



THE IMPACT OF SELF-ASSESSMENT ON ACADEMIC PERFORMANCE OF HIGH SCHOOL BIOLOGY STUDENTS

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INTRODUCTION

- ❖ Purpose- evaluate academic performance and student perception of self-assessment strategy and the potential to help students prepare for assessments.
- ❖ Demographics- 9th-grade students in a cohort taking a rigorous course load throughout high school

FOCUS QUESTIONS

- ❖ What is the impact on academic performance of high school biology students who use a self-assessment strategy?
- ❖ Does self-assessment have a positive, negative, or neutral effect on academic performance?
- ❖ Does self-assessment affect how students evaluate their strengths and weaknesses?

METHODOLOGY

- ❖ Pretest and Self-Assessment
- ❖ Targeted Remediation Activity
- ❖ Posttest and Reflection
- ❖ Student Survey

DATA

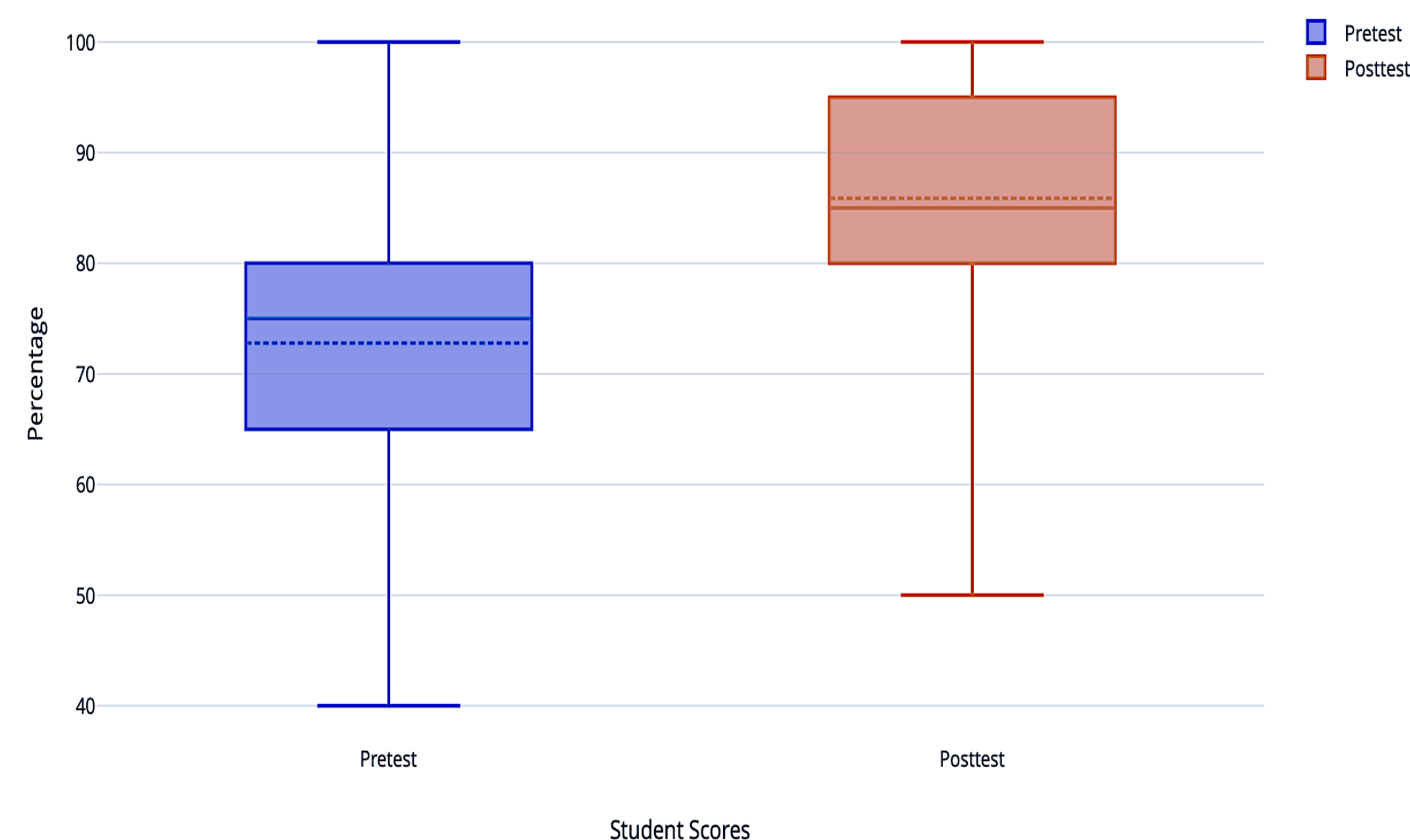


Figure 1. Student pretest and posttest scores, (N=97).

- ❖ Mean student score increased significantly from 73 to 86.
- ❖ Students who agreed they had confidence in their knowledge of the standards increased from 57.7% to 92.8% after the treatment.

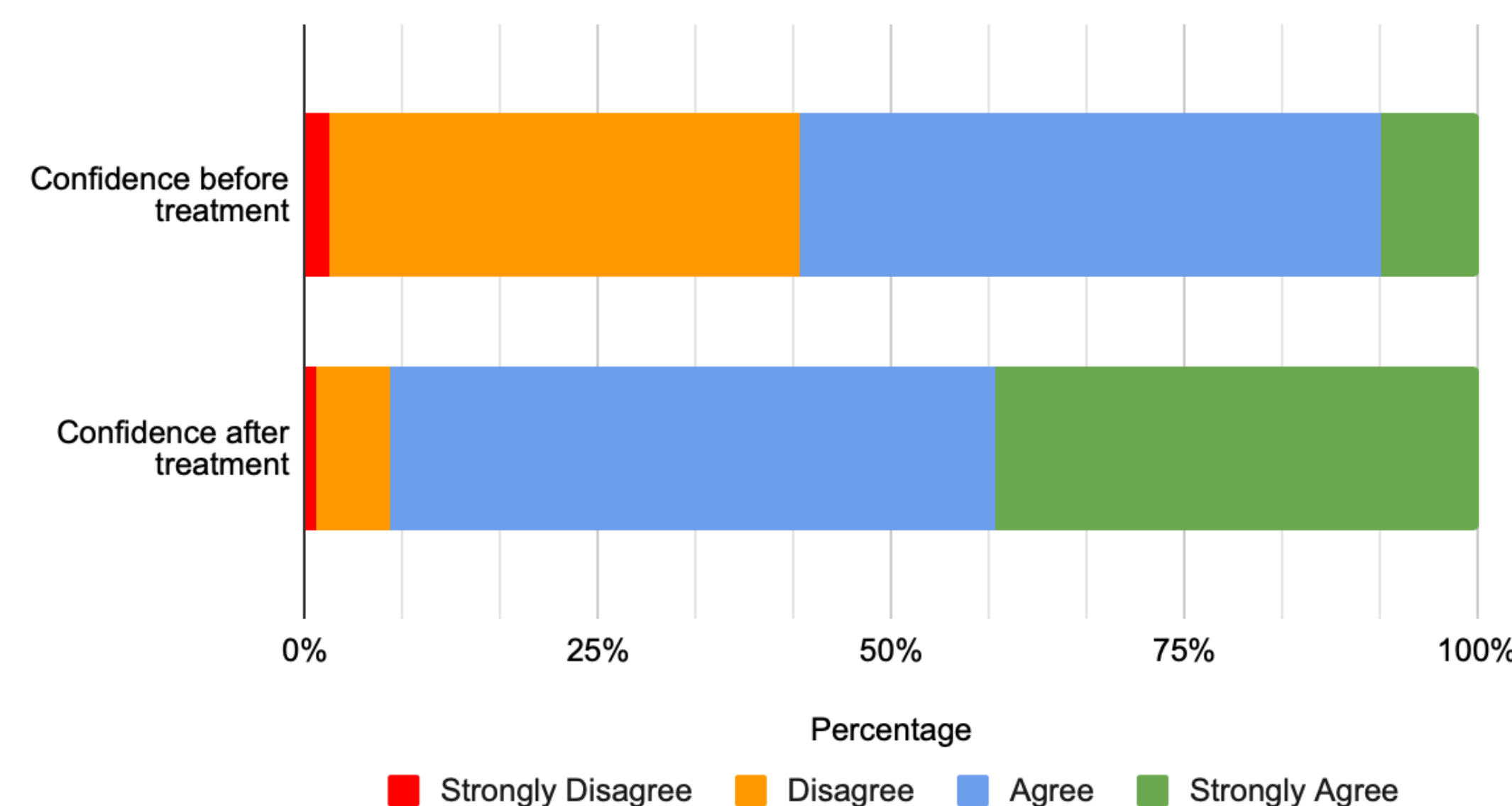


Figure 3. Student confidence before and after the treatment, (N=97).

STUDENT REFLECTION

- ❖ A student wrote, "Using this method would help me focus on the things I struggle with so I don't spend as much time studying things I'm stronger in."
- ❖ Another student wrote that this strategy would be helpful in other classes because "it helped me realize where I needed to improve in certain aspects of mindset/motivation."

IMPACT

- ❖ The treatment had a positive impact on the academic performance.
- ❖ Students scored significantly higher on a posttest after completing the treatment.
- ❖ Many students said they would use this strategy in biology and other subjects.
- ❖ Self-assessment can lead to increased student confidence and ownership of learning.