

Sebastian Daza

✉ sebastian.daza@gmail.com • 🌐 <http://sdaza.com>

Social data scientist and demographer with more than 10 years of experience in managing, designing, 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.

Skills

- **Data Science:** Advanced Machine Learning, NLP, Modeling Ensemble, Bayesian Inference, Deep Learning, Visualization, Dash, Shiny, SQL.
- **Modeling:** Proficiency and experience in statistical and demographic techniques such as generalized linear and multilevel models, social network analysis, data reduction techniques, structural equation model (SEM), survival analysis, causal inference and design of experiments. Agent-Based Modeling (ABM) and Simulation. See working papers on my website.
- **Research:** Designed, analyzed and presented research in academic conferences applied and academic research projects on social inequality, education, 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.
- **Languages:** English (fluent) and Spanish (native).

Professional Experience

- **Research Assistant**
University of Wisconsin-Madison July 2012–current
Participated in four research projects resulting in 5 working papers under review to be published.
- **R Package Developer**
Applied Population Laboratory (APL), UW-Madison 2014–current
Created R package `acsR` to help extract variables and compute statistics using the America Community Survey and Decennial US Census.
- **Methodology Consultant**
Center for Social Studies (DESUC), Catholic University of Chile August 2010–current
Designed sampling and post-adjustments in nationally representative studies in Chile. Provided methodological guidance (attrition, non-response adjustments).
- **Project Manager**
Center for Social Studies (DESUC), Catholic University of Chile May 2005–July 2010
Led research projects in areas such social cohesion, political perception and government approval ratings, education, crime and delinquency, and organizational studies.
- **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. Candidate (ABD) in Sociology and Demography (expected 2017)**
University of Wisconsin-Madison, US 2010–present
- **Master of Arts in Sociology**
Catholic University, Chile 2009
- **Bachelor of Arts in Sociology**
Catholic University, Chile 2004