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Assessing Small Group Simulated Patient Experiences on Students' Perceptions of Learning and Confidence.

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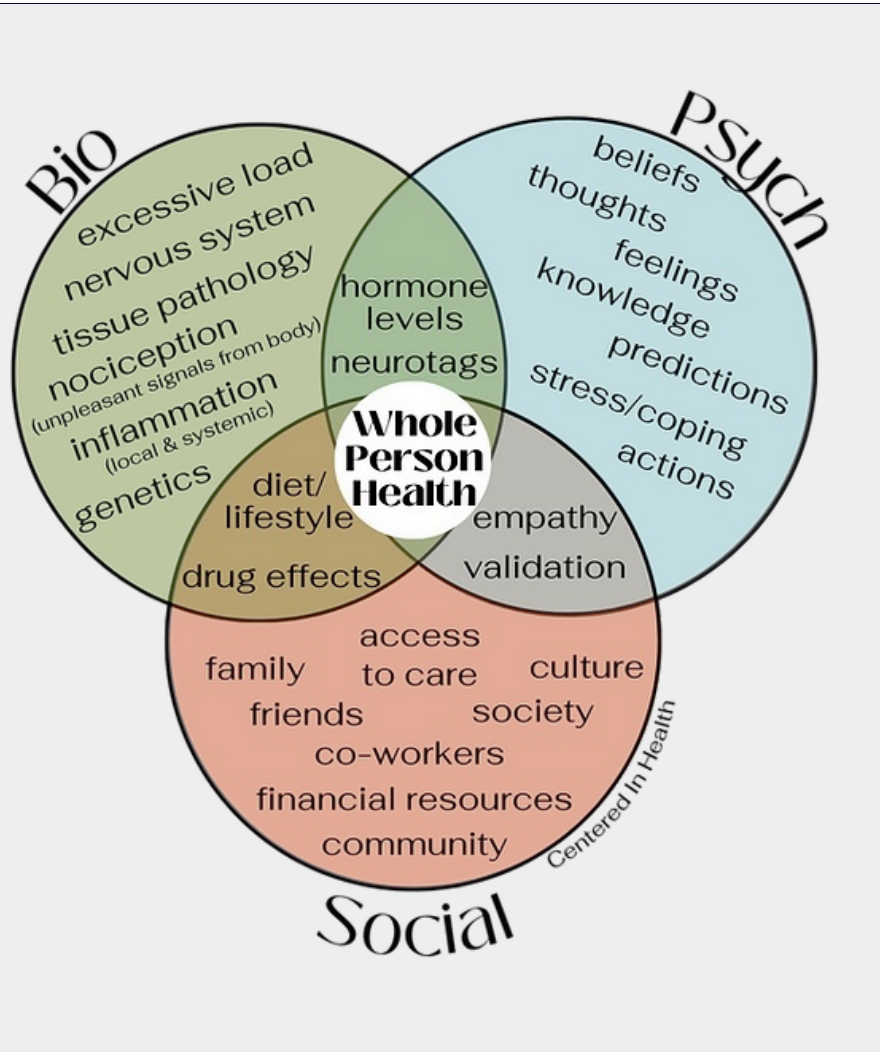
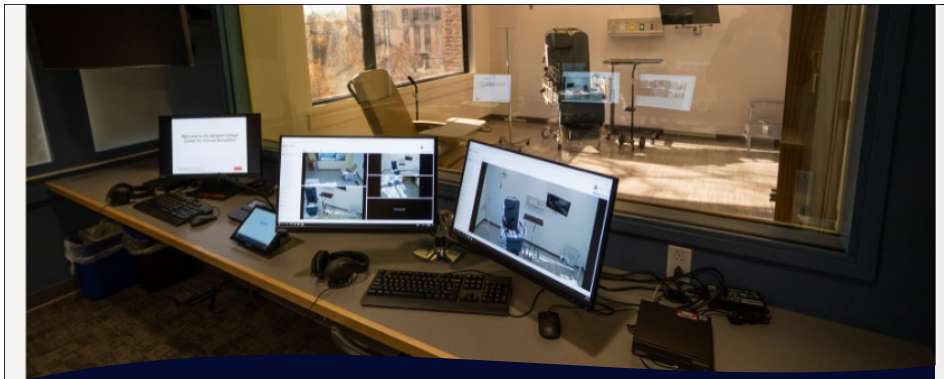
BE INSPIRED BY NEW IDEAS.

Background: Basis for project

- PT's must adapt to address the needs of society by providing high-quality treatment and education to manage chronic conditions effectively.
- Research emphasizes the importance of training health care providers in communication approaches that embrace a biopsychosocial model and psychologically-informed care.
- Evidence suggests that students lack confidence in utilizing these techniques
- Traditional lectures may not prepare students adequately for real-world clinical practice

The Biopsychosocial Model





Simulation-Based Education (SBE)

- Simulation has become a common means of enhancing experiential learning and clinical competence in health care education.
- SBE may bridge the gap between didactic settings and real-world clinical practice.
- Standards of Best Practice include use of prebrief and debrief before and after the simulation experience.
- Pre-brief: identify roles, learning objectives, experience
- Debrief: discuss emotions, thought process in the moment, conclusions, themes, how to move forward.

Our project: A Group Simulation-Based Learning Experience

- **Purpose**:
  - Assess students' perceptions of group SBE in delivering psychologically informed education interventions
  - Assess differences in learning experiences based on role
- Students self-selected groups/roles
  - "active participant" - interact with standardized patient
  - "learner observer" – provide specific feedback on application of techniques applied during session and overall peer performance
- Students were provided patient case to review/prepare
- Experience:
  - 15 minutes of pre-brief (as a whole class)
  - 20 minutes of simulation
  - 40 minutes of structured debriefing session post-simulation with instructor

Cases

Case 1: Middle aged or older adult SP, hospital day 2 after a noncomplicated STEMI.	Case 2: Young adult SP, marathoner with knee pain.
• Objectives: evaluate readiness to change, use educational theory and behavior change techniques to provide patient education on lifestyle modifications i.e exercise, smoking cessation.	• Objectives: evaluate readiness to change, use educational theory and behavior change techniques to address patients' values and beliefs around exercise and pain.

Methods

Please rate your level of confidence in the following areas:

	None at all	A little	A moderate amount	A lot	A great deal
Initiating a conversation with a patient regarding their concerns.	○	○	○	○	○
Discovering a patients primary concerns.	○	○	○	○	○
Establishing rapport with a patient	○	○	○	○	○
Coping with a situation where a patient disagrees with your recommendations.	○	○	○	○	○
Coping with a situation where a patient responds emotionally.	○	○	○	○	○
Identifying when to using motivational interviewing techniques.	○	○	○	○	○
Identifying when to use cognitive behavioral techniques.	○	○	○	○	○

Please rate your knowledge in the following domains.

	Not knowledgeable at all	Slightly knowledgeable	Moderately knowledgeable	Very knowledgeable	Extremely knowledgeable
Understanding of the biopsychosocial model of care.	○	○	○	○	○
Understanding of shared decision making models and techniques.	○	○	○	○	○
Understanding of motivational theories.	○	○	○	○	○
Understanding of behavior change theories.	○	○	○	○	○
Understanding of Motivational Interviewing techniques.	○	○	○	○	○

Please rate your perceived level of competence in the following areas:

Click to write Label 1

	Extremely incompetent	Somewhat incompetent	Neither competent nor incompetent	Somewhat competent	Extremely competent
Practicing with a biopsychosocial approach.	○	○	○	○	○
Using shared decision making techniques.	○	○	○	○	○
Using Motivational Interviewing strategies.	○	○	○	○	○
Using cognitive behavior techniques.	○	○	○	○	○

Results

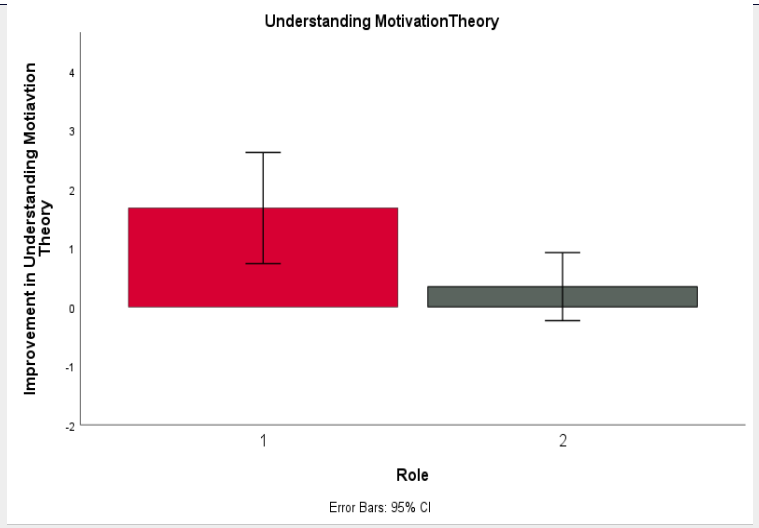
53 students completed the pre and post simulation surveys.

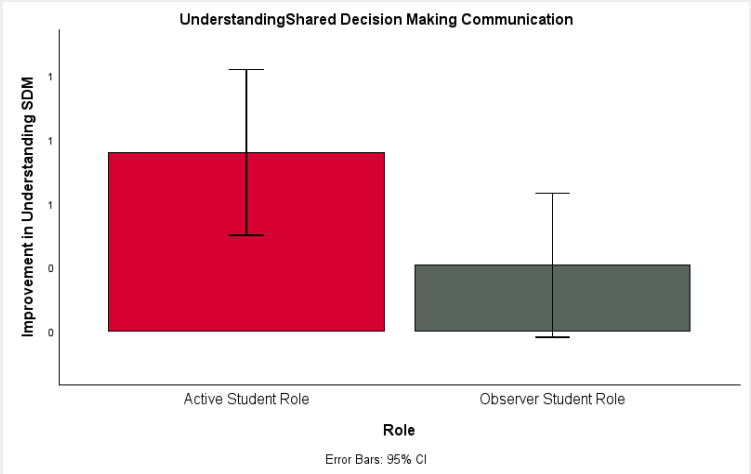
No significant differences between groups on all pre-test items.

All students reported significant improvement in their understanding, confidence, and competence after the simulated learning activity.

Results

- Effect size ranged .638- 1.01
- Smallest for understanding the biopsychosocial approach to care
- Largest for understanding motivational interviewing techniques.
- Differences between active role vs observer role.
  - Limited differences in improvement observed between active student and observer students across most domains.





Students Perspective

"This simulation experience ***truly was a confidence booster*** for me, as it helped me realize that I do have the skills for efficient patient education."

"Overall, I thought this simulation experience was ***very helpful in tying in key concepts that we have learned across the semester*** into one coherent patient experience!

"I think ***being an active observer made me reflect*** on how I would've approached the situation as the PT. There were moments where I would have added something based on a key phrase the patient said, but I know being the PT in the moment can be overwhelming and can cause you to miss things. This is something I want to think about, and possibly find ways of practicing so that you can utilize the most impactful strategies."

"I thought the experience was helpful in pulling everything together. ***It made everything we've been talking about feel more real which made it a great opportunity to learn in real practice.*** The debrief was also helpful in brainstorming all together ways we could've done things differently to prepare for real experiences and conversations in the clinic."

Conclusion

Benefits

- Group simulation led to improved student self reported understanding, confidence, and competence in educational theory, motivational interviewing, and cognitive behavior techniques.
- Both active participants and observers found value in the experience, however most stated they would like the opportunity to participate in both roles.
- Simulation was effective at creating an authentic active learning environment for practice.

Challenges

- Logistics (scheduling, timing, class size)
- Faculty load
- Cost (SPs)

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