

SONJA D. WINTER

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Columbia, MO 65211

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EXPERIENCE

Educational, School & Counseling Psychology, University of Missouri <i>Assistant Professor</i>	August 2023 - current <i>Columbia, Missouri</i>
Missouri Prevention Science Institute, University of Missouri <i>Postdoctoral Fellow</i>	August 2021- July 2023 <i>Columbia, Missouri</i>
Methodology and Statistics, Utrecht University <i>Researcher</i>	January 2014 - June 2016 <i>Utrecht, the Netherlands</i>

EDUCATION

University of California, Merced Ph.D., Psychological Sciences Area of Study: Quantitative Methods, Measurement, and Statistics Advisor: Associate Professor Sarah Depaoli Dissertation: <i>Advanced Methods for Detecting Specification Issues in Bayesian Structural Equation Modeling.</i>	2016-2021
Utrecht University, the Netherlands M.Sc. (Cum Laude), Psychology	2011-2013
Utrecht University, the Netherlands B.Sc. (with honours), Psychology	2008-2011

GRANT FUNDING

Current

1. Trends in Distress and Mental Health Service Use among U.S. Domestic and International Student-Athletes (2019-2024) (08/01/2025-12/08/2025). Grant awarded by the University of Missouri Research Council. PI: Russel Ravert (University of Missouri). (\$5,547). **Role: Co-I.**
2. Project MIDAS: Development of a Multi-Informant Decisional Assessment System (08/01/2024 - 07/31/2026). Grant awarded by the US Department of Education, Institute for Educational Sciences. PI: Nathaniel von der Embse (University of South Florida). (\$2,000,000). **Role: Co-I.**

Pending

1. Project ENCODE: Using the Tools of Information Theory to Improve Model Evaluation (08/01/2025 - 07/31/2028). Grant submitted to the US Department of Education, Institute for Educational Sciences. PI: Wes Bonifay (University of Missouri). (\$900,000) **Role: Co-PI.**
2. Calibrating Uncertainty in Education Research: Extending Bayesian Simulation-Based Calibration Methods to Structural Equation Models (9/1/2026-8/31/2028). Grant submitted to the National Academy of Education/Spencer Foundation. PI: Sonja Winter (University of Missouri). (\$70,000) **Role: PI.**

Completed

1. Innovative, Translational, and User-Friendly tools for Comprehensive Statistical Model Evaluation (05/01/2024-08/31/2025). Grant awarded by the US Department of Education, Institute for Educational Sciences. PI: Wes Bonifay (University of Missouri). (\$900,000). **Role: Co-PI.**

PUBLICATIONS

Peer-Reviewed Articles

1. Cornell, D. G., Maeng, J., **Winter, S. D.**, Huang, F., Konold, T., Kerere, J., Afolabi, K., & Cowley, D. (accepted). How Prevalent Are Adverse Academic Outcomes Following a School Threat Assessment? *Preventing School Failure*.
2. Merkle, E. C., **Winter, S. D.**, & Fitzsimmons, E. (in press). Identification and Scaling of Latent Variables in Ordinal Factor Analysis. *Psychometrika*.
3. van de Schoot, R., Coimbra, B. M., Evenhuis, T., Lombaers, P., Weijdema, F., de Bruin, L., Neeleman, R., Grandfield, E. M., Sijbrandij, M., Teijema, J., Jalovec, E., Bron, M. P., **Winter, S. D.**, de Bruin, J., van Zuiden, M. (2025). The Hunt for the Last Relevant Paper: Blending the best of humans and AI. *European Journal of Psychotraumatology*, 16(1): 254621
4. Parmenter, J. G., **Winter, S. D.**, Clements, Z., Alexander, K., & Taylor, H., (2025). How community and individual strengths “fill our cup”: A strengths-based psychological mediation framework for LGBTQIA+ communities. *Journal of Counseling Psychology*.
5. von der Embse, N., **Winter, S. D.**, Bonifay, W., Kilgus, S. Oddleifson, C., Eklund, K., Suldo, S., Latimer, J., & Welliver, M. (2025). Reconciling Discrepant Data To Inform Social-Emotional And Behavioral Decision-Making: A Bayesian Logistic Regression Approach. *Journal of School Psychology*, 110, 101461.
6. Parmenter, J. G., **Winter, S. D.**, & Taylor, H. (2025). Considering Sexual and Gender Minority Community Inequity within the Psychological Mediation Framework. *Psychology of Sexual Orientation and Gender Diversity*
7. Cornell, D. G., Maeng, J., **Winter, S. D.**, Huang, F., Konold, T., Kerere, J., Afolabi, K., & Cowley, D. (2025). Equity in Law Enforcement Actions Following a School Threat Assessment. *Law and Human Behavior*, 49(4), 338.
8. Cornell, D. G., Maeng, J., **Winter, S. D.**, Huang, F., Konold, T., Kerere, J., Afolabi, K., & Cowley, D. (2025). Behavioral Threat Assessment and Equity in Exclusionary School Discipline. *School Psychology Review*
9. **Winter, S. D.**, Eddy, C. L., Yang, W., & Bonifay, W. (2025). A tutorial on Bayesian item response theory: An illustration using the Teacher Stress Inventory-Short Form. *Journal of School Psychology*
10. Bonifay W., **Winter, S. D.**, Skoblow, H., & Watts. A. (2024). Good fit is weak evidence of replication: Increasing rigor through prior predictive similarity checking. *Assessment*. doi:10.1177/10731911241234118 [Invited contribution to special issue on “Assessment, Measurement, and Registered Replication.”]
11. Depaoli, S., **Winter, S. D.**, & Liu, H. (2024). Under-Fitting and Over-Fitting: The Performance of Bayesian Model Selection and Fit Indices in SEM. *Structural Equation Modeling: A Multidisciplinary Journal*, 31(4), 604-625.
12. Parmenter, J. G. & **Winter, S. D.** (2023). Inequity within the LGBTQ+ Community as a Distal Stressor: An Extension of Minority Stress Theory. *Psychology of Sexual Orientation and Gender Diversity*.

13. Merkle, E., Ariyo, O., **Winter, S. D.**, & Garnier-Villarreal, M. (2023). Opaque Prior Distributions in Bayesian SEM. *Methodology, 19*(3), 228-255. doi:[10.5964/meth.11167](https://doi.org/10.5964/meth.11167)
14. **Winter, S. D.**, & Depaoli, S. (2023). Illustrating the Value of Prior Predictive Checking for Bayesian Structural Equation Modeling. *Structural Equation Modeling: A Multidisciplinary Journal*. doi:[10.1080/10705511.2022.2164286](https://doi.org/10.1080/10705511.2022.2164286)
15. **Winter, S. D.**, & Depaoli, S. (2022). Detecting Prior-Data Disagreement in Bayesian Structural Equation Modeling. *Structural Equation Modeling: A Multidisciplinary Journal*. doi:[10.1080/10705511.2022.2039066](https://doi.org/10.1080/10705511.2022.2039066)
16. **Winter, S. D.**, & Depaoli, S. (2022). Sensitivity of Bayesian Model Fit Indices to the Prior Specification of Latent Growth Models. *Structural Equation Modeling: A Multidisciplinary Journal* 29(5), 667-686. doi:[10.1080/10705511.2022.2032078](https://doi.org/10.1080/10705511.2022.2032078)
17. **Winter, S. D.**, & Depaoli, S. (2022). Performance of Model Fit and Selection Indices for Bayesian Structural Equation Modeling with Missing Data. *Structural Equation Modeling: A Multidisciplinary Journal*, 29(4), 531-549. doi:[10.1080/10705511.2021.2018656](https://doi.org/10.1080/10705511.2021.2018656)
18. van de Schoot, R., **Winter, S. D.**, Griffioen, E., Grimmelikhuijsen, S., Arts, I., Veen, D., Grandfield, E. M., & Tummers, L. G. (2021). The Use of Questionable Research Practices to Survive in Academia: Expert Elicitation, Prior-Data Conflicts, Bayes Factors for Replication Effects, and the Bayes Truth Serum. *Frontiers in Psychology: Quantitative Psychology & Measurement*, 12, 621547 doi:[10.3389/fpsyg.2021.621547](https://doi.org/10.3389/fpsyg.2021.621547)
19. Arroyo, A. C., **Winter, S. D.**, Depaoli, S., & Zawadzki, M. J. (2021). Illuminating Differences in The Psychological Predictors of Academic Performance for First- And Continuing-Generation Students. *Journal of Educational and Psychological Research*, 3(2), 234-246.
20. Depaoli, S., **Winter, S. D.**, & Visser, M. (2020). The Importance of Prior Sensitivity Analysis in Bayesian Statistics: Demonstrations using an Interactive Shiny App. *Frontiers in Psychology: Quantitative Psychology & Measurement*, 11, 3271. doi:[10.3389/fpsyg.2020.608045](https://doi.org/10.3389/fpsyg.2020.608045)
21. Smid, S. C., & **Winter, S. D.** (2020). Dangers of the Defaults: A Tutorial on the Impact of Default Priors when using Bayesian SEM with Small Samples. *Frontiers in Psychology: Quantitative Psychology & Measurement*, 11, 611963. doi:[10.3389/fpsyg.2020.611963](https://doi.org/10.3389/fpsyg.2020.611963)
22. **Winter, S. D.**, & Depaoli, S. (2020). An Illustration of Bayesian Approximate Measurement Invariance with Longitudinal Data and a Small Sample Size. *International Journal of Behavioral Development*, 44(4), 371-382. doi:[10.1177/0165025419880610](https://doi.org/10.1177/0165025419880610)
23. Depaoli, S., **Winter, S. D.**, Lai, K., & Guerra-Peña, K. (2019). Implementing continuous non-normal skewed distributions in latent growth mixture modeling: An assessment of specification errors and class enumeration. *Multivariate Behavioral Research*, 54(6), 795-821. doi:[10.1080/00273171.2019.1593813](https://doi.org/10.1080/00273171.2019.1593813)
24. Hoorn, J. F., & **Winter, S. D.** (2018). Here comes the bad news: Doctor robot taking over. *International Journal of Social Robotics*, 10, 519-535. doi:[10.1007/s12369-017-0455-2](https://doi.org/10.1007/s12369-017-0455-2)
25. Tiemensma, J., Depaoli, S., **Winter, S. D.**, Felt, J. M., Rus, H., & Arroyo, A. C. (2018). The Performance of the IES-R for Latinos and non-Latinos: Assessing Measurement Invariance. *PLoS ONE*, 13(4), e0195229. doi:[10.1371/journal.pone.0195229](https://doi.org/10.1371/journal.pone.0195229)
26. van de Schoot, R., Sijbrandij, M., Depaoli, S., **Winter, S. D.**, & van Loey, N. (2018). Bayesian PTSD-Trajectory Analysis with Informed Priors Based on a Systematic Literature Search and Expert Elicitation. *Multivariate Behavioral Research*, 53(2), 267-291. doi:[10.1080/00273171.2017.1412293](https://doi.org/10.1080/00273171.2017.1412293)

27. Winter, S. D., Depaoli, S., & Tiemensma, J. (2018). Assessing differences in how the CushingQoL is interpreted across countries: Comparing patients from the U.S. and the Netherlands. *Frontiers in Endocrinology*, 9, 368. doi:10.3389/fendo.2018.00368
28. van de Schoot, R., Sijbrandij, M., Winter, S. D., Depaoli, S., & Vermunt, J. K. (2017). The GRoLTS-Checklist: Guidelines for reporting on latent trajectory studies. *Structural Equation Modeling: A Multidisciplinary Journal*, 24(3), 451-467. doi:10.1080/10705511.2016.1247646
29. van de Schoot, R., Winter, S. D., Ryan, O., Zondervan-Zwijnenburg, M. & Depaoli, S. (2017). A systematic review of Bayesian articles in psychology: The last 25 years. *Psychological Methods*, 22(2), 217-239. doi:10.1037/met0000100
30. Konijn, E. A., van der Schoot, R., Winter, S. D., & Ferguson, C. J. (2015). Possible solution to publication bias through Bayesian statistics, including proper null hypothesis testing. *Communication Methods and Measures*, 9(4), 280-302. doi:10.1080/19312458.2015.1096332

Book Chapters

1. Depaoli, S., Kaplan, D., & Winter, S. D. (2023). Foundations and extensions in Bayesian structural equation modeling. In Hoyle, R. (2nd Ed.) *Handbook of structural equation modeling*. New York, NY: The Guilford Press.
2. van de Schoot, R., Griffioen, E., & Winter, S. D. (2021). Dealing with imperfect elicitation results. In Hanea, A.M., Nane, G.F., Bedford, T., French, S. (Eds.), *Expert Judgment in Risk and Decision Analysis*. Basel: Springer International Publishing.
3. van de Schoot, R., Veen, D., Smeets, L., Winter, S. D., & Depaoli, S. (2020). A Tutorial on Using The Wambs Checklist to Avoid The Misuse of Bayesian Statistics. In R. van de Schoot & M. Miočević (Eds.), *Small Sample Size Solutions: A guide for applied researchers and practitioners* (pp. 30–49). London: Routledge. doi:10.4324/9780429273872-4

Web Applications

1. Depaoli, S., Winter, S. D., & Visser, M. (2020). The Importance of Prior Sensitivity Analysis in Bayesian Statistics: Demonstrations using an Interactive Shiny App. ucmquantpsych.shinyapps.io/sensitivityanalysis.
2. Smid, S.C., & Winter, S. D. (2020). Shiny App: The Impact of Prior Distributions in a Bayesian Latent Growth Model. utrecht-university.shinyapps.io/impact_of_prior_distributions.
3. Behrens, L., Winter, S. D., & van de Schoot, R. (2018). Shiny App: FBI: First Bayesian Inference. utrecht-university.shinyapps.io/bayesian_estimation.

PAPERS UNDER REVIEW

1. Coimbra, B. M., Sijbrandij, M., Engelhard, I., Neeleman, R. C., Evenhuis, T., Lombaers, P., Weijdema, F., de Bruin, L., Grandfield, E. M., Teijema, J. J., Jalovec, E., Bron, M. P., Winter, S. D., van der Kuil, T., de Bruin, J., van de Schoot, R., & van Zuiden, M. (submitted). PTSD Symptom Trajectories in the Wake of Traumatic Events: a Systematic Review and Meta-Analysis of 20 Years of Research.
2. Padgett, R. N. & Winter, S. D. (submitted). Threshold priors in item factor analysis under DELTA and THETA parameterizations.
3. Watts, A. L., Winter, S. D., Bonifay, W., Poore, H., Brusco, M., Greene, A. L., Steinley, D., Sher, K. J., & Waldman, I. W. (revise & resubmit). Dismantling psychopathology's Holy Grail: Rethinking construct validity as support for the general factor of psychopathology

PAPERS IN PREPARATION

1. Bonifay, W., **Winter, S. D.**, Skoblow, H., Watts, A., & Greene, A. (in preparation). Strong Confirmation in Factor Analysis. [Analyses completed, first draft written.]
2. **Winter, S. D.**, Bonifay, W., & Watts, A. (in preparation). Prior Specification in Bayesian Estimation Affects a Model's Fitting Propensity. [Analyses completed, first draft written.]
3. **Winter, S. D.** & Wiedermann, W. (in preparation). A Bayesian Approach to Direction Dependence Analysis. [Analyses in progress.]
4. **Winter, S. D.**, Sinval, J., & Merkle, E. (in preparation). Comparing priors for estimating sparse ordinal indicators in Bayesian factor analyses. [Analyses completed, first draft written.]

PRESENTATIONS

* denotes presenter

Invited Presentations

1. **Winter, S. D.*** (2025, June). *The Shape of Good Fit*. Invited talk presented at the Quantitative Psychology Speaker Series at the University of California, Davis.
2. **Winter, S. D.*** & Akkaziev, J.* (2025, April). *Ask a former international graduate student: Navigating U.S. Higher Education*. Invited panel organized by the Center for Inclusive Excellence in Graduate Education, University of Missouri.
3. Andorra, A.* (Host), & **Winter, S. D.*** (Guest). (2024, June). Prior Sensitivity Analysis, Overfitting & Model Selection [Audio podcast episode 109]. In *Learning Bayesian Statistics*. Recording can be found here: [Podcast episode](#)
4. **Winter, S. D.*** (2023, December). *Teaching Bayesian Methods in Psychology*. Invited panel organized by the Section on Bayesian Education Research and Practice, International Society for Bayesian Analysis. A recording of this panel can be found here: [Zoom Recording](#)
5. **Winter, S. D.*** (2022, October). *Returning meaning to 'good fit': Constraining the bifactor model via Bayesian prior specification*. Invited talk presented at the Quantitative Psychology Speaker Series at the University of California, Davis.
6. **Winter, S. D.***, Bonifay, W., & Watts, A. (2022, September). *Prior Specification in Bayesian Estimation Affects a Model's Fitting Propensity*. Invited talk presented at the Quantitative Psychology seminar at the University of Missouri, Columbia, MO.
7. McCall, C* & **Winter, S. D.*** (2022, September). *Using intersectional research methods to examine intervention efficacy*. Invited roundtable Discussion presented at the Missouri Prevention Science Institute (MPSI) seminar.
8. **Winter, S. D.*** (2022, April). *Assessing prior-data disagreement in Bayesian SEM*. Invited webinar presented at Young Statisticians Europe (YSE). A recording of this webinar can be found here: <https://www.youtube.com/watch?v=Cuwhzd-8z4k>
9. **Winter, S. D.*** (2022, March). *Introduction to Bayesian Analysis*. Invited talk presented at the College of Education and Human Development Lunch Hour, University of Missouri, MO.
10. **Winter, S. D.*** (2021, November). *Basic Bayes*. Invited talk presented at the Missouri Prevention Science Institute (MPSI) seminar.

11. **Winter, S. D.*** (2021, October). *Exploring Three Methods for Detecting Prior-Data Disagreement in Bayesian SEM*. Invited talk presented at the Quantitative Psychology seminar at the University of Missouri, Columbia, MO.
12. **Winter, S. D.*** (2017, April). *Bayesian Approximate Measurement Invariance for Second-Order Latent Growth Models*. Invited talk presented at The University of California, Merced, CA.
13. Depaoli, S.* & **Winter, S. D.*** (2016, November). *A Systematic Review of Bayesian Papers in Psychology: The Last 25 Years*. Invited talk presented at The University of California, Merced Quantitative Psychology Colloquium, Merced, CA.

Invited Workshops

1. Bonifay, W.*, **Winter, S. D.***, & Keller, B.* (2025, April). *Comprehensive Statistical Model Evaluation: Traditional, Bayesian, and Information-theoretic Methods and User-friendly Software*. Workshop presented at the National Council on Measurement and Education (NCME) Conference, Denver, PA.
2. **Winter, S. D.*** (2022, March). *Creating Dynamic Reports from your Shiny App*. Invited talk presented at R-Ladies St. Louis. A recorded version of this webinar can be found here:
<https://www.youtube.com/watch?v=MvGAstDzLJk>
3. **Winter, S. D.***, and Smid, S. C.* (2020, July). *Dangers of Default Priors*. Invited post-conference workshop presented at S4, Utrecht, the Netherlands. (Conference canceled)
4. **Winter S. D.*** & Coburn, K.* (2019, April). *Creating an Interactive Shiny App to Share Your Research Findings*. One-day workshop presented at The University of California, Merced, CA.
doi:10.17605/OSF.IO/69J37.
5. **Winter S. D.*** (2015, June). *Statistics 101*. Workshop presented at DevOps Days Amsterdam, the Netherlands.

Conference Presentations

1. **Winter, S. D.*** & Khumalo, T. (2025, July). *Fitting propensity analysis in R*. In W. Bonifay (chair) and S. Student (discussant) *Advanced in the Evaluation of Statistical Model Complexity*. Talk presented at the International Meeting of the Psychometric Society (IMPS), Minneapolis, MN.
2. Padgett, N.*, & **Winter, S. D.** (2025, July). *Bayesian item factor analysis when indicator variables have skewed marginal distributions*. Talk presented at the International Meeting of the Psychometric Society (IMPS), Minneapolis, MN.
3. Sinval, J.*, **Winter, S. D.**, Kadane, J. B., & Merkle, E. C. (2025, July). *A priori distributions in Bayesian structural equation modeling: A scoping review protocol*. Talk presented at the International Meeting of the Psychometric Society (IMPS), Minneapolis, MN.
4. Merkle, E. C.*, **Winter, S. D.**, & Fitzsimmons, E. (2025, April). *Identifying Ordinal Factor Analysis Models via Integer Coding*. Talk presented at the National Council on Measurement and Education (NCME) Conference, Denver, PA.
5. **Winter, S. D.*** (2024, May). Evaluating Bayesian SEM Selection and Fit Indices in the Presence of Under- or over-Fitting. In H. Liu (chair) and S. Depaoli (discussant) *Model Fit Assessment of Bayesian Structural Equation Modeling*. Talk presented at the 36th APS Annual Convention, San Francisco, CA.
6. **Winter, S. D.***, Bonifay, W., Skoblow, H. & Watts, A. (2024, April). *Evaluating Model Replication Efforts Through Prior Predictive Similarity Checking*. Talk presented at the National Council on Measurement and Education (NCME) Conference, Philadelphia, PA.

7. Bonifay, W.*, **Winter, S. D.***, & Skoblow, H.* (2024, April). *Comprehensive Statistical Model Evaluation: Traditional, Bayesian, and Information-theoretic Methods and User-friendly Software*. Workshop presented at the National Council on Measurement and Education (NCME) Conference, Philadelphia, PA.
8. Sun, W.*, Ravert, R. D., & **Winter, S. D.** (2024, April). *Student-Athlete Well-being: Comparing Domestic and International Student Indicators*. Poster presented at the Midwestern Psychological Association (MPA) Annual Meeting, Chicago, IL.
9. **Winter, S. D.*** (2023, August). *Goodness-of-fit and Theory Corroboration Through Informative Prior Specifications*. In W. Bonifay (chair) *High Risk, High Reward: Methods for Rigorous Testing of Psychological Theories*. Talk presented at the American Psychological Association (APA) Convention, Washington, DC.
10. **Winter, S. D.*** & Bonifay, W. (2023, April). *Prior Specification in Bayesian Estimation Affects a Model's Fitting Propensity*. Talk presented at the National Council on Measurement and Education (NCME) Conference, Chicago, IL.
11. **Winter, S. D.***, Sinval, J., & Merkle, E. (2023, April). *Comparing Priors for Estimating Sparse Ordinal Indicators in Bayesian Factor Analyses*. Talk presented at the National Council on Measurement and Education (NCME) Conference, Chicago, IL.
12. Bonifay W.*, **Winter, S. D.**, & Watts, A. (2023, January). *Better than good fit: Methods for more insightful measurement model evaluations*. Talk presented at the Hawaii International Conference on Education (HICE), Honolulu, Hawaii.
13. **Winter, S. D.***, Bonifay, W., & Watts, A. (2022, July). *Bayesian prior specification and model fitting propensity*. Talk presented at the International Meeting of the Psychometric Society (IMPS), Bologna, Italy.
14. McCall, C* & **Winter, S. D.*** (2022, July). *Using intersectional research methods to examine intervention efficacy*. Roundtable Discussion presented at the Annual Conference of the International School Psychology Association (ISPA), Leuven, Belgium.
15. **Winter, S. D.*** & Depaoli, S. (2022, April). *Detecting Misspecification in Latent Growth Models with Bayesian Fit Indices*. E-board presented at the National Council on Measurement and Education (NCME) Conference, San Diego, CA.
16. **Winter, S. D.*** & Depaoli, S. (2021, July). *Detecting Misspecification in Latent Growth Models with Bayesian Fit Indices*. Talk presented at the International Meeting of the Psychometric Society (IMPS).
17. **Winter, S. D.*** & Depaoli, S. (2021, May). *Classification and Estimation Accuracy of Growth Mixture Models with Class-Predicting Covariates: Frequentist and Bayesian Approaches*. Poster presented at the APS Virtual Convention.
18. Arroyo, A. C.*, **Winter, S. D.**, Depaoli S., & Zawadski, M. (2019, May). *Psychosocial Traits and Academic Performance: First- and Continuing-generation College Students*. Poster presented at the 31st APS Annual Convention, Washington, DC.
19. Smid, S. D.* & **Winter, S. D.** (2019, May). *The Impact of Default Priors in Bayesian SEM with Small Samples*. In R. van de Schoot (chair) *Risks of Default Priors in Bayesian Structural Equation Models with Small Samples and Two Approaches on How to Avoid Those Risks*. Talk presented at the 31st APS Annual Convention, Washington, DC.
20. **Winter, S. D.*** & Smid, S. (2019, May). *Demonstration of an Online Educational Application on Bayesian Default Priors*. In R. van de Schoot (chair) *Risks of Default Priors in Bayesian Structural*

Equation Models with Small Samples and Two Approaches on How to Avoid Those Risks. Talk presented at the 31st APS Annual Convention, Washington, DC.

21. **Winter, S. D.*** & Lek, K. M. (2018, July). *Bayesian Approximate Measurement Invariance: For Those Times When You Have Too Little or Too Much Data.* Talk presented at VIII European Congress of Methodology, Jena, Germany.
22. **Winter, S. D.*** & Depaoli S. (2018, May). *Measurement Invariance for Second-Order Latent Growth Models: Frequentist and Bayesian Approaches.* Poster presented at the 30th APS Annual Convention, San Francisco, CA.
23. **Winter, S. D.*** & Depaoli S. (2017, March). *Bayesian Approximate Measurement Invariance As A Viable Alternative to Frequentist Methods.* Poster presented at The University of California, Merced Psychology Symposium, Merced, CA.

TEACHING EXPERIENCE

Student Advising

Doctoral Advisor: Tive Khumalo.

Dissertation Committee Member: Chun-An Liu, Tenzin Phenthok, Wenting Sun, John Elmer (2025), Xiuhan Chen (2025), Ishtehar Sharif (2025), Tayla Stephens (2024).

Master's Thesis Committee Member: Mackenzie Bryant, Megan Liew, Irakli Matcharashvili (2025), Tive Khumalo (2024).

Instructor of Record

ESC PS 8082: Foundations of Educational & Psychological Measurement	Fall 2023-2024
ESC PS 8082: Foundations of Educational & Psychological Measurement – Online	Fall 2025-Spring 2026
ESC PS 8087: Introduction to Bayesian Statistics	Fall 2025
ESC PS 9710: Structural Equation Modeling	Spring 2023-2026

Guest Lectures

ESC PS 8850: Quantitative Foundations in Educational Research - Logistic Regression	Fall 2023
ESC PS 8655: Item Response Theory - Estimating Person Parameters	Spring 2022

PSY 202B: Advanced Psychological Statistics II - Introduction to <i>Mplus</i>	Spring 2021
PSY 202B: Advanced Psychological Statistics II - Multilevel modeling with <i>Mplus</i>	Spring 2021
PSY 010: Analysis of Psychological Data - One-Sample <i>t</i> -test	Spring 2019
PSY 010: Analysis of Psychological Data - One-way ANOVA	Spring 2019
PSY 010: Analysis of Psychological Data - Independent Samples <i>z</i> -test	Fall 2017

Graduate Teaching Assistant

PSY 202B: Advanced Psychological Statistics II, graduate level Psychology course	Spring 2021
PSY 202A: Advanced Psychological Statistics I, graduate level Psychology course	Fall 2019, 2020
PSY 105: Advanced Research Methods in Psychology	Spring 2017
PSY 010: Analysis of Psychological Data	Fall 2017, 2018, Spring 2019
PSY 015: Research Methods in Psychology	Fall 2016, Spring 2018, 2020

Laboratory Instructor

PSY 010L: Analysis of Psychological Data	Fall 2017, 2018, Spring 2019
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SERVICE

International & National

Member, Membership Committee, Psychometric Society,	2025-
Editorial Board Member, Multivariate Behavioral Research,	2025-
Editorial Board Member, School Psychology Review,	2025-
Ad Hoc Reviewer, National Science Foundation (NSF), CAREER	2024
Reviewer, American Psychiatric Association (APA) Division 5 Poster Submissions	2023
Organizer, Symposium: Estimating PTSD Trajectories, Utrecht, The Netherlands	2015

University & Department

Member, Outstanding Teaching Faculty Awards Committee	2024
Statistical Consultant, Missouri Prevention Science Institute	2021-2022
Moderator, program Twitter account: @UCM_QuantPsych (300+ followers)	2018-2021
Mentor, GradEXCEL Peer Mentor Program, Graduate Division	2019-2020
Member, Graduate Student Survey Committee for Graduate Program Review	2018
Student Representative, Quantitative Psychology Open-Rank Job Search Committee	2018

Public Scholarship and Media Engagement

Interviewed for "The Missouri Assessment Program might gain a fifth category," May, 2025
KBIA, National Public Radio member-station

Ad Hoc Reviewer

Journals	<i>Psychological Methods, Structural Equation Modeling: A Multidisciplinary Journal, Psychometrika, Behavior Research Methods, British Journal of Mathematical and Statistical Psychology, Educational and Psychological Measurement, European Journal of Psychological Assessment, Communications in Statistics - Simulation and Computation, AERA Open, The European Journal of Psychotraumatology</i> (special issue on Bayesian Statistics), <i>Journal of Media Psychology, Prevention Science.</i>
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FELLOWSHIPS & AWARDS

University of Missouri

Nentwig Faculty Excellence Award, College of Education and Human Development	2025
Scholarship for National Center for Faculty Development and Diversity's Faculty Success Program	2024
Office of the Provost and Division of Inclusion, Diversity, & Equity	

University of California, Merced

Will Shadish Graduate Student Fellowship (for research and teaching excellence)	2020
Psychological Sciences Outstanding Graduate Student	2020-2021
Psychological Sciences Research Support Award	2020
Psychological Sciences William R. Shadish Award for Leadership and Service	2019-2020
Psychological Sciences Research Dissemination Award	2018-2021
Psychological Sciences Jennifer Mendiola Travel Award	2018
Psychological Sciences Summer Support Fellowship	2017-2021
Psychological Sciences Graduate Group Recruitment Fellowship	2016
Graduate Student Association Travel Award	2018

Society of Multivariate Experimental Psychology (SMEP)

Dissertation Research Award	2021
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Journals

Article of the Year Award: Communication Methods and Measures Journal, for: 2015
Possible solution to publication bias through bayesian statistics, including proper null hypothesis testing.

PROFESSIONAL DEVELOPMENT

Missouri Prevention Science Institute (Dr. Chynna McCall), Equitable Endeavor for Everyone	2021-2022
A Meeting of Methodologies: Advancing Methods Development, Application, and Teaching in Psychology, the Behavioural, and Social Sciences	2020
The Center for Engaged Teaching and Learning, UC Merced, three-part seminar on remote instruction	2020
Professional Seminar on Teaching, UC Merced, a semester-long course on evidence-based teaching strategies, developing a syllabus, and effective communication	2018
The Center for Engaged Teaching and Learning, UC Merced, Fundamentals for TAs in Higher Education Certificate	2018
Women in Analytics Conference, Facebook HQ, one of 300 attendees out of 1500 applicants	2018

PROFESSIONAL AFFILIATIONS

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- American Psychological Association (APA)
 - Association for Psychological Science (APS)
 - International Society for Bayesian Analysis (ISBA)
 - National Council on Measurement in Education (NCME)
 - Psychometric Society

SKILLS

Languages	Dutch, English
Software	R, Mplus, BUGS/JAGS, Stan, HLM, SPSS, Git, Qualtrics
Coding	R, Python, HTML, css, L ^A T _E X, Markdown
Select Statistics	Bayesian methods, Structural Equation Modeling, Item Response Theory, Multi-level Modeling, Measurement and Measurement Invariance, Finite Mixture Modeling, Longitudinal Data Analysis