in other forums is permitted, provided the original author(s) and the copyright owner(s) are credited and that the original publication in this journal is cited, in accordance with accepted academic practice. No use, distribution or reproduction is permitted which does not comply with these terms.