

BACKGROUND

- Motivational interviewing is a communication practice commonly used in the medical setting to assist patients in making a change and assisted in improving patient adherence and outcomes in some disease states.
- The use of motivational interviewing as a practice has been taught and studied in medical schools, but very rarely in the setting of pharmacy schools.
- The goal of this study was to assess the understanding and competency of using motivational interviewing in first-year pharmacy school students at Southern Illinois University Edwardsville School of Pharmacy (SIUE).

OBJECTIVE

- To assess the proficiency of motivational interviewing in first-year pharmacy school students using a coding tool.
- To survey the students' understanding of motivational interviewing and expressing empathy both before and after a course on motivational interviewing has been given.

METHODS

Study Design

- Observational longitudinal trend study that used a quantitative survey to collect information and a coding tool to assess motivational interviewing proficiency.

Inclusion Criteria

- Currently enrolled at SIUE School of Pharmacy as first-year pharmacy students.
- Currently enrolled in the course PPHR 717: Patient-Centered Communication: From Theory to Practice.

Survey

- A 10-question pre- and post-course survey was specifically created and conducted for the purpose of this research.
- The survey assessed the students' understanding of aspects of motivational interviewing including empathy and autonomy, using nine (9) 5-point Likert-scale questions.

Proficiency Assessment

- The coding tool used to assess the students' proficiency was the Motivational Interviewing Coding Assessment (MICA).
- The MICA includes 7 sections each graded on a scale from 1-5 and also includes a composite score for overall proficiency.
- A MICA score of 1 reflects poor proficiency, a score of 3 reflects some competency in using motivational interviewing, and a score of 5 reflects strong proficiency.

Data Analysis

- Comparison of the pre- and post-course surveys was done using student's t-test to establish statistical significance of the survey results.

RESULTS

Figure 1: Question 1 Data Collection

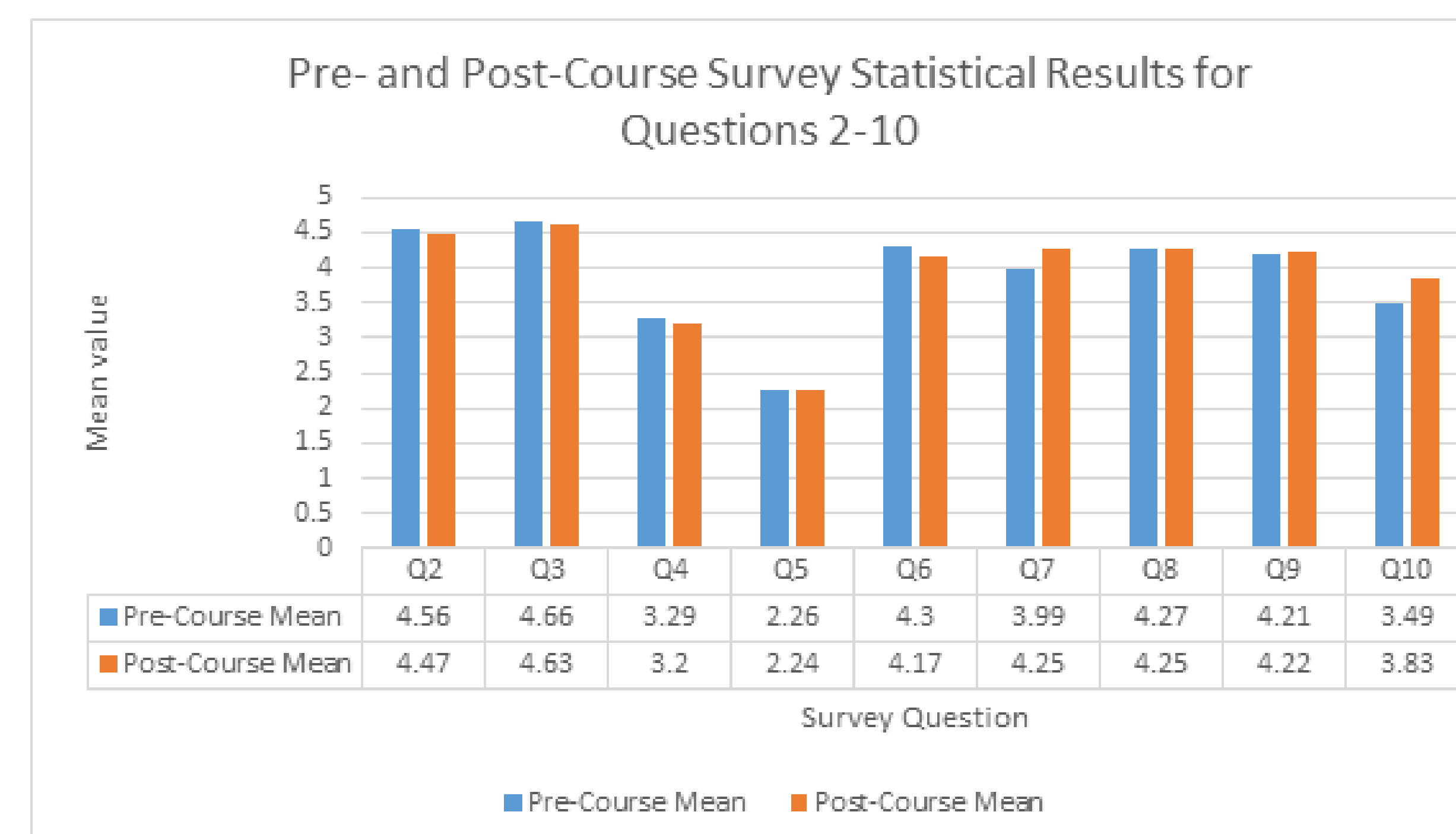
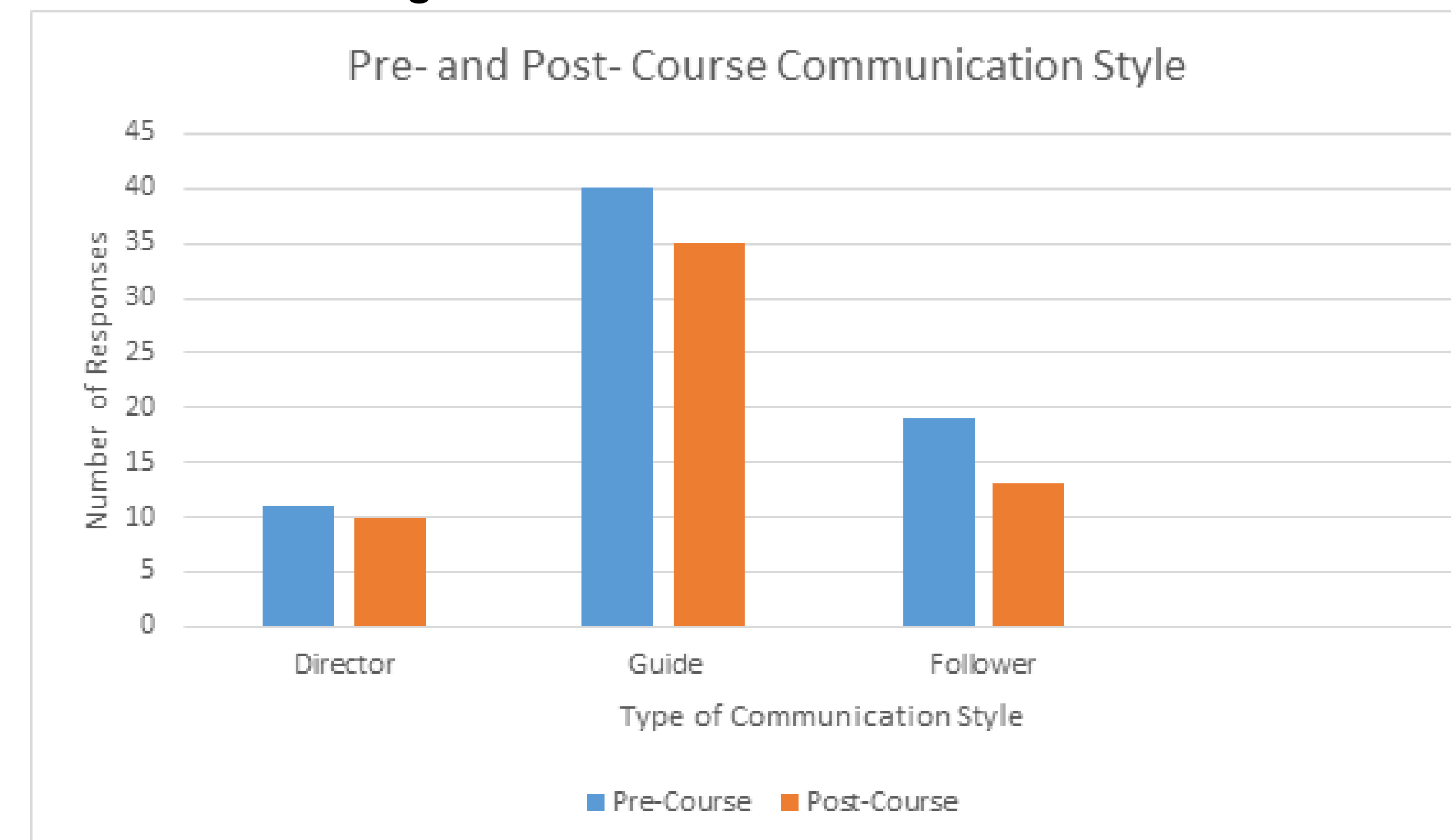


Table 1: Questions 2-10 Results

| Pre- and Post-Course Survey Statistical Results for Questions 2-10 | | | |
|--|------------------------|----------|------------------------|
| Question | Pre-Course (Mean) | p-value | Post-Course (Mean) |
| 2 | 4.56 (CI: 4.36 - 4.76) | = 0.5984 | 4.47 (CI: 4.24 - 4.71) |
| 3 | 4.66 (CI: 4.45 - 4.86) | = 0.8517 | 4.63 (CI: 4.39 - 4.86) |
| 4 | 3.29 (CI: 3.05 - 3.52) | = 0.6518 | 3.20 (CI: 2.94 - 3.47) |
| 5 | 2.26 (CI: 2.06 - 2.46) | = 0.8967 | 2.24 (CI: 2.01 - 2.46) |
| 6 | 4.30 (CI: 4.11 - 4.89) | = 0.3919 | 4.17 (CI: 3.95 - 4.39) |
| 7 | 3.99 (CI: 3.80 - 4.17) | = 0.0848 | 4.25 (CI: 4.01 - 4.49) |
| 8 | 4.27 (CI: 4.07 - 4.27) | = 0.0192 | 4.25 (CI: 3.99 - 4.52) |
| 9 | 4.21 (CI: 4.07 - 4.40) | = 0.9687 | 4.22 (CI: 3.98 - 4.46) |
| 10 | 3.49 (CI: 3.28 - 3.70) | = 0.0351 | 3.83 (CI: 3.59 - 4.07) |

RESULTS

Table 2: MICA Score Results

| MICA Score Results (N= 72) | |
|----------------------------|------------------------|
| Composite Score | 8.10 (CI: 7.79 - 8.37) |
| Sustain Talk | 3.91 (CI: 3.76 - 4.06) |
| Change Talk | 4.26 (CI: 3.90 - 4.26) |
| Partnership | 4.10 (CI: 3.93 - 4.26) |
| Evoking | 4.06 (CI: 3.87 - 4.26) |
| Guiding | 4.08 (CI: 3.92 - 4.24) |
| Empathy | 4.19 (CI: 4.04 - 4.35) |
| Supporting Autonomy | 3.99 (CI: 3.83 - 4.14) |

Limitations

- Online learning environment for both the course and the motivational interviewing assessment may have affected results.
- Duration of the course was 5 weeks, and the results may be different depending on the length of the course.
- The motivational interviewing sessions done by students were assessed via a recorded video, and a student peer was to participate as the patient.
- Assessing the students' motivational interviewing proficiency both before and after the course may have given better insight in how significant the course was in improving their proficiency.

CONCLUSION

- There was no difference in the students' pre- and post-course survey questions, however the responses to those questions showed a competent level of understanding regarding motivational interviewing as well as expressing empathy for the patient.
- The MICA composite score average showed that the students were proficient in using motivational interviewing to some degree.
- Although the course and the assessment on motivational interviewing were done via an online setting, the students were able to understand and use motivational interviewing in an educational practice setting.