Gagandeep Sachdeva

Last Updated: December 20, 2024

Education

PhD in Economics, University of California, Santa Cruz	2019-Present
• Dissertation: "Essays in Discriminatory Outcomes and Mechanisms in Education"	
Committee Chairs: Professor Laura Giuliano (UCSC) and Professor Robert Fairlie (UCLA)	
MPhil in Economics, Indira Gandhi Institute of Development Research	2018
MSc in Economics, Indira Gandhi Institute of Development Research	2017
• Awarded the Chancellor's Gold Medal for the Best-Performing Student in The M.Sc. Program.	
B.A. (Hons) Economics, University of Delhi	2015

Working Papers

Affirmative Action, Faculty Productivity, and Caste Interactions: Evidence from Engineering Colleges in India

(with Robert Fairlie, Saurabh Khanna, and Prashant Loyalka)

Abstract: Affirmative action programs are often criticized because of concerns that they result in lower worker productivity and efficiency losses. We study the relative productivity of workers benefiting from an aggressive affirmative action policy in a setting where hiring constraints are especially likely to bind. In India, colleges are required to reserve approximately 50 percent of faculty hires for individuals from disadvantaged caste and social class groups. We collect and analyze data from a nationally representative sample of 50 engineering and technology colleges in India, some of which randomly assign students to classrooms. We find that reservation category faculty have lower levels of education, lower professorial ranks and fewer years of experience in academia than general category faculty who are not hired through reservations. Yet, even with lower qualifications, we find no evidence that reservation category faculty provide lower quality instruction across a wide range of measures that include course grades, follow-on course grades, standardized test scores, dropout, attendance, graduate school plans, and graduation. In fact, we find that, at least for immediate effects on course grades, students taught by reservation category faculty perform slightly better than students taught by general category faculty. We find no evidence of positive "teacher-like-me" effects of reservation category faculty on the relative course performance and longer-term outcomes of reservation category students. Furthermore, even in the face of potential discrimination and resentment against faculty hiring quotas, general category students perform slightly better in classrooms taught by reservation category faculty than general category faculty. The findings have implications for the heated debates over affirmative action programs found in many countries around the world and in India which is now the largest country in the world.

A STEM Instructor Like Me: Female Teacher-Student Interactions in Indian Engineering Colleges

(with Robert Fairlie, Mridul Joshi, Saurabh Khanna, and Prashant Loyalka).

Abstract: This study provides causal evidence on the impact of exposure to female faculty on female STEM students. We leverage the random assignment of undergraduate STEM students to instructors, which is rarely feasible in higher education settings, to circumvent identification issues arising from non-random sorting of students to classrooms based on instructor or peer characteristics. We find that female students taught by female faculty achieve higher course grades, improving by 2.7 percentile points. Moreover, increasing female faculty exposure by 10 percentage points over two years (from a baseline of 34 percent) yields a 0.03 standard deviation improvement in standardized test scores of female students. Beyond academic performance, we find that exposure to more female faculty leads to a reduction in STEM anxiety among female students and more equitable gender beliefs among male students. These findings suggest that the exposure to female faculty helps improve the performance of female students in STEM through higher academic achievement and reduced anxiety as well help reshape traditionally held gender-based stereotypes in STEM.

Works in Progress

Gender Gaps in Reading Skills and The Role of Teachers: Evidence from North Carolina

The Performance of Affirmative Action Admits in College: Evidence from Reservation Policies in Indian Engineering Colleges

(with Robert Fairlie, Saurabh Khanna, and Prashant Loyalka)

Friday Night Lights, Monday Morning Grades: How High School Football Success Affects Student Achievement (with Evan Bennett, Derek Rury, and Sofia Shchukina)

Gender, STEM, and Confirmation Bias: An Experimental Investigation

The Relationship between School Segregation and Learning Outcomes: Evidence from India

(with Moumita Das, Shreya Dutt, and Kartik Srivastava)

Teaching and Mentoring Experience

Graduate Student Instructor, Department of Economics, UCSC

• Intermediate Microeconomics (Online Asynchronous)

Teaching Assistant, Department of Economics, UCSC

- Applied Econometrics (Graduate Course)
- Applications in Microeconomics (Graduate Course)
- Intermediate Microeconomics (x5)
- Introductory Microeconomics (x4)

Graduate Pedagogy Fellow, Teaching and Learning Center, UCSC

- Assisting in developing teaching strategies for economics graduate students in their role as teaching assistants.
- · Conducting professional development workshops for graduate teaching assistants in using active learning in economics classrooms.

Peer Mentor, Summer GSI Support Team, Teaching and Learning Center, UCSC

- Developing equity-minded course learning outcomes, assessment plans, and an engaging course structure.
- · Leading discussions on effective teaching strategies, giving feedback to students, and navigating classroom challenges.
- Facilitating peer feedback on lesson planning, syllabus design, and reflective teaching practices.

Research and Work Experience

Graduate Student Researcher, UC Santa Cruz	2020-2024
Prof Laura Giuliano, Department of Economics, UCSC	
• Prof Robert Fairlie, Chair, Department of Public Policy, UCLA Luskin School of Public Affairs	
Institutional Research, Assessment and Policy Studies Unit, UCSC	
Research Associate, Economic Research Unit, Koan Advisory	2019
Research Assistant, Delhi School of Economics	2017
Prof Rohini Somanathan, Center for Development Economics, DSE	

Grants, Awards, and Fellowships

Summer GSI Peer Support Fellowship, Teaching and Learning Center, UCSC	2024
Dissertation Research Grant, Department of Economics, UCSC	2024, 2023, 2022
Graduate Pedagogy Fellowship, Teaching and Learning Center, UCSC	2022
Regent's Fellowship, Graduate Division, UCSC	2019

- Introductory Macroeconomics
- Industrial Organization
- Economic Rhetoric

Winter 2022-Present

Spring-Summer 2024

Summer 2024

Winter 2020-Present

Conferences and Summer Schools

Jni- 2024		
2023		
2022		
Summer School on Theory-Driven Experiments, Center for Theoretical and Experimental Social Sciences, CalTech, Pasadena 2022		
2019		
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Technical Skills

Data analysis and plotting with STATA, R, SPSS, and MICROSOFT EXCEL.

Optimization, computation, and plotting with WOLFRAM MATHEMATICA.

Typesetting with LATEX

References

Dr Carlos Dobkin, Professor, Department of Economics, UC Santa Cruz	cdobkin@ucsc.edu
Teaching References	
Dr George Bulman, Associate Professor, Department of Economics, UC Santa Cruz	gbulman@ucsc.edu
Dr Robert Fairlie, Distinguished Professor, Public Policy and Economics, UCLA	rfairlie@ucla.edu
Dr Laura Giuliano, Professor, Department of Economics, UC Santa Cruz	lgiulian@ucsc.edu

Dr Kendra Dority, Teaching and Learning Center, UC Santa Cruz kdority@ucsc.edu