

ESSAY

Embracing discomfort and vulnerability: cultivating brave learning spaces within simulation-based nursing education

Natalie J. Ford¹, Larissa M. Gomes¹, Erin. Lowe¹, Nicole Harder²

¹Department of Nursing, Red Deer Polytechnic, Red Deer, Alberta, Canada

²College of Nursing, University of Manitoba, Winnipeg, Manitoba, Canada

Corresponding Author: Natalie J. Ford, Natalie.Ford@rdpolytech.ca

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ABSTRACT

Evolving evaluation methods and the changing pedagogical landscape of nursing education offer the opportunity to re-examine learning spaces in simulation. Psychological safety is an established standard within simulation-based experiences; however, limiting learning spaces exclusively within the construct of safety competes with shifting pedagogical practices in simulation within pre-licensure nursing programmes. Conflations of safety and comfort are pervasive in higher education. Shifting language from a place of safety towards one of courage and bravery holds the potential to better promote learning environments which foster agency and meaningful growth when discomfort is experienced. Brave learning spaces recognize discomfort and vulnerability as an essential component of learning and transformation, while also aligning with key principles of psychological safety to optimize learning experiences. Discourse exploring alternatives to safe learning spaces in simulation is notably absent in the current nursing simulation literature propelling the need for this discussion.

What this essay adds:

- This essay challenges prevailing language and conceptual frameworks used to describe the safety of learning spaces in simulation-based education in nursing. While acknowledging the existing understandings of simulation spaces conducive for learning, new suggestions are offered to better align with the shifting landscape of simulation. To our knowledge, this essay addresses a new approach to simulation-based education not yet explored in published literature within nursing simulation.

Nurse educators are tasked with providing learning opportunities which prepare pre-licensure nursing students for the complex realities of clinical practice. Simulation-based education (SBE) has transformed the possibilities of experiential learning which otherwise may be uncontrolled, or in some cases, dangerous for patients or novice learners [1]. The constructed emotional learning space within nursing simulation is an important catalyst for establishing shared expectations and supporting student learning [2,3]. In pre-licensure nursing education, conducting effective SBE is intertwined with the concept of psychological safety. The prevailing view has been one of creating safe spaces for learners, underpinned by the assumption that safety equates to comfort for learners. However, this

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perspective encounters a significant challenge when juxtaposed with the evolving pedagogical landscape that increasingly recognizes the value of pushing learners to the edge of their abilities. The dichotomy between the desire for safety and the necessity for discomfort compels a critical examination of the language and conceptual frameworks we employ in the design of learning spaces within simulation. We challenge our fellow simulationists to reconsider the current language and conflicting expectations of safe learning spaces in simulation. Although the scope of this essay is from a nursing lens, application of brave spaces beyond the nursing profession deserves conversation.

Background

SBE is widely used to enhance clinical skills and decision-making in the health professions, with psychological safety playing a pivotal role in facilitating effective learning [4,5]. Psychological safety is conceptualized as 'a shared belief held by members of a team that the team is safe for interpersonal risk taking' [6, p.350] and refers to the perception that one can voice their opinions, ask questions, or make mistakes without fear of repercussions or embarrassment [7]. Several studies have highlighted the positive impact of psychological safety in healthcare simulation [5,8,9], and suggest that when healthcare learners feel psychologically safe, they are more likely to engage in active participation, share their experiences and learn from their mistakes [5,10]. This, in turn, is believed to contribute to improved clinical competencies and enhanced patient safety [11].

Ideally in SBE, learners are asked to practise to the edge of their abilities and take risks within an environment which does not belittle or humiliate them [3]. It is recognized that despite the best efforts of the facilitator to create a safe container for this learning, psychological safety may not mitigate all feelings of interpersonal risk [3]. Specifically, engaging in actions without discomfort or the fear of negative consequences in psychologically safe learning spaces [7,12] can become challenged when perceived consequences remain subjective and elements of discomfort are non-modifiable. Further exploration is required concerning the aspect of making mistakes without consequences in psychologically safe environments [7], especially given variations in programmes that may incorporate summative and/or high-stakes evaluations. Challenges in creating and maintaining psychological safety in simulation, such as interpersonal factors [5,13], power dynamics and hierarchies amongst healthcare providers, still need to be addressed [8]. Despite attempts to create psychological safety, incongruence in perception between learners and faculty can occur [5] driving examination of current language in our learning spaces.

Expanding the concept

The intersection of goals and outcomes related to expected behaviours and affective participant responses should align with the framing of the learning space. Incongruences of these expectations can threaten desired outcomes of the learning experience. Prioritizing pedagogy and

learning environments which align with foundational principles of psychological safety and cultural safety is not disputed; however, safety and comfort are subjective in nature [13] which creates practical challenges in the evolving environment of simulation. Safety and comfort are pervasive in simulation, yet these feelings in clinical practice and during times when learners are asked to challenge themselves can be difficult to achieve. As such, designating learning spaces as safe can be misleading when comfort or conditions of safety for learners cannot be guaranteed [5,8,14]. In their qualitative study on pre-licensure nursing students' perceptions of psychological safety, Stephen et al. [9] identified instances where learners felt unsafe in simulation scenarios, such as being observed by peers and instructors, during a perceived lack of support from the group, and if they believed their grades were at stake. These findings underscore incongruence with grounded practices in simulation such as observation and misaligned perceptions of safety between facilitators and learners.

In a shared space, perceptions of all members need to be considered, including leaders such as faculty and simulation facilitators. Recent research from Williams and Quaid [15] focused on faculty efforts to create safe classroom spaces highlights unpredictable behaviours or characteristics among student cohorts, leading to a misalignment between instructors' expectations of a safe space and the perceived reality of those within it. Notably, the study identifies instances where faculty felt unsafe, citing intimidating body language and aggressive challenges from students as contributing factors [15]. The broader discourse on safe spaces in education has often overlooked the safety concerns of faculty [15] which requires a collective conversation regarding accountability in learning spaces. Leadership remains a key feature of psychological safety research; however, much is still unknown about transactions of other team members in the creation of psychological safety [16].

The exploration of the construct of psychological safety in nursing SBE illuminates a non-modifiable and subjective nature, impacting learners and educators alike. The role of authentic leadership in cultivating psychological well-being and the often-overlooked safety concerns of faculty underscore the complexity of creating truly safe learning environments in simulation and educational settings. Perceptions of safety in simulation in faculty and students are under-researched. Using the National League of Nursing Jeffries Simulation Theory as a framework to guide their study, Turner et al. [5] explored the perspectives of psychological safety in nursing students and faculty. Results of this study noted dynamic interactions and student self-efficacy as themes perceived to affect psychological safety in students, while themes for faculty contributed to psychological safety through simulation design and trust via communication strategies during facilitation [5]. Their study highlighted that influences of psychological safety extended beyond the simulation space, which may be difficult to control or modify. Translation beyond the simulation space is an important consideration for educators. Healthcare and clinical settings today are not safe spaces. *Roze des*

Ordons and authors [17] also question the authenticity of safe spaces and transferability of psychological safety from education settings to clinical settings due to the complexity of healthcare workplaces where psychological safety may not be prioritized and fostered. If psychological safety is prioritized in the simulation learning environment, we must consider this as an ideal and not as an absolute end, given that the learner is the one who determines safety.

Critiques of safe spaces in higher education extend beyond practicality and involve unrecognized privilege, thwarting of intellectual development and the potential hindrance of critical thinking, particularly through the lens of Socratic questioning [18]. Socratic questioning serves as a key pedagogical tool in common debriefing methods, aiding in the identification of performance gaps and fostering critical reflection [19]. However, the act of challenging students' thoughts, integral to this process, may be perceived as unsafe by learners if discomfort is experienced. It is important to note authentic learning requires some risk [20] and transformative learning requires critical reflection that can include uncomfortable feelings of guilt and shame before new understandings and transformation can occur [21]. Given the goal to embrace risk-taking, share vulnerability and create environments which support authentic similarities to current healthcare settings, learning spaces framed within bravery and courage may be a more persuasive and impactful for simulation in nursing education. The concept of brave spaces, originating from social justice literature by Arao and Clemens [22], may offer a more collaborative and credible alternative to safe spaces [14]. Building off previous work from Ford et al. [14], it is proposed brave learning spaces, with its emphasis on acknowledging challenges and discomfort, may find effective integration into simulation learning environments.

Leaning into discomfort and vulnerability

Within brave spaces, learners and facilitators actively engage with discomfort, vulnerability and controversy [14, 22]. Arao and Clemens [22] identified five key elements or 'ground rules' for creating such spaces: (a) fostering respect, (b) acknowledging the impact each participant has on others, (c) navigating controversy with civility, (d) embracing perspective taking and (e) encouraging challenges by choice. While expectations of respect are common to both safe and brave spaces, the latter distinguishes itself by providing tools to address and navigate discomfort [23]. This involves reframing discussions to foster a growth mind-set, emphasizing bravery and courage in the face of vulnerability. Acknowledging that authentic learning, which involves embracing vulnerability, requires courage from learners [24], with the need to prepare nurses with courage and civility [14,25,26], brave learning spaces better align with the goals of transformational learning and courage needed in risk-taking within an SBE.

Although discussion of the implementation of brave spaces in nursing has been limited, brave spaces are not new in higher education. Varying applications of brave spaces have been considered within the context of learners and faculty with positive outcomes in transformation and

agency. Cook-Sather [20] asserts the change of language to brave learning spaces focuses the attention on the role learners play in engagement and increases learner agency while engaging in pedagogical partnerships in nursing programmes. Using the brave spaces ground rules from Arao and Clemens [22] to encourage perspective taking and controversy with civility, Canadian research in nursing ethics education highlighted perceptions of necessary transformation from learners leaning into vulnerability and perspective taking to enhance their own learning and the learning of others [14]. The Washington Center for Nursing [27] has published guidelines to support their nurse educators in building a brave space while also combining a safe space with their learners in classrooms and hospital settings to support more inclusive environments. Reaching beyond the classroom space, Ford and Gulbransen [28] have also suggested the ground rules of brave spaces in clinical capacities for nurses and interprofessional teams to propel difficult conversations regarding inequalities and injustice in the health of women and children. Given the practical applications of brave spaces in learning and teams, brave learning spaces certainly hold potential in simulation as we seek to engage learners in authentic and transformational learning opportunities that are challenging and meant to stimulate critical thought.

Alternatives to safe spaces also come with critiques we need to consider in this conversation. Critics of brave spaces have suggested further alternative terminology such as communities of disagreement [29] and accountable spaces [30] to highlight the need for community and attention to privilege within groups of people in a shared space. Modifications to brave spaces in largely homogenous groups have been suggested to decrease the potential responsibilities of sharing within underrepresented groups [31]. The initial concept of brave spaces primarily focused on addressing challenging conversations related to oppression and marginalization [31]; therefore, the dialogue surrounding a standardized definition and strategies for implementing brave learning spaces should be mindful of this context and consider privilege as well as power dynamics [14]. What is considered to be brave may differ between learners; therefore, it is also important to explore definitions of bravery and courage for those in the space [27].

Prior to considering a shift in language and discussing expectations for learners in a brave learning space, it is also imperative to operationalize what is meant by discomfort. Study results from 37 simulation faculty in the United States indicate a perceived coalesce of verbal and nonverbal behaviours of discomfort with being unsafe which required 'protection' from faculty members [10 p.3]. These ideas can convolute end goals of transformational learning if discomfort is to be avoided or perceived as unsafe. It is critical to note discomfort is not synonymous with psychological, emotional or physical distress; however, attention must be given to the potential consequences of negative responses in simulation. In one study addressing the impact of psychological safety and simulation in the emergency department, the researchers identified how

anxiety from previous negative simulation experiences restricted taking interpersonal risks or participation in subsequent simulations [13]. Study findings also suggest both the benefits and stressors associated with the simulation learning space or perceived 'safe containers' can seep into clinical practice and beyond the walls of the simulation experience [13] highlighting the permeability of interactions and responses with one another in simulation. Vygotsky's theory of the zone of proximal development suggests an ideal threshold for discomfort and learning which can be supported through skilled facilitation and scaffolding [32,33]. Following the Healthcare Simulation Standards of Best Practice (HSSBP) simulation design standard [34], the level of the learner also needs to be considered in brave learning spaces to mitigate a conflation of discomfort with learning through scaffolding of content and expectations.

To further clarify discomfort in the learning process, Taylor and Baker [35] identify discomfort as a result of experiencing feelings of dissonance. Dissonance is the reaction to identifying 'inconsistency in two or more [of ones] thoughts, beliefs, or events' [35 p.173]. Learning comes from challenging and transforming ones' thoughts, assumptions and beliefs. Discomfort that can lead to productive learning is created through critical self-reflection identifying individually meaningful internal causes and is guided by support to make sense of what caused the reaction of dissonance [35]. Although discomfort can result in learning, it is essential for post-secondary educators to understand that discomfort can also be damaging and unproductive when it occurs as a result of trauma or external factors not in the learners' control [35,36]. Facilitator discretion and awareness of anticipated stressful SBE need to be applied when asking learners to be brave. Harder et al. [37] propose a trauma-informed psychologically safe debriefing method when these anticipated stressful SBE occur, such as during a simulated patient death. Regardless of the learning space used, a trauma-informed lens is recommended to support the education of healthcare professionals [17].

Implications for simulation

Brave learning spaces in simulation have not been explored in the literature, therefore alignment with HSSBP™ needs to be discussed in a larger arena. Re-framing of learning spaces in nursing simulation for pre-licensure nursing students requires intentionality and unified approaches within individual nursing simulation programmes. Learners may struggle with the new frame and expectations. This inconsistency with previous frames for the learner may create a disequilibrium in the learning process [38]. Therefore, timing of implementing new language and expectations in the learning space needs to be considered. Professional development of staff must also be addressed, particularly for novice simulation facilitators learning best practices in simulation and learning. The key message to articulate and prepare students is to lean into the idea of challenging thoughts and perspectives to promote authentic growth and reflection, which can be uncomfortable; and not frame expectations within safety. Ideally in a brave

space learners would be more prepared for discomfort and courage needed in interpersonal risk-taking, versus having expectations of safety [15].

When comparing safe spaces with brave learning spaces in healthcare simulation, it is essential to consider various aspects to inform the application. Several elements overlap; however, key differences are present. Using our understandings of the resources presented in this paper key comparisons of both learning spaces are made (see Table 1).

By recognizing these key differences and similarities between safe and brave spaces, simulationists can create a nuanced approach that combines the strengths of psychological safety and brave learning spaces to enhance the overall healthcare simulation experience.

Further research

As brave learning spaces are a different approach in SBE, researchers need to investigate the impacts of this shift. Research is needed to compare catalysts in the learning process, perceptions of risk-taking and learners' willingness to engage in challenging conversations related to social justice, healthcare disparities and ethical dilemmas in safe learning spaces versus brave learning spaces. Qualitative exploration would give critical insight into how learners' perceptions of psychological safety and bravery in the simulation environment influence their levels of confidence and participation in scenario-based activities that involve emotional and controversial content. Priority facilitation strategies which follow ground rules of brave learning spaces and framing of discomfort need to be discussed and established to support standardization for SBE. Ideally, research exploring how the simulation environment translates to practice would offer clarity to help prepare registered nurses who encounter challenges and discomfort with courage and practical strategies to address difficult conversations and clinical problems. Given the shared environment of clinical spaces, common language and approaches to SBE across healthcare disciplines would be a value. Given this, consideration for use of brave learning spaces beyond nursing deserves exploration.

Conclusion

Creation of a learning space which supports accountability and vulnerability can transform learning in SBE [3]. A growing body of evidence points to critical disparities in how we perceive and construct safe learning spaces. The importance of fostering courage and sharing vulnerabilities in the learning process within a new frame of bravery versus safety in simulation learning spaces is a critical conversation to initiate. Learning spaces in simulation must consider foundational elements of psychological safety [7,12] and trauma-informed pedagogy [37] which have been highlighted in this manuscript. As SBE continues to evolve, our current understanding of a safe learning environment in simulation requires further examination. We recognize the HSSBP™ [12,19,34,39] employed in this essay are intended for interprofessional application, and with the considerations presented here may apply to a broader audience, which

Table 1: Comparison of safe learning spaces and brave learning spaces

| Key Element | Safe Learning Spaces | Brave Learning Spaces |
|---------------------------------|---|---|
| Ground rules and expectations | Establish clear ground rules focusing on respect, empathy and inclusivity [3,7]. Ensure that learners feel comfortable sharing their perspectives. Inclusion of fiction contract with framing of safety related to patient harm and learner safety [12,34]. | Build upon the foundation of respect and inclusivity by incorporating additional ground rules, such as acknowledging impact on one another, engaging with controversy with civility and encouraging perspective taking [22]. Inclusion of fiction contract [12] with framing of safety related to patient harm. |
| Communication and dialogue | Dialogue predominantly facilitator lead [39]. Emphasize open communication, active listening and non-judgmental interactions while mitigating disruptive behaviours [3,12]. Encourage learners to express their thoughts and ideas without fear of reprisal [6,7]. | Emphasis on mutuality and accountability in the shared space. Extend communication to include discussions around discomfort, vulnerability and controversial topics [27]. Foster an environment where learners feel agency to engage in challenging conversations related to healthcare disparities, social justice and ethical dilemmas [14]. |
| Tools for navigating discomfort | Provide resources and support for learners experiencing emotional challenges. Emphasize the importance of creating a supportive learning community. Potential use of safe words and facilitator intervention with perceived learner responses to feeling unsafe. Incorporate a trauma informed lens [37]. | Introduce specific tools and strategies to address discomfort, such as reframing discussions to promote a growth mind-set, emphasizing bravery and agency in responses and providing resources for addressing distress. Trauma informed lens [37]. |
| Content and scenarios | Develop scenarios that encourage critical thinking, problem-solving and collaboration while maintaining a supportive atmosphere. Scenarios developed for level of learner [34]. | Include scenarios that explicitly challenge learners to confront issues of social justice, healthcare disparities and ethical considerations [27]. Create opportunities for discussions that may evoke discomfort but contribute to transformative learning experiences. Scenarios developed for level of learner [34]. |
| Facilitator training | Establish clear institutional definition of expectations in a safe learning space. Train facilitators to lead the creation of inclusive and supportive learning environments which focus on effective communication and conflict resolution [39]. Emphasis is provided on safety of participants. | Establish clear institutional definition of expectations in a brave learning space. Provide additional training on facilitating discussions around challenging topics, addressing discomfort and promoting a culture of bravery and courage within the simulation setting. Emphasis on shared responsibility and fostering of courage in participants [14]. |
| Assessment and feedback | Implement assessment strategies that consider learners' emotional well-being and provide constructive feedback [34]. Evaluation methods may have separation of simulation experience and clinical practicums. | Foster ability to engage in uncomfortable conversations and navigate ethical complexities. Provide feedback that encourages growth and reflection [34]. Evaluation and/or assessments may hold more weight in clinical grade or outcome. |

we encourage. Brave learning spaces have the potential to facilitate authentic learning in complex learning spaces that require bravery through shared vulnerability while also respectfully challenging new understandings and transformation. Civil discourse exploring alternatives to safe learning spaces in simulation is necessary to meet the needs of evolving educational and healthcare landscapes.

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