## It Only Takes a Moment: Mindset Intervention Improves Performance, Retention...and Resilience?

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400-WORD ABSTRACT. We have incorporated a variety of high impact teaching strategies into our curriculum. One of them is a mindset intervention (Blackwell, Trzesniewski, & Dweck, 2007). It does not replace content or other high impact pedagogies, but augments implementation by boosting student resilience (Yeager, Walton, & Cohen, 2013). In this method, students' implicit theories of intelligence are surreptitiously altered from accepting failure as lack of ability to viewing it as part of growth. In growth mindsets, intelligence is perceived as fluid and malleable rather than fixed. Thus, this mindset—coupled with the belief that effort and "exercise" lead to brain growth—contributes to resilience and persistence on intellectually challenging and difficult material (Dweck, Walton, & Cohen, 2011; Yeager & Dweck, 2012.

In "brief interventions" (e.g., Blackwell et al., 2007) students are presented with innocuous and non-reactive tasks to alter their beliefs about their own intelligence: their mindsets. These subtle interventions shift students from "fixed" mindsets (i.e., intelligence is predetermined and set) to "growth" mindsets (i.e., intelligence as malleable).

Students in three of seven sections of General Psychology (n = 136) participated in mindset interventions. After receiving feedback on the first exam, students wrote letters of advice to future students. In addition to their own advise, they were instructed to include the idea that "intelligence is malleable," and that with effort, one's brain can grow. Later in the semester, students analyzed a research article that demonstrated neuron growth in rats run in complex mazes, as opposed to those run in simple mazes. This intervention was repeated in our Survey of Psychology courses (i.e., introduction course for non-majors). Four sections of the Survey course participated with two sections receiving the brief intervention and two that did not.

A comparison of the General Psychology students who received the mindset intervention (n = 136) to those who did not (n = 138) revealed a significant difference in withdraw rate,  $X^2$  (1, N = 274) = 6.27, p = .012. 14% of students receiving the mindset intervention withdrew compared to 26.1% of those who did not receive the intervention. Furthermore, the mindset intervention was especially impactful for our Latino students,  $X^2$  (1, N = 124) = 5.78, p = .016. The course withdraw rate for Latino students who received the brief intervention was lower (20%) relative to those who did not (36.8%).

## References

- Blackwell, L. A., Trzesniewski, K. H., & Dweck, C. S. (2007). Theories of intelligence and achievement across the junior high school transition: A longitudinal study and an intervention. *Child Development*, 78, 246–263.
- Dweck, C. S., Walton, G. M., & Cohen, G. L. (2011). Academic tenacity: Mindsets and skills that promote long-term learning. *Gates Foundation*. Seattle, WA: Bill & Melinda Gates Foundation.
- Yeager, D. S. & Dweck, C. S. (2012). Mindsets that promote resilience: When students believe that personal characteristics can be developed. *Educational Psychologist*, 47, 302-314.

Yeager, D., Walton, G., & Cohen, G. L. (2013). Addressing achievement gaps with psychological interventions. *Phi Delta Kappan*, *94*, 62-65.