Skill Accumulation with Malleable Ability: 
Evidence from a Growth Mindset Intervention

Existing research shows that students endowed with “growth mindset”, a belief that one’s intelligence and cognitive abilities are malleable and can be improved through effort, are more likely to be academically successful. Interventions attempting to change these beliefs, particularly in groups with low academic performance, have therefore been suggested as a way to improve, or close ethnic or social gaps in students’ performance. However, the mechanisms through which the claimed benefits are found are still poorly understood. In this paper we evaluate the effects of a randomized intervention focusing on beliefs about ability on a sample of first year university students in the UK. We consider the effects of this intervention on measures of an individual’s growth mindset, elicited through standard validated questions, as well as her subjective beliefs about the productivity of hours of study and attendance to classes and lectures, as measured through novel sets of questions. We also look at a range of explanatory factors, including actual attendance to lectures and classes, self-reported study hours, and various measures of study habits. We document a positive treatment effect on students’ beliefs about the malleability of ability, using all different measurements, their expected final grades, and actual GPAs in end of year tests. We find evidence that the intervention impacted mainly students’ study habits. However, we also find that low SES students do not benefit most from this intervention.