# Curriculum Vitae Chad Hazlett Updated: November 2024

# Academic Positions

Professor, Department of Statistics and Data Science, UCLA, July 2023-present

Professor, Department of Political Science, UCLA, July 2023-present

Associate Professor, Departments of Statistics and Data Science, UCLA, July 2021-present

Associate Professor, Departments of Political Science, UCLA, July 2021-present

Assistant Professor, Departments of Statistics and Data Science, UCLA, July 2014- June 2021

Assistant Professor, Departments of Political Science, UCLA, July 2014- June 2021

# 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.

# Work in Progress

Wulf, D., Hazlett, C., Hill, B., Chiang, J., Goodman-Meza, D., Pasanuic, B., Arah, O., Erlandson, K., Montague, B. Safe learning outside of randomized trials: Application of the stability-controlled quasiexperiment to the effects of three COVID-19 therapies. *Revise and Resubmit, Observational Studies*.

#### Publications

Peer reviewed (authorship usually alphabetical)

- Faries, D., Gao, C., Zhang, X., Hazlett, C., Stamey, J., Yang, S., Ding, P., Shan, M., Sheffield, K., Dreyer, N. (2024+). Real Effect or Bias? Best Practices for Evaluating the Robustness of Real-World Evidence through Quantitative Sensitivity Analysis for Unmeasured Confounding. *Forthcoming, Pharmaceutical Studies*
- Bertoli, A., Hazlett, C. (2024+). Seeing like a district: Understanding what close-election designs for leader characteristics can and cannot tell us. *Forthcoming, Political Analysis.*
- Cinelli, C., Ferwerda, J., Hazlett, C. (2024+). sensemakr: Sensitivity Analysis Tools for OLS in R and Stata. Forthcoming, Observational Studies. Available at http://www.chadhazlett.com
- Cinelli, C., Hazlett, C. (2024+) An Omitted Variable Bias Framework for Sensitivity Analysis of Instrumental Variables. *Forthcoming, Biometrika*.
- Hartman, E., Hazlett, C., Sterbenz, C. (2024). Kpop: A kernel balancing approach for reducing specification assumptions in survey weighting. Journal of the Royal Statistical Society Series A: Statistics in Society. https://doi.org/10.1093/jrsssa/qnae082
- Fabbe, K., Hazlett, C., Sinmazdemir, T. (2024). Threat Perceptions, Loyalties and Attitudes Towards Peace: The Effects of Civilian Victimization among Syrian Refugees in Turkey. Conflict Management and Peace Sciences.
- Ramos, A., Hazlett, C. and Smith, S. (2023). Beyond poverty as a proxy: reducing inequality in infant mortality by identifying and targeting higher risk births. *Nature Scientific Reports*.
- Cesar B. Martinez-Alvarez, Chad Hazlett, Paasha Mahdavi, and Michael L. Ross. (2023). Reply to van den Bergh and Savin: Fossil fuel taxes are politically hard to change. *Proceedings of the National Academy* of Sciences, 2023
- Hazlett, C., Parente F. (2023) From "Is it unconfounded?" to "How much confounding would it take?" A sensitivity-based approach to observational studies. (2023) Journal of Politics. Available at http://www.chadhazlett.com
- Cesar B. Martinez-Alvarez, Chad Hazlett, Paasha Mahdavi, and Michael L. Ross. Political Leadership Has Limited Impact on Fossil Fuel Taxes and Subsidies. (2022) Proceedings of the National Academy of Sciences, 119 (47).
- A. Akhazhanov, A. More, A. Amini, C. Hazlett, T. Treu, S. Birrer, and the Dark Energy Survey Collaboration. (2022). Finding quadruply imaged quasars with machine learning. I. Methods. *Monthly Notices* of the Royal Astronomical Society, 513(2).
- Graeme Blair, Mohammed Bukar, Rebecca Littman, Elizabeth R. Nugent, Rebecca Wolfe, Benjamin Crisman, Anthony Etim, Chad Hazlett, Jiyoung Kim. (2021). Trusted authorities can change minds and shift norms during conflict. *Proceedings of the National Academcy of Science*, 118 (42).
- Chang, T.S., Ding, Y., Freund, M.K., Johnson, R., Schwarz, T., Yabu, J.M., Hazlett, C., Chiang, J.N., Wulf, D.A., Antonio, A.L. and Ariannejad, M. (2021). Pre-existing conditions in Hispanics/Latinxs that are COVID-19 risk factors. Iscience, 24(3), p.102188.
- Blum, A., Hazlett, C., & Posner, D. N. (2021). Measuring Ethnic Bias: Can Misattribution-Based Tools from Social Psychology Reveal Group Biases that Economics Games Cannot? *Political Analysis.* 29(3), 385-404. Available at http://www.chadhazlett.com
- Conley, B., & Hazlett, C. (2021). How very massive atrocities end: A dataset and typology. *Journal of Peace Research*, 58(3). Data, case studies, and additional materials available at http://www.chadhazlett.com.

- Hazlett, C., Wainstein, L. (2020). Understanding, choosing, and unifying multilevel and fixed effect approaches. Forthcoming, *Political Analysis*: 1-20. Available at http://www.chadhazlett.com
- Hazlett, C., Maokola, W., Wulf, D. (2020). Inference without randomization or ignorability: A stabilitycontrolled quasi-experiment on the prevention of tuberculosis. *Statistics in Medicine*, 39(28), 4149-4186. DOI: 10.1002/sim.8717. Available at http://www.chadhazlett.com
- Hazlett, C., & Mildenberger, 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
- 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 Darfurian 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 updates.

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

- R software on github: https://github.com/chadhazlett/sensemakr
- R software on CRAN: Install using install.packages(sensemakr).
- 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
- pERPred. 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/pERPred")

Stability-controlled quasi-experiment (SCQE):

- scqe: available at https://github.com/chadhazlett/scqe.
- Install with devtools::install\_github("chadhazlett/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, 2021, 2022.
- 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, 2021, 2022.
- Causal Inference for Social Science. (Masters of Applied Statistics students, 17.). 2020, 2022 (forthcoming)
- Statistical Modeling and Learning: Maximum likelihood and machine learning. (PhD and MS students from Statistics, Engineering, Computer Science, other departments, 30-45 students.) 2015, 2016, 2017, 2018, 2019, 2020, 2021, 2022.
- Machine Learning for Social Science: Current Literature. (Small PhD reading group) 2016.
- Undergraduate Statistics for Political Science. (90-170 students). 2016, 2019, 2020, 2021, 2022.

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

#### Grants

- Bedari Kidness Institute. "From bias to better angels: Harnessing social desirability and self- presentational demands to promote cross-group kindness". \$18,000 (with Dan Posner and Jennifer Hamilton)
- 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

*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.

#### 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), core of statistics (2022)

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 Affiliate, 2019 onward

#### **Consultations and Field Experience**

- USAID: Reconciliation, Reintegration, and Stabilization in Mali. November 2020-present. With Dan Posner and Salma Mousa. Developing and evaluating interventions aimed at facilitating reintegration and reducing inter-group conflict in Mali.
- 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
- *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".