ZACHARY M. HIMMELBERGER

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ZacharyHimmelberger.github.io

QUALIFICATION HIGHLIGHTS

- Published in multiple journals, led several statistical workshops, and presented at numerous professional conferences
- Conducted experimental and longitudinal studies, including writing a literature review, designing methodology, creating stimuli and materials, obtaining ethical approval from instutional review board, collecting data using study protocol, checking data integrity, processing data, analyzing and interpreting findings, and publishing results
- Extensive training in applied statistical analysis and statistical programming (primarily with R and python) with an emphasis on best practices for readability and reproducibility
- Statistical expertise in Bayesian modeling, multilevel modeling, general linear modeling, path analysis, and factor analysis
- College-level educator with strong oral and written communication skills
- Supervised and trained numerous students and professionals in statistics and research methodology
- Presented statistical results to key opinion leaders and administrators

EDUCATION

Doctorate of Philosophy in Experimental Psychology, The University of Alabama *2018*
Focuses in Cognitive Psychology, Developmental Science, and Statistics
Dissertation: The Acquisition of Survey Knowledge across Repeated Exposures to a Novel Environment in Individuals with Down Syndrome

Master of Arts in Experimental Psychology, The University of Alabama *2015*
Master's Thesis: Processing Spatial Relations: The Role of Instructions on the Priming of Egocentric and Allocentric Spatial Representations

Bachelor of Arts in Psychology, Rivier College *2012*
Honor's Thesis: The Testing Effect in the Classroom

SAMPLE PROJECT

Wayfinding in Individuals with Down syndrome

- Identified a gap in the literature, developed specific research questions and hypotheses, and designed study procedure to minimize confounds and measure covariates
- Wrote the application to obtain ethical approval from the institutional review board using appropriate federal, institutional, and professional standards
- Developed a survey, programmed a cognitive task in Python and SuperLab, and designed, created, and piloted a set of virtual environments to ensure the study materials were appropriate for the target population
- Wrote Python and R scripts to automate the data pre-processing, check data quality, and visualize the results
- Analyzed the data using a multilevel modeling framework to analyze repeated trials nested within individuals
- Published the manuscript to a high-quality academic journal

EXPERIENCE

Lecturer in Psychology, Maryville College, Maryville, TN *2017-present*

- Maintained an active research lab where I published papers, presented at conferences, supported institutional research, and mentored student research
- Taught courses and held workshops in statistics, research methodology, and programming in R
- Consulted with the Associate Dean, Career Center, faculty, and students on data analysis, statistical programming, grant writing, and results interpretation

Graduate Research Assistant, The University of Alabama, Tuscaloosa, AL *2012-2017*

- Designed, managed, collected, and analyzed data for survey and behavioral research projects
- Trained and supervised undergraduate and graduate research assistants on a large, federally funded grant, as well as other concurrent research projects
- Collaborated with colleagues on research projects using a wide range of methodologies

PUBLICATIONS

Yang, Y., **Himmelberger, Z.M.**, Robinson, T., Davis, M., Conners, F., & Merrill, E. (2021). Everyday memory in people with Down syndrome. *Brain Sciences, 11* (551), 1-15. doi: 10.3390/brainsci11050551

Faught, G.G., **Himmelberger, Z.M.**, Conners, F.A., & Tungate, A. S. (2020). Sustained Attention to Response Task Performance Trajectories in Down Syndrome. *Journal of Intellectual Disability Research*, 1-6. doi:10.1111/jir.12805

Lewis, J., **Himmelberger, Z.M.**, & Elmore, J.D. (2020). I Can See Myself Helping: The Effect of Self-Awareness on Prosocial Behavior. *International Journal of Psychology*, 56(5), 710-715. doi:10.1002/ijop.12733

Himmelberger, Z.M., Merrill, E.C., Conners, F.A., Roskos, B., Yang, Y., & Robinson, T. (2020). The Acquisition of Survey Knowledge by Individuals with Down syndrome. *Frontiers in Human Neuroscience, 14* (256), 1-17. doi:10.3389/fnhum.2020.00256

Faught, G.G., Conners, F.A., & **Himmelberger, Z.M.** (2016). Auditory and visual sustained attention in Down syndrome. *Research in Developmental Disabilities, 53*, 135-146. doi:10.1016/j.ridd.2016.01.021

MANUSCRIPTS IN REVIEW

A complete draft of each project is available for review upon request.

Himmelberger, Z.M., Bagci, M., Roskos, B., & Merrill, E.C. (under review in the *Journal of Environmental Psychology*) The Effect of Landmark Saliency on Route and Landmark Learning Trajectories

Himmelberger, Z.M., Faught, G.G., Tungate, A., Conners, F.A., & Merrill, E.C. (revision under review in the *International Journal of Developmental Disabilities*) Personality Traits Predicting Attitudes toward Individuals with Intellectual Disability

Sherwood, J.A., Lewis, J.A., Elmore, J.D., & **Himmelberger, Z.M.** (under review in *Violence and Victims*) The leprous nature of victim status: Victimization decreases social desirability

Himmelberger, Z.M., Coyle, E., & Leonard, T. (rejected, not yet resubmitted) The Relationship between Contact and Social Comfort around Individuals with Intellectual Disabilities

WORKSHOPS

Himmelberger, Z., & Johnson, A.R. (2021, March) Applied Multilevel Modeling with Longitudinal Data. Workshop given at the Annual Meeting of the Southeastern Psychological Association.

Himmelberger, Z., & Johnson, A.R. (2020, June) An Introduction to Multilevel Modeling. Workshop given at the Annual Meeting of the Southeastern Psychological Association.

Himmelberger, Z., & Johnson, A. R. (2018, April) Introduction to R. Workshop given to students, faculty, and staff at Maryville College.

RECENT PROFESSIONAL DEVELOPMENT

WorldQuant University Applied Data Science Module *2021*
Scientific Computing & Python (with honors)
Machine Learning & Statistical Analysis (with honors)

Bayesian Data Analysis *2021*
Course taught by Aki Vehtari (GSU, 2021)

TECHNICAL PROGRAMS

Data Analysis	R, Stan, SPSS, SAS
Programming	Python, JavaScript
Presentation	LaTeX(Beamer), Rmarkdown, Microsoft PowerPoint
Other Tools	SQL, Microsoft Excel, Qualtrics