Jason R. Finley	Curriculum Vitae
Department of Psychology Washington University in St. Louis One Brookings Drive, Campus Box 1125 St. Louis, MO 63130	jrfinley@wustl.edu www.jasonfinley.com
Education	
Ph.D. in Psychology  University of Illinois at Urbana-Champaign  Committee: Aaron S. Benjamin (advisor), William F. Brev  Gary S. Dell, Brian D. Gonsalves, Brian H. Ross  Thesis: "Retrieval cue variability: When and why are two better than one?"	ŕ
M.A. in Psychology  University of Illinois at Urbana-Champaign  Thesis: "Adaptive and qualitative changes in encoding strate experience"	2010 ategy with
B.S. in Cognitive Science, summa cum laude  University of California, Los Angeles  Minor in English  Specialization in Computing	2003
Honors, Awards, & Funding	
Crowd-funding awarded from Experiment.com for project: <i>How technology affect our memory?</i>	does 2014
Graduate Teacher Certificate, University of Illinois at Urbana-Ci	hampaign 2011
National Science Foundation Graduate Research Fellowship	2007
List of Teachers Ranked as Excellent by Their Students, University of Illinois at Urbana-Champaign	2007, 2010
Mary Jane Neer Scholarship	2007-2011
UCLA Regent Scholarship	2000

## **Research Interests**

Human cognition in laboratory and everyday settings; applying cognitive psychology principles toward improving education; overcoming the limitations of human memory by improving metacognition and/or offloading aspects of cognition onto the environment.

### **Teaching Interests**

Research methods, statistics, introductory psychology, cognitive psychology, learning and memory, human factors, judgment and decision-making, history of psychology.

### **Teaching and Mentoring Experience**

### Introductory Psychological Statistics, Instructor

Fall 2014

Washington University in St. Louis, University College

Small course for continuing education students seeking a bachelor's degree in psychology. I developed a syllabus, created weekly quiz/homework assignments using the Blackboard course management platform, presented 2.5-hour weekly lectures, and created and graded exams. (7 students)

# Graduate Teacher Certificate Program

2007-2011

Center for Innovation in Teaching and Learning, UIUC

- Attended a three-day pre-semester teaching development program
- Taught at least 2 semesters at the University of Illinois
- Discussed and reflected on an observation of my teaching by a faculty mentor (Sarah Grison)
- Analyzed and reflected on informal and formal student feedback
- Participated in six hours of teaching development workshops:
  - Active Learning
  - o Writing Exam Questions
  - o FERPA, Grading, Cheating, and Conflicts
  - o Teaching Students to Find and Evaluate Reputable Sources
  - o Developing a Course
  - o The Teaching Philosophy

## Introductory Psychology, Instructor

Fall 2010

University of Illinois at Urbana-Champaign

Large lecture course for all undergraduates interested in psychology. I developed a syllabus, created and graded quizzes and writing assignments, presented three 1-hour lectures per week, and contributed to exam development. Additionally, participated in weekly workshops with other instructors and faculty supervisors focusing on iterative development of teaching methods. (2 sections, 50 students each)

### Introduction to Statistics, Instructor

Spring 2008

University of Illinois at Urbana-Champaign

Large lecture and laboratory course for undergraduates majoring in psychology. This class used an innovative online adaptive tutoring and assessment system, ALEKS, geared toward letting students work toward concept mastery at their own pace. All quizzes/homework and exams were completed on the ALEKS system. I developed a syllabus, created and maintained course website, presented 1-hour lectures every other week, and held 1-hour computer lab problem sessions every other week. (2 sections, 50 students each)

Cognitive Psychology Laboratory (Research Methods), **Teaching Assistant** Fall 2007 *University of Illinois at Urbana-Champaign* 

Small laboratory course for advanced undergraduates majoring in psychology. I led 2-hour lab sections twice per week, guided small students groups in creation and execution of their own experiments, instructed them in statistical analyses relevant to their data, tutored them in data analysis and graph creation, guided them in writing APA-style papers on their project and two additional in-class experiments that I organized and ran, graded papers, held review sessions, and contributed to exam development. (2 sections, 15 students each)

Mentor and Supervisor to 12 undergraduate research assistants:

2003-2006

Introducing Desirable Difficulties for Educational Applications in Science UCLA Department of Psychology, Funded by the Institute of Education Sciences' Cognition and Student Learning Program

I met weekly with students to provide guidance in running experiments, data entry, data analysis; I helped students search the literature, understand research publications, and link the readings to the experiments we were conducting.

# **Research Experience**

Postdoctoral Research Associate, Advisor: Henry L. Roediger III

Applying Cognitive Psychology to Enhance Educational Practice,
James S. McDonnell Collaborative Activity Award

Washington University in St. Louis

Graduate research, Advisor: Aaron S. Benjamin

Memory, metamemory, encoding and retrieval strategies

University of Illinois at Urbana-Champaign

Graduate research, Advisor: William F. Brewer
Autobiographical memory
University of Illinois at Urbana-Champaign

Research Associate, Advisor: Marcia C. Linn

Technology Enhanced Learning in Science: A NSF Center for
Learning and Teaching

UC Berkeley Graduate School of Education

Research Associate, Advisor: Robert A. Bjork
Introducing Desirable Difficulties for Educational Applications in
Science; Funded by the Institute of Education Sciences' Cognition
and Student Learning Program
UCLA Department of Psychology

Research Assistant, Advisor: Elisheva F. Gross

UCLA Children's Digital Media Center: A NSF Social, Behavioral,
and Economic Center

Research Assistant, Advisor: W. Lewis Johnson

University of Southern California Information Sciences Institute

Research Assistant, Advisor: Christine L. Borgman

2001-2003

2002

NSF Research Experience for Undergraduates Participant: Alexandria Digital Earth ProtoType Project *UCLA Graduate School of Education and Information Studies* 

Research Assistant, Advisor: William A. Sandoval UCLA Graduate School of Education and Information Studies

2001

Research Assistant, Advisor: Patricia W. Cheng UCLA Department of Psychology 2000-2001

### **Peer-Reviewed Publications**

- **Finley, J. R.**, Roediger, H. L., Hughes, A. D., Wahlheim, C. N., & Jacoby, L. J. (accepted pending minor revisions). Simultaneous versus sequential presentation in testing recognition memory for faces. *American Journal of Psychology*.
- **Finley, J. R.**, Benjamin, A. S., & McCarley, J. S. (2014). Metacognition of multitasking: How well do we predict the costs of divided attention? *Journal of Experimental Psychology: Applied*, 20(2), 158-165.
- Nestojko, J. F., **Finley, J. R.**, & Roediger, H. L. (2013). Extending cognition to external agents. *Psychological Inquiry*, 24(4), 321-325.
- Tullis, J. G., **Finley, J. R.**, & Benjamin, A. S. (2013). Metacognition of the testing effect: Guiding learners to predict the benefits of retrieval. *Memory & Cognition*, 41(3), 429-442.
- **Finley, J. R.**, & Benjamin, A., S. (2012). Adaptive changes in encoding strategy with experience: Evidence from the test expectancy paradigm. *Journal of Experimental Psychology: Learning, Memory, and Cognition*, 38(3), 632-652.
- **Finley, J. R.**, Brewer, W. F., & Benjamin, A. S. (2011). The effects of end-of-day picture review and a sensor-based picture capture procedure on autobiographical memory using SenseCam. *Memory*, 19(7), 796-807.
- **Finley, J. R.**, Benjamin, A. S., Hays, M. J., Bjork, R. A., & Kornell, N. (2011). Benefits of accumulating versus diminishing cues in recall. *Journal of Memory and Language*, 64, 289-298.
- Borgman, C. L., Smart, L. J., Millwood, K. A., **Finley, J. R.**, Champeny, L., Gilliland, A. J., & Leazer, G. H. (2005). Comparing faculty information seeking in teaching and research: implications for the design of digital libraries. *Journal of the American Society for Information Science and Technology*, *56*(6), 636-657.

### **Manuscripts Under Review**

**Finley, J. R.**, & Brewer, W. F. (under review). Accuracy and completeness of autobiographical memory: Evidence from a wearable camera.

Agarwal, P. K., **Finley, J. R.**, Rose, N. S., & Roediger, H. L. (under review). The poorer get richer: Retrieval practice for students with low working memory span increases final recall to the level of high span students.

- **Finley, J. R.**, & Benjamin, A. S. (under review). Retrieval cue variability: When and why are two meanings better than one?
- **Finley, J. R.**, Liu, X., & Benjamin, A. S. (under review). Metacognitive control: Learning to avoid part-list cues?

# **Book Chapters and Conference Proceedings**

- **Finley, J. R.**, Tullis, J. G., & Benjamin, A. S. (2010). Metacognitive control of learning and remembering. In M. S. Khine & I. Saleh (Eds.), *New science of learning: cognition, computers and collaboration in education.* Springer.
- Richland, L.E., Bjork, R. A., **Finley, J. R.**, & Linn, M.C. (2005). Linking Cognitive Science to Education: Generation and Interleaving Effects. In B.G. Bara, L. Barsalou, M. Bucciarelli (Eds.), *Proceedings of the Twenty-Seventh Annual Conference of the Cognitive Science Society* (p. 1850). Mahwah, NJ: Lawrence Erlbaum.
- Borgman, C. L., Leazer, G. H., Gilliland-Swetland, A., Millwood, K., Champeny, L., **Finley, J. R.**, & Smart, L. J. (2004). How geography professors select materials for classroom lectures: implications for the design of digital libraries. *JCDL '04: Proceedings of the 4th ACM/IEEE-CS joint conference on Digital libraries* (pp. 179-185). Tucson, AZ: Association for Computing Machinery.
- Champeny, L., Borgman, C. L., Leazer, G. H., Gilliland-Swetland, A. J., Millwood, K. A., D'Avolio, L., **Finley, J. R.**, Smart, L. J., Mautone, P. D., Mayer, R. E., & Johnson, R. A. (2004). Developing a digital learning environment: an evaluation of design and implementation processes. *JCDL '04: Proceedings of the 4th ACM/IEEE-CS joint conference on Digital libraries* (pp. 37-46). Tucson, AZ: Association for Computing Machinery.
- Richland, L.E., **Finley, J. R.**, & Bjork, R. A. (2004). Differentiating the Contextual Interference Effect from the Spacing Effect. In K. Forbus, D. Gentner, & T. Regier (Eds.), *Proceedings of the Twenty-Sixth Annual Conference of the Cognitive Science Society* (p. 1624). Mahwah, NJ: Lawrence Erlbaum.

# **Manuscripts in Preparation**

- **Finley, J. R.**, & Benjamin, A., S. (in preparation). Metacognitive control of transfer-appropriate processing.
- **Finley, J. R.**, Richland, L. E., & Bjork, R. A. (in preparation). Incorporating Desirable Difficulties in Science Learning: Effects of Testing and Interleaving.
- **Finley, J. R.** (in preparation). Evolution of Research Topics in Experimental Psychology: 50 Years of Psychonomic Society Session Titles.
- **Finley, J. R.**, Roediger, H. L., Balota, D. A., & Sungkhasettee, V. (in preparation). Hybrid false memories: Contributions of semantic and phonological associates.

#### **Posters and Presentations**

**Finley, J. R.**, & Brewer, W. F. (2013, November). *Evolution of Research Topics in Experimental Psychology: 50 Years of Psychonomic Session Titles*. Poster presented at the annual meeting of the Psychonomic Society, Toronto, Canada.

- Hays, M. J., & **Finley, J. R.** (2013, November). *Computerized Hints Can Optimize Recall: Difficulty and Duration*. Poster presented at the annual meeting of the Psychonomic Society, Toronto, Canada.
- **Finley, J. R.** (2013, October). *Unlocking the Secrets of Hypermnesia*. Cognitive Talk Series, Department of Psychology, University of Illinois at Urbana-Champaign.
- **Finley, J. R.** (2013, April). *Effect Size Tutorial: Cohen's d and Omega-squared*. Presentation given to Memory Lab and Memory & Cognition Lab, Department of Psychology, Washington University in St. Louis.
- **Finley, J. R.**, Benjamin, A. S., & McCarley, J. S. (2012, November). *Metacognition of Multi-Tasking*. Poster presented at the annual meeting of the Psychonomic Society, Minneapolis, MN.
- **Finley, J. R.**, & Brewer, W. F. (2011, August). *The Accuracy and Completeness of Recollective Memory*. Presentation given at the 5th International Conference on Memory, York, UK.
- **Finley, J. R.**, & Brewer, W. F. (2010, September). *Accuracy and Completeness of Autobiographical Memory*. Poster presented at SenseCam 2010 Symposium, Dublin, Ireland.
- **Finley, J. R.**, & Fraundorf, S. H. (2010, April). *Signal Detection Theory & Multi-Level Modeling: When "Accuracy" Isn't Always Accurate*. Presentation given to Multilevel Modeling Reading Group, Department of Psychology, University of Illinois at Urbana-Champaign.
- **Finley, J. R.**, Brewer, W. F., & Benjamin, A. S. (2009, October). *Reflections of memory in the environment*. Presentation given at SenseCam 2009 Symposium, Chicago, IL.
- **Finley, J. R.** (2009, January). *SenseCam: a new type of tool to study and augment human cognition*. Visual Cognition and Human Performance Talk Series, Department of Psychology, University of Illinois at Urbana-Champaign.
- **Finley, J. R.**, Brewer, W. F., & Benjamin, A. S. (2008, November). *SenseCam and Autobiographical Memory*. Poster presented at the annual meeting of the Psychonomic Society, Chicago, IL.
- **Finley, J. R.**, Brewer, W. F., & Benjamin, A. S. (2008, June). *Memory effects of daily review of SenseCam images for healthy young adults*. Presentation given at 2nd SenseCam Collaborator's Meeting, Microsoft Research Cambridge Lab, UK.
- **Finley, J. R.**, & Benjamin, A. S. (2007, November). *Adaptive Changes in Encoding Strategy With Experience: Evidence From the Test Expectancy Paradigm*. Poster presented at the annual meeting of the Psychonomic Society, Long Beach, CA.

**Finley, J. R.** (2007, September). *Adaptive changes in encoding strategy with experience*. Cognitive Talk Series, Department of Psychology, University of Illinois at Urbana-Champaign.

- Linn, M. C., Bjork, R. A., Richland, L. E., Cheng, H., Kornell, N., Hays, M. J., **Finley, J. R.**, & Fink, D. S. (2006, June). *Desirable difficulties in science learning in a Web-Based Inquiry Science Environment (WISE)*. Poster presented at the Institute for Education Sciences 2006 Research Conference, Washington, D. C.
- Linn, M. C., Cheng, B. H., Richland, L. E., Bjork, R. A., & Finley, J. R. (2005, January). *Can desirable difficulties improve science learning from text?* Paper presented at the Sixteenth Annual Winter Conference on Discourse, Text, and Cognition. Jackson Hole, Wyoming.
- Tate, E. D., & **Finley, J. R.** (2007, April). *Does the Hanging With Friends, Velocity Style! Module Support Students' Ability to Calculate and Graph Velocity?* Poster presented at the annual meeting of the American Educational Research Association, Chicago, IL.
- Tate, E. D., & **Finley, J. R.** (2006, April). *How do multiple visualizations improve students' understanding of velocity?* Poster presented at the annual meeting of the American Educational Research Association, San Francisco, CA.
- **Finley, J. R.** (2005, May). *Desirable difficulties: learning, teaching, and collaboratively bridging.* Paper presented at the Third UCLA Lake Arrowhead Conference on Human Complex Systems, Lake Arrowhead, CA.
- Linn, M. C., Bjork, R. A., Cheng, B. H., Richland, L. E., & **Finley, J. R.** (2005, April). *Improving science learning: generation and reflection*. In E. Albro, Chair, Symposium on Bringing Cognitive Science into the Classroom. Meetings of the American Educational Research Association, Montreal, Canada.
- **Finley, J. R.**, Richland, L. E., Bjork, R. A. (2004, April). *Introducing desirable difficulties into science learning*. Poster presented at the annual meeting of the American Educational Research Association, San Diego, CA.
- Borgman, C. L., Smart, L. J., Millwood, K. A., **Finley, J. R.**, Champeny, L., Gilliland-Swetland, A., Leazer, G. H. (2004, April). *Getting ready for class: the information seeking behavior of geography professors in support of teaching.* Paper presented at the annual meeting of the American Educational Research Association, San Diego, CA.

### **Other Publications and Presentations**

- **Finley, J. R.** (2008, October). Hot Spots Near You: Mildred E. Mathias Botanical Garden, Los Angeles, CA. *Birder's World*.
- **Finley, J. R.** (2006). Hail to the Birds of Westwood. *Western Tanager (Los Angeles Audubon Society)*, 72(7), 1-3.
- Methot, L. M., & Finley, J. R. (2003). The UCLA AstroBiology Society: the first student-run astrobiology organization. *Astrobiology*, 3(2), 249-250.

Methot, L. M., & Finley, J. R. (2003). Origin and Evolution of the UCLA AstroBiology Society. In Norris, R., & Stootman, F. (Eds.), *Bioastronomy 2002: Life Among the Stars, Proceedings of International Astronomical Union Symposium #213* (p. 559). San Francisco: Astronomical Society of the Pacific.

- **Finley, J. R.**, & Methot, L. M. (2002, May). 2002-2003 Education and Public Outreach Initiatives for the Center for Astrobiology: The UCLA AstroBiology Society. Presentation at the UCLA Center for Astrobiology Retreat, Malibu, CA.
- **Finley, J. R.**, & Methot, L. M. (2002, April). *Origin and evolution of the UCLA AstroBiology Society*. Poster presented at the Astrobiology Science Conference 2002, NASA Ames Research Center, Moffett Field, CA.
- **Finley, J. R.**, & Methot, L. M. (2000, March). *The UCLA AstroBiology Society:* Forming a Multidisciplinary Organization. Presentation at the UCLA Center for Astrobiology Retreat, Westwood, CA.

### Media Coverage of my Research

- Jaffe, E. (2014, March 6). People who suck at multitasking don't realize they suck: And that's a big problem when it comes to distracted driving. Fast Company:

  Co.Design. <a href="http://www.fastcodesign.com/3027118/evidence/people-who-suck-at-multitasking-dont-realize-they-suck">http://www.fastcodesign.com/3027118/evidence/people-who-suck-at-multitasking-dont-realize-they-suck</a>
- Laursen, L. (2009, March 13). A memorable device. *Science*, *323*(5920), 1422-1423. http://www.sciencemag.org/content/323/5920/1422
- Willingham, D. T. (2014, March 3). What people know about the cost of multitasking [Web log post]. <a href="http://www.danielwillingham.com/daniel-willingham-science-and-education-blog/what-people-know-about-the-cost-of-multitasking">http://www.danielwillingham.com/daniel-willingham-science-and-education-blog/what-people-know-about-the-cost-of-multitasking</a>

### **Professional Memberships**

American Educational Research Association
Association for Psychological Science
Cognitive Science Society
International Association for Metacognition
Psychonomic Society, Associate Member
Society for Applied Research in Memory and Cognition

# **Professional Experience**

Digital Associate Editor, Psychonomic Society (2014)

Communications Committee, Psychonomic Society: website re-launch (2013)

Chair: Jeremy M. Wolfe

Ad Hoc Reviewer: Behavior Research Methods

Ad Hoc Reviewer: Cognition

Ad Hoc Reviewer: Journal of Cognitive Psychology

Ad Hoc Reviewer: Journal of Experimental Psychology: Applied

Ad Hoc Reviewer: Journal of Experimental Psychology: Learning, Memory, and Cognition

Ad Hoc Reviewer: Journal of Experimental Psychology: General

Ad Hoc Reviewer: *Memory* 

Ad Hoc Reviewer: Memory & Cognition

#### **Technical Skills**

Computer Programming Languages:

C++, HTML, PHP, LISP, MatLab, NetLogo, PASCAL, REAL Basic, Visual BASIC, Flash ActionScript3.

#### Software:

R, SPSS, SAS, PsyScope, SuperLab, StatView, NVivo/NUDIST, Photoshop, Illustrator, Excel, PowerPoint, website design and maintenance, Survey Monkey, Experimetrix, Sona, Compass, Blackboard, Amazon Mechanical Turk.

### References

Professor Aaron S. Benjamin Department of Psychology University of Illinois at Urbana-Champaign 603 East Daniel Street Champaign, IL 61820 (217) 333-6822 asbenjam@illinois.edu

Professor William F. Brewer Department of Psychology University of Illinois at Urbana-Champaign 603 East Daniel Street Champaign, IL 61820 (217) 333-1548 wbrewer@illinois.edu

Professor Henry L. Roediger, III Department of Psychology Washington University in St. Louis 1 Brookings Drive St. Louis, MO 63130 (314) 935-8731 roediger@wustl.edu