

**Nursing Education Research Conference 2020**  
**The Psychological Safety Assessment Survey in Simulation-Based Prelicensure Nursing Education: Is the Model Supported?**

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**Purpose:**

This presentation disseminates findings from a narrative literature review of nursing education literature supporting the work-team learning model.

The landmark study from The National Council for State Boards of Nursing (NCSBN) multi-site, longitudinal simulation study in prelicensure nursing education spurred increasing use of simulation-based education. The International Nursing Association for Clinical Simulation and Learning (*INACSL Standards of Best Practice: Simulation*) includes ensuring Psychological safety (PS) as a best practice (INACSL Standards Committee, 2016). Psychological safety is defined as “a team members perception that within the learning environment making mistakes and applying knowledge for the first time is an opportunity for learning and not embarrassment or shame (Edmondson, 1999; Higgins, Ishimaru, Holcombe, & Fowler, 2011; Lopreiato et al., 2016).” Unfortunately, no strong measures assessing PS in simulated learning environments exist; yet, it is essential simulation educators use evidence-based practices when teaching pre-licensure nursing students. Nursing education literature suggests students perceive educator behaviors associated with PS impact the ability to engage in learning oriented behaviors (Billings & Kowalski, 2016; Ganley & Linnard-Palmer, 2012; Mcdermott, 2016; Turner & Harder, 2018), yet validated instruments have not been designed for this purpose. The inability to measure psychological safety in simulation-based nursing education prevents the ability to evaluate the impact of psychological safety on learning outcomes.

The PS assessment survey (Edmondson, 1999), used in organizational behavior research has four constructs: antecedent conditions, team beliefs, team behaviors, and outcomes. The PS assessment survey, grounded in Edmondson’s work-team learning model developed using evidence-based research, is a robust instrument with demonstrated reliability and validity. This PS survey is untested in pre-licensure nursing education, specifically simulation-based education; yet could be considered to measure psychological safety.

**Methods:**

Databases were searched using keywords, subject headings, and search terms include: CINAHL®, Medline,ERIC™, PsycINFO®, Scopus, and PubMed. Search terms included psychological, safety, education, healthcare, nursing, and associated truncations of those terms. Reviewed literature included publications between 2010 (date of initial publication of *INACSL Standards of Best Practice: Simulation* (INACSL Standards Committee, 2016) and 2019.

**Results:**

The initial electronic database search retrieved 1,426 references. Common reasons for exclusion at the title level (n = 1090) include non-nursing, patient safety focus, clinical practice focus, and mental health education focus. At the abstract level, 159 articles were excluded for being focused on graduate nursing education or a non-English publication. Ten articles were included for this review: four descriptive studies (two using qualitative and two using quantitative methods); three literary reviews; two short communications of teaching strategies; one concept analysis; and one book chapter.

| <b>Constructs</b>     | <b>Found in the review</b> |
|-----------------------|----------------------------|
| Antecedent conditions | 10/10                      |
| Team Beliefs          | 10/10                      |
| Team behaviors        | 7/10                       |
| Outcomes              | 5/10                       |

### **Conclusion:**

The findings of the literature review and evaluation demonstrates the viability of applying the psychological safety assessment survey in simulation-based nursing education. This review supports further exploration of relationships between psychological safety and learning outcomes in simulation-based nursing education. Developing a psychometrically sound instrument with a theoretical foundation in Edmondson's work-team learning model tool to measure psychological safety for use in simulation-based nursing education is an ideal next step.

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### **Title:**

The Psychological Safety Assessment Survey in Simulation-Based Prelicensure Nursing Education: Is the Model Supported?

### **Keywords:**

Nursing Education, Psychological Safety and Simulation

### **Abstract Summary:**

Psychological Safety (PS), deemed essential for quality simulation-based nursing education, remains unmeasured. This presentation disseminates findings of a narrative literature review of nursing education literature supporting the model used to ground the Psychological Safety (PS) assessment survey. This survey, untested in nursing education, demonstrated reliability and validity in organizational behavior.

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