

# Socialising the Next-Gen Health Professional: A pilot study

G. Kruger<sup>1</sup>, L. Reynolds<sup>2,3</sup>, K. Ireland<sup>1</sup>, S. Philip<sup>1</sup>, K. Mumford<sup>1</sup>, A. Osman<sup>1</sup>, J. Kirwan<sup>4</sup>,  
M. Poulton<sup>5</sup>, J. Van Dam<sup>4</sup>, M. Jiwa<sup>6</sup> & K. Edward<sup>1\*</sup>

<sup>1</sup>College of Sport, Health and Engineering, Victoria University, St Albans, Victoria, Australia  
<sup>2</sup>Australian Catholic University, Melbourne, Victoria, <sup>3</sup>Safer Care Victoria, Melbourne, Australia, <sup>4</sup>Mercy Health, Australia, <sup>5</sup>University of Melbourne, Australia, <sup>6</sup>University of Notre Dame, Australia.

## BACKGROUND

Interprofessional Education (IPE) is associated with developing collaborative team behaviours in healthcare students to enhance their ability to address the complex needs of health services users<sup>1</sup>.

Higher education institutions have responded by providing IPE subjects; however, there is limited evidence of IPE being delivered in a practical, contemporary manner using simulation and standardised patients<sup>2</sup>.

Although the literature is replete with examples of interprofessional educational programs however, few IPE programs are described as using simulation with real-world case scenarios and standardised patients<sup>3</sup>.

## RESEARCH QUESTION & AIM

The research question for this study is:  
Does IPE using a simulation activity improve attitudes, values and beliefs of collaborating in practice for health professional students in nursing, midwifery, paramedicine and medicine.

The aim for this study is:  
To examine the attitudes, values and beliefs regarding health professional students before and after an IPE simulation activity for undergraduate students in the professions of nursing, midwifery, paramedicine and medicine.

## PROJECT DESIGN | DATA COLLECTION | RESULTS

12 students from nursing, midwifery, paramedicine and medicine undertook an 8 scene immersive simulation of a post-partum patient presenting unwell.

A mixed methods design using two validated self-report instruments: the web-based Student Perceptions of Interprofessional Clinical Education Revised (SPICE-R) 10-item scale<sup>5</sup>, and the Interprofessional Socialization and Valuing Scale (ISVS-21) and body language analysis<sup>4</sup>.

Active participation, role play with the simulated patient was then observed through live streaming and video recording.

Qualitative data were collected during the simulations where the interprofessional collaboration and body language of the participants was evaluated<sup>4</sup>. The analysis offers evidence of students' non-verbal behaviour as a sign of their increased engagement with other professional groups during the exercise.

Scene	Midwife	Nurse	Paramedic	Doctor
Scene 1: Postnatal home visit	11		11	
Scene 2: Ambulance Transfer		11		11
Triage		12	12	12
Resuscitation bay	12			12
Postnatal ward review			12	
Postnatal discharge meeting	12	12		12
Scene 7: Discharge from ward	12	12	12	

Table 1: Non-verbal scores summary

Scores demonstrated a high level of engagement with the interdisciplinary team as students learnt about their roles with regard to each chosen profession. Learnings reflect the complexity of designing, implementing and analysing interprofessional simulated learning scenarios in undergraduate health curricula.

Pre and post test scores related to interdisciplinary practice improved across the factors of teamwork, collaborative practice and patient outcomes related to collaborative practice with the greatest improvement noted in post-test scores was in the factor of collaborative practice.

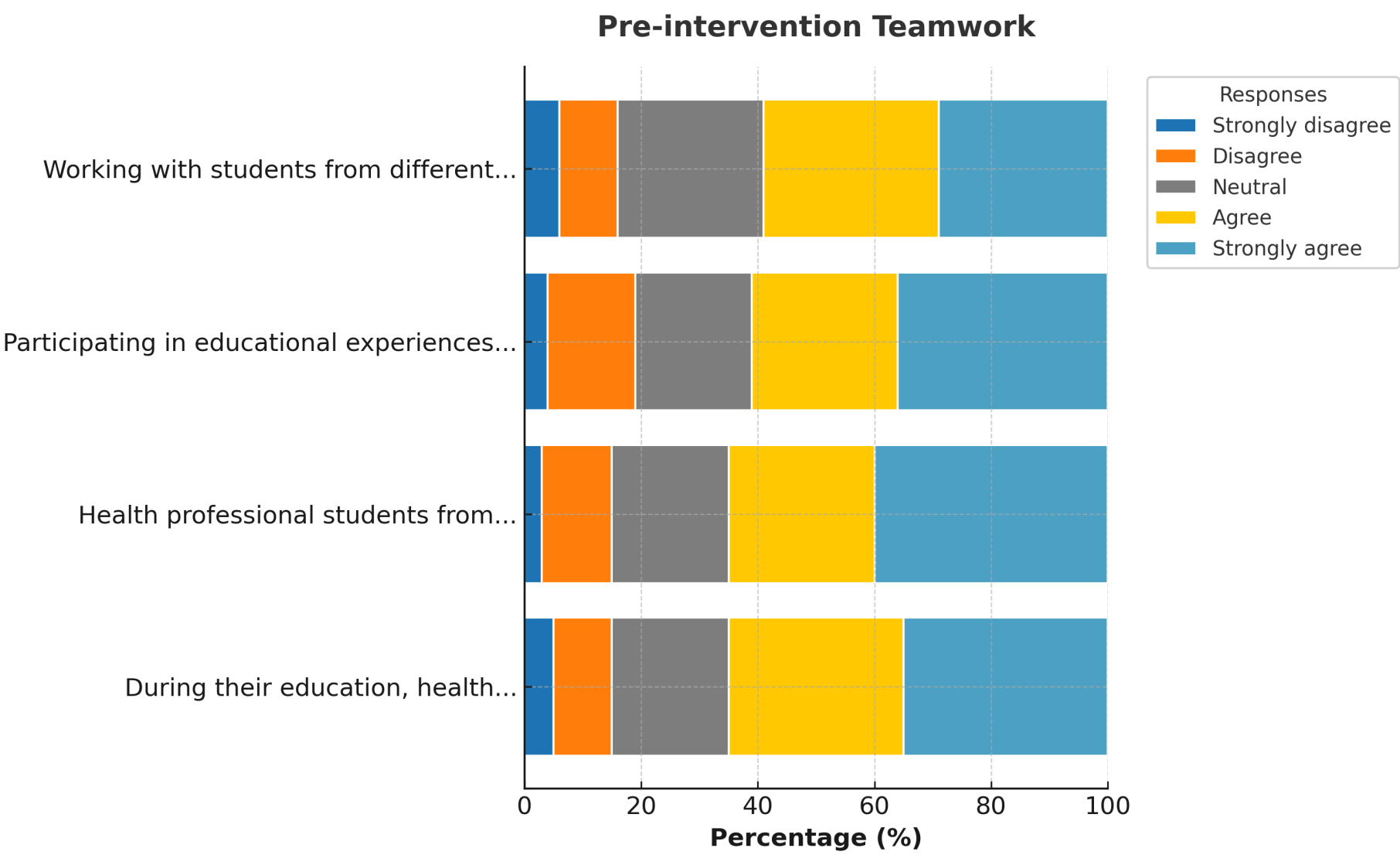


Figure 1: Pre-intervention teamwork scores

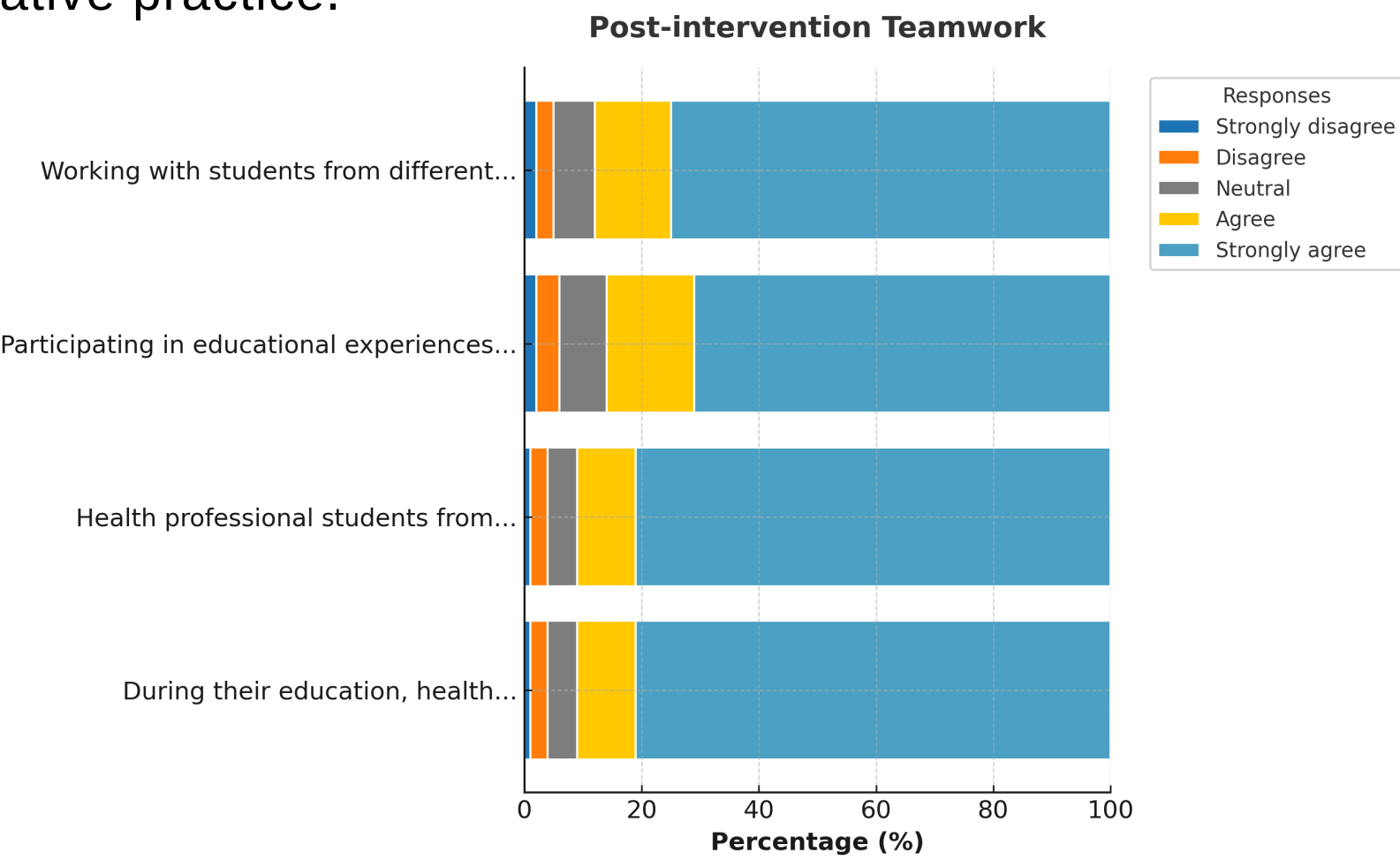


Figure 2: Post-intervention teamwork scores

## STUDENT FEEDBACK

"I felt well respected by all other participants regardless of their profession. I felt a greater understanding for where the scope of practice and different clinical exposure can bring different ideas to the plan for care"

Third year BN/BM student

"The use of immersive simulated scenarios in different clinical settings... created an opportunity to understand better the scope of practice of our allies in healthcare. This improved understanding of the roles of nurses and paramedics has allowed me to identify challenges patients face throughout the continuum of care and work closely with these colleagues"

Fourth-year MD student

## COLLABORATIVE PARTNERS

The authors wish to acknowledge the passing of their esteemed colleague, friend and mentor Professor Karen-leigh Edward, May 2024. Professor Edward showed true collaborative leadership in the conceptualisation, development of the research outline and data collection which the authors are grateful to have shared.

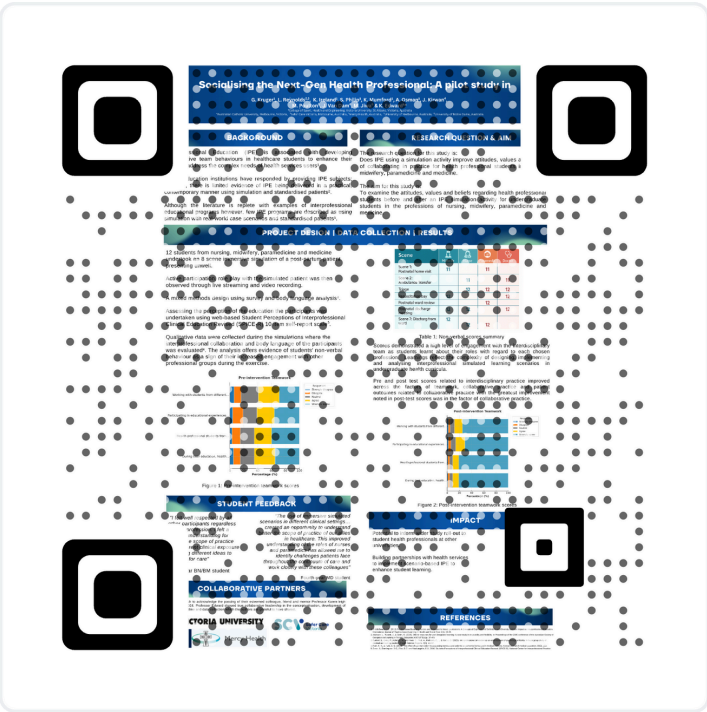


## IMPACT

Authentic learning environments allow for students to develop professional practices in preparation for their future workplaces upon graduation.

Capacity and capability of IPE ensures safe clinical practice and communication.

Building partnerships with health services to implement scenario-based IPE to enhance student learning at scale.



## REFERENCES

- Thistlethwaite, J.E. (2013) Practice-based Learning Across and Between the Health professions: A Conceptual Exploration of Definitions and Diversity and their Impact on Interprofessional Education. International Journal of Practice-based Learning in Health and Social Care 1(1), 15-28.
- Atkinson, L., Rizzetti, J., & Smith, S. (2005). Online resources for work integrated learning: A case study in re-usability and flexibility. In Proceedings of the 2005 conference of the Australian Society of Computers in Learning in Tertiary Education (ASCILITE) (pp. 37-45).
- Burford, B., Grieg, P., Kelleher, M., Merriman, C., Platt, A., Richards, E., ... & Vance, G. (2023). Interprofessional simulation as an enhancement of psychological fidelity: A focus group study of medical and nursing students. Health Science Reports, 6(5), e1237.
- Park, K. H., & Park, S. G. (2018). The effect of communication training using standardized patients on nonverbal behaviors in medical students. Korean journal of medical education, 30(2), 153.
- Zorek, J., Dominguez, D.G., Fike, D.C. and MacLaughlin, E.J., 2016. Students Perceptions of Interprofessional Clinical Education Revised (SPICE-R). National Center for Interprofessional Practice and