Daniel Showalter* (showaltd@ohio.edu), Athens, OH. Do High School Mathematics Courses Prepare Students for College Placement Tests?

This presentation reports on a study designed to estimate the causal effect of taking pure mathematics courses in high school on the likelihood of placing out of postsecondary remedial mathematics. A nonparametric variant of propensity score analysis (marginal mean weighting through stratification) was used on a nationally representative dataset to test for a practically significant causal effect in three groups of students: all comparable students, students who were unlikely to take high-level mathematics courses, and students in a range of demographic categories.

The findings suggest that enrollment in high school mathematics courses may not have as strong of an effect on placement out of postsecondary remedial mathematics as typically claimed in the research literature. More generally, the results suggest that hidden selection bias in many previous education studies may have unwittingly masked the inequity in the U.S. education system. (Received September 11, 2014)