

Amanda Kay Montoya

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IDENTIFIERS

ORCID	0000-0001-9316-8184
ResearcherID	AAR-4439-2021
Open Science Framework	https://osf.io/pzq3t/

ACADEMIC APPOINTMENTS

Associate Professor, Department of Psychology, UCLA	July 2023 - Current
Assistant Professor, Department of Psychology, UCLA	November 2018 - July 2023
Acting Assistant Professor, Department of Psychology, UCLA	July 2018 - November 2018

EDUCATION

<i>PhD</i> , Psychology, Quantitative The Ohio State University, Columbus, OH Dissertation: "Conditional Process Analysis in Two-Instance Repeated-Measures Designs" Adviser: Andrew F. Hayes, PhD	2018
<i>M.S.</i> , Statistics The Ohio State University, Columbus, OH	2016
<i>M.A.</i> , Psychology, Quantitative The Ohio State University, Columbus, OH Thesis: "Extending the Johnson-Neyman Procedure to Categorical Independent Variables: Mathematical Derivations and Computational Tools" Adviser: Andrew F. Hayes, PhD	2016
<i>B.S.</i> , Psychology, Minor: Mathematics University of Washington, Seattle, WA Cum Laude, Departmental Honors Thesis: "Increasing Interest in Computer Science through Group Work: A Goal Congruity Approach" Adviser: Sapna Cheryan, PhD & Allison Master, PhD	2013

RESEARCH INTERESTS

My research focuses on improving the ability of psychology researchers to answer their questions of interest using sound statistical methods and by developing easy-to-use tools to encourage researchers to use the most advanced methods available. I have focused my research on mediation, moderation, conditional process

models, structural equation modeling, and measurement including factor analysis and item response theory. I am also interested in improving our ability to conduct meta-science by developing statistical methods in meta-analysis, and understanding the impact of research practices on our ability to create replicable science. Additionally, I have previous experience and hope to continue my research focused on understanding and ameliorating issues of inequity in education, particularly for women in science, technology, engineering, and mathematics.

PUBLICATIONS

 Preregistered,  Registered Report,  Open Data,  Open Access,  Preprint (PsyArXiv),  Preprint (EdArXiv),  Preprint (ArXiv),  Open Science Framework Page,  Github Page

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Block, J.[†], Reise, S., Widaman, K., **Montoya, A. K.**, Loring, D., Glass Umfleet, L., Bauer, R., Gullett, J., Wolff, B., Drane, D., Enriquez, K., & Bilder, R. (2025). Model Based Person Fit Statistics Applied to the Wechsler Adult Intelligence Scale IV (WAIS-IV). *Educational and Psychological Measurement*, DOI: 10.1177/00131644251339444 

Montoya, A. K.. (Online First). Conditional Process Analysis for Two-Instance Repeated-Measures Designs. *Psychological Methods*, DOI:10.1037/met0000715 

Montoya, A. K. (in press). Growing Up in Science. (Ed. Weiji Ma). Princeton University Press.

Cha, L.[‡], **Montoya, A. K.**, Schetter, C. D., & Sumner, J. A. (2025). Neighborhood disorder and social cohesion: A longitudinal investigation of links with maternal cardiometabolic risk one year postpartum. *Journal of psychosomatic research*, 189, 112012. DOI: 10.1016/j.jpsychores.2024.112012 

Ray, L. A., Grodin, E. N., Baskerville, W.-A., Donato, S., Cruz, A.[†], **Montoya, A. K.** (2025). Gabapentin for the treatment of alcohol use disorder: A machine learning approach. *Alcohol and Alcoholism*, 60(3), DOI: 10.1093/alcalc/agaf010 

Montoya, A. K. (2024). Combining Statistical and Causal Mediation Analysis. *Handbook of Research Methods in Social and Personality Psychology* (H. T. Reis, T. West, C. M. Judd, Ed.) Cambridge University Press. 

Ramos, G., Woller, M.[‡], Questch, L., Girard, E., Barnett, M., **Montoya, A. K.**, Le, K., Reyes, Y., Chavira, D., Villodas, M., & Lau, A. (2024). Trajectories of change in parent-child interaction therapy outcomes in Latinx families: Implications for cultural adaptation, *Journal of Consulting and Clinical Psychology*, 53, 1–15, DOI: 10.1080/15374416.2024.2395272 

Hunger, J. M., **Montoya, A. K.**, Edrosolan, K., Tan, J., Hubbard, A. S.[†], Tomiyama, A. J. (2024). Ecological Momentary Assessment of Weight Stigma and Eating Behavior in Everyday Life. *Annals of Behavioral Medicine*, 58(6), 457 - 462. DOI: 10.1093/abm/kaae012  

Luijken, K., Lohmann, A., Alter, U., Claramunt Gonzalez, J., Clouth, F., Fossum, J. L.[†], Hesén, L., Huizing, A., Ketelaar, J., **Montoya, A. K.**, Nab, L., Nijman, R. C. C., Penning de Vries, B. B. L., Tibbe, T. D.[†], Wang, Y. A., & Groenwold, R. H. H. (2024). Replicability of simulation studies for the investigation of statistical methods: The RepliSims project. *Royal Society of Open Science*. DOI: 10.1098/rsos.231003  

Silverstein, P., Elman, C., Montoya, A. K., McGillivray, B., Pennington, C. R., Harrison, C. H., Steltenpohl,

C. N., Röer, J. P., Corker, K. S., Charron, L. M., Elsherif, M., Malicki, M., Hayes-Harb, R., Grinschgl, S., Neal, T., Evans, T. R., Karhulahti, V.-M., Krenzer, W. L. D., Belaus, A., Moreau, D., Burin, D. I., Chin, E., Plomp, E., Mayo-Wilson, E., Lyle, J., Adler, J. M., Bottesini, J. M., Lawson, K. A., Schmidt, K., Reneau, K., Villhuber, L., Waltman, L. Gernsbacher, M. A., Plonski, P. E, Ghai, S., Grant, S., Christian, T.-M., Ngiam, W., & Syed, M. (2024). A guide for social science journal editors on easing into open science. *Research Integrity and Peer Review*, 9(2). DOI: 10.1186/s41073-023-00141-5  Full Guide.

Giner-Sorolla, R., **Montoya, A. K.**, Carpenter, T.^{*}, Lewis, Jr. N. A.^{*}, Aberson, C. L.^{*}, Bostyn, D. H.^{*}, Conrique, B. G.^{*}, Ng, B. W.^{*}, Reifman, A.^{*}, Schoemann, A. M.^{*}, Soderberg, C.^{*} (2024). Power to detect what? Considerations for planning and evaluating sample size. *Personality and Social Psychology Review*, 9(2). DOI: 10.1177/10888683241228328  

Grodin, E. N., **Montoya, A. K.**, Cruz, A.[†], Donato, S., Baskerville, W.-A., Ray, L. A. (2024). Identifying Treatment Responders to Varenicline for Alcohol Use Disorder Using Two Machine Learning Approaches. *Clinical Psychological Science*, 12(1), 133 - 146. DOI: <https://doi.org/10.1177/21677026231169922>.  

Huang, Y.[†], Tibbe, T. D.[†], Tang, A.[†], & **Montoya, A. K.** (2023). Lasso and Group Lasso with Categorical Predictors: Impact of Coding Strategy on Variable Selection and Prediction. *Journal of Behavioral Data Science*, 3(2), 15-42. DOI: 10.35566/jbds/v3n2/montoya  

Ramos, G.[‡], **Montoya, A. K.**, Smith, D., Rith-Najarian, L., & Chavira, D. (2023). Digital intervention barriers scale (DIBS-7): Development, evaluation, and preliminary validation. *JMIR Formative Research*, 7, e40509, DOI: 10.2196/40509.

Schaerer, M., du Plessis, C., Nguyen, M., van Aert, R. C. M., Toikhin, L., Lakens, D., Clemente, E. G., Pfeiffer, T., Dreber, A., Johannesson, J., Clark, C. J., **Gender Audits Forecasting Collaboration**, Uhlmann, E. L. (2023). On the trajectory of discrimination: A meta-analysis and forecasting survey capturing 44 years of field experiments on gender and hiring decisions. *Organizational Behavior and Human Decision Processes*, 179, 104280. DOI: 10.1016/j.obhdp.2023.104280.

Fossum, J. L.[†] & **Montoya, A. K.** (2023). When to use different tests for power analysis and data analysis for mediation. *Advances in Methods and Practices in Psychological Science*, 6(2), 1-10. DOI: 10.1177/25152459231156606     

Siy, J. O., Germano, A., Vianna, L., Azpeitia, J., Yan, S., **Montoya, A. K.**, & Cheryan, S. (2023). Does the follow-your-passions ideology cause greater academic and occupational gender disparities than other cultural ideologies? *Journal of Personality and Social Psychology*. DOI: 10.1037/pspi0000421    

Media Coverage

- Cheryan, S. & Mortejo, T. A. The Most Common Graduation Advice Tends to Backfire, *New York Times*. [Link](#)

Tawa, J., & **Montoya, A. K.** (2023). Racial embodiment in virtual environments for facilitating students' understanding of racism. *Technology, Mind, and Behavior*, 4(1), Special Collection: Technology in a Time of Social Distancing. DOI: 10.1037/tmb0000024    

Green, R.[‡], Lin, J., **Montoya, A. K.**, Bello, M. S., Grodin, E. N., Ryu, H., Ho, D., Leventhal, A. M., and Ray, L. A. (2022). Characteristics Associated with Treatment Seeking for Smoking Cessation Among Heavy-Drinking Research Participants. *Frontiers in Psychiatry*, Section: *Addictive Disorders*, 13. DOI: 10.3389/fpsyg.2022.951364 

Tibbe, T. D.[†] & **Montoya, A. K.** (2022). Correcting the bias correction for the bootstrap confidence interval in mediation analysis. *Frontiers in Psychology*, 13. DOI: 10.3389/fpsyg.2022.810258    

Meredith, L. R.[‡], Grodin, E. N., **Montoya, A.K.**, Miranda Jr., R., Squeglia, L. M., Towns, B., Evans, C., Ray, L. A. (2022). The Effect of Neuroimmune Modulation on Subjective Response to Alcohol in the Natural Environment. *Alcoholism: Clinical and Experimental Research*, 46(5), 876-890. DOI: 10.1111/acer.14821

Montoya, A. K. (2022). Selecting a Within- or Between-Subject Design for Mediation: Validity, Causality, and Statistical Power. *Multivariate Behavioral Research*, 58(3). DOI: 10.1080/00273171.2022.2077287 



Ramos, G.[‡], Aguilera, A., **Montoya, A. K.**, Lau, A., Wen, Y., Torres, V., Chavira, D. (2022). App-Based Mindfulness for People of Color Who Experience Race-Related Stress: Protocol for a Randomized Controlled Trial. *JMIR Protocols*, 11(4), e35196. DOI: 10.2196/35196.

Miocevic, M., Moeyart, M., Mayer, A., & **Montoya, A. K.** (2022). Causal Mediation Analysis in Single Case Experimental Designs (SCEDs): Introduction to the Special Issue, *Evaluation & the Health Professions*, DOI: 10.1177/0163278721107319

Fossum, J. L.[†], & **Montoya, A. K.** (2022). Heterogeneity. In B. Frey (Ed.), *The SAGE Encyclopedia of Research Design*. (Vol. 1, p. 656) Thousand Oaks, CA: SAGE. DOI: 10.4135/9781071812082.n245

Andre, Q., van Osselaer, S., Janiszewski, C., **Montoya, A. K.**, Hilgard, J., Charlton, A., Evangelidis, I., & Price, J. (2021). "Methodological Advances in Consumer Research", in NA - Advances in Consumer Research Volume 49, eds. Tonya Williams Bradford, Anat Keinan, and Matthew Thomson, Duluth, MN : Association for Consumer Research, Pages: 821-826.

Green, R.[‡], **Montoya, A. K.**, Ray, L. A. (2021). The Relationship Between Drinking and Smoking in a Clinical Trial for Smoking Cessation and Drinking Reduction. *Experimental and Clinical Psychopharmacology*. DOI: 10.1037/pha0000536

Leathem, L. D.[‡], Currin, D. L., **Montoya, A. K.**, & Karlsgodt, K. H. (2021). Socioemotional Mechanisms of Loneliness in Subclinical Psychosis. *Schizophrenia Research*, 238, 145 - 151. DOI: 10.1016/j.schres.2021.10.002

Ramos, G.[‡], Delgadillo, D., Fossum, J. L.[†], **Montoya, A. K.**, Thamrin, H., Rapp, A., Escovar, E., & Chavira, D. (2021). Discrimination and Internalizing Disorders in Rural Latinx Adolescents: An Ecological Model of Etiology. *Children and Youth Services Review*, 130, 106250. 

Meredith, L. R. [‡], Grodin, E. N.[‡], Karno, M. P., **Montoya, A. K.**, MacKillop, J., Lim, A. C., & Ray, L. A. (2021). Preliminary Study of Alcohol Problem Severity and Response to Brief Intervention. *Addiction Science & Clinical Practice*, 16(54). DOI: 10.1186/s13722-021-00262-6 

Montoya, A. K., Krenzer, W. D. L., & Fossum, J. L.[†] (2021). Opening the Door to Registered Reports: Census of Journals Publishing Registered Reports. *Collabra: Psychology*, 7(1): 24404. DOI: 10.1525/collabra.24404  

Cleveland, S., Reed, K., Thomas, J., Ajijola, O. A., Ebrahimi, R., Hsiai, R., Lazarov, A., **Montoya, A. K.**, Neria, Y., Shimbo, D., Wolitzky-Taylor, K., & Sumner, J. A. (2021). Key dimensions of posttraumatic stress disorder and endothelial dysfunction: A mechanism-focused cohort study. *BMJ Open*, 11, e043060. DOI: 10.1136/bmjopen-2020-043060 

Grodin, E. N.[‡], **Montoya, A. K.**, Bujarski, S., & Ray, L. A. (2021). Modeling motivation for alcohol in humans using traditional and machine learning approaches. *Addiction Biology*, 26(2), e12949. [Link]  

Montoya, A. K., & Edwards, M. C. (2021). The Poor Fit of Model Fit for Selecting Number of Factors in Exploratory Factor Analysis for Scale Evaluation. *Educational and Psychological Measurement*, 81(3), 413 - 440. [Link].   

Montoya, A. K. & Jeon, M. (2019). MIMIC models for testing uniform and non-uniform differential item functioning as moderated mediation models. *Applied Psychological Measurement*, 44(2), 118 - 136.

Montoya, A. K. (2019). Moderation analysis in two-instance repeated-measures designs: Probing methods and multiple moderator models. *Behavior Research Methods*, 51(1), 61 - 82.

Tawa, J., & **Montoya, A. K.** (2018). Construals of self and group: How racial nominalism can promote adaptive intergroup outcomes for interdependent selves. *Group Processes & Intergroup Relations*, 22(7), 1002-1020.  

Montoya, A. K. (2018). Probing moderation analysis in two-instance repeated-measures designs. *Multivariate Behavioral Research*, 53(1), 140 - 141 [Abstract].

Dohle, S., & **Montoya, A. K.** (2017). The dark side of fluency: Fluent names increase drug dosing. *Journal of Experimental Psychology: Applied*, 23(3), 231 - 239. DOI: <https://doi.org/10.1037/xap0000131>

Stojek, M. K., **Montoya, A. K.**, Drescher, C., Newberry, A., Sultan, Z., Williams, C. F., Pollock, N. K., & Davis, C. L. (2017). Fitness, sleep-disordered breathing, symptoms of depression, and cognition in inactive overweight children: Mediation models. *Public Health Reports*, 132(Supplement 2), 65S - 73S.

Hayes, A. F., **Montoya, A. K.**, & Rockwood, N. J. (2017). The analysis of mechanisms and their contingencies: PROCESS versus structural equation modeling. *Australasian Marketing Journal*, 25(1), 76 - 81.

Montoya, A. K., & Hayes, A. F. (2017). Two-condition within-participant statistical mediation analysis: A path-analytic framework. *Psychological Methods*, 22(1), 6-27.

Cheryan, S., Ziegler, S., & **Montoya, A. K.**, Jiang, L. (2017). Why have women entered some STEM fields more than others? *Psychological Bulletin*, 143(1), 1-35.

Hayes, A. F., & **Montoya, A. K.** (2017). A tutorial on testing, visualizing, and probing an interaction involving a multicategorical variable in linear regression. *Communication Methods and Measures*, 11(1), 1-30. 

Work In Progress

Montoya, A. K., Tibbe, T. D.[†], & Krenzer, W. L. D. (In-Principle Acceptance). A Registered Report on Registered Reports: Impact of Publishing Registered Reports on Questionable and Open Research Practices. *Royal Society Open Science*.   

Guassi Moreira, J. F., Block, J.[†], Cruz, A.[†], Enders, C. K., & **Montoya, A. K.** A Preregistered Replication and Extension of Maas & Hox (2005). (In Principle Acceptance). *British Journal of Mathematical and Statistical Psychology*   

Fossum, J. L.[†], **Montoya, A. K.** & Anderson, S. F. (In-Principle Acceptance). How does model over- and under-specification impact statistical power and type 1 error rate in moderated mediation analysis? A Registered Report, *Peer Community in Registered Reports*  

Montoya, A. K., Cleveland, S., Lamarque-Navarette, K.[†], Brown, K., & Sumner, J. A. (under review). Using propensity score matching for recruitment in sequential enrollment multigroup cohort studies.   

Montoya, A. K., Hayes, A. F., & Gomez, N.[†] (under review). Mediation Analysis in the Two Condition Pretest-Posttest Design: A Treatment-as-Moderator Conditional Process Approach. 

Montoya, A. K., Charlton, A., Krebfield-Schwab, A., Price, J., Hilgard, J. (under review). Noise in the process: An assessment of the evidential value of mediation effects in marketing journals. 

Ramos, G., **Montoya, A. K.**, Aguilera, A., Lau, A., Anders, C., Wen, Y., & Chavira, D. (under review) A digital mental health intervention for racially and ethnically minoritized individuals who experience discrimination: A randomized controlled trial.

Bozkurt, S., Gligor, D. M., & **Montoya, A. K.** (under review). Regret, Refunds, and Repurchase: The Psychological Impact of Post-Purchase Compensation Following Retailer Price Drops.

Cleveland, S.[‡], Carroll, J. E., **Montoya, A. K.**, Cha, L., Stiles, L., & Sumner, J. A. (under review). Early Life Adversity and Mitochondrial Dysfunction: Comparing Cumulative Risk and Dimensional Models of Adversity.

Block, J. M.[†], Bjälkebring, P., Loran, Z.[†], Smith, S. M., Tápal, A., & **Montoya, A. K.** (in prep). Individuals with Lower Numeracy show more Extreme and Mid-point Responding: An IRTree Based Approach. 

Montoya, A. K., Yu, G. O.[‡], & Tawa, J. (invited) Mini-Many Analysts: Using Registered Reports to Learn about Analytical Flexibility. *Teaching of Psychology*

[†] Student or postdoc author (Primary mentor) [‡] Student or postdoc author (Non-primary mentor)

White Papers

Fossum, J. L.[†], & **Montoya, A. K.** (2022). RepliSims - replication report for Fritz & MacKinnon (2007). Zenodo. DOI: 10.5281/zenodo.5975520

Tibbe, T. D.[†] & **Montoya, A. K.** (2022). RepliSims - replication report MacKinnon, Lockwood and Williams (2004). Zenodo. DOI: 10.5281/zenodo.6460344

Aberson, C. L.^{*}, Bostyn, D. H.^{*}, Carpenter, T.^{*}, Conrique, B. G.^{*}, Giner-Sorolla, R.^{*}, Lewis, Jr. N. A.^{*}, **Montoya, A. K.**^{*}, Ng, B. W.^{*}, Reifman, A.^{*}, Schoemann, A. M.^{*}, & Soderberg, C.^{*} (2019) Techniques and solutions for sample size determination in psychology: A critical review. 

Montoya, A. K., Master, A., & Cheryan, S. (2013). Increasing interest in computer science through group work: A goal congruity approach. (Senior Thesis). University of Washington, Seattle, WA. 

^{*} Authors appear alphabetically, reflecting their equal contributions

BOOKS

Montoya, A. K., Hayes, A. F., Preacher, K. J., & Page-Gould, E. (under contract). *Statistical mediation analysis: Within-subjects designs*. New York: The Guilford Press.

PRESENTATIONS

Invited Presentations

Montoya, A. K. (2025, Jul). Preregistration with Complex Statistical Models. Presented at Rocky Mountain Methodology Academy.

Montoya, A. K. (2024, Oct). Using Propensity Score Matching for Sequential Recruitment in prospective Cohort Studies. Presented at Arizona State University, Department of Psychology.

Montoya, A. K. (2024, Nov). Integrating Diversity and Inclusion Themes to Undergraduate Statistics Education. Presented at the University of Maryland.

Montoya, A. K. (2024, Nov). Improving Mediation Analysis Practice in Marketing Research. Presented at the John Chambers College of Business & Economics, Department of Marketing, West Virginia University.

Montoya, A. K. (2024, Jan). Getting Started with Registered Reports. Presented at the Quantitative Family Collective, Virtual.

Montoya, A. K. (2023, Sept). Growing Up in Science: Inclusive Teaching with the General Linear Model. Presented at the Quantitative, Qualitative, and Psychometric Methods (QQPM) Seminar, University of Nebraska, Virtual.

Montoya, A. K. (2023, Sept). Combining Statistical and Causal Mediation Analysis. Presented at the Princeton University Seminar in Advanced Research Methods, Princeton, NJ.

Montoya, A. K. (2023, May). Mediation, Moderation, and Conditional Process Analysis in Two-Instance Repeated-Measures Designs. Presented at the CAIDe Lab Meeting, University of Oregon, Virtual.

Montoya, A. K. (2023, April). Incorporating Meta-Science in the development of mediation and moderation analysis. Presented at the University of Southern California, Los Angeles, CA.

Montoya, A. K. (2023, Jan). Incorporating Meta-Science in the development of mediation and moderation analysis. Presented at The Ohio State University, Columbus, OH.

Logan, J., **Montoya, A. K.**, & Strauss, C. (2022, Nov) Panel on teaching for diversity in quantitative courses. Presented at the Joint Quantitative Brownbag, Virtual.

Dawson, J., Edwards, J., **Montoya, A. K.**, & Preacher, K. (2022, Oct). Topic Interest Groups - Ask the Experts: Moderation and Mediation Analysis. Consortium for the Advancement of Research methods and Analysis, Texas Tech University, Virtual.

Montoya, A. K., Huang, Y.†, Tibbe, T. D.†, & Tang, A.† (2022, Sept.). When small choice have big impact: Handling categorical predictors in lasso & group lasso. Presented at the University of Virginia, Quant Lunch, Virtual.

Montoya, A. K. & McCoach, D. B. (2022, Feb). Registered Reports for Education Research. Presented at the Virtual Unconference on Open Scholarship in Education Research, Virtual.

Montoya, A. K. (2021, Sept). Mediation Analysis for Between- and Within-Subject Experimental Designs. Presented at the University of Manitoba, Psychology Colloquia Series, Winnipeg, Manitoba, Canada.

Montoya, A. K. (2021, May). Moderated Mediation Analysis for Repeated-Measures Designs. Presented at Mediation Days, Montreal, Quebec, Canada.

Montoya, A. K. (2021, Apr). Focusing on the Effect of Time: A Conditional Process Analysis Approach to Analyzing 2 (Within) X 2 (Between) Designs. Presented at the University of California - Santa Barbara, Quantitative Methods in Social Sciences Seminar, Santa Barbara, CA.

Montoya, A. K. (2021, Apr). Understanding When and For Whom: Moderation Analysis for Two-Instance Repeated-Measures Designs. Presented at the Princeton University Seminar in Advanced Research Methods, Princeton, NJ.

Montoya, A. K. (2021, March). Mediation and Moderation in Repeated-Measures Designs: Recent Developments and Future Directions. Presented at Logan Lab Meeting, Quantitative Research, Evaluation, and Measurement in the College of Education and Human Ecology, Ohio State University, Columbus, OH.

Montoya, A. K. & Rambo-Hernandez, K. (2021, Feb). Deep Dive into Open Scholarship: Preregistration and Registered Reports. Presented at the Virtual Unconference on Open Scholarship in Education Research, Virtual.

Montoya, A. K. (2021, Jan.). Mediation and Moderation in Repeated-Measures Designs: Recent Developments and Future Directions. Presented at the University of Colorado Boulder, Graduate Professional Development Seminar in Social Psychology, Department of Psychology and Neuroscience, Boulder, CO.

Montoya, A. K. (2020, Nov). Quantitative Psychology and Meta-Science: Two Sides of the Same Coin, or Two Ships Passing in the Night? Presented at Arizona State University, Tempe, AZ.

Montoya, A. K. (2020, Aug). Quantitative Psychology and Meta-Science: Two Sides of the Same Coin, or Two Ships Passing in the Night? Presented at the University of North Carolina - Chapel Hill, Chapel Hill, NC.

Montoya, A. K. (2020, Apr) The More Things Change the More They Stay The Same: Model Equivalence in Repeated-Measures Mediation. Presented at University of California - Davis, Davis, CA. (Presentation Cancelled)

Montoya, A. K. (2019, Aug.) Understanding rigor and replicability: What can and cannot be gleaned from meta-analysis? Presented at the UC Consortium on the Developmental Science of Adolescence, Los Angeles, CA. 🌸

Peer-Reviewed Presentations

Krenzer, W. L. D., Montoya, A. K., & Block, J. (2025). Creating a Sustainable System for Identifying Registered Reports. Presented at the Society for Improving Psychological Science, Budapest, Hungary. 🌸

Steinberg, H., Blank, I. A., & Montoya, A. K. (2025). Noisy Channel Processing: How we rationally decode handwriting. Presented at the Undergraduate Research & Creativity Showcase in Los Angeles, CA.

Yu, G. O., Blank, I. A., Montoya, A. K., (2025). Uncovering the Cognitive Mechanisms That Support Naturalistic Reading: A Data-Driven Approach. Presented at Undergraduate Research Creativity Showcase in Los Angeles, CA.

Steinberg, H., Blank, I. A., & Montoya, A. K. (2025). Noisy Channel Processing: How we rationally decode handwriting. Presented at the UCLA Psychology Undergraduate Research Conference in Los Angeles, CA.

Block, J.†, **Montoya, A. K.** & Krenzer, W. D. L. (2025) Developing a Measure for Assessing the Propensity of Early Researchers to Commit Questionable Research Practices. Presented at the Association for Practical

and Professional Ethics, Norfolk, VA.

Montoya, A. K. (Dec 2024). Can Registered Reports Improve Transparency in Natural Sciences? Session Name: Streamlining and improving publication transparency in the natural sciences. Presented at the American Geophysical Union Annual Meeting, Washington, DC.

Ding, J.[†], Conner, J., Krenzer, W. D. L., & Montoya, A. K. (Nov 2024). What Keeps Researchers from Publishing Registered Reports? Presented at the Association for Interdisciplinary Meta-Research and Open Science, Canberra, Australia.

Krenzer, W. D. L. & Montoya, A. K. (June 2024). How Researcher "Really" Feel about Registered Reports. Talk presented at Society for Improving Psychological Science Annual Meeting.

Litson, K., Montoya, A. K., Wang, Y. (June 2024). Comparing approaches to examine multiple binary moderators in latent variable models. Talk presented at Modern Modeling Methods.

Montoya, A. K. (June 2024). Registered Reports for Simulation Studies. Talk presented at Modern Modeling Methods.

Tibbe, T. D., & Montoya, A. K. (June 2024). Replicating Simulation Research: A Case Study. Talk presented at Modern Modeling Methods.

Ramos, G., Chen, B., Owoyemi, P., Reyes, Y., Wen, Y., Montoya, A., Aguilera, A., Lau, A., & Chavira, D. (2024, June). Using human support to promote engagement in an internet intervention for racially/ethnically minoritized individuals: The Mind-Us program. In S. Schueller (Chair), Centering the experiences of racially and ethnically minoritized groups in the design and improvement of internet interventions. Presentation at the International Society for Research on Internet Interventions 12th Annual Meeting, Limerick, IRL.

Montoya, A. K. (May 2024, Chair), Methodological Innovations in Multilevel Modeling. Symposium presented at the Association for Psychological Science Annual Meeting, San Francisco, CA.

Mena, S. & Montoya, A. K. (May 2024) Sample size planning for complex multilevel models. Talk presented at the Association for Psychological Science Annual Meeting, San Francisco, CA.

Guassi-Moreira, J. & Montoya, A. K. (May 2024) Reconsidering Reporting Standards for Multilevel Modeling in Social Psychology. Talk presented at the Association for Psychological Science Annual Meeting, San Francisco, CA.

Montoya, A. K. (2024, March). Registered Reports: A New Publication Process. Talk Presented at the Year of Open Science Culminating Conference hosted by the Center for Open Science in collaboration with NASA. Virtual. 

Krenzer, W. L. D., & **Montoya, A. K.** (2024, March). Increasing Adoption and Implementation for Registered Reports in Funding Agencies to Improve Public Trust in Science. Talk presented at the Association for Practical and Professional Ethics Annual Meeting, Cincinnati, OH.

Ramos, G.[‡], **Montoya, A. K.**, Aguilera, A., Lau, A., Wen, Y., Chavira, D. (2023, November). Reductions in stress, anxiety, and depression in a randomized controlled trial of a self-guided, app-based mindfulness meditation for people of color who experience discrimination. In A. Silverman & G. Ramos (Chairs), Leveraging digital mental health interventions to increase access to care among marginalized racial-ethnic groups. Presentation at the Association for Behavioral and Cognitive Therapies (ABCT) 57th Annual Convention, Seattle, WA.

Ramos, G.[‡], **Montoya, A. K.**, Aguilera, A., Lau, A., Wen, Y., Chavira, D. (2023, November). Can you

culturally adapt an already-developed app? Post-hoc strategies and implementation outcomes in the Mind-Us program. In J. Doung & A. Timmons (Chairs). Breaking down barriers: Bridging evidence-based digital mental health care and culturally inclusive technology. Presentation at the Association for Behavioral and Cognitive Therapies (ABCT) 57th Annual Convention, Seattle, WA.

Ramos, G.[‡], **Montoya, A. K.**, Aguilera, A., Lau, A., Wen, Y., Chavira, D. (2023, November). Making mindfulness-based interventions accessible for people of color via technology: The Mind-Us randomized controlled trial. E. Susman (Chair), Increasing accessibility of mindfulness and self-compassion interventions: Adaptations and innovations. Presentation at the Association for Behavioral and Cognitive Therapies (ABCT) 57th Annual Convention, Seattle, WA.

Ramos, G.[‡], **Montoya, A. K.**, Aguilera, A., Lau, A., Wen, Y., Chavira, D. (2023, August). Engagement strategies in self-guided, app-based mindfulness meditation for youth of color who experience discrimination. In A. Ortega C. Stiles-Shield (Chairs), Overcoming suboptimal digital health engagement: A priority for pediatric digital health research. Presentation at the American Psychological Association (APA) 2023 Annual Convention, Washington, D.C.

Montoya, A. K. (2023, Aug). Inclusive Teaching with the General Linear Model. Session Title: Incorporating EDI Perspectives into Quantitative Methodology Teaching, Practice, and Research. Presentation at the American Psychological Association (APA) 2023 Annual Convention, Washington, D.C.

Krenzer, W. L. D., Rhodes, D, Tibbe, T. **Montoya, A. K.** (2023, June). Preparing for a Bright Future with Registered Reports: A Hackathon to learn from and prepare undergraduates about this publishing mechanism. Hackathon at the annual Society for the Improvement of Psychological Science conference, Padua, Italy.

Flake, J., McCoach, B., Manapat, P., Howard, A., & **Montoya, A. K.** (2023, June). Transparency, Reproducibility, and Replicability of Modeling Methods: Problems and Solutions. Panel presented at the Modern Modeling Methods, University of Connecticut, Mansfield, CT.

Montoya, A. K. (2023, June). Causal Language in Evaluating Moderation/Interaction Hypotheses. Presented at the Modern Modeling Methods, University of Connecticut, Mansfield, CT.

Ramos, G.[‡], **Montoya, A. K.**, Aguilera, A., Lau, A., Wen, Y., Chavira, D. (2023, May). Effectiveness of a self-guided, app-based mindfulness meditation program for people of color who experience discrimination. Presentation at the American Society of Hispanic Psychiatry Annual Convention, San Francisco, CA.

Krenzer, W. D. L., Tibbe, T. D.[†], **Montoya, A. K.** (2023, March.) Demystifying Registered Reports for the Advancement of both the Mentor and Mentee. Presented at the 32nd Annual APPE International Conference, Portland, OR.*

Montoya, A. K., Krenzer, W. D. L., Tibbe, T. D.[†], Fossum, J. L.[†] (2023, Feb.) Getting started with registered reports. Presented at the Society for Personality and Social Psychology, Virtual.*

Montoya, A. K. (2022, Dec). Using the General Linear Model to Teach about Race in Research. Presented at the PsychTERMS Virtual Conference, Virtual.

Charlton, A., **Montoya, A. K.**, Price, J., & Hilgard, J. (2022, Nov). Noise in the process: an assessment of the evidential value of mediation effects in marketing journals. Presented at the Society for Judgement and Decision Making Annual Meeting, San Diego, CA.

Blankson, A. N., **Montoya, A. K.**, Flake, J. K., Garrison, S. M., Logan, J., Madison, M., Pek, J., Rhemtulla, M., Stapleton, L., & Sweet, T. (2022, Oct). QUAD Squad. Presented at the Society for Multivariate Experimental Psychology, Monterey Bay, CA.

Fossum, J. L.[†] & **Montoya, A. K.** (2022, July). Power analysis methods for mediation and moderated mediation models. Presented at the International Meeting of the Psychometric Society, Bologna, Italy.

Krenzer, W. D. L., Tibbe, T. D.[†], Fossum, J. L.[†], & **Montoya, A. K.** (2022, June). Discussion on registered reports: A new way to publish academic research. Presented at the Annual Meeting of the Society for the Improvement of Psychological Science, Victoria, BC, Canada.

Tibbe, T. D.[†], Krenzer, W. D. L., **Montoya, A. K.** (2022, February). The Role of Registered Reports in Improving Responsible Research. Presented at Association for Practical and Professional Ethics Research Integrity Scholars and Educators Consortium Fourth Annual Pre-Conference Symposium, Cincinnati, OH.

Charlton, A., **Montoya, A. K.**, Price, J., & Hilgard, J. (2021). Noise in the Process: A Meta-Analysis of Mediation Effects in Marketing Journals. Presented at the Annual Meeting of the Association for Consumer Research, Seattle, WA.

Makel, M. C., **Montoya, A. K.**, Cook, B., & Smith, K. (2021, Apr.) Open Access and Preprints. Session: Actions for Increasing the Credibility of Educational Research. Chair: Peters, S. J. Presented at the Annual Meeting for the American Educational Research Association, San Francisco, CA.

Montoya, A. K. (2021, Feb). New Insights in Power and Power Analysis in Mediation Models. *Symposium Chair*. Presented at the Society for Personality and Social Psychology Annual Meeting, Virtual. 

Fossum, J. L.[†] & **Montoya, A. K.** (2021, Feb). Comparison of power analysis methods for mediation. Presented at the Society for Personality and Social Psychology Annual Meeting, Virtual. 

Krenzer, W. D. L., Tibbe, T. D.[†], & **Montoya, A. K.** (2020, Dec.). Registered Reports: What we know and understand, what you would like to know. Presented at the Annual Meeting of the Association for Interdisciplinary Meta-Research and Open Science, Virtual.

Montoya, A. K. (2020, May) The More Things Change the More They Stay The Same: Model Equivalence in Repeated-Measures Mediation. Presented at the Annual Meeting for the Association for Psychological Science, Chicago, IL.(Conference Cancelled)

Montoya, A. K., Makel, M. C., Cook, B., & Smith, K. (2020, Apr.) Open Access and Preprints. Session: Actions for Increasing the Credibility of Educational Research. Chair: Peters, S. J. Presented at the Annual Meeting for the American Educational Research Association, San Francisco, CA. (Conference Cancelled) [Link]

Giner-Sorolla, R., Lewis, N., **Montoya, A. K.**, Carpenter, T. (2020, Feb) Power Analysis: Insights and Techniques from the 2019 Working Group, Society for Personality and Social Psychology Annual Meeting, New Orleans, LA.

Montoya, A. K. (2019, Oct.) Focusing on the Effect of Time: A Conditional Process Analysis Approach to Analyzing 2 (Within) X 2 (Between) Designs. Presented at the Society for Experimental Social Psychology, Toronto, Canada.

Montoya, A. K. (Chair) (2019, Apr.) Adopting Open Science at Any Career Stage: A Panel Discussion. Presented at the Annual Meeting of the Western Psychological Association, Pasadena, CA. 

Montoya, A. K., & Krenzer, W. (2019, Feb.) Registered Reports: Understanding Where and How to Publish (Presentation and Mini-hack). Presented at the Annual Meeting of the Society for Personality and Social Psychology: Society for the Improvement of Psychological Sciences Preconference, Portland, OR. 

Montoya, A. K., & Jeon, M. J. (2018, Apr). MIMIC models for uniform and non-uniform DIF as mediation

and moderated mediation models. Presented at the 2018 AERA Annual Meeting, New York, NY.

Montoya, A. K., & Edwards, M. C. (2017, Apr). Cautions on using model fit to choose number of factors in EFA. Presented at the 2017 Annual Meeting of the National Council on Measurement in Education, San Antonio, TX.

Montoya, A. K. (2016, Mar). Two condition within-subjects mediation: Power and type I error for methods of inference for the indirect effect. Presented at the Annual Meeting for the Southeastern Psychological Association, New Orleans, LA.

Montoya, A. K. (2016, Jan). Multiple mediator models for two-condition within-subjects designs: Estimating and comparing indirect effects. Presented at the Annual Meeting of the Society for Personality and Social Psychology, San Diego, CA.

Stojek, M. M. K., Drescher, C., **Montoya, A. K.**, Newberry, A., Sultan, Z., Williams, C. F., Pollock, N. K., & Davis, C. L. (2015, Nov). Sleep-disordered breathing, depression symptoms, and cognition in overweight inactive children. Presented at Obesity Week 2015, Los Angeles, CA.

Hayes, A. F. & **Montoya, A. K.** (2015, May). Hacking PROCESS: Some advanced and undocumented applications in mediation and moderation. Presented at the 27th Annual Convention for the Association for Psychological Science, New York, NY.

Montoya, A. K., Master, A., & Cheryan, S. (2013, July). Working together to belong: Increasing women's feelings of fit in STEM through group work. Presented at the Annual Pacific Conference on Prejudice & Culture, Bellingham, WA.

Montoya, A. K., Master, A., & Cheryan, S. (2013, May). Using group work to recruit women to STEM: A goal congruity approach. Presented at the Annual UW Undergraduate Research Symposium, Seattle, WA.

Montoya, A. K., Master, A., & Cheryan, S. (2013, May). Using communal interactions to recruit women into STEM: A goal congruity perspective. Presented at the UCLA Psychology Undergraduate Research Conference, Los Angeles, CA.

Montoya, A. K., Ni, W., Pena, A., & Stillwell, E. (2013, Mar). Debunking stereotypes: Research on why the image of computer science matters. Presented at the Women in Science and Engineering Conference, Seattle, WA.

Colloquia

Montoya, A. K. (2024, Dec). Using Propensity Score Matching for Sequential Recruitment in prospective Cohort Studies. Presented at Sumner Lab Meeting, Department of Psychology, UCLA.

Montoya, A. K. (2024, Apr). Getting Started with Registered Reports. Presented at the Social Psychology Brownbag, UCLA, Los Angeles, CA.

Montoya, A. K., Charlton, A., Price, J., & Hilgard, J. (2021, March). Mediation analysis in consumer behavior: Evaluating evidence for questionable research practices and publication bias. Behavioral Decision Making Meeting, UCLA, Los Angeles, CA.

Montoya, A. K. (2021, Mar). Quantitative Psychology and Meta-Science: Two Sides of the Same Coin, or Two Ships Passing in the Night? Presented at the Quantitative Psychology Seminar, UCLA, Los Angeles, CA.

Montoya, A. K. (2020, Feb). An Introduction to Power Analysis for Mediation. Behavioral Decision Making Meeting, UCLA, Los Angeles, CA.

Montoya, A. K., & Huang, Y.[†] (2019, Apr). Understanding performance of LASSO regression with categorical predictors: Variable selection and predictive ability. Quantitative Psychology Seminar, UCLA, Los Angeles, CA.

Montoya, A. K., Smith, S. M., Bjälkebring, P., & Tapal, A. (2018, Dec). Numeracy-Related Responding on Numeric Self-Report Scales. Behavioral Decision Making Meeting, UCLA, Los Angeles, CA.

Montoya, A. K. (2017, Oct). The Society of Multivariate Experimental Psychology: A graduate student perspective. Quantitative Psychology Seminar, Ohio State University, Columbus, OH.

Montoya, A. K. (2017, Mar). Estimating and probing interactions in two instance repeated-measures designs. Methodological Colloquium Series, College of Education and Human Ecology, Ohio State University, Columbus, OH.

Montoya, A. K. (2016, Sep). Extending the Johnson-Neyman procedure to categorical independent variables. Quantitative Psychology Seminar, Ohio State University, Columbus, OH.

Montoya, A. K., & Hayes, A. F. (2016, Mar). Two condition within-subjects mediation: Power and type I error for methods of inference for the indirect effect. Quantitative Psychology Seminar, Ohio State University, Columbus, OH.

Montoya, A. K. & Hayes, A. F. (2015, Apr). Within-subjects mediation: A path-analytic approach. Quantitative Psychology Seminar, Ohio State University, Columbus, OH.

Poster Presentations

Yu, G. O., Blank, I. A., & Montoya, A. K. (2025) Uncovering the Cognitive Mechanisms That Support Naturalistic Reading: A Data-Driven Approach. Presented at the Southern California Undergraduate Linguistics Conference in Los Angeles, CA.

Yu, G. O., Blank, I. A., & Montoya, A. K., (2025). Uncovering the Cognitive Mechanisms That Support Naturalistic Reading: A Data-Driven Approach. Presented at UCLA Psi Chi Research Conference in Los Angeles, CA.

Steinberg, H., Blank, I. A., & Montoya, A. K. (2025). Noisy Channel Processing: How we rationally decode handwriting. Presented at the UCLA Psi Chi Research Conference in Los Angeles, CA

Yu, G. O., Blank, I. A., & Montoya, A. K., (2025). Uncovering the Cognitive Mechanisms That Support Naturalistic Reading: A Data-Driven Approach. Presented at the UCLA Psychology Undergraduate Research Conference in Los Angeles, CA.

Tanyildiz, D., Block, J., Krenzer, W. L. D., & Montoya, A. K. (2025) Exploring Ethical Decision Making: A Vignette-Based Scale to Measure Susceptibility to Questionable Research Practices in Early Career Researchers. Presented at the UCLA Psychology Undergraduate Research Conference, Los Angeles, CA.

Yu, G. O., Blank, I. A., & Montoya, A. K., (2025). Uncovering the Cognitive Mechanisms That Support Naturalistic Reading: A Data-Driven Approach. Presented at Western Psychological Association Convention in Las Vegas, NV.

Tanyildiz, D., Block, J., Krenzer, W. L. D., & Montoya, A. K. (2025) Exploring Ethical Decision Making: A Vignette-Based Scale to Measure Susceptibility to Questionable Research Practices in Early Career Researchers. Presented at the Western Psychological Association, Las Vegas, NV.

Conner, J., Ding, J., Krenzer, W. L. D., & Montoya, A. K., (2025). What Keeps Researchers from Publishing Registered Reports? An Exploratory Analysis on Researcher's Views and Concerns. Presented at Western Psychological Association Convention in Las Vegas, NV

Yu, G.[†], Blank, I. A., & Montoya, A. K. (2025) Uncovering the Cognitive Mechanisms That Support Naturalistic Reading: A Data-Driven Approach. Poster presented at Western Psychological Association, Las Vegas, NV.

Tanyildiz, D.[†], Block, J.[†], Krenzer, W. D. L., & Montoya, A. K. (2025) Exploring Ethical Decision-Making: A Vignette-Based Scale to Measure Susceptibility to Questionable Research Practices in Early Career Researchers. Poster presented at Western Psychological Association, Las Vegas, NV.

Connor, J.[†], Ding, J.[†], Krenzer, W. D. L., & Montoya, A. K. (2025) What keeps researchers from publishing registered reports? An exploratory analysis on researcher's views and concerns. Poster presented at Western Psychological Association, Las Vegas, NV.

Wang, Y.[†] & Montoya, A. K. (June 2024). When to Standardize Your Data? A Comparison of Percentile Bootstrap Confidence Interval for Standardized Indirect Effects. Poster presented at Modern Modeling Methods, Storrs, CT.

Yu, G.[†], Tibbe, T. D.[†], Krenzer, W. D. L., & Montoya, A. K. (May 2024). Comparing the Number of Submissions to Publish for Registered Reports vs. Traditional Papers. Poster presented at UCLA Undergraduate Research Week, Los Angeles, CA.

Conner, J.[†], Ding, J.[†], Krenzer, W. L. D., & Montoya, A. K. (May 2024). What Keeps Researchers from Publishing Registered Reports? An Exploratory Analysis on Researcher's Views and Concerns. Poster presented at UCLA Psychology Undergraduate Research Conference, Los Angeles, CA.

Yang, J.[†] & Montoya, A. K. (May 2024). Comparison of Mediation Testing Models in Two-Condition Pretest-Posttest Design. Poster presented at UCLA Psychology Undergraduate Research Conference, Los Angeles, CA. 

Tibbe, T. D.[†], Enders, C. E., & Montoya, A. K. (May 2024). Inference on the Indirect Effect in the Presence of Missing Data: The Bias-Corrected Bootstrap Confidence Interval Results in Inflated Type I Error Rates When Implemented with Multiple Imputation Procedures. Poster presented at Association for Psychological Science, San Francisco, CA.

Wang, Y. & Montoya, A. K. (April 2024). When to Standardize Your Data? A Comparison of Percentile Bootstrap Confidence Interval for Standardized Indirect Effects. Poster presented at Western Psychological Association.

Tibbe, T. D. & Montoya, A. K. (April 2024). A Comparison of Missing Data Methods for Qualitative Interaction Trees. Poster presented at Western Psychological Association.

Fossum, J. L. & Montoya, A. K. (April 2024). Impacts of Model Misspecification on Statistical Power in Moderated Mediation. Poster presented at Western Psychological Association.

Block, J.[†], **Montoya, A. K.**, Loran, Z.[†], Smith, S., Tapal, A., and Bjälkebring, P. (2023, Nov). Using Item Response Theory Trees to Estimate the Relationship Between Response Style and Numeracy. Presented at Psychonomics Society Annual Meeting, San Francisco, CA.

Tang, A.[†], Tibbe, T. D.[†], **Montoya, A. K.** (2023, April). Lasso with Categorical Predictors: Impact of Coding Strategy on Variable Selection and Prediction. Presented at the Annual Meeting of the Western Psychological Association, Pasadena, CA

Block, J.[†] & **Montoya, A. K.** (2023, April). A Comparison of Multidimensional Item Response Theory Methods for Response Styles. Presented at the Annual Meeting of the Western Psychological Association, Pasadena, CA.

Yang, N.[†], Fossum, J. L.[†], **Montoya, A. K.** (2023, April). Extending Mediation Analysis to Within-subjects Data with Dichotomous Outcomes. Presented at the Annual Meeting of the Western Psychological Association, Pasadena, CA.

Fossum, J. L.[†], **Montoya, A. K.** (2023, April). Choosing Simulation Study Parameters from Current Practices. Presented at the Annual Meeting of the Western Psychological Association, Pasadena, CA.

Tibbe, T. D.[†], **Montoya, A. K.** (2023, April). Assessing the Bias-Corrected Bootstrap in Missing Data Methods for the Indirect Effect. Presented at the Annual Meeting of the Western Psychological Association, Pasadena, CA.

Cruz, A. M.[†], **Montoya, A. K.** (2023, April). Within-Subjects Mediation Analysis with a Multicategorical Independent Variable. Presented at the Annual Meeting of the Western Psychological Association, Pasadena, CA.

Krenzer, W. D. L., Tibbe, T. D., **Montoya, A. K.** (2023 March). Demystifying Registered Reports for the Advancement of both the Mentor and Mentee. Presented at the 32nd Annual APPE International Conference.*

Block, J. & Montoya, A. K. (2022, November). Modeling Numeracy's Effect on Likert Data; An IR-Tree Based Approach. Presented at the Society for Judgement and Decision Making Annual Meeting, San Diego, CA.

Cruz, A. M.[†], **Montoya, A. K.**, Grodin, E. N., Donato, S., Baskerville, W.-A., & Ray, L. A. (2022, June). A Case Study with RCT of Varenicline Using Two Machine Learning Approaches. Presented at the Symposium for Data Science and Statistics, Pittsburgh, PA.

Meredith, L. R.[‡], Grodin, E. N., **Montoya, A.K.**, Miranda, R., Squeglia, L. M., Ray, L. A. (2022, June). The effect of ibudilast on daily naturalistic reporting of subjective response to alcohol. Presented at the Research Society on Alcoholism Convention, Orlando, FL.

Grodin, E. N., **Montoya, A. K.**, Cruz, A. M.[†], Donato, S., Baskerville, W.-A., & Ray, L. A. (2022, June). Identifying likely treatment responders to Varenicline for Alcohol Use Disorders Using a Tree-Based Qualitative Interaction Analysis. Presented at the 45th Annual Research Society on Alcoholism Scientific Meeting, Orlando, FL.

Tibbe, T. D.[†], **Montoya, A. K.**, & Enders, C. (2022, May). Elevated type I error rates of the bias-corrected bootstrap in missing data methods for the indirect effect. Presented at the Annual Meeting of the Association for Psychological Science, Chicago, IL.

Fossum, J. L.[†] & **Montoya, A. K.** (2022, May). Modeling latent interactions using the product indicator approach: An applied example in R. Presented at the Annual Meeting of the Association for Psychological Science, Chicago, IL. 🌸

Garcia Ruiz, E.[†], Tibbe, T. D.[†] & **Montoya, A. K.**, (2022, May). Registered reports: The adoption of registered reports over time. Presented at the UCLA Undergraduate Research Week, Los Angeles, CA.

Yang, N.[†], Fossum, J. L.[†] & **Montoya, A. K.**, (2022, May). Extending mediation analysis to within-subjects data with dichotomous outcomes. Presented at UCLA Undergraduate Research Week, Los Angeles, CA.

Garcia Ruiz, E.[†], Tibbe, T. D.[†] & **Montoya, A. K.**, (2022, May). Registered reports: The adoption of registered reports over time. Presented at the 31st Annual UCLA Psychology Undergraduate Research Conference, Los Angeles, CA.

Yang, N.[†], Fossum, J. L.[†] & **Montoya, A. K.**, (2022, May). Extending mediation analysis to within-subjects data with dichotomous outcomes. Presented at the 31st Annual UCLA Psychology Undergraduate Research Conference, Los Angeles, CA.

Block, J.[†], Loran, Z.[†] & **Montoya, A. K.**, (2022, May). Using IR-trees to model numeracy's effect upon Likert scales. Presented at the 31st Annual UCLA Psychology Undergraduate Research Conference, Los Angeles, CA.

Cruz, A. M.[†], & **Montoya, A. K.** (2022, April). Within-subject mediation analysis with more than two conditions: An applied example. Presented at the Annual Meeting of the Western Psychological Association, Portland, OR.

Lamarque-Navarrete, K.[†] **Montoya, A. K.** (2021, October). Propensity Score Matching Concurrently with Participant Recruitment: Examining Cardiovascular Health and PTSD. Presented at the Women in Statistics and Data Science Conference, Virtual.

Tibbe, T. D.[†], **Montoya, A. K.**, Krenzer, W. D. L. (2021, May). A Registered Report on Registered Reports: Investigating Potential Benefits of and Barriers to Adopting Registered Reports. Presented at the Annual Convention of the Association for Psychological Science, Virtual.

Loran, Z.[†], & **Montoya, A. K.** (2021, June). Methods for Detecting Numeracy's Effect on Trait-Unrelated Response Styles. Presented at the Symposium on Data Science and Statistics, Virtual.

Lamarque-Navarrete, K.[†] & **Montoya, A. K.**, (2021, May). Reducing Carryover Effects in Within-Subjects Design. Presented at the UCLA Undergraduate Research Week, Los Angeles, CA. 

Loran, Z.[†] & **Montoya, A. K.**, (2021, May). Methods for detecting numeracy's effect on trait-unrelated response styles. Presented at the UCLA Undergraduate Research Week, Los Angeles, CA. 

Yang, N.[†], Fossum, J. L.[†] & **Montoya, A. K.**, (2021, May). Moderated mediation analysis across different research areas. Presented at the UCLA Undergraduate Research Week, Los Angeles, CA. 

Lamarque-Navarrete, K.[†] & **Montoya, A. K.**, (2021, May). Propensity Score Matching Concurrently with Participant Recruitment: Examining Cardiovascular Health and PTSD. Presented at the 30th Annual UCLA Psychology Undergraduate Research Conference, Los Angeles, CA. 

Fossum, J. L.[†], **Montoya, A. K.** (2021, April). Current Practices and Sample Sizes Used for Moderated Mediation. Presented at the Annual Meeting of the Western Psychological Association, Virtual.

Tibbe, T. D.[†], **Montoya, A. K.** (2021, April). Correcting the Bias Correction for the Bootstrap in Mediation Analysis. Presented at the Annual Meeting of the Western Psychological Association, Virtual.

Polad, V. [†] & **Montoya, A. K.**, (2020, November). Reducing Carryover Effects in Within-Subjects Design. Presented at the Electronic Undergraduate Statistics Research Conference. [Link to Video]

Polad, V. [†] & **Montoya, A. K.**, (2020, May). Reducing Carryover Effects in Within-Subjects Design.

Presented at the 29th Annual UCLA Psychology Undergraduate Research Conference, Los Angeles, CA. 

Polad, V. [†] & **Montoya, A. K.**, (2020, May). Reducing Carryover Effects in Within-Subjects Design. Presented at the UCLA Undergraduate Research Week, Los Angeles, CA. 

Loran, Z. [†] & **Montoya, A. K.**, (2020, May). Numeracy Effects on Numeric Self-Report Scale Responses. Presented at the UCLA Undergraduate Research Week, Los Angeles, CA.

Leathem, L. D. [‡], Currin, D. L., Montoya, A. K. , & Karlsgodt, K. H. (2020, Apr). Social Cognitive and Neural Mechanisms of Loneliness in Subclinical Psychosis. Presented at the 2020 Society of Biological Psychiatry Virtual Symposium.

Montoya, A. K.. (2020, Feb.) Moderated Mediation for Integrating Between X Within-Subject Designs. Presented at the Annual Meeting of the Society for Personality and Social Psychology, New Orleans, LA.

Krenzer, W. D. L., & **Montoya, A. K.**. (2020, Feb.) Registered Reports: An Unbiased Future to Psychological Research. Presented at the Annual Meeting of the Society for Personality and Social Psychology, New Orleans, LA. 

Grodin, E. N., **Montoya, A. K.**, Bujarski, S., & Ray, L. A. (2019). A Machine Learning Approach to Modeling Motivation for Alcohol in Humans. Presented at the 58th Annual Meeting of the American College of Neuropsychopharmacology, Orlando, FL.

Loran, Z. [†], **Montoya, A. K.**, & Krenzer, W. D. L. (2019, May). Registered Report Early Adoption: Census of Journal Policies and Open Science Practices. Presented at the UCLA Undergraduate Research Week, Los Angeles, CA.

Huang, Y. [†], & **Montoya, A. K.** (2019, May). Comparing Performance of Lasso, Group Lasso, and Linear Regression with Categorical Predictors. Presented at the 28th Annual UCLA Psychology Undergraduate Research Conference, Los Angeles, CA.

Huang, Y. [†], & **Montoya, A. K.** (2019, May). Comparing Performance of Lasso, Group Lasso, and Linear Regression with Categorical Predictors. Presented at the Symposium on Data Science and Statistics, Bellevue, WA.

Montoya, A. K., Smith, S. M., Bjälkebring, P., & Tapal, A. (2018, Nov). Numeracy-Related Responding on Numeric Self-Report Scales. Presented at the Annual Meeting for the Society of Judgment and Decision Making, New Orleans, LA.

Silberstein, C. [†], & **Montoya, A. K.** (2018, May). Penalized regression within the game cribbage: A machine learning application. Presented at the Symposium on Data Science and Statistics, Reston, VA.

Montoya, A. K. (2018, Mar). Statistical power in mediation analysis for repeated measures designs. Presented at the Annual Meeting of the Society for Personality and Social Psychology, Atlanta, GA.

Montoya, A. K. (2017, Oct). Probing moderation analysis in two-instance repeated-measures designs. Presented at the Society for Multivariate Experimental Psychology, Minneapolis, MN.

Montoya, A. K. (2017, May). Simple slopes and Johnson-Neyman probing methods extended to two-condition within-subject designs. Presented at the Annual Convention of the Association for Psychological Science, Boston, MA.

Montoya, A. K., & Hayes, A. F. (2015, May). Estimating and testing indirect effects in within-subject mediation analysis: A path-analytic framework. Presented at the Annual Convention of the Association for

Psychological Science, New York, NY.

Montoya, A. K., Flaherty, B., & Cheryan, S. (2015, Feb). Collapsing conditions increases type I error: Changing analysis of multiple control conditions. Presented at the Annual Meeting of the Society for Personality and Social Psychology, Long Beach, CA.

Montoya, A. K., Master, A., & Cheryan, S., (2014, Feb). Communal goal fulfillment through group work: A new direction in recruiting women into computer science. Presented at the Annual Meeting of the Society for Personality and Social Psychology, Austin, TX.

Montoya, A. K., Master, A., & Cheryan S., (2013, May). Using group work to recruit women to STEM: A goal congruity approach. Presented at the 42nd Annual Department of Psychology Research Festival, Seattle, WA.

Stillwell, E., **Montoya, A. K.**, Master, A., & Cheryan, S., (2013, May). Perceptions of group work in STEM fields: Explaining women's disinterest in computer science. Presented at the Annual UW Undergraduate Research Symposium, Seattle, WA.

Montoya, A. K., Master, A., & Cheryan, S. (2013, Jan). Students' goal endorsement predicts perceived fit in STEM fields. Presented at the Annual Meeting of the Society for Personality and Social Science, New Orleans, LA.

Montoya, A. K., Master, A., & Cheryan, S. (2012, May). Perceptions of communal goals predict students' interest in STEM fields. Presented at the Annual UW Undergraduate Research Symposium, Seattle, WA.

*Future presentations which have already been accepted.

† Student or postdoc author (Primary mentor) ‡ Student or postdoc author (Non-primary mentor)

SOFTWARE

MEMORE, Macro for SPSS and SAS 

- V1 allows for mediation analysis in two-instance repeated-measures (TIRM) designs with one or more mediators in parallel or serial. Released in 2017.
- V2 added functionality for testing moderation analysis in TIRM designs with one or more moderators in additive or multiplicative models. Released in 2019
- V3 added functionality for testing moderated mediation analysis in TIRM designs with one or more mediators in parallel and a single moderators. Released in 2025

Omnibus Groups Regions of Significance (OGRS), Macro for SPSS and SAS LINK

- V1.2 allows for probing interactions between a multicategorical independent variable and a continuous moderator in predicting a continuous outcome variable.

MENTORSHIP

Graduate Students

Bidkar Salazar	2025 –
Lillian King	2025 –
Jared Block (co-mentored with Steve Reise)	2022 –

Alondra Cruz, Masters	2021 – 2023
Tristan Tibbe, PhD Dissertation: A Comprehensive Comparison of Missing Data Procedures for Tree-Based Machine Learning Methods [LINK] Current Position: Senior Statistician, Department of Medicine Statistics Core, UCLA	2019 – 2024
Jessica Fossum, PhD Dissertation: Impacts of Model Specification on Statistical Power and Type I Error Rate in Moderated Mediation Analysis [LINK] Current Position: Instructor of Research Psychology, Director of Research - Graduate Psychology, Seattle Pacific University	2019 – 2023

Undergraduates/Postbaccalaureate

Hannah Steinberg, UCLA, Research Assistant/Honors Student Current Position: PhD Student in Quantitative Psychology at Arizona State University	2024 – 2025
Defne Tanyildiz, UCLA, Research Assistant	2024 –
Gareth Yu, UCLA, Research Assistant	2024 –
Jennifer Ding, UCLA, Research Assistant	2023 – 2025
Jack Conner, UCLA, Research Assistant	2023 –
Jocelyn Yang, UCLA, Research Assistant Current Position: Masters student in Biostatistics at Harvard University	2023 – 2025
Jun Yu (Johnny) Chen, UCLA, Research Assistant	2023
Eunwoo Kim, UCLA, Research Assistant	2023
Yiwei Wang, UCLA, Research Assistant, Departmental Honors Current Position: PhD Student in Quantitative Psychology at University of Notre Dame	2022 – 2024
Deana Moghaddas, UCLA, Research Assistant Current position: Data and Policy Analyst I — Statistical Programmer, Acumen, LLC	2021 – 2023
Anushka Chakrabarti, UCLA, Research Assistant Current position: HSBC Commercial Banking Graduate Analyst	2021 – 2023
Amy Tang, UCLA, Research Assistant Current position: Master's student in Data Science at New York University	2021 – 2023
Nickie Yang, UCLA, Research Assistant/PROPS/PEERS Current position: Medical Student at University of California, San Francisco	2020 – 2024
Erika Garcia, UCLA, Research Assistant/PEERS	2020 – 2022
Jared Block, UCLA, Research Assistant Current Position: PhD Student in Quantitative Psychology at UCLA	2021 – 2022

Yuhan (Bruce) Mei, UCLA, Research Assistant Current Position: PhD Program in Management and Organization at Duke.	2020 – 2022
Carolyn Moore, UCLA, Research Assistant Current Position: Associate Consultant, Bain & Company	2020 – 2021
Kathleen Lamarque-Navarrete, Departmental Honors Previous Position: Lab Manager for QRClab (PI: Montoya)	2020 – 2022
Yihuan (Charlotte) Huang, UCLA, Research Assistant Current Position: Data Scientist at Facebook	2018 – 2021
Zach Loran, UCLA, Research Assistant Current Position: Data Analyst at FieldLevel.com	2018 – 2021
Valerie Polad, PROPS Current Position: PhD Student in Quantitative Psychology at UNC-Chapel Hill	2019 – 2021
Nancy Gomez, Research Assistant Current Position: PhD Student in Quantitative Psychology at University of Washington	2019 – 2021
Anjum Farook, UCLA, Research Assistant Current Position: Business Analyst at FMGG Direct	2019 – 2020
Kevin Le, UCLA, Research Assistant Current Position: Masters Student in Data Science at Brown University	2019 – 2020
Chris Silberstein, OSU, Research Assistant Current Position: Data Engineer at CVS Health	2017 – 2018

Mentee Awards

Block, J. [†] National Science Foundation, Graduate Research Fellowship,	2024 – 2027
Block, J. [†] UCLA Graduate Division, Graduate Summer Research Mentorship Award,	2023
Cruz, A. [†] UCLA Graduate Division, Graduate Research Mentorship Award,	2022
Cruz, A. [†] UCLA Graduate Division, Graduate Summer Research Mentorship Award,	2022
Consultant to Erica Grodin (PI); Sponsor Lara Ray “Characterizing the Microbiome-Gut-Brain Axis in Individuals with Alcohol Use Disorder” Ruth. L. Kirschstein National Research Service Award (NRSA) Predoctoral Fellowship, National Institute on Alcohol Abuse and Alcoholism (NIAAA), NIAAA 1K01AA029712-01.	04/01/2022-03/31/2027
Consultant to Lindsay Meredith (PI); Sponsor Lara Ray “Neuroimmune Treatment for AUD: Testing Moderators of Clinical Response and Mechanisms of Action” Ruth. L. Kirschstein National Research Service Award (NRSA) Predoctoral Fellowship, National Institute on Alcohol Abuse and Alcoholism (NIAAA), NIH F31AA0292, \$40,690 TDC.	06/01/2022-05/31/2024

Tibbe, T. [†] UCLA, Graduate Division, Graduate Dean's Scholar Award,	2020 – 2022
Fossum, J. L. [†] UCLA Graduate Division, Graduate Research Mentorship Award,	2021 – 2022
Tibbe, T. [†] National Science Foundation, Graduate Research Fellowship, <i>Mediation Analysis with Missing Data: Correcting the Bias-Corrected Bootstrap</i>	2021 – 2023
Consultant to Anika Guha (PI); co-sponsors Cindy M. Yee-Bradbury and Gregory A. Miller. Identifying Neural Mechanisms of Aberrant Inhibitory Processing and Salience in Patients with Schizophrenia.” Individual National Research Service Award (pre-doc), National Institute of Mental Health F31 MH124421, \$74,674 TDC.	02/01/21-01/31/23
Tibbe, T. D. [†] UCLA Graduate Division, Graduate Summer Research Mentorship Award,	2020
Huang, Y. [†] UCLA Library Prize for Undergraduate Research in the Science, Engineering, and Math, <i>Lack of Robustness of Lasso and Group Lasso with Categorical Predictors</i> . (\$700)	2020

Dissertation Committee Members

Michael Woller, Quantitative Psychology, Chair: Craig Enders	In Progress
Richard Tyrus Korecki, Clinical Psychology, Chair: Julie Bower	In Progress
Stefany Mena, Quantitative Psychology, Chair: Han Du	2025
Egamaria Alacam, Quantitative Psychology, Chair: Craig Enders	2024
Logan Leathem, Clinical Psychology, Chair: Katie Karlsgodt	2024
Juan Diego Vera, Quantitative Psychology, Chair: Craig Enders	2023
Giovanni Ramos, Clinical Psychology, Chair: Denise Chavira	2022
Blanche Wright, Clinical Psychology, Chair: Anna Lau	2022
Rejoyce Green, Clinical Psychology, Chair: Lara Ray	2021
Morgan Bartholomew, Clinical Psychology, Chairs: Greg Miller & Cindy Yee-Bradbury	2021
Chelsea Romney, Health Psychology, Chair: Ted Robles	2021
Beth Moroney, Clinical Psychology, Chair: Steve Lee	2021

Comprehensive Exam Committee Member

Juan Diego Vera, Quantitative Psychology, Chair: Craig Enders	2022
Egamaria Alacam, Quantitative Psychology, Chair: Craig Enders	2022

FUNDING

Grants

Statistician (PI: Priscilla Lui, UW), University of Washington Addictions, Drug & Alcohol Institute (ADAI), Effects of Acculturative Stress on Drinking to Cope: Testing Bicultural Self-Acceptance and Social Support Interventions. (\$3,000)	2025
Principle Investigator, National Science Foundation, Ethical and Responsible Research, Redefining Questionable Research Practices and the Role of Registered Reports: A Cross-Disciplinary and Multi-Stakeholder Exploration Award No: 2418938 (\$399,674)	2024 - 2027
Institute for Digital Research and Education, Workshop Award (\$5,000)	2022
Co-Principal Investigator (PI: Lara Ray), National Institutes of Health, <i>Identifying treatment responders in medication trials for AUD using machine learning approaches</i> , Award No: 1R03AA029244-01 (\$149,553)	4/2021 - 3/2023
Faculty Affiliate, National Institutes of Mental Health, <i>T32: Biobehavioral Issues in Physical and Mental Health</i> , UCLA	2021 - 2026
Faculty Career Development Award, UCLA Equity, Diversity, and Inclusion (\$15,000)	2020
Collaborator, National Science Foundation, <i>Create a STEM Education Research Hub</i> 	2020 - 2025
Principal Investigator, National Science Foundation, Ethical and Responsible Research, <i>Aligning Incentives: Can Registered Reports Encourage Ethical and Responsible Research Practices among Early Career Researchers</i> , Award No: 2024377 (\$400,127)	2020 - 2023
Co-Investigator (PI: Jennifer Sumner), National Institute of Health, National Heart, Lung, and Blood Institute, <i>Identifying Early Intervention Targets for Reducing CardiovascularRisk in Posttraumatic Stress</i> , Award No: R01 HL139614 (\$788,933).	8/2018 - 6/2023
Co-Investigator, Decision Sciences Collaborative, Small Research Grant, The Ohio State University, <i>Numeracy-related responding to numeric self-report scales</i> (\$2,260)	2017

Fellowships

Faculty Innovation Fellowship, Startup UCLA	2024
National Science Foundation, Graduate Research Fellowship, <i>Modernizing Within-Subjects Mediation Analysis</i> (\$102,000)	2015
The Ohio State University, Susan L. Huntington Dean's Distinguished University Fellowship (\$85,500)	2014

Honors & Awards

SAGE Early Career Trajectory Award, Society for Personality of Social Psychology (\$2000)	2024
Quantitude Podcast, Meme Caption Awesomeness Award [LINK]	2022
UCLA, Undergraduate Research Week Faculty Mentor Award	2022
Department of Psychology, UCLA, Distinguished Teaching Award	2022
Association for Psychological Science, APS Rising Star Award	2022
Department of Psychology, UCLA, PGSA J. Arthur Woodward Graduate Mentoring Award	2020
Department of Psychology, The Ohio State University, Herbert Toops Research Award, <i>Two-condition within-participant statistical mediation analysis: A path-analytic framework</i> (\$500)	2017
Department of Psychology, The Ohio State University, Spring Graduate Research Forum, 1st Place, <i>Extending the Johnson-Neyman procedure to categorical independent variables: Mathematical derivations and computational tools</i> (\$500)	2017
Association for Psychological Science, Student Caucus Volunteer/Travel Assistance Award (\$200)	2017
Council of Graduate Students, The Ohio State University, Ray Travel Award (\$1000)	2017
Council of Graduate Students, The Ohio State University, Ray Travel Award (\$750)	2016
Society for Personality and Social Psychology, Graduate Travel Award (\$500)	2016
Society for Personality and Social Psychology, Diversity Fund Graduate Travel Award (\$500)	2016
Association for Psychological Science, Student Caucus Volunteer/Travel Assistance Award (\$200)	2015
Society for Personality and Social Psychology, Diversity Fund Undergraduate Registration Award (\$340)	2013
Department of Psychology, University of Washington, Guthrie Price for Best Empirical Paper, <i>Increasing interest in computer science through group work: A goal congruity approach</i> (\$250)	2013
University of Washington, Mary Gates Research Scholarship, <i>How increasing perceptions of communal goals in computer science can increase women's interest</i> (\$4,000)	2013
University of Washington, Undergraduate Research Travel Conference Award (\$650)	2013

TEACHING EXPERIENCE

Invited Workshops

Co-Instructor with William Krenzer, Getting Started with Registered Reports, Association for Psychological Science, Washington DC.	2025, May
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<u>Instructor</u> , Promoting Reproducibility in Africa: Preregistration and Registered Reports, African Reproducibility Network, Virtual.	2025, May
Co-Instructor with Jared Block [†] , Introduction for Item Response Theory (IRT) for Psychology Research, Western Psychological Association, Las Vegas, NV.	2025, May
<u>Instructor</u> , Mediation, Moderation, and Conditional Process Analysis I, Global School of Empirical Research Methods, University of St. Gallen.	2025, June
<u>Instructor</u> , Mediation, Moderation, and Conditional Process Analysis II, Global School of Empirical Research Methods, University of St. Gallen.	2025, June
<u>Instructor</u> , Mediation, Moderation, and Conditional Process Analysis, Statistical Horizons, Virtual.	2025, April
<u>Instructor</u> , Mediation, Moderation, and Conditional Process Analysis I, Global School of Empirical Research Methods, University of Ljubljana.	2025, Jan
<u>Instructor</u> , Getting Started with Registered Reports, Center for Open Science - Instagram Data Access Team	Nov 2024
<u>Instructor</u> , Mediation and Moderation Analysis for Simple Within-Subject Designs, Statistical Horizons, Virtual.*	2024, Sept
<u>Instructor</u> , Mediation, Moderation, and Conditional Process Analysis I, Global School of Empirical Research Methods, University of St. Gallen.	2024, June
<u>Instructor</u> , Mediation, Moderation, and Conditional Process Analysis II, Global School of Empirical Research Methods, University of St. Gallen.	2024, June
<u>Instructor</u> , Mediation, Moderation, and Conditional Process Analysis, Statistical Horizons, Virtual.	2024, April
Co-Instructor with Jessica Fossum [†] , Introduction to Moderation Analysis, American Psychological Association, Science Training Session, Virtual. 	2023, Nov
Co-Instructor with Jessica Fossum [†] , Introduction to Mediation Analysis, American Psychological Association, Science Training Session, Virtual. 	2023, Nov
<u>Instructor</u> , Mediation, Moderation, and Conditional Process Analysis I, Global School of Empirical Research Methods, University of St. Gallen.	2023, June
<u>Instructor</u> , Mediation, Moderation, and Conditional Process Analysis II, Global School of Empirical Research Methods, University of St. Gallen.	2023, June
Co-Instructor with William Krenzer and Tristan Tibbe [†] , Getting Started with Registered Reports, Institute for Digital Research and Education, UCLA, Los Angeles, CA.	2023, June
<u>Instructor</u> , Mediation, Moderation, and Conditional Process Analysis, Statistical Horizons, Virtual.	2023, April
Co-Instructor with Tristan Tibbe [†] , Best Practices in Mediation Analysis, Annual Convention of the Western Psychological Association, Riverside, CA.	2023, April

Co-Instructor with William Krenzer and Tristan Tibbe [†] , Getting Started with Registered Reports, Institute for Digital Research and Education, UCLA, Los Angeles, CA. 	2023, March
Co-Instructor with William Krenzer and Tristan Tibbe [†] , Getting Started with Registered Reports, Institute for Digital Research and Education, UCLA, Los Angeles, CA.	2023, Jan
Instructor, Mediation, Moderation, and Conditional Process Analysis I, Global School of Empirical Research Methods, University of Ljubljana.*	2023, Jan
Instructor, Mediation, Moderation, and Conditional Process Analysis, Statistical Horizons, Virtual.	2022, Aug
Instructor, Mediation, Moderation, and Conditional Process Analysis I, Global School of Empirical Research Methods, University of St. Gallen, Virtual.	2022, June
Co-Instructor with Jessica Fossum [†] , Introduction to Mediation Analysis, Annual Convention of the Western Psychological Association, Portland, OR.	2022, April
Instructor, Mediation, Moderation, and Conditional Process Analysis, Anderson School of Management, UCLA, Los Angeles, CA.	2022
Instructor, Mediation, Moderation, and Conditional Process Analysis I, Global School of Empirical Research Methods, University of Ljubljana, Virtual.	2022
Instructor, Mediation, Moderation, and Conditional Process Analysis, Statistical Horizons, Virtual.	2022
Instructor, Mediation, Moderation, and Conditional Process Analysis, Statistical Horizons, Virtual.	2021
Instructor, Introduction to Mediation Analysis, Race, Ethnicity, Politics, and Society Lab (PI: Efren Perez), Los Angeles, CA.	2021
Co-Instructor, Mediation, Moderation, and Conditional Process Analysis II, Global School of Empirical Research Methods, University of St. Gallen, Virtual.	2021
Instructor, Mediation, Moderation, and Conditional Process Analysis I, Global School of Empirical Research Methods, University of St. Gallen, Virtual.	2021
Instructor, Mediation, Moderation, and Conditional Process Analysis I, Global School of Empirical Research Methods, University of Ljubljana, Virtual.	2021
Instructor, Mediation and Moderation for Two-Instance Repeated-Measures Designs, Annual Convention of the Western Psychological Association, Virtual.	2020
Co-Instructor, Considerations for Planning and Evaluating Sample Size, Annual Convention of the Association for Psychological Science, Chicago, IL. (Conference Cancelled)	2020
Instructor, Mediation, Moderation, and Conditional Process Analysis I, Global School of Empirical Research Methods, University of St. Gallen, St. Gallen, Switzerland.	2020
Instructor, Mediation in Repeated Measures and Multilevel Designs,	2019

Annual Convention of the Association for Psychological Science, Washington DC.

Instructor, Introduction to Mediation Analysis, 2019
Annual Convention of the Western Psychological Association, Pasadena, CA. 🌸

Instructor, Mediation in Repeated Measures and Multilevel Designs, 2019
Society for Personality and Social Psychology Annual Meeting, Portland, OR.

Instructor, Mediation, Moderation, and Conditional Process Analysis I, 2019
Global School of Empirical Research Methods, BI Norwegian Business School, Oslo, Norway.

Instructor, Mediation, Moderation, and Conditional Process Analysis I, 2018
Global School of Empirical Research Methods, University of Ljubljana, Ljubljana, Slovenia.

Instructor, Understanding PROCESS v3: New features, building, and editing models, 2018
University of Southern California, Los Angeles, CA.

Co-Instructor, Mediation in Repeated Measures and Multilevel Designs, 2018
Annual Convention of the Association for Psychological Science, San Francisco, CA.

Co-Instructor, Understanding PROCESS v3: New features, building, and editing models, 2018
Society for Personality and Social Psychology Annual Meeting, Atlanta, GA.

Instructor, Mediation, Moderation, and Conditional Process Analysis I, 2018
Global School of Empirical Research Methods, BI Norwegian Business School, Oslo, Norway.

Instructor, Introduction to R through Mediation and Moderation, 2017
Department of Psychology, University of Washington, Seattle, WA.

Instructor, MEMORE: Mediation and Moderation in Repeated Measures Designs, 2017
Society for Personality and Social Psychology Annual Meeting, San Antonio, TX.

Instructor, Using MEMORE: Mediation in Two-Instance Repeated Measures Designs, 2017
Social Psychology Graduate Student Workshop Series, Columbus, OH.

Instructor, Conditional Process Analysis: Moderation of Mediation, 2016
Annual Meeting for the Southeastern Psychological Association, New Orleans, LA.

Instructor, Conditional Process Analysis: The Moderation of Mediation, 2016
University of San Francisco, San Francisco, CA.

Course Assistant, Statistical Mediation and Moderation, 2015
Instructor: Andrew F. Hayes, Statistical Horizons, Philadelphia, PA.

*Future presentations which have already been accepted.

Courses Taught - UCLA

Instructor, Psychological Statistics (Psych 100A), Enrollment: 250 Fall 2025*

Instructor, Advanced Psychological Statistics, (Psych 250C), Enrollment: 26. Spring 2025

<u>Instructor</u> , Mediation, Moderation, and Conditional Process Analysis (Psych 254B) Enrollment: 28.	Fall 2024
<u>Instructor</u> , Advanced Psychological Statistics, (Psych 250C), Enrollment: 31.	Spring 2024
<u>Instructor</u> , Psychological Statistics (Psych 100A), Enrollment: 248	Fall 2023
<u>Instructor</u> , Advanced Psychological Statistics, (Psych 250C), Enrollment: 33.	Spring 2023
<u>Instructor</u> , Multivariate Analysis with Latent Variables (Psych M257), Enrollment: 21	Fall 2022
<u>Instructor</u> , Advanced Psychological Statistics, (Psych 250C), Enrollment: 36.	Spring 2022
<u>Instructor</u> , Mediation, Moderation, and Conditional Process Analysis (Psych 254B) Enrollment: 33.	Winter 2022
<u>Instructor</u> , Psychological Statistics (Psych 100A), Enrollment: 246	Fall 2021
<u>Instructor</u> , Advanced Psychological Statistics, (Psych 250C), Enrollment: 33.	Spring 2021
<u>Instructor</u> , Psychological Statistics (Psych 100A), Enrollment: 174.	Winter 2021
<u>Instructor</u> , Advanced Psychological Statistics, Enrollment: 36. (Psych 250C)	Spring 2020
<u>Instructor</u> , Special Problems in Psychological Statistics: Mediation, Moderation, and Conditional Process Analysis (Psych 258), Enrollment: 35.	Winter 2020
<u>Instructor</u> , Psychological Statistics (Psych 100A), Enrollment: 275.	Fall 2019
<u>Instructor</u> , Psychological Statistics (Psych 100A), Enrollment: 196.	Spring 2019
<u>Instructor</u> , Special Problems in Psychological Statistics: Mediation, Moderation, and Conditional Process Analysis (Psych 258), Enrollment: 27.	Winter 2019

Additional Teaching

<u>Guest Lecture</u> Introduction to Mediation Analysis, Instructor: Jason Geller, Princeton University, Princeton, NJ.	2023
<u>Guest Lecture</u> , Advanced Psychological Statistics, Instructor: Jennifer Krull, UCLA, Los Angeles, CA.	2019
<u>Guest Lecture</u> , Further Directions in Quantitative Psychology, Instructor: Leanne Stanley, The Ohio State University, Columbus, OH.	2017
<u>Guest Lecture</u> , Error and Inference in Statistical Modeling, Instructor: Laura Little, University of Washington, Seattle, WA.	2017
<u>Tutor</u> , Data Analysis in Psychology, Instructor: Joe Roberts, The Ohio State University, Columbus, OH.	2016
<u>Tutor</u> , Quantitative and Statistical Methods in Psychology,	2015

Instructor: Joe Roberts, The Ohio State University, Columbus, OH.	
<u>Guest Lecture</u> , Mediation and Moderation Analysis, Instructor: Andrew F. Hayes, The Ohio State University, Columbus, OH.	2015
<u>Teaching Assistant</u> , Summer Challenge: Math Topics, Robinson Center for Young Scholars, Supervisor: Nancy Hertzog, University of Washington, Seattle, WA.	2014
<u>Teaching Assistant</u> , Statistical Inference in Psychological Research, Instructor: Geoff Loftus, University of Washington, Seattle, WA.	2013
<u>Teaching Assistant</u> , Introduction to Probability and Statistics in Psychology, Instructor: Geoff Loftus, University of Washington, Seattle, WA.	2013

Efforts to Improve Teaching

Equitable Teaching Practices in Psychological Research Methods and Statistics: Professional Development Conference, University of California, Virtual	2021
Engaging Students Remotely and Equitably, Center for Education Innovation and Learning in the Sciences, UCLA	2020
Teaching Remotely: Statistics and Research Methods Webchat, Federation of Associations in Behavioral and Brain Sciences	2020
Reducing Math Anxiety Among Your Students, Center for the Integration of Research, Teaching, and Learning	2020
Planning for a Remote Spring Quarter - Where to Start?, Center for Education Innovation and Learning in the Sciences, UCLA	2020
Summer Institute on Scientific Teaching, Center for Education Innovation and Learning in the Sciences, UCLA	2019
Engaging Students in the Teaching of Statistics, Center for the Integration of Research, Teaching, and Learning	2019
New Faculty Teaching Engagement, Office of Instructional Development, UCLA	2018
Best Practices in Teaching Workshop, Center for Education Innovation and Learning in the Sciences, UCLA	2018

Teaching Outreach

Interviewee, How a UCLA Professor is Adapting Her Curriculum for Remote Learning Zoom Blog, [Link]	2020
Transitioning to Online Teaching: A Case Study, Blog, [Link]	2020

SERVICE

Academic Publishing

Editorial Roles

Journal of Robustness Reports, Editorial College	2025 –
Personality and Social Psychology Bulletin, Consulting Editor, Registered Reports section	2025 –
Statistics, Transparency, and Rigor (STAR) Editor, Psychological Science,	2024 – 2027
Editorial Board Member, Scientific Reports, Registered Reports Section	2020 –
Associate Editor, Evaluation and Health Professions, Special Issue: Single Subject Causal Mediation Analysis	2020-2021
Action Editor, Meta-Psychology,	2021 –
Advances in Methods and Practices in Psychological Science, Editorial Board	2021 –

Computational Reproducibility Checks

Prati, G. (2025). Does religious-service attendance increase mental health? A random-intercept cross-lagged panel analysis across 18 years. *Psychological Science*, 36(3). DOI: 10.1177/09567976251325449

Ad hoc Reviewer

Addictive Behaviors
Advances in Methods and Practices in Psychological Science
Behavior Research & Therapy
Behavioral Research Methods
BMC Medical Research Methodology
BMC Psychiatry
British Journal of Mathematical and Statistical Psychology
Communication Methods and Measures
Educational Psychologist
Evaluations & the Health Professions
Journal of Modern Applied Statistical Methods
Meta-Psychology
Multivariate Behavioral Research
Nature Human Behavior
Personality and Social Psychology Review
Psychological Methods
Psychological Review
Wellcome Open Research

Open Reviews

Rohrer, J. M., Hunermund, P., Arslan, R. C., and Elson, M. (2022). That's a lot to Process! Pitfalls of Popular Path Models. *Advances in Methods and Practices in Psychological Science*, 5(2). [Article] [Review]

Clark, R., Drax, K., Chambers, C. D., Munafò, M., & Thompson, J. (2021). Evaluating registered reports funding partnerships: a feasibility study. *Wellcome Open Research*, 6, 231. [Article]. [Review]

Olvera Astivia, O. L., Gadermann, A., & Guhn, M. (2019). The relationship between statistical power and predictor distribution in multilevel logistic regression: A simulation-based approach. *BMC Medical Research Methodology*, 19. [Article]. [Review]

Grant Reviewing

NSF Reviewer 2022 – 2023

California Education Learning Lab 2019 – 2020

Professional Societies and Organizations

Senior Moderator, PsyArxiv 2025 –

Organizer, SIPSSPSP Community Action Meeting 2026: Improving Open Science Resources for Social-Personality Psychology 2026

Panel Member, Society for Personality and Social Psychology, BECOME Mentee Cohort Meetup 2025

Board Member, Center for Open Science Board of Directors 2025 –

Workshop Teacher, Abstract Writing Basics for Conference Submissions, Association for Psychological Science, Professional Development Series, Live Webinar 2024

Panel Member, *Open Science and Methodology Expert Panel*, American Psychological Association 2024 –

Committee Member (Methodology Representative), *Association for Psychological Science Program Committee*, Association for Psychological Science 2021 – 2024

Preregistration Team Member, *Emerging Adulthood Measured at Multiple Institutions 3: The International Edition (EAMMI3)* 2021

Reviewer, *2022 American Educational Research Association Annual Meeting* 2021
SIG - Systematic Review and Meta-Analysis; Division D - Measurement & Research Methodology

Conference Planning Committee, *Virtual Unconference on Open Scholarship in Education Research*, Center for Open Science 2021 - 2022

Steering Committee, EdArXiv: a preprint server for the education research community 2019 – 2022

- Committee Member 2019 - 2020
- Vice Chair (elected) 2020 - 2021
- Chair (elected) 2021 - 2022
- EdArXiv Pre-print Server Community Meeting [Recording], Aug 12, 2020

Methods Track Coordinator, <i>32nd Annual Convention for the Association for Psychological Science</i> , Association for Psychological Science	2019
Panel Member, SPSPChat 13: First Gen, Society for Personality and Social Psychology	2018
Conference Volunteer, <i>30th Annual Convention for the Association for Psychological Science</i> , Association for Psychological Science	2018
Conference Volunteer, <i>29th Annual Convention for the Association for Psychological Science</i> , Association for Psychological Science	2017
Poster Judge, <i>2017 Graduate Poster Award</i> , Society for Personality and Social Psychology	2017
Conference Volunteer, <i>Annual Meeting of the Society for Personality and Social Psychology</i> , Society for Personality and Social Psychology	2016
Conference Volunteer, <i>27th Annual Convention for the Association for Psychological Science</i> , Association for Psychological Science	2015

Quantitative Psychology

Quantitative Access and Diversity (QUAD) Squad	2020 – 2023
• Quantitative Methods Info Session, Virtual	2020
• Quantitative Methods Info Session, Virtual	2021
• Quantitative Methods Info Session, Virtual	2022

University of California, Los Angeles, CA

University Service

Planning Committee, GeekWeek, UCLA Residential Life	2023
Reviewer, UCLA's Fulbright U.S. Student Program Campus Review Committee	2020
Panel Member, Academic and Research Speaker Panel, BruinSynaptoGenesis	2020
Host-Instructor, Fall 2019 Lecture Experience Program, Undergraduate Education	2019
Reviewer, Dr. Ursula Mandel Scholarship, Graduate Division	2019

Division Service

Committee Member, Director of the Institute for Quantitative & Computational Biosciences Search Committee, Division of Life Sciences 2024

Committee Member, Quantitative, Computational, and Systems Biology, BioDataX Initiative 2020 – 2021

Departmental Service

Alternate Member, Merit Review Committee, Department of Psychology 2025 - 2026

Committee Member, Graduate Studies Committee, Department of Psychology 2023 - 2025

Committee Member, Strategic Planning Committee, Department of Psychology (appointed) 2023 - 2024

Committee Member, Executive Committee, Department of Psychology (elected) 2023 - 2025

Moderator, Psychology Undergraduate Research Conference, Department of Psychology 2023

Committee Member, Quantitative Psychology Hiring Committee, Department of Psychology 2022 - 2023

Committee Member, Quantitative Psychology Hiring Committee, Department of Psychology 2021 - 2022

Committee Member, Graduate Studies Committee, Department of Psychology 2021 - 2022

Committee Member, Quantitative Psychology Hiring Committee, Department of Psychology 2020 - 2021

Committee Member, Teaching Points Committee, Department of Psychology 2020

Panel Member, PROPS Faculty Mentorship Panel, Department of Psychology 2020

Committee Member, Merit Review Committee, Department of Psychology 2019 - 2021

Panel Member, Acing the Interview, Department of Psychology 2018

Ohio State University, Columbus, OH

Committee Member, Senior Vice President of Research Search Committee 2017 - 2018

Committee Member, Council on Student Affairs, University Senate 2017 - 2018

Committee Member, Strategic Programming Grant Subcommittee of the Council of Student Affairs, University Senate 2017 - 2018

Committee Chair, Allocations Subcommittee of the Council on Student Affairs, University Senate 2017 – 2018

Committee Member, Graduate Compensation and Benefits Committee, University Senate 2017 – 2018

Committee Member, University Research Committee, University Senate	2017 – 2018
Treasurer, Council of Graduate Students	2017 – 2018
Committee Chair, Ray Travel Committee, Council of Graduate Students	2017 – 2018
Committee Member, Organizations and Elections Committee, Council of Graduate Students	2017 – 2018
Panel Member, University of Cincinnati McNair Scholars Visit, Office of Graduate Education	2017
Panel Member, Creating Pathways: Building Community and Engagement in Graduate and Professional Higher Education Affairs, Office of Student Life	2017
Panel Member, University of Illinois McNair Scholars Visit, Office of Graduate Education	2017
Moderator, Professional Development Panel, Hayes Graduate Research Forum, Council of Graduate Students	2017
Judge, Undergraduate Research Colloquium & Reception, Psychology Department	2017
Panel Member, Life at OSU, Office of Diversity and Inclusion	2016
Judge, Fall Student Poster Forum, Undergraduate Research Office	2016
Psychology Department Delegate, Council of Graduate Students	2016 – 2017
Committee Member, Hayes Graduate Research Forum Committee, Council of Graduate Students	2016 – 2018
Panel Member, Getting Into Graduate School, Psychology Department	2016
Proctor, Hayes Graduate Research Forum, Council of Graduate Students	2016
Panel Member, Funding your Graduate Education, College of Arts and Sciences	2016
Panel Member, Money Matters: A Student Led Panel about Finding Money, Psychology Graduate Student Association	2016
Proctor for Oral Presentations, Social and Behavioral Science, Hayes Graduate Research Forum	2016
Treasurer, Psychology Graduate Student Association	2015 – 2018
Panel Member, How to Get Into Graduate School, Graduate and Professional Students Recruitment Initiative	2015
Panel Member, Life at OSU, Office of Diversity and Inclusion	2015
Judge, Fall Student Poster Forum, Undergraduate Research Office	2015
Panel Member, Psychology Department Diversity Open House	2015
Panel Member, Applying to Graduate School in Psychology Workshop	2015

Panel Moderator, Life at OSU, Office of Diversity and Inclusion	2014
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PROFESSIONAL DEVELOPMENT

Mentoring Graduate Student in Uncertain Times, Division of Graduate Education, Mentoring Initiatives	2025
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UCLA Faculty Leadership Development Program, Office of Academic Affairs and Personnel	2025
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Bruin Faculty Writing Retreat, UCLA Equity Diversity and Inclusion Office	2024
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Mentorship Circle, Department of Psychology, UCLA	2024
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Faculty Success Program, National Center for Faculty Diversity and Development 	2023
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Restorative Practice Training: How to Build Community Through Conversation, Semel Health Campus Initiative Center and The Healthy Climate Committee, UCLA	2023
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Advancing Faculty Research Mentoring Refresher Workshop, Graduate Programs in Bioscience and National Research Mentoring Network, UCLA	2023
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Developing a Toolkit for Fostering Open Science Practices, National Academies of Sciences, Engineering, and Medicine, Virtual	2020
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Advancing Mentoring Practices Workshop, Graduate Programs in Bioscience and National Research Mentoring Network, UCLA	2020
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Meta-Analysis Training Institute, Loyola University Chicago & Institute of Education Sciences	2019
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Developing a Productive Writing Practice, UCLA Library	2018
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Best Practices in Mentoring, UCLA Dept of Psychology	2018
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SCIENTIFIC OUTREACH

Montoya, A. K. (2025) Research replication can determine how well science is working – but how do scientists replicate studies? *The Conversation* [LINK]

Youtube Video Series, MEMORE Macro V3.0 Release, > 1000 views 	2025
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Siy, J. O., Germano, A. L., & **Montoya, A. K.** (Aug. 11, 2023). Career Advice to “Follow Your Passions” Has a Paradoxical Downside. CHARACTER & CONTEXT BLOG. [LINK]

Guest, S2E20 The Future of Teaching Quantitative Methods, Quantitude Podcast	2021
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Youtube Video, How to See Presentation Notes while presenting PowerPoint slides on Zoom, > 900,000 views 	2020
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Guest, S2E01 We Know What You Did Last Summer, Quantitude Podcast	2020
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Young, J. R. (2020). Preprint servers have changed research culture in many fields. Will a new one for education catch on? *EdSurge* (**A. K. Montoya** interviewed for article). [Article Link]

Scientist, 500 Women Scientists, [Profile Link]	2019 –
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2017 –

Cannon, B. (2018) Practicing Quantitative Psychology (From an Aerial Circus Trapeze!?) With Amanda Montoya, PhD. *Eye on PsiChi* <https://doi.org/10.24839/2164-9812.Eye23.3.22>.

Panel Member, Psi Chi Undergraduate Research Week, Psi Chi

2019