

BACKGROUND

- Medical improv is an applied form of improvisational theater focusing on communication skills.
- The skills of improv are taught through a series of exercises and games which are each followed by a debrief of the activity. The debriefs connect the exercises back to communication skills that can be applied to interactions within the medical field.
- Previous studies have shown that participants have found medical improv to be fun and enjoyable. The games give the participants a chance to play in a judgement-free environment with such benefits as stress relief, self-esteem building, group bonding, and laughter.
- Positive emotions are crucial in an environment like medical school where psychological distress and a lack of well-being can be common. There is resiliency found in these positive emotions and they may serve as a valuable tool for wellness of medical students.

HYPOTHESIS

- This study aims to identify the emotional impact that participating in medical improvisation has on students.
- Participation in medical improvisation workshops can affect emotions in a positive way

METHODS

- Three workshops were developed and led during June and July 2019 for Medical College of Wisconsin (MCW) medical students.
- Each workshop was one hour long and consisted of a series of improv exercises, each followed by a short debrief session. The exercises and debrief in each workshop were adapted from Katie Watson's medical improv curriculum, Watson/Northwestern Medical Improv Curriculum plus Teacher's Guide, as well as my own experiences in improvisational theater.
- Each participant took a survey both before and after the workshop. This survey was inspired by the Positive and Negative Affect Schedule (PANAS) Questionnaire from the group Authentic Happiness at the University of Pennsylvania.
- The survey asked the participants to rate the degree to which they were feeling various positive and negative emotions in general on a 5-point Likert scale.
- The affects used in the survey are as listed: alert, apprehensive, curious, energized, excited, interested, nervous, relaxed, and stressed. These specific emotions were selected based on participant reports of emotions from a qualitative study of medical improv at MCW (unpublished data).
- The participants used anonymous identifiers to track individuals' changes in pre/post emotions, as well as to track longitudinal trends over multiple workshop sessions.
- The differences in the pre-workshop and post-workshop responses were analyzed using a one-tailed Wilcoxon signed-rank test.

RESULTS

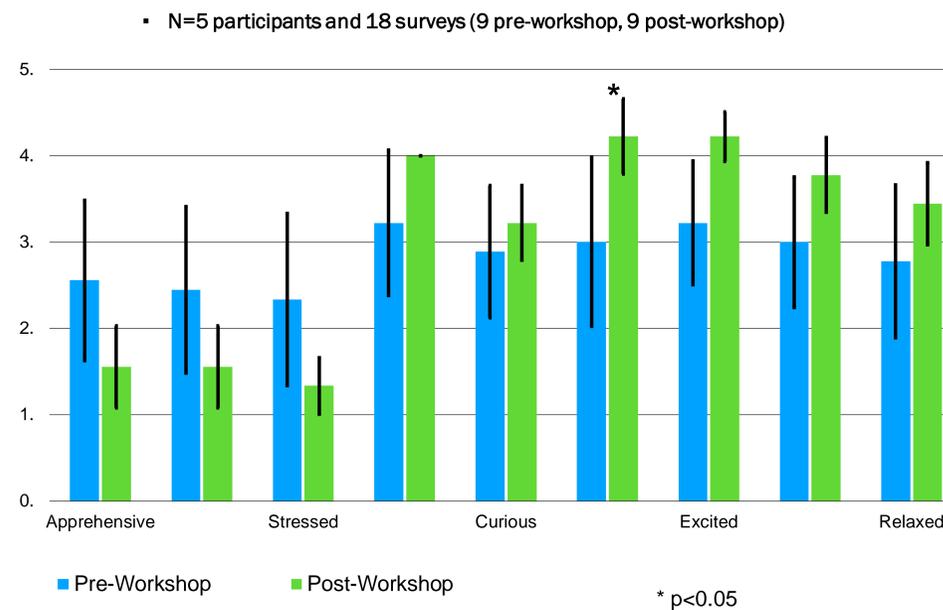


Figure 1: Average responses to the pre-session and post-session surveys with 95% confidence intervals

DISCUSSION

- Negative emotions (apprehensive, nervous, and stressed) averaged a 2.44 on the Likert-scale for the pre-workshop survey, likely due to a lack of experience with improv.
- A decrease to an average of 1.48 in these negative emotions may be due to feeling safe in the environment and achieving simply by participating in the workshop. These trends may be a representation of the safety and support present in the workshops.
- The increase in the responses to relaxed may illustrate that the participants feel more comfortable with the material and exercises than before they participated in them. One goal of the medical improv curriculum is to provide a space for medical students to make mistakes while still feeling safe.
- The average pre-workshop value of 3.22 for alert may be the participants preparing to pay attention to the skills that will be taught in the workshop.
- The increase in the alert values to 4 can be attributed to the skills involved in improv exercises. These skills, such as active listening and being present in the moment may translate to an increased sense of alertness found in the surveys.
- The increase in the values of curious and interested show that the participants start out with an interest that grows over the course of the workshop.
- The post-workshop surveys for these values show that the participants are invested in what they will be learning in the next workshop. Also, comments were made in the survey indicating that the participants were ready to try new exercises and forms of improv adding some validity to this statement.
- The increases in energized and excited values from pre- to post-workshop is a reflection of the active nature of the workshop. Most of the exercises involved include the participants on their feet, walking around, and acting out different activities.

CONCLUSIONS

- A one-hour medical improv workshop shows the trends of increasing positive affects and decreasing negative affects immediately after participating in the workshop
- As medical improv has already been shown to be an effective method to teach communication skills, this study suggests that there may be the added benefit of simultaneously promoting wellness

LIMITATIONS

- The small sample size is a limiting factor in the application and processing of this data.
- There are many outside influences besides the medical improv workshop that can effect a person's affect responses listed on the survey.
- The survey used in the survey is based off of the PANAS Questionnaire but it has not itself been validated.

NEXT STEPS

- Continue refining the survey tools used in this workshop to better address other factors of wellbeing.
- Continue to lead medical improv workshops for medical students to increase the power for statistical analysis.
- Studying longitudinal trends of the affects for those students who are involved in multiple workshops over time.