

Simulation in Nursing Education: An Integrative Literature Review

Jami Reese BSN, RN, CMGT-BC, Nurse Educator Student

Chair: Amy Putnam DNP, RN, CNE

Committee: Candice Laney DNP, RN, CNE

ABSTRACT

Purpose

- Examine effectiveness of simulation-based learning (SBL) in nursing education
- Focus on clinical skills, critical thinking, decision-making, and student confidence

Methodology

- Integrative literature review (2020–2025)
- Peer-reviewed quantitative, qualitative, mixed-methods, and review studies from major science databases
- Focus: simulation in undergraduate and professional nursing education

Evaluation

- Analysis of learning outcomes examined across:
 - Cognitive domain (knowledge, reasoning)
 - Psychomotor domain (clinical skills)
 - Affective domain (confidence, engagement)
- Additional constructs: teamwork, communication, professional competence, transfer to clinical practice

Findings

- Simulation-based learning improves clinical skills, critical thinking, and student confidence and engagement
- High-fidelity and scenario-based simulation strengthen clinical reasoning, communication, and teamwork
- Some challenges with transfer of simulation skills to real clinical environments
- Effective implementation requires structured design, faculty support, and debriefing

Keywords: *Simulation-based learning; Nursing education; Clinical competence; Experiential learning; High-fidelity simulation; Critical thinking*



INTRO/GOALS/OBJECTIVES

Introduction

Healthcare systems are increasingly complex and require nurses capable of critical thinking and rapid decision-making. Simulation-based learning allows students to practice clinical skills and judgement in realistic environments without compromising patient safety.

Goals

Examine how simulation improves learning outcomes in nursing education.

Objectives

- Evaluate simulation's impact on clinical competence
- Examine effects on student confidence
- Identify effective simulation design features



THEMES

Clinical Competence

Simulation improves clinical reasoning, psychomotor skills, and evidence-based decision-making.

Confidence and Engagement

Students report higher confidence, communication skills, and teamwork abilities.

Simulation Design

Effective simulation requires appropriate fidelity, active participation, and structured debriefing.

METHODOLOGY

Study Design

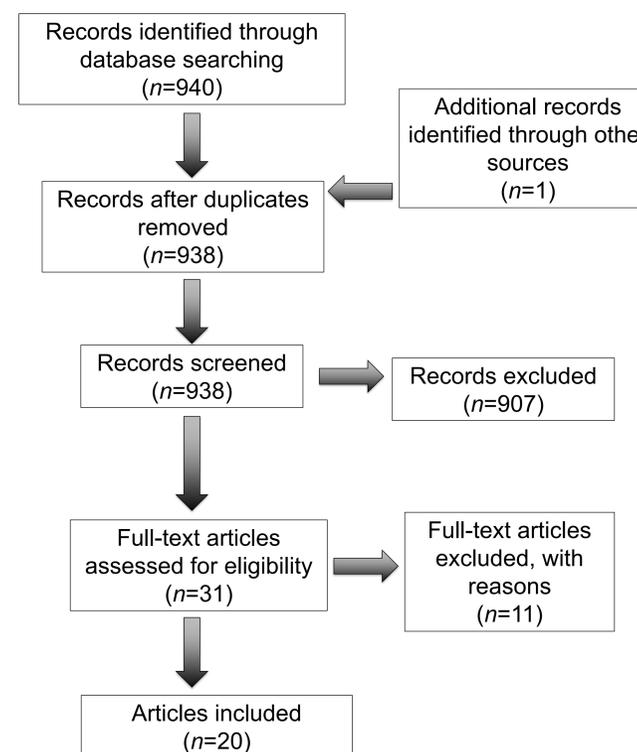
Integrative literature review

Databases

CINAHL
MEDLINE
PubMed
EMBASE
ProQuest



Selection



Note. A PRISMA flow diagram. An illustration of how articles were reviewed, included, and excluded from the review.

THEORETICAL FRAMEWORK

Simulation-based learning is supported by:

Experiential Learning Theory

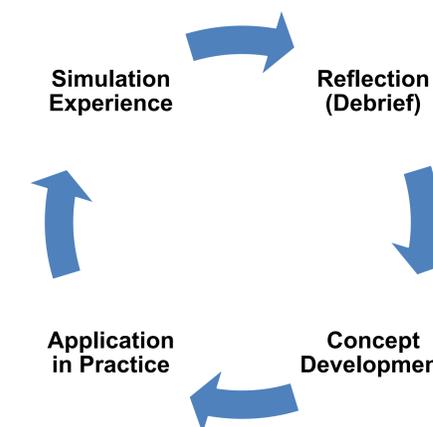
Students learn through experience and reflection.

Constructivist learning Theory

Learners build knowledge by integrating new experiences.

Competency-Based Education

Simulation allows students to demonstrate measurable clinical competencies.



CONCLUSIONS AND RECOMMENDATIONS

Simulation-based learning improves clinical competence, critical thinking, and confidence in nursing students. High-fidelity simulation provides valuable experiential learning opportunities that prepare students for complex patient care environments.

- Integrate simulation throughout nursing curricula
- Provide structured prebriefing and debriefing
- Support faculty training in simulation facilitation
- Combine simulation with clinical placements

REFERENCES

References are provided on handout.