

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

- 2022 Jang, Beksahn, **Kelsey E. Gonzalez**, Liwen Zeng, and Daniel E. Martínez. 2022. “Correlates of Panethnic Identification: Assessing similarities and differences among Latinos and Asian Americans in the United States” *Sociological Perspectives*. 65(4):702–726. doi: [10.1177/07311214211057121](https://doi.org/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](https://doi.org/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](https://doi.org/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](https://doi.org/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](https://doi.org/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](https://doi.org/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](https://doi.org/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](https://doi.org/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](https://doi.org/10.1108/S0275-495920200000038011)

DISSERTATION PAPERS (AWAITING SUBMISSION)

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

- 2021-2022 **AI Advisory Product Manager**, Chief Analytics Office, IBM. Feb 2024 - Present.
- Identify and prioritize internal data science product solutions to leading to 100k annual hours of time saved by HR Professionals
 - Design long-term product roadmap of internal generative AI chatbot solution and manage day-to-day operations to build with excellence leading to a successful product pilot for UAT
- 2021-2022 **Lead Data Scientist**, Finance & Planning Team, Chief Analytics Office, IBM. April 2023 - Feb 2024.
- Orchestrated the evaluation and deployment of 36 data inference and scoring pipelines dedicated to revenue forecasting across all business units and revenue streams. Leveraged diverse databases and cubes, employing time-series models that resulted in the timely delivery of 52 weekly forecast assessments throughout 2023
 - Engineered a comprehensive revenue forecasting explainability dashboard tailored for C-level finance and sales executives. Translated complex model insights into human-readable content and integrated natural language generation (NLG) explanations that have already proven instrumental in shaping sales goals and financial targets
 - Facilitated weekly code review sessions, directed code release management procedures, meticulously maintained process documentation and coached a team of 8 data scientists, enhancing their technical skill set and contributing to a 10-hour reduction in the weekly workload
- 2021-2022 **Senior Data Scientist**, People Analytics Team, Chief Analytics Office, IBM. June 2021 - April 2023.
- Independently perform data querying, interpretation, visualization, feature engineering, model selection, training, validation, OOP, and code testing in Python. Lead and mentor junior data scientists in these skills through model discussions, code reviews, evaluation, and model selection activities
 - Lead worksteam and establish workstream vision, roadmap and OKRs and ensure

data science product aligns with user and stakeholder needs; coordinate with front-end developers to launch product from PoC to MVP to Production, impacting 270k IBMers

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

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 (<i>Declined</i>)
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 (<i>Cancelled</i>)
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

ACADEMIC PAPERS PRESENTED & PUBLIC SPEAKING

2024	Gonzalez, Kelsey E. . “Carrot Tutorial: Get a look at IBM’s Data Science framework” <i>Women in Data Science - RTP Conference</i> , Durham, North Carolina.
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 **Gonzalez, Kelsey E.** . “Meso-Level Behavioral Contagion: the relationship between geographic social interconnectedness and population mobility during COVID-19.” *American Sociological Association Annual Conference*, Aug 7, 2021. Online. (*Withdrew*)
- 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.
- 2020 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.
- 2020 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.
- 2020 **Gonzalez, Kelsey E.** “Utilizing Blockmodeling, Clustering, and Heatmaps to Visualize Multinomial Logistic Regression Models.” *Stanford Conference on Computational Sociology*, Aug 07, 2020. Poster. Online.
- 2020 **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.
- 2019 **Gonzalez, Kelsey E.** “The Importance of Homophily for Perceived Ethno-Racial Discrimination.” *American Sociological Association Annual Conference*, Aug 11, 2019. Manhattan, NY.
- 2019 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.
- 2013 **Gonzalez, Kelsey E.** "Life Without Water: The Border Dispute between Chile, Bolivia and Peru." *Borders, Boundaries, and Peace Undergraduate Research Conference*. Feb 28, 2013. Milwaukee, WI.

CONFERENCE PANELS AND OTHER SPEAKING ENGAGEMENTS

- 2024 Panelist, "Careers Certifications" Panel. *IBM-Women in Technology, Carolinas*, June 03, 2024. Durham, North Carolina.
- 2023 Panelist, "Early Careers" Panel. *IBM-NCSU Pathfinder Mentoring Program*, Nov 03, 2023. Raleigh, North Carolina.
- 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	<i>Director.</i> Research Bazaar - Arizona, May 17-21, 2021. Online.
2021	<i>Co-organizer.</i> Women in Data Science - Tucson Conference, April 21, 2021. Online.
2020	<i>Co-organizer.</i> Research Bazaar - Arizona, May 18-29, 2020. Online.
2020	<i>Co-organizer.</i> Women in Data Science - Tucson Conference, April 17, 2020. Online.
2019	<i>Session Organizer.</i> UArizona Computational Social Sciences Showcase, Dec 6, 2019.

Teaching

INSTRUCTOR OF RECORD

American University

STAT 412/612: *Statistical Programming in R*. (Spring 2021, live online)

University of Arizona

SOC 303: *Health & Society*. (Sum 2020, Win 2020, Sum 2021, Win 2021, online)

SOC 101: *Introduction to Sociology*. (Summer 2019, online)

TEACHING ASSISTANT

Summer Institute in Computational Social Science

WICSS: Tucson (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

2024	<u>Carrot Tutorial: Get a look at IBM's Data Science framework</u> , <i>Women in Data Science - RTP</i>
2022	The Data Science Pipeline, <i>Chief Analytics Office</i>
2021	<u>Advanced Data Wrangling with the Tidyverse</u> , <i>Critical Path Institute</i>
2020	<u>Software Carpentry:R for Reproducible Scientific Analysis</u> , <i>UArizona</i>
2020	<u>Intro to R</u> , <i>BIO5 Institute's Keep Engaging Youth in Science Research Program</i>
2020	<u>Animating your ggplots</u> , <i>RezBaz Arizona 2020</i>
2020	<u>Data Carpentry:R for Social Scientists</u> , <i>Bryn Mawr College</i>
2019	<u>Software Carpentry:R for Reproducible Scientific Analysis</u> , <i>UArizona</i> .

Professional Service

SERVICE TO THE DEPARTMENT

2020	Student Assistant, <u>Arizona Methods Workshop</u> (<i>Cancelled</i>)
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, <u>Research Bazaar - Tucson 2021</u>
2021	Website Designer, <u>Women in Data Science - Tucson 2021</u>
2021	Judge, <u>2021 University Libraries Data Visualization Challenge</u> , UArizona
2020-2021	Senior Data Science Ambassador, <u>UA Data Science Institute</u>
2020	Organizing Committee, <u>Research Bazaar - Tucson 2020</u>
2020	Organizing Committee, <u>Women in Data Science - Tucson 2020</u>
2019-2020	Steering Committee Member, <u>Research Bazaar - Tucson</u>
2019-2020	Data Science Ambassador, <u>College of Social and Behavioral Sciences</u>
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 - 2022)

University of Arizona Binational Immigration Institute (2020 - 2022)

Relevant Professional Skills

LANGUAGES

Very Proficient: Python, R, STATA, SQL, L^AT_EX, 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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