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The dynamics of power and psychological safety on team cohesion during interprofessional simulation-based education



VCU HealthTM
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Introduction

- Healthcare team functioning requires coordination and collaboration between multiple practitioners towards a common goal of delivering safe and quality patient care.¹
- Negative relationships amongst providers can affect teams in clinical settings, which in turn can undermine patient safety.²
- Psychological safety is the belief that one can express themselves without the fear of negative consequences.³
- Power distance refers to inequity existing between high and low status individuals.⁴
- Sources of poor team cohesion can be rooted in unequal distributions of power and the inability to express oneself without fear.^{3,5}

As illustrated in Figure 1, team cohesion is hypothesized to increase as power distance decreases, both directly and indirectly through psychological safety

Figure 1. Mediation Model



ICCS Course

- The Interprofessional Critical Care Simulations (ICCS) aim to enhance competency in interprofessional practice and critical care by providing students an opportunity to evaluate and manage acutely ill patients in a collaborative, simulated environment.
- Emphasis: team communication while minimizing profession-specific responsibilities.
- Three, two-hour simulation workshops over a two-week period.
- Simulation centers in nursing and medicine schools.
- Senior nursing students and fourth-year medical students.
- Interprofessional teams of ~6-7 members.
- Four faculty facilitators (two nurses and two physicians); 1 per team

Methods

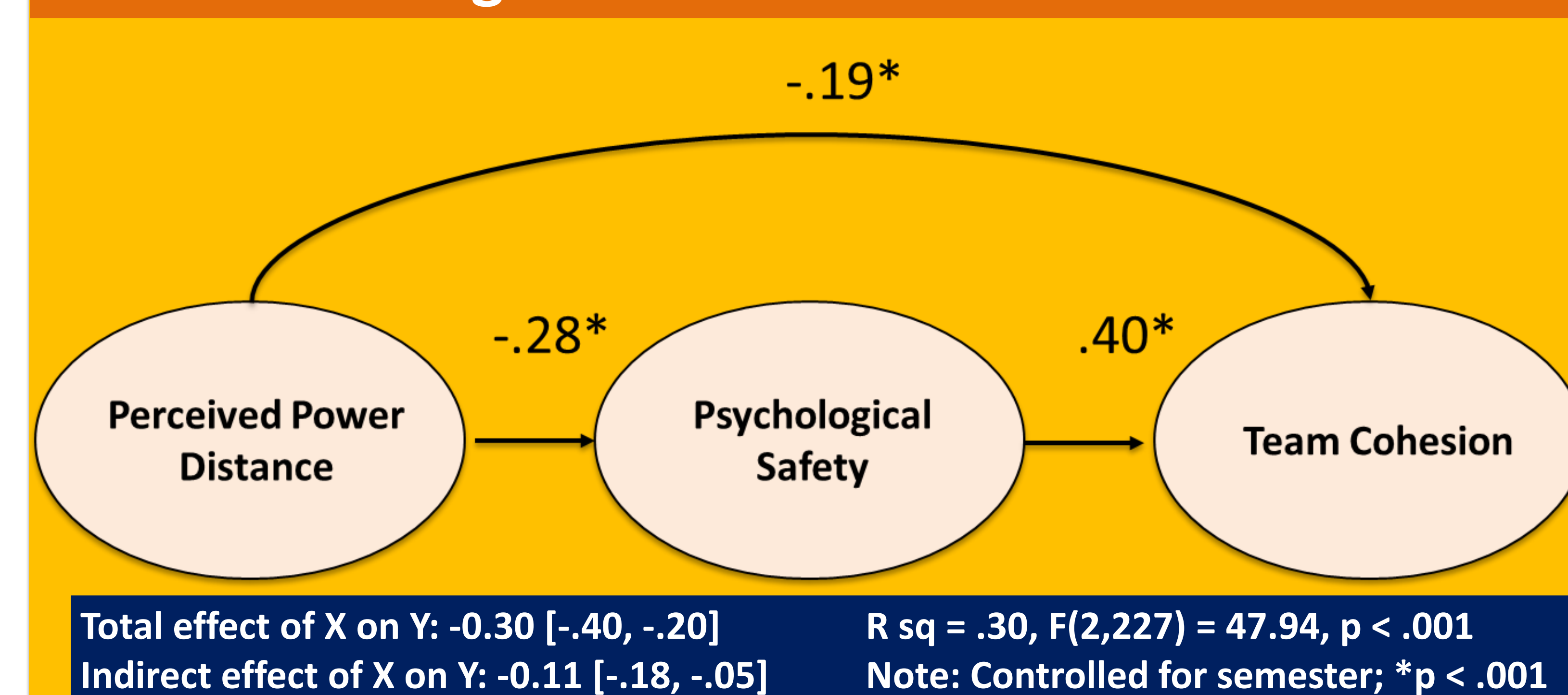
- 2015-16 academic year
- Paper surveys completed after the last simulation session
- Three measures: team cohesion⁶, perceived power distance⁷, and psychological safety³
- All items with five point Likert scale (1=strongly disagree, 5=strongly agree).
- Statistical analyses via 1000 bootstrapping samples and controlling for semester through SPSS Version 23 (Armonk, NY) Process Macro, model 4⁸



Results

- 243 (76% response rate) post-ICCS responses
- Path coefficients for the mediation analyses are displayed in Figure 2
- No significant group differences in perceived power distance, psychological safety, or cohesion between nursing and medical students

Figure 2. Mediation Results



KEY FINDINGS

Unequal distributions in power between medical and nursing students affects perceived team cohesion both directly and indirectly through psychological safety

Discussion

Course facilitators can:

- shape team interactions so power is equally distributed amongst medical and nursing students
- support environments where students feel safe to speak up



Study Limitations:

- Potential for social desirability bias with self report survey methodology
- Link between team cohesion and team performance was not studied
- Responses were clustered within teams but not statistically accounted for
- Cannot infer causation

Conclusions

- Creating a safe space where learners clearly understand their roles and responsibilities on an interprofessional team will impact the affective nature of team dynamics.
- Future research can focus on the impact of facilitator leadership on team dynamics and influences of context and culture when transitioning to the clinical learning environment.

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