

Curriculum Vitae

Chad Hazlett

Updated: September 2020

Academic Positions

Assistant Professor of Statistics, UCLA, 2014-Present

Assistant Professor of Political Science, UCLA, 2014-Present

Education

Ph.D., Political Science, Massachusetts Institute of Technology, 2009-2014.

Dissertation: *Inference in Tough Places: Essays on Modeling, Matching, and Measurement with Applications to Civil Conflict*.

Committee: Jens Hainmueller (chair), Fotini Christia, Adam Berinsky, Teppei Yamamoto

Subfields: Political Methodology and International Relations

Pre-doctoral Fellow (with Kosuke Imai), Dept. of Politics, Princeton, 2013-2014

M.P.P., Harvard University, Kennedy School of Government, 2004-2006.

Concentration: *Political and Economic Development*

B.S. with Distinction, *magna cum laude*, Duke University, 1998–2002.

Major: Psychology; Concentration in Cognitive Neuroscience

Research Interests

Causal inference with observational data, non-randomized trials, sensitivity analysis, machine learning, measurement of sensitive attitudes and emotions, civil conflict, mass atrocities and genocide.

Grants

East Africa Social Science Translation Collaborative, Center for effective global action (2020). “A piece of paper? The benefits of a secondary school certificate in Tanzania”. \$70,000. (with Christina Fille)

Faculty Research Grant, “How well does preventing evictions prevent homelessness?: A natural experiment”. UCLA (2019). \$6184.

Facebook Statistics for Improving Insights and Decisions (2019), “KPop: Kernel-based population reweighting of surveys”. \$50,000. (with Erin Hartman)

California Center for Population Research Seed Grant (2018-2019), “Estimating Real World Causal Effects under Self-Selection”, \$13,000.

Research Enabling Grant, UCLA Academic Senate (2018-2019), \$1800

Center for Social Statistics, Seed Grant (2018-2019). “Improving Kernel Methods for Social Science Research.” \$9,279. (with Arash Amini).

Research Enabling Grant, UCLA Academic Senate (2017-2018), \$1,800

- Center for Social Statistics, Seed Grant (2017-2018). “Randomized trials with varying probability of treatment”. \$20,000
- California Center for Population Research Seed Grant (2016). “The effects of Boko Haram violence on attitudes towards religion, policy, and peace.” \$17,200
- Hellman Fellowship (2016-2017). “Can social psychological tools detect ethnic biases that behavioral economics games miss? An initial test in Nairobi, Kenya.” \$30,000
- Research Enabling Grant, UCLA Academic Senate (2016). \$2000.
- JPAL Governance Initiative (2015). “Ruling (by) the Airwaves: The effect of radio programming on attitudes toward government in South Sudan.” \$49,850. (Declined due to conflict escalation and suspension of operations by implementing partner)

Fellowships

- US Holocaust Museum Simon-Skjodt Center Fellowship. Statistical analyses and annual forecasts of mass atrocity risk. 2017-Present.
- Ford International Political Science Fellow, 2009-2013

Work in Progress

Under review

- Timothy S Chang, Yi Ding, Malika K Freund, Ruth Johnson, Tommer Schwarz, Julie M Yabu, Chad Hazlett, Jeffrey N Chiang, Ami Wulf, UCLA Precision Health Data Discovery Repository Working Group, Daniel H Geschwind, Manish J Butte, Bogdan Pasaniuc. Prior diagnoses and medications as risk factors for COVID-19 in a Los Angeles Health System. *Under review, Cell Reports Medicine*.
- Fabbe, K., Hazlett, C., Sinmazdemir, T. Displaced Loyalties: The effects of indiscriminate violence on attitudes among Syrian refugees in Turkey. *Under review*. Available at <http://www.chadhazlett.com>

In preparation

- Cinelli, C., Ferwerda, J., Hazlett, C. sensemakr: Sensitivity Analysis Tools for OLS in R and Stata. *In preparation for J. of Statistical Software*. Available at <http://www.chadhazlett.com>
- Hazlett, C., Parente F. “Is it identified?” is the wrong question: How the sensitivity-based approach would improve the way we understand, communicate, and debate the credibility of observational studies. Available at <http://www.chadhazlett.com>
- Cinelli, C., Hazlett, C. An Omitted Variable Bias Framework for Sensitivity Analysis of Instrumental Variables. *Available by request*.
- Hartman, E., Hazlett, C., Sterbenz, C. KPop: A kernel balancing approach for reducing specification assumptions in survey weighting. *Available by request*.
- Graeme Blair, Mohammed Bukar, Rebecca Littman, Elizabeth R. Nugent, Rebecca Wolfe, Benjamin Crisman, Anthony Etim, Chad Hazlett. Religious Leaders Can Change Minds and Shift Norms.
- Hazlett, C., Xu. Y. Trajectory Balancing: A general reweighting approach to causal inference with time-series cross-sectional data. Available at <http://www.chadhazlett.com>
- Inoue, K., Arah, O., Seaman, M., Cinelli, C., Hazlett C. Do prescription opioids increase all-cause mortality among the US general population?
- Hazlett, C., Mello, F. What good is a free house? Evidence from 3000 imperfect housing lotteries in Brazil. Pre-analysis plan registration 20200219AB, available at <https://osf.io/yz8wa>.

- Hazlett, C., Sonnet, L. Beyond Logit, Probit, or Linear Probability Models: avoiding misspecification bias while maintaining interpretability for binary outcome regressions.
- Hazlett, C., Wulf, D. A., Montague, B., Erlandson, K., Arah, O., Pasanuic, B. What (not) to conclude from non-randomized studies of hydroxychloroquine, and how to do better.
- Hazlett, C., Wulf, D.A., Hill, B., Chiang, J. What we can learn about Remdesivir from observational data: A stability-controlled quasi-experiment in a Los Angeles Health System.
- Amini, A., Hazlett, C., Zhang L. Practical kernel regularized least squares with a million observations.
- Hazlett, C., Ramos, A., Smith, S. Using machine learning approaches to improve practical targeting of infant mortality prevention measures.

Publications

Peer reviewed (authorship alphabetical unless otherwise noted)

- Hazlett, C., Wainstein, L. Understanding, choosing, and unifying multilevel and fixed effect approaches. Forthcoming, *Political Analysis*. Available at <http://www.chadhazlett.com>
- Blum, A., Hazlett, C., & Posner, D. N. Measuring Ethnic Bias: Can Misattribution-Based Tools from Social Psychology Reveal Group Biases that Economics Games Cannot? Forthcoming, *Political Analysis*. Available at <http://www.chadhazlett.com>
- Hazlett, C., Maokola, W., Wulf, D. (2020). Inference without randomization or ignorability: A stability-controlled quasi-experiment on the prevention of tuberculosis. *Statistics in Medicine*, Online September 2020, DOI: 10.1002/sim.8717. Available at <http://www.chadhazlett.com>
- Hazlett, C., & Mildenerger, M. (2020). Wildfire exposure increases pro-climate political behaviors. *American Political Science Review*. Online 15 July 2020. doi:10.1017/S0003055420000441. Available at <http://www.chadhazlett.com>
- Conley, B., & Hazlett, C. (2020). How very massive atrocities end: A dataset and typology. *Journal of Peace Research*, 30. Data, case studies, and additional materials available at <http://www.chadhazlett.com>.
- Hazlett, C. (2020). Kernel Balancing: A flexible non-parametric weighting procedure for estimating causal effects. *Statistica Sinica*. Available at <http://www.chadhazlett.com>.
- Hazlett, C., Campos E., Tan, P., Truong, H., Loo, S., DiStefano, C., Jeste, S., & Senturk, D. (2020). Principle ERP reduction and analysis: Estimating and using principle ERP waveforms underlying ERPs across tasks, subjects and electrodes. *NeuroImage*, 212, 116630. (Co-first author with E. Campos). Available at <http://www.chadhazlett.com>.
- Cinelli, C., & Hazlett, C. (2020). Making sense of sensitivity: Extending omitted variable bias. *Journal of the Royal Statistical Society: Series B (Statistical Methodology)*, 82(1), 39-67. <http://www.chadhazlett.com>.
- Hazlett, C. (2020). Angry or Weary? How Violence Impacts Attitudes toward Peace among Darfuran Refugees. *Journal of Conflict Resolution*, 64(5), 844-870. Available at <http://www.chadhazlett.com>
- Hazlett, C. (2019). Estimating causal effects of new treatments despite self-selection: The case of experimental medical treatments. *Journal of Causal Inference*, 7(1). Available at <http://www.chadhazlett.com>.
- Fabbe, K., Hazlett, C., & Sinmazdemir, T. (2019). A persuasive peace: Syrian refugees attitudes towards compromise and civil war termination. *Journal of Peace Research*, 56(1), 103-117. Available at <http://www.chadhazlett.com>.
- Fong, C., Hazlett, C., & Imai, K. (2018). Covariate balancing propensity score for a continuous treatment: Application to the efficacy of political advertisements. *The Annals of Applied Statistics*, 12(1), 156-177. Available at <http://www.chadhazlett.com>.

- Hazlett, C., & Berinsky, A. (2018). Stress-testing the affect misattribution procedure: Heterogeneous control of affect misattribution procedure effects under incentives. *British Journal of Social Psychology*, 57(1), 61-74. Available at <http://www.chadhazlett.com>.
- Ross, M. L., Hazlett, C., & Mahdavi, P. (2017). Global progress and backsliding on gasoline taxes and subsidies. *Nature Energy*, 2(1), 1-6.
- Ferwerda, J., Hainmueller, J., & Hazlett, C. (2015). Krls: A Stata package for kernel-based regularized least squares. *Journal of Statistical Software*, 55(2). Available at <http://www.chadhazlett.com>.
- de Waal, A., Davenport, C., Hazlett, C., Kennedy, J. (2014). The Epidemiology of Lethal Violence in Darfur: Using Micro-Data to Explore Complex Patterns of Ongoing Armed Conflict. *Social Science & Medicine*, 120.
- Hainmueller, J., Hazlett, C. (2014). Kernel Regularized Least Squares: Reducing Misspecification Bias with a Flexible and Interpretable Machine Learning Approach. *Political Analysis*, 22(2).

Prior to PhD

- Weissman, D. H., Gopalakrishnan, A., Hazlett, C. J., & Woldorff, M. G. (2005). Dorsal anterior cingulate cortex resolves conflict from distracting stimuli by boosting attention toward relevant events. *Cerebral Cortex*, 15(2), 229-237.
- Hazlett, C., Woldorff, M.G. (2004). Mechanisms of Moving the Mind's Eye: Planning and Execution of Spatial Shifts of Attention. *Journal of Cognitive Neuroscience*, 16(5).
- Woldorff, M. G., Hazlett, C. J., Fichtenholtz, H. M., Weissman, D. H., Dale, A. M., & Song, A. W. (2004). Functional parcellation of attentional control regions of the brain. *Journal of Cognitive Neuroscience*, 16(1), 149-165.
- Weissman, D. H., Woldorff, M. G., Hazlett, C. J., & Mangun, G. R. (2002). Effects of practice on executive control investigated with fMRI. *Cognitive Brain Research*, 15(1), 47-60.

Software

Please see *software* section of my website for update.

sensemkr: Examining the sensitivity of regression results to unobserved confounding.

- R software on github: <https://github.com/chadhazlett/sensemkr>
- R software on CRAN: Install using `install.packages(sensemkr)`.
- Stata software: Install using `ssc install sensemakr`

kbal: An R package for Kernel Balancing.

- Development version available at <https://github.com/chadhazlett/kbal>
- Install with devtools: `install_github("chadhazlett/kbal")`

KRLS: Kernel regularized least squares

- R software on CRAN: Install using `install.packages(KRLS)`.
- Stata software: Install using `ssc install krls`

pERPpred. Software for Principle ERP reduction and analysis: Estimating and using principle ERP waveforms underlying ERPs across tasks, subjects and electrodes (Hazlett and Campos, 2020). Available on GitHub: `devtools::install_github("emjcampos/pERPpred")`

scqe: Browser-based application for the stability controlled quasi-experiment with aggregate data
https://amiwulf.shinyapps.io/SCQE_demo/.

Book Chapters

“Beset on all sides: Children and the Landscape of Conflict in North East Nigeria.” (With Hilary Matfess and Graeme Blair). In *Cradled by Conflict: Child Involvement with Armed Groups in Contemporary Conflict*. Ed: Siobhan O’Neil, Kato Van Broeckhoven.

“Not On Our Watch: American Mobilization for Darfur” (with R.J. Hamilton). In *War in Darfur and the Search for Peace*, Alex De Waal (Ed.). Cambridge, Ma. Harvard University Press. 2007.

News Media

“What Do Syrians Want Their Future to Be? A Survey of Refugees in Turkey” (with Kristin Fabbe and Tolga Sinmazdemir). *Foreign Affairs*. May, 2017.

“What Syrian refugees tell us about their hopes and fears for the future” (with Kristin Fabbe and Tolga Sinmazdemir). *Monkey Cage, Washington Post*. March, 2016.

“Primed to Protest” (with Nicholas Miller). *Foreign Policy.com*. Sept, 2012.

“India’s Other Terrorism”. *Far Eastern Economic Review*. Dec, 2008.

Courses

Advanced Causal Inference (PhD students in Statistics, social science departments, business school, 25 students). 2018

Causal Inference for Social Science. (PhD and MS students in Political Science, Statistics, Health Sciences, Education, Sociology, other social science departments, enrollments ranged from 15-45 students). 2015, 2016, 2017, 2018, 2020

Statistical Modeling and Learning. (PhD and MS students from Statistics, Engineering, Computer Science, other departments, 30-45 students.) 2015, 2016, 2017, 2018, 2019

Machine Learning for Social Science: Current Literature. (Small PhD reading group) 2016.

Undergraduate Statistics for Political Science. (90-170 students). 2016, 2019

Mass Violence and Civil War (PhD students in Political Science, Sociology). 2017.

Service

Graduate Student Mentorship Award (2017)

Methods Field Chair, Political Science (2016-2018)

Co-founder, Southern California Methods Meeting (2016-)

Faculty Search Committees:

- Political Science: comparative politics (2014)
- Statistics: joint statistics & social science search (2014)

Manuscript Referee: *American Political Science Review*, *J. of Causal Inference*, *J. of Experimental Political Science*, *J. of Genocide Research*, *J. of Conflict Resolution*, *J. of Public Policy*, *Political Science Research Methods*, *J. of Politics*, *Nature (Scientific Reports)*, *J. of American Statistical Association*, *International Organization*, *Political Analysis*, *Political Behavior*, *Biometrics*, *Comparative Political Science*, *Statistica Sinica*

Professional Memberships

UCLA Bedari Kindness Institute, Faculty Associate, 2020
Center for California Population Research, Faculty Associate, 2014 onward
Evidence in Governance and Politics (EGAP), Member, 2018 onward
Center for Effective Global Action (CEGA), Faculty Affility, 2019 onward

Invited Talks, Conferences

Society for Political Methodology, Annual Summer Meeting. July 2020
Workshop on Regression Discontinuity in West Africa (CEGA), May 2020
UCLA Biostatistics Seminar, December 2019
Brain Research Institute Electrophysiology of Brain Dynamics Affinity Group (UCLA), November 2019
Southern California Methods, September 2019
East African Social Science Translation Collaborative Summit, Nairobi, July 2019
Society for Political Methodology, Annual Summer Meeting. July 2019
UC Santa Barbara Political Science, Methods Seminar. July 2019
MIT Political Science, Methods Seminar, July 2019
Southern California Methods, September 2018
Society for Political Methodology, Annual Summer Meeting. July 2018
Empirical Studies of Conflict, May 2018
Working Group in African Politics, May 2018
Causal Inference from Neuroscience to Computer Science, UCLA. September 2017
Southern California Methods (co-founder), September 2017
American Political Science Association, Annual Meeting. San Francisco, August 2017
Empirical Studies of Conflict, May 2017.
Southern California Methods (co-founder), August 2016.
UC Riverside, Statistics Seminar, May 2016.
USC Marshall, Data Sciences and Operations Department Seminar, March 2016.
Biostatistics Seminar (UCLA), December 2015.
International Political Economy Society, November 2015.
Political Economy Workshop, Chicago Harris School of Public Policy, October 2015.
California Center for Population Research Seminar, October 2015.
American Mathematical Society, Western Regional Meeting, October 2015.
“Big Data and Death” workshop, University of Wisconsin. December 2014.

First Annual Leila and Melville Straus 1960 Family Symposium on Early Warning for Mass Atrocities. Dartmouth, October 2014

American Political Science Association, Annual Meeting. Chicago, August 2014

Stanford Political Methodology Workshop. April 2015.

Society for Political Methodology, Annual Summer Meeting. University of Virginia. July 2013

New Faces in Political Methodology Conference. Penn State, April 2013

Midwest Political Science Association, Annual Meeting. Chicago, 2013, 2014, 2015, 2016

B-WGAPE (Boston Working Group on African Political Economy). November 2012.

Applied Statistics Seminar (Institute for Quantitative Social Science). Harvard University, October 2012.

MIT Strategic Use of Force Working Group. Sept. 2012; May 2013

Annual Meeting of the Northeast Methodology Program (NEMP). New York, May 2012.

Midwest Political Science Association, Annual Meeting. Chicago, April 2012

Lecture for AM111 (Harvard), "Applied Mathematics: Scientific Computing". Feb, 2012.

Consultations and Field Experience

Early Warning Project, U.S. Holocaust Museum. 2016-present. Providing annual risk forecasts and additional analysis of countries at risk of mass killings.

Nigeria: United Nations University. (2016-2017). Preventing and responding to Boko Haram recruitment of children.

Political Instability Task Force. 2012-2018. Providing statistical analyses and forecasting models on variety of projects relating to mass killings and civil wars, using traditional and machine learning approaches.

U.S. Institute of Peace. 2011. Contracted to assess existing genocide forecasting model and recommend improvements. Report available from U.S. Holocaust Museum at <http://bit.ly/14MZbfi>

Kenya: Research Assistance to Fotini Christia (MIT). 2011. Conducted fieldwork for initial inquiry into effects of Somali piracy on markets in Nairobi. Interviewed negotiators, attorneys, and policy-makers involved in Somali piracy.

Chad: U.S. Department of State. 2010. Field statistician in eastern Chad for "Darfurian Voices", a project surveying over 2000 refugees, civilian leaders, and rebel leaders in refugee camps.

Mass Atrocities Response Operations, Carr Center for Human Rights, Harvard. 2010. Tasked to produce report on the status of African countries and regional organizations on their preparedness to respond to mass atrocities.

Burma, Thailand: Genocide Intervention Network. 2008, 2010. Consultant to develop and evaluate a radio-based civilian early warning system in eastern Burma.

African Union. 2009. Grant from the African Union Department of Peace and Stability to track and analyze levels of violence in Darfur in 2008-2009 using a variety of data sources from both the peacekeeping mission and media sources. Analyzed patterns of violence to help settle regarding nature of ongoing conflict. See "The Epidemiology of Lethal Violence in Darfur: Using Event-Data to Explore Complex Patterns of Ongoing Armed Conflict".

Sudan, Ethiopia: Genocide Intervention Network. 2007, 2008. Small-scale survey of IDPs in both government and rebel held territories of Darfur to determine the security risks they face. Worked with local partner and African Union peacekeeping forces to develop programs to improve camp security through improving patrols and by reducing need for firewood collection.

Zimbabwe: Zimbabwe Opportunities Industrialization Center. 2005. Conducted survey of small and medium-scale businesses able to survive economic crisis, shortages, and hyper-inflation to determine characteristics of resilient businesses.

India: Seva Mandir. 2003-2004. Under Hart fellowship from Duke University. Conducted field research with Seva Mandir, an NGO in Rajasthan, India. Examined access to health care in rural areas; designed and launched health insurance program.