

# Erin M. Buchanan

Professor of Cognitive Analytics

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## Education

Ph.D., Experimental Cognitive Psychology, Texas Tech University	2008
Dissertation: <i>What's the difference: A study on semantic and associative priming and blocking.</i>	
Committee: Drs. William S. Maki (chair), Patricia R. Delucia, Ruth Maki, Roman Taraban	
M.A., Experimental Psychology, Texas Tech University	2006
Thesis: <i>Feature binding: Not quite so pre-attentive</i>	
Committee: Drs. M. Kathryn Bleckley (chair), William S. Maki	
B.S., Psychology, Texas A&M University	2004

## Employment

Harrisburg University of Science and Technology, Analytics	Full Time
Professor of Cognitive Analytics	2019-Current
DataCamp Instructor	Part-Time
Structural Equation Modeling in R <a href="#">Link</a>	2018-Current
Financial Modeling in Spreadsheets <a href="#">Link</a>	2019-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

## Honors and Awards

Society for the Improvement of Psychological Science Commendation	2024
Society for the Improvement of Psychological Science Commendation	2020
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	2014; 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	2005-2007
Graduate School Travel Grant	2005-2007
Department of Psychology Competitive Scholarship	2004-2006

## 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	
Principal Investigator	
The DOOM Lab	2010-2018
Missouri State University, Department of Psychology	
Principal 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	
Principal 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, Spark, Javascript (React)

### *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. (2024). visualizemi: Visualization, Effect Size, and Replication of Measurement Invariance for Registered Reports. *R package version 0.0.1*. [Link](#)

Buchanan, E. M. (2024). Visualizing Sensitivity. *R package version 0.1.3*.doi: 10.32614/CRAN.package.ViSe [Link](#)

+Maxwell, N. P., & Buchanan, E. M. (2021). lrd: A Package for Processing Lexical Response Data. *R package version 0.1.0*.doi: 10.32614/CRAN.package.lrd [Link](#)

+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*.doi: 10.32614/CRAN.package.MOTE [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*

\$Vaidis, D. C., et al. (2026). The Advantage of Big Team Science: Lessons Learned from Cognitive Science. *Collabra: Psychology*, 12, 160129. doi: 10.1525/collabra.160129 [Link](#)

+Viviani, G., et al. (2026). Developmental Trajectories of Executive and Semantic Flexibility Using Task-Switching. *Scientific Reports*, X, XX-XX. [Link](#)

+Padfield, W.E., Buchanan, E.M., & Jordan, K. N. (2025). Moral Foundations of US Political News Organizations: A Replication and Methodological Study. *Meta-Psychology*, X, XX-XX. [Link](#)

\$Chin, S.-C., et al. (2025). Investigating Object Orientation Effects Across 18 Languages. *Current Psychology*, 44, 19148-19174. doi: 10.1007/s12144-025-08304-x [Link](#)

+Buchanan, E.M., et al. (2025). Measuring the Semantic Priming Effect Across Many Languages. *Nature Human Behaviour*, 10, 182–201. doi: 10.1038/s41562-025-02254-x [Link](#)

\$Faytak, M., et al. (2025). Big Team Science for language science: opportunities and challenges. *Linguistics*, X, XX–XX. [Link](#)

\$Viviani, G., et al. (2025). Exploring semantic and executive flexibility interplay in task switching. *Scientific Reports*, 15, 31609. doi: 10.1038/s41598-025-09639-y [Link](#)

Geller, J., et al. (2025). Perceptual Disfluency and Recognition Memory: A Response Time Distributional Analysis. *Journal of Cognition*, 8, 1–26. doi: 10.5334/joc.469 [Link](#)

+Wynn, A., et al. (2025). Online assignment submission delay as a behavioral indicator of procrastination. *Scholarship of Teaching and Learning in Psychology*, X, XX–XX. doi: 10.1037/stl0000468 [Link](#)

\$Hall, B., et al. (2024). Registered Replication Report: A Large Multilab Cross-Cultural Conceptual Replication of Turri et al. (2015). *Advances in Methods and Practices in Psychological Science*, 7, XX–XX. doi: 10.1177/25152459241267902 [Link](#)

Buchanan, E. M. (2024). Semantic Feature Production Norms. *Reference Module in Social Sciences. International Encyclopedia of Language and Linguistics, 3rd Edition*, X, 637–641. doi: 10.1016/B978-0-323-95504-1.00045-4 [Link](#)

+Sumner, C., Scofield, J.E., Buchanan, E.M., Evans, M.R., & Shearing, M. (2023). The role of personality, authoritarianism and cognition in the United Kingdom’s 2016 referendum on European Union membership. *Frontiers in Psychology: Personality and Social Psychology*, 14, 61. doi: 10.3389/fpsyg.2023.1077354 [Link](#)

\$Coretta, S. et al. (2023). Multidimensional signals and analytic flexibility: Estimating degrees of freedom in human speech analyses. *Advances in Methods and Practices in Psychological Science*, 6, 1–29. doi: 10.1177/25152459231162567 [Link](#)

\$Bochynska, A., Buchanan, E. M., Casillas, J. V., Champagne, I. A., Chen, K., Halfacre, C., Keeble, L., Roettger, T. B., & Rothlisberger, M. (alphabetical) (2023). Reproducible research practices and transparency across linguistics. *Glossa: Linguistics*, 2, 1–36. doi: 10.5070/G6011239 [Link](#)

+Jordan, K.N., Buchanan, E.M., & Padfield, W.E. (2022). The Language of War: A Replication and Extension of Abe (2012) and Matsumoto and Hwang (2013). *Meta-Psychology*, 6, MP.2019.1633. doi: 10.15626/MP.2019.1633 [Link](#)

+Maxwell, N. P., Huff, M., & Buchanan, E. M. (2022). lrd: An R Package and Shiny Application for Lexical Response Data. *Behavior Research Methods*, 54, 2001–2024. doi: 10.3758/s13428-021-01718-y [Link](#)

+Buchanan, E.M., Valentine, K.D., & Wikowsky, A. (2022). An extension of the QWERTY effect: Not just the right hand, expertise and typeability predict valence ratings of words.

*Psychology of Language and Communication*, 26, 85-101. doi: 10.2478/plc-2022-0005 [Link](#)

+Scofield, J.E., Kostic, B., & Buchanan, E.M. (2020). How the presence of others affects desirability judgments in heterosexual and homosexual participants. *Archives of Sexual Behavior*, 49, 623–633. doi: 10.1007/s10508-019-01516-w [Link](#)

+Maxwell, N.P. & Buchanan, E.M. (2020). Investigating the interaction of direct and indirect relation on memory judgments and retrieval. *Cognitive Processing*, 21, 41–53. doi: 10.1007/s10339-019-00935-w [Link](#)

Buchanan, E.M., De Deyne, S., & Montefinese, M. (2020). A practical primer on processing semantic property norm data. *Cognitive Processing*, 21, 587–599. doi: 10.1007/s10339-019-00939-6 [Link](#)

+Knoph, R.E., & Buchanan, E.M. (2020). Language learning and metacognition: An intervention to improve second language classrooms. *Journal of Scientific Psychology*, October, 1–15. [Link](#)

\*Forbes, F.-J., & Buchanan, E.M. (2019). “Textisms”: The comfort of the recipient. *Psychology of Popular Media Culture*, 4, 358–364. doi: 10.1037/ppm0000194 [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*, 51, 1878–1888. 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*, 1–16. doi: 10.4135/9781526491398 [Link](#)

+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*, 51, 1849–1863. doi: 10.3758/s13428-019-01243-z [Link](#)

\*Marshall, C.Z., Buchanan, E.M., & Fallone, M.D. (2019). Love, language, and linear algebra: Linguistic modeling of personality and mate preference. *Modern Psychological Studies*, 25, 1–27. [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](#)

\*Pavlicic, 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](#)

\$Duncan, J., Buchanan, E.M., Marshall, C.Z., & Oberdieck, K. (2018). But words will never hurt me. *The Journal of Psychology and the 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](#)

\*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](#)

+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](#)

\$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/ppm000036 [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](#)

+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](#)

+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](#)

+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](#)

\*Foster, L.E., & Buchanan, E.M. (2012). Judgments of memory: Do the number and presentation 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](#)

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](#)

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

*Applied Statistics*

+Buchanan, E. M., et al. (2026). The Challenges and Payoffs of In-person Big-team Science. *Social and Personality Psychology Compass*, 20, e70121. doi: <http://dx.doi.org/10.1111/spc3.70121> [Link](#)

\$Buchanan, E. M., et al. (2026). Accuracy in Parameter Estimation and Simulation Approaches for Sample Size Planning with Multiple Stimuli. *Behavior Research Methods*, 58, 48. doi: 10.3758/s13428-025-02860-7 [Link](#)

\$Larkin, K., et al. (2026). Knowledge and Luck... and Stereotypes?: Examining the Influence of an Actor's Group Membership on Knowledge Attribution. *Psi Chi Journal of Psychological Research*, X, XX-XX. [Link](#)

\$Marcoci, A., et al. (2025). Predicting the replicability of social and behavioral science claims from the COVID 19 Preprint Replication Project with structured expert and novice groups. *Nature Human Behaviour*, 9, 287-304. doi: 10.1038/s41562-024-01961-1 [Link](#)

Buchanan, E. M. (2025). visualizemi: Visualization, Effect Size, and Replication of Measurement Invariance for Registered Reports. *Assessment*, 32, 190-205. doi: 10.1177/10731911241280763 [Link](#)

\$Buchanan, E. M., Miranda, J., & Stephens, C. (2025). The Reliability of Student Evaluations of Teaching. *Assessment & Evaluation in Higher Education*, 50, 997-1011. doi: 10.1080/02602938.2025.2504618 [Link](#)

\$Kerschbaumer, S. et al. (2025). VALID: A Checklist-Based Approach for Improving Validity in Psychological Research. *Advances in Methods and Practices in Psychological Science*, 8, XX-XX. doi: 10.1177/25152459241306432 [Link](#)

\$Phills, C., et al. (2025). Multi-region investigation of "man" as default in attitudes. *PLoS One*, 20, e0323938. doi: 10.1371/journal.pone.0323938 [Link](#)

\$Heyman, T., et al. (2025). Crowdsourcing Multiverse Analyses to Examine the Robustness of Research Findings. *Psychological Methods*, X, XX-XX. doi: 10.1037/met000770 [Link](#)

\$Lazarevic, L., et al. (2025). Collaborative registered replication of Griskevicius et al. (2010): Can pro-environmental behavior be promoted by priming status motivation?. *Collabra: Psychology*, 11, 143773. doi: 10.1525/collabra.143773 [Link](#)

\$Aczel, B., et al. (2025). Investigating the analytical robustness of the social and behavioural sciences. *Nature*, 652, 135-142. doi: 10.1038/s41586-025-09844-9 [Link](#)

\$Loenneker, H., et al. (2024). We don't know what you did last summer. On the importance of transparent reporting of reaction time data pre-processing. *Cortex*, 172, 14-37. doi: 10.1016/j.cortex.2023.11.012 [Link](#)

+Peetz, H., et al. (2024). Evaluating Interventions: A Practical Primer for Specifying the Smallest Effect Size of Interest. *A better how: notes on developmental meta-research*, X, 127-135. [Link](#)

Buchanan, E. M. (2024). Statistical Power: How Not to Miss What's Right in Front of You. *The Cambridge Handbook of Research Methods and Statistics for the Social and Behavioral Sciences*. Cambridge University Press., NA, 232–260. doi: 10.1017/9781009000796.012 [Link](#)

\$Schmidt, K., et al. (2024). A Response to a Comment on Hall et al. (2024). *Advances in Methods and Practices in Psychological Science*, 7, XX–XX. doi: 10.1177/25152459241268249 [Link](#)

+Höfler, M., Pronizius, E., & Buchanan, E. M. (2024). How large must an associational mean difference be to support a causal effect?. *Methodology*, 20, 318–335. doi: 10.5964/meth.14579 [Link](#)

+Buchanan, E.M., Manley, H., Sly, J., Cady, R., Wikowsky, A., & Cunningham, A.L. (2023). Development of the Functional Assessment of Migraine Scale using a patient guided approach. *Quality of Life Research*, 32, 867–879. doi: 10.1007/s11136-022-03279-9 [Link](#)

+Pavlicic, J. M., Weber, M. C., Torres, V. A., Ho, L. Y., Buchanan, E. M., & Schulenberg, S. E. (2023). Perceived meaning, pandemic self-efficacy, social support, and discrimination predict trajectories of peri-pandemic growth and distress for international students. *Psychological Trauma: Theory, Research Practice, and Policy*, 15, 469–473. doi: 10.1037/tra0001417 [Link](#)

+Buchanan, E. M., et al. (2023). PSACR: The Psychological Science Accelerator's COVID-19 Rapid-Response Dataset. *Nature Scientific Data*, 10, 87. doi: 10.1038/s41597-022-01811-7 [Link](#)

\$Buchanan, E.M., Cady, R.J., Manley, H.R., Sly, J.S., & Wikowsky, A. (2023). The Functional Assessment of Migraine Scale Development Datasets. *Data in Brief*, 46, 108803. doi: 10.1016/j.dib.2022.108803 [Link](#)

\$Terry, J. et al. (2023). Data from an International Multi-centre Study of Statistics and Mathematics Anxieties and Related Variables in University Students (the SMARVUS Dataset). *Journal of Open Psychology Data*, 11, 1–8. doi: 10.5334/jopd.80 [Link](#)

+Weber, M. C., Pavlicic, J. M., Torres, V. A., Ho, L. Y., Buchanan, E. M., & Schulenberg S. E. (2023). Collective efficacy and perceived COVID-19 severity predict preparedness and response behaviors: A longitudinal study of intersectionally vulnerable university students. *Disaster Medicine and Public Health Preparedness*, 17, 1–5. doi: 10.1017/dmp.2023.87 [Link](#)

\$Primbs, M., Dudda, I., Andresen, P. K., Buchanan, E. M., Peetz, H. K., Silan, M. A., & Lakens, D. (2023). Consensus meetings will outperform integrative experiments. *Behavioral and Brain Sciences*, 47, e56. doi: 10.1017/S0140525X23002248 [Link](#)

+Velez, J. et al. (2023). Modeling Chronic Pain in Canadian Veterans: An Application of the Biopsychosocial Model Structural Equation Model for Pain in Canadian Veterans LASS 2019. *Journal of Military, Veteran and Family Health*, 10, 30–39. doi: 10.3138/jmvfh-2023-0025 [Link](#)

+Schmidt, K., Buchanan, E. M., & Hall, B. (2022). Moderators of the Relationship between Implicit and Explicit Measures of Evaluation and Identification. *Journal of Experimental Social Psychology*, 100, 104280. doi: 10.1016/j.jesp.2021.104280 [Link](#)

+Pavlicic, J. M., Buchanan, E. M., McCaslin, S. E., Schulenberg, S. E., & Young, J. N. (2022). A systematic review of posttraumatic stress and resilience trajectories and covariates in veterans and service members. *Professional Psychology Research and Practice, 53*, 266–275. doi: 10.1037/pro0000451 [Link](#)

\$Bago, B., et al. (2022). Situational factors shape moral judgments in the trolley dilemma in Eastern, Southern, and Western countries in a culturally diverse sample. *Nature Human Behaviour, 6*, 880–895. doi: 10.1038/s41562-022-01319-5 [Link](#)

+Primbs, M., Pennington, C. R., Lakens, D., Silan, D., Lieck, D., Forscher, P., Buchanan, E. M., & Westwood, S. (2022). Are Small Effects the Indispensable Foundation for a Cumulative Psychological Science? A Reply to Gotz et al. (2022).. *Perspectives on Psychological Science, 18*, 508–512. doi: 10.1177/17456916221100420 [Link](#)

+Legate, N., et al. (2022). A Global Experiment on Motivating Social Distancing during the COVID-19 Pandemic. *Proceedings of the National Academy of Sciences, 119*, e2111091119. doi: 10.1073/pnas.2111091119 [Link](#)

Counsell, A., Rovetti, J., & Buchanan, E.M. (2022). Psychometric Evaluation of the Students' Attitudes Toward Statistics and Technology Scale (SASTSc). *Statistics Education Research Journal, 21*, 1–18. doi: 10.52041/serj.v21i3.29 [Link](#)

+Dorison, C., et al. (2022). In COVID-19 health messaging, loss framing increases anxiety with little-to-no concomitant benefits: Experimental evidence from 84 countries. *Affective Science, 3*, 577–602. doi: 10.1007/s42761-022-00128-3 [Link](#)

+Pavlicic, J. M., Schulenberg, S. E., Witcraft, S. M. & Buchanan, E. M. (2022). Assessing the Effectiveness and Utility of a Mindfulness-Based Ecological Momentary Intervention in College Students. *Journal of Technology in Behavioral Science, 7*, 554–566. doi: 10.1007/s41347-022-00274-2 [Link](#)

+Pavlicic, J. M., Witcraft, S. M., Dixon, L. J., Buchanan, E. M., & Schulenberg, S. E. (2022). Daily changes in state emotion regulation abilities predict positive and negative affect. *Journal of Contextual Behavioral Science, 26*, 63–68. doi: 10.1016/j.jcbs.2022.08.006 [Link](#)

\$Valentine, K.D., Buchanan, E.M., Cunningham, A., Hopke, T.G., Wikowsky A., & Wilson H. (2021). Have researchers increased reporting of outliers in response to the reproducibility crisis?. *Social and Personality Psychology Compass, 15*, e12591. doi: 10.1111/spc3.12591 [Link](#)

+Young-Jones, A., Yadon, C.A., Hart, B., & Buchanan, E.M. (2021). Validation of a Four Factor Measure: Scale of Perceived Instructor Support. *Psychological Reports, 125*, 1714–1731. doi: 10.1177/00332941211000653 [Link](#)

+Pavlicic, J. M., Schulenberg, S. E., & Buchanan, E. M. (2021). Experiential Avoidance and Meaning in Life as Predictors of Valued Living: A Daily Diary Study. *Journal of Prevention and Health Promotion, 2*, 135–159. doi: 10.1177/2632077021998261 [Link](#)

+Reigada, L. C., Buchanan, E. M., Hazeltine, D. B., Shakil, H., & Polokowski, A. R. (2021). A pilot

randomized controlled trial testing supplements of omega-3 fatty acids, probiotics, combination or placebo on symptoms of depression, anxiety and stress. *Journal of Affective Disorders Reports*, 5, 100141. doi: 10.1016/j.jadr.2021.100141 [Link](#)

+Buchanan, E.M., Valentine, K.D., & Pavlacic, J. (2021). Hypothesize once, plan twice. *Academia Letters*, June, 1274. doi: 10.20935/AL1274 [Link](#)

\$Wang, K., et al. (2021). A multi-country test of brief reappraisal interventions on emotions during the COVID-19 pandemic. *Nature Human Behaviour*, 5, 1089–1110. doi: 10.1038/s41562-021-01173-x [Link](#)

+Weber, M.C., Pavlacic, J.M., Gawlik, E.A., Schulenberg, S.E., & Buchanan, E.M. (2020). Modeling resilience, meaning in life, posttraumatic growth, and disaster preparedness with two samples of tornado survivors. *Traumatology*, 26, 266–277. doi: 10.1037/trm0000210 [Link](#)

+Herr, D. & Buchanan, E.M. (2020). Generativity and other buffers of death awareness in first responders with PTSD. *Anxiety, Stress, & Coping*, 33, 193–206. doi: 10.1080/10615806.2019.1695522 [Link](#)

+Huber, B., Jones, R.G., Capps, S.C., & Buchanan, E.M. (2020). Memory Complaint Inventory Profiles in Poor Effort, Pseudodementia, and Dementia Populations. *Applied Neuropsychology: Adult*, 29, 234–243. doi: 10.1080/23279095.2020.1735388 [Link](#)

\$Buchanan, E.M., Crain, S., Cunningham, A., Johnson, H., Stash, H., Papadatou-Pastou, M., Isager, P.M., Carlsson, R., & Aczel, B. (2020). Getting started creating data dictionaries: How to create a shareable dataset. *Advances in Methods and Practices in Psychological Science*, 4, 251524592092800. doi: 10.1177/2515245920928007 [Link](#)

+Pavlacic, J. M., Dixon, L. J., Schulenberg, S. E., & Buchanan, E. M. (2020). Examining daily-level associations between nightly alcohol use and next-day valued behavior in college students. *Journal of American College Health*, 70, 963–967. doi: 10.1080/07448481.2020.1785473 [Link](#)

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## Registered Reports

These articles have been accepted in principle as a registered report, but have not been completed for final publication.

*Psycholinguistics, Cognitive Science*

\$Taylor, V.J., et al. (2019). Stereotype Threat in Black College Students Across Many Operationalizations. *Nature Human Behaviour*. [Link](#)

### *Applied Statistics*

\$Peters, K., et al. (2025). Think Political Leader, Think He or She? A Multi-Country Test of a Gender Fair Language Intervention for Stereotype Bias. *Leadership Quarterly*. [Link](#)

\$Yang, X., et al. (2024). Large-scale cross-societal examination of real-and minimal-group biases. *Nature Human Behaviour*. [Link](#)

### **Preprints**

#### *Psycholinguistics, Cognitive Science*

+Jordan, K.N, et al. (2026). Replicating Partisan Differences in Partisan Media Data. [Link](#)

+Montefinese, M., et al. (2026). Word Familiarity Norms as a Test Case: Toward Methodological Standards for Word Norming Research. [Link](#)

Buchanan, E. M. (2025). Counting on Memory: How Expertise Shapes Our Numerical Judgments of Associations. [Link](#)

Maxwell, N. P. & Buchanan, E. M. (2025). Do large language models Dunning-Kruger?. [Link](#)

+Padfield, W.E. & Buchanan, E.M. (2019). Moral foundations of U.S. political news organizations (Thesis Version). [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](#)

+Wikowsky, A., & Buchanan, E.M. (2019). Expertise within working memory and fluid intelligence. [Link](#)

Montefinese, M., Buchanan, E.M., & Vinson D. (2018). How well do similarity measures predict priming in abstract and concrete concepts?. [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](#)

+Buchanan, E.M., Scofield, J.E., Nunley, N. (2018). The N400's 3 As: Association, automaticity, attenuation (and some semantics too). [Link](#)

\*Marshall, C.Z. & Buchanan, E.M. (2017). Latent semantic analysis applied to authorship questions in textual analysis. [Link](#)

### *Applied Statistics*

\$Law, K., et al. (2026). Social discounting outpredicts temporal discounting in intergenerational judgment: A many labs investigation. [Link](#)

\$Sirota, M. et al. (2025). Mapping and Increasing Error Correction Behaviour in a Culturally Diverse Sample. [Link](#)

\$Srivastava, A., et al. (2025). Ethical Challenges and Opportunities in Global Big Team Science: Lessons from the Psychological Science Accelerator. [Link](#)

\$Murray, S., et al. (2024). A Cross-Cultural Study of Everyday Moral Experiences. [Link](#)

+Buchanan, E. M. & Lewis, S. C. (2024). What defines big team science?. [Link](#)

\$Grigoryan, L. et al. (2024). (In)Alienable Worth? Cultural Logics of Dignity, Honor, and Face and their Links to Prosociality Across the World. [Link](#)

\$Smith, T. et al. (2024). The Impact of Migraine on Career Mobility and Opportunities among Working Women: An Exploratory Study. [Link](#)

+Shipman, S.S., Buchanan, E.M., & Reese, A.C. (2022). Infectious complications following radical cystectomy: A structural equation model. [Link](#)

+Liberto, A.K., Pimperl, J.W., Buchanan, E.M., Deal, W.P., & Schulenberg, S.E. (2019). Development of the Impact of Event Scale-8 (IES-8): A study in serious mental illness. [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. OpenNorms: Building an Open, FAIR, and Scalable Portal for Multilingual Normed Data. Dutch escience center (2025, submitted). €381,510.

Co-Principal Investigator. Co-LLECT: Collaborative Language Data Collection and Technology. OSCARS. (2025, submitted). \$291,500.

Partner Institution Faculty Mentor. Information control processes: an alternative and multidimensional approach to study their development. Horizon MSCA. (12/01/2025-12/01/2027). €288,859.

Principal Investigator. Many Languages, One Network: Cross-Linguistic Semantic Priming Effects in 45 Languages and Large Language Models (06/01/2025-06/01/2027). \$473,434.

Principal Investigator. Measuring the Lexicon: Computational Approaches to Quantifying Similarity Among Cognitive Representations. Psychonomic Society Estes Grants. (2019, submitted). \$19,000.

Co-Principal Investigator. To see or not to see: Perceptual learning in organic chemistry. National Science Foundation (2015, submitted). \$980,730.

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). 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). \$6,000.

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). \$6,000.

Principal Investigator. Cheating at Scrabble: An Online Database of Word Information. Missouri State University's Faculty Research Grant. (1/2011-1/2012). \$7,095.

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

### *Applied Statistics*

Co-Principal Investigator. Comparative Effectiveness of an AI-Generated Personalized Migraine Report to Support Shared Decision Making and Treatment Adherence. PCORI PLACER (2026, submitted). \$1,400,000.

Statistician. Randomized controlled feasibility trial of a just-in-time intervention and mobile application for adults with misophonia. (2026). LOI accepted.

Principal Investigator. STAPLE Metadata Commons: A Community-Driven Library for Open, Reusable Metadata Standards. ORCA Catalytic Awards Program (2025, submitted). \$15,000.

Co-Principal Investigator. Empowering Migraine Patients and Optimizing Wellness through Evidence-based, Real-time Personal Health Informatics (EMPOWER). National Institutes of Health (2025, submitted). \$1,106,420.

Principal Investigator. Empowering Shared Decision-Making through Customized Reports to Lower Unmet Disease Burden. Pfizer. (2025, submitted). \$197,643.

Statistician. Examining momentary and longitudinal associations between misophonia and emotion regulation: an intensive experience sampling approach. (06/25/2025-06/25/2026). \$70,000.

Principal Investigator. STAPLE+: Advancing Open Science through Interoperability, Collaboration, and Community. OSCARS. (2025, submitted). \$223,409.

Principal Investigator. STAPLE - Science Tracking Across Project Lifespan. National Science Foundation. (2024, submitted). \$241,776.

Principal Investigator. STAPLE - Science Tracking Across Project Lifespan. NASA ROSES. (10/01/2023-10/01/2024) \$97,059.

Principal Investigator. Customized Response to Treatment Feedback for Patients with Migraine and their Providers. Pfizer. (2023, submitted). \$470,456.

Principal Investigator. Customized Response to Treatment Feedback for Patients with Migraine and their Providers. Agency for Health Care Research and Quality. (2022, submitted). \$1,015,699.

Principal Investigator. Blueprint for the Enabling QUantitative Interpretation of Patient Preference Estimate Data (EQUIPPED) Database. Pfizer. (2021, submitted). \$43,953.

Principal Investigator. Building inclusive open data infrastructure for a recovering pandemic world. Trans-Atlantic Platform Social Sciences and Humanities. (2021, submitted). \$199,733.

Principal Investigator. Amazon Response Grants for Non-Profits (in partnership with the Psychological Science Accelerator). (04/01/2020-09/01/2020). \$1,200.

Principal Investigator. Validation of the Functional Assessment of Migraine Scale (FAMS). National Headache Foundation (2020, submitted - POSTPONED DUE TO COVID). \$64,016.00.

Statistician. The Impact of Migraine on Women in the Workforce. National Headache Foundation (06/01/2020-12/01/2020). \$5,000.

Statistician. Trajectories of psychological functioning and pandemic preparedness for students quarantined during the COVID-19 pandemic. National Hazards Center Quick Response Research Grant Program. (06/01/2020-12/01/2020). \$3,240.

Principal Investigator. Creating Enhanced Shared Decision Making through a Migraine Tracking Application. Presidential Research Grant at Harrisburg University. (01/01/2020-01/01/2021). \$19,180.

Principal Investigator. Development of a Headache Meaningful Response Measure Using a Patient Guided Approach. National Headache Foundation (04/01/2018-04/01/2019). \$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-Principal Investigator: II-NEW: An Infrastructure for Distributed Research on Neurophysiology and Brain-Computer Interface. National Science Foundation (2010, resubmitted).

## Presentations

### *Psycholinguistics, Cognitive Science*

Buchanan, E. M. (2025, September). *Designing Big Science: Lessons from a 25,000-Participant, 30-Language Semantic Priming Study*. Invited talk for AMLaP: Architectures and Mechanisms for Language Processing, Prague, Czechia. [Link](#)

Buchanan, E. M. (2025, November). *Designing a language specific data collection platform with gamified results and open data*. Presentation for the Society for Computation in Psychology, Denver, CO. [Link](#)

Buchanan, E. M. & Maxwell, N. P. (2025, November). *Do large language models Dunning-Kruger?*. Presentation for the Annual Meeting of the Psychonomic Society, Denver, CO. [Link](#)

Viviana, G., et al. (2025, June). *Game on for Cognitive Testing: How Do We Validate Our Cognitive Control Battery?*. Poster Presentation for the Society for Improvement of Psychological Science, Budapest, Hungary. [Link](#)

Montefinese, M., et al. (2025, June). *Filtering the Noise: a Gamified Approach to Cognitive Control in Children*. Poster Presentation for the Society for Improvement of Psychological Science, Budapest, Hungary. [Link](#)

Heyman, T., Buchanan, E. M., & Pronizius, E. (2025, July). *Crowdsourcing Multiverse Analyses to Explore the Impact of Different Data-processing and Analysis Decisions*. Poster Presentation for the Metascience Conference in London, UK. [Link](#)

Pattullo, A., Matic Škorić, A., Scott, L., Buchanan, E., & Reilly, J. (2025, August). *Investigating the Role of Sensorimotor Dominance in Semantic Feature Listings: When I Say Dog, Will You Say Tail?*. Proceedings of the Annual Meeting of the Cognitive Science Society. [Link](#)

Buchanan, E. M. (2024, November). *Priming is consistent but different across languages: The data release and results from the Semantic Priming Across Many Languages Project*. Presentation for the Annual Meeting of the Psychonomic Society, New York, NY. [Link](#)

Buchanan, E. M. (2023, October). *What can we learn about two million priming values? An update to the Semantic Priming Across Many Languages Project (PSA007)*. Big Team Science Conference.

Roettger, T., & Buchanan, E. M. (2023, October). *ManyLanguages*. Big Team Science Conference. [Link](#)

Buchanan, E. M., et al. (2023, November). *What can we learn about two million priming values? An update to the Semantic Priming Across Many Languages Project (SPAML)*. Spoken presentation at the Psychonomic Society Meeting, San Francisco, CA. [Link](#)

Buchanan, E. M. (2023, February). *Big Team Science Means Big Method Opportunities*. Invited presentation for the UK Metascience Group. [Link](#)

Buchanan, E. M. (2023, April). *Big Team Science Means Big Method Opportunities*. Invited presentation for NYU's PRIISM Speaker Series. [Link](#)

Buchanan, E. M. (2022, September). *BTS Comes for Linguistics*. Invited presentation for the University of Utah Linguistics program. [Link](#)

Buchanan, E.M., et al. (2022, November). *Is Priming Consistent Across Languages? Preliminary Findings from the SPAML: Semantic Priming Across Many Languages*. Spoken presentation at the annual meeting of the Psychonomic Society, Boston, MA. [Link](#)

Heyman, T., Buchanan, E.M., et al. (2022, November). *Crowdsourcing Multiverse Analyses to Examine the Robustness of Research Findings*. Spoken presentation for the Annual Meeting of the Society for Computation in Psychology, Boston, MA. [Link](#)

Buchanan, E.M. (2022, March). *A PSA on the PSA: Big Team Science with the Psychological Science Accelerator*. Invited spoken presentation for the University of Mississippi's clinical research students, Oxford, MS. [Link](#)

Buchanan, E.M. (2022, March). *SPAM-L: Semantic Priming Across Many Languages*. Invited spoken presentation for Stanford University's brown bag series. [Link](#)

Buchanan, E. M. (2021, October). *Cross-linguistic research is hard: Update to the SPAM-L*. Presentation for PSACON 2021. [Link](#)

Buchanan, E. M., et al. (2021, November). *Adaptive Algorithms for Stimuli Sampling in Cognitive Studies*. Spoken presentation for the Annual Meeting of the Society for Computation in Psychology. [Link](#)

Buchanan, E. M., et al. (2021, November). *Creating a cross-referenced multi-linguistic dataset*

to investigate semantic priming. Spoken presentation for the Annual Meeting of the Psychonomic Society. [Link](#)

Buchanan, E. M. (2020, October). *SPAM-L: PSA007 Study Announcement*. Presentation for PSACON 2020. [Link](#)

Buchanan, E. M., Valentine, K. D., Maxwell, N. P., Taylor, J. E., & Montefinese, M. (2020, November). *Power simulations for linguistic norm data collection*. Spoken presentation for the Annual Meeting of the Psychonomic Society, Austin, TX. [Link](#)

Grim II, P. A. & Buchanan, E.M. (2020, November). *Testing the assumption of model similarity across languages*. Spoken presentation for the Annual Meeting of the Society for Computation in Psychology, Austin, TX. [Link](#)

Buchanan, E.M., Korn, J., & Newman, M. (2020, November). *Using STRUDEL to create concept-feature norms for many languages*. Spoken presentation for the Annual Meeting of the Society for Computation in Psychology, Austin, TX. [Link](#)

+Maxwell, N. P., Huff, M., & Buchanan, E. M. (2020, November). *lrd: An R Package and Shiny Application for Lexical Response Data*. Spoken presentation for the Annual Meeting of the Society for Computation in Psychology, Austin, TX. [Link](#)

Basnight-Brown, D., Chin, S.-C., Wagge, J., & Buchanan, E. M. (2020, November). *The Psychological Science Accelerator*. Poster presentation for the Annual Meeting of the Psychonomic Society, Austin, TX. [Link](#)

+Cunningham, A., Chate, N. & Buchanan, E.M. (2019, November). *Automating the Linguistic Annotated Bibliography (LAB)*. Spoken presentation for the Annual Meeting of the Society for Computers in Psychology, Montreal, Canada. [Link](#)

+Buchanan, E.M., De Deyne, S., & Montefinese, M. (2019, November). *A practical primer on processing semantic property norms*. Spoken Presentation for the Annual Meeting of the Psychonomic Society, Montreal, Canada. [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](#)

\$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](#)

+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](#)

+Buchanan, E.M., Gillenwaters, A., Padfield, W.E., Van Nuland, A., & Wikowsky, A.

(2018, November). *Word space creator: A visual tool for semantic space visualization*. Spoken presentation for the Annual Meeting of the Society for Computers in Psychology, New Orleans, LA. [Link](#)

\*Marshall, C.Z. & Buchanan, E.M. (2018, April). *Latent semantic analysis applied to authorship questions in textual analysis*. 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 survival 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 Association Convention, 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. [Link](#)
- +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 [Link](#)

+Buchanan, E.M., & Valentine, K.D. (2011, November). *JAM-boree: A meta-analysis of judgment 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. [Link](#)

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

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. [Link](#)

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. [Link](#)

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. [Link](#)

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

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. [Link](#)

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 . [Link](#)

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

#### *Applied Statistics*

Buchanan, E. M. (2025, September). *STAPLE: Infrastructure for Open, Transparent, and Collaborative Science*. Online presentation for the Center for Open Science. [Link](#)

Buchanan, E. M. (2025, November). *Advancing Best Practices in Cross Cultural Psychological Research*. Online presentation for APA's D52 Science Committee.

Buchanan, E. M. (2025, November). *Navigating Career Development in Open and Big Team Science: Challenges and Opportunities*. Online Panel for ManyManys Organization.

Buchanan, E. M. (2024, October). *STAPLE: Software for Scientists*. Workshop for Big Team Science Conference. [Link](#)

Buchanan, E. M. (2024, November). *STAPLE: Software for Scientists*. Presentation for the Annual Meeting of the Society for Computation in Psychology, New York, NY. [Link](#)

Buchanan, E. M. (2024, November). *Technology and Psychology's Renaissance*. Presentation for the Annual Meeting of the Society for Computation in Psychology, New York, NY. [Link](#)

Buchanan, E. M. (2024, May). *On the Nature of Research: Fostering Transparency, Innovation, and Quality in Science Collaboration*. Invited spoken presentation for the Annual Meeting of the Association for Psychological Science's session on On the Nature of Research: Fostering Transparency, Innovation, and Quality in Science Collaboration. San Fransico, CA. [Link](#)

Buchanan, E. M. (2024, June). *STAPLE: Software for Scientists*. Workshop for the Society for the Improvement of Psychological Science (SIPS) 2024 Meeting. [Link](#)

Buchanan, E. M. (2024, July). *STAPLE: Software for Scientists*. Invited workshop for ELTE University, Budapest, Hungary. [Link](#)

Buchanan, E. M. (2024, July). *STAPLE: Software for Scientists*. Invited workshop for WoProc 2024 an International Word Processing Conference. Belgrade, Serbia. [Link](#)

Buchanan, E. M. (2024, July). *STAPLE: Software for Scientists*. Invited workshop for the University of Vienna, Vienna, Austria. [Link](#)

Buchanan, E. M. (2024, July). *Multiverse Analyses*. Invited workshop for WoProc 2024 an International Word Processing Conference. Belgrade, Serbia. [Link](#)

Buchanan, E. M. (2024, August). *Multilevel Modeling Psych #rstats*. Invited workshop for the Psych #rstats Club. [Link](#)

Buchanan, E. M. (2024, April). *Practical tools for impact through Open Science*. Invited Spoken presentation for the Conference for Open Science and Societal Impact hosted by Advancing & Evaluating the Societal Impact of Sciences. [Link](#)

\$Heyman, T., Pronizius, E., & Buchanan, E. M. (2024). *Crowdsourcing Multiverse Analyses to Examine the Robustness of Research Findings*. Proceedings of the Annual Meeting of the Cognitive Science Society. [Link](#)

Buchanan, E. M. & Kovacs, M. (2023, October). *STAPLE: Software for Scientists*. Big Team Science Conference. [Link](#)

Buchanan, E. M. (2023, November). *STAPLE: Software for Scientists*. Spoken presentation at the annual meeting of the Society for Computation in Psychology, San Francisco, CA.. [Link](#)

Buchanan, E. M. (2023, June). *Breaking Barriers: Empowering Girls through Coding*. Presentation for Camp Code for Girls. [Link](#)

+Primbs, M., Peetz, H., & Buchanan, E. M. (2023, June). *Developing Consensus-Based Guidelines for Multiverse Analysis*. Hackathon presentation for the Annual Meeting of the Society for the Improvement of Psychological Science, Padua, Italy. [Link](#)

+Lonneker, H., et al. (2023, June). *Introducing a checklist on reporting reaction time pre-processing steps*. Lightning talk at the Annual Meeting of the Society for the Improvement of Psychological Science, Padua, Italy. [Link](#)

Montefinese, M., et al. (2023, June). *Ethical Challenges of Big -Team Science: Lessons learned from the Psychological Science Accelerator*. Lightning talk at the Annual Meeting of the Society for the Improvement of Psychological Science, Padua, Italy. [Link](#)

+Buchanan, E. M. & Kovacs, M. (2023, June). *STAPLE: Software for Scientists*. Hackathon presentation for the Annual Meeting of the Society for the Improvement of Psychological Science, Padua, Italy. [Link](#)

Buchanan, E. M. (2023, July). *Code for Everyone: Making the Transition to R in Statistics Courses*. Invited presentation for the AALAC Open Science Workshop at Carleton College, Northfield, MN. [Link](#)

Buchanan, E. M. (2023, April). *Keep Calm and Automate: Using RMarkdown to Create Reports*. Invited workshop for the 2023 Joint North Central & Southwestern Branch Meeting, Oklahoma City, OK. [Link](#)

Buchanan, E. M. (2023, April). *Integrating social science and entomology using cognitive analytics*. Invited presentation for the 2023 Joint North Central & Southwestern Branch Meeting, Oklahoma City, OK. [Link](#)

Buchanan, E. M. & Chartier, C. (2022, September). *How to setup a big Team Science project within PSA*. Invited presentation for the Advancing Big-team Reproducible science through Increased Representation Conference 2022. [Link](#)

Buchanan, E. M. (2022, October). *Big Team Science Infrastructure*. Invited presentation for the Big Team Science Conference 2022. [Link](#)

+Pavlicic, J.M., Schulenberg, S.E., Witcraft, S.M., & Buchanan, E.M. (2022, November). *Assessing the Effectiveness and Utility of a Mindfulness-Based Ecological Momentary Intervention*. Poster presentation for the 56th annual meeting of the Association for Behavioral and Cognitive Therapies, New York, NY . [Link](#)

Buchanan, E.M. (2022, November). *Power to the Stimuli: Not the Effect*. Invited spoken presentation for Princeton University's Statistics Research Series, Princeton, NJ. [Link](#)

Buchanan, E.M. (2022, November). *Power Simulation Workshop*. Invited workshop for

Princeton University's Statistics Research Series, Princeton, NJ. [Link](#)

Buchanan, E.M. (2022, March). *Improving Patient's Assessment of Their Migraine*. Invited spoken presentation for the Medical Decision Making Research Group at Massachusetts General Hospital. [Link](#)

Reedy, M., McCoach, B., Makel, M., Steltenpohl, C., Adelson, J., Matthews, M., & Buchanan, E. M. (2022, April). *Open Science 201: Research Life Cycle from Various Stakeholder Perspectives*. Spoken presentation for the Annual Meeting of the American Educational Research Association, San Diego, CA. [Link](#)

Reedy, M., Cook, B. G., Hahn, K., Buchanan, E. M., & Steltenpohl, C. (2022, April). *Building a Culture of Open Science in the Education Community: Data on Adoption and a Platform for Change*. Spoken presentation for the Annual Meeting of the American Educational Research Association, San Diego, CA. [Link](#)

Reedy, M., Buchanan, E. M., Mallot, M., & Henninger, F. (2021, October). *Advancing open science through the open scholarship knowledge base*. Presentation for PSACON 2021. [Link](#)

+Pavlicic, J. M., Weber, M. C., Torres, V. A., Buchanan, E. M., & Schulenberg, S. E. (2021, November). *Trajectories of psychological functioning in international students during the COVID-19 pandemic*. Poster presented at the 55th annual Convention of the Association for Behavioral and Cognitive Therapies, New Orleans, LA. [Link](#)

Steltenpohl, C.N., & Buchanan, E. M. (2021, May). *Creating More Accessible Educational Networks: The Open Scholarship Knowledge Base*. Poster presentation for the Annual Convention of the Midwestern Psychological Association, Chicago, IL. [Link](#)

+Primbs, M., Gjoneska, B., Pfuhl, G., Wagge, J., Buchanan, E. M., Forscher, P., Silan, M. & Coles, N. (2021, June). *Unconference: Large-Scale Psychological Science: Reflecting on Lessons Learned*. Presentation for the Annual Meeting of the Society for the Improvement of Psychological Science. [Link](#)

+Weber, M.C., Pavlicic, J.M., Torres, V., Schulenberg, S., & Buchanan, E. (2021, July). *Collective efficacy and accurate threat perception facilitate pandemic preparedness and prevention efforts among international students during COVID-19*. Paper presented at the 7th International Positive Psychology Association World Congress 2021, Vancouver, BC, Canada. [Link](#)

+Pavlicic, J.M., Weber, M.C., Torres, V., Schulenberg, S., & Buchanan, E. (2021, July). *It's never too late to start being resilient: A time-series study of social support and meaning in life among international students in the U.S. during the COVID-19 pandemic*. Paper presented at the 7th International Positive Psychology Association World Congress 2021, Vancouver, BC, Canada. [Link](#)

Buchanan, E. M. (2021, December). *Using computer adaptive testing to improve migraine outcomes*. Presentation for the 14th International Conference of the ERCIM WG on Computational and Methodological Statistics (CMStatistics 2021). [Link](#)

+Pavlicic, J. M., Schulenberg, S. E., & Buchanan, E. M. (2020, November). *Meaning, pur-*

pose, and experiential avoidance as predictors of valued behavior: A daily diary study. In S. C. Hayes, Discussant, New Research Directions at the Interface of Values and Psychological Flexibility. Symposium accepted to the 54th Annual Convention of the Association for Behavioral and Cognitive Therapies, Philadelphia, PA. [Link](#)

+Pavlicic, J. M., Buchanan, E. M., McCaslin, S. E., & Schulenberg, S. E. (2020, November). *A systematic review of posttraumatic stress and resilience trajectories and covariates in veterans and service members*. Poster presented at the 54th Annual Convention of the Association for Behavioral and Cognitive Therapies, Philadelphia, PA. [Link](#)

Buchanan, E.M., Wagge, J., Miller, J., Primbs, M., & Steltenpohl, C. (2020, June). *Unconference: Here's the PSA!*. Unconference presentation for the Annual Meeting of the Society for the Improvement of Psychological Science, Victoria, Canada. [Link](#)

Buchanan, E.M., Henninger, F., & Clyburne-Sherin, A. (2020, June). *Hackathon: Contribute, Curate, or Code the Open Scholarship Knowledge Base*. Hackathon presentation for the Annual Meeting of the Society for the Improvement of Psychological Science, Victoria, Canada. [Link](#)

Clyburne-Sherin, A., Buchanan, E.M., & Henninger, F. (2020, June). *Unconference: Towards a Community-Built Open Scholarship Knowledge Base*. Unconference presentation for the Annual Meeting of the Society for the Improvement of Psychological Science, Victoria, Canada. [Link](#)

Leviton, C., Wagge, J., Buchanan, E.M., & Benjamin, J. (2020, June). *Hackathon: Collaborative Open Science Research with Undergraduates*. Hackathon presentation for the Annual Meeting of the Society for the Improvement of Psychological Science, Victoria, Canada. [Link](#)

+Pavlicic, J. M., Weber, M. C., Torres, V. A., Schulenberg, S. E., & Buchanan, E. M. (2020, July). *Trajectories of psychological functioning and pandemic preparedness for students quarantined during the COVID-19 pandemic*. Grant presentation accepted at the 45th Annual Natural Hazards workshop and Research Meeting of the Natural Hazards Center, Boulder, CO. [Link](#)

Steltenpohl, C.N., Basnight-Brown, D.M., Chartier, C.R., Buchanan, E.M., Ellis, C., Bermann, K., & Levitan, C. (2019, November). *Using collaborative networks to address the WEIRD problem in science: The Psychological Science Accelerator*. Ignite poster session accepted to Midwest Eco at Lisle, IL. [Link](#)

+Cunningham, A., Crain, S. E., Johnson, H. R., Stash, H., & Buchanan, E. M. (2019, November). *Data dictionaries: Shareable datasets for all*. Poster Presentation for the Annual Meeting of the Psychonomic Society, Montreal, Canada. [Link](#)

+Huber, B., Jones, R.G., Capps, S.C., & Buchanan, E.M. (2019, November). *Memory Complaint Inventory cutoff scores: Differentiating genuine clinical presentation from insufficient effort*. Poster presentation for the National Academy of Neuropsychology, San Diego, CA. doi: 10.1093/arclin/acz034.55 [Link](#)

+Finkelstein-Fox, L., Pavlicic, 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. [Link](#)

+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. [Link](#)

Buchanan, E.M. (2019, May). *Uncovering factors patients use to evaluate meaningful response to migraine treatment*. Data Analytics Summit V, Harrisburg, PA. [Link](#)

+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, Philadelphia, PA. [Link](#)

Buchanan, E.M., & Azevedo, F. (2019, July). *Workshop - Statistics are useless without suitable data: How to implement and assess for data quality*. Workshop for the Society for the Improvement of Psychological Science (SIPS) 2019 Meeting. [Link](#)

+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](#)

+Pavlicic, 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. [Link](#)

+Weber, M., Pavlicic, J.M., Schulenberg, S.E., & Buchanan, E.M. (2018, April). *Gender differences 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](#)

+Pavlicic, 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. [Link](#)

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., Pavlicic, 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., Pavlicic, 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](#)

\*Pavlicic, 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 rates are not affected by Chronic HIV(+) or HCV(+) Infection in organ transplant recipients*. Poster presentation for the Society for Investigative Dermatology, Portland, OR. [Link](#)

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. [Link](#)

+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. [Link](#)

+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. [Link](#)

+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 [Link](#)

+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 [Link](#)

Buchanan, E.M. (2011, October). *The N400: how math informs us about language*. Invited 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. [Link](#)

+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](#)

+Schnitzer, 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 [Link](#)

## Students

### Graduate Students

HU, 2024 | Meetu Fu | TBA

HU, 2024 | Nidhal Selmi | TBA

HU, 2024 | Rajendra Mannam | TBA

HU, 2024 | Patrick Pan | TBA

HU, 2019-2024 | Phillip Grim II | Word Space in Many Languages: Discovering the Optimal Dimensions, Algorithm, and Window Size for Building Word Vectors in 59 Languages

HU, 2019-2022 | Jonathan Korn | Deep Text Mining Approaches for Text Classification

MSU, 2018-2022 | Arielle Cunningham | The Effect of Brief Mindfulness Meditation on Mind Wandering Content

MSU, 2017-2019 | Addie Wikowsky | Working memory, expertise, and fluid intelligence

MSU, 2017-2019 | William Padfield | Moral Foundations and political rhetoric

MSU, 2016-2018 | David Herr | Generativity and Trauma in first responders

MSU, 2016-2018 | Nick Maxwell | Investigating the interaction between associative, semantic, and thematic database norms for memory judgments and recall

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 about 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 Methods, Basic Statistics (ANOVA, Regression), Advanced Statistics (Multivariate, 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 requirements 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 a 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.

*StatsTools:* The Statistics Tools or Statistics of DOOM 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**

Psychological Science Accelerator (PSA) - Director

Psychological Science Accelerator (PSA) - Associate Director (previous)

Psychological Science Accelerator (PSA) - Assistant Director (previous)

Society for Computation in Psychology (SCiP) - Executive Director  
 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**

*Journal Boards*

Behavior Research Methods, Editor in Chief	2024-Current
Psychological Science, Consulting Editor	2024-Current
Assessment, Consulting Editor	2022-Current
Frontiers, Associate Editor	2021-2023
Behavior Research Methods, Associate Editor	2020-2024
Meta-Psychology, Editorial Board & Action Editor	2019-Current
Journal of Scientific Psychology, Consulting Editor	2009-Current

*Journal Reviewer*

[Publons Profile](#)

Reviewer for Assessment	2017-Current
Reviewer for Assessment	2019-Current
Reviewer for Cognitive Science	2019-Current
Reviewer for Applied Psycholinguistics	2018-Current
Reviewer for Journal of Traumatic Stress	2018-Current
Reviewer for International Journal of Dermatology	2018-Current
Reviewer for Language Teaching Research	2018-Current
Reviewer for Psychology of Popular Media Culture	2018-Current
Reviewer for Journal of Clinical Psychology	2013-Current
Reviewer for Behavior Research Methods	2012-Current
Reviewer for the Journal of Scientific Psychology	2007-Current

*Service Committees*

Graduate College Chair	2024-Current
Promotion Oversight Committee	2024-Current
Course Lead	2018-Current
Promotion and Hiring Committees	2018-Current
Provost Council for Web Accessibility	2018
GradCAS "Dream Team", Graduate Application Redesign	2018
Statistics Course Redesign, Chair	2018
Application System Coordinator	2014-2018
Departmental Assessment Committee	2014-2018
Graduate Council	2013-2017
Comprehensive Exam Coordinator	2013-2018
Coordinator of Statistics Help Lab	2013-2018
Graduate Review Committee	2013-2018
Multidisciplinary Forum	2012-2014
Departmental Search Committees	2012-2018
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