

# Effects of interprofessional mass casualty incident simulation on role perception and communication between medical, physician assistant, and nursing students

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BRODY SCHOOL OF MEDICINE  
8<sup>th</sup> Annual Medical Education Day



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## ■ The Issue

- During the didactic portion of health professional schools, students report:
  - Little opportunity to experience their *role* in the healthcare team
  - Little opportunity to practice *communication* in the healthcare team
  - Lack of confidence in *applying* themselves in their future role

## ■ The Solution

- A voluntary, half-day, interprofessional Mass Casualty Incident (MCI) simulation



# I.T.E.A.M. Day

Interprofessional Triage, Emergency Assessment, and Management

■ Saturday, Nov 12th

■ Personnel

■ Faculty: 14

■ Participants: 36

■ 18 Medical Students

■ 10 PA Students

■ 8 Nursing students

■ Volunteers: 6

■ Standardized Patients: 24

■ 6 skill stations, 1 mass causality scenario

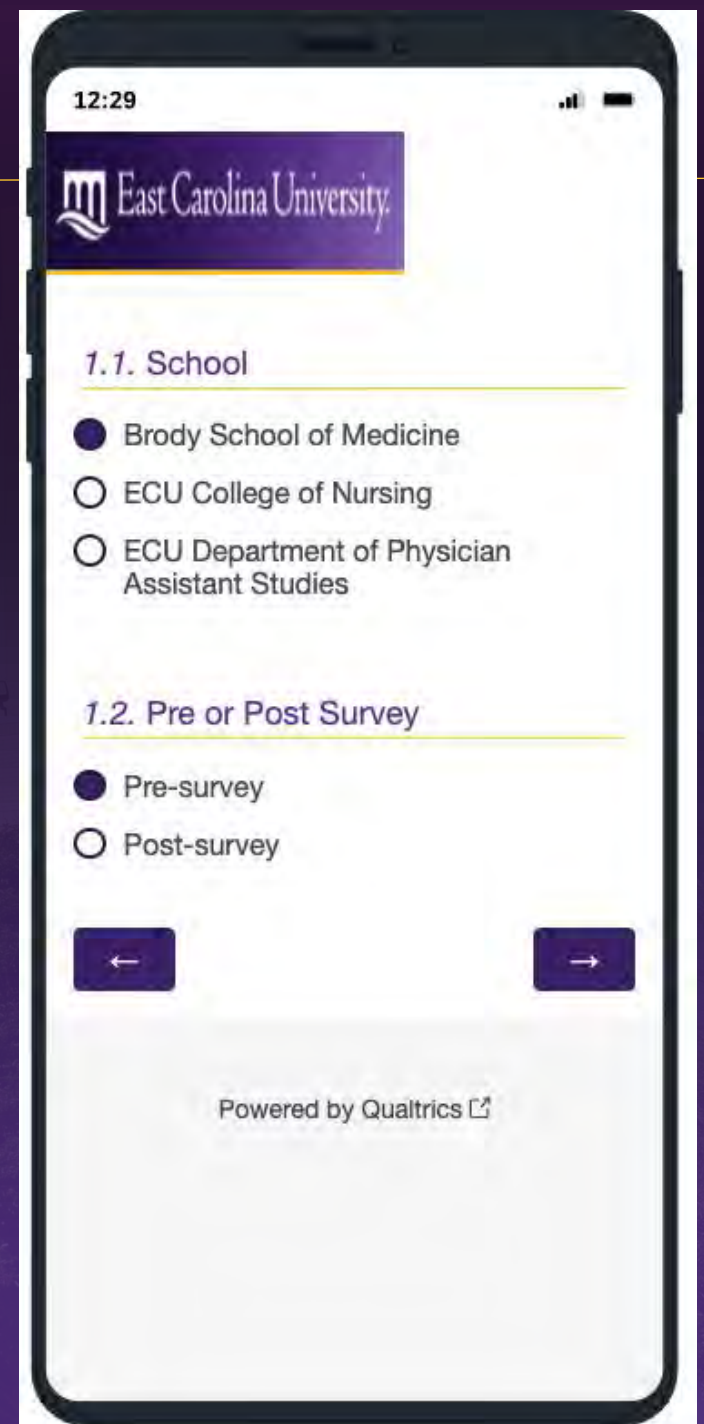
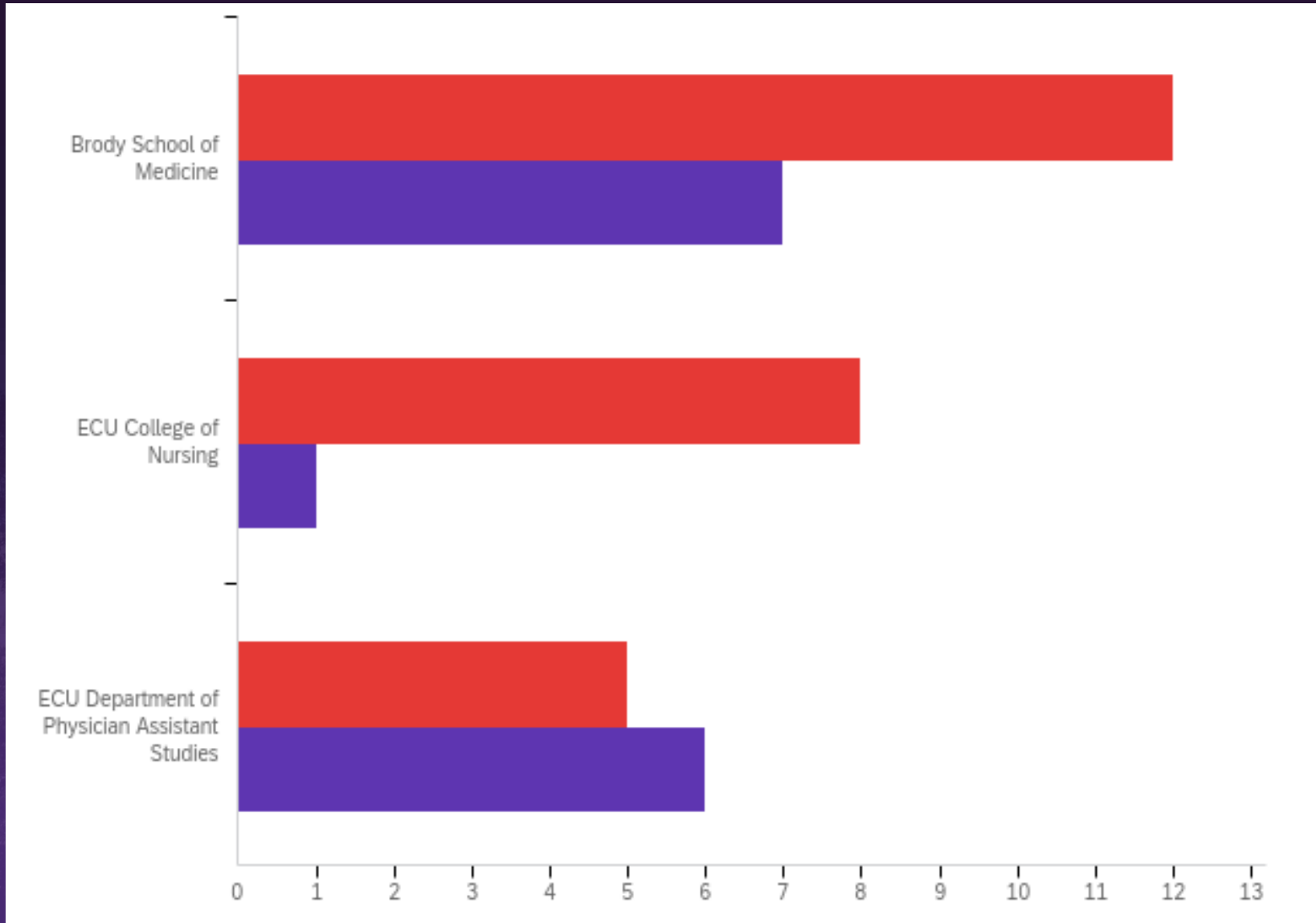
Station	Description
A	Primary Survey/Triage
B	IV/IO
C	Hemorrhage Management
D	Burn Management
E	Basic Airway
F	Surgical Interest Group Situation <ul style="list-style-type: none"><li>• Needle decompression and chest tubes</li></ul>
Mass Casualty Scenario and debrief: Live Actor Triage Simulation	

	Group 1	Group 2
8:30 am	registration	registration
9 am	A	B
9:30 am	B	A
10 am	C	D
10:30 am	D	C
11 am	break	break
11:15 am	E	F
11:45 am	F	E
12:15 pm	Lunch	Lunch
12:45 pm	Mass A	Mass A
1:15 pm	Survey	Survey
1:45 pm		
2:15 pm		

# Learning Objectives

- Students will learn how to implement triage algorithms for the evaluation and management of patients in a disaster situation
- Students will practice emergent interventions indicated for variable disaster-related injuries
- Participants will demonstrate core competencies of interprofessional teamwork, including working with individuals and students of other professions to maintain a climate of mutual respect and applying leadership practices that support collaboration and team effectiveness

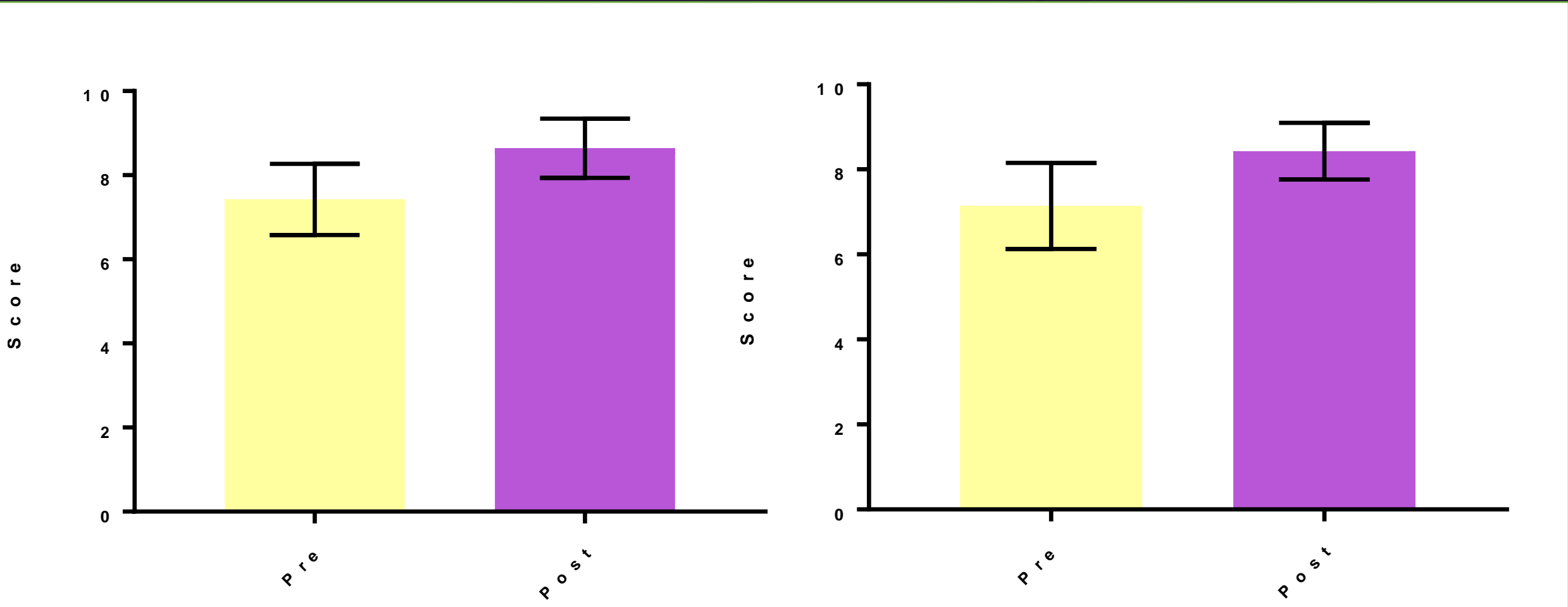




# Results - Role

- I understand my role within the healthcare team (p-0.038)

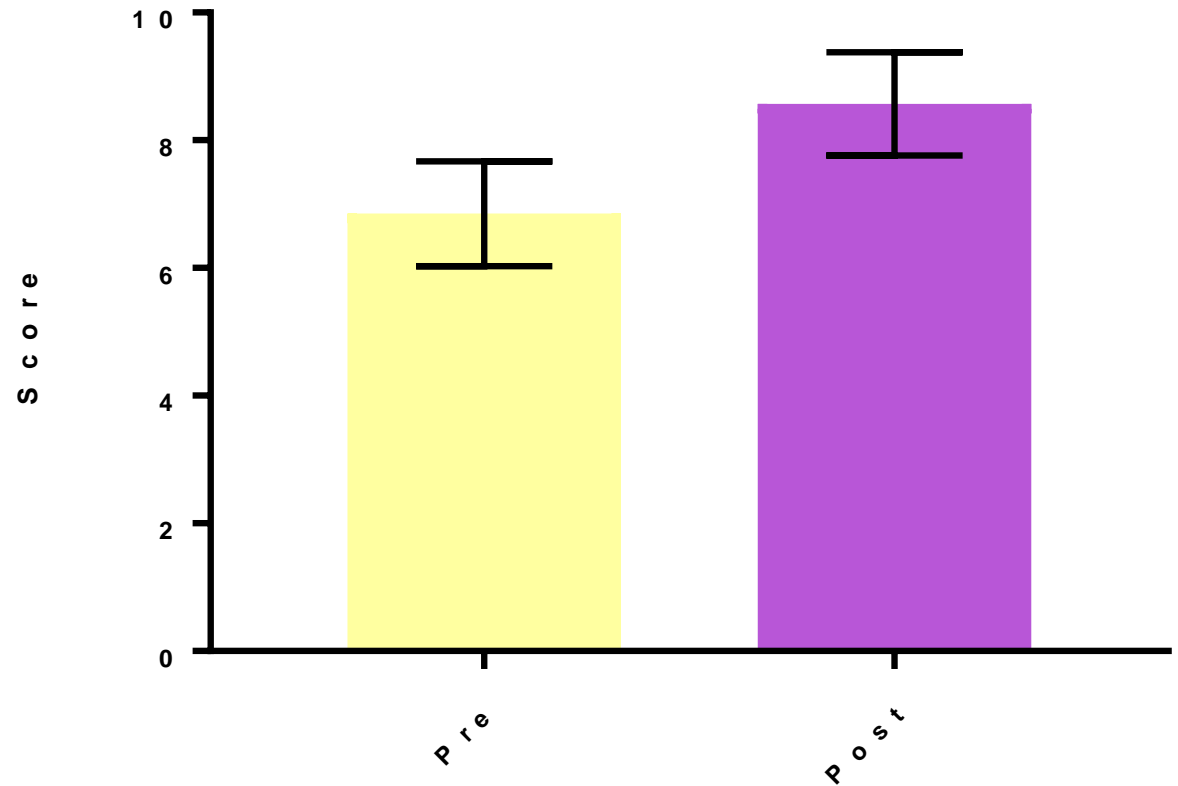
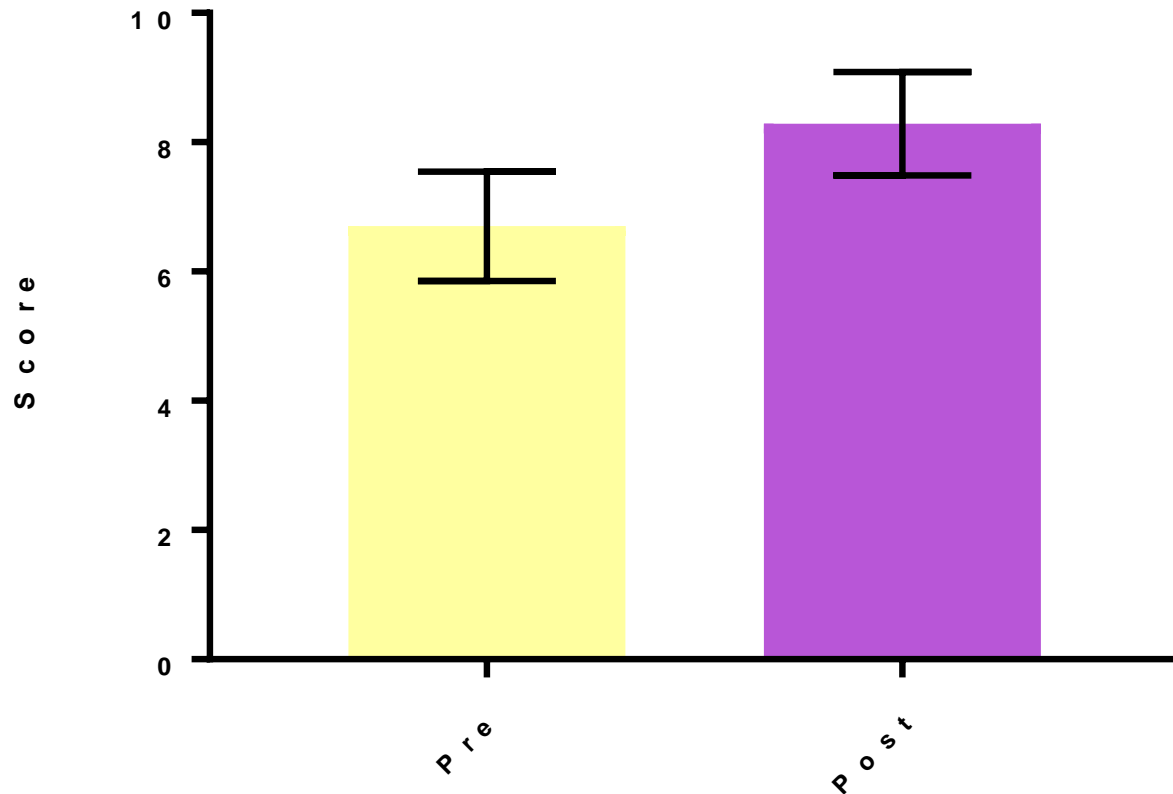
- I am confident functioning in my role on the healthcare team (p-0.034)



# Results - Communication

- I am confident in my communication skills to other members of the healthcare team (p-0.001)

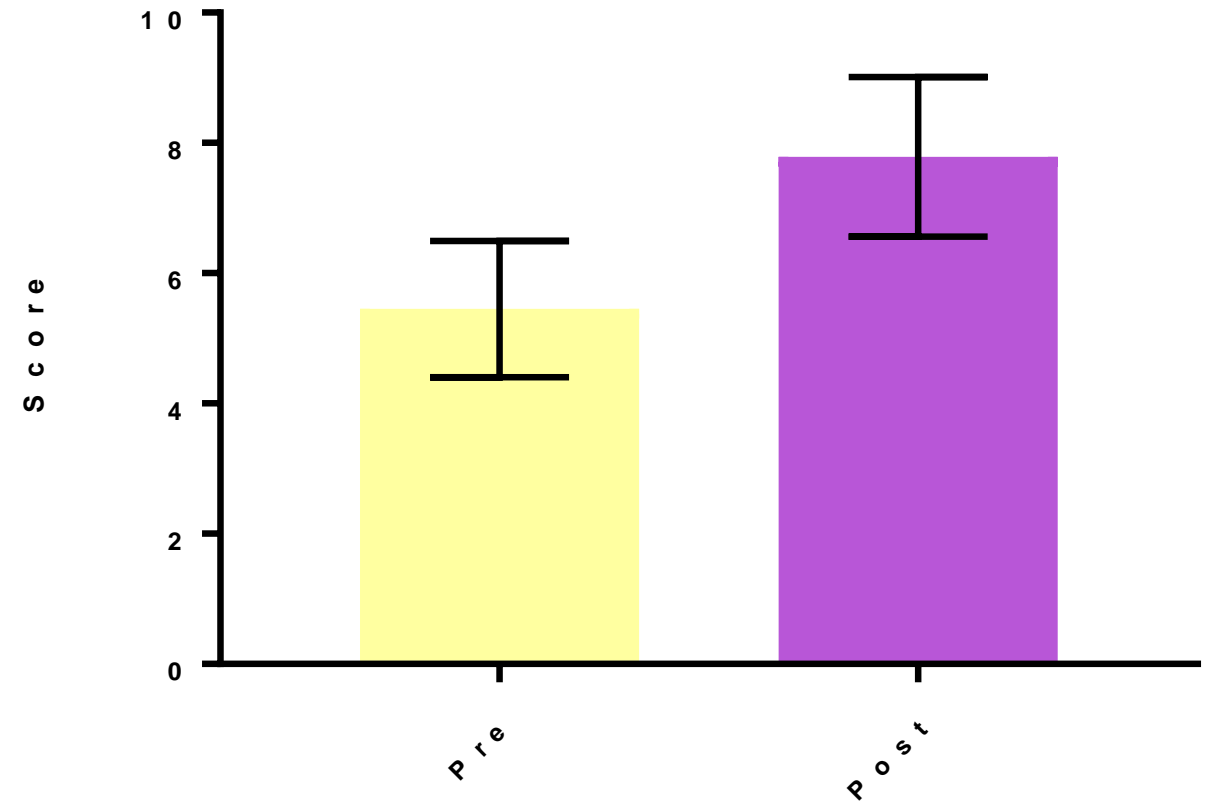
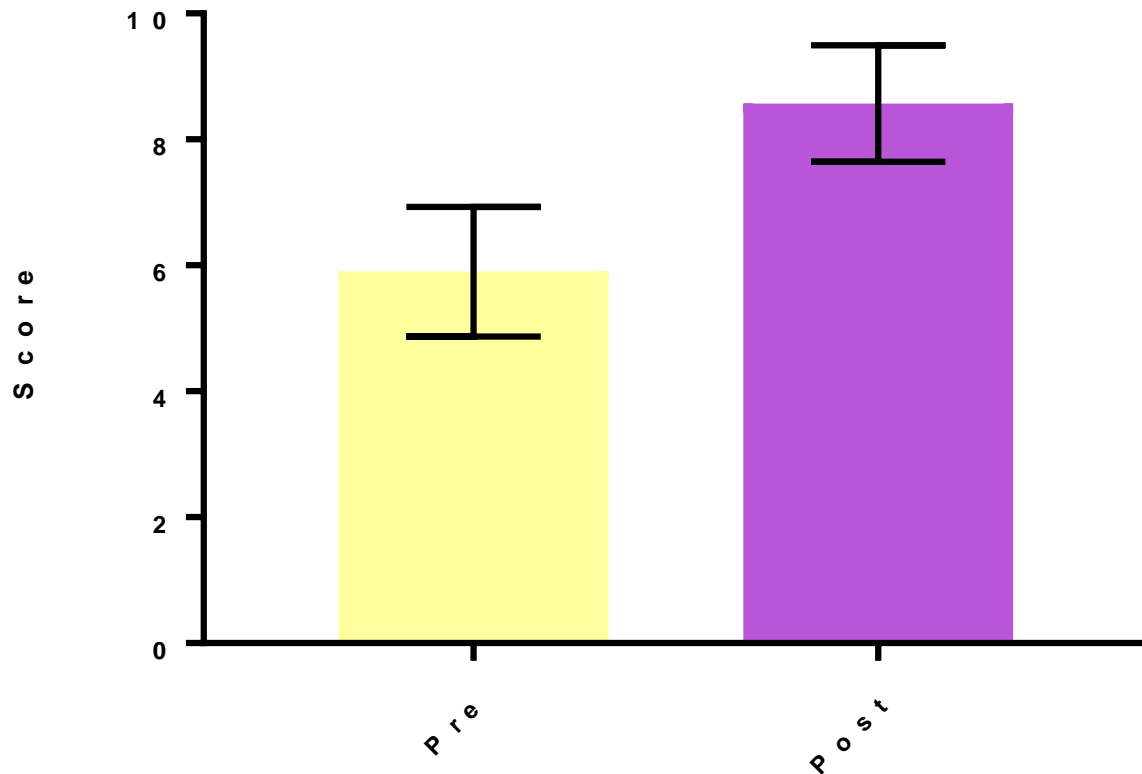
- I can identify reasons for communication breakdown within the healthcare team (p-0.005).





# Results - MCI

- I have knowledge of skills I can implement in a mass casualty event (p-0.0005)
- I feel confident implementing skills in a mass casualty event (p-0.004)



What did you learn from this simulation?

chaotic  
communication  
learned  
triage  
skills  
casualty  
practice

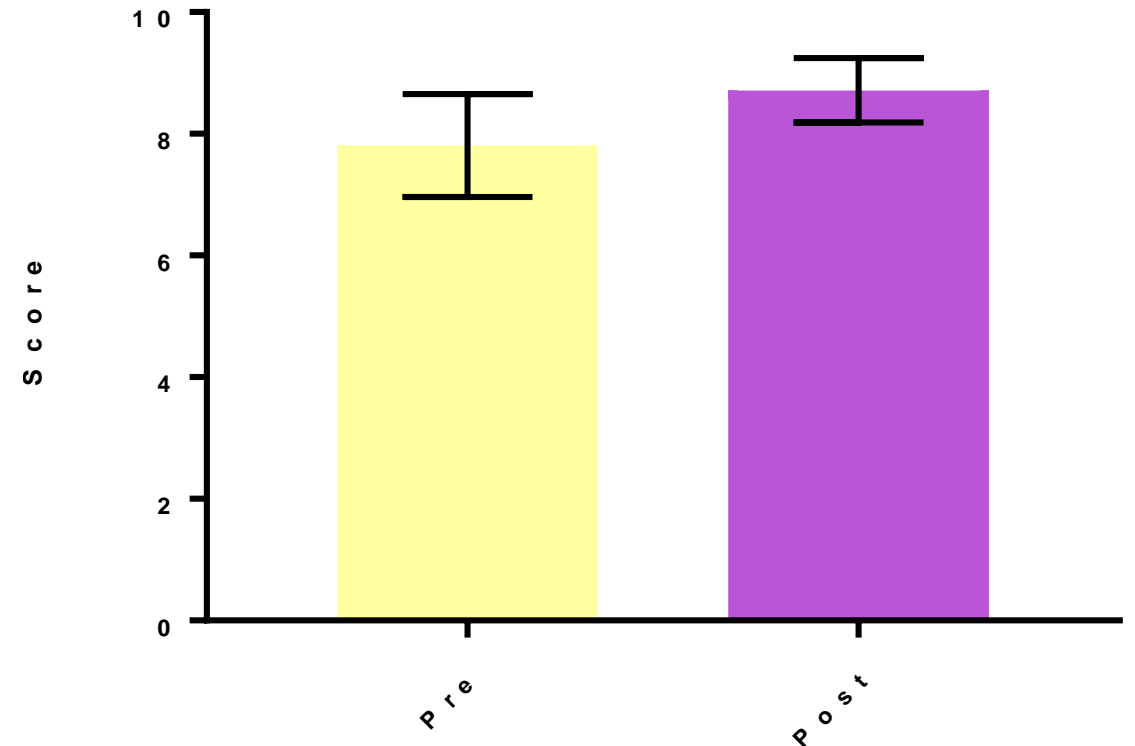
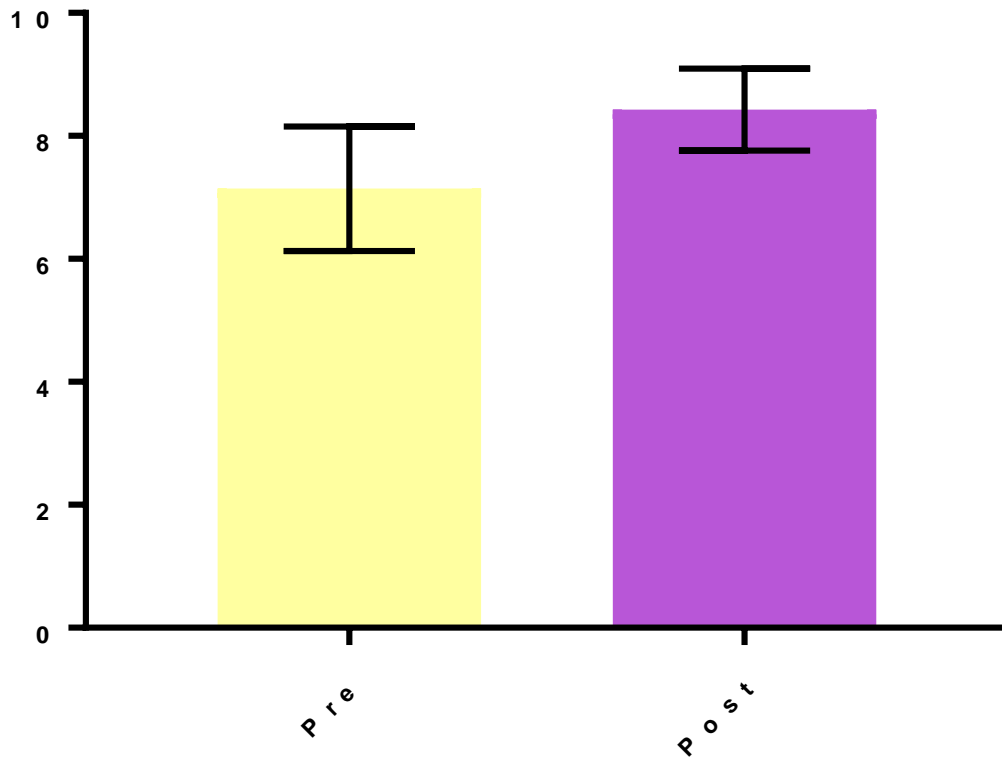
What surprised you the most about working with students from other disciplines?

education  
student  
work  
practice  
discipline

# Results – Unsignificant

- I understand the roles of others (RN, PA, MD) on the healthcare team (p=0.0552)

- I feel comfortable working with others as a member of the healthcare team (p=0.101)



- Space and personnel limitations
- Date limitations
- Program designed by students in single profession
- Limited post survey responses
- Results are perceived
  - No measure of direct learning



- Simulated MCI improves
  - Knowledge of individual *roles*
  - Confidence in *role* functioning
  - Ability to *communicate* with others
- The activity should be voluntary
- Nursing and PA student involvement in the future development
  - Longitudinal - perceived improvements translation into clinical practice



- ECU Office of Clinical Simulation
- ECU Department of Physician Assistant Studies
- ECU College of Nursing
- ECU School of Theater and Dance
- ECU Health Physicians, Physician Assistants, and Nurses
- Office of Clinical Skills Assessment and Education – Standardized Patient Program
- Institute for Healthcare Improvement ECU
- ECU Student Government Association

