# John E. Scofield, M.S

Columbia, Missouri

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An **online version** of this CV can be viewed at: https://jscofield.org/

#### Education

University of Missouri Columbia, MO

Ph.D. Candidate - Cognition & Neuroscience

Fall 17 - Spring 20

• Advisors: Jeffrey Johnson, Ph.D. - David Geary, Ph.D.

Missouri State University

Springfield, MO

M.S. - EXPERIMENTAL PSYCHOLOGY

Fall 15 - Spring 17

• Advisor: Bogdan Kostic, Ph.D. **Missouri State University** 

Springfield, MO

GRADUATE CERTIFICATE - STATISTICS AND RESEARCH DESIGN

Fall 15 - Spring 17

• A supplementary certificate in tandem with a Master of Science degree

• targeting advanced statistical techniques and applied research areas. Advisor: Erin Buchanan, Ph.D.

Truman State University Kirksville, MO

B.S. - Psychology Fall 13 - Spring 15

· Advisor: Professor Salvatore Costa

# Teaching.

A copy of my teaching philosophy is accessible online at: https://scofieldjohn.github.io/

PSYCH3010: Research Methods
INSTRUCTOR

University of Missouri

Summer 19

Online instruction following fundamentals of research in psychology

#### **PSYCH3010: Research Methods**

University of Missouri

GUEST LECTURE

Summer 18

- Overviews of neuroscientific tools in neuroscience
   measurement, reliablility, validity (EEG, fMRI, TMS, MEG)
- DCV202. From a visus and all Davids also are

#### **PSY302: Experimental Psychology**

Missouri State University

INSTRUCTOR

- Laboratory course with a strong lecture component.
- Demonstrations and discussions of classic experiments
- Oversaw research projects (from data collection to manuscript writeups)

#### **PSYCH3010: Research Methods**

University of Missouri

TEACHER'S ASSISTANT

Spring 18 - Fall 19

Fall 15 - Spring 17

· distribution of course content and grading

### PSYCH2410: Developmental Psychology

University of Missouri

TEACHER'S ASSISTANT

Fall 17

• distribution of course content and grading

#### **PSYCH3420: Cognitive Development in Childhood**

University of Missouri

TEACHER'S ASSISTANT

Fall 17

distribution of course content and grading

#### Publications \_\_\_\_\_

SUBMITTED ——————

Hone, L. S. E., **Scofield, J. E.**, Bartholow, B. D., & Geary, D. C. (*Submitted*). Binge drinking is associated with sexspecific cognitive deficits. https://psyarxiv.com/m3xa8

Geary, D. C., **Scofield, J. E.**, Hoard, M. K., & Nugent, L. (*Submitted*). Cognitive, attitudinal, and classroom contributions to variation in the pattern of adolescents' mathematical competencies.

2019 ——————

Hone, L. S. E., **Scofield, J. E.**, Bartholow, B. D., & Geary, D. C. (*In-Press*). Tutorial on designing, implementing, and analyzing a degraded image paradigm: A facial expression-decoding task example. *The Quantitative Methods for* 

Psychology. https://osf.io/ntmah/

Cowan, N., Adams, E. J., Bhangal, S., Corcoran, M., Decker, R., Dockter, C. E., ... **Scofield, J. E.**, ... & Watts, A. L. (2019). Foundations of arrogance: A broad survey and framework for research. *Review of General Psychology*. doi: 10.1177/1089268019877138.

Chu, F. W., vanMarle, K., Hoard, M. K., Nugent, L., **Scofield, J. E.**, & Geary, D. C. (*In Press*). Preschool deficits in cardinal knowledge and executive function contribute to longer-term mathematical learning disabilities. *Journal of Experimental Child Psychology*. https://osf.io/phtxm/

**Scofield, J. E.**, Johnson, J. D., Wood, P. K., & Geary, D. C. (2019). Latent resting-state network dynamics in boys and girls with attention-deficit/hyperactive disorder. *PLOS ONE*, *14*(6), e0128891. doi:10.1371/journal.pone. 0218891. https://osf.io/xqewf/

Geary, D. C., Hoard, M. K., Nugent, L., Chu, F., **Scofield, J. E.**, & Hibbard, D. F. (2019). Sex differences in mathematics anxiety and attitudes: Concurrent and longitudinal relations to mathematical competence. *Journal of Educational Psychology*. doi:10.1037/edu0000355.

**Scofield, J. E.**, Kostic, B., & Buchanan, E. M. (2019). How the presence of others affects desirability judgments in heterosexual and homosexual participants. *Archives of Sexual Behavior*. doi:10.1007/s10508-019-01516-w. https://osf.io/ej5kh/

Valentine, K. D., Buchanan, E. M., **Scofield, J. E.**, & Beauchamp, M. T. (2019). Beyond p-values: Utilizing multiple estimates to evaluate evidence. *Behaviormetrika*. doi:10.1007/s41237-019-00078-4.

2018	 	
2018	 	 

Buchanan, E. M., & **Scofield, J. E.** (2018). Methods to detect low quality data and its implication for psychological research. *Behavior Research Methods*, 50(6), 2586-2596. doi:10.3758/s13428-018-1035-6.

**Scofield, J. E.**, Buchanan, E. M., & Kostic, B. (2018). A meta-analysis of the survival processing advantage in memory. *Psychonomic Bulletin and Review*, 25(3), 997-1012. doi:10.3758/s13423-017-1346-0.

2017	
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Derringer, C. J., **Scofield, J. E.**, & Kostic, B. (2017). Investigations of a reproductive processing advantage in memory. *Memory and Cognition*, 45(6), 983-1001. doi: 10.3758/s13421-017-0709-0.

#### PRE-PRINTS/REPLICATIONS ————

Sumner, C., **Scofield, J. E.**, Buchanan, E. M., Evans, M., & Shearing, M. (2019). The role of personality, authoritarianism and cognition in the United Kingdom's 2016 referendum on European union membership. https://osf.io/n5r67/

Kostic, B., & **Scofield, J. E.** (2019). Sex differences across sexual orientation and sexual identity. https://osf.io/8tnd4/

Buchanan, E. M., **Scofield, J. E.**, & Nunley, N. (2018). The N400's 3 As: Association, automaticity, attenuation (and some semantics too). https://osf.io/6w2se/

Buchanan, E. M., & **Scofield, J. E.** (2018). Bulletproof bias? Considering the type of data in common proportion of variance effect sizes. https://osf.io/cs4vy/

**Scofield, J. E.** & Kostic, B. (2016, April 05). Eye movements and handedness in memory. Retrieved from http://www.PsychFileDrawer.org/replication.php?attempt=MjQ2

**Scofield, J. E.** & Kostic, B. (2016, January 29). Sex and sexual orientation differences in mating. Retrieved from http://www.psychfiledrawer.org/replication.php?attempt=MjM4

#### **Presentations**

**Scofield, J. E.**, & Johnson, J. D. (2019, November). *The precision of retrieving temporal information associated with episodic memories*. Poster presented at the Psychonomic Society Annual Meeting, Montreal, Canada.

Hone, L. S. E., **Scofield, J. E.**, Bartholow, B. D., & Geary, D. C. (2019, June). *Development of a timed facial expression decoding task*. Talk presented at teh NorthEastern Evolutionary Psychology Society, Boston, MA.

Shenk, M., McAllister, L., Scofield, J. E., Zoeller, M., & Jaeggi, A. (2019 June). Are reproductive behaviors sensitive to priming? A bayesian multi-level meta-analysis. Talk presented at the Human Behavior & Evolution Society Annual Meeting, Boston, MA.

Scofield, J. E., Price, M. H., Flores, A., Merkle, E. C., & Johnson, J. D. (2019, March). Behavioral and electrophysiological correlates of the memory search process during continuous recognition. Poster presented at the Cognitive Neuroscience Society, San Francisco, CA.

Scofield, J. E., Price, M. H., Flores, A., Merkle, E.C., & Johnson, J.D. (2018, November). Scanning through memory along a compressed timeline: A continuous recognition task with multiple repetitions. Poster presented at the Psychonomic Society Annual Meeting, New Orleans, LA.

Scofield, J. E. & Geary, D. C. (2018, August). Sex differences in brain network dynamics across time. Oral talk presented at the Heterodox Psychology Workshop, Orange, CA.

Scofield, J. E. (2018, May). The contribution of handedness to hippocampal functional connectivity. Data blitz presented at the Show Me State Conference on Cognition, St. Louis, MO.

Scofield, J. E., & Johnson, Jeffrey D. (2018, March). Resting-state hippocampal functional connectivity depends on handedness. Poster presented at the Cognitive Neuroscience Society, Boston, MA.

Scofield, J. E., & Buchanan, E. M. (2017, November). Survey automation detection methods and its implications on psychological research. Oral talk presented at the Society for Computers in Psychology Conference, Vancouver, BC, Canada.

Buchanan, E. M., **Scofield, J. E.**, & Marshall, C. Z. (2017, November). Distributions and Sampling Variance for Five Effect Size Measures of Variance Overlap. Poster presented at the Psychonomic Society Annual Meeting, Vancouver, BC, Canada.

Scofield, J. E., Buchanan, E. M., & Kostic, B. (2016, November). A meta-analysis of the survival processing advantage in memory. Poster presented at the Psychonomic Society Annual Meeting, Boston, MA.

Decker, R., Scofield, J. E., Wekesser, M., Myers, A., & Palmer, T. (2016, May). Flash suppression eliminates lip-movement influence in syllable identification. Poster presented at the Midwestern Psychological Association Conference, Chicago, IL.

Scofield, J. E. (2016, April). Sex differences in gender, orientation, and identity. Poster presented at the Missouri State University Interdisciplinary Forum, Springfield, MO.

Scofield, J. E., & Kostic, B. (2016, April). Sex differences in heterosexual, homosexual, and bisexual participants. Oral Talk presented at the Southwestern Psychological Association Conference, Dallas, TX.

Scofield, J. E., Sloan, J., Lin, X., Berry, E., Gambino, D., & Roberts, M. (2015, May). Effects of hypnotic and progressive relaxation on sleep quality. Poster presented at the Midwestern Psychological Association Conference, Chicago, IL.

Scofield, J. E., & Roland, C. (2015, May). Effects of visual bias on reaching performance with an unseen hand. Poster presented at the Truman State University Psychological Symposium, Kirksville, MO.

#### Software\_

Buchanan E., Gillenwaters A., Scofield J. E., Valentine K. (2019). MOTE: Measure of the Effect: Package to assist in effect size calculations and their confidence intervals. R package version 1.0.1, https://cran.r-project.org/ web/packages/MOTE/index.html

# **Research Experience**

#### **Memory and Neuroimaging Lab**

Columbia, MO

University of Missouri

Fall 17 - Current

• co-investigator and research assistant to Dr. Jeffrey Johnson.

- Investigates Episodic Memory using fMRI & EEG.
- Incorporating both univariate (GLM) and multivariate (MVPA; machine learning) approaches

Evolution and Cognitive Development Lab	Columbia, MO
University of Missouri	Fall 17 - Current

• co-investigator and research assistant to Dr. David Geary

Incorporates sexuals selection theory to investigate human cognitive sex differences
 DOOM Research Lab
 Springfield, MO

MISSOURI STATE UNIVERSITY

• Research assistant to Dr. Erin Buchanan.

· Statistical techniques including simulations, effect sizes, and traditional parametric vs. Bayesian techniques

 Cognitive Research Lab
 Springfield, MO

 MISSOURI STATE UNIVERSITY
 Fall 15 - Spring 17

MISSOURI STATE UNIVERSITY

• co-investigator and assistant to Dr. Bogdan Kostic

• Investigated common cognitive phenomena as well as human sex differences

Cognition Lab Kirksville, MO

Truman State University Fall 13 - Spring 15

• research assistant to Dr. Terry Palmer

• investigating the role of consciousness in multisensory integration

Psychological Testing Lab

Kirksville, MO

Truman State University Fall 14 - Spring 15

• research assistant to professor Salvatore Costa

# Statistical Analysis Skills

#### **ANALYSES**

- Multivariate Pattern Classification/Machine learning
  - SVM, Ridge, Lasso, Naive Bayes, Neural Networks (MLP, CNN)
- Bayesian Statistics
  - regression, model-building/comparison, bayes factors
- Multilevel/mixed effects modeling
- Structural Equation Modeling
  - EFA, single/multi-group CFA, path, latent growth, IRT
- · meta-analytic techniques
  - traditional RE/FE, bayesian multilevel estimation, p-value distribution analysis
- GLM
  - simultaneous/hierarchical/mediation/moderation/logistic regression, AN/ANC/MAN/MANC-OVA

#### LANGUAGES AND SOFTWARE FOR STATISTICAL ANALYSIS

· Python, R, MATLAB, JASP, FSL, AFNI

#### LANGUAGES AND SOFTWARE FOR STIMULUS PRESENTATION

• Python (Psychopy), MATLAB (Cogent)

# Relevant Work Experience \_\_\_\_\_

Research Assistant Columbia, MO

University of Missouri Spring 17 - Current

- Research Assistant under Dr. David Geary.
- data collection, individual cognitive testing in Columbia Public School System
- data analysis, mauscript preparation

Teaching Assistantship Columbia, MO

University of Missouri Fall 17 - Current

• Teaching assistantship including grading, course content distribution, and course management

Data Science Intern Springfield, MO

SKYFACTOR Spring 17 - Summer 17

• data screening, cleaning, analysis, presentations for educational testing and research

model building and data visualization

Teaching AssistantshipSpringfield, MOMISSOURI STATE UNIVERSITYFall 16 - Spring 17

• teaching and management of Experimental Psychology lab courses

Spring 16 - Fall 18

**Graduate Assistantship** Springfield, MO

MISSOURI STATE UNIVERSITY

- Fall 15 Spring 16 • management of online courses, course content management and distribution
- assisted in survey construction, data analysis, and literature reviews

#### Service\_

Web & Scholary Communications Committee (08/01/2018 - Present)

Ad-hoc Reviewer: Brain & Behavior, Psychiatry Review, Journal of Child Psychology & Psychiatry, Evolutionary Psychological Science

# Organizations / Associations \_

**Psychonomic Society** 

Cognitive Neuroscience Society

American Psychological Assoication

Southwestern Psychological Association

# Honors / Awards\_

Graduate College Research Grant, \$300.00, Missouri State University

President's List, Missouri State University

Cum Laude, Truman State University

President's List/ Dean's List, Truman State University, Benedictine College

Varsity Collegiate Baseball, Truman State University, Benedictine College

GLVC Academic all-conference team 2014-2015, Truman State University

GLVC Academic all-conference team 2013-2014, Truman State University

BCIA certification of HRV biofeedback, Truman State University