



WHAT

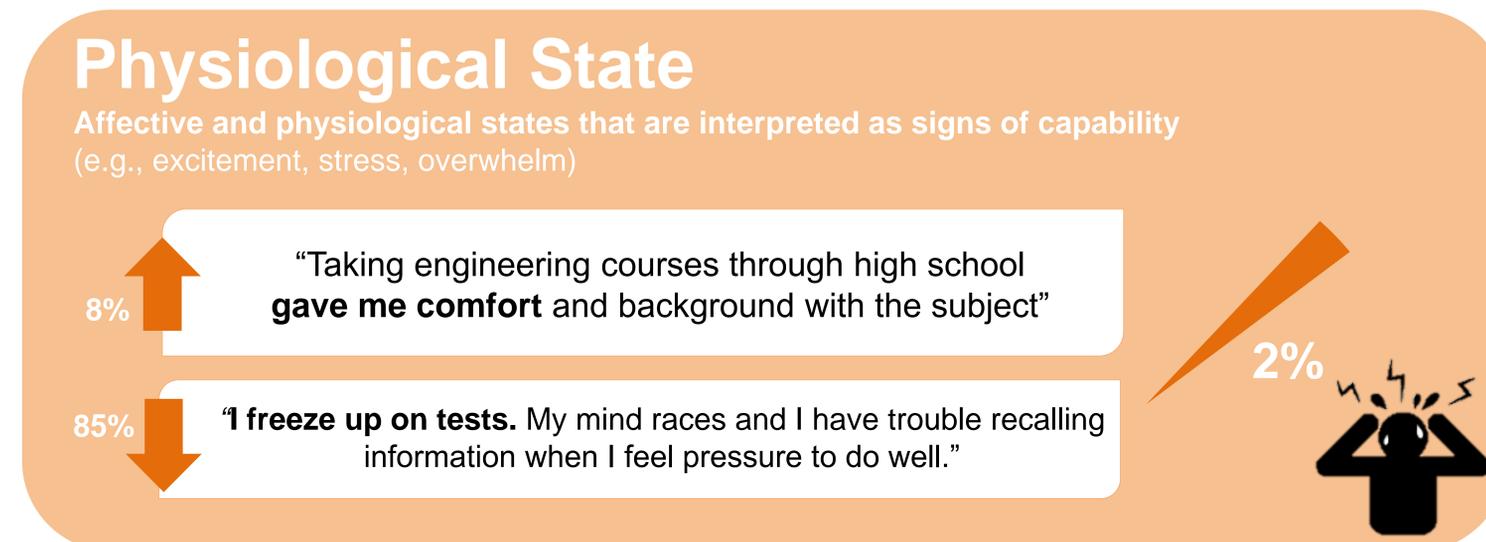
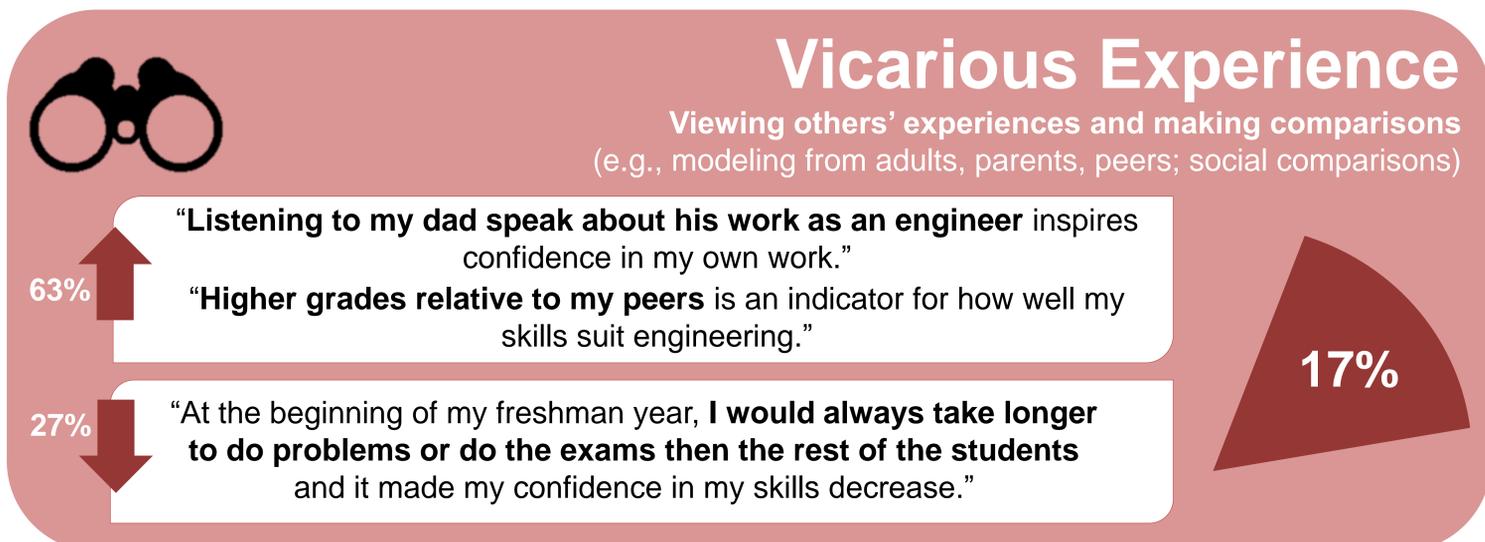
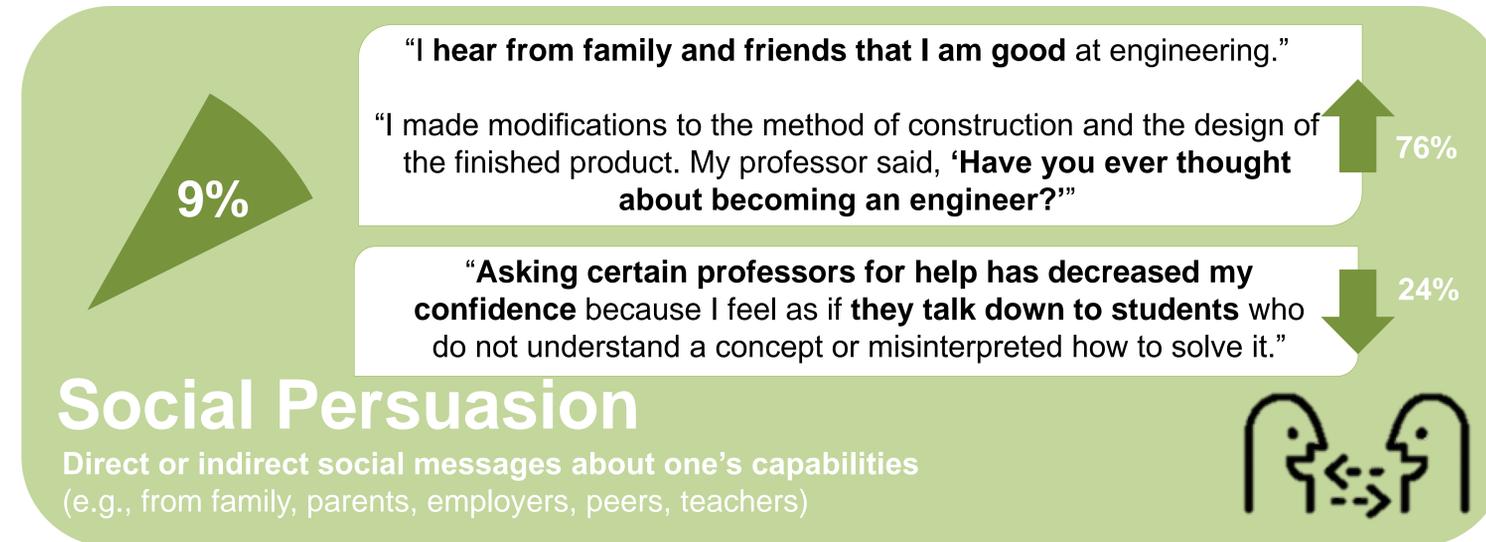
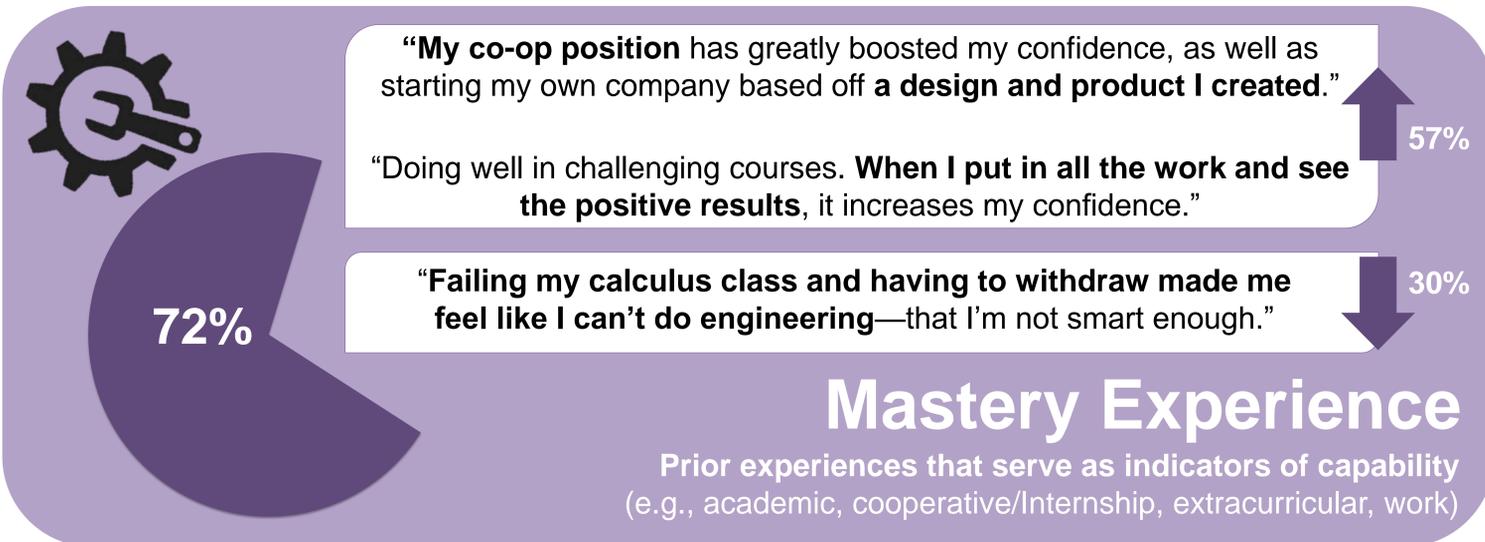
To examine experiences related to self-efficacy for engineering, and to investigate any gender differences in the engineering domain

WHO

654 undergraduate engineering students from two large, public universities (73% men; 86% White)

HOW

Coded responses to a single open-ended question: *“What events have affected your confidence in engineering? How?”*



RESULTS

- The sources of self-efficacy are complex and intertwined (9% of responses were multiply-coded).
- Academic (40%) and internship experiences (7%) were the most frequent sources of self-efficacy.
- Most (84%) cooperative/internship experiences raised self-efficacy; only 48% of academic experiences did so.
- Other efficacy-relevant information included help availability, stereotype awareness, and practical applicability.

DISCUSSION

- Consistent with past research, enactive experience plays a key role in self-efficacy development. Course performance seems particularly influential.
- Practical application of engineering skills (e.g., internship) raises self-efficacy.
- Efficacy-relevant experiences are interconnected. Even those that are less frequent might be equally powerful in altering self-efficacy and career trajectories (Usher & Pajares, 2008).