

Sebastian Daza

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Social data scientist and demographer with more than 10 years of experience designing, managing, supervising, and analyzing applied and academic social studies. Strong quantitative-qualitative skills and theoretical background. Eager to apply my knowledge and skills to solve social problems and work with interdisciplinary teams. Authorized to work in the U.S.

Skills

- **Data Science:** Machine Learning, NLP, Visualization (Dash, Shiny), pySpark, SQL, Databricks.
- **Modeling:** Proficiency and experience in statistical and demographic techniques (GLM, multilevel models, SNA, SEM, survival analysis, causal inference, Bayesian statistics). Agent-Based Modeling (ABM) and Simulation. See publications on my website.
- **Research:** Designed, analyzed and presented research in academic conferences applied and academic research projects on social inequality, education, public opinion, social psychology, adolescent behaviors, and social networks.
- **Survey Research:** Experience designing and implementing questionnaires using different modes (in-person, phone, web), sampling and analysis adjustments (weights, missing data). Created R package `sampler` for practitioners.
- **Project Management:** Led more than 20 research national and international projects, teams of 40 people, and manage an annual budget of US\$400,000.
- **Software:** *Statistics:* R, Stata, Mplus, HLM, SPSS, SAS, CTM, Stan, INLA. *Qualitative software:* Nvivo. Data entry and processing: CSPro. *Social Network:* Ucinet, R-Siena. *Agent-based modeling (ABM) and System Dynamics:* Anylogic, Netlogo.
- **Programming:** Python, Java (basic).
- **Languages:** English (fluent) and Spanish (native).

Professional Experience

- **Senior Quantitative Social Scientist**
Juntos Inc May 2018–present
Provide user insights through design and analysis of experiments, NLP and machine learning.
- **Research Associate**
Center for Justice and Society Studies, Catholic University of Chile 2016–present
Co-investigator of the project *Women Re-entry Study*.
- **Methodology Consultant**
Center for Social Studies (DESUC), Catholic University of Chile August 2010–present
Designed sampling and post-adjustments in nationally representative studies in Chile. Provided methodological guidance (attrition, non-response adjustments).
- **Research Assistant**
University of Wisconsin-Madison July 2012–August 2018
Participated in four academic research projects. See my website for details.
- **R Package Developer**
Applied Population Laboratory (APL), UW-Madison 2014–2018
Created and maintained the R package `acsr` to help extract variables and statistics using the America Community Survey and Decennial US Census.
- **Director**
Center for Social Studies (DESUC), Catholic University of Chile 2005–2010

Led projects in areas such social cohesion, political perception and government approval ratings, education, tobacco and substance, crime and delinquency, and organizational studies. I was involved in writing grant proposals, budget estimation, methodological design (theoretical framework, sampling design, instruments), analysis and presentation of results. A key project was the Survey of Social Cohesion in Latin America (ECosocial) that involved 7 countries: Chile, Argentina, Brazil, Colombia, Guatemala, Mexico and Peru, and 10,000 cases.

Lecturer

- *Catholic University of Chile* 2008–2009
Taught courses on advanced methods for social research, qualitative analysis, and design and implementation of social surveys.

Education

- **Ph.D. (ABD) in Sociology and Demography** 2010–present
University of Wisconsin-Madison, US
- **Fellow** 2017
The Data Incubator, US. Capstone Project: Tracking sentiment of Congress members' tweets
- **Master of Arts in Sociology** 2009
Catholic University, Chile
- **Bachelor of Arts in Sociology** 2004
Catholic University, Chile