

BACKGROUND

- Interprofessional education (IPE) is crucial in improving students' teamwork and collaboration skills.
- However, it is unknown whether simply participating in IPE activities enhances students' observed teamwork or whether deliberate instruction on teamwork principles is necessary.
- Additionally, it is unclear whether providing instruction on teamwork principles, at the time of or right before an IPE interaction, can have an impact on team dynamics and performance.

STUDY OBJECTIVE

To determine whether deliberate instruction on teamwork prior to an IPE activity can enhance observed and self-reported teamwork.

METHODS

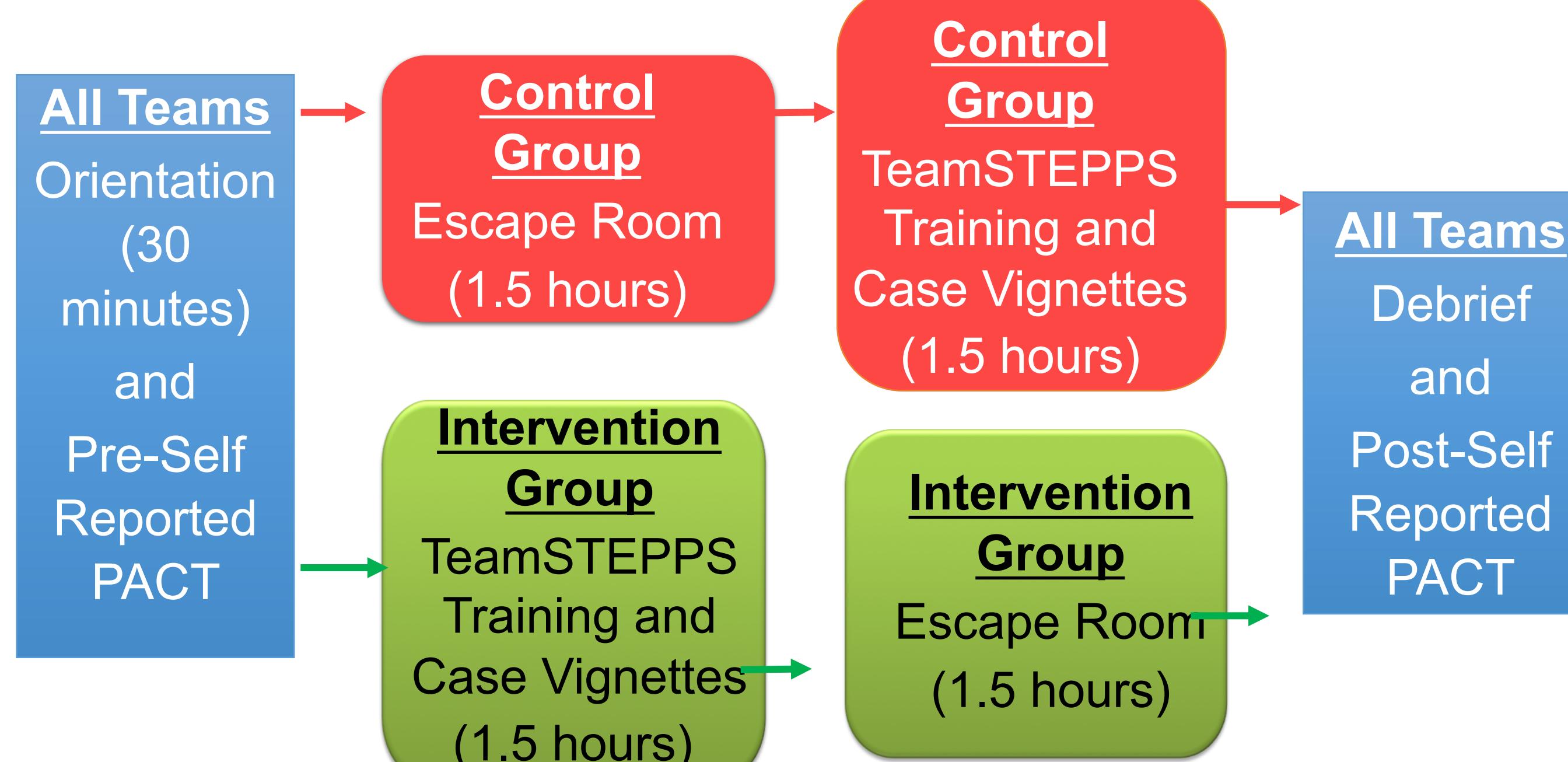
STUDY POPULATION (N=115)

- ✓ Eighty-eight physician assistant (PA) students and 27 pharmacy students participated in this study.
- ✓ Students were divided into teams of 3 PA and 1 pharmacy student (29 teams were created).
- ✓ Teams were randomized to a control arm (14 teams) or intervention arm (15 teams)

INTERVENTION

- ✓ Team Strategies & Tools to Enhance Performance and Patient Safety (TeamSTEPPS) was utilized for this study.
- ✓ An escape room format was chosen as it provided an opportunity to observe teamwork in action.
- ✓ The control arm started in the escape room then completed TeamSTEPPS training. In contrast, the intervention arm received the TeamSTEPPS training first and then proceeded to the escape room.
- ✓ One faculty observer was assigned to each team.

Station	Components
1	Pediatric dosing (crossword puzzle)
2	Otitis media case with standardized patient (invisible ink and Jigsaw puzzle)
3	Acute exacerbation of asthma simulation (mannequin)
4	Diabetes education (glucose meter and insulin)
5	Vaccine basics (lock box and final escape)



EVALUATION TOOLS USED

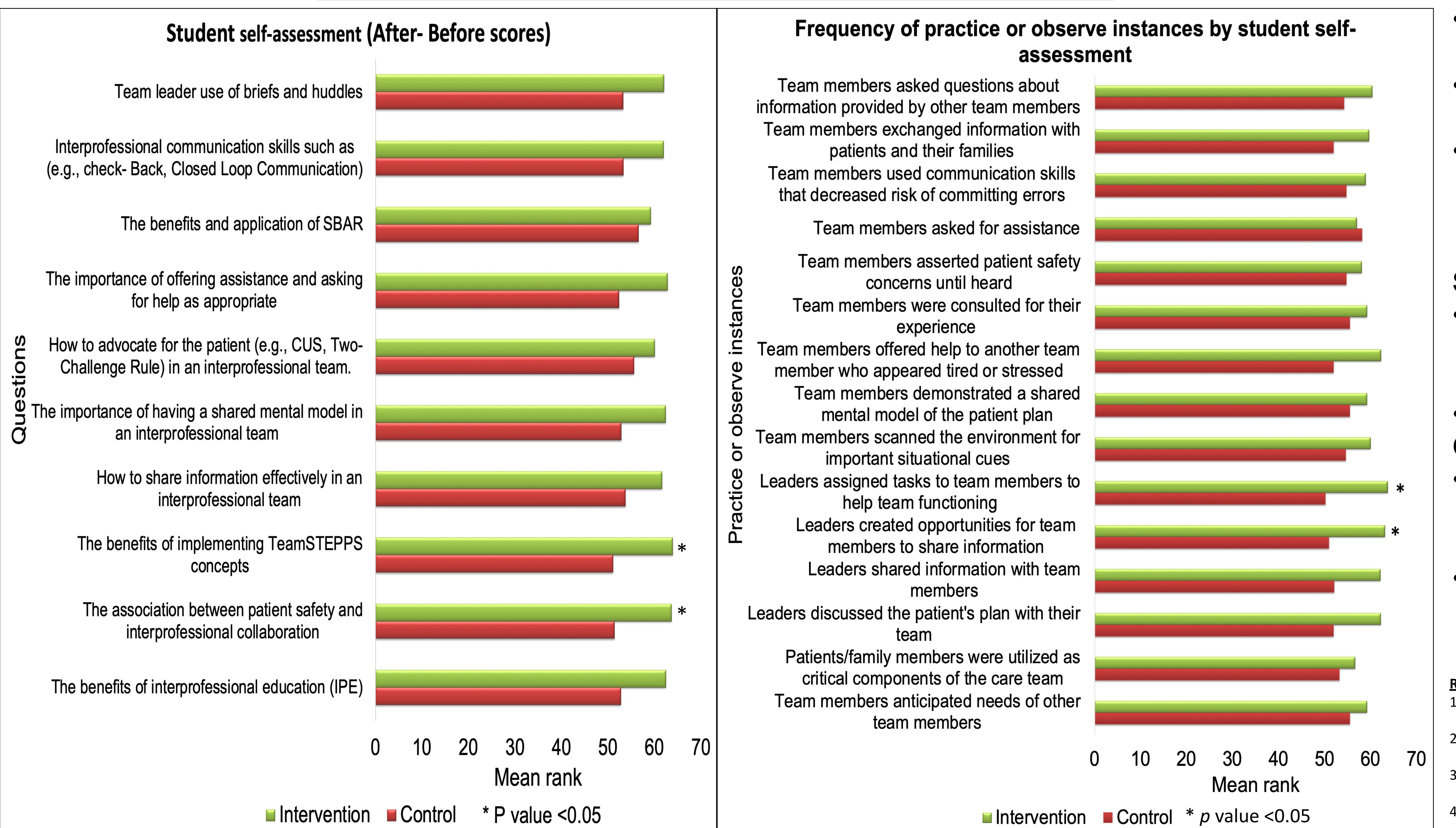
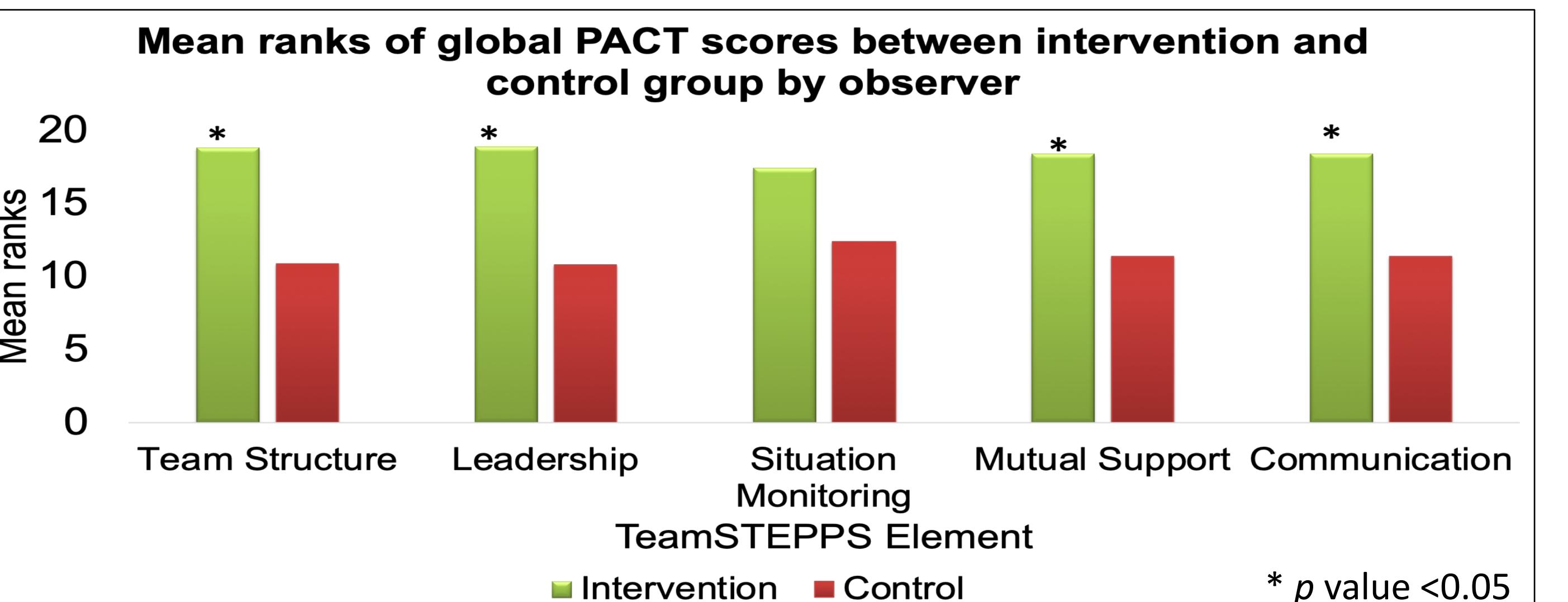
- ✓ Performance Assessment Communication and Teamwork (PACT) expert-observer form (validated)
- ✓ Abbreviated self-report PACT tool (validated)
- ✓ Self-reflection on the prompt "What were the most important takeaways from today's interprofessional activity?"

STATISTICAL METHODS

- ✓ The Mann-Whitney U test was used to analyse the differences between control and intervention groups.

Impact of Just in Time TeamSTEPPS Training on Team Performance in a Pediatric Escape Room Interprofessional Event

RESULTS



HIGHLIGHTS FROM RESULTS

The intervention group had significantly higher global PACT expert observer mean ranks in all the team behaviour, excluding situation monitoring.

On the self-reported PACT post-assessment, the intervention arm reported significantly more instances of leadership during the escape.

On the self-reflection exercise, 67.8% of students mentioned the activity highlighted the importance of teamwork principles in patient care.

On the self-reported PACT, significantly more students in the intervention arm understood the "association between patient safety and interprofessional collaboration".

CONCLUSIONS

STUDY STRENGTHS

- Escape room design allowed for observation of overt teamwork and communication skills.
- Use of faculty observers provided objective data on team dynamics and communication.
- Statistically significant movement in student attitudes on the PACT tool was encouraging and showed that the intervention group demonstrated more positive team behaviors.

STUDY LIMITATIONS

- Disproportionate numbers of PA and pharmacy students could have resulted in less participation by the pharmacy students.
- Sample size was small and from one institution.

CONCLUSION

- In this study, just-in-time TeamSTEPPS training improved observed and to a lesser extent, self-reported teamwork and communication skills.
- Reinforcing the training just before an IPE event may enhance team performance and overall student experience.

REFERENCES

1. Lockeman KS et al (2017) Outcomes of Introducing Early Learners to Interprofessional Competencies in a Classroom Setting, *Teaching and Learning in Medicine*, 29:4, 433-443
2. Chiu, C. J. (2014). Development and Validation of Performance Assessment Tools for Interprofessional Communication and Teamwork (PACT) (unpublished doctoral dissertation, University of Washington).
3. Interprofessional Education Collaborative Expert Panel. *Core Competencies for Interprofessional Collaborative Practice: 2016 update*; Interprofessional Education Collaborative: Washington, DC, USA, 2001, 2016.
4. Agency for Healthcare Research and Quality. (2006). *TeamSTEPPS™ Guide to Action: Creating a Safety Net for your Healthcare Organization*. AHRQ Publication No. 06-0020-4.