Non-Cognitive Predictors of Student Success: A Predictive Validity Comparison Between Domestic and International Students

INTRO:
- The ocean has absorbed ~40% of emissions from cement production and fossil fuel combustion.
- Nearly every nation pledged to limit global warming to 1.5°C.
- The reductions in warming can enhance ocean carbon uptake, but how will reduction to the growth rate of atmospheric CO₂ affect ocean uptake?

METHODS

Model:
We use ocean biogeochemistry output from the CESM-LE, CESM-ME, and a low-warming CESM ensemble.

Flux Efficiency:
\[ \eta = \left( \frac{F_{\text{anth}}}{F_{\text{exp}}} \right) \times 100 \]
- Assumes continued growth at historical rates, consistent with transient steady state.
- Ratio of anthropogenic flux \( F_{\text{anth}} \) and expected flux \( F_{\text{exp}} \).

RESULTS
- Increasing emission mitigation decreases efficiency.

Emissions mitigation reduces ocean carbon uptake efficiency.

Meeting the 1.5°C warming target reduces ocean carbon uptake efficiency to <10% by 2080.