R. Noah Padgett

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Education

Ph.D.	Present	Baylor University Educational Psychology Quantitative Methodology Specialization
M.A.	2019	Baylor University Educational Psychology Quantitative Methodology Specialization Master's Thesis: Successfully Defended on April 30, 2019 *Factor Analysis in Educational Settings: A Simulation Study Comparing Fit Statistics Across Robust Estimators*
B.S.	2017	University of Wisconsin - Whitewater Majors: Mathematics *Statistics emphasis* & Psychology *General* Senior Thesis: Successfully Defended on May 4, 2017 *Exploring Modular Arithmetic and Stochasticity to Measure Latent Variables*
	2014	Caldwell Community College and Technical Institute Non-degree seeking dual enrolled (56 credits) Emphasis: Mathematics

Scholarship

Refereed Publications

Note: these articles are listed in two separate sections: 1) articles that address methodology and psychometric considerations and 2) articles where methods are applied to address the design or analysis of empirical data.

Refereed Publications – Methodology and Psychometric

1. **Padgett, R. N.** & Morgan, G. B. (2019, Dec.). An examination of sensitivity to measurement error of Rasch residual-based fit statistics. *Journal of Applied Measurement. 20*(4), 354-366.

2. Rehfeld, D. & **Padgett, R. N.** (2019, July). Test Review: Comprehensive Assessment of Spoken Language Second Edition. *Journal of Psychoeducational Assessment, 37*(4), 524–529.
doi: 10.1177/0734282917753484

3. Paneru, K., **Padgett, R. N.**, & Chen, H.. (2018, June). Analysis of zero-inflated population mean: A bootstrapping approach. *Journal of Modern Applied Statistical Methods. 17*(1), eP2557. doi: 10.22237/jmasm/1525133460

Refereed Publications – Applications of Methods

1. Papadakis, Z., **Padgett, R. N.**, Stamatis, A., & Karasch, R. (In Press). Baseball performance via the lens of anthropometric, fitness testing and statistics: A longitudinal study. *International Journal of Sports Science & Coaching.* Methods: random effects models.

2. McKay, M., Andretta, J., **Padgett, R. N.**, & Cole, J. (2020, Jan.). Stress and subjective life expectancy: cross-sectional and longitudinal associations in early adolescence. *International Journal of Psychology.* , 1-6. doi: 10.1002/ijop.12660. Methods: SEM, latent transition analysis.

3. Papadakis, Z., Stamatis, A., **Padgett, R. N.**, & Sanders, B. K. (2019, Aug.). NCAA In-Season Coaching Time Regulations Negate Strength and Conditioning Gains in Women's Division-II Basketball Team. *International Journal of Sports Science, 9*(4), pp. Methods: random effects models.

4. Faucher, M. A., Greathouse, K. L., **Padgett, R. N.**, Hastings-Tolsma, M., Sheikh, A., Choudhury, A. (2019, June). Exploration of the vaginal and gut microbiome in African American women by body mass index, class of obesity, and gestational weight gain: A pilot study. *American Journal of Perinatology,* (online). doi: 10.1055/s-0039-1692715. Methods: biostatistics, random effects models.

5. Greathouse, K. L., White, J., **Padgett, R. N.**, Perrotta, B., Jenkins, G. D., Chia, N., & Chen, J. (2019, Feb.). Gut microbiome meta-analysis reveals dysbiosis is independent of body mass index in predicting risk of obesity-associated CRC. *BMJ Open Gastroenterology, 6*(1), e000247. doi: 10.1136/bmjgast-2018-000247. Method: biostatistics, random forest analysis, random-effects meta-analyses.

6. **Padgett, R. N.**, Forsse, J. S., Papadakis, Z., Deal, P. J., & Stamatis, A. (2019, Feb.). Mental Health Best Practices in NCAA: The Bidirectional Relationship between Mental Toughness and Self-Compassion. *International Journal of Exercise Science: Conference Proceedings. 2*(11), 11 https://digitalcommons.wku.edu/ijesab/vol2/iss11/11. Methods: non-recursive SEM models.

7. Greathouse, K. L., White, J., Vargas, A., Bliskovsky, V., Beck, J., von Muhlinen, N., **...**, Harris, C. (2018, Aug.) Microbiome-TP53 Gene Interaction in Human Lung Cancer. *Genome Biology, 19*(1), 123. doi: 10.1186/s13059-018-1501-6 (Journal Impact Factor = 13.2). Methods: biostatistics, principal coordinate analysis (PCA on a non-Euclidean distance matrix), nonparametric statistics.

Technical Reports & Nonrefereed Publications

1. **Padgett, R. N.**, Kim, Y. Y., Zheng, X., & Feng, X. (2019). *Digital Familiarity and Writing Performance: A Multiple-group SEM Approach.* Technical Memo: National Center for Educational Statistics.

2. **Padgett, R. N.**, Yarnell, L, & Broer, M. (2019). *Teacher Weights Study: Investigating Weight Trimming Methods for State Level Teacher Estimates.* Internal Technical Report: American Institutes for Research.

3. Cooper, S., Kerschen, K., **Padgett, R. N.**, & Rehfeld, D. (2018). *Math for Early Learners Academy (MELA).* Press release. https://www.baylor.edu/soe/index.php?id=935594

4. **Padgett, R. N.**, Wilberding, E. & Waraczynski, M. (2016, Dec.). *Analyzing the Effectiveness of the Functional Family Case Management Program: Examining Episode and Placement Length.* Internal Report: Department of Health and Human Services, Walworth, WI.

5. Cortez, M., Gockenbach, M., Huang, Y., **Padgett, R. N.**, Nazari, F., Kribs, C., & Arriola, L. (2016). *The Effects of Culling and Quarantine on Reducing Antibiotic Resistance in a Cohort of Beef Cattle.* Technical Report. (2) https://mtbi.asu.edu/tech-reports-2016

Works Submitted

1. Sulak, T., **Padgett, R. N.**, & Rehfeld, D. (2020, Jan.). School Safety Elements and the Number of Violent Acts in a School.

2. Greathouse, L., Ryan, B. M.; **Padgett, R. N.**, Kitahara, C. M., Bowman, E. D., & Harris, C. C. (2020, Jan.). Lung Cancer Risk is Differentially Associated with Overall and Central adiposity in Both European and African Americans.

3. Stamatis, A., Grandjean, P., Morgan, G. B., **Padgett, R. N.**, Cowden, R., & Koutakis, P. (2020, Jan.). Developing and Training Mental Toughness in Sport: A Systematic Review and Meta-analysis of Cross-sectional Designs and Pre- and Post-test Experiments.

4. Renbarger, R. L., **Padgett, R. N.**, Rehfeld, D. M., Sulak, T. N., & Morgan, G. B. (2019, Dec.). What Matters for Effective Professional Development? An Examination of the Components.

5. **Padgett, R. N.** & Morgan, G. B. (2019, Nov.). Multilevel CFA with Ordered Categorical Data: A Simulation Study Comparing Fit Indices Across Robust Estimation Methods.

6. Greathouse, K. l., **Padgett, R. N.**, Sheik, A., Petrosino, J., Hastings-Tolsma, M., & Faucher, M. A. (2019, Oct.). Exploration of diet quality by obesity severity in association with gestational weight gain and distal gut microbiota in pregnant African American women: A Pilot Study.

7. Adair, K., **Padgett, R. N.**, von Waaden, N., Wilson, R. L., & Bowden, R. G. (2019, Oct.). Metabolic Health, Obesity, and Cardiovascular Disease: NHANES Cohort Findings.

8. Renbarger, R. L., **Padgett, R. N.**, Cowden, R. G., Govender, K., George, G., Makhnach, A.V., ..., Kreménková, L. (2019, July). Culturally Relevant Resilience: A Psychometric Meta-Analysis of the Child and Youth Resilience Measure (CYRM).

Open Access Data

1. **Padgett, R. N.**; Morgan, G. (2019, Nov.). *ML-CFA Monte Carlo Simulation Back Up Files.* Texas Data Repository Dataverse. https://doi.org/10.18738/T8/RBUFZG

2. **Padgett, R. N.** & Morgan, G. B. (2019, May). *Rasch Fit Statistics Simulation Results.* Texas Data Repository Dataverse. https://doi.org/10.18738/T8/AWC5FD

3. **Padgett, R. N.** & Tipton, R. J. (2019, March). *Monte Carlo Simulation Results Categorical Latent Class Analysis.* Texas Data Repository Dataverse. https://doi.org/10.18738/T8/CHW28Z

Conference Presentations

National/International

1. Stamatis, A., Andre, T. L., **Padgett, R. N.**, & Valladao, S. P. (2019, June). *Identification of Risk Factors Associated with Groin Injury in an Upright Standing Position.* Poster Session, American College of Sports Medicine: Medicine & Science in Sports & Exercise (51), Orlando, FL. doi: 10.1249/01.mss.0000562654.16060.8f

2. Herrera, M. C., Amasay, T., Papadakis, Z., Castillo, A., Samantha, D., & **Padgett, R. N.** (2019, May). *Identification of Risk Factors Associated with Groin Injury in an Upright Standing Position.* Poster Session, American College of Sports Medicine: Medicine & Science in Sports & Exercise (51), Orlando, FL. doi: 10.1249/01.mss.0000560678.07528.19

3. Rehfeld, D., Renbarger, R. L., Sulak, T. N., **Padgett, R. N.**, & Morgan, G. B. (2020, April). *Effective Professional Development: Mapping Theory onto Practice.* Paper Session, American Educational Research Association, San Francisco, CA.

4. **Padgett, R. N.**, Morgan, G. B., & Stamatis, A. (2019, Aug.). *Measuring Mental Toughness in Sport: Which Assessment Tool is the Most Widely Accepted?* Poster Session, American Psychological Association, Chicago, IL.

5. Stamatis, A., Andre, T. L., **Padgett, R. N.**, & Valladao, S. P. (2019, June). *Mental Toughness as a Moderator of the Physical Exercise – eSports Performance Relationship: A Pilot Study.* Poster Session, American College of Sports Medicine, Orlando, FL.

6. **Padgett, R. N.** & Morgan, G. B. (2019, April). *An examination of sensitivity to measurement error of Rasch residual-based fit statistics.* Paper Session, American Educational Research Association, Toronto, Canada.

7. **Padgett, R. N.**, Renbarger, R. L., Sulak, T. L. & Jiang, S. (2019, April). *A comparison of methods and software for analyzing plausible values: An example with PIAAC.* Paper Session, American Educational Research Association, Toronto, Canada.

8. Renbarger, R. L., **Padgett, R. N.**, Cowden, R. G., Govender, K., George, G., Makhnach, A.V., Novotný, J.S., Nugent, G., Rosenbaum, L., & Kreménková, L. (2019, April). *Culturally Relevant Resilience: A Psychometric Meta-Analysis of the Child and Youth Resilience Measure (CYRM).* Poster Session, American Educational Research Association, Toronto, Canada.

9. Rehfeld, D. M., **Padgett, R. N.**, & Rainer, D. (2018, Nov.). *A pilot investigation into the relationship between clinical competence and student independence.* ePoster session presented at the meeting of the American Speech-Language-Hearing Association (ASHA). Boston, MA.

10. Paneru, K., **Padgett, R. N.** (2017, Jan.). *Pseudo-Likelihood Estimates and Bootstrap Confidence Intervals for the Mean of Zero-Inflated Population.* Paper Session, Joint Mathematics Meeting, Atlanta, GA.

11. **Padgett, R. N.** (2017, Jan.). *Exploring Modular Arithmetic and Stochasticity to Estimate Latent Variables.* Mathematics Association of America Student Poster Session, Joint Mathematics Meeting, Atlanta, GA.

Regional/Local

1. **Padgett, R. N.**, Kim, Y. Y., Zheng, X., & Feng, X. (2019, Aug.). *Digital Familiarity and Writing Performance: A Multiple-group SEM Approach.* American Institutes for Research Psychometrician Research Group, Crystal City, VA.

2. **Padgett, R. N.**, Yarnell, L., & Broer, M. (2019, July). *Teacher Weights Study: Investigating Trimming Methods for State Level Inferences.* Technical report presentation at National Center for Educational Statistics (NCES) for NAEP Commissioner Peggy Carr, Washington, D.C..

3. **Padgett, R. N.**, Forsse, J. S., Papadakis, Z., Deal, P. J., & Stamatis, A. (2019, Feb.). *Mental Health Best Practices in NCAA: The Bidirectional Relationship between Mental Toughness and Self-Compassion.* Poster Presentation. Texas Chapter of the American College of Sports Medicine, Fort Worth, TX.

4. **Padgett, R. N.**, Morgan, G. B., Jiang, S. & Shero, L. (2019, Feb.). *Multilevel factor models: Model specification and fit guidance.* Paper presentation. SERA Annual Meeting, San Antonio, TX.

5. **Padgett, R. N.** & Rehfeld, D. M. (2019, Feb.). *School Climate Characteristics and Student Outcomes: A School-Centered Approach.* Paper presentation. SERA Annual Meeting, San Antonio, TX.

6. Rehfeld, D. M., **Padgett, R. N.**, & Collins, C. (2019, Feb.). *A Comparison of Graduate Student Supervision Needs & Expectations.* Paper presentation. SERA Annual Meeting, San Antonio, TX.

7. **Padgett, R. N.** & Tipton, R. J. (2018, April). *Frequency of Response Category Endorsement and Resulting Impact on Classification.* Poster presentation. Graduate Student Association Research Showcase, Waco, TX.

8. Morgan, G., Wells, K., **Padgett, R. N.** (2018, Feb.). *Multilevel Latent Transition Mixture Modeling for Organizational Models: A Simulation.* Paper presentation. SERA Annual Meeting, New Orleans, LA.

9. **Padgett, R. N.** (2018, Feb.). *Investigating Error Distribution from Categorizing Item Response as a Source of Variability in Trait Estimates.* Paper presentation. SERA Annual Meeting, New Orleans, LA.

10. **Padgett, R. N.**, & Tipton, R. J. (2018, Feb.). *Frequency of Response Category Endorsement and Resulting Impact on Classification.* Paper presentation. SERA Annual Meeting, New Orleans, LA.

11. Bhattacharyya, J., Chan, C., **Padgett, R. N.**, & Waraczynski, M. (2017, April) *Assessing the Dynamics of Learning in Research Apprenticeship Program (RAP) Students.* Poster session at UW System Spring Conference on Teaching and Learning, La Crosse, WI.

12. **Padgett, R. N.** (2017, April) *Exploring Modular Arithmetic and Stochasticity to Measure Latent Variables.* Mathematics Association of America Wisconsin Section, Milwaukee, WI.

13. **Padgett, R. N.** (2017, Mar.) *Exploring Modular Arithmetic and Stochasticity to Measure Latent Variables.* Poster session at UW-W Spring Undergraduate Research Day, Whitewater, WI.

14. Cortez, M., Gockenbach, M., Huang, Y., **Padgett, R. N.**, Nazari, F., Kribs, C., & Arriola, L. (2016, Oct.). Antibiotic Resistance in Beef Cattle: The Effects of Culling, Quarantining, and New Legislation. Poster session at Louis Stokes Midwest Center of Excellence, Lisle, IL.

15. Zawacki, A., & **Padgett, R. N.** (2016, Sept.) *Assessing Intervention Effectiveness in Walworth County's Health and Human Services.* Dean's Advisory Board Poster Session, Whitewater, WI.

16. **Padgett, R. N.** (2016, April). *Zero-Inflated Populations in Applications: Examples, Analysis, and Modeling.* Mathematics Association of America Wisconsin Section, La Crosse, WI.

17. **Padgett, R. N.** (2016, April). *Analysis of Zero-Inflated Population Mean: Applying Bootstrapping as an Alternative.* Poster session at National Conference of Undergraduate Research, Asheville, NC.

18. Bhattacharyya, J., Chan, C., Gnadt, K.,Martinez, M., & **Padgett, R. N.** (2016, Feb.). *Mastering Research with RAP Masters: Peer Mentoring and LEAP ELO's.* Poster session at UW- System Liberal Education & America's Promise (LEAP), Whitewater, WI.

19. **Padgett, R. N.** (2015, Oct.) *Analysis of Zero-Inflated Populations: An Application to Rain Fall in Snoqualmie Falls, WA.* Dean's Advisory Board Poster Session, Whitewater, WI.

Research Awards

1. SERA Dean's Paper Award (2019). School Climate Characteristics and Student Outcomes: A School-Centered Approach.

2. SERA Dean's Paper Award (2018). Investigating Error Distribution from Categorizing Item Response as a Source of Variability in Trait Estimates.

3. SERA Dean's Paper Award (2018). Frequency of Response Category Endorsement and Resulting Impact on Classification.

4. Poster Presentation Award Finalist for Psychological & Behavioral Sciences (2017). Exploring Modular Arithmetic and Stochasticity to Measure Latent Variables. UW-Whitewater Undergraduate Research Day.

5. Best Use of Data for UW-Whitewater Assessment Day (2017). Assessing the Dynamics of Learning in Research Apprenticeship Program (RAP) Students.

6. Poster Presentation Award Finalist for Physical Sciences and Mathematics (2016). Analysis of Zero-Inflated Populations: Nonparametric Bootstrapping & Complex Sampling Designs. UW-Whitewater Undergraduate Research Day.

Fellowships & Internships

2020   National Assessment of Educational Progress Doctoral Summer Internship (Invited)
Funding Amount: $12,000
Host Institution: American Institute for Research (AIR)

2019   National Assessment of Educational Progress Doctoral Summer Internship (Funded)
Funding Amount: $12,000
Host Institution: American Institute for Research (AIR)

2019   National Science Foundation Graduate Research Fellowship Program (Unfunded)
Funding Amount: $138,000
Host Institution: Baylor University
Project: *Multilevel mixture propensity score analysis: Estimating causal effects in educational data*

2018   Digital Research & Innovative Visual Explorations Summer Scholars Fellowship (Unfunded)
        Funding Amount: $1,000
        Host Institution: Baylor University
        Project: *Interpretation driven approach to class enumeration selection: A new visualization tool*

2016   Mathematical & Theoretical Biology Institute Summer Program (Funded)
        Funding Amount: $4,000
        Host Institution: Arizona State University
        Project: *Antibiotic Resistance in Beef Cattle: The Effect of Culling, Quarantine, and New Legislation*

2016   Summer Undergraduate Research Fellowship (Funded)
        Funding Amount: $3,500
        Co-recipient with Alyssa Zawacki
        Host Institution: University of Wisconsin - Whitewater
        Project: *Assessing Intervention Effectiveness in Walworth County's Department of Health and Human Services*

2014   Research Apprenticeship Program (Funded)
        Funding Amount: $1,000
        Host Institution: University of Wisconsin - Whitewater
        Project: *Regression Analysis in Zero-Inflated Populations using Pseudo-Likelihood Function for Parameter Estimation*

Grants

Spencer Foundation; Research-Practice Partnerships
   Duration: 2021-2024
       Role: Co-Principal Investigator/Research Coordinator
    Funding: $400,000 (Submitted)
    Project: *Kindergarten Readiness in Math: Developing an Intervention Curriculum and Assessment of Early Number Sense for Prekindergarten and Kindergarten Children*
         PI: Sandi Cooper, Baylor University

University of Wisconsin - Whitewater Spring Undergraduate Research Grant
   Duration: 2016-2017
       Role: Principal Investigator
    Funding: $1000 (Funded)
    Project: *Exploring Modular Arithmetic and Stochasticity to Measure Latent Variables*

University of Wisconsin - Whitewater Spring Undergraduate Research Grant
   Duration: 2015-2016
       Role: Principal Investigator
    Funding: $500 (Funded)
    Project: *Analysis of Zero-Inflated Populations: A Bootstrap Approach*

Programming Languages & Statistical Software

Languages

R, M*plus* & LaTeX (Expert)
Python, C++, MATLAB, SPSS (Proficient)
SAS, Stata, Mathematica, Maple (Some Experience)

Open Source Software

1. Padgett, R. N. (2018, Dec.). **R**: Cluster analysis homogeneity statistic (Version v1.0). GitHub Repository. http://doi.org/10.5281/zenodo.2484733

Software Training

1. National Assessment of Educational Progress Research Training (2019, Jan.) Washington, DC.

Teaching

Baylor University

Courses

EDP 5327: Educational Evaluation (Teaching Assistant; Fall 2019)

EDP 6362: Applied Multiple Regression & Correlation Analysis in Education (Co-Instructor; Spring 219)

EDP 5334: Statistical Methods (Teaching Assistant; Summer 2018)

Workshops

Morgan, G. & **Padgett, R. N.** (2019, Feb.) *Mixture Models: Introduction & Applications.* Southwest Educational Research Association Invited Workshop, San Antonio, TX.

Morgan, G. & **Pagett, R. N.** (2017, Nov.) *Regression with Count Outcomes.* University of Texas - San Antonio Invited Workshop, San Antonio, TX.

University of Wisconsin - Whitewater

MATH 342: Applied Statistics (Supplemental Instructor; Fall 2015, Fall 2016, Spring 2017)

MATH 152: Pre-Calculus (Supplemental Instructor; Fall 2015)

PSYCH 215: Basic Psychological Statistics (Supplemental Instructor; Fall 2015, Spring 2016, Fall 2016)

Math Learning Center Tutor for: college algebra, pre-calculus, calculus I, calculus II, and statistics

Service

Service to Field

2020	Southwest Educational Research Association Graduate Student Representative
2019	Southwest Educational Research Association Graduate Student Representative

Reviewer For:
> *Journal of Advanced Academics*
> *Journal of Psychoeducational Assessment*
> *Journal of Montessori Research*
> Southwest Educational Research Association

Baylor University

2018 - Present	Present Your PhD Association
2018 - 2019	Graduate Student Association Department Representative

University of Wisconsin - Whitewater

2017	University Curriculum Committee: College of Letters and Sciences (CL&S) Student Representative
2016 - 2017	CL&S Curriculum Committee
2017	CL&S Appeals Committee
2017	CL&S Class Climate (Course evaluations committee)
2016 - 2017	CL&S Dean' Advisory Council representative for the Department of Psychology

Professional Membership

2019 - Present	Society for the Improvement Psychological Science (SIPS)
2019 - Present	American Psychological Association (APA)
2019 - Present	Texas American College of Sports Medicine (TACSM)
2018 - Present	American Educational Research Association (AERA)
2017 - Present	Southwest Educational Research Association (SERA)

Academic Awards & Scholarships

2018	School of Education Dean's Office Travel Award
2017	Baylor University Graduate School Research Travel Award
2017	Baylor University Department of Educational Psychology Travel Award
2016	Mark and Diane Fiebrink Mathematics Scholarship
2016	Marion B. Schlicher Mathematics Scholarship
2016	Amy Krueger Memorial Psychology Scholarship
2016	UW-Whitewater General Merit Scholarship
2016	UW-Whitewater Chancellor Scholarship
2016	Dean's List at UW-Whitewater
2015	UW-Whitewater General Merit Scholarship
2015	Amy Krueger Memorial Psychology Scholarship
2015	Chuck and Martha Heinrich Mathematics Scholarship
2015	Carroll and Kay Flanagan Mathematics Scholarship
2015	Dean's List at UW-Whitewater
2015	National Collegiate Bowling Association Academic All American
2014	Stephen Lewandowski Mathematics Scholarship
2014	Dean's List at UW-Whitewater
2014	National Collegiate Bowling Association Academic All American
2014	President's List at Caldwell Community College & Technical Institute
2013	Dean's List at Caldwell Community College & Technical Institute

Employment

Baylor University

2017 - present	Graduate Assistant for Grant Morgan, Ph.D
2019	Statistics & Methodology Consultant, MELA Summer 2019

University of Wisconsin - Whitewater

2015 - 2017	Research Apprenticeship Program Assistant
2014 - 2017	Math Learning Center
2016	Co-Coordinator for ULEAD Program in Career & Leadership Development