

CHRISTOPHER R. ENGELHARDT

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PROFESSIONAL POSITIONS

2015 – present Lead Data Scientist, CARFAX, Inc.

2013 – 2015 Post-doctoral Research Fellow, Autism and Media Research Laboratory, Department of Health Psychology, University of Missouri, Thompson Center for Autism & Neurodevelopmental Disorders, Columbia, MO

EDUCATION

2013 Ph.D., University of Missouri
Minor in Psychological Statistics and Research Methodology
Dissertation: *The Role of Misattribution in the Effects of Violent Video Games on Aggressive Behavior*

2010 M.A., University of Missouri
Thesis: *The Impact of Violent Video Games on Executive Functioning and Aggression*

2007 B.S., Pennsylvania State University, Erie – The Behrend College, *Summa Cum Laude*
Major: Psychology; Minor: Business Option
Schreyer's Honors Thesis: *Personality and Its Impact on Leadership Preferences*

PUBLICATIONS

Engelhardt, C. R., Mazurek, M. O., & Hilgard, J. (2017). Pathological game use in adults with and without autism spectrum disorder. *PeerJ*. DOI: 10.7717/peerj.3393

Hilgard, J., **Engelhardt, C. R.**, Bartholow, B. D., & Rouder, J. (2017). How much evidence is $p > .05$? Stimulus pre-testing and null primary outcomes in violent video games research. *Psychology of Popular Media Culture*, 6(4), 361-380.

Hilgard, J., **Engelhardt, C. R.**, & Rouder, J. N. (2017). Overstated evidence for short-term effects of violent games on affect and behavior: A reanalysis of Anderson et al. (2010). *Psychological Bulletin*, 143(7), 757-774.

Hilgard, J., **Engelhardt, C. R.**, & Bartholow, B. D. (2016). Brief use of a specific gun in a violent game does not affect attitudes towards that gun. *Royal Society Open Science*. DOI: 10.1098/rsos.160310

Mazurek, M. O., Sohl, K., **Engelhardt, C. R.**, & Hilgard, J. (2016). Bedtime electronic media use and sleep in children with autism spectrum disorder. *Journal of Developmental & Behavioral Pediatrics*, 37(7), 525-531.

Rouder, J. N., **Engelhardt, C. R.**, McCabe, S., & Morey, R. D. (2016). Model comparison in ANOVA. *Psychonomic Bulletin & Review*, 23(6), 1779-1786.

- Bodner, K. E., **Engelhardt, C. R.**, Minshew, N. J., & Williams, D. L. (2015). Making inferences: Comprehension of physical causality, intentionality, and emotions in discourse by high-functioning adolescents and adults with autism. *Journal of Autism and Developmental Disorders*, 45(9), 2721-2733.
- Engelhardt, C. R.**, Hilgard, J., & Bartholow, B. D. (2015). Acute exposure to difficult (but not violent) video games dysregulates cognitive control. *Computers in Human Behavior*, 45, 85-92.
- Engelhardt, C. R.**, Mazurek, M. O., Hilgard, J., Rouders, J. N., & Bartholow, B. D. (2015). Effects of violent-video-game exposure on aggressive behavior, aggressive-thought accessibility, and aggressive affect among adults with and without autism spectrum disorder. *Psychological Science*, 26(8), 1187-1200.
- Mazurek, M. O., **Engelhardt, C. R.**, & Clark, K. E. (2015). Video games from the perspective of adults with autism spectrum disorder. *Computers in Human Behavior*, 51, 122-130.
- Bodner, K. E., Williams, D. L., **Engelhardt, C. R.**, & Minshew, N. J. (2014). A comparison of measures for assessing the level and nature of intelligence in verbal children and adults with autism spectrum disorder. *Research in Autism Spectrum Disorders*, 8(11), 1434-1442.
- Engelhardt, C. R.**, & Mazurek, M. O. (2014). Video game access, parental rules, and problem behavior: A study of boys with autism spectrum disorder. *Autism: The International Journal of Research and Practice*, 18(5), 529-537.
- Mazurek, M.O., Handen, B.L., Wodka, E.L., Nowinski, L., Butter, E., & **Engelhardt, C. R.** (2014). Age at first ASD diagnosis: The role of birth cohort, demographic factors, and clinical features. *Journal of Developmental & Behavioral Pediatrics*, 35(9), 561-569.
- Engelhardt, C. R.**, & Bartholow, B. D. (2013). Aggression, Risk Factors of (pp. 14-17). In Matthew S. Eastin's (Ed) Encyclopedia of Media Violence. Sage Publications.
- Engelhardt, C. R.**, & Bartholow, B. D. (2013). Effects of situational cues on aggressive behavior. *Social and Personality Psychology Compass*, 7(10), 762-774.
- Engelhardt, C. R.**, Mazurek, M. O., & Sohl, K. (2013). Media use and sleep among boys with autism spectrum disorder, ADHD or typical development. *Pediatrics*, 132(6), 1081-1089.
- Hilgard, J., **Engelhardt, C. R.**, & Bartholow, B. D. (2013). Individual differences in motives, preferences, and pathology in video games: The gaming attitudes, motives, and experiences scales (GAMES). *Frontiers in Developmental Psychology*, 4. doi: 10.3389/fpsyg.2013.00608.
- Mazurek, M. O., & **Engelhardt, C. R.** (2013). Video game use and problem behaviors in boys with autism spectrum disorders. *Research in Autism Spectrum Disorders*, 7(2), 316-324.
- Mazurek, M. O., & **Engelhardt, C. R.** (2013). Video game use in boys with autism spectrum disorder, ADHD, or typical development. *Pediatrics*, 132(2), 260-266.
- Engelhardt, C. R.**, Bartholow, B. D., & Saults, J. S. (2011). Violent and nonviolent video games differentially affect physical aggression for individuals high versus low in dispositional anger. *Aggressive Behavior*, 37(6), 539-546.
- Engelhardt, C. R.**, Bartholow, B. D., Kerr, G. T., & Bushman, B. J. (2011). This is your brain on violent video games: Neural desensitization to violence predicts increased aggression following violent game exposure. *Journal of Experimental Social Psychology*, 47(5), 1033-1036.

MANUSCRIPTS SUBMITTED

Hilgard, J., **Engelhardt, C. R.**, Rouder, J. N., Segert, I., & Bartholow, B. D. (submitted). Null effects of game violence, game difficulty, and 2D:4D digit ratio on aggressive behavior.

MANUSCRIPTS IN PREPARATION

Engelhardt, C. R., Hilgard, J., Clark, K. E., Rouder, J. N., & Mazurek, M. O. (in preparation). A test of the General Aggression Model: The effects of violent-video-game exposure in adults with and without autism spectrum disorder.

Kwedar, K., **Engelhardt, C. R.**, Cheak-Zamora, N. C., Mazurek, M. O., & Sohl, K. (in preparation). Primary care readiness to assess and treat sleep disturbances in children with autism spectrum disorder or typical development.

McCabe, S., Arndt, J., Bartholow, B. D., & **Engelhardt, C. R.** (in preparation). Mortality salience and the weekend effect: Thoughts of death enhance alcohol-related attitudes on Friday but not Monday.

RESEARCH FUNDING

2012 Richard Wallace Faculty Incentive Grant Award, *The Effects of Violent Video Games on Aggression-Related Outcomes in Adults with Autism Spectrum Disorders*
 Role: Co-investigator (PI: Micah Mazurek)
 Total costs: \$3,998

RESEARCH EXPERIENCE

2013 – 2015 *Autism and Media Research Lab, Thompson Center for Autism & Neurodevelopmental Disorders*

My postdoctoral research focuses on autism, video game addiction, health outcomes, media, and behavioral problems. Current projects include investigating how violent game exposure affects individuals with autism compared to typically developing individuals using a novel video game paradigm, understanding how aggression and sleep problems change across time as a function of media exposure, and examining how exposure to media promotes negative and positive affective, cognitive, and behavioral outcomes.

2007 – 2013 *Social Cognitive and Addiction Neuroscience Lab (SCAN Lab), University of Missouri*

Much of my graduate research focused on investigating psychological phenomena through the use of event-related potentials (ERPs). Lab projects included investigating the relationship between violent video game exposure, executive functioning and aggressive behavior, and understanding the role of misattribution in how violent games prime aggressive responding. My other research examined how variability in video games satisfies basic psychological needs, and how these needs predict motivations for game play and addiction to video games.

R TRAININGS DELIVERED

2018 *3-day R Training, CARFAX, Inc.*

Training focused on how to use R and RStudio to create data science pipelines. I covered the RStudio integrated development environment (IDE) and how to import/export, tidy,

transform, visualize, and communicate data with R. The following packages were covered: readr, tidyr, dplyr, ggplot2, rmarkdown, stringr, and lubridate. By the end of the training, attendees could tell data stories (intermingled human-readable code, results, and text) using interactive rmarkdown documents. Lectures and in-training exercises were motivated by questions related to whether violent video games differentially affect adults with and with autism spectrum disorder.

INVITED TALKS

Engelhardt, C. R., & Brittingham, T. (2018 June). Live Your Best Life with Version Control. Talk given at CARFAX, Columbia, MO.

Engelhardt, C. R. (2018 May). Architecture for R and Data Science. Talk given at CARFAX, Columbia, MO.

Engelhardt, C. R. (2017 May). R Programming for Data Science: A Tidyverse Approach. Talk given at CARFAX, Columbia, MO.

Engelhardt, C. R. (2016 December). Data Science at CARFAX. Talk given at the Quantitative Psychology Seminar, Columbia, MO.

Engelhardt, C. R. (2016 April). Data Science. Talk given at CARFAX, Columbia, MO.

Engelhardt, C. R. (2016 April). Introducing R to CARFAX. Talk given at CARFAX, Columbia, MO.

Engelhardt, C. R. (2012 September). Misattribution and violent video games. Talk given at the Social Psychology Seminar, Columbia, MO.

Engelhardt, C. R. (2011, February). *This Guy Stands Between You and Freedom: The Role of Desensitization in Aggressive Behavior*. Talk given at the Social Psychology Seminar, Columbia, MO.

Engelhardt, C. R. (2010, March). *7 minutes, 7 minutes is all I can spare to play with you: Investigating the relationship between violent video games, executive functioning ability, and aggression*. Talk given at the Clinical Psychology Seminar, Columbia, MO.

Engelhardt, C. R. (2010, February). *7 minutes, 7 minutes is all I can spare to play with you: Investigating the relationship between violent video games, executive functioning ability and aggression*. Talk given at the Social Psychology Seminar, Columbia, MO.

Engelhardt, C. R. (2009, April). *"It's Been an Honor Serving With You, John": Investigating the Impacts of Violent Video Games on Cognitive Control*. Talk given at the Social Psychology Seminar, Columbia, MO.

Engelhardt, C. R. (2008, April). *Behavioral Evidence for Response Conflict (But Not Stimulus Conflict) in Affective Priming*. Talk given at the Social Psychology Seminar, Columbia, MO.

RESEARCH PRESENTATIONS

Engelhardt, C. R., Hilgard, J., Rouder, J. N., Bartholow, B. D., & Mazurek, M. O. (2015, February). The acute effects of violent video game exposure on aggression among people with and without autism spectrum disorder. Poster presented at the annual meeting of the Society for Personality and Social Psychology, Long beach, CA.

Engelhardt, C. R., Hilgard, J., Rouder, J. N., Bartholow, B. D., & Mazurek, M. O. (2014, November). Effects of violent video game exposure on aggressive behavior, aggressive cognition, and aggressive affect among adults with and without autism spectrum disorder. Poster presented at the Health Sciences Research Day, Columbia, MO.

Hilgard, J., **Engelhardt, C. R.,** Bartholow, B. D., & Segert, I. (2014, September). Digit ratio measures of prenatal testosterone exposure in predicting provoked aggression. Poster presented at the annual meeting of the Society of Psychophysiological Research, Atlanta, GA.

Engelhardt, C. R., Mazurek, M. O., Wodka, E. L., & Kanne, S. M. (2014, May). Longitudinal course and predictors of aggression in children with ASD. Poster presented at the annual meeting for the International Meeting for Autism Research, Atlanta, GA.

Bly, J. D., **Engelhardt, C. R.,** Hilgard, J., Bartholow, B. D., & Mazurek, M. O. (2014, April). Effects of violent video game exposure on aggressive affect, aggressive cognition, and aggressive behavior among adults with and without autism spectrum disorder. Poster presented at the Annual Psychology Day, Columbia, MO.

Engelhardt, C. R., Sauls, J. S., & Bartholow, B. D. (2013, January). The role of misattribution in the effects of violent video games on aggressive behavior. Poster presented at the annual meeting of the Society for Personality and Social Psychology, New Orleans, LA.

Engelhardt, C. R., Sauls, J. S., & Bartholow, B. D. (2012, September). Violent video games, cognitive control, and aggression: The moderating role of individual differences in behavior regulation problems. Poster presented at the annual meeting of the Society of Psychophysiological Research, New Orleans, LA.

Engelhardt, C. R., Sauls, J. S., & Bartholow, B. D. (2012, January). *Violent Video Games Dysregulate the Under-regulated: Cognitive Control and Aggression Following Video Game Play*. Poster presented at the annual meeting of the Society for Personality and Social Psychology, San Diego, CA.

Engelhardt, C. R., Sauls, J. S., & Bartholow, B. D. (2011, September). *Problems with Behavior Regulation Moderate the Relationship Between Violent Video Games and Psychophysiological Measures of Evaluative and Regulatory Control*. Poster presented at the annual meeting of the Society of Psychophysiological Research, Boston, MA.

Engelhardt, C. R., Sauls, J. S., & Bartholow, B. D. (2011, January). *Trait Anger and Executive Functioning Moderate the Relationship Between Violent Video Game Exposure and Aggression*. Poster presented at the annual meeting of the Society for Personality and Social Psychology, San Antonio, TX.

Engelhardt, C. R., Sauls, J. S., & Bartholow, B. D. (2010, October). *Evidence That Trait Aggressiveness Moderates the Relationship Between Violent Video Games and Psychophysiological Measures of Evaluative and Regulatory Control*. Poster presented at the annual convention for the Society of Psychophysiological Research, Portland, Oregon.

Engelhardt, C. R., Sauls, S. J., Vasquez, E. A., & Bartholow, B. D. (2010, January). *Violent Video Games and Executive Functioning: Are All Executive Functions Affected the Same?* Poster presented at the annual meeting of the Society for Personality and Social Psychology, Las Vegas, NV.

Engelhardt, C. R., Sauls, S. J., Vasquez, E. A., King, B. E., & Bartholow, B. D. (2009, October). *Psychophysiological Evidence for Violent Video Games Impairing Cognitive Control*. Poster presented at the annual convention for the Society of Psychophysiological Research, Berlin, Germany.

Engelhardt, C. R., Bartholow, B.D., & Sauls, S. J. (2009, April). *Good vs. Evil: Behavioral Evidence for Response Conflict in an Affective Priming Paradigm*. Poster presented at the Annual Psychology Day, Columbia, MO.

Engelhardt, C. R., & Bartholow, B. D. (2009, February). *The Affective Priming Effect: Evidence for Conflict at a Response Selection Stage of Processing*. Poster presented at the annual meeting of the Society for Personality and Social Psychology, Tampa, FL.

Engelhardt, C. R., & Bartholow, B. D. (2008, October). *Physiological and Behavioral Evidence for Response Conflict (But Not Stimulus Conflict) in Affective Priming*. Poster presented at the annual convention for the Society of Psychophysiological Research, Austin, TX.

Vasquez, E. A., Sauls, S. J., **Engelhardt, C. R., & Bartholow, B. D.** (2008, July). *The Impact of Alcohol Cues and Inhibition-related Alcohol Expectancies on Aggression and Inhibition Errors*. Poster presented at the 32nd annual meeting of the Research Society on Alcoholism, Washington, D.C.

Engelhardt, C. R., Riordan, M. A., & Bartholow, B. D. (2008, April). *Investigating the Neural Locus of Affective Congruency Effects: Electrophysiological Evidence of Response Conflict and Strategic Control of Responses*. Poster presented at the Annual Psychology Day, Columbia, MO.

Engelhardt, C. R., & Blasko, D. G. (2007, May). *Personality and Its Impact on Leadership Preferences*. Poster presented at the annual convention for the American Psychological Association, Washington, D.C.

TEACHING EXPERIENCE

Instructor, *Statistics: Graduate SAS programming class*, Department of Psychological Sciences, University of Missouri (Fall 2012; Spring 2013)

Instructor, *Statistics: Research Methods II*, Department of Psychological Sciences, University of Missouri (Summer 2012; Summer 2013)

Instructor, *Social Psychology*, Department of Psychological Sciences, University of Missouri (Fall 2011; Spring 2012)

Guest Lecturer, *Social Psychology*, Department of Psychological Sciences, University of Missouri (2011). Topic: Violent Video Games and Aggression

Guest Lecturer, *Mind, Brain and Behavior*, Department of Psychological Sciences, University of Missouri (2010). Topic: Neuro-anatomy of Aggression

Guest Lecturer, *Cognitive Neuroscience*, Department of Psychological Sciences, University of Missouri (2010). Topic: Executive Functioning

Teaching Assistant, *Experimental Social Psychology*, Department of Psychological Sciences, University of Missouri (2007-2009)

Guest Lecturer, *Statistics*, Pennsylvania State Erie – The Behrend College, Erie, PA (2006). Topic: Measures of Central Tendency

Teaching Assistant, *Statistics*, Pennsylvania State Erie – The Behrend College, Erie, PA (2006)

ADVANCED STATISTICS COURSES COMPLETED

Bayesian Theory

Bayesian Data Analysis

Latent Variable Models in Statistical Analysis

Multilevel Modeling

Multivariate Statistics in Psychology

Nonparametric Statistics

STATISTICS WORKSHOPS ATTENDED

American Statistical Association Course on Data Mining, Fall 2013
Structural Equation Modeling, Spring 2013

R CONFERENCES AND WORKSHOPS ATTENDED

Applied Machine Learning, January 2018
RStudio Conference, January 2018
Extending the Tidyverse, September 2017

AD-HOC REVIEWER

Autism: The International Journal of Research and Practice
Emotion
Journal of Applied Social Psychology
Journal of Experimental and Social Psychology
Journal of Personality and Social Psychology
Political Behavior

ADVISING EXPERIENCE

Undergraduate Honors Thesis Advisor, Jacob Bly, Fall 2013
Undergraduate Honors Thesis Advisor, Timothy Maness, Spring 2012
Undergraduate Honors Thesis Advisor, Alissa Rasmussen, \$500 poster award winner, Spring 2010
Undergraduate Mentor, Mike Harter, Prescott College

AWARDS

2012	Department of Psychological Sciences Travel Award
2011	Society for Psychophysiological Research Student Poster Award
2011	Department of Psychological Sciences Travel Award
2010	Graduate Professional Council Travel Award
2010	Society for Psychophysiological Research Student Poster Award
2010	Department of Psychological Sciences Travel Award
2010	Graduate Professional Council Travel Award
2009	Department of Psychological Sciences Travel Award
2008	Graduate Student Association Travel Award
2007	Pennsylvania State Erie – The Schreyer's College undergraduate research award
2007	Pennsylvania State Erie – The Behrend College undergraduate research award
2006	Pennsylvania State Erie – The Behrend College undergraduate research award

PROFESSIONAL AFFILIATIONS

American Psychological Association
Society for Personality and Social Psychology
Society for Psychophysiological Research
Graduate Association for Students in Psychology – Social Chair, 2008-2009
Psi Chi – National Psychology Honors Fraternity, The Behrend Chapter, President, 2005-2006