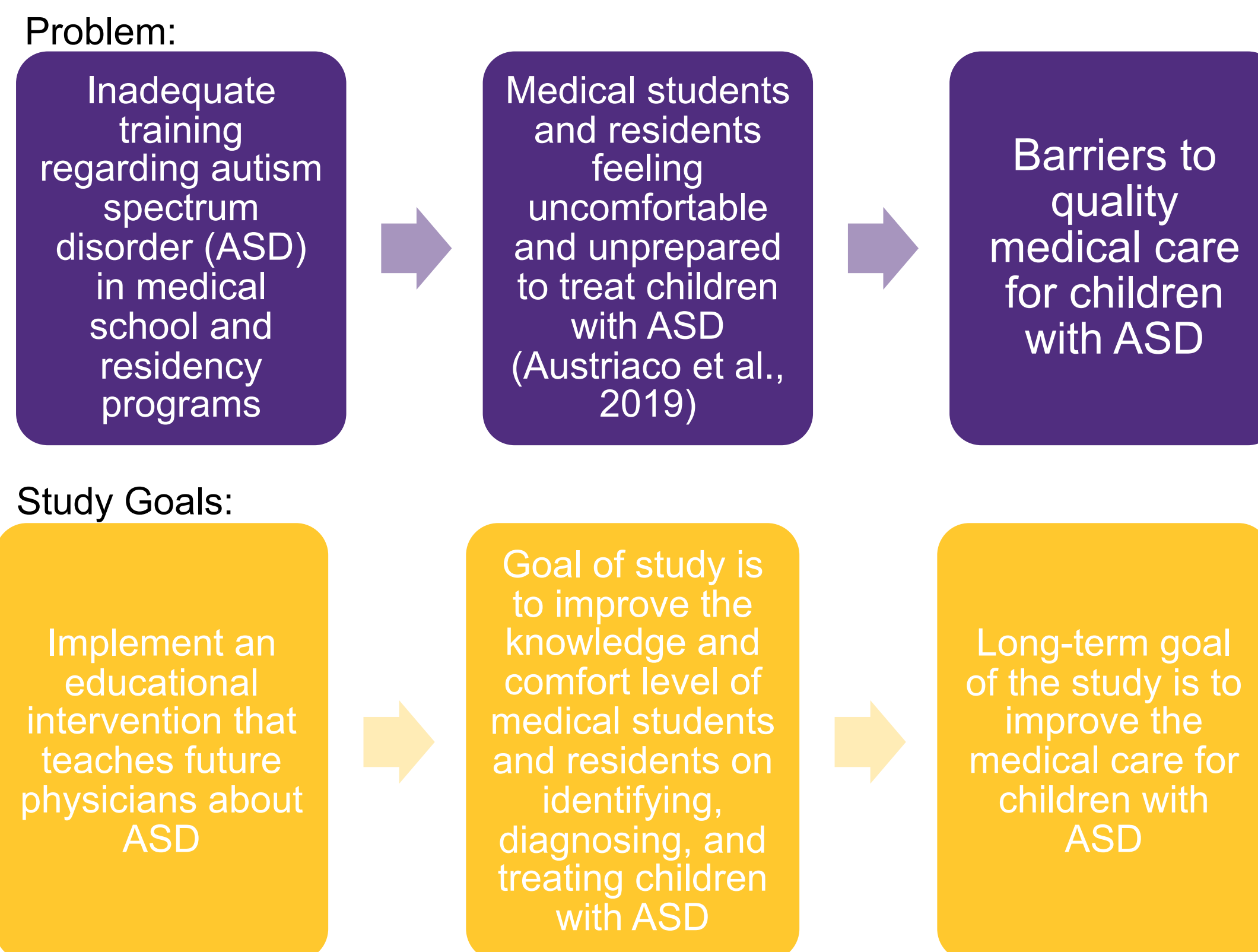


PROJECT RATIONALE



- Among 8-year-old children in the US, 1 in 44 diagnosed with ASD (Maenner et al., 2021)
 - Increasing prevalence of children with ASD
 - Pediatricians should be trained to provide quality medical care to children with ASD
- Pediatric residents and medical students report inadequate training regarding ASD (Austriaco et al., 2019)
- Inadequate training leads to low comfort level in managing children with ASD

METHODS

Developed 3 online modules incorporating slides from the Central Missouri Rapid Response Collaborative and videos from the CDC's Autism Case Training

- Understanding ASD
- Screening and Diagnosing ASD
- Treating ASD

Participants: Clinical medical students (M3 & M4) and pediatric residents

Analysis: Descriptive statistics, repeated-measures ANOVA, and linear regression

IMPACT OF EDUCATIONAL INTERVENTION

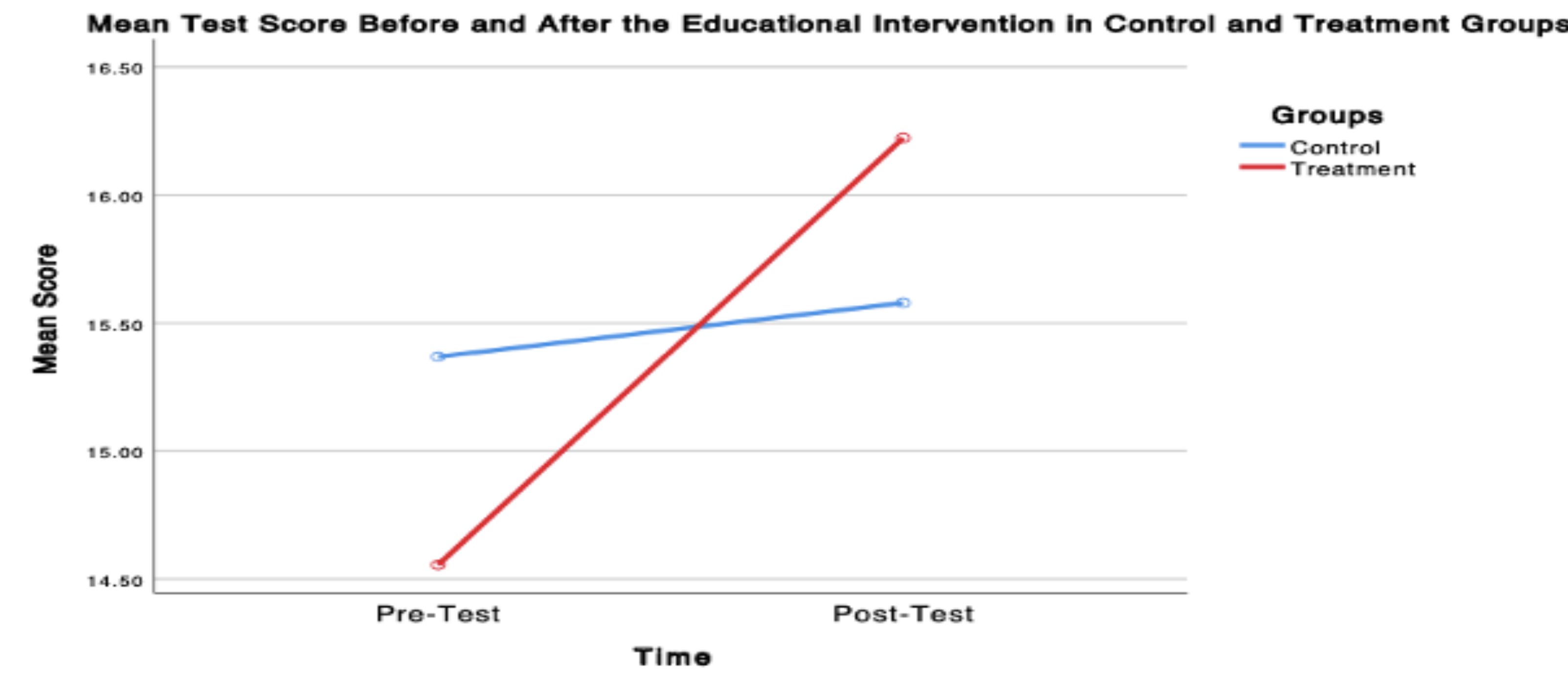


Figure 1: Mean pretest and posttest scores among the control and treatment group

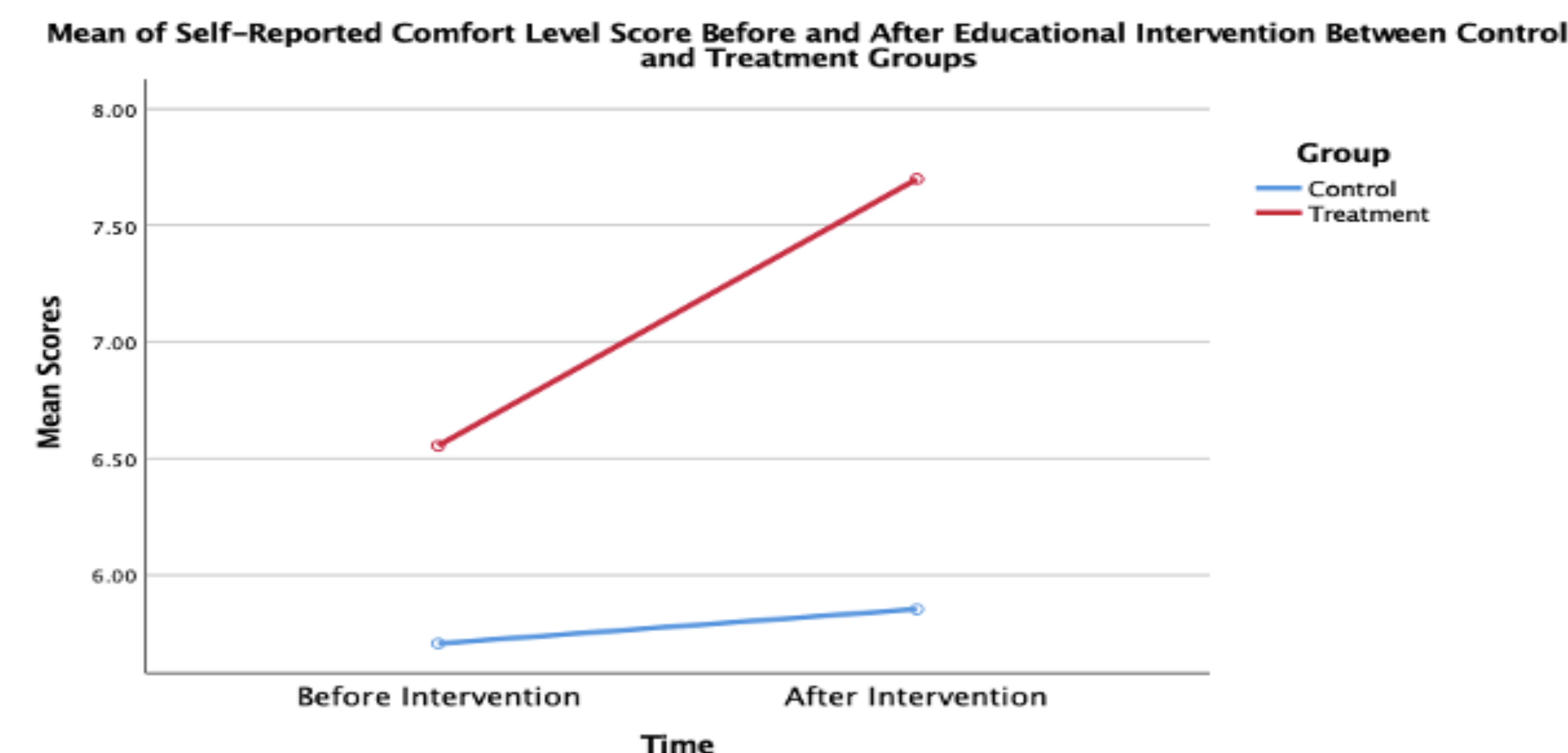


Figure 2: Mean self-reported comfort level scores among the control and treatment group

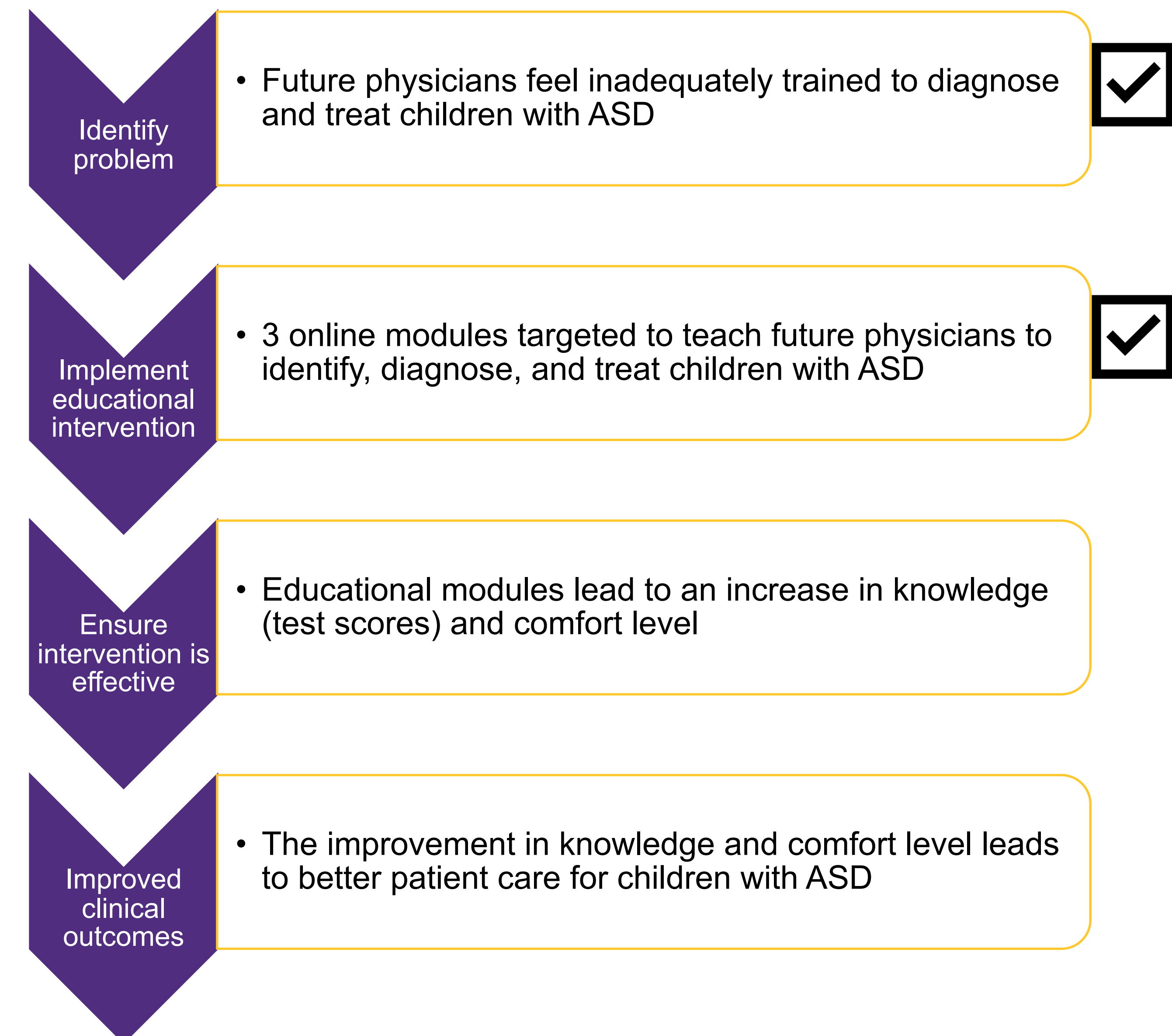
- 28 participants (control =19, treatment =9)
- 64.3% felt that the previous training they had received (in medical school and/or residency) had not sufficiently prepared them for clinical practice

Is the educational intervention effective?

- Compare control and treatment groups: statistically significant difference in pretest and posttest means ($p=0.034$, Figure 1)
- Compare control and treatment groups: statistically significant difference in self-reported comfort level mean scores before and after modules ($p=0.006$, Figure 2)
- No statistically significant difference in self-reported perception of knowledge ($p=0.066$)
- Linear regression model: 1.456 point increase in the change in test scores between control and treatment group
- Linear regression model: 0.997 point increase in the change in reported comfort level between control and treatment group

LESSONS LEARNED AND FUTURE DIRECTIONS

- Future physicians at ECU feel inadequately trained to identify, diagnose, and treat children with ASD
- Online modules improve knowledge and comfort level regarding ASD
- Limitations:
 - Small sample size
 - Unequal control and treatment group size
- Future directions:
 - Follow-up study to show efficacy of online modules in larger sample size
 - Does improved knowledge and comfort level impact patient outcomes?



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