

ABSTRACT

The United States is facing a shortage of trained pediatric audiologists. Leadership Education in Neurodevelopmental and Related Disabilities (LEND) programs and doctor of audiology programs are striving to provide evidence-based training for pediatric audiology students. Standardized patients (SPs) have been used in the medical community and recently been implemented into several audiology curricula. The purpose of the current project was to measure the effect of SP on audiology students' clinical confidence when delivering difficult news in a pediatric setting.

Sixteen third-year doctor of audiology students enrolled in the Counseling in Audiology course at the University of Wisconsin-Madison participated in simulated role play scenarios. The SP roles included a tearful mother, disputing father, and a guilty mother while the students acted as the audiologist delivering the hearing test results to the parent. For each of the scenarios, scripts were created by audiologists to prepare the SP for their role as a parent learning of their child's newly identified hearing loss. Students were provided with a document containing the case history and test results for their case. Pre- and post- questionnaires were given to the students before and after their SP encounter and following the completion of the Counseling in Audiology course. In addition, the Audiology Counseling Evaluation (ACE) survey was used to evaluate each student's interaction with the SP.⁴

Statistically significant increases in student confidence were seen in delivering news to a parent in a caring and empathetic manner and giving recommendations and next steps to parents. The mean responses across all scenarios revealed a positive trend in the students' confidence when delivering news in a simulated pediatric audiology setting. This project supports the benefit of implementing SPs and this form of experiential learning into audiology counseling education for sharing news of an infant's diagnosis of elevated hearing thresholds to parents.

METHODS

Three Scenarios:



Left to Right: Disputing Father, Tearful Mother, and Guilty Mother SP actors with UW Audiology graduate students

Materials:

- Pre- and post- confidence questionnaires given to students before and after their SP simulation, and again following completion of the Counseling in Audiology course

- ACE survey was used to collect information from students assessing personal counseling skills related to delivering challenging news to families

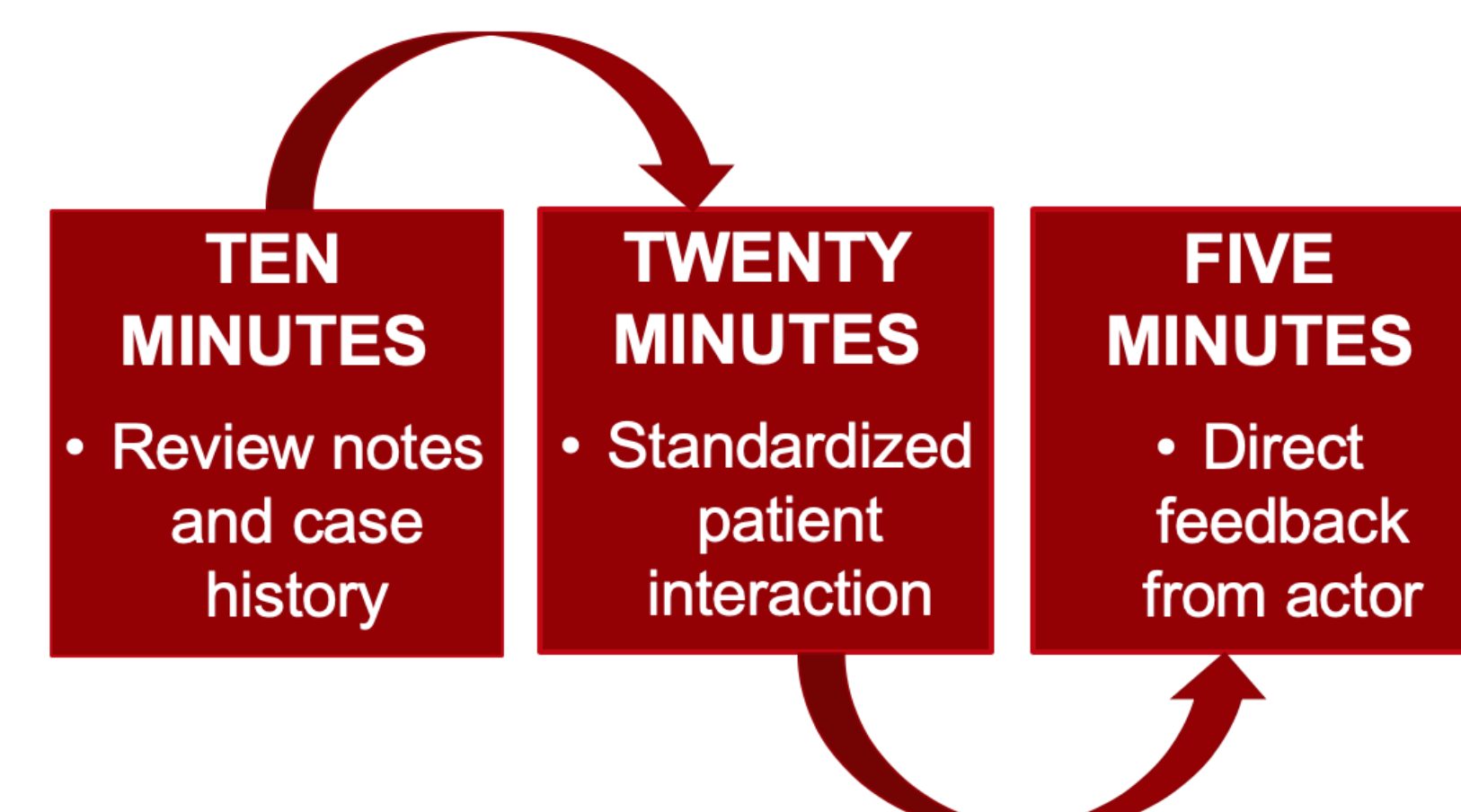
- Three additional raters completed the ACE survey for every student to assess the reliability of the tool

Pre-/Post SP Self-Confidence Questionnaire
Trainee Name: _____ Date: _____

	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
1. I am confident in breaking news to a parent in a caring and empathetic manner.	5	4	3	2	1
2. I am confident I can answer follow-up questions.	5	4	3	2	1
3. I am confident I can gauge a parent's perception and reactions.	5	4	3	2	1
4. I am confident in giving recommendations and next steps to parents.	5	4	3	2	1
5. I am confident using appropriate verbal communication.	5	4	3	2	1
6. I am confident using appropriate non-verbal communication.	5	4	3	2	1

Figure 1: Self-Confidence Questionnaire³

Research Protocol:



RESULTS

Pre and Post Self-Confidence Questionnaire Results Across All Scenarios

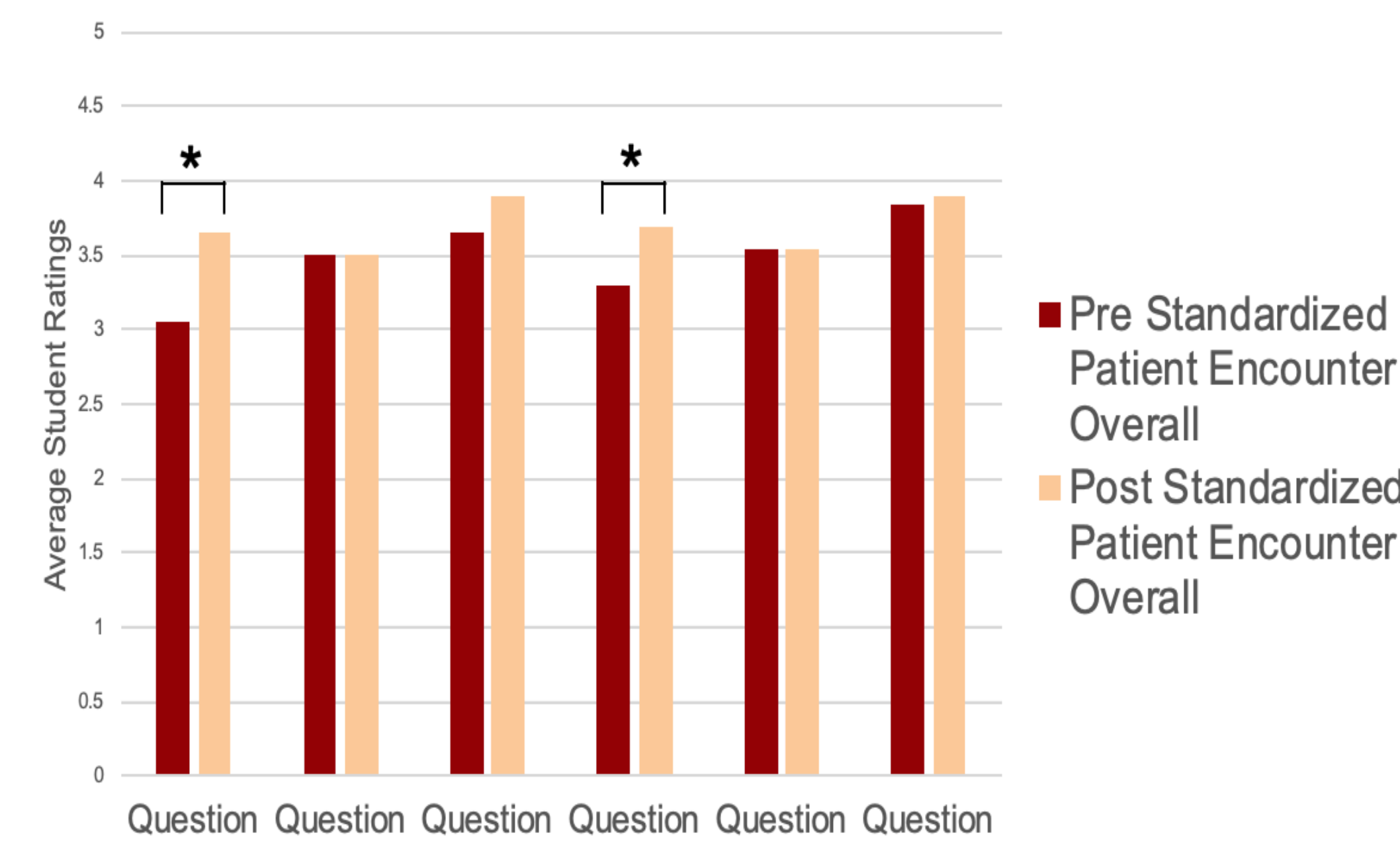


Figure 3: Self-Confidence Questionnaire Results Across All Scenarios

Tearful Mother Scenario

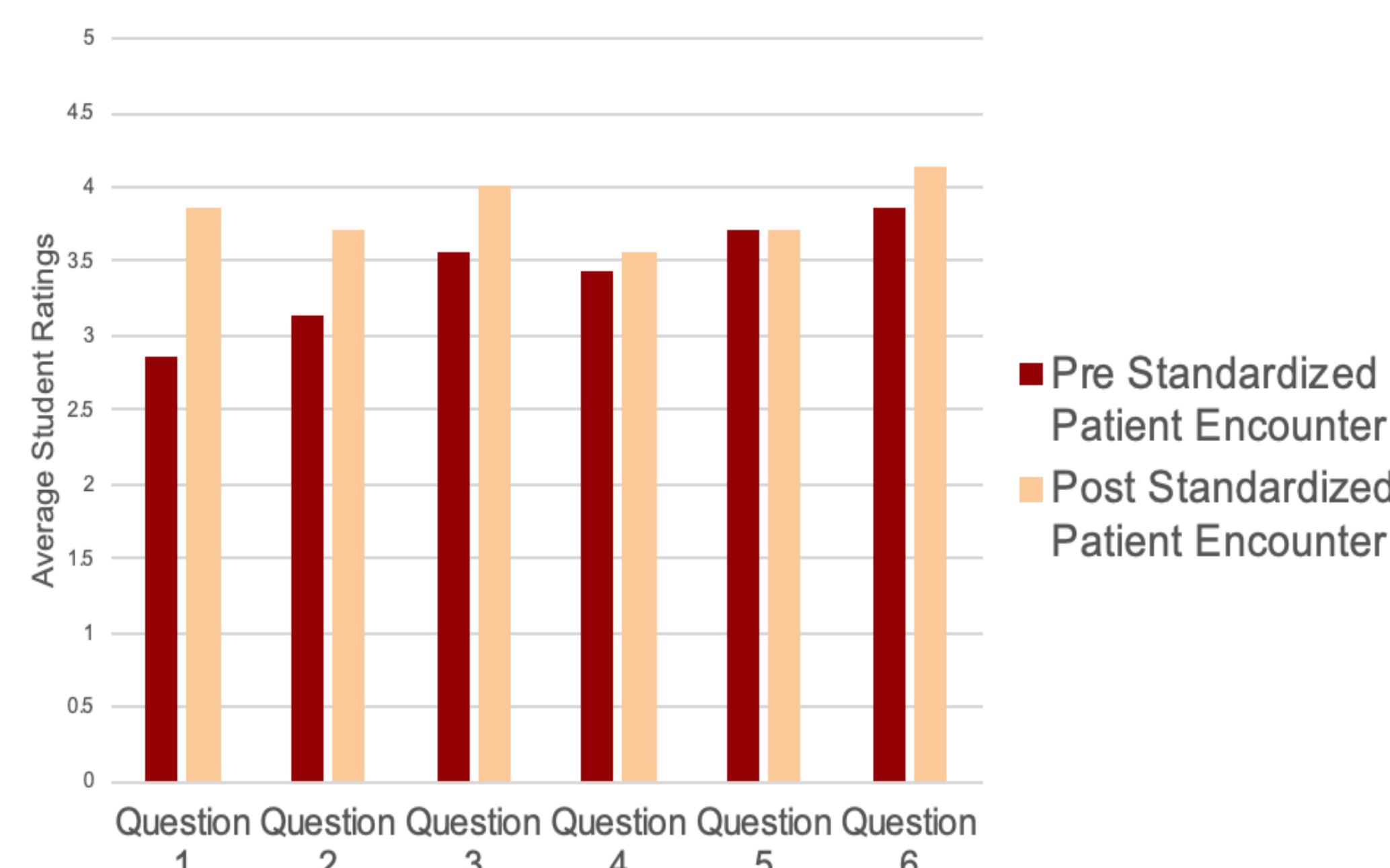


Figure 4: Self-Confidence Questionnaire Results Tearful Mother Scenario Only

Post-Class Self-Confidence Questionnaire Results Across All Scenarios

	Post-Standardized Patient	Post-Course	Difference
Question 1	3.5	3.9	+ 0.4
Question 2	3.2	3.8	+ 0.6
Question 3	3.8	4.3	+ 0.5
Question 4	3.5	3.6	+ 0.1
Question 5	3.7	3.8	+ 0.1
Question 6	3.9	4.4	+ 0.5

Figure 5: Post-Class Self-Confidence Questionnaire Results Across All Scenarios

- All students Pre- and Post- data regardless of scenario:
 - Significant statistical increase in confidence for questions 1 & 4
 - Questions 3 & 6 showed an increase in confidence
 - Questions 2 & 5 remained neutral or no change in confidence
 - Overall positive trend

- All questions (except #5) saw an increase in confidence comparing Pre- vs. Post- SP experience
- Question 5 remained neutral or no change in confidence
- These results are not statistically significant

Guilty Mother Scenario

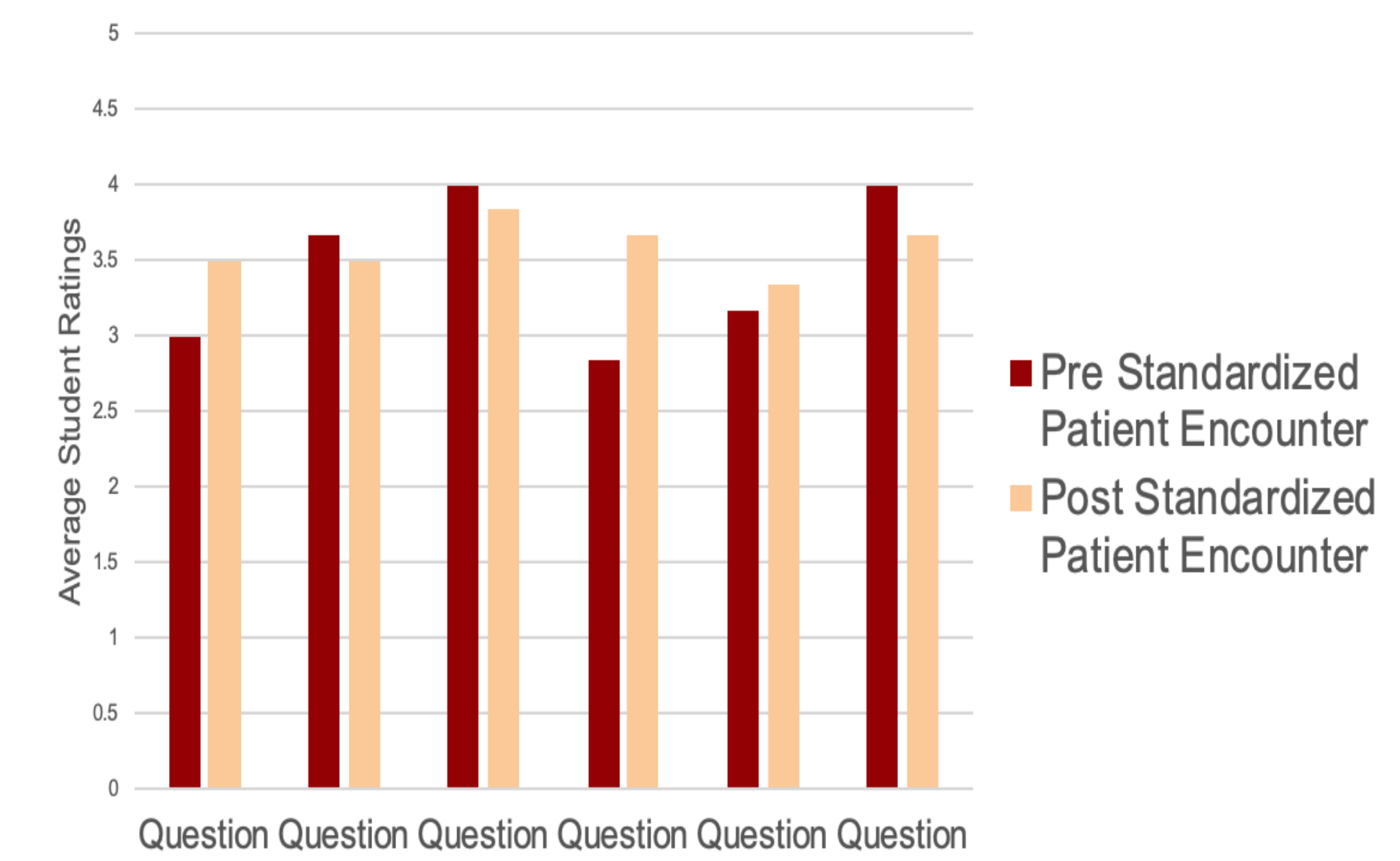


Figure 6: Self-Confidence Questionnaire Results Guilty Mother Scenario Only

Disputing Father Scenario

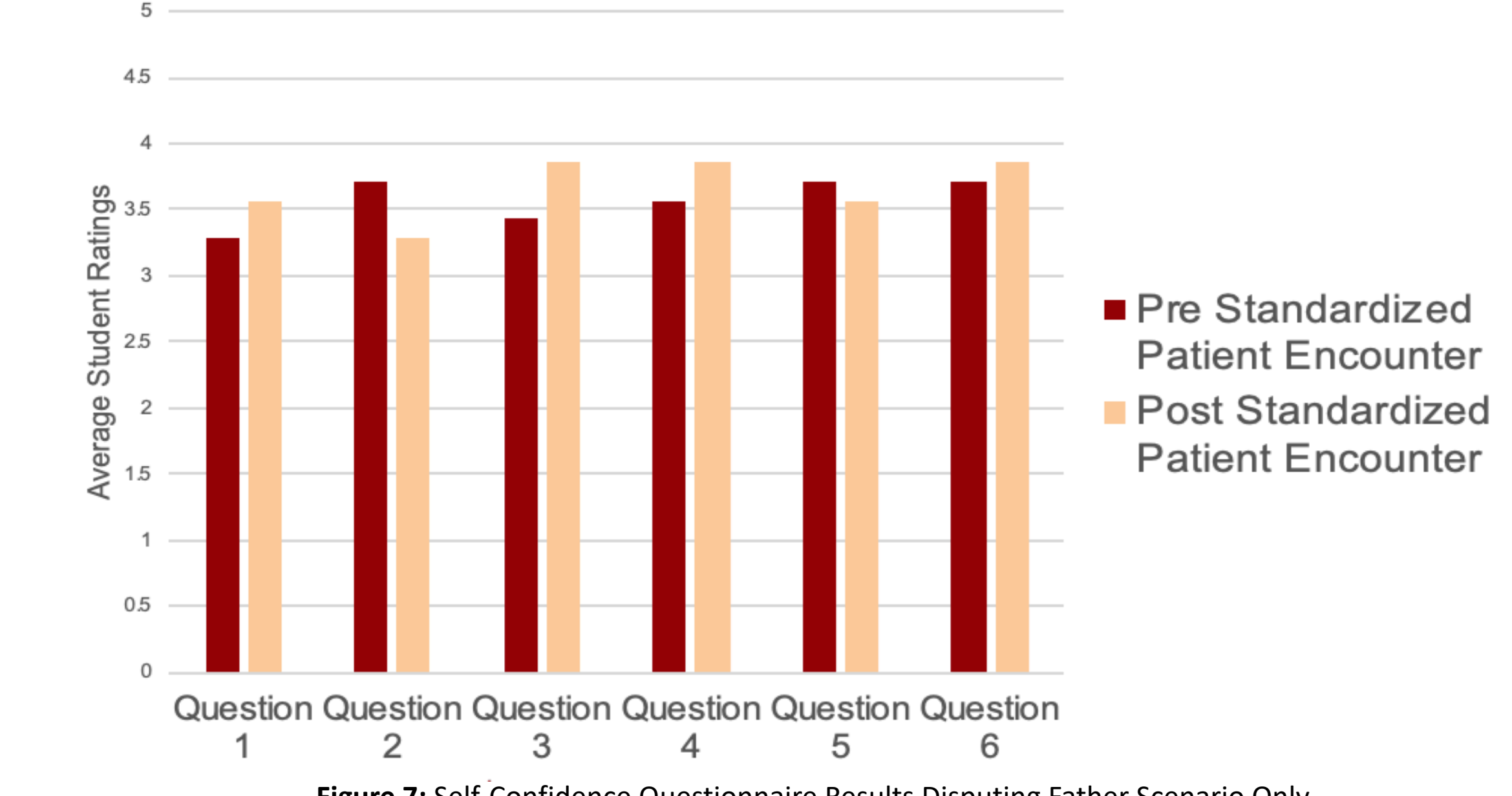


Figure 7: Self-Confidence Questionnaire Results Disputing Father Scenario Only

- Questions 1, 4 & 5 showed an increase in confidence comparing Pre- vs. Post- SP interaction
- Questions 2, 3 & 6 showed a slight decrease in confidence
- These results are not statistically significant

- Questions 1, 3, 4 & 6 showed an increase in confidence comparing Pre- vs. Post- SP interaction
- Questions 2 & 5 showed slight decrease in student confidence
- These results are not statistically significant

DISCUSSION

- Incorporating the role of SPs had a positive effect on students' clinical confidence when delivering difficult news in a simulated pediatric setting. This was seen regardless of scenario with students rating themselves as having lower self-perceived confidence before participating in the simulation and higher confidence following.
- This study supports the continued use of implementing SPs and this form of experiential learning into audiology counseling education, specifically for sharing difficult news of a child's newly diagnosed hearing loss to parents.
- The ACE questionnaire completed by the three raters is a reliable tool in helping students improve and develop their counseling skills before interacting with parents and could be incorporated into audiology curriculum.
- Future work will include a larger number of participants, additional scenarios, new areas within audiology beyond pediatric counseling, and implementation of this type of learning as required coursework within audiology doctoral programs.

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Figure 2: Excerpt from Audiology Counseling Evaluation (ACE) tool⁴