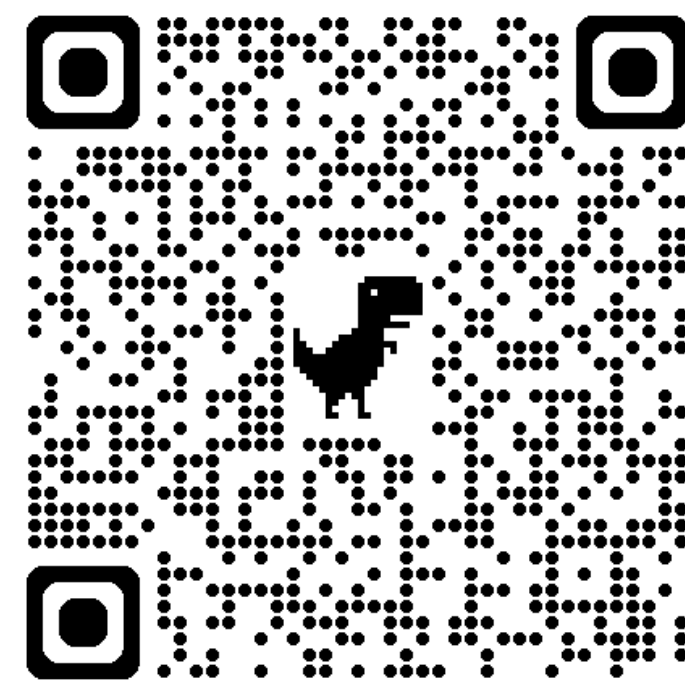


Student GPA and exposure to technology are the best predictors of experience and trouble shooting errors

Students develop stronger problem-solving skills over time (although not self-perceived)

Participate
HERE!



Abstract

This SoTL project investigates strategies to create a more equitable learning experience in GIS education.

The study recognizes that students from diverse backgrounds (e.g., first-generation, non-traditional, low-income) may have unequal access to technology, prior training, and academic preparation, which could impact their confidence and problem-solving abilities.

In this research, I examined predictors that sheds light on inequities that may affect student performance and learning in GIS education.

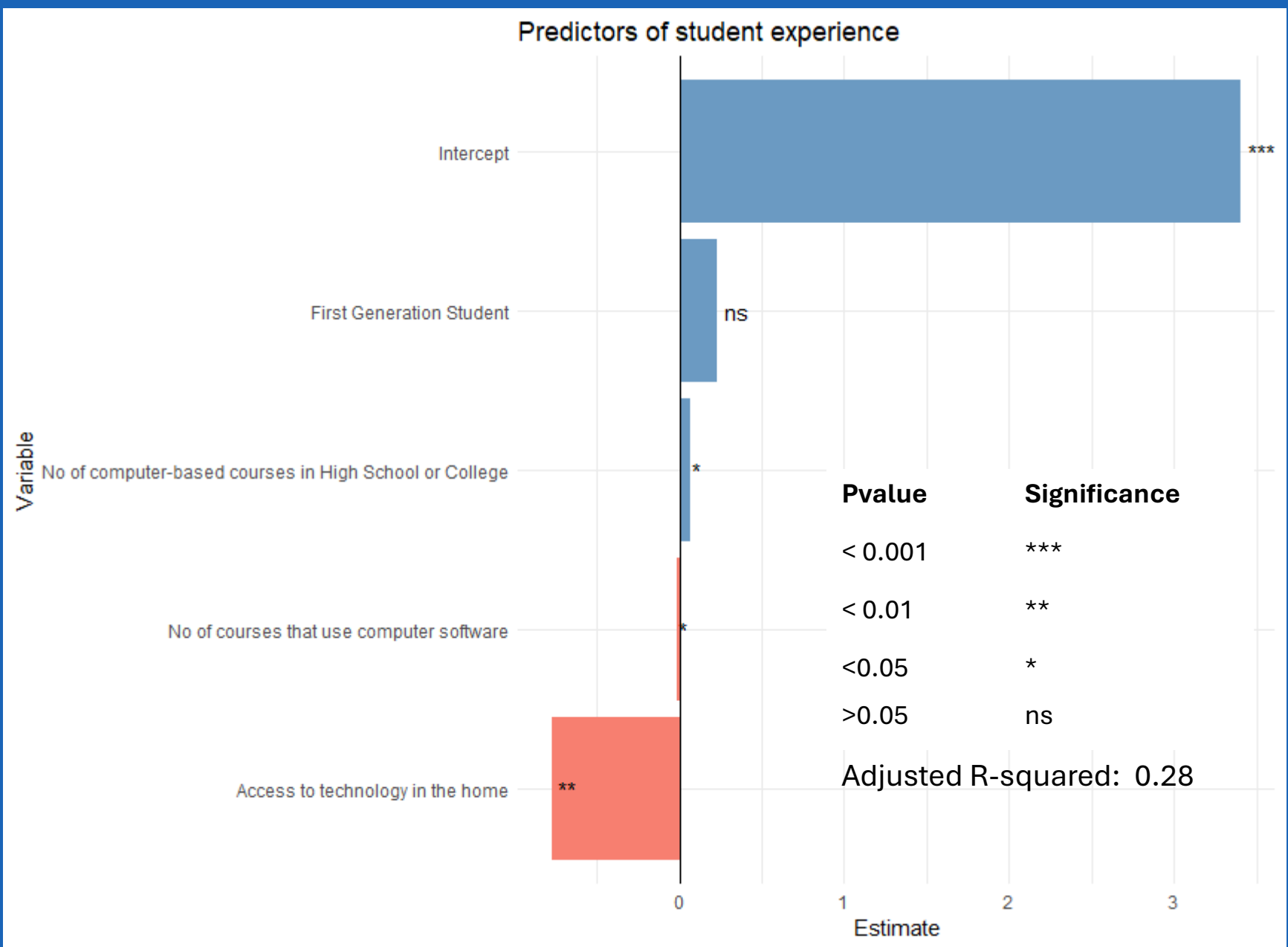
In class, I incorporated modeling methods of troubleshooting errors to scaffold learning and support students who may lack prior experience with complex technical software.

Additionally, this research prioritizes enhancing confidence and self-efficacy, which promotes resilience and persistence among underrepresented/disadvantaged students.

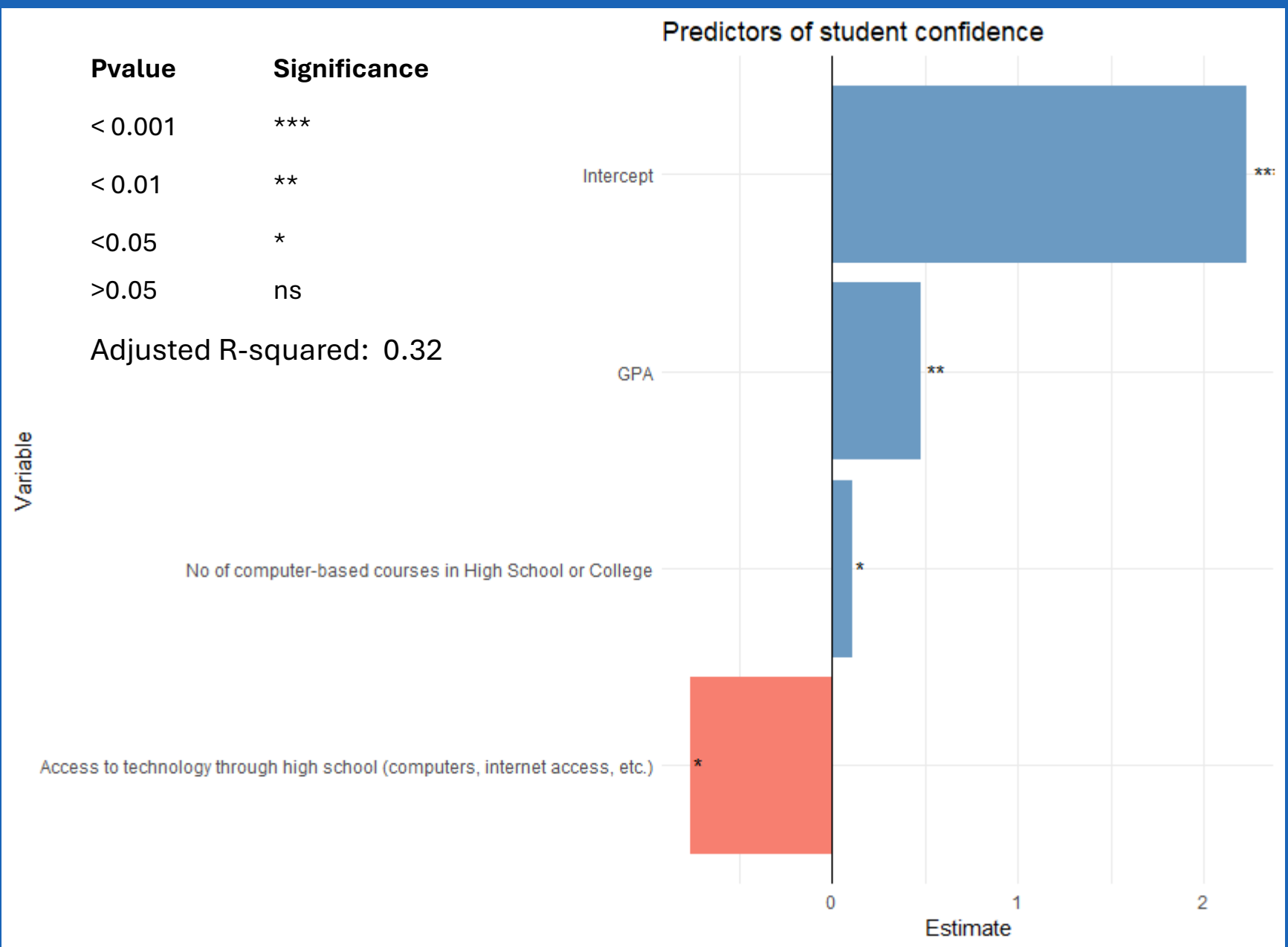
Quantitative Results

How does student background correlate to:

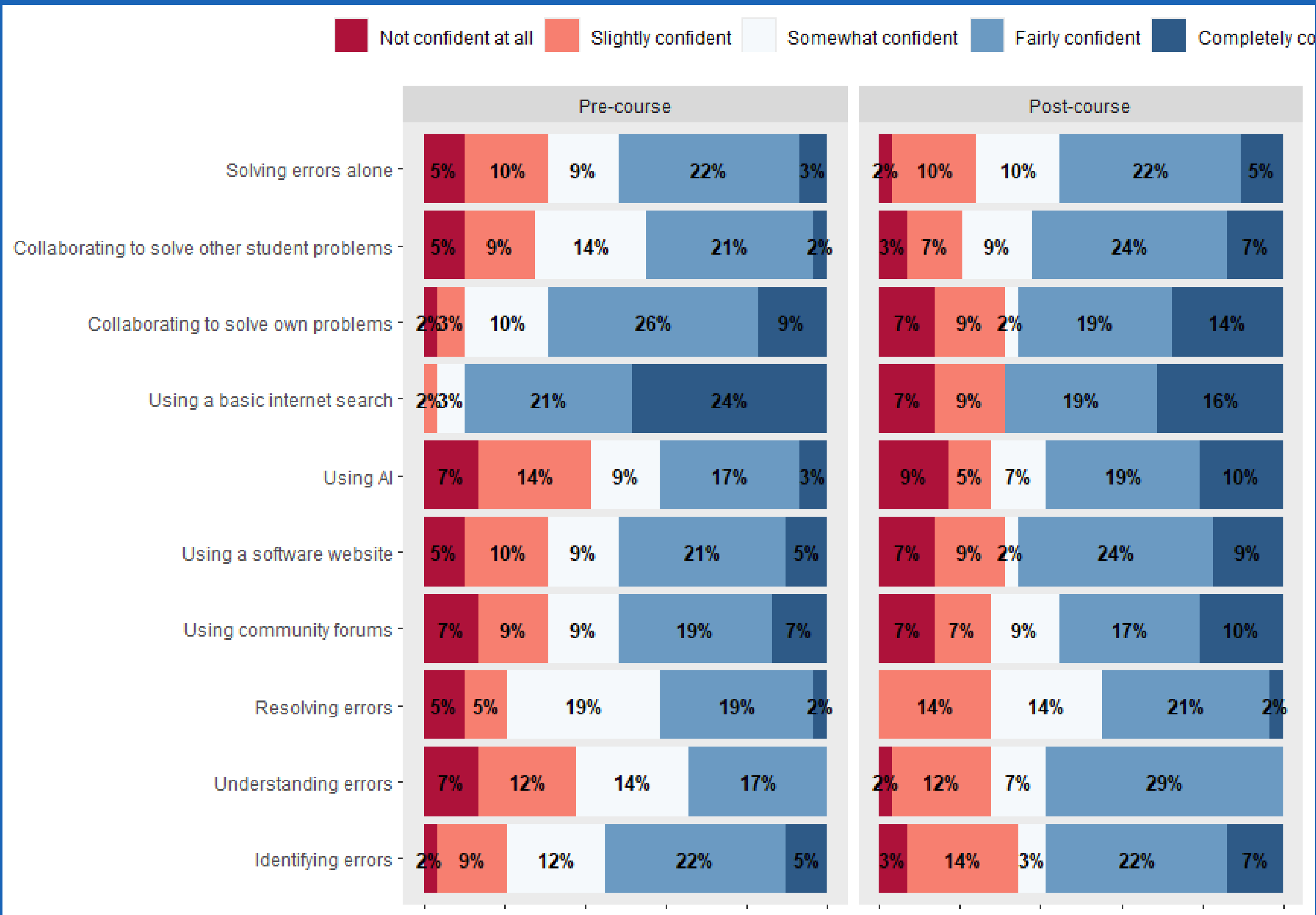
Experience with technology



Confidence with troubleshooting errors



Does self-perceived confidence improve throughout the semester?



Qualitative Results

- Shift toward
- Critical thinking
 - Structured troubleshooting
 - Greater independence.

Methods

