# **Tyson Stanley Barrett**

#### Curriculum Vitae

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#### **EDUCATION**

## Ph.D. Quantitative Psychology, Utah State University

(Expected) January 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 Science Lab, Utah State University	2016 - Present
<b>Instructor</b> , 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
<b>Teaching Assistant</b> , Psychological Statistics, Utah State University	2014 - 2015

## **RESEARCH FIELDS**

**Primary**: Mediation Analysis, Chronic Conditions and Disabilities among Children **Secondary**: Reproducible Research, Statistical Learning, Econometrics, Mixture Modeling

# **PUBLISHED WORKS** IN REFEREED JOURNALS

\* Denotes that my role was as the methodologist on the project

## Under Review/Revision

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

**Barrett, T. S.** & White, K. R. Is Hearing Loss Increasing Among Adolescents in the United States? Reexamining NHANES Data. Under Revision.

## 2017

Barrett, T. S. & Brignone, E. Furniture for Quantitative Scientists. *R Journal*. In press.

- \*Borrie, S.A., Lansford, K.L., & **Barrett, T.S.** Generalization of Speech Training. *Journal of Speech, Language, and Hearing Research.* In press.
- 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.
- Long, E., **Barrett, T.S.**, & Lockhart, G. (2017). Network-behavior dynamics of adolescent friendships, alcohol use, and physical activity. *Health Psychology*, *36*(6), 577-586. doi: 10.1037/hea0000483
- \*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 [SLHR-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

- \*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.

#### 2016

- **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.

## 2015

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.

## *In Preparation (to be submitted by 10/01/2017)*

- **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.**, Kawamura, M., & Lockhart, G. Understanding Subtypes of Adolescent Delinquency: The Impact of Chronic Migraines and Asthma. Manuscript in preparation.
- **Barrett, T.S.** & Lockhart, G. Covariate Selection Using Regularized Regression. Manuscript in preparation.
- **Barrett, T.S**. & Lockhart, G. Understanding is Key: Using Average Marginal Effects for More Interpretable and Robust Logistic Regression Estimates. Manuscript in preparation.

## **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.

## **OTHER PUBLICATIONS**

# 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. Currently published online at tysonstanley.github.io/Rstats/.

"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). Over 3,500 downloads.

"MarginalMediation" R package (Published on GitHub)

Contains functions to perform Marginal Mediation. Papers discussing the method and software are forthcoming.

## **AFFILIATIONS**

- Society for Prevention Research since 2016
- American Psychology Association since 2017
- American Statistical Association since 2017

## **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)