Sebastian Daza

✉ sebastian.daza@gmail.com   •   🌐 sdaza.com

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 Spain and 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 Researcher
Instituto de Economía, Geografía y Demografía (IEGD), CCHS-CSIC, Spain   December 2019–present
Working on early conditions, delayed adult effects and morbidity, disability and mortality in modern human populations.

Senior Quantitative Social Scientist
Juntos Inc   May 2018–December 2019
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**
University of Wisconsin-Madison, US *2020*

○ **Fellow**
The Data Incubator, US. Capstone Project: Tracking sentiment of Congress members' tweets *2017*

○ **Master of Arts in Sociology**
Catholic University, Chile *2009*

○ **Bachelor of Arts in Sociology**
Catholic University, Chile *2004*