

Tyson Stanley Barrett

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EDUCATION

Ph.D. Quantitative Psychology, Utah State University (Expected) Early 2018

Dissertation: Marginal Mediation: A New Framework for Interpretable Mediated Effects

B.S. Economics, Jon M. Huntsman School of Business, Utah State University, *Cum Laude* May 2014

B.S. Psychology, Utah State University, *Cum Laude* May 2014

EMPLOYMENT

Research Assistant, Prevention Lab, Utah State University 2016 – Present

Instructor, R for the Social Sciences (PSY 7810, CEPS 5700), Utah State University 2016 – Present

Statistical and Data Science Consultant, Utah State University 2015 – Present

Research Assistant, Veterans Affairs WOC, Salt Lake City 2015 – 2017

Teaching Assistant, Econometrics (ECN 7310), Utah State University Fall 2016

Research Assistant, NCHAM, Utah State University 2014 – 2016

Teaching Assistant, Psychological Statistics, Utah State University 2014 – 2015

RESEARCH FIELDS

Primary: Mediation Analysis, Chronic Conditions and Disabilities

Secondary: Reproducible Research, Statistical Learning, Econometrics, Mixture Modeling

PUBLISHED WORKS IN REFEREED JOURNALS

Method Development

Barrett, T.S. & Lockhart, G. Addressing the Reproducibility Crisis with Regularized Regression. Under Review.

Barrett, T. S. & Brignone, E. Furniture for Quantitative Scientists. Under Review.

Prevention Science and Development

Barrett, T. S. & White, K. R. The Temporal trend of adolescent hearing loss in the United States: A re-examination of NHANES data. Under Review.

Borrie, S.A., Lansford, K.L., & **Barrett, T.S.** Generalization of Speech Training. *Journal of Speech, Language, and Hearing Research*. In press.

Long, E., **Barrett, T.S.**, & Lockhart, G. Friendship Networks and Adolescent Health-Risk and Health-Protective Behavior. *Health Psychology*. In Press.

Borrie, S.A., Lansford, K.L., & **Barrett, T.S.** (2017). Rhythm perception and its role in perception and learning of dysrhythmic speech. *Journal of Speech, Language, and Hearing Research*, 60(3), 1-10. doi: 10.1044/2016_JSLHR-S-16-0094

Behl, D., White, K., **Barrett, T.**, Blaiser, K., Callow-Heusser, C., & Croshaw, T. (2017). A Multisite Study Evaluating the Benefits of Early Intervention via Telepractice. *Infant and Young Children*, 30(2), 147-161

Barrett, T. S. & White, K. R. (2016). Prevalence and Trends of Childhood Hearing Loss Based on Federally-funded National Surveys: 1994–2013. *Journal of Early Hearing Detection and Intervention*, 1(2), 8-16.

Doutré, S. M., **Barrett, T. S.**, Greenlee, J. & White, K. R. (2016). Losing Ground: Awareness of Congenital Cytomegalovirus in the United States. *Journal of Early Hearing Detection and Intervention*, 1(2), 39-48.

- Munoz, K., Rusk, S.E.P., Nelson, L., Preston, E., White, K.R., **Barrett, T.S.** & Twohig, M.P. (2016). Pediatric Hearing Aid Management: Parent Reported Needs for Learning Support. *Ear and Hearing Journal*. 37(6), 703-709.
- Borgogna, N., Lockhart, G., Grenard, J., **Barrett, T.**, Shiffman, S. & Reynolds, K. (2015). Ecological Momentary Assessment of Urban Adolescents' Technology Use and Cravings for Unhealthy Snacks and Drinks: Differences by Ethnicity and Sex. *Journal of the Academy of Nutrition and Dietetics*, 115(5), 759-766.

Applied Methodology

- Brignone, E., Gundlapalli, A.V., Blais, R.K., Kimerling, R., **Barrett, T.S.**, Nelson, R.E., Carter, M.E., Samore, M.A., & Fargo, J.D. (2017). Increased Health Care Utilization and Costs among Veterans with a Positive Screen for Military Sexual Trauma. *Medical Care*. In Press.
- Brown, L.T., Mohr, K.A.J., Wilcox, B.R., & **Barrett, T. S.** (2017). The effects of dyad reading and text difficulty on third-graders' reading achievement. *Journal of Educational Research*. 1-12. doi: 10.1080/00220671.2017.1310711
- Fargo, J.D., Brignone, E., Metraux, S., Peterson, R., Carter, M.E., **Barrett, T.**, Palmer, M., Redd, A., Samore, M.H., & Gundlapalli, A.V. (2017). Homelessness Following Disability-Related Discharges from Active Duty Military Service in Afghanistan and Iraq. *Disability and Health Journal*. 1-8. <http://dx.doi.org/10.1016/j.dhjo.2017.03.003>.

PRESENTATIONS

- Barrett, T.S.**, & Lockhart, G. Enhancing the Exploration and Communication of Big Data in Prevention Science. Poster presented at the *2017 Annual Meeting of the Society of Prevention Research*, Washington, DC.
Received "Distinguished Poster Award" and "Abstract of Distinction."
- Barrett, T.S.**, & Lockhart, G. Exploring the Predictors of Marijuana Use Among Adolescents with Asthma. Oral presentation at the *2017 Utah State University Research Symposium*, Logan, UT.
- Sanghavi, K., White, K., **Barrett, T.S.**, Wylie, A., Raspa, M., Cashman, D., Vogel, B., Caggana, M. & Bodurtha, J. Poster presented at the *2017 Early Hearing Detection and Intervention Conference*, Atlanta, GA.
Received "Outstanding Poster Award."
- Brignone, E., Gundlapalli, A.V., **Barrett, T.S.**, Blais, R.K., Nelson, R.E., Carter, M.E., Kimerling, R., Samore, M.H., Fargo, J.D., Cost of Care among Male and Female Veterans with a Positive Screen for Military Sexual Trauma. Poster presented at the *2016 Annual Meeting of the International Conference of Psychology*, Yokohama, Japan.
- Barrett, T.S.**, Munoz, K. & White, K. How well do parent report hearing loss in their children? Poster presented at the *2016 Early Hearing Detection and Intervention Conference*, San Diego, CA.
- Barrett, T.S.**, Munoz, K. & White, K. Accounting for Temporary Loss in National Studies on Hearing Loss. Poster presented at the *2016 Early Hearing Detection and Intervention Conference*, San Diego, CA.
- Barrett, T.S.**, Munoz, K. & White, K. An Evaluation of Early Intervention delivered via Video Conferencing. Poster presented at the *2016 Early Hearing Detection and Intervention Conference*, San Diego, CA.
- Stevens, V., **Barrett, T.S.** & Nelson, R. Distribution and Daily Cost of Care in a Pediatric Hospital. Oral presentation to the Pediatric Guidance Council of Intermountain Healthcare, Salt Lake City, UT.
- Barrett, T.S.**, Munoz, K. & White, K. Refinements to estimating prevalence of hearing loss in children. Poster presented at the *2015 Utah State University Research Symposium*, Logan, UT.
- Barrett, T.S.**, Prante, M., Peterson, R., Fargo, J.D., Pyle, N. Predictors of employability among homeless youth. Poster presented at the *2014 Psi-Chi Undergraduate Research Conference at Idaho State University*, Pocatello, ID.
- Barrett, T.S.**, Holland, D. Nascent Entrepreneurship, Impulsivity, and Self-Efficacy. Poster presented at the *2014 Research on Capitol Hill*, Salt Lake City, UT.
- Holland, D., **Barrett, T.S.** Impulsivity in young entrepreneurs. Round table discussion at the 2013 Babson Business Conference, Paris, France.

MANUSCRIPTS IN PREPARATION

- Barrett, T.S.,** Doutré, S., Munoz, K., & White, K. Self and Parent Report Accuracy of Childhood Hearing Loss. Manuscript in preparation.
- Barrett, T.S.,** Nelson, R., & Stevens, V. Predictors of Daily Cost of Pediatric Care. Manuscript in preparation.
- Barrett, T.S.** & Lockhart, G. An Emerging Trend in Social Statistics: Reproducibility. Manuscript in preparation.
- Barrett, T.S.** & Lockhart, G. Covariate Selection Using Regularized Regression. Manuscript in preparation.
- Barrett, T.S.** & Lockhart, G. Introduction to Average Marginal Effects: A Simple Interpretation of Generalized Linear Models. Manuscript in preparation.

OTHER PUBLICATIONS

- “furniture” R package** (Published on CRAN and GitHub)
Contains functions to help with several aspects of research in the health, behavioral, and social sciences. The main function—`table1`—function produces descriptive statistics in a well-formatted table (as commonly seen as the “Table 1” of academic journals).
- “MarginalMediation” R package** (Published on GitHub)
Contains functions to perform Marginal Mediation. Papers discussing the method and software are forthcoming.
- R for the Health, Behavioral, and Social Sciences**
A primer on using R for researchers in health, behavioral, and social sciences including importing data, data manipulation, data modeling, and data visualization. Self-publication through Amazon (released soon) and online at tysonstanley.github.io/Rstats/.

AFFILIATIONS

- Society for Prevention Research since 2016

AWARDS

- Abstract of Distinction (Annual Meeting of the Society of Prevention Research)
- Distinguished Poster Award (Annual Meeting of the Society of Prevention Research)
- Outstanding Poster Award (Annual Meeting of EHDI)
- Dean’s Scholarship (full tuition for two years)
- Eagle Scout Award
- Graduate Assistantship
- Best Poster Presentation (Psi-Chi Undergraduate Conference)