

"Dragon's Den': Gamifying Handover Skills Teaching'

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Introduction

Effective communication during patient handovers is critical to ensuring patient safety (1,2). While previous teaching methods locally have been successful, they have typically relied on substantial faculty input and resources. Drawing inspiration from contemporary approaches to small group learning, this study explores the impact of a gamified clinical simulation (3,4) —delivered through an interactive, 'Dragon's Den'-style format —on medical students' self-reported confidence and preparedness in handover and referral skills.

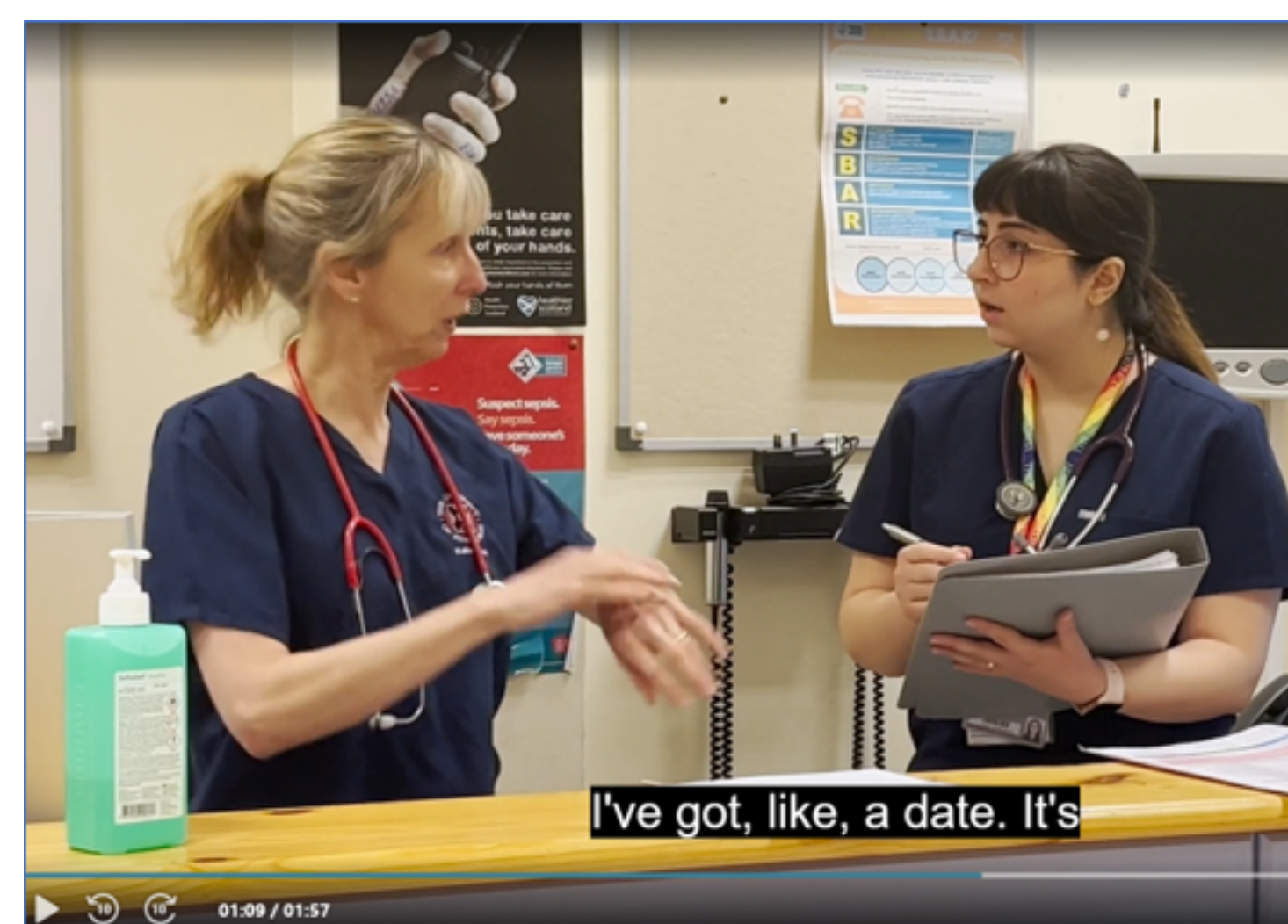
Aim

This project aimed to evaluate the impact of using gamified clinical simulation as a novel teaching approach on two self-reported student outcomes: confidence in delivering a handover and preparedness in using a standardised framework to structure a handover.

Methods

A 90-min workshop was developed incorporating a 'Dragon's Den'-inspired activity. Students assumed the role of 'investors', in teams, using a structured checklist to evaluate pre-recorded video handovers. This was followed by paired practice of referrals with fictional clinical scenarios, during which students gave and received peer feedback, using the same checklist. Paired pre- and post-session responses were collected via Wooclap to assess changes in self-reported confidence and preparedness. An anonymous free-text feedback form was also distributed following the session to gather qualitative data.

Wilcoxon's Rank Test was used to assess post-session changes between paired surveys due to lack of data normality. Free text responses in the feedback form were coded and thematically analysed using NVivo14 (version 14.23.2).



Snapshot from video material for 'Dragon's Den Activity'



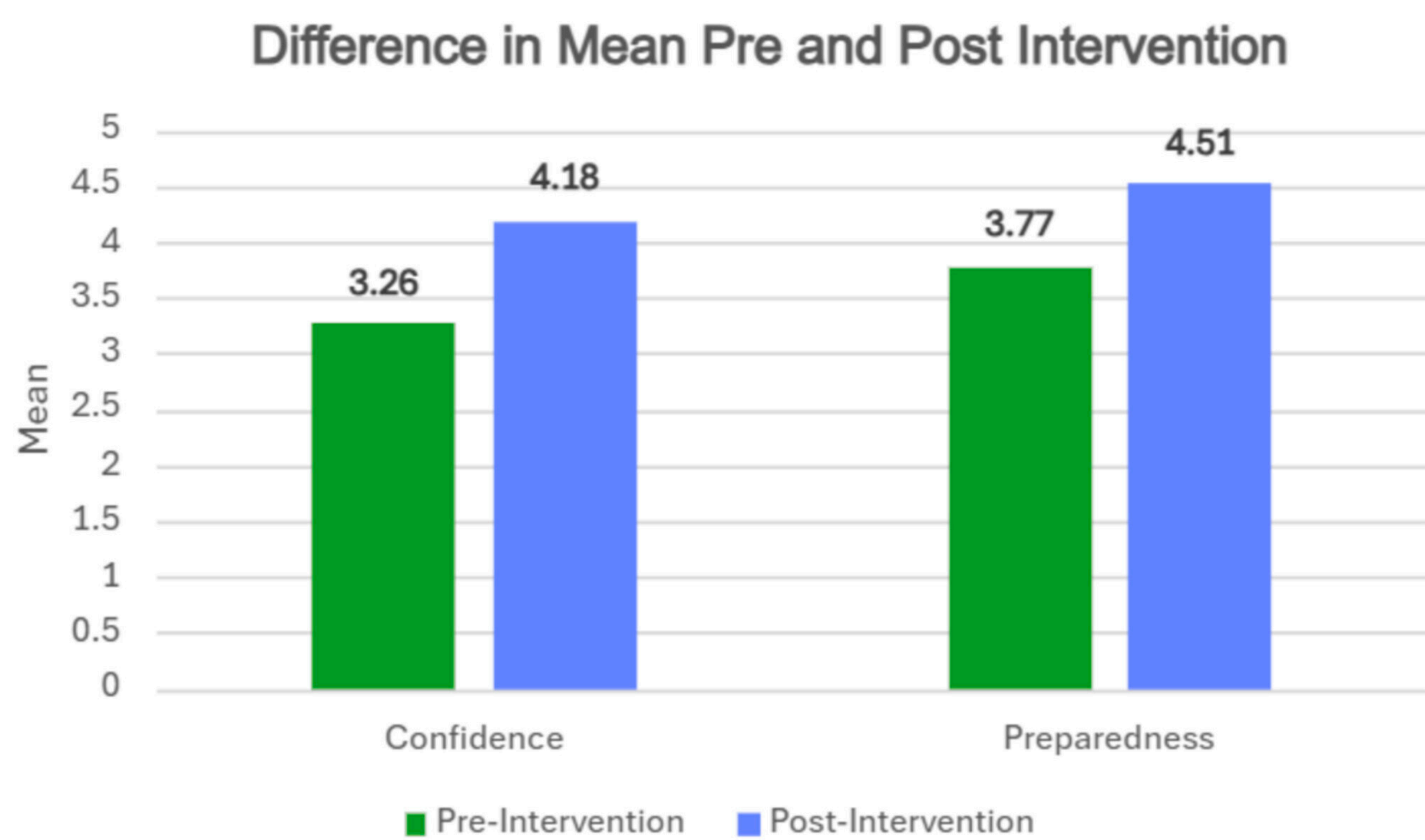
Image by PublicDomainPictures from Pixabay

SBAR-D Handover Checklist	
S Situation	<input type="checkbox"/> Reason for the call, patient ID, summary, urgency
B Background	<input type="checkbox"/> PMHx, reason for admission, current treatment, recent events, relevant investigations/results
A Assessment	<input type="checkbox"/> Impression, signs/symptoms, concerns
R Recommendation/Decision	<input type="checkbox"/> Request made, actions taken, further actions proposed

Checklist from Dragon's Den Activity

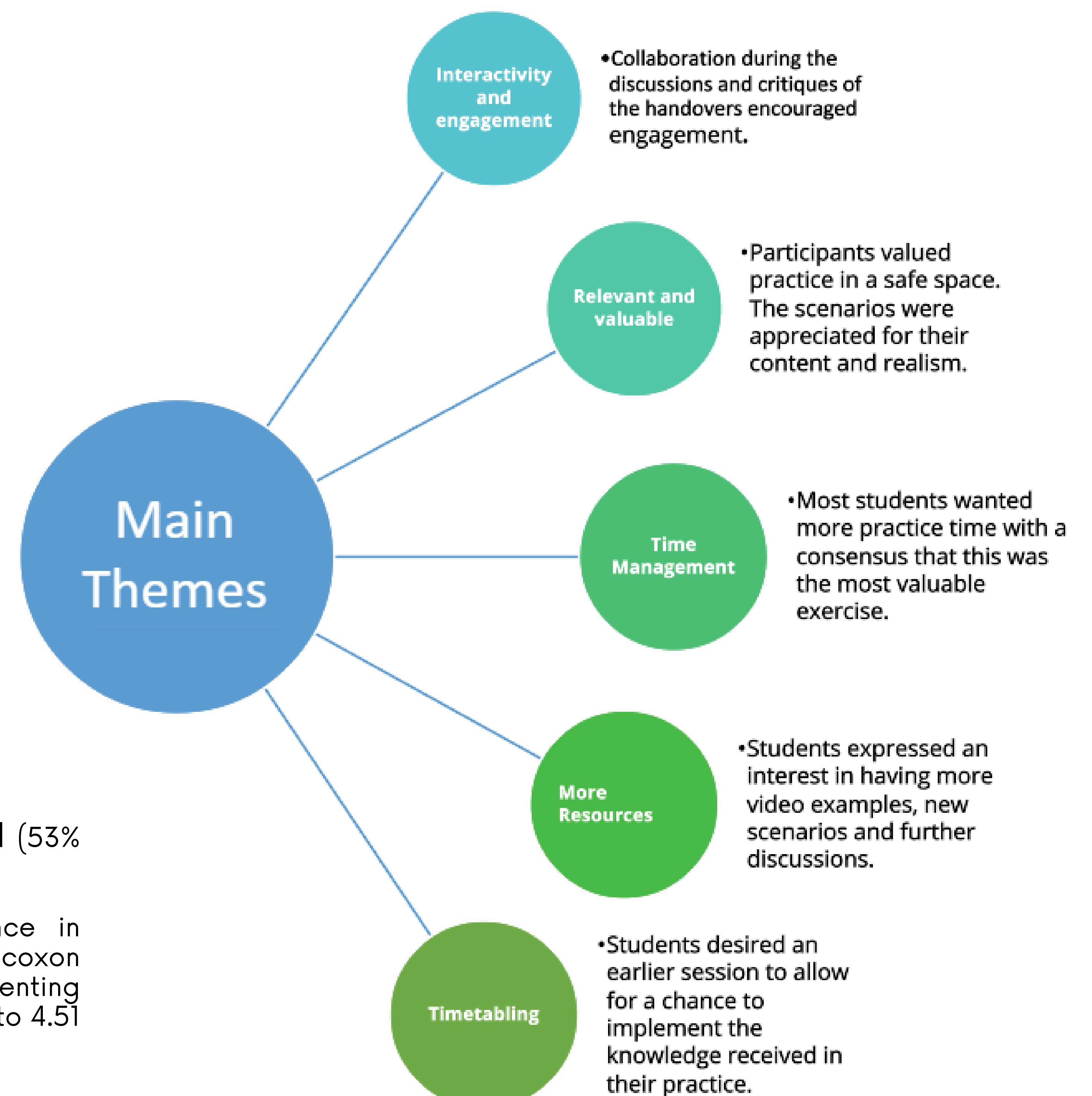
Results

There were 196 responses to the brief free-text feedback form (73% response rate). Thematic analysis of the responses generated the following themes summarised below:



Two hundred sixty-seven students attended the sessions, with 142 paired responses in total (53% response rate).

Results demonstrate statistically significant improvement ($p < 0.001$) in both confidence in delivering a handover and preparedness in using SBAR-D to structure their handover. Wilcoxon signed-rank tests demonstrate an increase in confidence from 3.26 to 4.18 ($\Delta = 0.92$), representing a 28% relative increase, with a large effect size ($r = 0.72$). Preparedness improved from 3.77 to 4.51 ($\Delta = 0.74$), representing a 20% increase, also with a large effect ($r = 0.71$).



Conclusion

This study supports the use of gamified clinical simulation as an effective method for teaching handover skills. The peer-led, experiential format lends itself well to sustainability, using a scalable, low-resource approach that aligns well with the constraints of modern medical curricula. Gamification enables the efficient delivery of high-quality teaching to large student cohorts within a compressed timeframe. Moreover, this model carries potential for broader application in wider educational settings.

References

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