Kelsey E. Gonzalez

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Education

2022   PHD in Sociology, University of Arizona
Comprehensive Exams: Social Networks, Statistics & Methods
Committee: Ronald Breiger (Chair), Daniel E. Martínez, Corey Abramson, Yotam Shmargad
Dissertation: 'Online Search Tools, Information-Seeking Behaviors, and The Formation of New Norms in Health Behaviors"

2020   Graduate Certificate in Computational Social Science, University of Arizona

2019   MA in Sociology, University of Arizona

2016   MPHIL in Race, Ethnicity, & Conflict, Trinity College, Dublin

Academic Areas of Specialization

Computational Social Science   Sociology of Health and Illness
Social Network Analysis   Race and Ethnicity
Statistics & Research Methods   Big Data

Publications

PEER-REVIEWED JOURNAL ARTICLES

Forth   Jang, Beksahn, **Kelsey E. Gonzalez**, Liwen Zeng, and Daniel E. Martínez. Online First. "Correlates of Panethnic Identification: Assessing similarities and differences among Latinos and Asian Americans in the United States" *Sociological Perspectives.* 0(0):0–0. doi: 10.1177/07311214211057121 (JIF: 1.194)

2021   **Gonzalez, Kelsey E.**, Rina James, Eric T. Bjorklund and Terrence Hill. 2021. "Conservatism and infrequent mask usage: A study of US counties during the novel

coronavirus (COVID19) pandemic". *Social Science Quarterly.* 102:2368-2382. doi: 10.1111/ssqu.13025 (JIF: 0.868)

Hill, Terrence, **Kelsey E. Gonzalez**, and Andrew P. Davis. 2021."The Nastiest Question: Does Population Mobility vary by Political Leadership during the Novel Coronavirus (COVID-19) Pandemic?". *Sociological Perspectives.* 64(5):786–803. doi: 10.1177/0731121420979700 (JIF: 1.194)

Martínez, Daniel E. and **Kelsey E. Gonzalez**. 2021. "'Latino' or 'Hispanic'?: The sociodemographic correlates of panethnic label preferences among US Latinos/Hispanics". *Sociological Perspectives.* 64(3):365–386. doi: 10.1177/0731121420950371 (JIF: 1.194)

Hill, Terrence, **Kelsey E. Gonzalez**, and Laura Upenieks. 2021. "Love thy Aged? A State-Level Analysis of Religiosity and Mobility in Aging Populations during the Novel Coronavirus (COVID-19) Pandemic". *Journal of Aging and Health.* 33(5–6):377–386. doi: 10.1177/0898264320984016 (JIF: 2.168)

Martínez, Daniel E. and **Kelsey E. Gonzalez**. 2021. "Panethnicity as a reactive identity: Primary panethnic identification among Latino-Hispanics in the United States" *Ethnic and Racial Studies.* 44(5):1–22. doi: 10.1080/01419870.2020.1752392 (JIF: 1.72)

2020   Hill, Terrence, **Kelsey E. Gonzalez**, and Amy M. Burdette. 2020. "The Blood of Christ Compels Them: State Religiosity and Mobility during the Coronavirus (COVID-19) Pandemic" *Journal of Religion and Health.* 59:2229–2242. doi: 10.1007/s10943-020-01058-9 (JIF: 1.270)

Coulter, Kiera, Samantha Sabo, Daniel Martínez, Katelyn Chisholm, **Kelsey E. Gonzalez**, Sonia Bass, Edrick Villalobos, Diego Garcia, Taylor Levy and Jeremy Slack. 2020. "A Study and Analysis of the Treatment of Mexican Unaccompanied Minors by Customs and Border Protection" *Journal on Migration and Human Security.* 8(2):96–110. doi: 10.1177/2331502420915898 (JIF: NA)

Peer-Reviewed Edited-Volume Chapters

2020   Mannheimer, Andrew, Adrienne Milner, **Kelsey E. Gonzalez**, and Terrence D. Hill. 2020. "Social Status and White Fragility: Gender and Socioeconomic Variations.' Pp. 115–127 in *Research in the Sociology of Health Care.* Vol 38, edited by J. Kronenfeld. Castle Hill, Aus: Emerald Press. doi: 10.1108/S0275-495920200000038011

Dissertation Papers (in progress)

Gonzalez, Kelsey E. "Digital Trace Data as Indicators of Social Data Validating Google Trends for use in Scientific Researchs".

Gonzalez, Kelsey E. "Information-Seeking Behaviors for Information on Covid-19 Vaccinations".

Gonzalez, Kelsey E. "Social Norms under Uncertain Times: A dynamic study of Stay-At-Home and Vaccination Rates During the Covid-19 Pandemic".

Employment & Research Experience

2022-Present **Senior Data Scientist**, Chief Analytics Office, IBM

2021-2022 **Senior Data Scientist Co-Op**, Chief Analytics Office, IBM. June 2021 - April 2022.

- Produced ML-driven insights into skill gaps and learning recommendations for IBM employees enabling and accelerating reskilling
- Implemented NLP solutions using word2vec and flashtext to extract workforce expertise and gaps to maintain highly skilled workforce
- Designed unsupervised recommendation algorithm to provide IBM employees with actionable recommendations for reskilling
- Evaluated and refined recommendation engine to optimize model parameters to exemplify proof of concept for key stakeholders
- Demonstrated product ownership by creating strong partnerships with stakeholders, transforming data science expertise into tangible business value and delivering a stronger product

2020-2021 **Graduate Research Associate**: "Non-State Armed Actors Governance Delivery in Colombia and Afghanistan" Department of Defense - Minerva Research Initiative, #71623-LS-MRI. Fall 2020, Spring 2021. *PI: Javier Osorio*
- Developed data wrangling pipeline for 5k+ unique and personalized surveys in English, Spanish, Pashto, and Dari to record a crowd-sourced history of armed conflict in Afghanistan and Colombia for the US Department of Defense
- Developed survey pipeline using R, Python, and the Qualtrics API to deploy surveys into production
- Assessed project state and automate forecasting of coverage to establish future project needs and priorities

2018-2020 **Graduate Research Assistant**: "Latina/o Racial and Identity Preferences". Fall 2018, Spring 2019, Fall 2019, Summer 2020. *PI: Daniel Martínez*
- Analyzed cross-sectional Pew survey data of 5,000 observations. Employed multiclass classification models resulting in two peer-reviewed journal articles

- Created a dataset of 20,000 observations from 25+ data sources by cleaning data and employing multiple imputation to address missing data
- Model data with Hierarchical Fixed-Effects, Random-Effects and Mixed-Effects nonlinear Regression (MLM) to uncover second-level effects on individuals

2020   **Graduate Research Assistant**: "The Weight of Inequality". Spring 2020. *PI: Corey Abramson*
- Reviewed 115 articles and wrote an annotated bibliography resulting in an NSF grant application
- Scraped 550 threads from 11 identified subreddits for pilot analysis using the Python PRAW API package and developed framework for future data collection
- Analyzed text data using natural language processing, unsupervised machine learning and network analysis to uncover associations between text and subreddits

2018   **Graduate Research Assistant**:"National Survey on Political Incivility and Political Polarization". Summer 2018. *PIs: Robin Stryker, Bethany A. Conway-Silva*
- Cleaned and prepared raw survey data using regular expressions and created data codebook for further analysis
- Selected, reviewed and analyzed over 50 academic articles on political polarization and incivility for usage in future academic publications

2018   **Graduate Research Assistant**: "The Migrant Border Crossing Project". Spring 2018. *PI: Daniel Martínez*
- Performed wrangling, cleaning and classifying on raw Berkeley-funded PIMSA survey data resulting in one of my peer-reviewed journal articles
- Reviewed 40 academic articles resulting in a Spencer Foundation grant application

Honors & Awards

2021   *Nominated*, 2021 William K. Bunis Graduate Student Teaching Instructor Award
2020   <u>First Place Winner</u>, *UArizona Libraries Data Visualization Challenge*

Fellowships

2022   Louise Foucar Marshall Foundation Dissertation Fellowship, Spring ($10,846)
2021   UArizona Social & Behavioral Sciences Graduate Fellowship, Fall ($9,580)
2021   UArizona Diversity and Inclusion Fellowship, Fall ($1,000)
2021-2022   Finalist, 2021 Facebook Fellowship Program (top 3.5% of 2,100 applications)
2021   Summer Institute in Migration Research Methods, UC - Berkeley *(Declined)*
2021   UArizona Social & Behavioral Sciences Recognition Award ($882)
2020   Summer Institute in Computational Social Science, Duke University
2020   Summer Institute in Migration Research Methods, UC - Berkeley *(Cancelled)*

2020	Rstudio::conf(2020) Diversity Scholarship ($2,435)
2020-2021	UArizona Data Science Ambassador Fellowship ($1,000)
2020-2021	University of Arizona Hispanic Alumni Club Graduate Scholarship ($7,500)
2019	US Research Software Sustainability Institute Winter School ($994)
2019-2020	UArizona Data Science Ambassador Fellowship ($1,000)
2017-2022	UArizona School of Sociology Graduate Associateship
2017-2018	UArizona College of Social and Behavioral Sciences Graduate Fellowship ($4,125)

Grants

2021	UArizona SBSRI Dissertation Research Grant ($750)
2021	American Sociological Association Student Forum Travel Award ($50)
2020	Russel Sage Foundation - SICSS Research Grant ($7,193)
2019	UArizona GPSC Travel Grant ($750)
2019	UArizona School of Sociology Travel Grant ($500)

Conferences

PAPERS PRESENTED

2022   **Gonzalez, Kelsey E.** . "Social Norms under Uncertain Times: A dynamic study of Stay-At-Home and Vaccination Rates During the COVID-19 Pandemic" *Women in Data Science - Tucson Conference*, April 22, 2022. Online.

2021   Hill, Terrence, **Kelsey E. Gonzalez**, Amy M. Burdette, Andrew P. Davis, Rina James, Eric J. Bjorklund, Laura Upinieks. "Conservatism and Pandemic Lifestyles" *Advancing Health Lifestyles Research Mini-Conference, University of Colorado - Boulder*, Feb 23, 2021. Online.

2020   **Gonzalez, Kelsey E.** "Race, Ideology of Structural Racism, and Happiness." *American Sociological Association Annual Conference*, Aug 11, 2020. Online.

Jang, Beksahn, **Kelsey E. Gonzalez**, Liwen Zeng, and Daniel E. Martínez. "Correlates of Panethnic Identification: Assessing similarities and differences among Latinos and Asian Americans in the United States." *American Sociological Association Annual Conference*, Aug 10, 2020. Online.

Martínez, Daniel E. and **Kelsey E. Gonzalez**. "Panethnicity as a Primary Identifier among Latino-Hispanics in the United States." *American Sociological Association Annual Conference*, Aug 08, 2020. Online.

Gonzalez, Kelsey E. "Utilizing Blockmodeling, Clustering, and Heatmaps to Visualize Multinomial Logistic Regression Models." *Stanford Conference on Computational*

Sociology, Aug 07, 2020. Poster. Online.

Gonzalez, Kelsey E. "Utilizing Blockmodeling, Clustering, and Heatmaps to Visualize Multinomial Logistic Regression Models." *International Network for Social Network Analysis 40th Sunbelt Conference*, July 13, 2020. Online.

2019   **Gonzalez, Kelsey E.** "A Method of Data Mining to Visualize Multinomial Logistic Regression Models." *Computational Social Science Showcase*, Dec 06, 2019. Tucson, AZ.

Gonzalez, Kelsey E. "The Importance of Homophily for Perceived Ethno-Racial Discrimination." *American Sociological Association Annual Conference*, Aug 11, 2019. Manhattan, NY.

Martínez, Daniel E. and **Kelsey E. Gonzalez**. "Hispanic or Latino?: The Sociodemographic Correlates of Panethnic Label Preferences among US Latinos/Hispanics." *American Sociological Association Annual Conference*, Aug 10, 2019. Manhattan, NY.

2017   **Gonzalez, Kelsey E.** "The Construction of Immigrant Youth Identities: The Impact of Socialisation and School Environments in the Republic of Ireland." *Sociology Research Seminar Series of Trinity College, Dublin*, Mar 15, 2017. Dublin, Ireland.

CONFERENCE PANELS AND OTHER SPEAKING ENGAGEMENTS

2022   Panelist, "Careers in Data Sciences" Panel. *Women in Data Science - Tucson Conference*, April 22, 2022. Online.

CONFERENCE PANEL ORGANIZATION, MODERATION AND COMMENTARY

2021   Moderator of the "Non-Academic Opportunities for Sociologists" Panel. *University of Arizona Department of Sociology Brownbag series*, September 24, 2021. Online.

2021   Organizer of the "What is Data Science?" Panel. *Research Bazaar - Arizona unConference*, May 17, 2021. Online.

2021   Presider of the "Health Lifestyles and Place" Session. *Advancing Health Lifestyles Research Mini-Conference*, Feb 23. UC-Boulder. Online.

2020   Organizer of the "What is Data Science?" Panel. *Research Bazaar - Arizona unConference*, May 18, 2020. Online.

2020

Organizer of the "Data Ethics & Bias" Panel. *Women in Data Science - Tucson Conference*, April 17, 2020. Online.

2020   Organizer of the "Data Analytics in Health Care" Panel. *Women in Data Science - Tucson Conference*, April 17, 2020. Online.

Conferences / Symposia Organized

2021   *Director.* Research Bazaar - Arizona, May 17-21, 2021. Online.
2021   *Co-organizer.* Women in Data Science - Tucson Conference, April 21, 2021. Online.
2020   *Co-organizer.* Research Bazaar - Arizona, May 18-29, 2020. Online.
2020   *Co-organizer.* Women in Data Science - Tucson Conference, April 17, 2020. Online.
2019   *Session Organizer.* UArizona Computational Social Sciences Showcase, Dec 6, 2019.

Teaching

Instructor of Record

American University
STAT 412/612: <u>*Statistical Programming in R*</u>. (Spring 2021, live online)

University of Arizona
SOC 303: <u>*Health & Society*</u>. (Sum 2020, Win 2020, Sum 2021, Win 2021, online)
SOC 101: <u>*Introduction to Sociology*</u>. (Summer 2019, online)

Teaching Assistant

Summer Institute in Computational Social Science
<u>WICSS: Tucson</u> (January 2021)

University of Arizona
SOC 375: *Social Statistics*. Ronald Breiger (Fall 2020)
SOC 202: *Connecting Society and Health*. Jennifer Brailsford (Spring 2020)
SOC 350: *Environment, Health and Society*. Jennifer Brailsford (Spring 2020)
SOC 150: *Social Issues in America*. Jennifer Earl (Fall 2017).

Trinity College, Dublin
SOC 1310: *Introduction to Sociology*. Richard Layte. (Spring 2017)
SOC 2310: *Introduction to Social Research*. Laura Graham. (Spring 2017)
SOC 1310: *Introduction to Sociology*. Daniel Faas. (Fall 2016)
SOC 3240: *Researching Society*. Alicja Bobek. (Fall 2016)

TUTOR

University of Arizona
SOC 375: *Social Statistics.* (Fall 2020)
SOC 374: *Social Research Methods.* (Fall 2020)
SBS 200: *Introduction to Statistics for the Social Sciences.* (Fall 2020)

WORKSHOPS TAUGHT

2021	Advanced Data Wrangling with the Tidyverse, *Critical Path Institute*
2020	Software Carpentry:R for Reproducible Scientific Analysis, *UArizona*
2020	Intro to R, *BIO5 Institute's Keep Engaging Youth in Science Research Program*
2020	Animating your ggplots, *RezBaz Arizona 2020*
2020	Data Carpentry:R for Social Scientists, *Bryn Mawr College*
2019	Software Carpentry:R for Reproducible Scientific Analysis, *UArizona.*

Professional Service

SERVICE TO THE DEPARTMENT

2020	Student Assistant, Arizona Methods Workshop *(Cancelled)*
2019-2021	Student Representative, School of Sociology Faculty Recruitment Committee
2018-2021	Chair, UArizona Sociology Graduate Association Bulletin Committee
2017-2018	Member, UArizona Sociology Graduate Association Communications Committee

SERVICE TO THE UNIVERSITY

2021	Director, Research Bazaar - Tucson 2021
2021	Website Designer, Women in Data Science - Tucson 2021
2021	Judge, 2021 University Libraries Data Visualization Challenge, UArizona
2020-2021	Senior Data Science Ambassador, UA Data Science Institute
2020	Organizing Committee, Research Bazaar - Tucson 2020
2020	Organizing Committee, Women in Data Science - Tucson 2020
2019-2020	Steering Committee Member, Research Bazaar - Tucson
2019-2020	Data Science Ambassador, College of Social and Behavioral Sciences
2019-2021	Research & Travel Grant Reviewer, UArizona Graduate & Professional Student Council
2019	Session Coordinator, UArizona "Computational Social Sciences Showcase"

SERVICE TO THE DISCIPLINE

2020-2021	Student Representative, ASA Section on Mathematical Sociology
2020	Committee Member, ASA Section on Mathematical Sociology Outstanding Article Award

Invited manuscript reviewer for *Ethnic and Racial Studies, Sociological Perspectives, Journal of Gerontology: Social Sciences, Sociological Inquiry*

SERVICE TO OPEN SCIENCE

2020-2021   Maintainer, Data Carpentry R for Social Science

Professional Affiliations

American Sociological Association (2017 - 2021)
International Network for Social Network Analysis (2020)
Software Carpentry, Data Carpentry (2019 - Present)
University of Arizona Data Science Institute (2019 - Present)
University of Arizona Binational Immigration Institute (2020 - 2022)

Relevant Professional Skills

LANGUAGES

Very Proficient: Python, R, STATA, SQL, LaTeX, Bash, Git
Some Experience: Bash, HTML, CSS, Javascript, SPSS, SAS

ANALYTICS EXPERTISE

Network Analysis, Machine Learning, Data Mining, Predictive modeling, Classification, Regression, Clustering, Dimensionality Reduction, Multiclass Classification, Multilevel Modeling, Association Rule Mining, Text Analysis, Natural Language Processing, Word Embeddings, Topic Models, Interactive Visualization, High Performance Computing, Survey Design

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