CURRICULUM VITAE

Matthew S. Fritz, Ph.D.

University of Nebraska – Lincoln

Department of Educational Psychology E-mail: matt.fritz@unl.edu

31 Teachers College Hall (0345), Lincoln, NE 68588-0345

UNL Faculty Website: https://cehs.unl.edu/edpsych/person/matthew-fritz/

Google Scholar: https://scholar.google.com/citations?user=5DZz-Q0AAAAJ&hl=en

ORCiD: https://orcid.org/0000-0002-5885-6341

Education

Ph.D. Quantitative Psychology Arizona State University 2007

Tempe, AZ

Certificate Statistics Arizona State University 2006

Tempe, AZ

M.A. Quantitative Psychology Arizona State University 2005

Tempe, AZ

H.B.S. Psychology, cum laude Oregon State University 2002

Minors – Statistics, Actuarial Science Corvallis, OR

Professional Experience

Associate Professor Department of Educational Psychology 2020 – present

of Practice University of Nebraska – Lincoln, Lincoln, NE

Fellow – Established NCSES Research Ambassadors Program 2020 – 2022

Scientist National Center for Science and Engineering Statistics

National Science Foundation, Alexandria, VA

Director Nebraska Evaluation and Research Center 2016 –20, 22-23

University of Nebraska – Lincoln, Lincoln, NE

Assistant Professor Department of Educational Psychology 2013 – 2020

University of Nebraska – Lincoln, Lincoln, NE

Assistant Professor Department of Psychology 2008 – 2013

Virginia Polytechnic Institute and State University,

Blacksburg, VA

Last updated: September 10, 2025

Professional Memberships/Affiliations

<u>Current</u>

<u>American Psychological Association</u> (APA) – Fellow

APA – Division 2: Society for the Teaching of Psychology

APA - Division 5: Quantitative and Qualitative Methods - Fellow

<u>Helping Give Away Psychological Science</u> – Board Member

National Prevention Science Coalition to Improve Lives

Prevention Science Methodology Group

<u>University of Nebraska – Lincoln LGBTQA+ Safe Spa</u>ce/Ally

Past/Periodic

Association for Psychological Science
American Statistical Association
Midwestern Psychological Association
Psychometric Society
Society for Personality and Social Psychology
Society for Prevention Research
Virginia Polytechnic Institute and State University LGBTQA Safe Zone/Ally
Western Psychological Association

Publications

Journal Articles (Peer Reviewed)

- 18.) Ledermann, T., Rudaz, M., & Fritz, M. S. (2025). On full versus partial mediation and the importance of effect sizes. *Advances in Methods and Practices in Psychological Science*, 8, 1-19. https://doi.org/10.1177/25152459251355585
- 17.) Fritz, M. S. (2021). "Collect, acquire, analyze, report, and disseminate statistical data related to the science and engineering enterprise...": The National Center for Science and Engineering Statistics. WikiJournal of Science, 4(1), 6. https://doi.org/10.15347/WJS/2021.006
- 16.) Chen, D., & Fritz, M. S. (2021). Comparing alternative corrections for bias in the biascorrected bootstrap test of mediation. *Evaluation & the Health Professions, 44*, 416-427. https://doi.org/10.1177/01632787211024356
- 15.) Nord, J., Bovaird, J. A., & Fritz, M. S. (2020). Latent interaction modeling with planned missing data designs. *Structural Equation Modeling*, *27*, 602-612. https://doi.org/10.1080/10705511.2019.1692306

- 14.) Prokasky, A., Fritz, M. S., Molfese, V., & Bates, J. E. (2019). Night-to-night variability in the bedtime routine predicts quality of sleep in toddlers. *Early Childhood Research Quarterly*, 49, 18-27. https://doi.org/10.1016/j.ecresq.2019.05.004
- 13.) Halliburton, A. E., & Fritz, M. S. (2018). Health beliefs as a key determinant of intent to use anabolic-androgenic steroids (AAS) among high-school football players: Implications for prevention. *International Journal of Adolescence and Youth, 23,* 269-280. https://doi.org/10.1080/02673843.2017.1344928
- 12.) Fritz, M. S., Kenny, D. A., & MacKinnon, D. P. (2016). The combined effects of measurement error and omitted confounders in the single-mediator model. *Multivariate Behavioral Research*, *51*, 681-697. https://doi.org/10.1080/00273171.2016.1224154
- 11.) Fritz, M. S., Cox, M. G., & MacKinnon, D. P. (2015). Increasing statistical power in mediation models without increasing sample size. *Evaluation & the Health Professions*, 28, 343-366. https://doi.org/10.1177/0163278713514250
- 10.) Pugliese, C. E., Fritz, M. S., & White, S. W. (2015). The role of anger rumination and ASD-linked perseveration in the experience of aggression in the general population. *Autism*, 19, 704-712. https://doi.org/10.1177/1362361314548731
- 9.) Mills-Smith, L., Spangler, D., Panneton, R., & Fritz, M. S. (2015). A missed opportunity for clarity: Problems in the reporting of effect size measures in infant development science. *Infancy*, 20, 416-432. https://doi.org/10.1111/infa.12078
- 8.) Fritz, M. S. (2014). An exponential decay model for mediation. *Prevention Science, 15,* 611-622. https://doi.org/10.1007/s11121-013-0390-x
- 7.) Fritz, M. S., Taylor, A. B., & MacKinnon, D. P. (2012). Explanation of two anomalous results in statistical mediation analysis. *Multivariate Behavioral Research*, *47*, 61-87. https://doi.org/10.1080/00273171.2012.640596
- 6.) Fritz, M. S., & MacKinnon, D. P. (2008). A graphical representation of the mediated effect. *Behavior Research Methods*, 40, 55-60. https://doi.org/10.3758/BRM.40.1.55
- 5.) Ryan, L. J., & Fritz, M. S. (2007). Erroneous knowledge of results affects decision and memory processes on timing tasks. *Journal of Experimental Psychology: Human Perception and Performance, 33,* 1468-1482. https://doi.org/10.1037/0096-1523.33.6.1468
- 4.) Fritz, M. S., & MacKinnon, D. P. (2007). Required sample size to detect the mediated effect. *Psychological Science*, *18*, 233-239. https://doi.org/10.1111/j.1467-9280.2007.01882.x

- 3.) MacKinnon, D. P., Fairchild, A. J., & Fritz, M. S. (2007). Mediation analysis. *Annual Review of Psychology, 58,* 593-614. https://doi.org/10.1146/annurev.psych.58.110405.085542
- 2.) MacKinnon, D. P., Fritz, M. S., Williams, J., & Lockwood, C. M. (2007). Distribution of the product confidence intervals for the indirect effect: Program PRODCLIN. *Behavior Research Methods*, *39*, 384-389. https://doi.org/10.3758/BF03193007
- 1.) Fritz, M. S., MacKinnon, D. P., Williams, J., Goldberg, L., Moe, E. L., & Elliot, D. L. (2005). Analysis of baseline by treatment interactions in a drug prevention and health promotion program for high school male athletes. *Addictive Behaviors, 30,* 1001-1005. https://doi.org/10.1016/j.addbeh.2004.08.030

U.S. Federal Working Papers (Peer Reviewed)

- 3.) Fritz, M. S., & Bray, B. C. (2023). Investigating the stability of job importance and job satisfaction over time: A latent transition analysis of the Survey of Doctorate Recipients (Working Paper NSF-NCSES No. 23-213). National Center for Science and Engineering Statistics, National Science Foundation. Available at: https://ncses.nsf.gov/pubs/ncses23213
- 2.) Fritz, M. S. (2022b). Replicating the job importance and job satisfaction latent class analysis of the 2017 Survey of Doctorate Recipients with the 2015 and 2019 cycles (Working Paper NCSES No. 22-208). National Center for Science and Engineering Statistics, National Science Foundation. Available at: https://ncses.nsf.gov/pubs/ncses22208
- 1.) Fritz, M. S. (2022a). *Job importance vs. job satisfaction: A latent class analysis of the 2017 Survey of Doctorate Recipients* (Working Paper NCSES 22-207). National Center for Science and Engineering Statistics, National Science Foundation. Available at: https://ncses.nsf.gov/pubs/ncses22207

Book Chapters and Encyclopedia Entries (Peer Reviewed)

- 8.) Fritz, M. S. (in press). Artificial intelligence, COVID-19, and Ways of Knowing: Teaching introductory statistics as an asynchronous online course in 2025. In J. L. Rodgers (Ed.), *Teaching statistics and quantitative methods into the 21st century* (2nd ed., pp. **-**). Routledge. ISBN: ***
- 7.) Fritz, M. S., & Arthur, A. M. (2024). Moderator variables. In J. M. Peiró (Ed.), *The Oxford Encyclopedia of Industrial, Work, and Organization Psychology* (pp. **-**). Oxford University Press. ISBN: 978-0190641856 [Reprint from the *Oxford Research Encyclopedia of Psychology*]

- 6.) Fritz, M. S., & Lester, H. F. (2024). Mediator variables. In J. M. Peiró (Ed.), *The Oxford Encyclopedia of Industrial, Work, and Organization Psychology* (pp. **-**). Oxford University Press. ISBN: 978-0190641856 [Reprint from the *Oxford Research Encyclopedia of Psychology*]
- 5.) Fritz, M. S. (2020). Singletons: Re-evaluating course objectives when an introductory statistics course is a student's only statistics course. In J. L. Rodgers (Ed.), *Teaching statistics and quantitative methods into the 21*st century (pp. 87-101). Routledge. ISBN: 978-1138336865 https://doi.org/10.4324/9780429442810
- 4.) Fritz, M. S., & Arthur, A. M. (2017). Moderator variables. *Oxford Research Encyclopedia of Psychology* (http://psychology.oxfordre.com/). Oxford University Press. https://doi.org/10.1093/acrefore/9780190236557.013.86
- 3.) Fritz, M. S., & Lester, H. F. (2016). Mediator variables. *Oxford Research Encyclopedia of Psychology* (https://psychology.oxfordre.com/). Oxford University Press. https://doi.org/10.1093/acrefore/9780190236557.013.19
- 2.) Krull, J., Cheong, J. W., Fritz, M. S., & MacKinnon, D. P. (2016). Moderation and mediation in interindividual longitudinal analysis. In D. Cicchetti (Ed.), *Developmental Psychopathology*, (Vol.1, 3rd ed., pp. 922-985). Wiley. ISBN: 978-1118120873
- 1.) Fritz, M. S., & MacKinnon, D. P. (2012). Mediation models for developmental data. In B. Laursen, T. Little, & N. Card (Eds.), *Handbook of developmental research methods* (pp. 291 310). Guilford. ISBN: 978-1606236093

Faculty Course Portfolio (Peer Reviewed)

1.) Fritz, M. S. (2015). *Benchmark portfolio for EDPS 859 Statistical Methods – Spring 2015*. Peer Review of Teaching Project, University of Nebraska-Lincoln. Available to download at: https://digitalcommons.unl.edu/prtunl/80/

Book Reviews (Peer Reviewed)

1.) Fritz, M. S. (2015). Review of Doing Statistical Mediation & Moderation, by Paul E. Jose. Structural Equation Modeling, 22, 319-322. https://doi.org/10.1080/10705511.2014.958045

Invited Articles

2.) Fritz, M. S. (Forthcoming). The problem with teaching "consumer statistics". *E-xcellence in Teaching*. https://teachpsych.org/E-xcellence-in-Teaching-Blog

1.) Fritz, M. S. (2022, January). The National Center for Science and Engineering Statistics. *The Score, 44*(1). https://www.apadivisions.org/division-5/publications/score/2022/01/science-engineering-statistics

Wikipedia Entries

1.) National Center for Science and Engineering Statistics. (2021, October 3). In *Wikipedia* (Wiki user name: Cobalt144). https://en.wikipedia.org/wiki/National Center for Science and Engineering Statistics

Electronic Media

1.) MacKinnon, D. P., Fritz, M. S., & Fairchild, A. F. (2008). Data sets and computer syntax. [CD-ROM]. In D.P. MacKinnon, *Introduction to statistical mediation analysis*. Lawrence Erlbaum Associates. ISBN: 978-0805864298

Dissertations and Theses

- 3.) Fritz, M. S. (2007). *An exponential decay model for mediation* (Dissertation No. 3287942) [Doctoral dissertation, Arizona State University]. ProQuest Dissertations and Theses Global.
- 2.) Fritz, M. S. (2005). *Required sample size to detect the mediated effect* [Unpublished Master's thesis]. Arizona State University Library Thesis Collection (LD179.15 2005.F757), Arizona State University, Tempe, AZ.
- 1.) Fritz, M. S. (2002). Effects of erroneous knowledge of results on human perception of time in an interval reproduction task [Unpublished undergraduate honors thesis]. University Honors College Thesis Collection, Oregon State University, Corvallis, OR.

Manuscripts Under Review

- 2.) Kenworthy, L., Bertollo, J. R., Pugliese, C. E., Candy, C., Armour, A. C., Csummitta, K. D., Reimann, G. E., Fritz, M. S., & Wallace, G. L. (2025). *Adaptive behavior challenges persist into young adulthood and are predicted by parent-reported inhibition in autistic youth.*Manuscript under review 9/22/2025.
- 1.) Kenworthy, L., Baczewski, L., Gerber, A., Pugliese, C. E., Armour, A. C., Csummita, K. D., Reimann, G. E., Candy, C., Martin, A., Wallace, G. L., & Fritz, M. S. (2025). *Executive function challenges persist into young adulthood and drive psychopathology in autism*. Invited resubmission to *Journal of Child Psychology and Psychiatry* 8/20/2025.

Manuscripts In Preparation

1.) Lamp, S. J., MacKinnon, D. P., Anderson, S. F., & Fritz, M. S. (2025). *Sample size requirements for detecting causal mediation effects*. Manuscript in preparation.

Organized Conferences and Presentations

Organized Conferences

1.) Fouladi, R. T., & Fritz, M. S. (Co-Chairs/Organizers). (2025, March 29-30). A Meeting of Methodologies (AMOM) Conference: Advancing methods development, application, and teaching in psychology, the behavioural, and social sciences (2nd meeting). Simon Fraser University, Burnaby, British Columbia, Canada. (145 registered participants from 6 continents) https://www.sfu.ca/psychology/research/mml/about/AMOM.html

<u>Peer-Reviewed Conference Presentations</u>

- 41.) Fritz, M. S. (2025, March). Are we actually introducing students to statistics? Teaching introductory statistics as a course in statistical literacy and critical thinking [Paper presentation]. A Meeting of Methodologies Conference (virtual).
- 40.) Fritz, M. S., & Fouladi, R. T. (2025, March). Quantitative researchers are people too:

 Discussing positionality and reflexivity in an introductory statistics course Tales of two instructors [Paper presentation; presented by R. T. Fouladi]. A Meeting of Methodologies Conference (virtual).
- 39.) Fritz, M. S. (2024, December). Are we actually introducing students to statistics?

 Teaching introductory statistics as a course in statistical literacy and critical thinking

 [Concurrent talk]. PsychTERMS: Teaching to Enhance Research Methods & Statistics in Psychology Conference (virtual). ***{Best Presentation Talk Award Winner}***
- 38.) Fritz, M. S., & Fouladi, R. (2024, December). *Quantitative researchers are people too:*Discussing positionality and reflexivity in an introductory statistics course [Interactive poster presentation]. PsychTERMS: Teaching to Enhance Research Methods & Statistics in Psychology Conference (virtual).
- 37.) Lederman, T., & Fritz, M. S. (2022, November). *Assessing and reporting mediation following the New Guideline for Mediation Analysis* [Workshop]. National Council on Family Relations Annual Meeting, Minneapolis, MN.
- 36.) Kenworthy, L., Fritz, M. S., Pugliese, C., Armour, A. C., & Wallace, G. L. (2022, May). Executive function problems persist in young adulthood in autism and drive psychopathology. In L. Kenworthy (Chair), *Executive functioning in autism* [Panel]. International Society for Autism Research, Austin, TX.

- 35.) Fritz, M. S. (2021, August). *Calling all psychologists: The National Center for Science and Engineering Statistics* [Symposium]. American Psychological Association Annual Convention, San Diego, CA (virtual).
- 34.) Fritz, M. S. (2021, August). Too good to be true? A psychologist's experience working at NCSES. In M. S. Fritz (Chair), *Calling all psychologists: The National Center for Science and Engineering Statistics* [Symposium]. American Psychological Association Annual Convention, San Diego, CA (virtual).
- 33.) Fritz, M. S. (2021, August). *Testing congruence between importance of and satisfaction with different job aspects: A novel application of latent transition analysis* [Poster presentation]. American Psychological Association Annual Convention, San Diego, CA (virtual).
- 32.) Chen, D., & Fritz, M. A. (2021, February). Winsorized means as corrections for bias in the bias-corrected bootstrap test of mediation. In A. K. Montoya (Chair), *New insights in power and power analysis in mediation models* [Organized paper symposium]. Society for Personality and Social Psychology Annual Convention, Austin, TX (virtual).
- 31.) Ledermann, T., Rudaz, M., & Fritz, M. S. (2020, November). *Power analysis for the actor-partner interdependence model using MLM and SEM: A 2020 Theory Construction and Research Methodology Workshop* [Workshop]. National Council on Family Relations Annual Meeting, St. Louis, MO (virtual).
- 30.) Fritz, M. S. (2020, August). *Advanced quantitative methods for addressing complexities in psychological research* [Organized paper symposium]. American Psychological Association Annual Convention, Washington, DC (virtual).
- 29.) Fritz, M. S., Kenworthy, L., Wallace, G., Pugliese, C., & Armour, A. C. (2020, August). Lessons from creating longitudinal data sets from multiple studies using the same participants. In M. S. Fritz (Chair), *Advanced quantitative methods for addressing complexities in psychological research* [Organized paper symposium]. American Psychological Association Annual Convention, Washington, DC (virtual).
- 28.) Chen, D., & Fritz, M. S. (2019, August). *Comparing alternative bias-corrections methods in the bias-corrected bootstrap test of mediation* [Poster presentation]. American Psychological Association Annual Convention, Chicago, IL.
- 27.) Nord, J., Bovaird, J. A., & Fritz, M. S. (2018, April). *Latent interaction modeling with planned missing data designs* [Paper presentation]. American Educational Research Association Annual Meeting, New York, NY.
- 26.) Prokasky, A., Fritz, M. S., & Molfese, V. (2018, April). *Night-to-night variability in the bedtime routine impacts sleep in toddlers* [Poster presentation]. Nebraska Center for

- Research on Children, Youth, Families, and Schools 2018 Summit on Research in Early Childhood, University of Nebraska Lincoln, Lincoln, NE.
- 25.) Wheeler, L. A., & Fritz, M. S. (2018, February). *Mexican-origin young adult's work conditions and health: The moderating role of sociocultural context* [Poster presentation]. Annual Minority Health Disparities Initiative Conference, University of Nebraska Lincoln, Lincoln, NE.
- 24.) Wheeler, L. A., & Fritz, M. S. (2017, November). Mexican-origin young adult's work conditions and health: The moderating role of sociocultural context. In S. Lee & K. Lawson (Chairs), When work permeates into one's family and personal life [Organized paper symposium]. National Council on Family Relations Annual Meeting, Orlando, FL.
- 23.) Fritz, M. S., & Ryu, E. (2016, June). A comparison of bootstrap confidence intervals for multilevel mediation. In A. Baraldi (Chair), *Three M's in prevention research: Mediation, multilevel modeling, and missing data* [Organized paper symposium]. Society for Prevention Research Annual Meeting, San Francisco, CA.
- 22.) Halliburton, A. E., Fritz, M. S., MacKinnon, D. P., Goldberg, L., Elliot, D., & Moe, E. (2015, November). *Unpacking the ATLAS Program: Condition process modeling of steroid use among high school football players* [Poster presentation]. Association for Behavioral and Cognitive Therapies Annual Meeting, Chicago, IL.
- 21.) Mills-Smith, L., Spangler, D., Panneton, R., & Fritz, M. (2015, March). *The interpretive utility of infant-calibrated cutoffs for interpreting effect size estimates* [Poster presentation]. Society for Research on Child Development Biennial Meeting, Philadelphia, PA.
- 20.) Fritz, M. S., Cox, M. G., MacKinnon, D. P., & Taylor, A. B. (2015, February). Issues with increasing statistical power in mediation models. In J. Westfall & C. M. Judd (Chairs), Statistical power and optimal design principles for improving the efficiency of psychological research [Organized paper symposium]. Society for Personality and Social Psychology Annual Meeting, Long Beach, CA.
- 19.) Fritz, M. S., MacKinnon, D. P., & Kenny, D. A. (2014, June). When two wrongs make a right: The opposing effects of ignoring measurement error and omitting confounders in the same single mediator model [Paper presentation]. Society for Prevention Research Annual Meeting, Washington, D.C.
- 18.) Mills-Smith, L., Spangler, D., Panneton, R., & Fritz, M. (2014, July). *A quantitative survey of effect size reporting and interpretation in infant research* [Poster presentation]. International Society on Infant Studies Biannual Meeting, Berlin, Germany.
- 17.) Fritz, M. S. (2013, June). Applications of advanced methods for collecting and analyzing

- *intensive data* [Organized paper symposium Chair]. Society for Prevention Research Annual Meeting, San Francisco, CA.
- 16.) Fritz, M. S. (2013, June). When the wrong model fits better: Effect of temporal design on trajectory selection in latent growth curve models. In M. S. Fritz (Chair), *Applications of advanced methods for collecting and analyzing intensive data* [Organized paper symposium]. Society for Prevention Research Annual Meeting, San Francisco, CA.
- 15.) Fritz, M. S. (2011, June). *Methodological advances in longitudinal data analysis* [Organized paper symposium Chair]. Society for Prevention Research Annual Meeting, Washington, D.C.
- 14.) Fritz, M. S., & MacKinnon, D. P. (2011, June). *Consequences of violating assumptions of mediation models* [Organized poster forum Chair]. Society for Prevention Research Annual Meeting, Washington, D.C.
- 13.) Cox, M. G., Fritz, M. S., & MacKinnon, D. P. (2011, June). Two methods to increase statistical power in mediation models. In M. S. Fritz & D. P. MacKinnon (Chairs), *Consequences of violating assumptions of mediation models* [Organized poster forum]. Society for Prevention Research Annual Meeting, Washington, D.C.
- 12.) Cox, M.G., Winett, R., & Fritz, M.S. (2011, April). *A meta-analysis of self-efficacy as a mediator of physical activity* [Poster presentation]. Society for Behavioral Medicine Annual Meeting, Washington, D.C.
- 11.) Fritz, M. S., Taylor, A. B., & MacKinnon, D. P. (2010, June). When does the bias-corrected bootstrap test of mediation produce elevated Type I error rates and why? [Poster presentation]. Society for Prevention Research Annual Meeting, Denver, CO.
- 10.) Fritz, M. S., & MacKinnon, D. P. (2009, May). Extensions of the exponential decay model for mediation [Poster presentation]. Society for Prevention Research Annual Meeting, Washington, D.C.
- 9.) Thoemmes, F., MacKinnon, D., Elliot, D., Kuehl, K., Goldberg, L., Defranscesco, C., Dulacki, K., McGinnis, W., Moe, E., & Fritz, M. (2009, May). *Long term effects of PHLAME A longitudinal study of 7 years* [Poster presentation]. Society for Prevention Research Annual Meeting, Washington, D.C.
- 8.) Fritz, M. S., & MacKinnon, D. P. (2008, May). *An exponential decay model for mediation* [Poster presentation]. Society for Prevention Research Annual Meeting, San Francisco, CA.
- 7.) Taylor, A. B., MacKinnon, D. P., & Fritz, M. S. (2007, May). *Power curves for tests of mediation* [Poster presentation]. Society for Prevention Research Annual Meeting,

- Washington, D.C.
- 6.) Bekman, S. K., Boring, J., Fritz, M. S., & Crnic, K. A. (2007, March). *Exploring parenting stress trajectories and child externalizing behavior problems: A growth modeling prospective* [Poster presentation]. Society for Research in Child Development Biennial Meeting, Boston, MA.
- 5.) Fritz, M. S., & MacKinnon, D. P. (2006, June). *Plots of the XM interaction in models of the mediated effect* [Poster presentation]. Society for Prevention Research Annual Meeting, San Antonio, TX.
- 4.) Fritz, M. S., & MacKinnon, D. P. (2005, May). Sample size and statistical power in tests of mediation [Paper presentation]. Society for Prevention Research Annual Meeting, Washington, D.C.
- 3.) Cheong, J., MacKinnon, D. P., Williams, J., & Fritz, M. S. (2005, May). Evaluation of longitudinal mediating mechanisms of a drug prevention program for adolescent athletes [Paper presentation]. Society for Prevention Research Annual Meeting, Washington, D.C.
- 2.) MacKinnon, D. P., Williams, J., Lockwood, C. M., & Fritz, M. S. (2004, July). *Empirical power of twenty mediation tests* [Poster presentation]. American Psychological Association Annual Convention, Honolulu, HI.
- 1.) Fritz, M. S., MacKinnon, D. P., Williams, J., Goldberg, L., Moe, E. L., & Elliot, D. L. (2004, April). *Analysis of baseline by treatment interactions in a drug prevention and health promotion program for high school male athletes* [Poster presentation]. Western Psychological Association Annual Meeting, Phoenix, AZ.

Invited Talks and Workshops

- 21.) Fritz, M. S. (2022, October 18). But we just want to know if they changed! Methodological challenges in determining change with examples from a pseudo-accelerated design, a single cohort design, and a nationally representative longitudinal survey [Research presentation]. Institute for Health Research and Policy, University of Illinois at Chicago, Chicago, IL.
- 20.) Fritz, M. S. (2022, May 18). *An introduction to item response theory* [Methods workshop]. National Center for Science and Engineering Statistics, National Science Foundation, Alexandria, VA.
- 19.) Fritz, M. S. (2021, December 8). *An introduction to exploratory and confirmatory factor analysis* [Methods workshop]. National Center for Science and Engineering Statistics, National Science Foundation, Alexandria, VA.

- 18.) Fritz, M. S. (2020, December 16). *Reliability and validity: An introduction to psychometrics and scale construction* [Methods workshop]. National Center for Science and Engineering Statistics, National Science Foundation, Alexandria, VA.
- 17.) Fritz, M. S. (2020, June 25-26). Invited discussant/participant. A Meeting of Methodologies (AMOM) Conference, Simon Fraser University, British Columbia, Canada (virtual). https://osf.io/xepkb/
- 16.) Fritz, M. S. (2020, February 10). *It takes time: Quantitative methods for evaluating longitudinal social and behavioral research* [Research presentation]. Department of Prevention and Community Health, Milken Institute School of Public Health, George Washington University, Washington, DC.
- 15.) Fritz, M. S. (2020, January 24). Advantages of person-centered approaches: Applying latent class analysis to the 2017 Survey of Doctorate Recipients [Research presentation]. National Center for Science and Engineering Statistics, National Science Foundation, Alexandria, VA.
- 14.) Fritz, M. S. (2019, November 15). *Post hoc alchemy: Addressing measurement issues in secondary data analyses.* [Research presentation]. Buros Center for Testing, University of Nebraska Lincoln, Lincoln, NE.
- 13.) Fritz, M. S. (2018, May 16-17). *Mediation, moderation, and conditional process models* [Methods workshop] School of Family and Consumer Sciences, Texas State University San Marcos, San Marcos, TX.
- 12.) Fritz, M. S. (2018, February 2). *Time is on my side: What British rock bands can teach us about designing longitudinal studies* [Research presentation]. Methodology Application Series, the Nebraska Academy for Methodology, Analytics & Psychometrics, University of Nebraska Lincoln, Lincoln, NE.
- 11.) Fritz, M. S. (2016, October 17). The mediated effect is significant, so I'm done, right? Thinking critically about testing and interpreting mediated effects in prevention interventions [Research presentation]. Department of Psychology, Boston College, Boston, MA.
- 10.) Fritz, M. S. (2016, March 23). The mediated effect is significant, so I'm done, right?

 Thinking critically about testing and interpreting mediated effects in prevention interventions [Research presentation]. Prevention and Methodology Training Program, The Methodology Center, Pennsylvania State University, State College, PA.
- 9.) Fritz, M. S. (2015, April 30). *Mediation, moderation, and conditional process models* [Methods workshop]. Midwestern Psychological Association Annual Meeting, Chicago, IL.

- 8.) Fritz, M. S. (2014, December 5). *The effects of nonlinearity, measurement error, and omitted variables in statistical mediation analysis* [Research presentation]. Big Ten Online Symposium Series in Educational Research Methods, University of Nebraska-Lincoln, Lincoln, NE.
- 7.) Fritz, M. S. (2013, March). *Power, Type I error, and nonlinearity in mediation models* [Research presentation]. Department of Psychology, Iowa State University, Ames, IA.
- 6.) Fritz, M. S. (2013, January). *Power, Type I error, and nonlinearity in mediation models* [Research presentation]. Research, Measurement, and Statistics program, Department of Educational Psychology, Texas A&M University, College Station, TX.
- 5.) Fritz, M. S. (2013, January 29). *Power, Type I error, and nonlinearity in mediation models* [Research presentation]. Quantitative, Qualitative, and Psychometric Methods Program, Department of Educational Psychology, University of Nebraska Lincoln, Lincoln, NE.
- 4.) Fritz, M. S. (2013, January). *Power, Type I error, and nonlinearity in mediation models* [Research presentation]. Department of Psychology, Fordham University, New York, NY.
- 3.) Fritz, M. S. (2009, June 8-12). Summer statistics workshop: Mediation and moderation analysis [Methods workshop]. Research, Measurement, and Statistics Program, Department of Educational Psychology, Texas A&M University, College Station, TX.
- 2.) Fritz, M. S. (2006, January). *Required sample size to detect the mediated effect* [Research presentation]. Department of Psychology, Virginia Polytechnic Institute and State University, Blacksburg, VA.
- 1.) Fritz, M. S. (2006, December). *Required sample size to detect the mediated effect* Research presentation]. Department of Psychology, University of Notre Dame, South Bend, IN.

Research Grants

<u>Funded – Completed</u>

- 6.) Pugliese, C. (Principal Investigator), Kenworthy, L., Anthony, L., Mikulich-Gilbertson, S., Maddox, B., Verbalis, A., Fritz, M. S., & Mandell, D. (2021-2024). A Hybrid Effectiveness-implementation Trial of a School Based Executive Function Treatment for Transition Age Youth with Autism (Project No. 1R01MH124772-02). National Institute of Mental Health. (Total Budget: \$2,542,924). https://reporter.nih.gov/project-details/10099981
- 5.) Gervais, S. (Principal Investigator), DiLillo, D., Fritz, M. S., & Dodd, M. (2018-2022). *Integrating Alcohol Myopia and Objectification to Understand Sexual Assault.* (Project

- No. 5R01AA025090-03). National Institute on Alcohol Abuse and Alcoholism. (Total Direct Costs: \$1,097,073) https://reporter.nih.gov/project-details/9936108
- 4.) Fritz, M. S. (Lead Investigator Subcontract). (2015-2020). Subcontract on MacKinnon, D. P. (Principal Investigator). *Estimating Mediation Effects in Prevention Research* (Project No. 5R37DA009757-18). National Institute on Drug Abuse. (Total Direct Costs: \$1,195,944; Subcontract: \$106,475) https://reporter.nih.gov/project-details/9697395
- 3.) Fritz, M. S. (Principal Investigator). (2014-2015). Effect of Temporal Design on Trajectory Selection in Latent Variable Growth Models. Layman Award Office of Research and Economic Development, University of Nebraska Lincoln. (Total Direct Costs: \$10,000) https://research.unl.edu/previous-layman-awards/
- 2.) Fritz, M. S. (Lead Investigator Subcontract). (2010-2015). Subcontract on MacKinnon, D. P. (Principal Investigator) *Estimating Mediation Effects in Prevention Research* (Project No. 5R01DA009757-13). National Institute on Drug Abuse. (Total Direct Costs: \$1,214,279; Subcontract: \$76,377) https://reporter.nih.gov/project-details/8488418
- 1.) Fritz, M. S. (Investigator). (2009-2014). Subcontract on Walker, D., & Stephens, R. (Principal Investigators). *Reaching and Motivating Change in Teen Marijuana Smokers* (Project No. 5R01DA014296-13). National Institute on Drug Abuse. (Total Direct Costs: \$2,229,670) https://reporter.nih.gov/project-details/8625289

Teaching

University of Nebraska – Lincoln (UNL)

EDPS 800 – Foundations of Educational Research EDPS 859 – Statistical Methods	Spring 2024-25; Fall 2024-25 Fall 2013, 17, 19, 22–25;
EDDC 000 Applications of Coloated Advanced Statistics	Spring 2014–17, 19, 23–25
EDPS 860 – Applications of Selected Advanced Statistics	Spring 2025
EDPS 900A – Correlational and Experimental Methods	Spring 2023, 25
in Educational Research	
EDPS 941 – Experimental Methods: ANOVA	Spring 2014–20, 25
EDPS 972 – Multivariate Analysis	Fall 2014, 16, 18, 23;
	Spring 2020
EDPS 973A – Evaluation Theory and Practice	Spring 2024
EDPS 991 – Longitudinal Data Analysis	Fall 2015, 17, 19, 22, 24
EDPS 995 – Doctoral Seminar: Research	Fall 2018;
	Spring 2017–18, 20
QQPM Professional Development Seminar	Fall 2023-25; Spring 2024-25

Virginia Polytechnic Institute and State University (VT)

PSYC 4364 – Advanced Topics in Clinical Research Methods Spring 2011–13
PSYC 5316 – Research Methods II Spring 2008–09

(co-taught with Dr. Danny Axsom)

PSYC 5316/6944 – Applied Multiple Regression Fall 2008–09;

Spring 2010–13

PSYC 6014 – Applied Multivariate Data Analysis Fall 2009–10, 12

Arizona State University (ASU)

PSY 530 – ANOVA	Teaching Assistant for Dr. David MacKinnon	Fall 2004
PSY 531 – Multiple Regression	Teaching Assistant for Dr. Leona Aiken	Spring 2005
PSY 532 – Multivariate Statistic	rs Teaching Assistant for Dr. Leona Aiken	Fall 2005

Student Mentoring and Advising

<u>Doctoral Dissertation Committees – In Progress</u>

- 3.) Promise Emmanuel (UNL Child, Youth, and Family Studies TBD)
- 2.) Janella Kang (UNL Child, Youth, and Family Studies TBD)
- 1.) Emilea Rejman (UNL School Psychology) TBD

<u>Doctoral Dissertation Committees – Completed</u>

- 13.) Kirstie Bash (UNL Quantitative, Qualitative, and Psychometric Methods 4/8/20) Intersecting advanced quantitative designs with mixed methods research: A case for integrating latent transition analysis.
- 12.) Yage Guo (UNL Quantitative, Qualitative, and Psychometric Methods 2/23/20) Using rapid responses to evaluate test speededness in high-stakes testing.
- 11.) Amanda Prokasky (UNL Child, Youth and Family Studies 12/3/19) A longitudinal examination of bedtime routines and sleep in toddlers.
- 10.) Ann Arthur (UNL Quantitative, Qualitative, and Psychometric Methods 6/28/18) Enhancing ability estimation with test-taking behavior.
- 9.) Alaina Bassett (UNL Special Education and Communication Disorders 6/25/18) Evaluating fall risk assessment protocols in the field of audiology.
- 8.) Andrew Moskowitz (UCLA Quantitative Psychology 5/19/17) *Testing non-nested multilevel models.*
- 7.) ChaoRong Wu (UNL Quantitative, Qualitative, and Psychometric Methods 6/15/16) Growth mixture CACE modeling: A statistical approach for evaluating causal effects in longitudinal interventions with noncompliance.
- 6.) Paige Lembeck (UNL School Psychology 5/14/15) Adolescent bullying: Do weight,

- body size, and body size dissatisfaction influence victimization?
- 5.) Scott Anderson (VT Clinical Psychology 1/22/2013) Examination of complicated grief, posttraumatic stress, and other psychological reactions among student survivors of the April 16th shootings at Virginia Tech.
- 4.) Matthew Cox (VT Clinical Psychology 5/18/2012) Theoretical and psychometric specificity of self-regulation in physical activity: Validating measures of self-regulation.
- 3.) Kelly Dugan-Burns (Virginia Tech Clinical Psychology 3/30/12) A trauma-informed cognitive-behavioral intervention for pediatric oncology patients.
- 2.) Laura Wilson (VT Clinical Psychology– 3/30/12) The effects of exercise-induced heart rate arousal on stimulation seeking and aggression in college men.
- 1.) Emily Martin (VT Clinical Psychology 2/21/2012) Manual development and pilot testing of a mindfulness- and acceptance-based intervention for increasing cardiorespiratory fitness in sedentary adults.

Comprehensive Examinations

- 19.) Promise Emmanuel (UNL Child, Youth, and Family Studies TBD)
- 18.) Janella Kang (UNL Child, Youth, and Family Studies TBD)
- 17.) Emily Rejman (UNL School Psychology 8/7/2025)
- 16.) Ahmed Haddadi (UNL Quantitative, Qualitative, and Psychometric Methods 3/6/2020)
- 15.) Ayotunde Akinleye (**Chair**; UNL Quantitative, Qualitative, and Psychometric Methods 10/28/2019)
- 14.) Donna Chen (**Chair**; UNL Quantitative, Qualitative, and Psychometric Methods 9/26/2019)
- 13.) Sam Perez-Gonzalez (**Co-Chair**; UNL Developmental and Learning Sciences 3/12/2019)
- 12.) Paul Dizona (UNL Quantitative, Qualitative, and Psychometric Methods 12/1/2018)
- 11.) Yage Guo (UNL Quantitative, Qualitative, and Psychometric Methods 5/1/2018)
- 10.) Kirstie Bash (UNL Quantitative, Qualitative, and Psychometric Methods 10/30/2017)
- 9.) Alaina Bassett (UNL Special Education and Communication Disorders 9/1/2016)
- 8.) Heath Wiley (UNL Construction Management 4/14/2016)
- 7.) Ann Arthur (UNL Quantitative, Qualitative, and Psychometric Methods 12/1/2015)
- 6.) Kaushalendra Amatya (VT Clinical Psychology 4/27/12) Witnessing partner violence in childhood: Attachment as a pathway to interpersonal violence victimization and subsequent outcomes in college students.
- 5.) Scott Anderson (VT Clinical Psychology 5/4/11) Cognitive-behavioral approaches to treating PTSD: Evaluating treatment components and developing an intensive therapy for victims of violence.
- 4.) Kelly Dugan-Burns (VT Clinical Psychology 5/12/2010) The mental health effects of pediatric oncology: A posttraumatic stress conceptualization.
- 3.) Matthew Cox (VT Clinical Psychology 5/11/2010) Social cognitive variables mediating physical activity: A meta-analysis.
- 2.) Emily Martin (VT Clinical Psychology 3/31/2010) A mindfulness-based intervention

- for cardiorespiratory fitness.
- 1.) Laura Wilson (VT Clinical Psychology 1/29/2010) *The link between sensation seeking and aggressive behavior: A meta-analytic review.*

Master's Theses Committees – Completed

- 8.) Donna Chen (**Chair**; UNL Quantitative, Qualitative, and Psychometric Methods 7/20/2018) A comparison of alternative bias-corrections in the bias-corrected bootstrap test of mediation.
- 7.) Jayden Nord (UNL Quantitative, Qualitative, and Psychometric Methods 10/16/17) Latent interaction modeling with planned missing data designs.
- 6.) Elizabeth Svoboda (UNL Quantitative, Qualitative, and Psychometric Methods 10/16/17) *Multilevel metric invariance: A Monte Carlo simulation.*
- 5.) Laura Mills (VT Developmental Psychology 5/2/13) Eye gaze does not attenuate cognitive load on 14-month-olds' word-object associative learning for minimal pairs.
- 4.) Kaushalendra Amatya (VT Clinical Psychology 5/2/11) *Psychological outcomes in Asian and Asian American survivors of the April 16th shootings at Virginia Tech: Roles of acculturation and parental overprotection.*
- 3.) Qiong (Joy) Wu (VT Developmental Psychology 2/10/2011) *Do infants discriminate hyper- from non-hyper-articulated speech?*
- 2.) Shujing (Jessie) Huang (VT Industrial/Organizational Psychology 2/18/2010) Shared leadership: Experimental evidence on its antecedents and impact on team outcomes.
- 1.) Shane Hutton (VT Mathematics 5/8/2009) *Modeling the United States unemployment rate with the Preisach model of hysteresis.*

Awards and Honors

National

Best Presentation: Talk Award – 2024 PsychTERMS Conference	2024
Nominee – President, Division 5: Quantitative and Qualitative Methods,	2024
American Psychological Association	
Fellow, Division 5: Quantitative and Qualitative Methods, American	2023
Psychological Association	
Fellow, American Psychological Association	2023
Participant – Established Scientist, NCSES Research Ambassadors Program	2020 – 2022
(formerly the Data Analysis and Statistics Research Program),	
Oak Ridge Institute for Science and Education/National Science Foundation	on
Featured Participant - ORISE NCSES Research Ambassadors Program	2021
(https://orise.orau.gov/ncses/profiles/fritz.html)	
Outstanding Contribution in Reviewing, Journal of School Psychology	2018
National Institutes of Health Early Career Reviewer Program	2014 – 2017
Honorable Mention, National Science Foundation Graduate Research Fellowship	2003
Psi Chi National Honor Society for Psychology	2002

Professional Service

Journal Editorial Boards

Journal of Studies on Alcohol and Drugs	2025 – present
Teaching of Psychology – Consulting Editor	2024 – present
Evaluation & the Health Professions	2013 – present
Child Development – Consulting Editor	2019 – 2023
Journal of School Psychology – Statistical and Methodological Advisor	2010 – 2019

Journal Reviewer

Addictive Behaviors
Applied Measurement in Education
American Journal of Orthopsychiatry
Behavior Genetics
Behavior Research Methods
BMC Bioinformatics
Child Development
Clinical Child and Family Psychology Review
Computational Statistics and Data Analysis
Developmental Psychology

Drug and Alcohol Dependence Evaluation & the Health Professions **Evolutionary Psychology** European Journal of Personality European Journal of Psychology of Education Health Psychology International Journal of Behavioral Development Journal of Adolescent Health Journal of Consulting and Clinical Psychology Journal of Early Adolescence Journal of Educational and Behavioral Statistics Journal of Experimental Psychology: General Journal of School Psychology Journal of Studies on Alcohol and Drugs Multivariate Behavioral Research **Nursing Research** Organizational Research Methods **Prevention Science** Psychological Medicine **Psychological Methods** Psychology of Addictive Behaviors Psychometrika Social Psychology Quarterly Sociological Methods and Research Statistical Methods in Medical Research Structural Equation Modeling

Grant Review - Panels and Ad Hoc

Teaching of Psychology

Primary Member – Grant Review Panel, Institute of Education Sciences	2018 – 2023
Member – Grant Review Panel, National Science Foundation	2019
Member – Grant Review Panel, Institute of Education Sciences	2016 – 2018
External Reviewer – Grant Review Panel, Louisiana Board of Regents	2013
External Reviewer – Grant Review Panel, National Science Foundation	2011, 14, 22
External Reviewer – Grant Review Panel, Medical Research Council (U.K.)	2011

<u>Professional Organizations: National</u>

Member – Praxis Psychology Test Committee, Educational Testing Service	2025
Board Member – Helping Give Away Psychological Science (501c3)	2024 – present
Member – Graduate Records Examination:	2024 – present
Psychology Subject Test Committee, Educational Testing Service	

Representative – Evaluation, Measurement, and Statistics Section, Division 5: Quantitative and Qualitative Methods, American Psychological Assoc.	2022 – 2025
Alternate – Summer 2024 Council of Representatives Meeting, Division 5: Quant and Qual Methods, American Psychological Association	2024
Reviewer – Conference Proposals/Abstracts, Society for Research on Adolescence	2023
Coordinating Officer – Division 5: Quantitative and Qualitative Methods, American Psychological Association	2016 – 2022
Alternate – Winter 2020 Council of Representatives Meeting, Division 5: Quant and Qual Methods, American Psychological Association	2020
Reviewer – Convention Proposals/Abstracts, Division 5: Quantitative and Qualitative Methods, American Psychological Association	2014 – 2015
Reviewer – Conference Proposals/Abstracts, Society for Prevention Research Member – Conference Proposal/Abstracts Thematic Subcommittee, Society for Prevention Research	2008 – 13, 19 2011
<u>Institutional Service</u>	
ACE Coordinator – Department of Educational Psychology, University of Nebraska – Lincoln	2024 – present
Chair – Undergraduate Curriculum Committee, Department of Educational Psychology, University of Nebraska – Lincoln	2024 – present
Member – University Undergraduate Curriculum Committee, University of Nebraska – Lincoln	2024 – present
Member – ACE Subcommittee, University Undergraduate Curriculum Committee, University of Nebraska – Lincoln	2024 – present
Member – Undergraduate Curriculum Committee, College of Education and Human Science, University of Nebraska – Lincoln	2024 – present
LGBTQ+ Ally and Safe Space Provider – University of Nebraska-Lincoln Member – Search Committee for Postdoctoral Scholar, MAP Academy, University of Nebraska – Lincoln	2013 – present 2023
Faculty Director – Nebraska Evaluation and Research Center, Department of Educational Psychology, University of Nebraska – Lincoln	2016 – 20, 22-23
Chair – Executive Committee of the Graduate Faculty, College of Education and Human Sciences, University of Nebraska – Lincoln	2018 – 2019
Judge – Graduate Student Poster Session, Graduate Research Fair, University of Nebraska – Lincoln	2018
Judge – Science Literary (SCIL) 101 Student Poster Session, College of Agricultural Sciences and Natural Resources, University of Nebraska – Lincoln	2018
Chair – Graduate Committee, Department of Educational Psychology, University of Nebraska – Lincoln	2017 – 2019
Member – Executive Committee of the Graduate Faculty, College of Education and Human Sciences, University of Nebraska – Lincoln	2017 – 2019

Member – Search Committee for Visiting Faculty, Survey Research and Methodology Program, University of Nebraska – Lincoln	2017 – 2018
Faculty Adviser – QQPM Student Association, Department of Educational Psychology, University of Nebraska – Lincoln	2015 – 2019
Member – Search Committee for Anti-Bullying Faculty, Department of Educational Psychology, University of Nebraska – Lincoln	2015 – 2016
Member – Graduate Committee, Department of Educational Psychology, University of Nebraska – Lincoln	2014 – 2019
Member – Technology Committee, College of Education and Human Sciences, University of Nebraska – Lincoln	2013 – 2018
Member – Search Committee for Industrial/Organizational Faculty, Department of Psychology, Virginia Polytechnic Institute and State University	2012 – 2013
LGBTQ Safe Zone Ally – Virginia Polytechnic Institute and State University	2011 - 2013
Reviewer – Graduate Research and Development Program, Graduate School, Virginia Polytechnic Institute and State University	2008 – 2011
Member – Search Committee for Quantitative/Health Faculty, Department of Psychology, Virginia Polytechnic Institute and State University	2008 – 2009
Member – Search Committee for Biostatistics Faculty, Department of Statistics, Virginia Polytechnic Institute and State University	2008 – 2009
Quantitative Psychology Representative – Psi Chi Graduate School	2005
Information Night, Department of Psychology, Arizona State University	
Student Member – Search Committee for Quantitative Faculty, Department of Psychology, Arizona State University	2004 – 2005