MICHAEL TOPPER

(805) 914-4285 ◇ michaeltopper@ucsb.edu ◇ michaeltopper.netlify.app ◇ US Citizen

Current as of October 27, 2023

EDUCATION

University of California, Santa Barbara: *PhD Economics* 2018 - Present

- Expected graduation: June 2024

San Diego State University: *M.A. Economics* 2018

University of California, San Diego: *B.S. Mathematics/Economics* 2015

PUBLICATIONS

The Effects of Fraternity Moratoriums on Alcohol Offenses and Sexual Assaults

Forthcoming: Journal of Human Resources 2023

I exploit variation in timing from 44 temporary university-wide halts on all fraternity activity with alcohol (moratoriums) across 37 universities over 2014-2019. I construct a novel data set, merging incident-level crime logs from university police departments to provide the first causal estimates of the effect of moratoriums on reports of alcohol offenses and sexual assaults. In particular, I find robust evidence that moratoriums decrease alcohol offenses by 26%. Additionally, I find suggestive evidence that moratoriums decrease reports of sexual assault on the weekends by 29%. However, I do not find evidence of long-term changes once the moratorium is lifted.

RESEARCH IN PROGRESS

Job Market Paper: *"The Effect of ShotSpotter Technology on Police Response Times"*

(with Toshio Ferrazares)

ShotSpotter is an acoustic gunfire detection technology utilized by police departments in over 150 cities world-wide with the intention of rapidly dispatching police officers to violent crime scenes in an effort to reduce gun violence. In Chicago, this amounts to approximately 70 instances per-day whereby officers are immediately dispatched to potential instances of gunfire. However, this allocation diverts police resources away from confirmed reports of 911 emergencies, creating delays in rapid response—a critical component of policing with health and safety implications. In this paper, we utilize variation in timing from ShotSpotter rollouts across Chicago police districts from 2016-2022 to estimate the causal effects of ShotSpotter on 911 emergency response times that are designated as Priority 1 (immediate dispatch). Using comprehensive 911 dispatch data from the Chicago Police Department, we find that ShotSpotter implementation causes police officers to be dispatched one-minute slower (23% increase) and arrive on-scene nearly two-minutes later (13% increase). Moreover, these effects are driven by periods with fewer police on-duty and times of day with larger numbers of ShotSpotter-related dispatches. Consequently, when responding to emergency calls, police officers' success rate in arresting perpetrators decreases by approximately 9%, with notably large decreases in arrests for domestic battery (14%).

In Progress: *"Gunshot Noise and Birth Outcomes"*

(with Anna Jaskiewicz)

Gun violence is ubiquitous across the United States, with gun-related deaths reaching an all-time high in 2021. The prevalence of gunfire results in loud and potentially stress-inducing sounds, which may adversely affect critical stages of in-utero development. However, gunfire is largely unreported, creating a unique challenge for researchers to understand its consequences. In this paper, we mitigate this shortcoming by leveraging data from ShotSpotter—an acoustic gunshot technology which uses an array of sensors placed on city structures to detect the sound of gunfire. We combine this unique data source with the universe of births in San Francisco over a four-year period (2016-2020), each matched to a mother's residence. Using the variation in gunfire detections from ShotSpotter at the census-block level, we employ a difference-in-differences methodology and find that gunshot noise creates substantial decreases in gestation lengths, resulting in an increase in preterm deliveries. These effects are driven entirely by times of the day when civilians are awake, and are particularly concentrated among mothers with low levels of education. These results suggest that gunshot noise is a major factor contributing to the income inequities in pregnancy outcomes.

TEACHING EXPERIENCE

Instructor of Record: *University of California Santa Barbara* and *San Diego State University*

- Econ 199RA Data Hack - (UCSB: Spring 2022)
- Introductory Microeconomics - (SDSU: Fall 2017/Spring 2018)

Teaching Assistant: *University of California, Santa Barbara* and *San Diego State University*

- Introductory Microeconomics- (UCSB: Fall 2018/Winter 2019)
- Introductory Macroeconomics - (UCSB: Spring 2019, 2020, 2023/Winter 2022, 2023)
- Introductory Econometrics A - (UCSB: Fall 2019/Winter 2020/Summer 2021)
- Introductory Econometrics B - (UCSB: Summer 2023)
- Data Wrangling in Economics - (UCSB: Fall 2020, 2021, 2022)
- Introduction to Research in STEM, Humanities, and Social Sciences - (UCSB: Summer 2023)
- Introductory Microeconomics - (SDSU: Fall 2016)
- Introductory Econometrics - (SDSU: Spring 2017)

Course Curriculum Creator: *University of California, Santa Barbara*

- Main contributor of course curriculum for Econ 145: Data Wrangling in Economics and its graduate counterpart, Econ 245, using the R programming language.

Undergraduate Research Advisor: *University of California Santa Barbara*

- Advisor for student Terry Cheng for undergraduate economics research.

Advanced Math Lab Tutor: *Santa Barbara City College*

- Tutored Calculus for Engineers I-III, Linear Algebra, Differential Equations, and Elementary Statistics at Santa Barbara Community College's walk-in mathematics lab.

TEACHING RECOGNITION

Academic Senate Outstanding Teaching Assistant: *University of California, Santa Barbara*

- Nominated: Fall 2019 (Introductory Econometrics)
- Nominated: Fall 2020 (Data Wrangling for Economics)

GSA Excellence in Teaching Award: *University of California, Santa Barbara*

- Nominated: Fall 2022

UCSB Economics Department Teaching Award: *University of California, Santa Barbara*

- Awarded: Fall 2021

TEXTBOOK

Data Wrangling for Economists (with Danny Klinenberg)

- This textbook (see here) was written as a guide for economists in both the undergraduate and PhD program to assist with the courses Econ 145/245. The book is a free online source, and is constantly undergoing revision.
- Chapter 8 used in CSU San Luis Obispo course: GSE 570 Collaborative Software Development for Economists

SOFTWARE

R Package: panelsummary

- Creates publication-quality regression tables that have multiple panels. Available on CRAN. Over 1.5k downloads. Click here for the package website.

ACADEMIC RECOGNITION

M.C. Madhaven Prize Outstanding Graduate Student: *San Diego State University*

- Awarded annually by the San Diego State Department of Economics to the Outstanding Graduating Masters Student.

The Weintraub Paper Award: *San Diego State University*

- Excellence in writing about Economics: "Do Donald Trump Rallies Cause More Violence?"

Terhune Scholarship: *San Diego State University*

PRESENTATIONS

Western Economic Association: *San Diego* 2023

All-California Labor Conference: *Santa Barbara* 2023

San Diego State Economics Department Seminar: *San Diego* 2023

Applied Microeconomics Lunch: *Santa Barbara* 2023

WORK EXPERIENCE

Research Assistant for Dr. Heather Royer: *University of California, Santa Barbara* 2020 - 2021

Appfolio: *Value Added Services: SaaS Intern* 2015 - 2016

Research Assistant for Dr. Steve Levkoff: *University of California, San Diego* 2014 - 2015

REFERENCES:

Professor Heather Royer
UC Santa Barbara
Committee Chair
(805) 893-8830
royer@econ.ucsb.edu

Associate Professor Kevin Schnepel
Simon Fraser University
Committee Member
N/A
kevin_schnepel@sfu.ca

Professor Dick Startz
UC Santa Barbara
Committee Member
(805) 893-2895
startz@ucsb.edu

ADDITIONAL INFO

Technical: R, Python, ArcGIS, LaTeX, STATA, MatLab

Areas of Focus: Economics of Crime, Health Economics, Labor Economics

Out of Office: Personal Food Critic, One-man Rock Band, Basketball Extraordinaire