



Evaluating Collective Competence to Promote Safe, Effective Care

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Background

- New graduate competency in clinical judgment is imperative to safe, effective nursing care.
- In practice, nurses often use clinical reasoning and judgment collaboratively to make decisions in complex patient situations.
- Collective competence, the effective achievement of a desired outcome by a health care team, is influenced by individual nurse confidence and competence.
- New graduate nurse delivery of safe, quality care requires that nursing education teach and assess both individual and collective competence in clinical reasoning and judgment in practice-relevant situations.

Purpose

- This study explored facilitators and barriers to collective competence and the relationship among individual student confidence, perceived clinical judgment competence, and collective competence of student teams in senior baccalaureate-level pre-licensure nursing students during a team-based simulation.

Methods

- Teams of 5-6 students working together for the first time participated in a team-based simulation structured as an escape room.
- A mixed methods pre- and post-test design using a 15-item pre-survey and a 40-item post-survey based on the National Council of State Boards of Nursing's Clinical Judgment Measurement Model (NCSBN-CJMM) assessed individual student confidence before and after a team-based simulation and perceptions of clinical judgment competence after the simulation.
- Facilitators and barriers to collective competence and student perception of learning were assessed through open ended survey items and researcher observation of team dynamics and task completion in video recordings of the simulations.

Limitations

- Study included students from only one school, but builds on outcomes from a previous pilot study.
- Data collection limitations prevented connection of individual confidence and perceived clinical judgment competence with collective competence of the group.
- Variation in prompts given by simulation facilitators may have impacted progression through the simulation.
- Gamification element of the simulation may have an undetermined impact on the overall understanding of collective competence.

Eighteen of 24 student teams successfully completed the simulation and “escaped” the simulation.



FACILITATORS AND BARRIERS

Researcher identified:

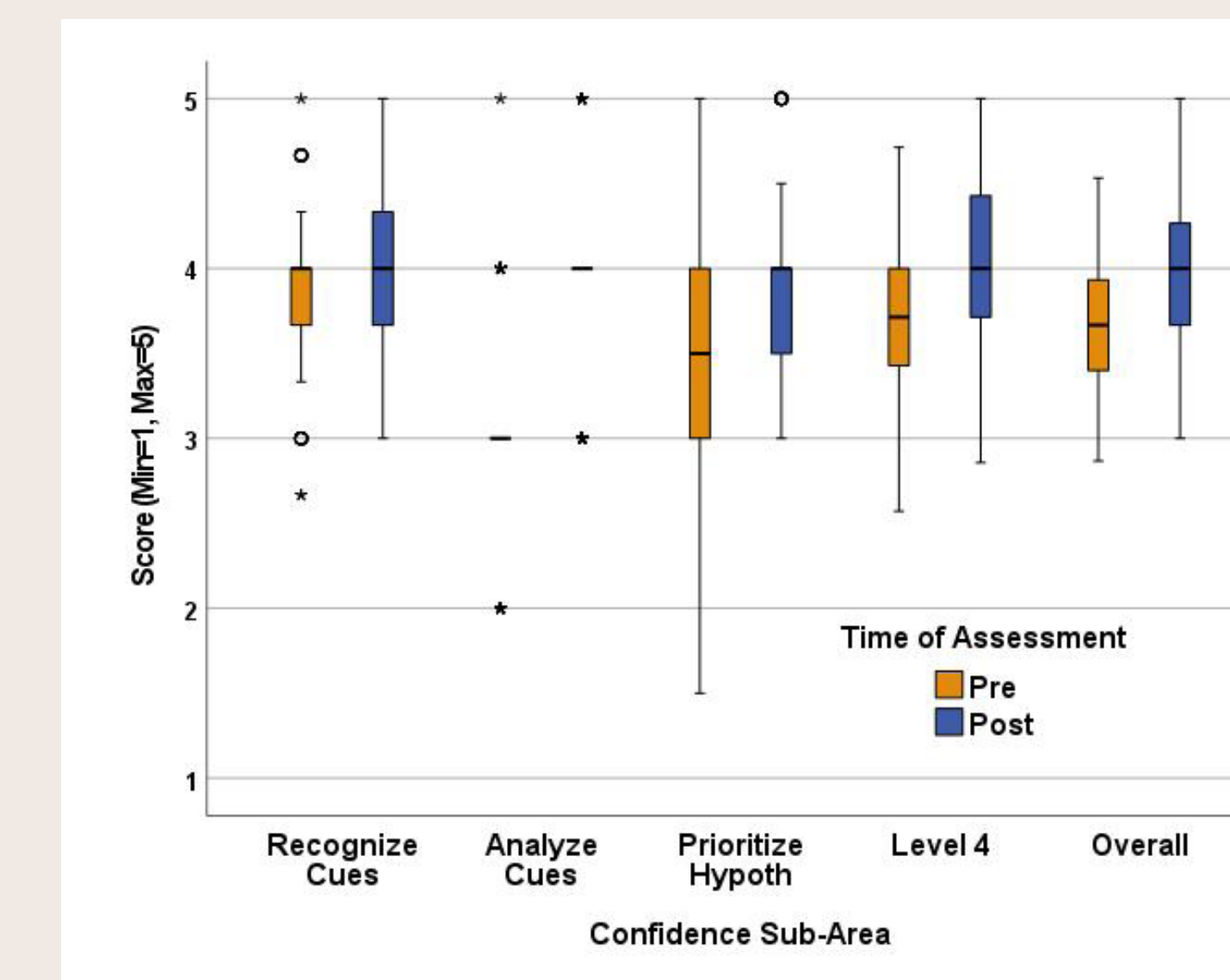
- Facilitators: frequent closed loop communication, thinking out loud, clear role delineation, prompts by the simulation facilitator, attention to clues, encouragement by group members
- Barriers: lack of student practice with psychomotor skills, use of inaccurate assessment technique, limited or no reassessment, lack of communication, lack of role delineation, students questioning appropriate orders or not trusting their knowledge, limited student understanding of the nursing scope of practice (hesitant to take actions within scope and also tried to take actions outside of scope), need for redirection when clues found out of pre-determined order, and poor understanding of game/locks

Participant identified:

- Facilitators: role delineation (especially identifying team leader)
- Barriers: lack of role clarity; poor communication; poor understanding of escape room concept; unfamiliarity with team members; team size was too large

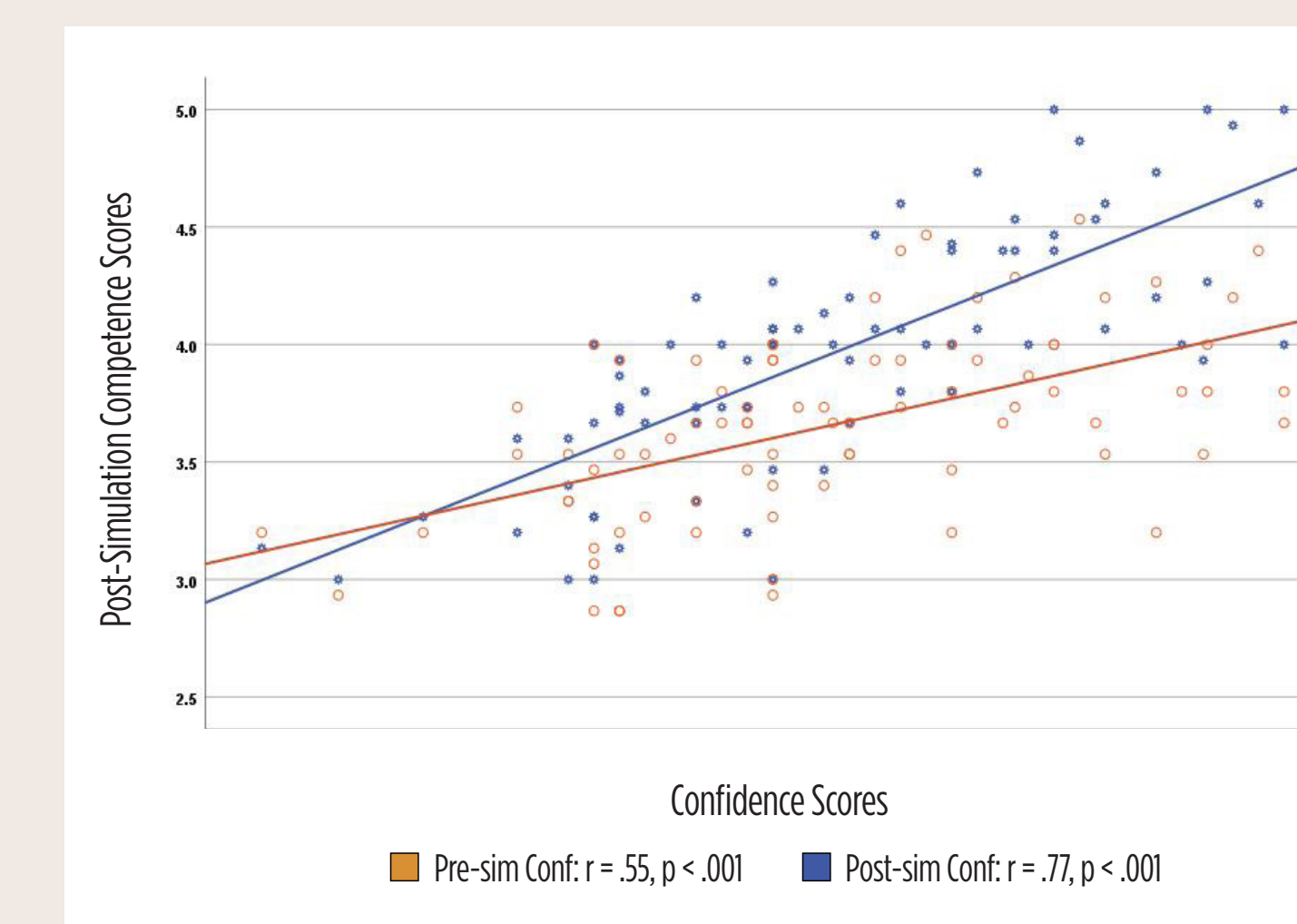
Results

CHANGE IN CONFIDENCE



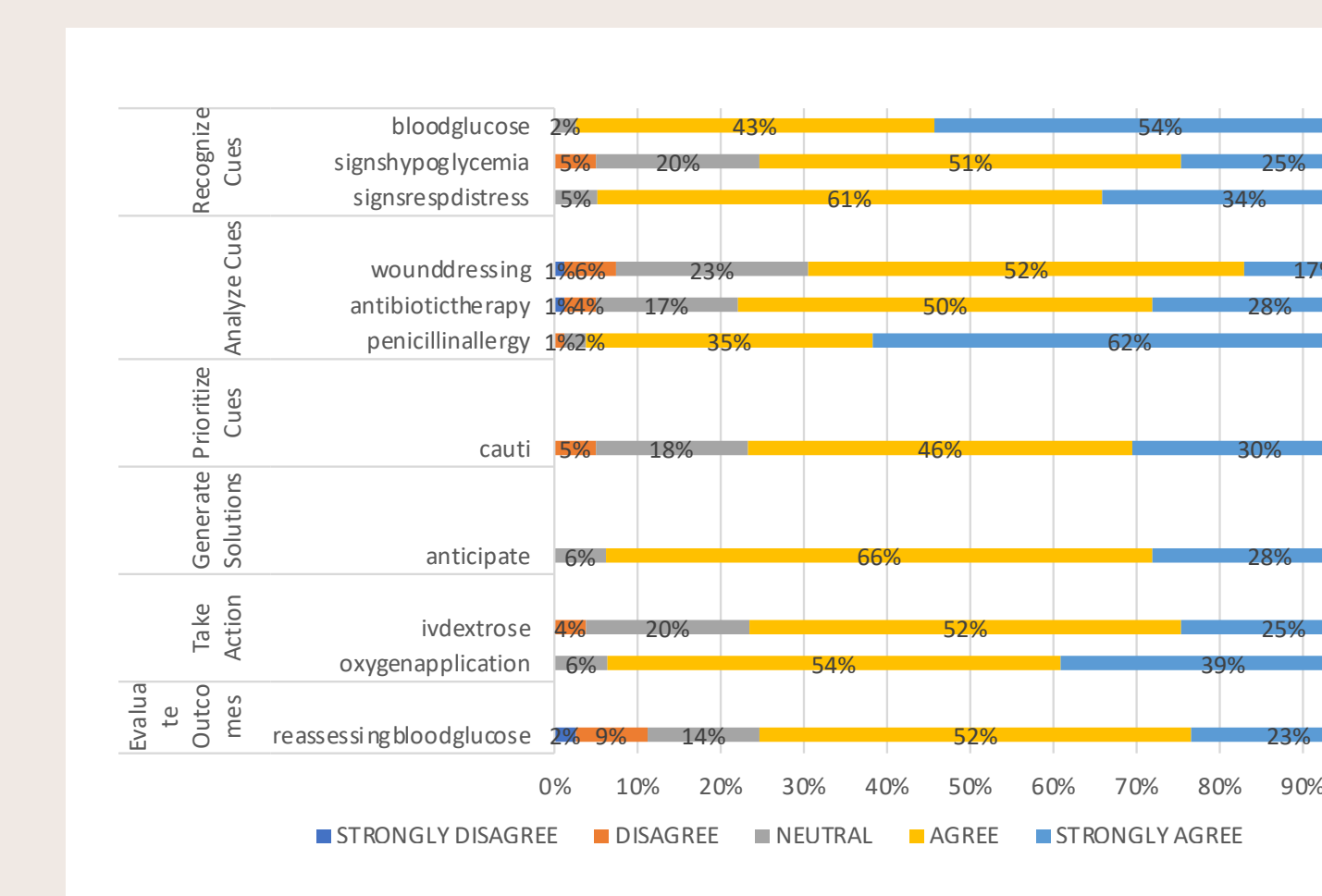
- Participants' mean overall confidence scores increased from pre-simulation (M = 3.7, SD = 0.4) to post-simulation (M = 4.0, SD = 0.5)
- Statistically significant increases in confidence were observed in overall scores, as well as each of the sub-areas (p < .001).

CORRELATIONS OF CONFIDENCE WITH COMPETENCE



- Strong correlations were identified between confidence and perceived competence scores

PERCEIVED CLINICAL JUDGMENT COMPETENCE



- Highest in recognizing signs and symptoms of hypoglycemia and respiratory distress and applying oxygen.
- Lowest in recognizing the need for blood glucose reassessment and need for a wound dressing change.

Conclusions

- Assessment of individual confidence and perceived competence in clinical judgment as identified by the NCSBN CJMM is feasible during team-based simulation.
- Results may guide academic and practice educators' assessment of collective competence in teams of students and practicing nurses.
- Additional research is needed to determine how individual confidence and perceived competence influences the collective competence of a team.

Implications for Education and Practice

- Multiple practice opportunities for both discrete psychomotor skills and integrated clinical judgment skills are needed to develop individual confidence and competence in clinical judgment.
- High-quality simulation provides the safe environment and contextual reality necessary for student development of the individual and collective clinical judgment essential for safe nursing practice.

References



Please scan for references and author contact information

