

Heuristic Self-Evaluation in High-Stakes Decisions: Fields of Study and Long-Term Earnings

This paper examines how uncertainty about one's ability interacts with cognitive heuristics to shape high-stakes educational choices and career paths. Using administrative data, I implement a regression discontinuity at a round-number threshold on the national university entrance test. Crossing the threshold on the first test sharply increases the likelihood of pursuing high-return STEM degrees, despite conferring no formal admission advantage and often falling below program cutoffs. This behavior is consistent with left-digit bias: students interpret the score's left digit as a meaningful signal, leading them to improve their scores through retesting, apply to, and ultimately enroll in STEM programs. In subsequent years, they are more likely to work in the tech sector, earn higher wages, and reach the top of the income distribution. Leveraging this behavioral discontinuity, I estimate large returns to STEM degrees among students who are uncertain about applying. The findings suggest that heuristic self-evaluation can generate persistent disparities in economic opportunity that are unrelated to actual ability.