Abstracts

Understanding the role of non-academic factors in student success: Perspectives from a minority-serving institution

Sinjini Mitra, California State University, Fullerton

Since the COVID-19 pandemic, much research has examined how educational institutions adapted to the abrupt shift to online learning, as well as the factors influencing student learning during that period and the challenges encountered by educators and administrators alike. One important aspect of student learning that was brought to the forefront by the pandemic was the significance of non-academic and social/environment factors in student performance and success that had received much less attention in prior studies compared to demographic and academic factors. This research study explores different non-academic factors that play a role in college success, particularly at a minority-serving university with a diverse student population, although many of the findings apply to most institutions today. Statistical analysis of the data revealed that factors such as students' self-perceived academic and emotional readiness for college, motivation and self-confidence, participation in campus co-curricular activities, perception of a sense of community and belonging, and the use of academic support services were significantly associated with student performance and success. Practical implications and future directions from both an academic and an institutional perspective will also be briefly discussed.

Gender Norms and Economic Decision-Making: Evidence on Risk and Labor Outcomes

Orlie Weitzman, University of Chicago

The research I supported examines the economic impact of gender identity and social norms, emphasizing the distinction between biological sex and the culturally constructed process of "doing gender" in economics. It argues that internalized beliefs and social expectations surrounding gender shape key life outcomes, including academic performance, labor force participation, and household specialization. The talk focuses on three empirical patterns: (i) gender norms and risk-taking, (ii) occupational sorting, and (iii) labor market outcomes across countries.

Within this framework, gender differences in economic behavior—particularly risk-taking—are shaped by internalized norms about how men and women are expected to behave. Risk-taking is identified as a core dimension of dominant masculinity norms, and cross-country evidence suggests that men's adherence to these norms is associated with greater willingness to take risks. Using data from more than 70 countries, De Haas et al. (2024) find that stronger conformity to masculinity norms is significantly associated with higher male risk tolerance, as well as broader patterns of occupational sorting and labor market behavior. Taken together in my co-report, these findings suggest that incorporating gender identity and norms into economic analysis meaningfully improves our ability to explain both individual behavior and aggregate labor market gender representation patterns.

Faculty Teaching and Research Productivity and Equity in STEM: Student Grade Gaps in Lower-Division Courses

Anna Kye, University of California Irvine

This study extends prior work that derived three STEM faculty academic productivity clusters from 16 standardized metrics using NbClust in R and validated them with ANOVA and Kruskal-Wallis tests. Those clusters are used here to examine equity in course outcomes among 553 faculty at a public R1 university. Average grade gaps between minoritized and non-minoritized students served as equity outcomes across four student groups. Four regression models were estimated with cluster membership, faculty characteristics, and course features as predictors. Tukey HSD tests confirmed significant gap variation across clusters. Faculty with moderate research productivity and heavy lower-division teaching loads were associated with smaller gaps for first-generation, low-income, and female students. Large class sizes widened gaps. The study demonstrates a pipeline combining cluster profiles, hypothesis testing, and regression to surface how faculty productivity shapes equity in STEM course outcomes.

Elevating Collaborations with Leadership and Hospitality

Kristin Gaffney, UAMS

To be a successful statistician or data scientist, we have to work skillfully with data. To be a successful collaborator, we also have to work skillfully with people. People are not data. While we focus on technical skills like coding, study design, statistical methods, and now AI, we should also refine skills that enable us to thrive in teamwork. Leveraging resources outside statistics and data science can equip us to be successful both technically and interpersonally. I will share lessons learned from leadership education and hospitality literature so you can take the next step in elevating your collaborative capabilities and experiences.