# Erin M. Buchanan

Professor of Cognitive	Ana	Vtics
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Harrisburg University of Science and Technology · 326 Market St. · Harrisburg, PA 17101 ☑ ebuchanan@harrisburgu.edu ♀ doomlab ♀ www.aggieerin.com │ *Updated:* May 10, 2019

# **Education**

Ph.D., Experimental Cognitive Psychology, Texas Tech University 2008 Dissertation: What's the difference: A study on semantic and associative priming and blocking. Committee: Drs. William S. Maki (chair), Patricia R. Delucia, Ruth Maki, Roman Taraban M.A., Experimental Psychology, Texas Tech University 2006 Thesis: Feature binding: Not quite so pre-attentive Committee: Drs. M. Kathryn Bleckley (chair), William S. Maki

# **Employment**

B.S., Psychology, Texas A&M University

Harrisburg University of Science and Technology, Analytics	Full Time
Professor of Cognitive Analytics	2019-Current
DataCamp Instructor	Part-Time
Structural Equation Modeling in R Link	2018-Current
Missouri State University, Department of Psychology	Full Time
Associate Professor of Quantitative Psychology	2014-2018
Assistant Professor of Quantitative Psychology	2010-2014
University of Mississippi, Department of Psychology	Full Time
Instructional Assistant Professor of Psychology	2008-2010
Texas Tech University, Department of Psychology	Part Time
Graduate Part-Time Instructor	2005-2008
Graduate Teaching Assistant	2004-2005
Texas A&M University, Student Learning Center	Part Time
Supplemental Instruction Leader for Sociology and Psychology	2002-2004

2004

# **Honors and Awards**

NACADA Academic Advising Excellence Faculty Advisor Award	2016
Nominated for the Missouri State Master Online Recognition Award	2016
Curtis P. Lawrence Award for Excellence in Advising Recipient,	
Missouri State University	2016
Missouri State University Honors College Curtis P. Lawrence Teaching Award Recipient	2015
Missouri State University Honors College Research Award Recipient	2014
Nominated for the Missouri State University Foundation Award in Research	014; 2015
Nominated for the Curtis P. Lawrence Award for Excellence in Advising,	
Missouri State University	2012
Nominated for Frist Teaching Award, University of Mississippi	2009
Teaching Academy's Departmental Excellence in Teaching Award	2007
First place in the 5th Annual Graduate Student Poster Competition	2006
Department of Psychology Travel Grant	005-2007
Graduate School Travel Grant	005-2007
Department of Psychology Competitive Scholarship	004-2006

# Research

# Links

Google Scholar

OrcID

General CV, Research

**Computational Linguistics** 

**Statistics Tools** 

YouTube Channel

GitHub

Open Science Framework

Twitter

#### **Interests**

Psycholinguistics and memory

Semantic memory, associative memory, priming of memory types, normed databases, linguistic variables, memory maps, judgments of memory, language statistics, working memory, individual differences.

#### **Statistics**

Alternatives to null hypothesis testing, effect sizes and confidence intervals, multigroup confirmatory factor analysis, item response theory, Bayesian inference statistics, hierarchical linear modeling, exploratory factor analysis, statistical reporting

# Experience

The DOOM Lab 2019-Current

Harrisburg University of Science and Technology, Analytics

Principle Investigator

The DOOM Lab 2010-2018

Missouri State University, Department of Psychology

Principle Investigator

Positive Psychology - Clinical Disaster Research Center

2009-Current

University of Mississippi, Department of Psychology

Researcher

Geospatial Sciences Collaborative Team

2009-2011

University of Mississippi, Depts of Psychology, Computer Science,

Health Exercise Science, and Geospatial Sciences

Researcher

Psycholinguistics Lab

2008-2010

University of Mississippi, Department of Psychology

Principle Investigator

Memory and Judgments Laboratory for Dr. William Maki

2006-2008

Texas Tech University, Department of Psychology

Graduate Researcher

Memory and Aging Laboratory Dr. M. Kathryn Bleckley

2004-2006

Texas Tech University, Department of Psychology

Graduate Coordinator and Researcher

Cognition and Perception Laboratory Dr. Takashi Yamauchi

2004

Texas A&M University, Department of Psychology

Undergraduate Research Assistant

## Skill Set

Programming knowledge

HTML, CSS, Perl, C++, PHP, MSSQL, MYSQL, Python, R

Software

SPSS (including syntax), Excel (macros/functions), AMOS, LISREL, RStudio, Shiny, MPlus, Inquisit, Qualtrics, Observation Oriented Modeling (OOM), JASP/Jamovi

#### **Publications**

## **Statistical Packages & Tools**

Note: \* indicate undergraduate authors, + graduate authors, \$ both undergraduate and graduate

+Buchanan, E.M., Gillenwaters, A., Scofield, J.E., & Valentine, K.D. (2019). MOTE: Measure of the Effect}: Package to assist in effect size calculations and their confidence intervals. *R package version* 1.0.1. Link

Buchanan, E.M. (2018). MeMoBootR: A package for mediation, moderation, and bootstrapped indirect effects. *R package version 0.0.0.6001*. Link

See Shiny Page for a complete list of Shiny apps and their help guides.

# **Journal Articles**

Psycholinguistics, Cognitive Science

- +Buchanan, E.M., Valentine, K.D., & Maxwell, N.P. (2019). English Semantic feature production norms: An Extended database of 4,436 concepts. *Behavior Research Methods, X, XX–XX.* doi: 10.3758/s13428-019-01243-z Link
- +Buchanan, E.M., Valentine, K.D., & Maxwell, N.P. (2019). LAB: Linguistic Annotated Bibliography a searchable portal for normed database information. *Behavior Research Methods*, X, XX–XX. doi: 10.3758/s13428-018-1130-8 Link
- +Buchanan, E.M. & Padfield, W.E. (2019). Using word frequencies to analyze political language and moral focus. *SAGE Research Methods Datasets Part* 2, X, X. doi: 10.4135/9781526491398 Link

- \*Forbes, F.-J., & Buchanan, E.M. (2018). "Textisms": The comfort of the recipient. *Psychology of Popular Media Culture, X, X. doi: 10.1037/ppm0000194 Link*
- +Scofield, J.E., Buchanan, E.M., & Kostic, B. (2018). A meta-analysis of the survival-processing advantage in memory. *Psychonomic Bulletin & Review*, 25, 997–1012. doi: 10.3758/s13423-017-1346-0 Link
- \$Duncan, J., Buchanan, E.M., Marshall, C.Z., & Oberdieck, K. (2018). But words will never hurt me. *Journal of Psychology and Behavioral Sciences*, 26, 72–81. Link
- \*Forbes, F.-J., & Buchanan, E.M. (2018). Getting "Clued" in: The usage and significance of context clues. LOGOS: A Journal of Undergraduate Research, 11, 114–128. Link
- \$Klein, D., Cunningham, A., & Buchanan, E.M. (2018). How metacognitive awareness relates to overconfidence in interval judgments. *International Journal of Undergraduate Research and Creative Activities*, 10, 1–10. doi: 10.7710/2168-0620.1109 Link
- \*Pavlacic, J., Culp, M., Harvey, S., Cathey, C., & Buchanan E.M. (2018). Using undergraduate learning assistants to aid in course redesign. *Modern Psychological Studies*, 23, 1–18. Link
- \*Marshall, C.Z. & Buchanan, E.M. (2016). The effect of personal distance on the perception of LGBTQ+ hate speech. *LOGOS: A Journal of Undergraduate Research*, 9, 30–43. Link
- \$Johnson, C.C., Buchanan, E.M., & Jordan, K.N. (2014). Blog topic and word frequency: What differentiates between high and low powered blogs? *Psychology of Popular Media Culture*, 3, 154–163. doi: 10.1037/ppm0000036 Link
- +Maxwell, M.T., Carney, R.N., Buchanan, E.M., & Deal, W.P. (2014). The face-name mnemonic strategy: Learning face-name pairs using abstract and concrete keywords. *The Researcher*, 26, 14–17. Link
- +Teasley, M.L. & Buchanan, E.M. (2013). Are Missouri State students satisfied with academic advising?. *LOGOS: A Journal of Undergraduate Research*, 6, 81–90. Link
- +Buchanan, E.M., Holmes, J. L., Teasley, M. L., & Hutchison, K. (2013). English semantic word-pair norms and a searchable Web portal for experimental stimulus creation. *Behavior Research Methods*, 45, 746–757. doi: 10.3758/s13428-012-0284-z Link
- +Valentine, K.D., & Buchanan, E.M. (2013). JAM-boree: An application of observation oriented modelling to judgements of associative memory. *Journal of Cognitive Psychology*, 25, 400–422. doi: 10.1080/20445911.2013.775120 Link
- +Hutchison, K.A., Balota, D.A., Neely, J.H., Cortese, M.J., Cohen-Shikora, E.R., Tse, C., Yap, M.J., Bengson, J.J., Niemeyer, D., & Buchanan, E.M. (2013). The semantic priming project. *Behavior Research Methods*, 45, 1099–1114. doi: 10.3758/s13428-012-0304-z Link
- \*Foster, L.E., & Buchanan, E.M. (2012). Judgments of memory: Do the number and pre-

sentation of cues available help?. *Journal of Psychological Inquiry, 17, 17–25.* doi: Elizabeth A. Dahl, Ph.D. Award for Excellence in Undergraduate Research Recipient Link

Buchanan, E.M. (2010). Access into memory: Differences in judgments and priming for semantic and associative memory. *Journal of Scientific Psychology, March*, 1–8. Link

Buchanan, E.M. (2008). Differential effects of association and semantics on priming and memory judgments. *Texas Tech University, Dissertation, X, X. Link* 

Maki, W., & Buchanan, E.M. (2008). Latent structure in measures of associative, semantic, and thematic knowledge. *Psychonomic Bulletin & Review*, 15, 598–603. doi: 10.3758/pbr.15.3.598 Link

## **Applied Statistics**

- +Buchanan, E.M., Valentine, K.D., & Frizell, M.L. (2019). Supplemental Instruction: Understanding Academic Assistance in Underrepresented Groups. *The Journal of Experimental Education*, 87, 288–298. doi: 10.1080/00220973.2017.1421517 Link
- +Valentine, K.D., Buchanan, E.M., Scofield, J.E., & Beauchamp, M.T. (2019). Beyond p-values: Utilizing multiple estimates to evaluate evidence. *Behaviormetrika*, X, 1–24. doi: 10.1007/s41237-019-00078-4 Link
- \$Pavlacic, J.M., Buchanan, E.M., Maxwell, N.P., Hopke, T.G., & Schulenberg, S.E. (2019). A meta-analysis of expressive writing on positive psychology variables and traumatic stress. *Review of General Psychology*, 1089268019831640, X. doi: 10.1177/1089268019831645 Link
- Chin, E.G., Bernecker, S., Buchanan, E.M., Cunningham, S., Schumacher, J.A., & Coffey, S.F. (2019). A novel dissemination effort for prolonged exposure: Practice & dissemination curriculum. *Psychological Trauma: Theory, Research Practice, and Policy,* 11, 314–318. doi: 10.1037/tra0000362 Link
- +Smith, J.M., Whisenhunt, B.L., Buchanan, E.M., & Hudson, D.L. (2019). Evaluating the effectiveness of ecological momentary assessment and intervention targeting body checking behaviors. *Eating Disorders*, X, 1–17. doi: 10.1080/10640266.2018.1560850
- +Weber, M.C., Pavlacic, J.M., Gawlik, E.A., Schulenberg, S.E., & Buchanan, E.M. (2019). Modeling resilience, meaning in life, posttraumatic growth, and disaster preparedness with two samples of tornado survivors. *Traumatology*, *X*, X. doi: 10.1037/trm0000210
- +Nadhan, K.S., Chung, C.L., Buchanan, E.M., Shaver, C., Shipman, S., Allawh, R.M., Hoffman, M.L., Lim, G., Abdelmalek, M., & Cusack, C.A. (2019). Risk factors for Keratinocyte Carcinoma skin cancer In Nonwhite individuals: A retrospective analysis. *Journal of the American Academy of Dermatology, X*, X. doi: 10.1016/j.jaad.2019.01.038 show
- +Chin, E.G., Buchanan, E.M., Ebesutani, C., Young, J. (2018). Depression, Anxiety, and Stress:

- How should clinicians interpret the Total and Subscale Scores of the 21-Item Depression, Anxiety, and Stress Scales? *Psychological Reports*, 003329411878350, X. doi: 10.1177/0033294118783508 Link
- \$Buchanan, E. M., Foreman, R. E., Johnson, B., Pavlacic, J. M., Swadley, R. L., & Schulenberg, S. E. (2018). Does the delivery matter? Examining randomization at the item level. *Behaviormetrika*, 45, 295–316. doi: 10.1007/s41237-018-0055-y Link
- Lakens, D., Adolfi, F.G., Alberbs, C.J., ... Zwaan, R. (2018). Justify your alpha. *Nature Human Behaviour*, 2, 168–171. doi: 10.1038/s41562-018-0311-x Link
- +Buchanan, E.M., & Scofield, J.E. (2018). Methods to detect low quality data and its implication for psychological research. *Behavior Research Methods*, *50*, 2586–2596. doi: 10.3758/s13428-018-1035-6 Link
- Schivinski, B., Brzozowska-Woś, M., Buchanan, E. M., Griffiths, M. D., & Pontes, H. M. (2018). Psychometric assessment of the Internet Gaming Disorder diagnostic criteria: An Item Response Theory study. *Addictive Behaviors Reports*, 8, 176–184. doi: 10.1016/j.abrep.2018.06.004 Link
- +Johnson, L.R., Chin, E.G., Kajumba, M., Buchanan, E.M., Kizito, S., Bangirana, P. (2017). Do concepts of depression predict treatment pathways? A closer look at explanatory models among clinical and nonclinical samples in Uganda. *Journal of Clinical Psychology*, 73, 893–909. doi: 10.1002/jclp.22378 Link
- Moyer, K.H., McEvoy, J.P., Mabe, P.A., Buchanan, E.M., Venkatesan, A., &Buckley, P.F. (2017). Prioritizing harm. *Journal of Personality Assessment*, 99, 78–82. doi: 10.1080/00223891.2016.1180625 Link
- +Schulenberg, S.E., Smith, C.V., Drescher, C.F., & Buchanan, E.M. (2016). Assessment of meaning in adolescents receiving clinical services in Mississippi following the Deepwater Horizon oil spill: An application of the Purpose in Life Test-Short Form (PIL-SF). *Journal Of Clinical Psychology*, 72, 1279–1286. doi: 10.1002/jclp.22240 Link
- +Aiena, B.J., Buchanan, E.M., Smith, C.V., & Schulenberg, S.E. (2016). Meaning, resilience, and traumatic stress after the Deepwater Horizon oil spill: A study of Mississippi coastal residents seeking mental health services. *Journal of Clinical Psychology*, 72, 1264–1278. doi: 10.1002/jclp.22232 Link
- Peter, C., Schulenberg, S.E., Buchanan, E.M., Prodinger, B., & Geyh, S. (2016). Rasch analysis of measurement instruments capturing psychological personal factors in persons with spinal cord injury. *Journal of Rehabilitation Medicine*, 48, 175–188. doi: 10.2340/16501977-2028 Link
- +Teasley, M.L. & Buchanan, E.M. (2016). When music goes up in flames: The impact of advising on music major burnout. *NACADA Journal*, 36, 43–53. doi: 10.12930/nacada-15-002 Link
- +Stefano, E.C., Hudson, D.L., Whisenhunt, B.L., Buchanan, E.M., & Latner, J.D. (2016). Examination of body checking, body image dissatisfaction, and negative affect using ecological momentary assessment. *Eating Behaviors*, 22, 51–54. doi: 10.1016/j.eatbeh.2016.03.026 Link

- Maack, D.J., Buchanan, E.M., & Young, J. (2015). Development and psychometric investigation of an inventory to assess fight, flight, and freeze tendencies: The Fight, Flight, Freeze Questionnaire. *Cognitive Behaviour Therapy*, 44, 117–127. doi: 10.1080/16506073.2014.972443
- +Aiena, B.J., Baczwaski, B.J., Schulenberg, S.E., & Buchanan, E.M. (2015). Measuring resilience With the RS-14: A tale of two samples. *Journal of Personality Assessment*, 97, 291–300. doi: 10.1080/00223891.2014.951445 Link
- +Buchanan, E.M., Valentine, K.D., & Schulenberg, S.E. (2014). Exploratory and confirmatory factor analysis: developing the purpose in life test-short form. *SAGE*, *X*, *X*. doi: 10.4135/978144627305013517794 Link
- +Walters, B.A., Drescher, C.F., Baczwaski, B.J., Aiena, B.J., Darden, M.C., Johnson, L.R., Buchanan, E.M., & Schulenberg, S.E. (2014). Getting active in the Gulf: Environmental attitudes and action following two Mississippi coastal disasters. *Social Indicators Research*, 118, 919–936. doi: 10.1007/s11205-013-0428-2 Link
- +Schulenberg, S.E., Baczwaski, B.J., & Buchanan, E.M. (2014). Measuring search for meaning: A factor-analytic evaluation of the Seeking of Noetic Goals Test (SONG). *Journal of Happiness Studies*, 15, 693–715. doi: 10.1007/s10902-013-9446-7 Link
- +Trent, L., Buchanan, E., Ebesutani, C., Heiden, L.J., Damon, J., & Hight, T., Young, J. (2013). A measurement invariance examination of the Revised Child Anxiety and Depression Scale in a southern sample: Differential item functioning between African American and Caucasian youth. *Assessment*, 20, 175–187. doi: 10.1177/1073191112450907 Link
- +Teasley, M.L. & Buchanan, E.M. (2013). Capturing the student perspective: A new instrument for measuring advising satisfaction. *NACADA Journal*, 33, 4–15. doi: 10.12930/nacada-12-132 Link
- +Schnetzer, L.W., Schulenberg, S.E., & Buchanan, E.M. (2013). Differential associations among alcohol use, depression and perceived life meaning in male and female college students. *Journal of Substance Use*, 18, 311–319. doi: 10.3109/14659891.2012.661026 Link
- +Rost, A.D., Wilson, K., Buchanan, E. M., Hildebrandt, M.J., & Mutch, D. (2012). Improving psychological adjustment among late-stage ovarian cancer patients: Examining the role of avoidance in treatment. *Cognitive and Behavioral Practice*, 19, 508–517. doi: 10.1016/j.cbpra.2012.01.003 Link
- +Smitherman, T., McDermott, M., & Buchanan, E.M. (2011). Negative impact of episodic migraine on a university population: quality of life, functional impairment, and comorbid psychiatric symptoms. *Headache: The Journal of Head and Face Pain*, 51, 581–589. doi: 10.1111/j.1526-4610.2011.01857.x Link
- Schulenberg, S.E., Strack, K.M., Buchanan, E.M. (2011). The meaning in life questionnaire: psychometric properties with individuals with serious mental illness in an inpatient setting. *Journal of Clinical Psychology*, 67, 1210–1219. doi: 10.1002/jclp.20841 Link
- +Schulenberg, S.E., Schnetzer, L.W. & Buchanan, E.M. (2011). The purpose in life test-short form: development and psychometric support. *Journal of Happiness Studies*, 12, 861–876. doi:

## **Preprints**

Psycholinguistics, Cognitive Science

- +Knoph, R.E., & Buchanan, E.M. (2019). Language learning and metacognition: An intervention to improve second language classrooms. Link
- +Buchanan, E.M., Gillenwaters, A., Padfield, W.E., Van Nuland, A., & Wikowsky, A. (2019). Word space creator: A visual tool for semantic space visualization. Link
- +Buchanan, E.M., & Valentine, K.D. (2018). An extension of the QWERTY effect: Not just the right hand, expertise and typability predict valence ratings of words. Link
- Montefinese, M., Buchanan, E.M., & Vinson D. (2018). How well do similarity measures predict priming in abstract and concrete concepts?. Link
- \*Marshall, C.Z., Buchanan, E.M., & Fallone, M.D. (2018). Love, language, and linear algebra: Linguistic modeling of personality and mate preference. Link
- +Maxwell, N.P. & Buchanan, E.M. (2018). Modeling memory: Exploring the relationship between word overlap and single word norms when predicting relatedness judgments and retrieval. Link
- +Jordan, K.N., Buchanan, E.M., & Padfield, W.E. (2018). The Language of War: A Replication and Extension of Abe (2012) and Matsumoto et al. (2015). Link
- +Buchanan, E.M., Scofield, J.E., Nunley, N. (2018). The N400's 3 As: Association, automaticity, attenuation (and some semantics too). Link
- +Sumner, C., Scofield, J.E., Buchanan, E.M., Evans, M.R., & Shearing, M. (2018). The role of personality, authoritarianism and cognition in the United Kingdom's 2016 referendum on European Union membership. Link
- +Scofield, J.E., Kostic, B., & Buchanan, E.M. (2017). How the presence of others affects desirability judgments in heterosexual and homosexual participants. Link
- +Maxwell, N.P. & Buchanan, E.M. (2017). Investigating the interaction between associative, semantic, and thematic database norms for memory judgments and retrieval. Link
- \*Marshall, C.Z. & Buchanan, E.M. (2017). Latent semantic analysis applied to authorship questions in textual analysis. Link

### **Applied Statistics**

+Huber, B., Jones, R.G., Capps, S.C., & Buchanan, E.M. (2019). Memory Complaint Inventory Profiles in Poor Effort, Pseudodementia, and Dementia Populations. Link

\$Valentine, K.D., Buchanan, E.M., Cunningham, A., Hopke, T.G., Wikowsky A., & Wilson H. (2018). Have researchers increased reporting of outliers in response to the reproducibility crisis?. Link

+Delmonico, J.R., & Buchanan, E.M. (2018). Personality factors, ideology, and sensitivity to change. Link

+Buchanan, E.M., & Scofield, J.E. (2017). Bulletproof bias? Considering the type of data in common proportion of variance effect sizes. Link

+Buchanan, E. M., Johnson, B. N., Miller, A., Stockburger, D. W., & Beauchamp, M. (2017). Perceived grading and student evaluation of instruction. Link

## Grants

Psycholinguistics, Cognitive Science

Co-Principal Investigator. To see or not to see: Perceptual learning in organic chemistry. National Science Foundation (2015, submitted). \$980,730.00

Principal Investigator. Using Language to Understand Congressional Voting Behaviors. National Science Foundation (2014, submitted). \$176,098.

Principal Investigator. Studying Semantic Memory of Intelligent Design Systems. IBM's Watson Group. (2014). Applied for access to database.

Principal Investigator. Counting tweets: How social media word frequency enhances our understanding of cognition. Twitter Grant Competition. (2014, submitted). Applied for access to database.

Principal Investigator. Memory as a Complex System: Creating Online, Dynamic Semantic Memory Models. James S. McDonnell Foundation Scholar Award in Complex Systems. (2014, submitted). \$450,000.

Principal Investigator. Online course development grant. Online course development stipend. Missouri State University Provost's Office. (1/1/14-5/15/14). \$2,400. Principal Investigator. Graduate Recruitment Grant. Missouri State University Graduate College. (1/1/14-12/15/14). \$1,800.

Principal Investigator. EXP: Supplemental Instruction: Bridging Technology and Student Academic Success Programs. National Science Foundation (2012, submitted). \$526,809.

Principal Investigator. We Are All Biased. Fixing Judgments of Associative Memory. Missouri State University Graduate College's Summer Research Stipend. (6/1/2012-8-15-2012).

\$6000.

Principal Investigator. Investigating Effective Supplemental Instruction to Improve Student Success. Missouri State University's Dean's Summer Research Stipend. (5/31/2011-9/1/2011). \$6000.

Principal Investigator. Cheating at Scrabble: An Online Database of Word Information. Missouri State University's Faculty Research Grant. (1/2011-1/2012). \$7095.

Principle Investigator: Understanding Language Learning in the Brain: Using EEG Brain Computer Interface to Improve Development. Honda Initiative (2009, submitted).

## **Applied Statistics**

Principal Investigator. Development of a Headache Meaningful Response Measure Using a Patient Guided Approach. National Headache Foundation (2018, awarded). \$99,592.

Statistician. Utilization of adaptive patient-centered electronic behavioral feedback intervention for the prevention of transformation from episodic to chronic migraine. Pragmatic Clinical Studies funded by the PCORI Foundation. (2014, submitted). \$2,000,000.

Statistician. Meaning and Purpose in Life as it Relates to Suicidality in Adult Inpatients with Serious Mental Illness. American Foundation for Suicide Prevention. (2013, submitted). \$30,000.

Statistician. Predictors of Subjective Well-being Among Survivors of the Armed Conflict in Colombia: a Positive Psychology View. Psychology Beyond Borders. (2013, submitted). \$8,156.38.

Principal Investigator. Visualizing Statistics: Developing Interactive Tools to Improve Statistics and Research Learning Outcomes. Faculty Teaching and Learning Center Curriculum Grant. (1/1/14-8/15/14). \$4,500.

Principal Investigator. Using Item Response Theory to Explore Scale Psychometrics. Missouri State University's Faculty Research Grant. (1/1/14-12/31/14). \$2,040.

Principal Investigator. A solution to the file drawer problem: Alternative analyses to null hypothesis testing. National Science Foundation (2013, submitted). Up to \$1,000,000.

Principal Investigator. Luella Stuck Cline resources award for textbook purchase. Missouri State University Library Funding. (2012, submitted). \$366.

Co-Principle Investigator: II-NEW: An Infrastructure for Distributed Research on Neurophysiology and Brain-Computer Interface. National Science Foundation (2010, resubmitted).

#### **Presentations**

Psycholinguistics, Cognitive Science

\$Hart, B., Walker, E., Nale, A., Heim, D., Gaspard, M., Cook, T., Yadon, C., Buchanan, E.M., Hayden, S., & Young-Jones, A. (2019, April). *Negating the nerves: Reducing test anxiety with expressive writing*. Poster presentation for the Annual Convention of the Southwestern Psychological Association, Albuquerque, New Mexico. Link

- +Padfield, W.E. & Buchanan, E.M. (2019, April). *Moral foundations of U.S. political news organizations*. Poster presentation for the Annual Convention of the Midwestern Psychological Association, Chicago, IL. Link
- +Buchanan, E. M., Maxwell, N. P., Valentine, K.D., ... (2018, November). *Using the Semantic Priming Project to understand variability in priming*. Poster presentation for the Annual Meeting of the Psychonomic Society, New Orleans, LA. Link
- \*Marshall, C.Z. & Buchanan, E.M. (2018, April). *Latent semantic analysis of personality and mate preference*. Poster presentation for the Annual Convention of the Midwestern Psychological Association, Chicago, IL. Link
- +Maxwell, N. P. & Buchanan, E. M. (2018, April). *Single and double word-pair norms: Predictive ability of recall and judgments.* Poster presentation for the Annual Convention of the Midwestern Psychological Association, Chicago, IL. Link
- +Knoph, R.E., Buchanan, E.M., Kostic, B.N., Hellman, A.B., & Carney, R.N. (2017, November). *Language learning and metacognition: An intervention to improve second language classrooms.* Poster presentation for the Annual Meeting of the Psychonomic Society, Vancouver, Canada. Link
- +Maxwell, N. P., Kostic, B., & Buchanan, E.M. (2017, November). *The interaction of semantic, thematic, and associative overlap strength in predicting recall.* Poster presentation for the Annual Meeting of the Psychonomic Society, Vancouver, Canada. Link
- \*Marshall, C.Z., & Buchanan, E.M. (2017, April). *Does God speak in Threes? Applying Latent Semantic Analysis to Isaiah*. Spoken presentation for the Annual Convention of the Southwestern Psychological Association, San Antonio, TX . Link
- +Scofield, J.E., Kostic, B., & Buchanan, E.M. (2016, November). *A meta-analysis of the sur-vival processing advantage*. Poster presentation for the Annual Meeting of the Psychonomic Society, Boston, MA. Link
- +Knoph, R.E., Buchanan, E.M., & Kostic, B. (2016, November). *Linguistic learning and metacognition: Do we learn differently, and do we know it?*. Poster presentation for the Annual Meeting of the Psychonomic Society, Boston, MA. Link
- \$Buchanan, E.M., Miller, K.D., Klug, E.R., Knoph, R.E., Kusel, E., Marshall, C.Z., Maxwell, N., & Swadley, R. (2016, November). *Metacognitive awareness and judgments of learning in statistics' courses.* Poster presentation for the Annual Meeting of the Psychonomic Society, Boston, MA. Link
- \$Knoph, R.E., Kusel, E.G., & Buchanan, E.M. (2016, May). *Learning a foreign language: Can features influence learning?*. Spoken presentation for the Annual Meeting of the Midwestern Psychological Association, Chicago, IL. Link
- \*Forbes, F.M. & Buchanan, E.M. (2016, April). "Textisms": The comfort of the recipient. Student Research Competition presentation for Annual Meeting of the Southwestern Psychological Association, Dallas, TX. Link

- \$Knoph, R.E., Kusel, E.G., & Buchanan, E.M. (2016, April). *Matching native language to second language learning: Languages are not equally difficult.* Poster presentation for the Annual Meeting of the Southwestern Psychological Association, Dallas, TX . Link
- \*Phillips, S.C. & Buchanan, E.M. (2016, April). *Past and present: Verb tenses across blog themes.* Poster presentation for the Annual Meeting of the Southwestern Psychological Association, Dallas, TX . Link
- +Delmonico, J., Hunter, S., & Buchanan, E.M. (2016, April). *Phonetic symbolism in an associative definition task.* Poster presentation for the Annual Meeting of the Southwestern Psychological Association, Dallas, TX . Link
- +Miller, K.E., Klug, E., & Buchanan, E.M. (2016, April). *Understanding JAM: How judgment of association is influenced by working memory and fluid intelligence*. Poster presentation for the Annual Meeting of the Southwestern Psychological Association, Dallas, TX . Link
- +Valentine, K.D., Buchanan, E.M., & Miller, K. (2015, November). *Individual expertise in underlying memory judgments*. Poster presentation for the Annual Meeting of the Society for Judgment and Decision Making, Chicago, IL. Link
- +Jordan, K.N. & Buchanan, E.M. (2015, April). *Exploring moral language: A validation of the Moral Foundation Dictionary*. Spoken presentation for the Southwestern Psychological Association Convention, Wichita, KS. Link
- +Delmonico, J. & Buchanan, E. M. (2015, April). *Phonetic preferences for cvc trigrams*. Poster presentation for the Southwestern Psychological AssociationConvention, Wichita, KS. Link
- +Jordan, K.N., Delmonico, J., & Buchanan, E.M. (2015, April). *The use of moral language in Congressional foreign policy discourse.* Poster presentation for the Southwestern Psychological Association Convention, Wichita, KS. Link
- +Jordan, K.N., Buchanan, E.M., Delmonico, J., & Carney, R.N. (2014, November). *Political party differences in language use in discourse on context*. Poster presentation for the Annual Meeting of the Psychonomic Society, Long Beach, CA. doi: 10.1037/e524912015-269 Link
- +Buchanan, E.M., Valentine, K.D., Teasley, M.L., Jordan, K.N., & Beauchamp, M.T. (2014, November). *LAB: Linguistic Annotated Bibliography A searchable portal for normed database information*. Poster presentation for the Annual Meeting of the Psychonomic Society, Long Beach, CA. doi: 10.1037/e524912015-084 Link
- +Jordan, K.N., & Buchanan, E.M. (2014, April). *Language of War.* Spoken presentation for the Southwestern Psychological Association meeting, San Antonio, Texas. Link
- +Maxwell, M., Carney, R.N., & Buchanan, E.M. (2013, October). *The face-name mnemonic strategy: Learning face-name pairs using abstract and concrete keywords.* Poster presentation for the annual meeting of the Northern Rocky Mountain Educational Research Association, Jackson Hole, WY.

+Buchanan, E.M., Valentine, K.D., & Teasley, M.L. (2012, November). *QWERTY: We like easy words to type*. Poster presentation for the Annual Psychonomic Society Meeting in Minneapolis, MN. doi: 10.1037/e502412013-887 Link

Buchanan, E.M. (2012, January). Family Feud: Language research is fun! . Invited talk for the Psi Chi Club meeting, Springfield, MO. Link

Buchanan, E.M., & Maki. W.S. (2011, November). *Cognitive load eliminates debiasing of metacognitive judgments of association*. Spoken presentation at the annual meeting of the Psychonomic Society Seattle, WA. doi: 10.1037/e520602012-051

+Buchanan, E.M., & Valentine, K.D. (2011, November). *JAM-boree: A meta-analysis of judg-ment of memory*. Poster presentation at the annual meeting of the Psychonomic Society, Seattle, WA . doi: 10.1037/e520602012-916 Link

Buchanan, E.M. (2011, November). *Psychology research and language use.* Invited talk for Central High School Psychology Club Springfield, MO. Link

Buchanan, E.M. (2011, April). *Updating your status: How Facebook talk informs us about current word use.* Invited talk for Honor's College at Missouri State University: Springfield, MO. Link

Maki, W.S., & Buchanan, E. M. (2010, November). Association as choice: What metacognitive judgments tell us about the associative processor. Symposium talk presented at the annual Psychonomic Society Meeting in St. Louis, MO. doi: 10.1037/e520592012-190 Link

Buchanan, E.M. (2010, November). From bad to worse: Variations in judgments of associative memory. Poster presented at the annual Psychonomic Society Meeting in St Louis, MO. doi: 10.1037/e520592012-535 Link

Buchanan, E.M. (2009, September). *Modeling constraints and access into memory*. Invited talk for colloquia series at the University of Mississippi: Oxford, MS.

Buchanan, E.M. (2009, October). *Limitations of judgments of associative memory.* Presentation for colloquia series at the University of Mississippi: Oxford, MS.

Buchanan, E.M. (2009, November). *Access into memory: Does associative memory come first?*. Poster session presented at the Psychonomic Society Meeting, Boston, MA.. doi: 10.1037/e520562012-724 Link

Buchanan, E.M. (2009, March). *Can't block the rock n roll: Early associative access*. Presentation for colloquia series at the University of Mississippi: Oxford, MS. Link

Buchanan, E.M. (2008, January). *Memory, priming, and all that jazz.* Presentation for Cognitive Brown Bag series at Texas Tech University, Lubbock, TX.

Buchanan, E.M. (2008, April). What's the difference: A study on semantic and associative priming and blocking. Presentation for Cognitive Brown Bag series at Texas Tech University,

Lubbock, TX.

Buchanan, E.M. (2007, October). *Can't block the rock n roll: Differences in judgments and priming for semantic and associative memory.* Presentation for Cognitive Brown Bag series at Texas Tech University, Lubbock, TX.

Buchanan, E., Maki, W. S. (2007, October). *Factor analytic structure of memory types*. Poster session presented at Annual Armadillo Conference, San Antonio, TX.

Buchanan, E., Maki, W. S., & Patton, M. (2007, November). *Associative judgments block semantic processing...*. Poster session presented at the Psychonomic Society Meeting, Long Beach, CA.. doi: 10.1037/e527342012-451 Link

Buchanan, E.M. (2007, March). *Attention switching: Does it make a jump?*. Presentation for Cognitive Brown Bag series at Texas Tech University, Lubbock, TX. Link

Buchanan, E.M. (2007, March). *Attention switching: The magic middle*. Poster session presented at Texas Tech University Graduate Student Conference, Lubbock, TX. Link

Buchanan, E.M. (2006, October). *Attention switching: What's in the middle?*. Poster session presented at Annual Armadillo Conference, Lubbock, TX. Link

Buchanan, E.M. (2006, October). *Where is it? Location tags are the key.* Presentation for Cognitive Brown Bag series at Texas Tech University, Lubbock, TX. Link

Buchanan, E.M. (2006, November). *Feature binding: How exactly do features move?*. Poster presented at the Psychonomic Society Meeting, Houston, TX. doi: 10.1037/e527352012-880 Link

Buchanan, E.M. (2006, May). *Feature binding: Not quite so pre-attentive.* Poster session presented at Association for Psychological Science Meeting, New York, NY. Link

Buchanan, E.M. (2006, March). *Feature binding: Early or late?* . Poster session presented at Texas Tech University All-University Conference, Lubbock, TX.

Buchanan, E.M. (2006, March). *Feature binding: Not quite so pre-attentive.* Poster session presented at Texas Tech University Graduate Student Conference, Lubbock, TX. Link

Buchanan, E.M. (2006, April). *Attention: What we can do with it.* Presentation for Cognitive Brown Bag series at Texas Tech University, Lubbock, TX.

Buchanan, E.M. (2005, April). *Attention and feature binding*. Presentation for Cognitive Brown Bag series at Texas Tech University, Lubbock, TX.

## Applied Statistics

- +Finkelstein-Fox, L., Pavlacic, J., Schulenberg, S.E., Buchanan, E.M., & Park, C.L. (2019, May). Daily stressors and values adherence: Protective effects of coping and emotion regulation resources. In C.L. Park, Chair, Integrating Perspectives on Stress Processes: The Overlapping and Unique Roles of Coping and Emotion Regulation. Symposium to be presented at the meeting of the Association for Psychological Science, Washington, D.C..
- +Hart, B., Young-Jones, A., Yadon, C.A., & Buchanan, E.M. (2019, May). *Support promotes student success: Validation of the Scale of Perceived Instructor Support (SPIS)*. Poster presentation for the Annual Meeting of the Association for Psychological Science, Washington, D.C..
- Buchanan, E.M. (2019, May). *Uncovering factors patients use to evaluate meaningful response to migraine treatment*. Data Analytics Summit V, Harrisburg, PA.
- +Cunningham, A., Crain, S. E., Johnson, H. R., Stash, H., & Buchanan, E. M. (2019, March). *Getting started creating data dictionaries: Creating shareable datasets*. Poster session presented at the 39th annual Great Plains Students' Psychology Convention, Springfield, MO. Link
- +Manley, H., Buchanan, E.M., Sly, J., Cady, R., Cunningham, A., & Wikowsky, A. (2019, July). *Development of a patient reported outcome measure evaluating meaningful response to migraine treatment*. Presentation for the American Headache Society's 61st Annual Scientific Meeting, Philadephia, PA.
- +Buchanan, E.M., Manley, H., Sly, J., Wikowsky, A., & Cady, R. (2019, February). *Uncovering factors patients use to evaluate meaningful response to migraine treatment*. Poster presentation for the 32nd Annual Practicing Physician's Approach to the Difficult Headache Patient, San Diego, CA. Link
- +Wikowsky, A., Buchanan, E.M., Cady, R., Manley, H., Sly, J., & Cunningham, A. (2019, April). *Development of a patient defined migraine assessment*. Poster presentation for the Annual Convention of the Midwestern Psychological Association, Chicago, IL. Link
- +Pavlacic, J. M., Buchanan, E. M., & Schulenberg, S. E. (2018, May). *A meta-analysis of expressive writing on posttraumatic stress.* Poster presentation for the Annual Convention of the Association for Applied Behavioral Analysis International, San Diego, CA. Link
- +Young-Jones, A., Hayden, S., Yadon, C., & Buchanan, E.M. (2018, June). *Reducing test anxiety: Evaluating contemplative practices in education*. Presentation at the 9th European Conference on Positive Psychology 2018.
- +Weber, M., Pavlacic, J.M., Schulenberg, S.E., & Buchanan, E.M. (2018, April). *Gender dif- ferences in resilience, meaning, and purpose using factor-analytic techniques and scale scores.* Poster presentation for the Resilience Con, Nashville, TN. Link
- +Buchanan, E.M., Padfield, W.E., Wikowsky, A., Van Nuland, A., & Gillenwaters, A. (2018, April). *Measuring effects: An online app for effect size calculation for research and statistics classes.* Poster presentation for the Annual Convention of the Midwestern Psychological Association, Chicago, IL. Link

- \$Buchanan, E.M., Valentine, K.D., Cunningham, A., Hopke, T.G., Wikowsky, A., & Wilson, H. (2018, April). *Outrageous observations: the redheaded stepchild of data analysis*. Poster presentation for the Annual Convention of the Midwestern Psychological Association, Chicago, IL. Link
- +Pavlacic, J. M., Schulenberg, S. E., Buchanan, E. M., & Boullion, G. Q. (2018, April). *Predicting mindfulness behaviors from values progression using ecological momentary assessment*. Data Blitz talk submitted at the 5th annual University of Mississippi Psychology Research Day, Oxford, MS.
- Buchanan, E.M. (2018, April). *Third wheels and interactions: Mediation and moderation analyses.* Invited Talk for the Annual Convention of the Midwestern Psychological Association, Chicago, IL. Link
- +Liberto, A.K., Pimperl, J.W., Buchanan, E.M., Deal, W.P., & Schulenberg, S.E. (2017, November). *Development of the Impact of Event Scale-8 (IES-8): A study in serious mental illness.* Poster presented at the 33rd annual meeting of the International Society for Traumatic Stress Studies, Chicago, IL. Link
- Chin, E., Bernecker, S., Buchanan, E., Cunningham, S., Schumacher, J., & Coffey, S. (2017, November). *A novel dissemination effort for prolonged exposure: Practice & dissemination curriculum.* Poster will be presented at the 51st annual meeting for the Association for Behavioral and Cognitive Therapies, San Diego, CA. Link
- +Buchanan, E.M., Scofield, J.E., & Marshall, C.Z. (2017, November). *Distributions and sampling variance for five effect size measures of variance overlap*. Poster presentation for the Annual Meeting of the Psychonomic Society, Vancouver, Canada . Link
- +Smith, J., Whisenhunt, B., & Hudson, D. (2017, November). *Examination of a five-day ecological momentary intervention on body checking: An update.* Poster presentation for the 51st annual meeting of the Association for Behavioral and Cognitive Therapies, San Diego, CA. Link
- +Scofield, J.E. & Buchanan, E.M. (2017, November). *Survey automation detection methods and its implications on psychological research.* Spoken presentation for the Annual Meeting of the Society for Computers in Psychology, Vancouver, Canada . Link
- +Weber, M. C., Pavlacic, J. M., Schulenberg, S. E., & Buchanan, E. M. (2017, July). *Meaning, self-efficacy, and posttraumatic growth in university faculty and staff: A study of tornado impact and survivor resilience.* Poster presentation for 5th World Congress on Positive Psychology, The International Positive Psychology Association, Montreal, Québec, Canada. Link
- +Weber, M. C., Pavlacic, J. M., Schulenberg, S. E., & Buchanan, E. M. (2017, July). *Meaning, self-efficacy, and posttraumatic growth in university students: A study of tornado impact and survivor resilience*. Poster presentation for 5th World Congress on Positive Psychology, The International Positive Psychology Association, Montreal, Québec, Canada. Link
- +Oh, K.J., Esposito, A., Owen-Simon, N., Dachert, S., Kaplan, J., Kamenko, A. . . . Eun, D. (2017, February). *Evaluation of video game skill for future training modalities in robotic-assisted*

- surgery. Poster presentation for the 12th Annual Academic Surgical Congress, Las Vegas, NV . Link
- \*Pavlacic, J., & Buchanan, E.M. (2017, April). *A meta-analysis of expressive writing on life quality and posttraumatic growth.* Spoken presentation for the Annual Convention of the Southwestern Psychological Association, San Antonio, TX. Link
- Nadhan K.S., Shipman S., Buchanan E.M., Malat G.E., & Chung C.L. (2017, April). *Cutaneous infection rats are not affected by Chronic HIV(+) or HCV(+) Infection in organ transplant recipients*. Poster presentation for the Society for Investigative Dermatology, Portland, OR.
- Nadhan K.S., Usedom E., Shipman S., Doyle A., Malat G.E., Buchanan E.M., Chung C.L. (2017, April). *Nonmelanoma skin cancer rates are not affected by Chronic HIV(+) or HCV (+) Infection in organ transplant recipients.* Poster presentation for the American Transplant Congress, Chicago, IL.
- +Swadley, R., Buchanan, E.M., Deal, W.P., & Capps, S.C. (2017, April). *Returning to abusive relationships: Related and predictive factors.* Spoken presentation for the Annual Convention of the Southwestern Psychological Association, San Antonio, TX. Link
- +Oh, K.J., Esposito, A., Owen-Simon, N., Dachert, S., Kaplan, J., Kamenko, A. . . . Eun, D. (2016, September). Evaluation of video game skill for future training modalities in robotic-assisted surgery. Poster presentation for the 4th Annual Temple Translational Science Symposium, Philadelphia, PA. Link
- +Shipman, S.S., Buchanan, E.M., & Reese, A.C. (2016, September). *Infectious complications following radical cystectomy: A structural equation model.* Poster presentation for the 4th Annual Temple Translational Science Symposium, Philadelphia, PA. Link
- +Smith, J.M., Battles, J.A., Johnson, M.L., Whisenhunt, B.L., Buchanan, E.M., & Hudson, D.L. (2016, October). *Examination of an ecological momentary intervention on body checking and body dissatisfaction*. Poster presentation for the 50th annual meeting of the Association for Behavioral and Cognitive Therapies, New York, NY . Link
- +Shipman, S.S., Buchanan, E.M., & Reese, A.C. (2016, November). *Infectious complications following radical cystectomy: A structural equation model.* Poster presentation for the American Medical Association Symposium, Orlando, FL. Link
- +Johnson, L. R., Chin, E., Buchanan, E., Kajumba, M., Kizito, S., & Bangirana, P. (2015, November). Do concepts of depression predict help-seeking in Uganda? A closer look at explanatory models among community and clinical participants. Poster presented at the 49th annual meeting of the Association for Behavioral and Cognitive Therapies, Chicago, IL.
- +Beauchamp, M.T., Buchanan, E.M., & Brown, C.E. (2015, November). *A psychometric evaluation of measures of male body dissatisfaction using item-response theory.* Poster presentation for the 49th Annual Convention of the Association for Behavioral and Cognitive Therapies, Chicago, IL . Link
- +Buchanan, E.M., Delmonico, J., Graves, B.L., Hickman, H.O., Hutchison, T. W., Phillips, S.C., & Vu, M.Q. (2015, November). *English semantic relatedness norms: An extended database, feature*

- coding, and online website. Poster presentation for the Annual Meeting of the Psychonomic Society, Chicago, IL. Link
- +Beauchamp, M.T., Buchanan, E.M., & Brown, C.E. (2015, April). *A psychometric evaluation of measures of male body dissatisfaction using item-response theory.* Poster presentation for the Annual Convention of the Southwestern Psychological Association, Wichita, KS. Link
- Buchanan, E.M. (2014, November). Shaking up statistics: A blended learning perspective for honors courses. Poster presentation for the National Collegiate Honors Council Conference Denver, CO. Link
- \$Foreman, R.E., Beauchamp, M.T., & Buchanan, E.M. (2014, November). *The delivery matters: Examining reactivity in question answering.* Poster presentation for the National Collegiate Honors Council Conference Denver, CO. Link
- +Teasley, M., & Buchanan, E.M. (2014, February). When music goes up in flames: The impact of advising on music major burnout. Poster presentation for the NACADA Region 7 conference, St Louis, MO. Link
- Buchanan, E.M. (2014, August). *Visualizing statistics: Developing curriculum tools.* Spoken presentation for the Faculty Center for Teaching and Learning Showcase Springfield, MO.
- +Vu, M., Buchanan, E.M., Jordan, K., Teasley, M., & Valentine, K.D. (2014, April). *Shaking up statistics: A blended learning perspective*. Poster presentation for the Southwestern Psychological Association meeting, San Antonio, Texas. Link
- +Buchanan, E.M., Valentine, K.D., & Derringer, C. (2013, November). *Effect sizes should be easy: A windows program to calculate effect sizes and their confidence intervals.* Poster presentation for the annual meeting of the Psychonomic Society, Toronto, Canada. doi: 10.1037/e633262013-896 Link
- +Burt, T., Buchanan, E.M., Carr, M., Teasley, M., Yadon, C., & Young-Jones, A. (2013, May). *Academic advising assessment: Perceived support and scale development as outcomes.* Poster presentation for the Annual Meeting of the Association for Psychological Science, Washington DC . Link
- +Teasley, M., Buchanan, E.M. (2012, October). *Capturing the student perspective: Advising at Missouri State University.* Poster presentation for NACADA Annual Conference, Nashville, TN. Link
- Maack, D. J., Buchanan, E., & Young, J. (2012, November). *Separating fear from anxiety: Psychometric validation of the tFEAR*. In C M Luberto and A C McLeish (Chairs) Refining the CBT Compass: Advancements in the Assessment of Anxiety-Related Risk Factors Symposium presented at the 46th annual Association for Behavioral and Cognitive Therapies, National Harbor, MD. doi: 10.1037/t45433-000
- +Aiena, B. J., Baczwaski, B. J., Buchanan, E. M., & Schulenberg, S. E. (2012, August). *The Psychometric properties of the 14-Item Resilience Scale (RS-14)*. Poster presentation at the 120th annual meeting of the American Psychological Association, Orlando, FL. doi: 10.1037/e666192012-001

#### Link

- +Campbell, S. W., Buchanan, E. M., & Schulenberg, S. E. (2012, August). *The Life Purpose Questionnaire: A factor-analytic investigation*. Poster presentation at the 120th annual meeting of the American Psychological Association, Orlando, FL. doi: 10.1037/e640962012-001
- Buchanan, E.M. (2011, October). *The N400: how math informs us about language.* nvited talk for the KME Math Honor's Society at Missouri State University: Springfield, MO. Link
- +Chin, E.G., Ebesutani, C., Buchanan, E.M., & Young, J. (2011, November). *A preliminary examination: Applicability of the 21-Item Depression, Anxiety, and Stress Scale as a general measure of psychological distress.* Poster presentation at the ABCT Annual Convention, Toronto, Canada.
- +Schulenberg, S.E., Buchanan, E.M., & Baczwaski, B. (2011, August). *Psychometric properties of the Seeking of Noetic Goals (SONG) test.* Poster presentation at the annual conferences of the American Psychological Association, Washington DC. doi: 10.1037/e697012011-001 Link
- +Trent, L., Buchanan, E., & Young, J. (2010, November). *Development and initial psychometric examination of the Measure of Disseminability.* Poster presentation at the annual meeting of the Association for Behavioral and Cognitive Therapies, San Francisco, CA (Dissemination and Implementation Special Interest Group. Link
- +Trent, L., Buchanan, E., & Young, J. (2010, November). *The Measure of Disseminability: Confirmatory factor analysis and psychometric replication.* Poster presentation at the annual meeting of the Association for Behavioral and Cognitive Therapies, San Francisco, CA (Dissemination and Implementation Special Interest Group. Link
- +Schnetzer, L., Schulenberg, S., & Buchanan, E.M. (2010, August). *Psychometric properties of the Purpose-in-Life Test–Short Form.* Poster presented at the annual conferences of the American Psychological Association, San Diego, CA. doi: 10.1037/e620922010-001

#### **Students**

#### **Graduate Students**

School, Year	Name	Thesis
MSU, 2018-2020 MSU, 2017-2019	Arielle Cunningham Addie Wikowsky	TBD Working memory, expertise, and fluid intelligence
MSU, 2017-2019 MSU, 2016-2018 MSU, 2016-2018	William Padfield David Herr Nick Maxwell	Moral Foundations and political rhetoric Generativity and Trauma in first responders Investigating the interaction between associative, semantic, and thematic database norms for memory judgments and recall

School, Year	Name	Thesis
MSU, 2015-2017	Katherine Miller	The Mediating Effects of Cortisol on Memory and Judgments of Learning
MSU, 2015-2017	Rebecca Knoph	Language Learning and Metacognition: An Interventions to Improve Language Classrooms
MSU, 2014-2016	Jahnavi Delmonico	Politics, Personality, and Sensitivity to Change
MSU, 2013-2015	Marshall Beauchamp	IRT Analyses of Body Dissatisfaction in Men
MSU, 2013-2015	Kayla Jordan	Linguistic Markers of Writing about War
MSU, 2012-2014	Marilee Teasley	When Music Goes Up in Flames: The Impact of
•	,	Academic Advising on the Perceived Burnout of Music Majors
MSU, 2011-2013	Kathrene Valentine	Alternatives: A Comparison of Parametric, Nonparametric, and Observation Oriented Modeling techniques

*Note.* I have supervised many graduate and undergraduate theses, presentations, and assistants. More information aboutt each of their presentations and outcomes can be found on my website under students.

# **Teaching**

#### **Interests**

## Undergraduate

Statistics, Cognition, Research Methods/Experimental Design, Memory, Psycholinguistics, Analytics

# Graduate:

Experimental Methhods, Basic Statistics (ANOVA, Regression), Advanced Statistics (Multivarite, Structural Equation Modeling), Non-parametric Statistics, Cognition, Attention, Memory, Language

## **Courses Taught**

## Undergraduate

Cognitive Psychology, General Psychology, Lab in Cognitive Psychology, Statistics for the Social Sciences, Advanced Statistics, Research Methods, Psycholinguistics, Freshman/Senior Honor's Seminars

#### Graduate

Regression/Factor Analysis, Multivariate Statistics, Advanced Statistics, Graduate Statistics, Nonparametric Methods, Structural Equation Modeling, Bayesian Methods, Sentiment Analytics, Natural Language Processing, Human Language

Course Evaluations can be provided upon request.

#### **Statistics Outreach**

Statistics Certificate: I designed a statistics and research methods graduate certificate for Missouri State University. I coordinated the program, working with students to ensure they've completed the requirements in a way that matches their long-term goals. Certificate requirement are one graduate statistics course, one research methods course, and two other electives in statistics or research based courses.

*In-Person/Online Help Desk*: The Psychology Help Desk was designed as small group tutoring/help opportunity for our statistics and research methods courses (approximately 1,500 students annually). The Help Desk holds regular open hours to accommodate students who need assistance with program or math related questions. The online Help Desk was created to reach our busy, non-traditional, and online students. I supervised the graduate assistant and practicum students who hold open hours. I trained these students, as well as create materials for the online portion of the Help Desk. The graduate assistant answered a special email box for the Help Desk and provides assistance through a special Blackboard portal. The Blackboard site was used to link students to appropriate materials, contact information for the Help Desk, and email out information as necessary.

*YouTube*: My YouTube channel contains many hours of tutorials on how to complete statistical procedures in SPSS, Excel, R, MOTE, and G\*Power. This information is used as teaching material in my courses and is open access for students/researchers to use as needed. I respond to online questions about these materials and take requests for video material.

*MOTE*: MOTE is a free R package and online app that calculates effect sizes and their non-central confidence intervals. This package was designed to fill the gap between running hypothesis testing calculations and effect sizes for students in a simple format – while also adding in confidence intervals for effect sizes because of the promotion for these values in reporting.

Statistics Tools website ties all these resources together in one convenient location. Materials from my courses (basic/advanced/graduate statistics and structural equation modeling) are provided with multiple formats (SPSS, Excel, R) for use by students in my courses and the interested graduate student or researcher. This information is formatted so that an individual may download the entire course for a template when assigned as a course prep.

## **Service**

## **Professional Memberships**

Society for Computers in Psychology (SCIP)

Society for the Improvement of the Psychological Sciences (SIPS)

Midwestern Psychological Association (MPA)

Southwestern Psychological Association (SWPA)

Psychonomic Society, Fellow

Association for Psychological Science (APS)

Graduate and Professional Student Association

## **Professional Activities**

Departmental Search Committees

# Journal Reviewer

**Publons Profile** 

201/ Current
2018-Current
2013-Current
2012-Current
2007 – Current
2009-Current
2018
2018
2018
2014-2018
2014-2018
2013-2017
2013-2018
2013-2018
2013-2018
2012-2014

2012-2018

2017-Current

Space Utilization Committee, Chair,	2011-2018
CHHS Assessment Committee	2011-2014
Course Evaluation Redesign and Coordinator	2011-2018
RStats Consultant	2011-2018
Research Writing Group	2010-2014
Honors Thesis Supervisor	2009-2018
Masters Thesis Committees	2008-2018
Honors Thesis Committees	2009-2018
Faculty Supervisor for Photography Club	2008 – 2010
Vice President of the Student Experimental Counsel	2007-2008
Psychology Textbook Adoption Committee	2006
Treasurer of the Student Experimental Counsel	2005-2006
Psychology Recycling Committee	2004-2008
Member of the Student Experimental Counsel	2004-2008
Served as research mentor for research assistants	2004-2008
Served as a poster judge undergraduate research presentations	2004-2008
Advising	
Pre-Law Advisor	2012-2018
Honors College Advisor	2011-2018
Living Learning Community Faculty Advisor	2011-2012
PASS Faculty Fellow	2011-2018
Recruitment Committee, Chair	2011-2018
Major's Fair	2010-2018
Bear Claw Advisory Board	2010-2018