Jason R. Finley October 29, 2013

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 Cognitive Psychology University of Illinois at Urbana-Champaign Committee: Aaron S. Benjamin (advisor), William F. Brewer, Gary S. Dell, Brian D. Gonsalves, Brian H. Ross Thesis: "Retrieval cue variability: When and why are two meanings better than one?" M.A. in Cognitive Psychology University of Illinois at Urbana-Champaign Thesis: "Adaptive and qualitative changes in encoding strategy with experience" B.S. in Cognitive Science, summa cum laude 2003

Minor in English Specialization in Computing

Honors and Awards

University of California, Los Angeles

Graduate Teacher Certificate University of Illinois at Urbana-Champaign	2011
National Science Foundation Graduate Research Fellow	2007
Mary Jane Neer Scholarship	2007-2011
List of Teachers Ranked as Excellent by Their Students <i>University of Illinois at Urbana-Champaign</i>	2007, 2010

2000

Research Interests

UCLA Regent Scholar

Overcoming limitations of human learning and memory by improving metacognition and/or offloading aspects of cognition onto the environment.

Teaching Interests

Cognitive psychology, memory, research methods and statistics, introductory psychology, human factors.

Teaching and Mentoring Experience	
Instructor: Introductory Psychology University of Illinois at Urbana-Champaign	Fall 2010
Instructor: Introduction to Statistics University of Illinois at Urbana-Champaign	Spring 2008
Instructor: Cognitive Psychology Laboratory (Research Methods) University of Illinois at Urbana-Champaign	Fall 2007
Mentor and Supervisor to 12 undergraduate research assistants: Introducing Desirable Difficulties for Educational Applications in UCLA Department of Psychology, Funded by the Institute of Edu Sciences' Cognition and Student Learning Program	
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	2012-
Graduate research, Advisor: Aaron S. Benjamin Memory, metamemory, encoding and retrieval strategies University of Illinois at Urbana-Champaign	2006-2012
Graduate research, Advisor: William F. Brewer Autobiographical memory University of Illinois at Urbana-Champaign	2006-2012
Research Associate, Advisor: Marcia C. Linn Technology Enhanced Learning in Science: A NSF Center for Learning and Teaching UC Berkeley Graduate School of Education	2004-2006
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	2003-2006
Research Assistant, Advisor: Elisheva F. Gross UCLA Children's Digital Media Center: A NSF Social, Behavioral, and Economic Center	2003-2005
Research Assistant, Advisor: W. Lewis Johnson University of Southern California Information Sciences Institute	2002
Research Assistant, Advisor: Christine L. Borgman NSF Research Experience for Undergraduates Participant: Alexandria	2001-2003

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.**, Benjamin, A. S., & McCarley, J. S. (in press). Metacognition of multitasking: How well do we predict the costs of divided attention? *Journal of Experimental Psychology: Applied*.
- Nestojko, J. F., **Finley, J. R.**, & Roediger, H. L. (in press). Extending cognition to external agents. *Psychological Inquiry*.
- 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.**, & 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

- Agarwal, P. K., **Finley, J. R.**, Rose, N. S., & Roediger, H. L. (in preparation). 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. (in preparation). Strategy use and memory. In J. Dunlosky & S. K. Tauber (Eds.), *The Oxford Handbook of Metamemory*. Oxford University Press.
- **Finley, J. R.**, Wahlheim, C. N., Jacoby, L. L., & Roediger, H., L. (in preparation). Face recognition: yes/no vs. 2AFC.
- **Finley, J. R.**, & Brewer, W. F. (in preparation). Accuracy and completeness of autobiographical memory: Evidence from a wearable camera.
- **Finley, J. R.**, & Benjamin, A., S. (in preparation). Metacognitive control of transfer-appropriate processing.

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.

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

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: Memory

Ad Hoc Reviewer: Memory & Cognition

Technical Skills

Computer Programming Languages:

C++, HTML, PHP, LISP, MatLab, NetLogo, PASCAL, REAL Basic, Visual BASIC, Flash, AS3.

Software:

R, SPSS, SAS, PsyScope, SuperLab, StatView, NVivo/NUDIST, Photoshop, Illustrator, Excel, website design and maintenance.

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@cyrus.psych.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