

Ying Jin
James Madison University
Associate Professor,
Learning, Technology, and Leadership Education
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Education

Doctor of Philosophy, University of Miami, Coral Gables, FL, 2013.

Major: Research, Measurement, and Evaluation

Master of Science, Utah State University, Logan, UT, 2009.

Major: Statistics

Master of Second Language Teaching, Utah State University, Logan, UT, 2007.

Major: Bilingual Multilingual Education

Bachelor of Arts, Minzu University of China, Beijing, China, 2004.

Major: History General

Academic Positions

2023 – present, Associate Professor, Learning, Technology, and Leadership Education, James Madison University.

2019 – 2023, Associate Professor, Quantitative Psychology, Middle Tennessee State University.

2013 – 2019, Assistant professor, Quantitative Psychology, Middle Tennessee State University.

Professional Positions

2024 – present, Associate Director, Center for Advancement Research Education, James Madison University.

2021 – 2023, Founder and Director, Center of Methodology, Evaluation, and Applied Statistics for University Research and Education, Middle Tennessee State University.

2020 – 2023, Associate Director, Tennessee STEM Education Center, Middle Tennessee State University.

RESEARCH

Peer-reviewed publications

Jin, Y., Mosley, C. (2025). Deeper Learning through Project-based Learning: Evidence in School-based Agricultural Education. *Career and Technical Education Research*.

Mosley, C., Rubenstein, E., Jagger, C., Clemmons, C., McCubbins, O., Davis, J., **Jin, Y.**, Epps, R., Stair, K., Layfield, D., Ramsey, J., Haynes, C., Johnson, D., & Santiago, E. (2025). Suicide and school-based agricultural education in the southern region – A multistate exploratory study. *Journal of Southern Agricultural Education Research*.

Jin, Y., Mosley, C. (2024). Development of a Concept Inventory of Inheritance for High School Agricultural Education. *Journal of Agricultural Education*. 65(4), 191-208.
<https://doi.org/10.5032/jae.v65i4.279>

- Couch, B., Wybren, E., de Araujo Bryan, M., Niravong, T., **Jin, Y.**, Bowen, C., Barnes, E. M. (2022). Exploring Undergraduate Biology Students' Science Communication about COVID-19. *Frontiers in STEM education*, 7, 1-10.
- Mehls, K. D., Grubbs, B. F., **Jin, Y.**, Coons, J. M. (2022). An Electromyography Comparison of Sex Differences During the Back Squat. *Journal of Strength and Conditioning Research*, 36(2), 310-313.
- Mehls, K. D., Grubbs, B. F., Stevens, S. L., Martinez, S., **Jin, Y.**, Coons, J. M. (2021). Correcting movement syndromes: the role of training load and its effects on muscle activity. *Sport Sciences for Health* (June 7, 2021), 1-10.
- Mehls, K. D., Grubbs, B. F., Stevens, S. L., Coons, J. M., **Jin, Y.** (2020). Power production and development in youth athletes: the effects of training load. *Journal of Athletic Enhancement*, 9(3), 1-4.
- Jin, Y.**, Rodriguez, C. A., Shah, L., Rushton, G. T. (2020). Examining the Psychometric Properties of the Redox Concept Inventory: A Rasch Approach. *Journal of Chemical Education*, 97(12), 4235-4244.
- Jin, Y.** (2020). A note on the cutoff values of alternative fit indices to evaluate measurement invariance for ESEM models. *International Journal of Behavioral Development*, 44(2), 166-174.
- Bernstein, S. E., Flipse, J. L., **Jin, Y.**, Odegard, T. N. (2020). Word and sentence level tests of morphological awareness in reading. *Reading and Writing: An Interdisciplinary Journal*, 33, 1591-1616.
- Jin, Y.**, Eason, H. (2016). Multilevel DIF analysis: a latent variable approach. *Journal of Educational Issues*, 2(2), 290-306.
- Jin, Y.**, Kang, M. (2016). Comparing DIF methods for data with dual dependency. *Large-Scale Assessments in Education*, 4(1).
- Rubenstein, C. L., Duff, J., Prilleltensky, I., **Jin, Y.**, Dietz, S., Myers, N. D., Prilleltensky, O. (2016). Demographic group differences in domain-specific well-being. *Journal of Community Psychology*, 44(4), 499-515.
- Myers, N. D., **Jin, Y.**, Ahn, S., Celimli, S., Zopluoglu, C. (2015). Rotation to a partially specified target matrix in exploratory factor analysis in practice. *Behavior Research Methods*, 47(2), 494-505.
- Prilleltensky, I., Dietz, S., Prilleltensky, O., Myers, N. D., Rubenstein, C. L., **Jin, Y.**, McMahon, A. (2015). Assessing multidimensional well-being: Development and validation of the i coppe scale. *Journal of Community Psychology*, 43(2), 199-226.
- Jin, Y.**, Myers, N. D., Ahn, S. (2014). Complex Versus Simple Modeling for DIF Detection: When the Intraclass Correlation Coefficient (ρ) of the Studied Item Is Less Than the ρ of the Total Score. *Educational and Psychological Measurement*, 74(1), 163-190.
- Myers, N. D., Prilleltensky, I., **Jin, Y.**, Dietz, S., Rubenstein, C. L., Prilleltensky, O., McMahon, A. (2014). Empirical contributions of the past in assessing multidimensional well-being. *Journal of Community Psychology*, 42(7), 789-798.
- Jin, Y.**, Myers, N. D., Ahn, S., Penfield, R. D. (2013). A Comparison of Uniform DIF Effect Size Estimators Under the MIMIC and Rasch Models. *Educational and Psychological Measurement*, 73(2), 339-358.

- Myers, N. D., Ahn, S., **Jin, Y.** (2013). Rotation to a Partially Specified Target Matrix in Exploratory Factor Analysis: How Many Targets? *Structural Equation Modeling*, 20(1), 131-147.
- Ahn, S., Myers, N. D., **Jin, Y.** (2012). Use of the estimated intraclass correlation for correcting differences in effect size by level. *Behavior Research Methods*, 44(2), 490-502.
- Myers, N.D., **Jin, Y.**, Ahn, S., Chase, M.A., & Feltz, D.L. (2012). Exploratory structural equation modeling under target rotation in sport and exercise psychology [Abstract]. *Journal of Sport & exercise Psychology*, 34(Suppl), S34.
- Myers, N.D., Ahn, S., & **Jin, Y.** (2011). Sample size and power estimates for a confirmatory factor analytic model in exercise and sport: A Monte Carlo approach. *Research Quarterly for Exercise and Sport (Measurement and Evaluation section)*, 82, 412-423.

Book chapters

- Kang, M., **Jin, Y.** (2016). Factor ANOVA and MANOVA. An Introduction to Intermediate and Advanced Statistical Analyses for Sport and Exercise Scientists (pp. 1-18). West Sussex: Wiley.
- Kang, M., **Jin, Y.** (2016). Repeated Measures ANOVA and MANOVA. An Introduction to Intermediate and Advanced Statistical Analyses for Sport and Exercise Scientists (pp. 19-34). West Sussex: Wiley.
- Myers, N. D., **Jin, Y.** (2013). Coaching competency and exploratory structural equation modeling. *Routledge Handbook of Sports Coaching* (pp. 81-95).

External and Internal Grants (funded)

- Jin, Y. (Principal)**, Syler, R. (Co-Principal), Torabi, E. (Co-Principal), Sharifian, S. M. (Co-Principal). "Uncovering Potential - Paving Career Pathways to Artificial Intelligence through Experiential Learning in Rural Areas". National Science Foundation, Federal, \$996,879. (2025 – 2028).
- Jin, Y. (Principal)**, Mosley, C. W. (Co-Principal), Cui, S. (Co-Principal), Wu, Q. (Co-Principal), Ragland, K. (Co-Principal), "Agri-analytics Fellowship: an interdisciplinary approach to expanding career pathways for undergraduate students." USDA National Institute of Food and Agriculture, Federal, \$749,443.00. (2023 - 2028). * Step down as Co-PI in 2024 after leaving MTSU.
- Jin, Y. (Principal)**, Mosley, C. W. (Co-Principal), Cui, S. (Co-Principal), "Deeper Learning Professional Development (PD) for High School Agriculture Teachers," USDA National Institute of Food and Agriculture, Federal, \$450,000.00. (2021 - 2024).
- Mosley, C. (Principal), **Jin, Y. (Co-Principal)**, Ragland, K. (Co-Principal), Sloane, M. E. (Co-Principal). "An Investigation of Virtual Reality Initiatives and Workforce Development Outcomes in Public Libraries." Institute of Museum and Library Services, Federal, \$558,439.00. (2024 – 2026).
*Terminated in 2025.
- Rushton, G. (Principal), Jones, R. (Co-Principal), Miller, K. (Co-Principal), Gamble, K. (Co-Principal), Krahenbuhl, K. (Co-Principal), **Jin, Y. (Evaluator)**, Developing Leaders in Education to Advance Data Science Learning in Middle School STEM Classrooms," National Science Foundation, Federal, \$2,999,332. (2024-2029).
- Haudek, K. (Principal), Henderson, R. (Co-Principal), Cooper, M. (Co-Principal), Kaplan, J. J. (Principal), **Jin, Y. (Evaluator)**, "Collaborative Research: Expanding a National Network for Automated Analysis of Constructed Response Assessments to Reveal Student Thinking in STEM," National Science Foundation, Federal, \$1,1700,000.00. (2023-2027).

- Ragland, K. D. (Principal), Mosley, C. (Co-Principal), Jin, Y. (**Evaluator**), "AgXplore Curriculum Training for Middle School Teachers," USDA National Institute of Food and Agriculture, Federal, \$500,000.00. (2023-2028).
- Hass, A. (Principal), Abolins, M. (Co-Principal), **Jin, Y. (Evaluator)**, "Undergraduate Students Learning About Urban Microclimates, Extreme Heat, and Climate Change," National Science Foundation, Federal, \$260,031.00. (2024-2026).
- Gardner, G. E. (Principal), Barnes, M. E. (Co-Principal), Bleiler-Baxter, S. (Co-Principal), Kaplan, J. J. (Co-Principal), Rushton, G. T. (Co-Principal), **Jin, Y. (Evaluator)**, "Preparation and Refinement of Postdocs in STEM for Disciplinary-Based Education Research (PROPS for DBER)." National Science Foundation STEM Ed Organizational Postdoctoral Research Fellowships (STEM Ed OPRF), Federal, \$1,249,445.
- Jin, Y. (Principal)**, "A longitudinal analysis of high school STEM teacher persistence and effectiveness," Sponsored by Middle Tennessee State University, \$10,000.00 (2018 - 2019).
- Jin, Y. (Principal)**, "Teaching statistics to at-risk students using facial action coding system," Sponsored by Middle Tennessee State University, \$10,000.00. (2016 - 2017).
- Brinthaup, T. M. (Principal), Schmidt, G. W. (Co-Principal), **Jin, Y. (Co-Principal)**, "MTSU Freshman and Transfer Student Wise Interventions," Sponsored by Tennessee Board of Regents, State, \$31,000.00. (2015 - 2016).

Presentations

- Mosley, C. W., **Jin, Y.**, Cui, S., CTE Research and Professional Development Conference, "Deeper learning professional development for high school agriculture teachers," Association for Career and Technical Education Research (ACTER), Las Vegas, NE. (November 2022).
- Matthews, L., Niravong, T., de Araujo Bryan, M., **Jin, Y.**, Bowen, C., Barnes, M. E., Society for the Advancement of Biology Education Research (SABER) meeting, "Exploring Undergraduate Biology Students' Attitudes and Science Communication about COVID19 and COVID19 Vaccines: Does Religious Identity Matter?"
- Jin, Y.**, Rushton, G. T., Biennial Conference on Chemical Education, "Assessment Instruments: Design, Development, and Evaluation," American Association of Chemistry Teachers, West Lafayette, IN, United States of America. (August 2022).
- Matthews, L., Niravong, T., de Araujo Bryan, M., **Jin, Y.**, Bowen, C., Barnes, M. E., American Association for the Advancement of Science (AAAS), "Exploring Undergraduate Biology Students' Attitudes and Science Communication about COVID19 and COVID19 Vaccines," Philadelphia, PA, United States of America. (February 2022).
- Matthews, L., Niravong, L., de Araujo Bryan, M., **Jin, Y.**, Bowen, C., Barnes, M. E., National Association of Biology Teachers (NABT) meeting, "Exploring Undergraduate Biology Students' Attitudes and Science Communication about COVID19 and COVID19 Vaccines: Does Religious Identity Matter?," Atlanta, GA. (November 2021).
- Jin, Y.**, Myers, N. D., Brinthaup, T. M., American Psychological Association (APA), "Accounting for a testlet effect under a differential item functioning analysis: An ESEM approach," San Francisco, CA, United States of America. (August 2018).

- Bernstein, S. E., **Jin, Y.**, Flipse, J. L., Odegard, T. N., Literacy Studies Conference, "Dissociating Lexical and Syntactic Aspects of Morphological Awareness: A Task Development Study," Middle Tennessee State University, Murfreesboro, TN, United States of America. (March 2018).
- Yi, J., **Jin, Y.**, Scholars Week, "The mode effects in smartphones surveys: analysis using the item response theory (IRT)," Middle Tennessee State University, Murfreesboro, TN, United States of America. (2017).
- Holt, A. R., Marshall, S. J., **Jin, Y.**, Frame, M., Association for Psychological Sciences Annual Convention, "Predicting final grades in introductory psychology courses: Exploring the use of student response systems.," Association for Psychological Sciences, Chicago, IL, United States of America. (May 2016).
- Marshall, S. J., Holt, A., **Jin, Y.**, Frame, M., Tenenholz, S. G., Crooks, C., Association for Psychological Sciences Annual Convention, "A comparison of college students' in-class and out-of-class learning behaviors in clicker and non-clicker classrooms.," Association for Psychological Sciences, New York, NY, United States of America. (May 2015).
- Marshall, S. J., Holt, A. R., **Jin, Y.**, Frame, M. C., Tenenholz, S. G., Crooks, C. E., Association for Psychological Sciences Annual Convention, "A comparison of college students' in-class and out-of-class learning behaviors in clicker and non-clicker classrooms," New York, NY, United States of America. (May 2015).
- Eason, H., **Jin, Y.**, Holt, A. R., Marshall, S. J., Tenenholz, S. G., Crooks, C. E., Frame, M. C., Association for Psychological Sciences Annual Convention, "Development of an audience response system scale: an IRT analysis," New York, NY, United States of America. (May 2015).
- Marshall, S. J., **Jin, Y.**, Holt, A., Tenenholz, S. G., Crooks, C., Frame, M., Association for Psychological Sciences Annual Convention, "Development of an audience response system scale: an IRT analysis.," Association for Psychological Sciences, New York, NY, United States of America. (May 2015).
- Holt, A. R., Marshall, S. J., **Jin, Y.**, Tenenholz, S. G., Crooks, C. E., Frame, M. C., Association for Psychological Sciences Annual Convention, "Perception of class experiences: Exploring the use of student response systems," New York, NY, United States of America. (May 2015).
- Marshall, S. J., Holt, A., **Jin, Y.**, Tenenholz, S. G., Crooks, C., Frame, M., Association for Psychological Sciences Annual Convention, "Perception of class experiences: Exploring the use of student response systems.," Association for Psychological Sciences, New York, NY, United States of America. (May 2015).
- Jin, Y.**, Flack, C., American Educational Research Association (AERA), "Accounting for Low Reliability in Multilevel Differential Item Functioning (DIF) Analysis: A Latent Variable Approach," Chicago, IL, United States of America. (April 2015).
- Jin, Y.**, Flack, C., National Council on Measurement in Education (NCME), "DIF Analysis for Short Tests with Multilevel Data," Chicago, IL, United States of America. (April 2015).
- Jin, Y.**, Myers, N. D., Ahn, S., American Educational Research Association (AERA), "Complex Versus Simple Modeling for DIF Detection When the Intraclass Correlation Coefficient (ρ) of the Studied Item Is Less Than the ρ of the Total Score," Philadelphia, PA, United States of America. (April 2014).

- Prilleltensky, I., Prilleltensky, O., Dietz, S., Myers, N. D., **Jin, Y.**, McMahon, A., Council on Contemporary Families, "Innovative ways to promote well-being in families," Miami, FL, United States of America. (April 2014).
- Myers, N. D., **Jin, Y.**, Ahn, S., American Educational Research Association (AERA), "Rotation to a Partially Specified Target Matrix in Exploratory Factor Analysis in Practice," Philadelphia, PA, United States of America. (April 2014).
- Myers, N. D., **Jin, Y.**, S., Chase, M. A., Feltz, D. L., North American Society for the Psychology of Sport and Physical Activity, "Exploratory structural equation modeling under target rotation in sport and exercise psychology," Honolulu, HI, United States of America. (June 2012).
- Jin, Y.**, Myers, N., Penfield, R., Ahn, S., Modern Modeling Methods Conference, "An effect size estimator for uniform DIF: A comparison of the MIMIC and the Rasch parameterization," Storrs, CT, United States of America. (May 2012).
- Myers, N., Ahn, S., **Jin, Y.**, American Educational Research Association, "Rotation to a Partially Specified Target Matrix in Exploratory Structural Equation Modeling: How Many Targets?" Vancouver, Canada. (April 2012).