Examining the Relationship between Psychosocial and Academic Outcomes in Higher Education: A Descriptive Analysis
Elise Swanson, Tatiana Melguizo, and Paco Martorell

Motivation
• Performance-based funding emphasizes retention and graduation rates (Holly & Fulton, 2017)
• Employers prioritize psychosocial skills as much or more than content/technical skills (The Aspen Institute, 2019; Hart Research Associates, 2013)
• Unclear if interventions that improve psychosocial outcomes also improve academic outcomes (Yeager & Walton, 2011; Kraft, 2017; Jackson, 2018)
• Call for research examining interventions that support success in both domains (National Academies, 2017)

Research Questions
• What is the relationship between students’ reported psychosocial skills and cumulative GPA at the end of their first, second, and third years on campus?
• What is the relationship between students’ reported psychosocial skills and likelihood of continued enrollment throughout their first six semesters (three years) on campus?

Defining Psychosocial Outcomes
• Mattering to campus: supportive relationships on campus
  • “There are people at {INSTITUTION} who are generally supportive of my individual needs”
• Belonging to campus: identify with the institution
  • “I feel I am a member of the {INSTITUTION} community”
• Academic self-efficacy: belief in ability to complete academic tasks
  • [I can] “meet the academic demands of college”
• Social self-efficacy: belief in ability to navigate social situations
  • [I can] “make friends you can talk about your very personal problems with”

Academic Outcomes
• Cumulative GPA: from University of Nebraska (NU) system
• Persistence: Measure of continuous enrollment in NU system (=1 if student is enrolled at an NU campus and was enrolled in prior semester)
• Dropout: Measure of exit from the NU system (=1 if a student is no longer enrolled but was in a prior semester)

Data Sources
• Two cohorts entering NU system in 2015 and 2016
• All students applied for a scholarship from the Susan Thompson Buffett Foundation
• Combine longitudinal survey and transcript data

Methods: GPA
• Pairwise correlations between four psychosocial outcomes and cumulative GPA at end of 1st, 2nd, and 3rd year
• Multivariate regression
  \[ Y_{it} = \beta_0 + \delta_1 M_{MA_{it}} + \delta_2 B_{B_{it}} + \delta_3 A_{SE_{it}} + \delta_4 S_{SE_{it}} + \gamma X_{it} + \tau + \epsilon_i \]

Results: GPA
• GPA positively correlated with psychosocial outcomes; most strongly with academic self-efficacy
• In regression analyses, relationship with academic self-efficacy and belonging strongest and most consistent over time

Methods: Persistence
• Probits- enrollment at start of 2nd and 3rd year
  \[ \Pr(Y_{it} = 1 | X) = \Phi(\beta_0 + \delta PSY_{i-1} + \gamma X_t + \tau_i + \epsilon_i) \]
• Survival model- 6 semesters; outcome is dropout

Data Sources
• Two cohorts entering NU system in 2015 and 2016
• All students applied for a scholarship from the Susan Thompson Buffett Foundation
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Results: Persistence
• Higher levels of belonging and academic self-efficacy predict increased likelihood of enrollment in 2nd and 3rd years
• Across students’ first six semesters, higher levels of belonging and academic self-efficacy associated with ~27% reduction in likelihood of dropout

Conclusions
• Psychosocial outcomes, especially belonging and academic self-efficacy, related to academic outcomes during students’ first three years
• Suggests institutions do not have to (and potentially should not) focus exclusively on one