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DANIEL MCNEISH

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ACADEMIC POSITIONS

Aug 2023 – Full Professor (with tenure)

Aug 2020 – July 2023 Associate Professor (with tenure)

Aug 2017 – July 2020 Assistant Professor

Department of Psychology, Quantitative Area

Arizona State University, USA

Aug 2017 – June 2019 Faculty Affiliate

Sept 2016 – July 2017 Research Scientist

Center for Developmental Science

University of North Carolina, Chapel Hill, USA

Supervisors: Daniel Bauer, Patrick Curran, Andrea Hussong

Jan 2016 – Aug 2016 Assistant Professor (permanent position)

Department of Methodology and Statistics

Utrecht University, the Netherlands

EDUCATION

Aug 2013 – Dec 2015 Ph.D., Measurement & Statistics

University of Maryland, College Park, USA

Advisor: Gregory Hancock

Aug 2011 – May 2013 M.A., Measurement & Statistics

University of Maryland, College Park, USA

Advisor: Robert Lissitz

Aug 2009 – May 2011 B.A., Psychology

Wesleyan University, USA Mentor: Steven Stemler

ONE-PAGE SUMMARY

Research

- Total Publications = 120
- Peer-Reviewed Journal Articles = 104
 - 76 methodological, 28 substantive
 - 65 first-authored articles (63%)
 - 28 sole-authored articles (27%)
- Submitted manuscripts = 13 (5 under revision, 8 under first review)
- 14 articles in *Psychological Methods*
 - 12 as first author, most first-author papers since the journal's inception in 1996
- 13 articles in Multivariate Behavioral Research
 - 12 as first author, 3rd most first-author papers since the journal's inception in 1966
- 15 federally funded grants and contracts at ASU, 3 as Principal Investigator
- 6 early career research awards, 1 elected society membership
- Highly Cited Researcher in Psychiatry/Psychology (2022, 2023, 2024), ISI/Web of Science
- 8th most research impact within Social Science Methods in 2023 (top 0.25%) Stanford/Elsevier
 - 1st in USA for researchers in any field whose first publication is in or after 2014
- 98th percentile in age-adjusted h-index, citations, and number of papers, <u>Scholar Analytics</u>
- 9th most productive early career educational psychologist as ranked in Fong et al (2022)
- Google Scholar Citations = 11480, h-index = 40, i-10 index = 84
- Scopus Citations = 6934, h-index = 31

Teaching & Mentoring

- 19 sections of 9 courses taught
 - Graduate = 10 sections, 4 courses
 - Undergraduate = 9 sections, 5 courses
 - At ASU, 13 sections of 5 courses total
- Average ASU graduate course rating = 1.0 / 5.0 (lower is better at ASU)
- Average ASU undergraduate course rating = 1.2 / 5.0 (lower is better at ASU)
- 2 completed PhD advisees
- 2 completed postdocs
- 1 current PhD advisee
- 46 graduate student milestone committees

Service

- 2 associate editorships
 - Multivariate Behavioral Research, Behavior Research Methods
- 4 editorial board memberships
 - Psychological Methods, Organizational Research Methods, Behavior Research Methods, Multivariate Applications book series
- Ad hoc reviewer at 55 journals

AWARDS & RECOGNITION

International 2024 Early Career Impact Award Federation of Associations in Brain and Behavioral Sciences 2023 Distinguished Scientific Award for Early Career Contributions American Psychological Association 2022 - 2024 Highly Cited Researcher in Psychiatry/Psychology (top 1% of citations) ISI/Web of Science 2020 Early Career Research Award Society for Multivariate Experimental Psychology 2019 Anne Anastasi Early Career Contributions Award American Psychological Association, Division 5 (Quant & Qual Methods) 2019 Early Career Award for Statistics (given every 3 years) American Educational Research Association, Division D (Methodology) 2018 Rising Star Early Career Award Association for Psychological Science 2018 Elected Member (limited to 65 active members worldwide) Society for Multivariate Experimental Psychology 2018 Anne Anastasi Dissertation Award American Psychological Association, Division 5 (Quant & Qual Methods) **Publications** 2024 Commendation Award, Society for Improving Psychological Science 2023 Editor's Choice Paper Selection, Psychological Methods 2021 Tanaka Award for outstanding paper, Multivariate Behavioral Research 2017 Best Paper Prize runner-up, Journal of Applied Statistics **Invited Keynotes** 14th International Conference on Multilevel Analysis, the Netherlands 2024 Title: Measurement in Intensive Longitudinal Data 2022 Small Sample Size Solutions Conference, the Netherlands Title: Mixture Models for Longitudinal Data with Small Samples Institutional 2016 Outstanding Dissertation, University of Maryland 2015 Outstanding Doctoral Student, University of Maryland 2013 Outstanding Master's Student, University of Maryland 2011 Walkley Prize for Excellence in Psychology, Wesleyan University 2011 Dean's List, Wesleyan University

EDITORIAL POSITIONS

2022-2024	Associate Editor, Behavior Research Methods
2020-2021	Consulting Editor, Behavior Research Methods
	Impact Factor: 4.6, ranked 1 / 13 in Mathematical Psychology
2020-	Associate Editor, Multivariate Behavioral Research
2022-	Section Editor for Software Contributions, Multivariate Behavioral Research
	Impact Factor: 5.3, ranked 4 / 115 in Statistics & Probability
2020-	Consulting Editor, Psychological Methods
	Impact Factor: 7.6, ranked 10 / 140 in Multidisciplinary Psychology
2020-	Editorial Board, Multivariate Applications Book Series (Routledge)
2017-	Editorial Board, Organizational Research Methods
	Impact Factor: 8.9, ranked 6/112 in Applied Psychology

PUBLICATIONS

Underline indicates mentored student or post-doc author 2-year impact factors are from year of publication

In Press
$$(n = 8)$$

1. **McNeish, D.** (in press). Dynamic fit index cutoffs for treating Likert items as continuous. *Psychological Methods*.

Impact Factor: 10.9 [2022 Journal Citation Reports® (Thomson Reuters, 2023)]

2. **McNeish, D.** (in press). A practical guide to selecting (and blending) approaches for clustered data: Clustered errors, multilevel models, and fixed effect models. *Psychological Methods*.

Impact Factor: 10.9 [2022 Journal Citation Reports® (Thomson Reuters, 2023)]

3. **McNeish, D.** & Mackinnon, D.P. (in press). Intensive longitudinal mediation in Mplus. *Psychological Methods*.

Impact Factor: 10.9 [2022 Journal Citation Reports® (Thomson Reuters, 2023)]

- 4. **McNeish, D.** & Matta, T.H. (in press). SRMR for models with covariates. *Psychometrika*. Impact Factor: 2.9 [2022 Journal Citation Reports® (Thomson Reuters, 2023)]
- 5. Levy, R. & **McNeish, D.** (in press). Measurement and uncertainty preserving parametric modeling for continuous latent variables with discrete indicators and external variables. *Journal of Educational and Behavioral Statistics*.

Impact Factor: 2.4 [2022 Journal Citation Reports® (Thomson Reuters, 2023)]

6. <u>Liu, X.</u> & **McNeish, D.** (in press). Optimal number of replications for obtaining stable dynamic fit index cutoffs. *Educational and Psychological Measurement*.

7. Oesterle, S., **McNeish, D.**, Guttmannova, K., Skinner, M., Kuklinksi, M.R., & Hawkins, J.D. (in press). Young adults' cannabis environments and their cannabis use and misuse. *Journal of the Society for Social Work and Research*.

Impact Factor: 1.9 [2022 Journal Citation Reports® (Thomson Reuters, 2023)]

8. Ahn, L.H., Kivlighan, D.M., Hill, C.E., & **McNeish**, **D.** (in press). Dyadic working alliance, therapist insight skills, and client outcomes longitudinal mediation analyses. *Psychotherapy*. Impact Factor: 2.6 [2022 Journal Citation Reports® (Thomson Reuters, 2023)]

$$2024 (n = 5)$$

9. **McNeish, D.**, Dumas, D., <u>Dong, Y.</u>, & Duellberg, D. (2024). Promoting inclusive recruiting & selection into military training schools: Admission waivers vs. retesting. *Journal of Applied Psychology*, 109 (3), 415-436.

Impact Factor: 11.8 [2022 Journal Citation Reports® (Thomson Reuters, 2023)]

- 10. **McNeish, D.** & <u>Wolf, M.G.</u> (2024). Direct discrepancy dynamic fit index cutoffs for arbitrary covariance structure models. *Structural Equation Modeling*, *31* (5), 835-862. Impact Factor: 6.2 [2022 Journal Citation Reports® (Thomson Reuters, 2023)]
- 11. **McNeish, D.** & <u>Manapat, P.D.</u> (2024). Dynamic fit index cutoffs for hierarchical and second-order factor models. *Structural Equation Modeling, 31* (1), 27-47.

 Impact Factor: 6.2 [2022 Journal Citation Reports® (Thomson Reuters, 2023)]
- 12. **McNeish, D.,** Somers, J.A., & <u>Savord, A.</u> (2024). Dynamic structural equation models with binary and ordinal outcomes in Mplus. *Behavior Research Methods*, *56* (3), 1506-1532. Impact Factor: 5.4 [2022 Journal Citation Reports® (Thomson Reuters, 2023)]
- 13. **McNeish, D.** (2024). Practical implications of sum scores being psychometrics' greatest accomplishment. *Psychometrika*, 89 (4), 1148-1169.

Impact Factor: 2.9 [2022 Journal Citation Reports® (Thomson Reuters, 2023)]

$$2023 (n = 16)$$

14. **McNeish**, **D.** (2023). Dynamic fit index cutoffs for factor analysis with Likert-type, ordinal, or binary responses. *American Psychologist*, 79 (9), 1061-1075.

Impact Factor: 16.4 [2022 Journal Citation Reports® (Thomson Reuters, 2023)

15. **McNeish, D.** & Wolf, M.G. (2023). Dynamic fit index cutoffs for confirmatory factor analysis models. *Psychological Methods*, 28 (1), 61-88.

** Paper received Commendation Award from Society for Improving Psychological Science

Impact Factor: 10.9 [2022 Journal Citation Reports® (Thomson Reuters, 2023)]

- 16. **McNeish, D.**, Bauer, D.J., Dumas, D., Clements, D.H., Cohen, J.R., Lin, W., Sarama, J., & Sheridan, M.A. (2023). Modeling individual differences in the timing of change onset and offset. *Psychological Methods*, 28 (2), 401-421.
 - **Paper selected as an <u>APA Editor's Choice Selection</u>

 Impact Factor: 10.9 [2022 Journal Citation Reports® (Thomson Reuters, 2023)]
- 17. **McNeish, D.**, Harring, J.R., & Bauer, D.J. (2023). Nonconvergence, covariance constraints, and class enumeration in growth mixture models. *Psychological Methods*, 28 (4), 962-992. Impact Factor: 10.9 [2022 Journal Citation Reports® (Thomson Reuters, 2022)]
- 18. **McNeish, D.** & Wolf, M.G. (2023). Dynamic fit cutoffs for one-factor models. *Behavior Research Methods*, 55 (3), 1157-1174.

 Impact Factor: 6.0 [2022 Journal Citation Reports® (Thomson Reuters, 2023)]
- 19. **McNeish, D.** (2023). Psychometric properties of sum scores and factor scores differ even when their correlation is 0.98: A response to Widaman and Revelle. *Behavior Research Methods*, 55 (8), 4269-4290.

Impact Factor: 6.0 [2022 Journal Citation Reports® (Thomson Reuters, 2023)]

20. **McNeish, D.**, <u>Peña, A.</u>, Vander Wyst, K.B., Ayers, S.L., Olson, M.L., & Shaibi, G.Q. (2023). Facilitating growth mixture model convergence in preventive interventions. *Prevention Science*, 24 (3), 505-516. [invited special issue contribution].

Impact Factor: 3.9 [2022 Journal Citation Reports® (Thomson Reuters, 2023)]

21. **McNeish, D.** (2023). Generalizability of dynamic fit index, equivalence testing, and Hu & Bentler cutoffs for evaluating fit in factor analysis. *Multivariate Behavioral Research*, 58 (1), 195-219. [invited early career award address]

Impact Factor: 3.1 [2022 Journal Citation Reports® (Thomson Reuters, 2023)]

22. **McNeish, D.**, Harring, J.R., & Dumas, D. (2023). A multilevel structured latent curve model for disaggregating student and school contributions to learning. *Statistical Methods & Applications*, 32, 545-575.

Impact Factor: 1.2 [2022 Journal Citation Reports® (Thomson Reuters, 2023)]

- 23. Levy, R. & **McNeish**, **D**. (2023). Alternative perspectives on Bayesian inference and their implications for data analysis. *Psychological Methods*, *28* (3), 719-739. Impact Factor: 10.9 [2022 Journal Citation Reports® (Thomson Reuters, 2023)]
- 24. <u>Savord, A.</u>, **McNeish, D.**, Iida, M., <u>Quiroz, S.</u>, & Ha, T. (2023). Fitting the longitudinal actor-partner interdependence model as a dynamic structural equation model. *Structural Equation Modeling*, *30* (2), 296-314.

- 25. Wolf, M.G. & McNeish, D. (2023). dynamic: An R package for deriving dynamic fit index cutoffs for factor analysis. *Multivariate Behavioral Research*, 58 (1), 189-194. Impact Factor: 3.1 [2022 Journal Citation Reports® (Thomson Reuters, 2023)]
- 26. Dumas, D., <u>Dong, Y.</u>, & **McNeish, D.** (2023). How fair is my test?: A ratio coefficient to help represent consequential validity. *European Journal of Psychological Assessment*, 39 (6), 416-423.

Impact Factor: 2.9 [2022 Journal Citation Reports® (Thomson Reuters, 2023)]

27. <u>Pandika</u>, D., Guttmannova, K., Skinner, M.L., Sanchez-Rodriguez, M., **McNeish**, **D.**, Morales, L.S., & Oesterle, S. (2023). Tobacco use patterns from adolescence to young adulthood among Latinx youth from rural communities. *Journal of Adolescent Health*, 73 (4), 761-768.

Impact Factor: 7.6 [2022 Journal Citation Reports® (Thomson Reuters, 2023)]

- 28. Perez, M., Winstone, L.K., Hernandez, J.C., Curci, S.G., McNeish, D., & Luecken, L.J. (2023). Association of BMI trajectories with cardiometabolic risk at age 7.5 years among low-income Mexican American children. *Pediatric Research*, 93 (5), 1233-1238. Impact Factor: 3.6 [2022 Journal Citation Reports® (Thomson Reuters, 2023)]
- 29. English, D., Smith, J.C., Scott-Walker, L., Lopez, F.G., Morris, M., Reid, M., ... **McNeish, D.** (2023). Feasibility, acceptability, and preliminary HIV Care and psychological health effects of THRIVE 365. *JAIDS: Journal of Acquired Immunodeficiency Syndrome*, 93 (1), 55-63.

Impact Factor: 3.8 [2022 Journal Citation Reports® (Thomson Reuters, 2023)]

$$2022 (n = 8)$$

- 30. **McNeish, D.** & Bauer, D.J. (2022). Reducing incidence of nonpositive definite covariance matrices in mixed effect models. *Multivariate Behavioral Research*, *57* (2-3), 318-340. Impact Factor: 5.4 [2021 Journal Citation Reports® (Thomson Reuters, 2022)]
- 31. **McNeish, D.** (2022). Limitations of the sum-and-alpha approach to measurement in behavioral research. *Policy Insights from the Brain and Behavioral Sciences*, 9 (2), 196-203. [invited paper]

Impact Factor: 3.9 [2021 CiteScore (Scopus, 2022)]

32. **McNeish, D.**, Dumas, D., Torre, D., & Rice, N. (2022). Modelling time to maximum competency in medical student progress tests. *Journal of the Royal Statistical Society, Series A*, 185 (4), 2007-2034.

Impact Factor: 2.2 [2021 Journal Citation Reports® (Thomson Reuters, 2022)]

- 33. Somers, J.A., Luecken, L.J., **McNeish, D.,** Lemery-Chalfant, K., & Spinrad, T.L. (2022). Second-by-second infant and mother emotion regulation and coregulation processes. *Development & Psychopathology, 34* (5), 1887-1900.

 Impact Factor: 4.2 [2021 Journal Citation Reports® (Thomson Reuters, 2022)]
- 34. <u>Blake, A.J.</u>, **McNeish, D.**, & Chassin, L. (2022). The influence of parent-child separation on young-adult substance use disorder: Measurement and moderation as sources of heterogeneity. *Journal of Family Psychology*, *36* (2), 159-169.

 Impact Factor: 3.3 [2021 Journal Citation Reports® (Thomson Reuters, 2022)]
- 35. Roberts, G.J., Dumas, D., **McNeish, D.**, & Cote, B. (2022). Understanding the dynamics of reading intervention dosage response: A nonlinear meta-analysis. *Review of Educational Research*, 92 (2), 209-248.

Impact Factor: 13.6 [2021 Journal Citation Reports® (Thomson Reuters, 2022)]

36. <u>Aitken, A.A.</u>, Graham, S., & **McNeish, D.** (2022). The effects of choice vs preference on writing and the mediating role of perceived competence. *Journal of Educational Psychology*, *114* (8), 1844-1865.

Impact Factor: 6.7 [2021 Journal Citation Reports® (Thomson Reuters, 2022)]

37. Cole, V.T., Hussong, A.M., **McNeish, D.**, Ennett, S.T., <u>Rothenberg, W.A.</u>, Gottfredson, N.C., & Faris, R.W. (2022). The self-medication pathway to smoking for adolescents: interactions between depressive symptoms, coping motives for smoking, and social standing. *Journal of Studies on Alcohol and Drugs*, 83, 420-429.

Impact Factor: 2.6 [2021 Journal Citation Reports® (Thomson Reuters, 2022)]

2021
$$(n = 5)$$

38. **McNeish, D.** (2021). Location-scale models for heterogeneous variances as multilevel SEMs. Organizational Research Methods, 24, 630-653.

Impact Factor: 9.4 [2020 Journal Citation Reports® (Thomson Reuters, 2021)]

- 39. **McNeish, D.**, Mackinnon, D.P., Marsch, L.A., & Poldrack, R.A. (2021). Measurement in intensive longitudinal data. *Structural Equation Modeling*, 28, 807-822. Impact Factor: 6.2 [2020 Journal Citation Reports® (Thomson Reuters, 2021)]
- 40. **McNeish, D.** & Harring, J.R. (2021). Improving convergence in growth mixture models without covariance structure constraints. *Statistical Methods in Medical Research*, *30*, 994-1012.

Impact Factor: 3.0 [2020 Journal Citation Reports® (Thomson Reuters, 2021)]

- 41. **McNeish, D**. & Dumas, D. (2021). A seasonal dynamic measurement model for summer learning loss. *Journal of the Royal Statistical Society, Series A, 184*, 616-642. Impact Factor: 2.5 [2020 Journal Citation Reports® (Thomson Reuters, 2021)]
- 42. Silverman, R.D., **McNeish, D.**, Ritchey, K.D., & Speece, D.L. (2021). Early screening for decoding and language-related reading difficulties in 1st and 3rd grade. *Assessment for Effective Intervention*, 46, 99-109.

Impact Factor: 2.0 [2019 CiteScore (Scopus, 2020)]

2020
$$(n = 12)$$

- 43. **McNeish, D.** & Hamaker, E.L. (2020). A primer on two-level dynamic structural equation modeling for intensive longitudinal data in Mplus. *Psychological Methods*, 25, 610-635. Impact Factor: 8.4 [2019 Journal Citation Reports® (Thomson Reuters, 2020)]
- 44. **McNeish, D.** & Wolf, M.G. (2020). Thinking twice about sum scores. *Behavior Research Methods*, 52, 2287-2305.

Impact Factor: 4.4 [2019 Journal Citation Reports® (Thomson Reuters, 2020)]

45. **McNeish, D.** & Harring, J.R. (2020). Covariance pattern mixture models: Eliminating random effects to improve convergence and performance. *Behavior Research Methods*, *52*, 947-979.

Impact Factor: 4.4 [2019 Journal Citation Reports® (Thomson Reuters, 2020)]

46. **McNeish, D.** & Matta, T.H. (2020). Flexible treatment of time-varying covariates with time unstructured data. *Structural Equation Modeling*, 27, 298-317.

Impact Factor: 3.6 [2019 Journal Citation Reports® (Thomson Reuters, 2020)]

- 47. **McNeish, D.**, Dumas, D.G., & Grimm, K.J. (2020). Estimating new quantities from longitudinal test scores to improve forecasts of future performance. *Multivariate Behavioral Research*, *55*, 894-909.
 - ** Paper won <u>Tanaka Award</u> for best paper published in MBR in 2020 Impact Factor: 2.8 [2019 Journal Citation Reports® (Thomson Reuters, 2020)]
- 48. **McNeish, D.** (2020). Should we use F-tests for model fit instead of chi-square in over-identified structural equation models?. *Organizational Research Methods*, 23, 487-510. Impact Factor: 5.7 [2019 Journal Citation Reports® (Thomson Reuters, 2020)]
- 49. **McNeish**, **D.** (2020). Relaxing the proportionality assumption in latent basis models for nonlinear growth. *Structural Equation Modeling*, 27, 817-824.

Impact Factor: 3.6 [2019 Journal Citation Reports® (Thomson Reuters, 2020)]

50. Dumas, D.G., **McNeish, D.**, & Greene, J.A. (2020). Dynamic measurement: A theoretical-psychometric paradigm for modern educational psychology. *Educational Psychologist*, 55, 88-105.

Impact Factor: 4.5 [2019 Journal Citation Reports® (Thomson Reuters, 2020)]

51. <u>Smid, S.C.</u>, **McNeish, D.**, Miočević, M., & van de Schoot, A.G.J. (2020). Bayesian versus frequentist estimation for structural equation models in small sample contexts: A systematic review. *Structural Equation Modeling*, 27, 131-161.

Impact Factor: 3.6 [2019 Journal Citation Reports® (Thomson Reuters, 2020)]

52. <u>Peña, A.</u>, **McNeish, D.**, Ayers, S.L., Olson, M.L., Vander Wyst, K.B., Williams, A.N., & Shaibi, G.Q. (2020). Response heterogeneity to lifestyle intervention among Latino adolescents. *Pediatric Diabetes*, *21*, 1430-1436.

Impact Factor: 3.1 [2019 Journal Citation Reports® (Thomson Reuters, 2020)]

- 53. Hussong, A.M., Ennett, S.T., **McNeish, D.**, <u>Cole, V.</u>, Gottfredson, N., <u>Rothenberg, W.A.</u>, & Farris, R.J. (2020). Social network interactions as mediators of depression-substance use associations across adolescence. *Development and Psychopathology*, *32*, 615-630. Impact Factor: 3.4 [2019 Journal Citation Reports® (Thomson Reuters, 2020)]
- 54. Somers, J.A., Kerr, M.L., **McNeish, D.**, Smiley, P.A., Buttitta, K.V., Rasmussen, H.F., & Borelli, J.L. (2020). Quantitatively representing real-time emotion dynamics: attachment-based differences in mothers' emotion. *Journal of Family Psychology*, *34*, 480-489. Impact Factor: 1.8 [2019 Journal Citation Reports® (Thomson Reuters, 2020)]

2019
$$(n = 9)$$

55. **McNeish, D.** (2019). Poisson multilevel models with small samples. *Multivariate Behavioral Research*, *54*, 444-455.

Impact Factor: 2.1 [2018 Journal Citation Reports® (Thomson Reuters, 2019)]

56. **McNeish, D.** (2019). Effect partitioning in cross-sectionally clustered data without multilevel models. *Multivariate Behavioral Research*, *54*, 906-925.

Impact Factor: 2.1 [2019 Journal Citation Reports® (Thomson Reuters, 2020)]

57. **McNeish, D.** & Kelley, K. (2019). Fixed effects models versus mixed effects models for clustered data: Reviewing the approaches, disentangling the differences, and making recommendations. *Psychological Methods*, 24, 20-35.

Impact Factor: 8.2 [2018 Journal Citation Reports® (Thomson Reuters, 2019)]

58. **McNeish, D.** (2019). Two-level dynamic structural equation models with small samples. *Structural Equation Modeling*, *26*, 948-966.

Impact Factor: 4.4 [2018 Journal Citation Reports® (Thomson Reuters, 2019)]

59. **McNeish, D.** & Dumas, D.G. (2019). Scoring repeated standardized tests to estimate capacity, not just current ability. *Policy Insights from the Brain and Behavioral Sciences*, 6, 218-224. [Invited Paper].

Impact Factor: 2.5 [2017 CiteScore (Scopus, 2018)]

60. Dumas, D., **McNeish**, **D.**, Schreiber-Gregory, D., Durning, S.J., & Torre, D.M. (2019). Dynamic measurement in health professions education: Rationale, application, and possibilities. *Academic Medicine*, *94*, 1323-1398.

Impact Factor: 4.9 [2018 Journal Citation Reports® (Thomson Reuters, 2019)]

61. Dumas, D.G., **McNeish, D.**, Sarama, J., & Clements, D. (2019). Pre-school mathematics intervention can significantly improve student learning trajectories through elementary school. *AERA Open*, *5* (4), 1-15.

Impact Factor: 1.9 [2018 Journal Citation Reports® (Thomson Reuters, 2020)]

62. Silverman, R.D., Artzi, L., **McNeish, D**., Hartranft, A., Martin-Beltran, M., & Peercy, M. (2019). The relationship between media type and vocabulary learning in a cross age peerlearning program for linguistically diverse elementary school students. *Contemporary Educational Psychology*, *56*, 106-116.

Impact Factor: 2.5 [2018 Journal Citation Reports® (Thomson Reuters, 2019)]

63. Wentzel, K., Tomback, R., Williams, A., & McNeish, D. (2019). Perceptions of competence, control, and belongingness over the transition to high school: A mixed-method study. *Contemporary Educational Psychology*, *56*, 55-66.

Impact Factor: 2.5 [2018 Journal Citation Reports® (Thomson Reuters, 2019)]

2018
$$(n = 10)$$

64. **McNeish, D.** (2018). Thanks coefficient alpha, we'll take it from here. *Psychological Methods*, 23, 412-433.

Impact Factor: 6.5 [2017 Journal Citation Reports® (Thomson Reuters, 2018)]

65. **McNeish, D.** & Hancock, G.R. (2018). The effect of measurement quality on targeted structural model fit indices: A comment on Lance, Beck, Fan, and Carter (2016). *Psychological Methods*, *23*, 184-190.

Impact Factor: 6.5 [2017 Journal Citation Reports® (Thomson Reuters, 2018)]

66. **McNeish, D.,** <u>An, J.,</u> & Hancock, G.R. (2018). The thorny relation between measurement quality and fit index cut-offs in latent variable models. *Journal of Personality Assessment,* 100, 43-52.

Impact Factor: 2.3 [2017 Journal Citation Reports® (Thomson Reuters, 2018)]

- 67. **McNeish, D.** & Matta, T. (2018). Differentiating between mixed effects and latent curve approaches to growth modeling. *Behavior Research Methods*, *50*, 1398-1414. Impact Factor: 3.6 [2017 Journal Citation Reports® (Thomson Reuters, 2018)]
- 68. **McNeish, D.** & Dumas, D.G. (2018). Calculating conditional reliability for dynamic measurement model capacity estimates. *Journal of Educational Measurement*, *55*, 614-634. Impact Factor: 0.9 [2017 Journal Citation Reports® (Thomson Reuters, 2018)]
- 69. **McNeish, D.** (2018). Growth models with small samples and missing data. *Journal of Experimental Education*, 86, 690-701.

Impact Factor: 1.9 [2017 Journal Citation Reports® (Thomson Reuters, 2018)]

70. **McNeish, D.** (2018). Approximating item difficulty with the Kaplan-Meier estimator. *Journal of Experimental Education*, 86, 308-324.

Impact Factor: 1.9 [2017 Journal Citation Reports® (Thomson Reuters, 2018)]

- 71. Dumas, D.G. & **McNeish, D.** (2018). Increasing the consequential validity of reading assessment using dynamic measurement modeling. *Educational Researcher*, 47, 612-614. Impact Factor: 4.0 [2017 Journal Citation Reports® (Thomson Reuters, 2018)]
- 72. Wentzel, K., Muenks, K.M., **McNeish, D.**, & Russell, S. (2018). Emotional support, social goals, and classroom behavior: A multi-level multi-site study. *Journal of Educational Psychology*, *110*, 611-627.

Impact Factor: 4.4 [2017 Journal Citation Reports® (Thomson Reuters, 2018)]

73. Hussong, A.M., Ennett, S.T., **McNeish, D.**, <u>Rothenberg, W.A.</u>, <u>Cole, V.</u>, Gottfredson, N.C., & Faris, R.W. (2018). Teen social networks and depression-substance use associations: Developmental and demographic variation. *Journal of Studies on Alcohol and Drug Use*, 79, 770-780.

Impact Factor: 2.6 [2017 Journal Citation Reports® (Thomson Reuters, 2018)]

74. **McNeish, D.**, Stapleton, L. M., & Silverman, R.D. (2017). On the unnecessary ubiquity of hierarchical linear modeling. *Psychological Methods*, 22, 114-140.

Impact Factor: 4.7 [2016 Journal Citation Reports® (Thomson Reuters, 2017)]

75. **McNeish, D.** (2017). Small sample methods for multilevel modeling: A colloquial elucidation of REML and the Kenward-Roger correction. *Multivariate Behavioral Research*, 52, 661-670.

Impact Factor: 2.6 [2016 Journal Citation Reports® (Thomson Reuters, 2017)]

- 76. **McNeish, D.,** & Wentzel, K.R. (2017). Accommodating small sample sizes in three level models when the third level is incidental. *Multivariate Behavioral Research*, *52*, 200-215. Impact Factor: 2.6 [2016 Journal Citation Reports® (Thomson Reuters, 2017)]
- 77. **McNeish, D.** & Dumas, D. (2017). Non-linear growth models as psychometric models: A second-order growth curve model for measuring potential. *Multivariate Behavioral Research*, *52*, 61-85.

Impact Factor: 2.6 [2016 Journal Citation Reports® (Thomson Reuters, 2017)]

78. **McNeish, D.** (2017). Challenging conventional wisdom for multivariate statistical models with small samples. *Review of Educational Research*, 87, 1117-1151.

Impact Factor: 5.3 [2016 Journal Citation Reports® (Thomson Reuters, 2017)]

79. **McNeish, D.** (2017). Multilevel mediation with few clusters: A cautionary note on the multilevel structural equation modeling framework. *Structural Equation Modeling*, 24, 609-625.

Impact Factor: 3.1 [2016 Journal Citation Reports® (Thomson Reuters, 2017)]

80. **McNeish, D.** (2017). Exploratory factor analysis with small samples and missing data. *Journal of Personality Assessment*, 99, 637-652.

Impact Factor: 2.0 [2016 Journal Citation Reports® (Thomson Reuters, 2017)]

81. **McNeish**, **D.**, & Harring, J.R. (2017). Corrected model fit criteria for small sample latent growth models with incomplete data. *Educational and Psychological Measurement*, 77, 990-1018.

Impact Factor: 1.6 [2016 Journal Citation Reports® (Thomson Reuters, 2017)]

- 82. **McNeish, D.** (2017). Fitting residual error structures for growth models in SAS PROC MCMC. *Educational and Psychological Measurement, 77,* 587-612. Impact Factor: 1.6 [2016 Journal Citation Reports® (Thomson Reuters, 2017)]
- 83. **McNeish, D.** & Harring, J.R. (2017). The effect of model misspecification in growth mixture model class enumeration. *Journal of Classification*, *34*, 223-248.

Impact Factor: 3.1 [2016 Journal Citation Reports® (Thomson Reuters, 2017)]

- 84. **McNeish, D.** (2017). Missing data methods for arbitrary missingness with small samples. *Journal of Applied Statistics*, 44, 24-39.
 - ** Paper was the runner-up for the journal's 2017 Best Paper Prize
 - ** 2nd most viewed paper in the journal's history
 Impact Factor: 0.7 [2016 Journal Citation Reports® (Thomson Reuters, 2017)]

- 85. **McNeish, D.**, & Harring, J.R. (2017). Clustered data with small sample sizes: Comparing the performance of model-based and design-based approaches. *Communications in Statistics: Simulation and Computation*, 46, 855-869.
 - ** <u>5th most viewed paper</u> in the journal's history Impact Factor: 0.5 [2016 Journal Citation Reports® (Thomson Reuters, 2017)]
- 86. Dumas, D. & McNeish, D. (2017). Dynamic measurement modeling: Using nonlinear growth models to estimate student learning capacity. *Educational Researcher*, 46, 284-292. Impact Factor: 3.8 [2016 Journal Citation Reports® (Thomson Reuters, 2017)]
- 87. Hancock, G. R., & **McNeish**, **D**. (2017). More powerful tests of simple interaction contrasts for the two way factorial design. *Journal of Experimental Education*, 85, 24-35.

 Impact Factor: 1.6 [2016 Journal Citation Reports® (Thomson Reuters, 2017)]
- 88. Harring, J.R., **McNeish, D., &** Hancock, G.R. (2017). Using phantom variables in structural equation modeling to assess model sensitivity to external misspecification. *Psychological Methods*, 22, 616-631.

Impact Factor: 4.7 [2016 Journal Citation Reports® (Thomson Reuters, 2017)]

89. Wentzel, K.R., Muenks, K., **McNeish, D.**, & Russell, S.L. (2017) Peer and teacher supports in relation to motivation and engagement: A multi-level study. *Contemporary Educational Psychology*, 49, 32-45.

Impact Factor: 2.9 [2016 Journal Citation Reports® (Thomson Reuters, 2017)]

90. <u>Elzakkers, I.F.F.M.</u>, Danner, U.N., Sternheim, L.C., **McNeish, D.**, Hoek, H.W., & van Elburg, A.A. (2017). Mental capacity to consent to treatment and the association with outcome – a longitudinal study in anorexia nervosa patients. *British Journal of Psychiatry Open*, *3*, 147-153.

Impact Factor: 2.5 [2017 CiteScore (Scopus, 2018)]

91. Silverman, R.D., Martin-Beltran, M., Peercy, M.M., Hartranft, A.M., **McNeish, D.**, Artzi, L., & Nunn, S.G. (2017). Effects of a cross-age peer learning program on the vocabulary and comprehension of ELs and Non-ELs in elementary school. *The Elementary School Journal*, 117, 485-512.

Impact Factor: 1.2 [2016 Journal Citation Reports® (Thomson Reuters, 2017)]

92. Silverman, R. D., Kim, Y., Hartranft, A. M., Nunn, S.J., **McNeish, D.** (2017). Effects of a multimedia enhanced reading buddies program in kindergarten and fourth grade. *Journal of Educational Research*, *110*, 391-404.

Impact Factor: 1.2 [2016 Journal Citation Reports® (Thomson Reuters, 2017)]

2016 (n = 7)

93. **McNeish, D.**, & Stapleton, L.M. (2016). The effect of small sample size on two level model estimates: A review and illustration. *Educational Psychology Review*, 28, 295-314. Impact Factor: 2.6 [2015 Journal Citation Reports® (Thomson Reuters, 2016)]

94. **McNeish, D.**, & Stapleton, L. M. (2016). Modeling clustered data with very few clusters. *Multivariate Behavioral Research*, *51*, 495-518.

** 8th most viewed paper in the journal's history
Impact Factor: 1.6 [2015 Journal Citation Reports® (Thomson Reuters, 2016)]

95. **McNeish, D.** (2016). Estimation methods for mixed logistic models with small sample sizes. *Multivariate Behavioral Research*, *51*, 790-804.

Impact Factor: 1.6 [2015 Journal Citation Reports® (Thomson Reuters, 2016)]

96. **McNeish**, **D.** (2016). Using data-dependent priors to mitigate small sample size bias in latent growth models: A discussion and illustration using Mplus. *Journal of Educational and Behavioral Statistics*, 41, 27-56.

Impact Factor: 1.1 [2015 Journal Citation Reports® (Thomson Reuters, 2016)]

97. **McNeish, D.** (2016). On using Bayesian methods to address small sample problems. *Structural Equation Modeling*, *23*, 750-773.

Impact Factor: 3.2 [2015 Journal Citation Reports® (Thomson Reuters, 2016)]

98. Kang, Y., **McNeish, D.**, & Hancock, G. R. (2016). The role of measurement quality on practical guidelines for assessing measurement and structural invariance. *Educational and Psychological Measurement*. 76, 533-561.

Impact Factor: 1.5 [2015 Journal Citation Reports® (Thomson Reuters, 2016)]

99. Stapleton, L.M., **McNeish, D.** & Yang, J.S. (2016). Multi-level and single-level models for measured and latent variables when data are clustered. *Educational Psychologist*, *51*, 317-330.

Impact Factor: 5.7 [2015 Journal Citation Reports® (Thomson Reuters, 2016)]

2015 & Prior
$$(n = 5)$$

100. **McNeish, D.** (2015). Using Lasso for predictor selection and to assuage overfitting: A method long overlooked in behavioral sciences. *Multivariate Behavioral Research*, *50*, 474-481.

Impact Factor: 2.5 [2014 Journal Citation Reports® (Thomson Reuters, 2015)]

101. **McNeish, D.**, & Dumas, D. (2015). A second-order model for understanding potential. *Multivariate Behavioral Research*, *51*, 727. [Abstract]

Impact Factor: 2.5 [2014 Journal Citation Reports® (Thomson Reuters, 2015)]

- 102. **McNeish, D.** (2014). Modeling sparsely clustered data: Design-based, model-based, and single-level methods. *Psychological Methods*, *19*, 552-563.

 Impact Factor: 5.7 [2013 Journal Citation Reports® (Thomson Reuters, 2014)]
- 103. **McNeish**, **D.** (2014). Analyzing clustered data with OLS regression: The effect of a hierarchical data structure. *General Linear Model Journal*, 40, 11-16.
- 104. Stemler, S. E., Elliott, J. G., **McNeish, D.**, Grigorenko, E. L. & Sternberg, R. J. (2012). Examining the construct and cross-cultural validity of the Teaching Excellence Rating Scale (TERS). *The International Journal of Educational and Psychological Assessment*, *9*, 121-138.

Book Chapters (n = 4)

- 105. West, S.G., Wu, W., **McNeish, D.**, & <u>Savord, A.</u> (2023). Model fit in structural equation modeling. In R.H. Hoyle (Ed.), *Handbook of Structural Equation Modeling* (2nd Ed.) New York: Guilford Press, pp. 184-205.
- 106. Bauer, D.J., **McNeish, D**., Baldwin, S.A., & Curran, P.J. (2020). Analyzing nested data: Multilevel modeling and alternative approaches. In A. Wright & M. Hallquist (Eds.), *Handbook of research methods in clinical psychology*. Cambridge University Press, pp. 426-443.
- 107. Hox, J. J., & **McNeish**, **D**. (2020). Small samples in multilevel modeling. In R. Van de Schoot & M. Miočević (Eds.), *Small sample size solutions: A guide for applied researchers and practitioners*. Routledge, pp. 215-225.
- 108. **McNeish, D.**, <u>Lane, S.</u>, & Curran, P.J., (2019). Monte Carlo simulation studies. In G.R. Hancock, R.O. Mueller, & Stapleton, L.M. (Eds.), *The reviewer's guide to quantitative methods in the social sciences*, pp. 269-278.

Technical Reports & Briefs (n = 7)

- 109. Dumas, D., **McNeish, D.**, Dong, Y., & Duellberg, D. (2022). Improving the fairness of Coast Guard recruitment and selection with the ASVAB and AFCT. Technical report. *Defense Technical Information Center*, AD1168899.
- 110. **McNeish, D.**, Radunzel, J., & Sanchez, E. I. (2016). Adjusted differences in ACT[®] scores by race/ethnicity. *ACT Data Byte*, 2016-7.

- 111. **McNeish, D.**, Radunzel, J., & Sanchez, E. I. (2016). Adjusted differences in ACT® scores by parental education level. *ACT Data Byte*, 2016-6.
- 112. **McNeish, D.**, Radunzel, J., & Sanchez, E. I. (2016). Adjusted differences in ACT[®] scores by family income. *ACT Data Byte*, 2016-5.
- 113. **McNeish, D.**, Radunzel, J., & Sanchez, E. I. (2016). Relating student and school characteristics to performance on the ACT®. *ACT Data Byte*, 2016-4.
- 114. Harring, J. R., **McNeish**, **D**., & Zhu, X. (2016). On the adequacy of SEM model fit criteria to detect cohort effects in accelerated longitudinal designs. Technical report. University of Maryland, College Park.
- 115. **McNeish, D.**, Radunzel, J., & Sanchez, E. I. (2015). Relating non-cognitive student characteristics to the ACT[®] College Readiness Assessment. *ACT Research Report Series*, RR2015-6.

Software (n = 5)

- 116. **McNeish, D.** & Dumas, D.G. (2024). Reliability representativeness (version 0.1.0.). [Software]. Available from www.dynamicfit.app/RelRep
- 117. Wolf, M.G. & McNeish, D. (2022). dynamic: DFI cutoffs for latent variables models (version 1.1.0). [Software]. Available from CRAN, https://cran.r-project.org/web/packages/dynamic (~400 downloads/month)
- 118. Matta, T.H. & **McNeish**, **D**. (2020). glvmfit: Methods to assess generalized latent variable model fit (version 0.0.0). [Software]. Available from CRAN, https://cran.r-project.org/web/packages/glvmfit (~ 500 downloads/month)
- 119. Wolf, M. G. & McNeish, D. (2020). Dynamic Model Fit (version 0.1.0.). [Software]. Available from www.dynamicfit.app (~900 uses/month)
- 120. Peters, G.J. & **McNeish**, **D.** (2016). scaleStructure: scaleStructure (version 0.5-2) [Software]. Now available as a function in the ufs R package, https://cran.r-project.org/web/packages/ufs/ (ufs receives ~1250 downloads/month)

MANUSCRIPTS UNDER REVISION

- 1. **McNeish, D.** (under review). Missing not at random intensive longitudinal data: Diggle-Kenward selection for dynamic structural equation models. *Psychological Methods*
- 2. **McNeish, D.** (under review). Less heuristic approximate local fit evaluation in structural equation models. *Structural Equation Modeling*.
- 3. **McNeish, D.** & Dumas, D.G. (under review). Reliability representativeness: How well does coefficient alpha summarize reliability across the score distribution? *Behavior Research Methods*.
- 4. <u>Miller, A.H., Espinas, D.R.</u>, **McNeish, D.**, & Barnes, M.A. (under review). Dosage response in intensive math interventions for early elementary students with or at-risk for mathematics difficulties. *Educational Psychology Review*.
- 5. English, D., Smith, J.C., Scott-Walker, L., Chavez, E., Reid, M., ... **McNeish, D.**, ... Bowleg, L. (under review). Examining a multicomponent health promotion intervention among black same gender loving men in southern ending the HIV epidemic in the S.S. jurisdictions: A randomized controlled trial. *BMC Public Health*.

MANUSCRIPTS UNDER FIRST REVIEW

- 1. **McNeish, D.** (under review; invited). How do psychologists determine if a measure is good? A quarter-century of scale validation with Hu & Bentler (1999). *Annual Review of Psychology*, Volume 77.
- 2. **McNeish, D.** & Somers, J.A. (under review). Dynamic structural equation modeling with binary and nonstationary outcomes and covariates. *Multivariate Behavioral Research*.
- 3. **McNeish, D.** & Savord, A. (under review). How many categories are needed to model ordinal intensive longitudinal data as continuous with dynamic structural equation models? *Psychological Methods*
- 4. <u>Plaitano, E.G.</u>, **McNeish, D.**, Bartels, S., Bell, K., Daller, J., Garbinski, M., ... Marsch, L.A. (under review). Adherence to a digital therapeutic mediates the relationship between momentary self-regulation and health risk behaviors. *Frontiers in Digital Health*.
- 5. <u>Vornlocher, C.</u> **McNeish, D.**, Cole, S., Daviglus, M.L., Elliassen, A.H., Kanaya, A.M., Shields, A.E., & Wormley, A.S. (under review). Religious antecedents of health and well-

- being in the Nurses' Health, Strong Heart, Hispanic Community Health, and MASALA studies. *Social Science & Medicine*.
- 6. <u>Giraldo-Santiago, N., Hernández, J.M., McNeish, D.</u>, Gearing, R.E., & Aarons, G.A. (under review). Evidence-based practice attitude scale for Latinx mental health professionals: A novel application of confirmatory factor analysis. *Implementation Science Communications*.
- 7. Coffman, J.L., Westover, A.E., Grammer, J.K., **McNeish, D.**, & Ornstein, P.A. (under review). Deliberate memory strategy development: The interplay of children's self-regulated learning abilities and teachers' cognitive processing language. *Journal of Applied Research in Memory and Cognition*
- 8. English, D., Smith, J.C., Scott-Walker, L., Chavez, E., Reid, M., ... **McNeish, D.**, ... Millar, B.M. (under review). iTHRIVE 365 reduces the negative psychological impact of daily intersectional stigma for black same gender loving men living with HIV. *Journal of Affective Disorders*.

RESEARCH SUPPORT

Funded Federal Grants & Contracts (Active & Completed)

As Principal Investigator

Extending dynamic fit index cutoffs for latent variable models
 Principal Investigator
 US Department for Education, Institute of Educational Sciences (IES)
 R305D220003
 Daniel McNeish, PI, Arizona State University
 2022-2025
 \$557,555

- Assessment of the ASVAB through dynamic measurement modeling
 Commissioned Contract
 United States Navy Research Laboratory
 Contract PR-11639169
 Denis Dumas & Daniel McNeish, co-recipients
 2021-2022
 \$360,000
- 3. Addressing small sample and computational issues in mixture models of repeated measures data with covariance pattern mixture models

Principal Investigator

US Department for Education, Institute of Educational Sciences (IES)

R305D190011

Daniel McNeish, PI, Arizona State University

2019-2021

\$209,305

As Co-Investigator or Key Personnel

4. Examining a multicomponent intervention to improve HIV health among black men in southern ending the HIV epidemic in the U.S. jurisdictions

Key Personnel

R01MH134265

National Institute on Minority Health and Health Disparities (NIH-NIMHD)

Devin English (Rutgers) & Justin C. Smith (CDC), PIs

2023-2028

5. Childhood obesity and cardiometabolic health among impoverished Mexican Americans
Co-Investigator

National Institute on Minority Health and Health Disparities (NIH-NIMHD)

R01MD011599

Marisol Perez & Linda Luecken, PIs, Arizona State University

2022-2027

\$3,788,455

6. Estimating mediation effects in prevention studies

Co-Investigator

National Institute on Drug Abuse (NIH-NIDA)

R37DA009757

David MacKinnon, PI, Arizona State University

2020-2025

\$1,835,367

7. Promoting health by understanding risk and protective factors for substance use among Latino youth in rural and small town communities in the United States

Co-Investigator

National Institute on Drug Abuse (NIH-NIDA)

R01DA048827

Katarina Guttmannova, PI, University of Washington

2020-2024

\$1,243,696

8. The interplay of social, normative, and legal marijuana environments and marijuana and ATOD use from late childhood to young adulthood

Co-Investigator

National Institute on Drug Abuse (NIH-NIDA)

R01DA044522

Sabrina Oesterle (ASU) & Margaret Kuklinksi (Washington), PIs

2018-2023

\$4,966,151

9. Contextual and intrapersonal influences on impaired control over drinking

Key Personnel

National Institute on Alcohol Abuse and Alcoholism (NIH-NIAAA)

K01AA024160

Julie Patock-Peckham, PI, Arizona State University

2020-2022

\$705,615

10. Applying novel technologies and methods to inform the ontology of self-regulation Co-Investigator

National Institute on Drug Abuse (NIH-NIDA)

UH2DA041713

Lisa Marsch (Dartmouth) & Russell Poldrack (Stanford), PIs

2015-2022

\$2,816,716

11. Harmonizing substance use and disorder measures to facilitate multistudy analyses

Statistician

National Institute on Drug Abuse (NIH-NIDA)

R01DA034636

Daniel Bauer, PI, University of North Carolina, Chapel Hill

2013-2018

\$2,553,540

12. Peer mechanisms in the internalizing pathway to substance use

Statistician

National Institute on Drug Abuse (NIH-NIDA)

R01DA037215

Andrea Hussong, PI, University of North Carolina, Chapel Hill

2014-2017 \$689,930

As Consultant or Mentor

13. Testing a multistage model of risk factors for cannabis use utilizing a measurement burst design among sexual minority women, sexual minority gender diverse individuals, and heterosexual women.

Consultant Statistician

National Institute on Drug Abuse (NIH-NIDA)

R01DA058642

Christina Dyar, PI, Ohio State University

2024-2029

\$3,500,000

14. Deep Microstructural Phenotyping of the Developing Brain

Advisory Committee

Discovery Award, Wellcome Trust (UK)

227882/Z/23/Z

Derek Jones (Cardiff), Sarah-Jayne Blakemore (Cambridge), Marianne van den Bree (Cardiff), & Rogier Kievit (Donders Institute), PIs

2024-2032

£5,508,635

15. Affective and cognitive mechanisms of emotion-based impulsivity in bipolar disorder: Linking neural oscillatory dynamics to real-world outcomes

Consultant Statistician

National Institute of Mental Health (NIH-MIMH)

K23MH131601

Sarah Sperry, PI, University of Michigan

2023-2028

\$963,166

16. Daily impact of stressful digital events during the Covid-19 pandemic

Statistical Mentor (F31)

National Institutes on Alcohol Abuse and Alcoholism (NIH-NIAAA)

F31AA030212

Selena Quiroz, PI, Arizona State University

2022-2024

\$117,495

17. Research training in drug abuse prevention

Statistical Mentor & Co-Investigator (T32)

National Institute on Drug Abuse (NIH-NIDA)

T32DA039772

Nancy Gonzales, PI, Arizona State University

2021-2026

\$2,177,478

18. Childhood adversity in adolescent custodial grandchildren

Statistical Mentor (F31)

National Institute of Child Health and Human Development (NIH-NICHD)

F31HD103373

Saul Castro, PI, Arizona State University

2021-2023

\$107,904

19. The CLAVES intervention project: developing a supplemental intervention for comprehension, linguistic awareness, and vocabulary in English for Spanish speakers Consultant Statistician

US Department for Education, Institute of Educational Sciences (IES)

R305A140114

Patrick Proctor, PI, Boston College

2014-2017

\$1,470,182

20. Developing a cross-age peer-tutoring program to promote the vocabulary and comprehension of English learners

Consultant Statistician

US Department for Education, Institute of Educational Sciences (IES)

R305A110142

Rebecca Silverman, PI, University of Maryland

2011-2014

\$1,500,000

Proposals Under Review

1. Dynamic structural equation models for messy intensive longitudinal data: Categorical outcomes and nonignorable missingness

Principal Investigator

National Science Foundation; Methodology, Measurement, & Statistics (NSF-MMS) Daniel McNeish, PI, Arizona State University 2025-2028

2. Nonlinear dosage response in reading interventions

Co-Principal Investigator, subcontract PI US Department for Education, Institute of Educational Sciences (IES)

Garret Roberts, PI, University of Denver

2025-2029

3. Dyadic affect and physiological synchrony in the intergenerational transmission of depression

Co-Investigator, subcontract PI

National Institute of Mental Health (NIH-NIMH)

Jennifer Somers (Auburn), Steve Lee (UCLA), & Tiffany Ho (UCLA), PIs 2025-2030

4. Enhancing the risk and protective factor framework for adolescent substance use

Co-Investigator, subcontract PI

National Institute on Drug Abuse (NIH-NIDA)

Margaret Kuklinski & Nicole Eisenberg, PIs, University of Washington 2025-2030

5. Outcomes and mechanisms of a digital mindfulness intervention for loneliness

Co-Investigator, subcontract PI

National Center for Complementary and Integrative Health (NIH-NCCIH)

Kirk Warren Brown (Carnagie Mellon), PI

2025-2030

6. Substance use among "new" adults in the lifecycle of COVID-19: implications for prevention and disaster preparedness

Co-Investigator

National Institute on Drug Abuse (NIH-NIDA)

Margaret Kuklinski (Washington) & Sabrina Oesterle (Arizona State), PIs 2025-2030

7. Transactions among adolescent technology engagement, self-regulation, sleep, and

ADHD: Traditional and intensive longitudinal methodologies

Consultant Statistician

National Institute on Mental Health (NIH-NIMH)
Jessica Dollar & Michaeline Jensen, MPIs, University of North Carolina
2024-2029

8. Bisexual adolescents' and young adults' risk for depression and suicidal ideation:

Developmental trajectories, risk and protective factors, and underlying mechanisms.

Consultant Statistician

National Institute on Drug Abuse (NIH-NIDA)

Christina Dyar (Ohio State) & Brian Feinstein (Rosalind Franklin), PIs 2024-2029

9. Unpacking parents' immediate responses to impairing emotional outbursts in children

Consultant Statistician

National Institute of Health

William Pelham, PI, University of California-San Diego

2025-2030

10. Introducing the generalized social relations model: Advancing research on interpersonal relationships in education

Advisory Board Member

US Department for Education, Institute of Educational Sciences (IES)

Li Tan, PI, Arizona State University

2024-2029

11. ChatBCT: Interdisciplinary personalized digital health analytics training for behavior change technologies

Statistical Mentor & Co-Investigator (T32)

National Institute of Health

Matthew Buman & Hassan Zadeh, PIs, Arizona State

2025-2030

12. Adapting AI-derived approaches to individualize instruction for students with reading difficulties

Consultant Statistician and Advisory Board Member

US Department for Education, Institute of Educational Sciences (IES)

Yixiao Dong, PI, University of Denver

2025-2026

Fellowships

2013-2015 Flagship Fellowship, University of Maryland

Award: \$50.000 + tuition remission 2011-2015 Dean's Fellowship, University of Maryland Award: \$35,000 + tuition remission All-S.T.A.R. Fellowship, University of Maryland 2014-2015 Award: \$10,000 2013-2014 Merit Fellowship, University of Maryland Award: \$2,000 2010 Quantitative Analysis Center Fellowship, Wesleyan University Award: \$3,800 Travel Awards SMEP Conference Travel Award (\$1500) 2015 2013, 2015 HDQM Graduate Student Travel Grant (\$400 each) Data Awards 2017-2020 Kingsbury Research Award, NWEA Awardees: Denis Dumas & Daniel McNeish Award: Access to restricted data and technical support from NWEA **TEACHING & DISSEMINATION** Instructor of Record 2017-ARIZONA STATE UNIVERSITY Course: PSY 539 Multilevel Models for Psychological Research PSY 537 Longitudinal Growth Modeling PSY 591 Simulation & Computation PSY 230 Introduction to Statistics PSY 598 Design & Data Analysis Seminar

LOWER RATINGS ARE BETTER AT ASU (1 - 5 SCALE)
Fall 2017 Evaluation (PSY 539, 29 students): 1.0 / 5.0
Fall 2018 Evaluation (PSY 539, 24 students): 1.1 / 5.0
Spr. 2019 Evaluation (PSY 230, 46 students): 1.1 / 5.0
Spr. 2019 Evaluation (PSY 230, 13 students): 1.4 / 5.0
Fall 2019 Evaluation (PSY 537, 31 students): 1.0 / 5.0
Spr. 2020 Evaluation (PSY 230, 47 students): 1.2 / 5.0
Spr. 2021 Evaluation (PSY 591, 10 students): 1.0 / 5.0
Fall 2021 Evaluation (PSY 539, 40 students): 1.0 / 5.0
Spr. 2022 Evaluation (PSY 539, 36 students): 1.0 / 5.0
Fall 2022 Evaluation (PSY 539, 36 students): 1.1 / 5.0
Fall 2022 Evaluation (PSY 598, 9 students): 1.0 / 5.0

Spr. 2023 Evaluation (PSY 598, 9 students): 1.0 / 5.0 Fall 2024 Evaluation (PSY 539, 40 students): in progress

2016 University College Utrecht

Course: MET23 Applied Multivariate Statistics

MET2A Analysis of Behavioral Data (Psychometrics)

MET22 Applied Multivariate Statistics (MET23 + MET2A)

Spr. 2016 Evaluation (MET23, 24 students): 4.8/5.0 Spr. 2016 Evaluation (MET2A, 23 students): 4.6/5.0 Sum 2016 Evaluation (MET22, 29 students): 4.8/5.0

2012-2015 University of Maryland

Course: EDMS 451 Introduction to Educational Statistics Fall 2012 Evaluation (EDMS 451, 30 students): 3.8/4.0 Spr. 2013 Evaluation (EDMS 451, 30 students): 3.9/4.0 Sum 2015 Evaluation (EDMS 451, 11 students): 3.8/4.0

Short Courses & Workshops

2025 FEB Dynamic Structural Equation Modeling

Statistical Horizons, Virtual

2025 JAN Latent Growth Curve Modeling

Statistical Horizons, Virtual

2024 JAN Latent Growth Curve Modeling

Statistical Horizons, Virtual

2018 MAR Multilevel Modeling with Small Samples,

Small Sample Solutions Conference, Utrecht, Netherlands

Materials presented by Joop Hox

(Health issue precluded me from attending in person)

2017 Aug Bayesian Analysis to Deal with Small Samples,

18th European Conference on Developmental Psychology, Utrecht, Netherlands.

Co-taught with Rens van de Schoot

2017 APR Modeling Multilevel Data with Small Sample Sizes,

11th International Multilevel Conference, Utrecht, the Netherlands

Co-taught with Rens van de Schoot

2016 Jul. Introduction to Structural Equation Modeling with Mplus, Utrecht University Summer School, Utrecht, the Netherlands. Co-taught with Rens van de Schoot and Kimberly Lek Other 2012 Teaching Assistant, University of Maryland Courses: EDMS 451 Introduction to Educational Statistics EDMS 645 Quantitative Research Methods 2012 Teaching Trainee Program, University of Maryland Course: EDMS 451 Introduction to Educational Statistics **MENTORING & ADVISING Graduate & Postdoc Mentoring** 2021 -Xinran Liu (PhD, primary advisor) 2018 - 2023Andrea Savord (PhD, primary advisor) First Position: Associate Statistician, Vector Psychometric Group 2022 – 2023 Patrick Manapat (Postdoc, primary advisor) First Position: Research Associate, University of Texas-Austin Current Position: Assistant Professor, University of Oklahoma 2020 – 2022 Melissa Wolf (PhD, lab member) First Position: UX Researcher, Microsoft Current Position: Statistical Programmer, Delfi Diagnostics 2021 - 2022Yixiao Dong (Postdoc, external co-advisor) First Position: Assistant Professor, Information Science, U of Denver 2018 - 2021Jennifer Somers (PhD, co-advisor) First Position: Postdoctoral Fellow, UCLA Current Position: Assistant Professor, Auburn University 2017 – 2018 Daniel Coven (Social Science Methods Certificate, co-advisor) First Position: Biostatistician, Arizona State University 2016 Sanne Smid (PhD, Utrecht University, secondary advisor) First Position: Data Scientist, Office of Education (Dutch Government) Chaired or Co-Chaired Committees (n = 6)2024 Xinran Liu Comp. Exam 2023 Andrea Savord Dissertation Andrea Savord 2021 Comp. Exam 2020 Jennifer Somers Dissertation (Co-Chair) 2020 Andrea Savord First-Year Project

Social Science Research Methods Certificate

2018

Daniel Coven

Committee Member (n = 42)

	Commi	(n - 42)	
Ongoing	Byron García	Dissertation	ASU PSY – Clinical
Ongoing	Diana Alvarez Bartolo	Dissertation	ASU PSY – Quant
Ongoing	Molly Gardner	Dissertation	ASU PSY – Quant
Ongoing	Russell Houpt	Dissertation	ASU PSY – Quant
Ongoing	Sarah Johnson	Thesis	ASU PSY – Quant
2024	Yibin Ni	Dissertation	ASU PSY – Quant
2024	Aubrey Rhodes	Dissertation	ASU PSY – Clinical
2024	Felix Muniz	Dissertation	ASU PSY – Quant
2024	Selena Quiroz	Dissertation	ASU PSY – Developmental
2024	Russell Houpt	Comp. Exam	ASU PSY – Quant
2024	Molly Gardner	Comp. Exam	ASU PSY – Quant
2023	Yibin Ni	Comp. Exam	ASU PSY – Quant
2023	Lindsay Chromik	Thesis	ASU PSY – Clinical
2023	Diana Alvarez Bartolo	Comp. Exam	ASU PSY – Quant
2023	R.J. Risueño	Comp. Exam	ASU Speech & Hearing
2023	Xinran Liu	Thesis	ASU PSY – Quant
2023	Sydni Basha	Comp. Exam	ASU PSY – Clinical
2023	Felix Muniz	Comp. Exam	ASU PSY – Quant
2023	Lynn Muldrew	Thesis	ASU PSY – Clinical
2023	Sarah Okey	Dissertation	ASU PSY – Clinical
2023	Danielle Rodgers	Dissertation	ASU PSY – Quant
2022	Melissa Wolf	Dissertation	UCSB Quant Methods
2022	Heather Smyth	Dissertation	ASU PSY – Quant
2022	Russel Houpt	Thesis	ASU PSY – Quant
2022	Diana Alvarez Bartolo	Thesis	ASU PSY – Quant
2022	Melissa Sacchetta	Dissertation	ASU Speech & Hearing
2022	Molly Gardner	Thesis	ASU PSY – Quant
2022	Sydni Basha	Thesis	ASU PSY – Clinical
2021	Danielle Rodgers	Comp. Exam	ASU PSY – Quant
2021	Leena Bui	Dissertation	ASU PSY – Clinical
2021	Charles Van Liew	Dissertation	ASU Health Solutions
2021	Yixiao Dong	Dissertation	U. of Denver Info Science
2021	Heather Smyth	Comp. Exam	ASU PSY – Quant
2020	Felix Muniz	Thesis	ASU PSY – Quant
2020	Charles Van Liew	Comp. Exam	ASU Health Solutions
2020	Amanda Bruening	Dissertation	ASU PSY – Clinical
2019	Gabriela Stegmann	Dissertation	ASU PSY – Quant
2019	Kimberly Fine	Dissertation	ASU PSY – Quant

2019 2019 2018 2018	Austin Blake Saul Castro Kimberly Fine Gabriela Stegmann	Thesis Comp. Exam Comp. Exam Comp. Exam	ASU PSY – Clinical ASU PSY – Developmental ASU PSY – Quant ASU PSY – Quant	
Advisee Awards				
2020	Jenn Somers PEO Scholar Fellowship \$15,000 external merit fellow		rellence	
2020	Jenn Somers ProQuest Distinguished Diss ASU Semi-Finalist	ertation Award		
2019	Jenn Somers Doctoral Scholar Award ASU Department of Psychologorus	ogy		
2018	Sanne Smid			

PRESENTATIONS

(Underline indicates student author)

Invited

Award for Best Student Presentation at S4 Conference

- 1. **McNeish, D.** (2024, March). *Psychometrics and intensive longitudinal data*. Invited keynote presentation for the 14th International Conference on Multilevel Analysis, Utrecht, the Netherlands.
- 2. **McNeish, D.** (2023, December). *Multilevel, longitudinal, and measurement models; oh my!* Invited presentation for the Department of Psychology, Yale University, New Haven, CT, USA
- 3. **McNeish, D**. (2022, September). *Psychometrics and intensive longitudinal data*. Invited presentation for the Department of Biostatistics Seminar Series, Bloomberg School of Public Health, Johns Hopkins University, Baltimore, MD, USA.
- 4. **McNeish, D.** (2020, June). *Growth mixture models with small samples*. Invited keynote presentation delivered at the Small Sample Size Solutions (S4) conference, Utrecht, the Netherlands.

^{*} Conference cancelled due to COVID-19

- 5. **McNeish, D.** (2020, February). *Growth mixture model convergence*. Presented at colloquium series sponsored by the Notre Dame quantitative psychology program and the Mendoza College of Business, South Bend, IN, USA.
- 6. **McNeish, D.** (2017, March). *Is Bayes a solution for small samples?* Presented at colloquium series co-sponsored by the Educational Psychology and Statistics Departments, University of Connecticut, Storrs, CT, USA.
- 7. **McNeish, D.** (2014, November). *Clustered data mean you need multilevel models, right?*Presented at the Harvard University Graduate School of Education, Cambridge, MA, USA.

International

- 8. Dumas, D., <u>Dong, Y.</u>, & **McNeish, D**. (2023, August). *How fair is my test? A ratio coefficient to help represent consequential validity*. Poster presented at the Biennial meeting of the European Association for Research on Learning and Instruction (EARLI), Thessaloniki, Greece.
- 9. Dumas, D. & McNeish, D. (2019, April). *Calculating conditional reliability for dynamic measurement model capacity estimates*. Paper presented at the annual meeting of the National Council on Measurement in Education (NCME), Toronto, ON, Canada.
- 10. Dumas, D. & McNeish, D. (2019, April). *Increasing the consequential validity of reading assessment using dynamic measurement modeling*. Paper presented at the annual meeting of the American Educational Research Association (AERA), Toronto, ON, Canada.
- 11. **McNeish, D.** & Dumas, D. (2018, September). *Dynamic measurement modeling: using nonlinear growth models to estimate learning capacity*. Frontiers in Educational Measurement Conference, Oslo, Norway.
- 12. <u>Smid, S.C.</u>, Depaoli, S., **McNeish, D.**, Miocevic, M., & van de Schoot, A.G.J. (2018, March). *Bayesian SEM with informative priors: Precautions and guidelines*. Paper presented at the Small Sample Size Solutions (S4) Conference, Utrecht, the Netherlands. *Won award for best student talk at the conference.
- 13. **McNeish, D.** (2017, August). *Do Bayesian methods cure small sample issues?*. Part of a symposium on Bayesian SEM with small samples (with <u>Smid, S.C., Zondervan-Zwijnenburg, M.A.J., Schrooten, I.,</u> & van de Schoot, A.G.J) at the 18th European Conference on Developmental Psychology, Utrecht, the Netherlands.

- 14. <u>Smid, S.C.</u>, **McNeish, D.**, & van de Schoot, A.G.J. (2017, August). *Bayesian vs. maximum likelihood estimation for small samples: A systematic review*. Part of a symposium on Bayesian SEM with small samples (with <u>Smid, S.C.</u>, <u>Zondervan-Zwijnenburg, M.A.J.</u>, <u>Schrooten, I.</u>, & van de Schoot, A.G.J) at the 18th European Conference on Developmental Psychology, Utrecht, the Netherlands.
- 15. **McNeish, D**. (2017, April). *Multilevel mediation with small samples*. Paper presented the 11th International Multilevel Conference, Utrecht, the Netherlands.
- 16. <u>Elzakkers, I.F.F.M.</u>, Danner, U.N., Sternheim, L.C., **McNeish, D.**, Hoek, H.W., & van Elburg, A.A. (2016, October). *Anorexia nervosa and mental capacity: a longitudinal study*. Poster presented at the 21st annual meeting of the Eating Disorders Research Society (EDRS), Taormina, Sicily, Italy.

National

- 17. <u>Liu, X.</u> & **McNeish, D.** (2024, October). Optimal number of replications for obtaining stable dynamic fit index cutoffs. Poster presented at the 64th annual meeting of the Society for Multivariate Experimental Psychology (SMEP), Ithaca, NY, USA.
- 18. <u>Miller, A. H., Espinas, D. R.</u>, **McNeish, D.**, & Barnes, M. A. (2024, June). Dosage response in intensive math interventions for early elementary students with or at-risk for mathematics difficulties. [Poster Presentation]. Mathematical Cognition and Learning Society Conference, Washington, D.C.
- 19. <u>Hernandez-Torres, J.M, Giraldo-Santiago, N.,</u> & **McNeish,** D. (2024, June). *Validation of the evidence-based practices attitudes scale (EBPAS) using dynamic fit index cutoffs*. Paper presentation at the Modern Modeling Methods (M3) conference, Storrs, CT, USA.
- 20. Oesterle, S.A., <u>Pandika, D.M.</u>, **McNeish, D.**, & Kuklinksi, M. (2023, June). *Effects of communities that care on long term alcohol use patterns from adolescence to young adulthood*. Poster presented at the 46th Annual Research Society on Alcoholism (RSA), Bellevue, WA, USA.
- 21. **McNeish, D.**, Wolf, M.G., & Manapat, P.D. (2023, June). *Dynamic fit indices for generalizing and extending Hu & Bentler*. Invited session presented at the Modern Modeling Methods (M3) conference, Storrs, CT, USA.
- 22. **McNeish, D.** & Wolf, M.G. (2022, April). *Unresolved issues with Hu and Bentler cutoffs and a method to derive more appropriate cutoffs*. Paper presented at a symposium at the

- annual convention for the American Educational Research Association (AERA), San Diego, CA, USA.
- 23. Wolf, M.G. & McNeish, D. (2022, April). *Dynamic model fit indices: A R Shiny application*. Paper presented at a symposium at the annual convention for the American Educational Research Association (AERA), San Diego, CA, USA.
- 24. Matta, T.H. & McNeish, D. (2022, April). *Extending the SRMR for SEMs with mean structures and covariates*. Paper presented at a symposium at the annual convention for the American Educational Research Association (AERA), San Diego, CA, USA.
- 25. **McNeish, D.** (2022, April). *Moving beyond Hu and Bentler: Comparing adjusted cutoffs from dynamic fit indices and equivalence testing.* Paper presented at a symposium at the annual convention for the American Educational Research Association (AERA), San Diego, CA, USA.
- 26. Harring, J.R., **McNeish, D.**, & Dumas, D. (2021, April). *A multilevel structured latent curve model for disaggregating student and school contributions to learning*. Paper presented at the multilevel modeling special interest group business meeting during the annual meeting of the American Educational Research Association (AERA).
- 27. <u>Aitken, A. A.</u>, **McNeish, D.**, & Graham, S. (2021, April). *The mediating role of motivation between choice and writing quality*. Roundtable presentation at the annual meeting of the American Educational Research Association (AERA), Virtual Presentation.
- 28. Dumas, D., **McNeish, D**., Roberts, G. J. (2021. April). *Conceptualizing a Nonlinear Meta-Analysis for Education Research*. Paper presented at the annual meeting of the American Educational Research Association (AERA), Virtual Presentation.
- 29. <u>Blake, A.J.</u>, **McNeish, D.**, & Chassin, L. (2021, April). *The influence of parent-child separation on young-adult substance use disorder: measurement and moderation as sources of heterogeneity*. Poster presentation at the annual meeting of the Society for Research in Child Development (SRCD), Virtual Presentation.
- 30. **McNeish, D.** & Harring, J.R. (2020, July). *Improving convergence in growth mixture models*. Paper accepted at the International Meeting of the Psychometric Society (IMPS), College Park, MD, USA.
 - * Conference cancelled due to COVID-19

- 31. Matta, T.H. & **McNeish**, **D.** (2020, July). *Refining the SRMR for latent growth curve models*. Paper accepted at the International Meeting of the Psychometric Society (IMPS), College Park, MD, USA.
 - * Conference cancelled due to COVID-19
- 32. <u>Peña, A.</u>, **McNeish, D.**, Ayers, S.L., Olson, M.L., Vander Wyst, K., Williams, A.N., Konopken, Y.P., Castro, F.G., Keller, C.S., Patrick, D.L., & Shaibi, G.Q. (2020, June). *Heterogenic response to lifestyle intervention among Latino adolescents with obesity*. Paper presented to the American Diabetes Association Scientific Sessions, Chicago, IL, USA.
- 33. Dumas, D., **McNeish, D.**, Sarama, J., & Clements, D. (2020, April). *Pre-school mathematics intervention can significantly improve student learning trajectories through elementary school*. Paper presented at the annual meeting of the American Educational Research Association (AERA), San Francisco, CA.
 - * Conference cancelled due to COVID-19
- 34. Dumas, D., **McNeish, D.,** Schreiber-Gregory, D., Durning, S., & Torre, D. (2020, April). *Dynamic measurement in health professions education: Rationale, application, and possibilities*. Paper presented at the annual meeting of the American Educational Research Association (AERA), San Francisco, CA, USA.

 *Conference cancelled due to COVID-19
- 35. **McNeish, D.**, Dumas, D., & Grimm, K.J. (2019, October). *Estimating new quantities from longitudinal test scores to improve forecasts of future performance*. Paper presented at the 59th annual meeting of the Society for Multivariate Experimental Psychology (SMEP), Baltimore, MD, USA.
- 36. **McNeish, D.** & Harring, J.R. (2018, October). *Covariance pattern mixture models*. Paper presented at the 58th annual meeting of the Society for Multivariate Experimental Psychology (SMEP), Albuquerque, NM, USA.
- 37. **McNeish, D.** & Harring, J.R. (2018, September). *IH8REM: Covariance pattern mixture models*. Presentation given at the Innovations in Latent Variable and Random Effects Modeling (ILVREM) Conference, Colorado Springs, CO, USA.
- 38. Dumas, D.G. & McNeish, D. (2018, August). *Dynamic measurement modeling: Using nonlinear growth models to estimate student learning capacity*. Paper presented at the annual convention for the American Psychological Association (APA), San Francisco, CA, USA.

- 39. Dumas, D.G. & McNeish, D. (2018, March). Dynamic measurement modeling: Using non-linear growth models to estimate student learning capacity. Part of the symposium "Prioritizing Growth But Underutilizing Growth Scales: Implications of Advances in Growth Modeling for Educational Policy and Practice" (with Yeow Meng Thum, Megan Kuhfeld, and Jim Soland) at the 15th meeting of the Society for Research of Educational Effectiveness, Washington, D.C., USA.
- 40. Montalbano, C., Allen, E., Greene, J. A., Murphy, P. K., Butler, A., Firetto, C. M., Wei, L., & McNeish, D. (2017, August). *Investigating changes in relational reasoning in small-group discourse across time and ability*. Paper presented at the 2017 annual meeting of the American Psychological Association (APA), Washington, D.C., USA
- 41. Smid, S., McNeish, D., & van de Schoot, A.G.J. (2017, May). Structural equation models with small samples: Bayesian vs maximum likelihood estimation. Poster presented at the 29th Association for Psychological Science (APS) annual convention, Boston, MA, USA.
- 42. <u>Smid, S.</u>, **McNeish, D.**, & van de Schoot, A.G.J. (2017, May). *Bayesian structural equation models with small samples. Part of the symposium entitled*, "What the Dutch can do with prior information" at the 2017 Modern Modeling Methods (M3) Conference, Storrs, CT, USA.
- 43. Muenks, K., **McNeish, D.,** & Wentzel, K. (2017, April). *Social support, goal pursuit, and classroom behavior of adolescents: a multi-level study*. Paper presented at the annual meeting of the Society for Research in Child Development, Austin, TX, USA.
- 44. Muenks, K., **McNeish, D.,** & Wentzel, K. (2017, April). *Social support, goal pursuit, and classroom behavior of adolescents: a multi-level study*. Paper presented at annual meeting of the American Educational Research Association (AERA), San Antonio, TX, USA.
- 45. Dumas, D. & McNeish, D. (2017, April) *Can we measure student potential?* Paper presented at the annual meeting of the American Educational Research Association (AERA), San Antonio, TX, USA.
- 46. Muenks, K., **McNeish, D.,** & Wentzel, K. (2016, August). *Relations between peer and teacher supports, motivation, and engagement in adolescent students*. Poster presented at the annual meeting of the American Psychological Association, Division 15, Denver, CO, USA.
- 47. **McNeish, D.,** & Dumas, D. (2016, May). *Non-linear growth models as measurement models: A second-order growth curve model for measuring potential.* Paper presented at the 2016 Modern Modeling Methods (M3) Conference, Storrs, CT, USA.

- 48. **McNeish, D.,** & Dumas, D. (2015, October). *A second-order model for understanding potential*. Poster presented at the annual meeting of the Society for Multivariate Experimental Psychology, Los Angeles, CA, USA.
- 49. **McNeish, D.** & Dumas, D.G. (2015, September). *A second-order structured latent curve model for measuring potential*. Presentation given at the Innovations in Latent Variable and Random Effects Modeling (ILVREM) Conference, Minneapolis, MN, USA.
- 50. **McNeish, D.**, & Harring, J.R. (2015, May). *Small sample robust model fit criteria in latent growth models with non-informative dropout*. Paper presented at the Modern Modeling Methods (M3) Conference, Storrs, CT, USA.
- 51. **McNeish, D.**, Radunzel, J., & Sanchez, E. I. (2015, April). *Relating non-cognitive student characteristics to ACT*[®] *scores: An application of sparsely clustered data methods.* Paper presented at the annual meeting of the American Educational Research Association (AERA), Division D: Measurement & Research Methodology, Chicago, IL, USA.
- 52. **McNeish, D.** (2015, April). *Using Lasso for selection and to assuage overfitting: A method long ignored in educational research.* Paper presented at the annual meeting of the American Educational Research Association (AERA), SIG: Educational Statisticians, Chicago, IL, USA.
- 53. **McNeish, D.**, <u>An, J.</u>, & Hancock, G. R. (2015, April). Factor indicator reliability and fit-indices: More evidence against golden rule cut-offs in latent variable models. Paper presented at the annual meeting of the American Educational Research Association (AERA), SIG: Structural Equation Modeling, Chicago, IL, USA.
- 54. **McNeish, D.** (2015, April). *Bayesian latent growth models with small samples: An empirical Bayes alternative using data-dependent priors.* Paper presented at the annual meeting of the American Educational Research Association (AERA), SIG: Structural Equation Modeling, Chicago, IL, USA.
- 55. **McNeish, D.**, & Stapleton, L. M. (2015, April). *Clustered data mean you need multilevel models, right?*. Paper presented at the annual meeting of the American Educational Research Association (AERA), SIG: Multilevel Modeling, Chicago, IL, USA.
- 56. **McNeish, D.** (2014, September). *Small sample inference with latent growth models*. Presented at the Innovations in Latent Variable and Random Effects Modeling Conference, Colorado Springs, CO, USA.

- 57. **McNeish, D.** (2014, May). *Small sample size and growth curve models in the SEM framework: Assessing model fit criteria and parameter estimate bias.* Paper presented at the 2014 Modern Modeling Methods (M3) Conference, Storrs, CT, USA.
- 58. **McNeish, D.** (2014, April). *Variance component adjustment for latent growth and multi-level models in an SEM framework*. Paper presented at the annual meeting of the American Educational Research Association (AERA), SIG: Structural Equation Modeling, Philadelphia, PA, USA.
- 59. **McNeish, D.**, & Hancock, G. R. (2014, April). *The reliability paradox in multiple sample covariance structure models*. Paper presented at the annual meeting of the American Educational Research Association (AERA), SIG: Structural Equation Modeling, Philadelphia, PA, USA.
- 60. **McNeish, D.** (2014, April). A new estimation method for item parameters in IRT with small sample sizes: Applying Kaplan-Meier to item response data. Paper presented at the annual meeting of the National Council of Measurement in Education (NCME), Philadelphia, PA, USA.
- 61. **McNeish, D.**, & Harring, J. R. (2013, May). *Clustered data with a small number of clusters: Comparing the performance of model-based and design based approaches.* Paper presented at the 2013 Modern Modeling Methods Conference (M3), Storrs, CT, USA.
- 62. **McNeish, D.**, & Stapleton, L. M. (2013, April). *The effect of the number of clusters on multilevel model estimates: A review and illustration.* Paper presented at the annual meeting of the American Educational Research Association (AERA), SIG: Multilevel Modeling, San Francisco, CA, USA.
- 63. Hancock, G. R., & McNeish, D. (2013, April). *More powerful tests of simple interaction contrasts for the two way factorial design*. Paper presented at the annual meeting of the American Educational Research Association (AERA), SIG: Educational Statisticians, San Francisco, CA, USA.

Regional

64. **McNeish, D.**, & Stemler, S. E. (2011, April). *Key components in* the *measurement of teaching excellence*. Paper presented at the annual meeting of the New England Educational Research Organization (NEERO), New Bedford, MA, USA.

65. **McNeish, D.**, Kobrin, D., Cheng, J., & Lin, Y. (2011, April). *The association between demographics and bus disciplinary status in the Middletown school district*. Poster presented at the Connecticut State Department of Education 6th Annual Data Showcase, Waterbury, CT, USA.

Institutional

- 66. **McNeish, D.** (2019, September). *Sum scores are factor scores*. Presented at Arizona State University for the Quantitative Design and Data Analysis seminar, Tempe, AZ, USA.
- 67. **McNeish, D.** (2019, January). *SEM model fit measures probably lie to you.* Presented at Arizona State University for the Quantitative Design and Data Analysis seminar, Tempe, AZ, USA.
- 68. **McNeish, D.** (2018, September). *Random effects are killing your mixture models*. Presented at Arizona State University for the Quantitative Design and Data Analysis seminar, Tempe, AZ, USA.
- 69. **McNeish, D.** (2016, February). *Lies your SEM fit indices have been telling you.* Presented at Utrecht University for the Research Methods working group, Utrecht, the Netherlands.
- 70. **McNeish, D.** (2016, January). *Data-dependent priors for growth models with small samples*. Presented at Utrecht University for the Bayesian Statistics working group, Utrecht, the Netherlands.
- 71. **McNeish, D.**, & Stapleton, L. M. (2015, October). *Clustered data: Are multilevel models really necessary?* Presented at the University of Maryland, Baltimore as part of the Maryland Longitudinal Data System Center Research Series, Baltimore, MD, USA.
- 72. Preston, A., Stapleton, L. M., & **McNeish, D.**, (2015, May). *Visual Representations of Data: Review and Recommendations*. Presented at the University of Maryland, Baltimore as part of the Maryland Longitudinal Data System Center Research Series, Baltimore, MD, USA.
- 73. **McNeish, D.**, <u>An, J.</u>, & Hancock, G. R. (2015, March). *Factor indicator reliability and fit-indices: More evidence against golden rule cut-offs in latent variable models*. Presented at the University of Maryland, College Park as part of the Measurement, Statistics, and Evaluation program Research Day, College Park, MD, USA.
- 74. **McNeish, D.** (2014, December). *An EDMS student's advice for conducting research in graduate school.* Presented at the University of Maryland, College Park as part of the Monday Symposium on Measurement and Statistics, College Park, MD, USA.

- 75. **McNeish, D.**, Stapleton, L. M., & Preston, A. (2014, November). *Strategies for missing data in educational research*. Presented at University of Maryland, College Park as part of the Maryland Longitudinal Data System Center Research Series, Baltimore, MD, USA.
- 76. **McNeish, D.**, Radunzel, J., & Sanchez, E. I. (2014, August). *Relating non-cognitive student characteristics to the ACT*[®] *College Readiness Assessment*. Poster presented at Summer Intern Open House at ACT, Inc., Iowa City, IA, USA.
- 77. **McNeish, D.**, Radunzel, J., & Sanchez, E. I. (2014, July). *Relating non-cognitive student characteristics to the ACT® College Readiness Assessment*. Presented to the Statistical, Measurement, and Workforce Research Departments at ACT, Inc., Iowa City, IA, USA.
- 78. Stapleton, L. M., **McNeish, D.**, & Mao, X. (2013, December). *Approaches for causal inference in educational policy research*. Presented at University of Maryland, Baltimore as part of the Maryland Longitudinal Data System Center Research Series, Baltimore, MD, USA.
- 79. **McNeish, D.**, & Stapleton, L. M. (2013, April). *The effect of the number of clusters on multilevel model estimates: A review and illustration*. Paper presented at the University of Maryland Graduate Research Interaction Day (GRID), College Park, MD, USA.
- 80. **McNeish, D.** (2010, July). *Measuring adaptability in military personnel*. Poster presented at the annual poster session for the Quantitative Analysis Center and Howard Hughes Medical Institute Program, Middletown, CT, USA.

WORK EXPERIENCE

2013-2015 Research Analyst, Maryland Longitudinal Data System Center

Baltimore, MD, USA

Supervisor: Laura Stapleton

2014 Statistical Research Intern, ACT, Inc.

Iowa City, IA, USA

Supervisors: Justine Radunzel and Edgar Sanchez

2013 Statistician/Psychometrics Intern, American Institutes for Research

Washington, D.C., USA

Supervisor: Harold Doran

2011-2013 Research Assistant, University of Maryland

College Park, MD, USA Supervisor: André Rupp

2009-2011 Research Assistant, Wesleyan University Psychometric Laboratory

Middletown, CT, USA

Lab Director: Steven Stemler

2010 Research Apprentice, Wesleyan University Quantitative Analysis Center

Middletown, CT, USA Mentor: Steven Stemler

EXTERNAL CONSULTING

United States' Coast Guard

- United States' Department of Defense
- Ohio Attorney General
- University of Toledo, Office of Legal Affairs
- Stanford University, School of Education
- University of Denver, Morgridge School of Education

ADVANCED TRAINING

- 1. Introduction to Machine Learning (Utrecht Univ., 2016)
- 2. Multilevel Structural Equation Modeling with xxM (Univ. of Conn., 2015)
- 3. Cross-Classified and Multiple Membership Models (Univ. of MD, 2014)
- 4. Analyzing Survey Data with Missing Values (Census Bureau, 2014)
- 5. Bayesian Non-Parametric Regression Modeling (Univ. of Conn., 2014)
- 6. Introduction to Quantile Regression (Univ. of Conn, 2013)
- 7. Bayesian Statistical Modeling (Univ. of MD, 2013)
- 8. Advanced Topics in Structural Equation Modeling (Univ. of MD, 2012)
- 9. Introduction to Structural Equation Modeling (Univ. of MD, 2012)

SERVICE

Profession

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2021 -	External tenure/promotion evaluations (6 associate, 2 full)
	Countries: USA, Germany, the Netherlands, Singapore
2020	Small Sample Size Solutions Conference, scientific committee
2018	Small Sample Size Solutions Conference, organizing committee
2016	International Multilevel Conference, organizing committee
2014	NCME Annual Meeting Session Chair

2013-2014	ALKA Structural Equation Modeling 510 Newsletter		
	University		
2024 - 2027	College of Liberal Arts and Science Senator		
2024 - 2027	College of Liberal Arts and Science Senate Curriculum Committee		
2022	Research Development panel on early career grant funding		
2017	REACH Panelist: CV and cover letter writing		
2019 -	~15 hours/year informal consulting with faculty and students outside psychology		
Department			
2024-2026	Chair, Faculty Evaluation Committee (FEC)		
2021	Third-year review committee, Gi-Yeul Bae		
2021	Personnel subcommittee, Roy Levy Psychology Dept. appointment		
2020-2022	Member, Faculty Evaluation Committee (FEC)		
2019-2021	Planning and Advisory Committee (PAC)		
2017-2018	Quantitative Methods Search Committee Member		
2017 -	~50 hours/year informal consulting with faculty and students		

AERA Structural Equation Modeling SIG Newsletter

Ad-Hoc Reviewing

Total Ad Hoc Reviews: 290 for 55 journals

Total Reviews Coordinated: 109

2024 Manuscripts Coordinated as AE: 19

2024 Reviews: 30

2013-2014

2023 Manuscripts Coordinated as AE: 40

2023 Reviews: 18

Methods & Statistics Journals (n = 29)

Advances in Methods and Practices in Psychological Frontiers in Applied Mathematics & Statistics

Science

Annals of Applied Statistics

Applied Psychological Measurement

Behavior Research Methods

Biometrical Journal

BMC Medical Research Methodology

British Journal of Mathematical and Statistical

Psychology

Communications in Statistics: Simulation and

Computation Clinical Trials

Educational and Psychological Measurement

Epidemiologic Methods

Journal of Applied Statistics Journal of Classification

Journal of Educational and Behavioral Statistics

Journal of Experimental Education

Journal of Statistical Simulation and Computation Journal of Survey Statistics and Methodology Journal of the American Statistical Association Measurement: Interdisciplinary Research and

Perspectives Methodology

Multivariate Behavioral Research Organizational Research Methods

Psychological Methods

Psychometrika

Statistical Methods in Medical Research

Statistics in Medicine

Statistical Papers

Structural Equation Modeling

Empirical Journals (n = 26)

American Educational Research Journal

American Psychologist Annals of Behavioral Medicine

Child Development

Clinical Psychological Science

Contemporary Educational Psychology

Developmental Psychology

Educational Psychologist

European Journal of Work and Organizational

Psychology Evaluation Review Group Dynamics

Journal of Clinical Child and Adolescent Psychology

Journal of Counseling Psychology

Journal of Consulting and Clinical Psychology

Journal of Educational Psychology Journal of Personality Assessment

Journal of Psychopathology and Clinical Science

The Leadership Quarterly

Learning & Individual Differences

Nature Communications

Perspectives on Psychological Science

Prevention Science

Psychological Assessment Psychological Science

Review of Educational Research Studies in Higher Education

Grant Proposals

Dutch Research Council (NWO), Vidi Program

German Research Foundation (DFG)

National Science Foundation (NSF); Methodology, Measurement, and Statistics program

Natural Sciences and Engineering Research Council of Canada (NSERC)

Swiss National Science Foundation (SNSF)

Conferences

Advances in Multilevel Modeling for Educational Research

Society for Multivariate Experimental Psychology

Book Series

Guilford Press, Methodology in Social Sciences Series

Routledge, Multivariate Applications Book Series