Curriculum Vitae

Troy A. Smith

Department of Psychology University of Oklahoma Dale Hall Tower, Room 705 Norman, OK 73019 troy.a.smith@ou.edu Cell: (817) 988-8884 Lab: (405) 325-2599

EDUCATION

Ph.D., Psychology, University of Oklahoma, 2010 (expected)

Major area: Cognitive psychology; Minor area: Quantitative psychology

Advisor: Associate Professor Daniel R. Kimball

Dissertation title: Modeling mirror effects and false memories with a dual-process global

recognition model

M.S., Experimental Psychology, University of Texas at Arlington, 2007

Advisor: Assistant Professor Daniel R. Kimball (now at University of Oklahoma)

Thesis title: Spacing and the delay-retention effect: An alternative explanation of the effects of feedback timing on semantic learning

Honors B.S., Interdisciplinary Studies, Cum Laude, University of Texas at Arlington, 2001

Professional focus: Technical Training and Education

Advisor: Professor Martin Danahay (now at Brock University)

Honors thesis title: The search for a new understanding of literacy in a technological society

RESEARCH EXPERIENCE

Graduate Research Assistant

University of Oklahoma University of Texas at Arlington July 2008 – present Aug 2005 – Jun 2008

Computational modeling of associative processes in false memory and forgetting. (NIH 1R03MH079357-01; PI: Daniel R. Kimball). The goal of this project is to investigate the operation of associative memory processes in creating memory errors in free recall, including false memory and forgetting, using a combination of experimental research with human participants and computational modeling of basic memory processes through the development and testing of the fSAM model—the first large-scale computational model of semantic and episodic memory to successfully simulate veridical and false recall in an associatively related word list paradigm. My responsibilities included writing grant applications; designing and running experiments; analyzing data; supervising undergraduate research assistants; programming, testing, and evaluating computational models; presenting results at professional conferences; and writing and editing manuscripts for publication.

Learning optimization, desirable difficulties, and metamemory. (PI: Daniel R. Kimball). This ongoing research program seeks to 1) explore the effectiveness of proposed learning enhancement techniques and 2) examine the theoretical underpinnings for these techniques, including basic memory processes and meta-cognitive processes. My investigation of feedback timing effects when students are learning from tests (Smith, 2007; Smith & Kimball, in press) was conducted as part of this research program, and I have collaborated on three additional projects in this program: boundary conditions for the delayed JOL effect (Kimball & Smith, manuscript in preparation), interactions of spacing and generation effects, and using theory-based training to de-bias metamemory decisions (research in progress). My duties on these projects have included assisting in experimental design, creating computer programs to run participants, analyzing data, and writing and editing manuscripts for publication.

Research Assistant - Volunteer

University of Texas at Arlington

Oct 2003 – July 2005

False memory and part-set cuing. (PI: Daniel R. Kimball). This research project examined the effects of providing part-set cues on veridical and false recall in the Deese-Roediger-McDermott paradigm (Kimball, Bjork, Bjork, & Smith, 2008). My duties on this project included assisting in experimental design, creating computer programs to run participants, scoring participant responses, analyzing data, and writing and editing manuscripts for publication.

TEACHING EXPERIENCE

Graduate Teaching Assistant

University of Oklahoma University of Texas at Arlington Aug 2009 – Dec 2009 Aug 2006 – Dec 2006

Elements of Psychology. As the instructor of record for a mid-sized section (59 students) of this freshman-level survey course, I was responsible for all aspects of the course, including lesson planning, classroom instruction, student assessment, and filing of progress and grade reports.

Experimental Design Lab. This advanced graduate-level course covered experimental design techniques and related methods of inferential statistics from theoretical and computational perspectives using the general linear model. As the instructor for the lab portion of the course, I was responsible for reviewing theory from the lectures, discussing illustrative examples, and demonstrating how to use the SAS statistical package, as well as writing and grading homework exercises and practical exams.

Mathematics Teacher

Joshua High School, Joshua, Texas

Aug 2002 – May 2005

Taught high school mathematics courses including AP Calculus AB, Algebra 1 and Geometry. My responsibilities included planning and implementing instructional schedules; writing and delivering daily lesson plans; assessing student performance; and counseling students regarding academic, attendance, and behavioral issues.

- Led team of 4 teachers to develop a geometry curriculum that was based on state and national standards, incorporated active learning techniques, and integrated applications of mathematics with the traditional focus on the logic of mathematic proofs (2004-2005)
- Served as a designated faculty trainer for professional development courses focused on using technology and computer-based learning to enhance instruction (2003-2005)

Electronics/Information Technology Instructor

ATI Career Training Center, Hurst, Texas ITT Technical Institute, Arlington, Texas

Nov. 2001 – June 2002 Dec. 1998 – June 2001

Taught theory and laboratory courses in analog and digital electronics, computer repair, computer literacy, applications such as Microsoft Office, and basic computer networking. I was also responsible for maintaining and repairing lab equipment including networked computer labs.

- Honored as Instructor of the Year at the ITT Tech Arlington campus (1999)
- Founded and served as faculty advisor for Electronics Technicians Association chapter at ITT Technical Institute, Arlington, TX (1999-2001)

PUBLICATIONS

- **Smith, T.A.**, & Kimball, D.R. (in press). Pursuing a general model of recall and recognition. In A. S. Benjamin (Ed.), *Successful remembering and successful forgetting: A festschrift in honor of Robert A. Bjork*. New York: Psychology Press.
- Kimball, D.R., Muntean, W.J., & **Smith, T.A.** (in press). Dynamics of thematic activation in recognition testing. *Psychonomic Bulletin & Review*.
- **Smith, T. A.**, and Kimball, D. R. (2010). Learning from feedback: Spacing and the delayretention effect. *Journal of Experimental Psychology: Learning, Memory, and Cognition*, *36*, 80-95.
- Kimball, D.R., Bjork, E.L., Bjork, R.A., and **Smith, T.A.** (2008). Part-list cuing and the dynamics of false recall. *Psychonomic Bulletin & Review*, *15*, 296-301.
- Kimball, D. R., **Smith, T. A.**, & Kahana, M. J. (2007). The fSAM model of false recall. *Psychological Review, 114*, 954-993.

Manuscripts under review and in preparation

- **Smith, T.A.**, & Kimball, D.R. Revisiting the rise and fall of false recall: The role of attentional blink and rehearsal processes. Manuscript in preparation.
- **Smith, T.A.**, & Kimball, D.R. *Spacing, interference, and response perseveration: A critical re-examination of feedback timing effects in semantic learning.* Manuscript in preparation.
- Kimball, D.R., & **Smith, T.A.** *The fSAM model: Simulation of core false recall findings.* Manuscript in preparation.
- Kimball D.R., & **Smith, T.A.** Delaying judgments of learning to improve self-regulation of study and recall performance: Boundary conditions for a causal chain. Manuscript in preparation.

CONFERENCE PRESENTATIONS

- **Smith, T.A.**, Kimball, D.R., & Mann, M. (2009, November). *Presentation rate and false recall: The roles of attentional and rehearsal limitations*. Poster session presented at the 50th annual meeting of the Psychonomic Society, Boston, MA.
- **Smith, T.A.**, & Kimball, D.R. (2009, October). *Reexamining the rise and fall of false recall*. Poster session presented at the annual ARMADILLO: The Southwest Cognition Conference, Houston, TX.
- Kimball, D.R., & **Smith, T.A.** (2009, January). *Conjunctive and summative processes in human memory*. Paper presented at the Context and Episodic Memory Symposium, West Palm Beach, FL (read by T.A. Smith).
- **Smith, T.A.** & Kimball, D.R. (2008, November). *Modeling part-set cuing of false memory*. Poster session presented at the 49th annual meeting of the Psychonomic Society, Chicago, IL.
- Kimball, D.R., & **Smith, T.A.** (2008, November). *Delayed judgments of learning, improved restudy decisions, and improved recall: A causal chain?* Paper presented at the 49th annual meeting of the Psychonomic Society, Chicago, IL.
- Kimball, D.R., Muntean, W.J., **Smith, T.A.**, & Mann, M. (2008, November). *Dynamics of semantic priming in recognition testing*. Poster session presented at the 49th annual meeting of the Psychonomic Society, Chicago, IL.
- Kimball, D.R., & **Smith, T.A.** (2008, October). *Delaying judgments of learning leads to more-not more effective--restudy*. Paper presented at the annual ARMADILLO: The Southwest Cognition Conference, El Paso, TX.

- Kimball, D.R., Muntean, W.J., & Smith, T.A. (2008, October). Semantic associations and false memories for studied and unstudied lists. Poster session presented at the annual ARMADILLO: The Southwest Cognition Conference, El Paso, TX.
- **Smith, T.A.** (2008, March). *Learning from tests: Delayed feedback improves retention*. Paper presented at the UT Arlington Annual Celebration of Excellence by Students, Arlington, TX.
- Kimball, D. R., Muntean, W., & Smith, T.A. (2008, March). *Increasing false memory by testing related information first*. Poster session presented at the UT Arlington Annual Celebration of Excellence by Students, Arlington, TX.
- Kimball, D.R., & **Smith, T.A.** (2008, January). *Testing the fSAM model as a general model of false recall*. Paper presented at the Context and Episodic Memory Symposium, Tampa, FL.
- Kimball, D.R. & **Smith, T.A.** (2007, November). *Generalizing the fSAM model: Simulation of core false recall effects*. Paper presented at the 48th annual meeting of the Psychonomic Society, Long Beach, CA.
- **Smith, T.A.**, Kimball, D.R., & Mann, M. (2007, November). *Feedback timing in semantic learning: A critical re-examination of the delay-retention effect.* Poster session presented at the 48th annual meeting of the Psychonomic Society, Long Beach, CA.
- Kimball, D.R., Muntean, W., & **Smith, T.A.** (2007, October). *Dynamics of false memory during recognition tests of associative lists*. Poster session presented at the annual ARMADILLO: The Southwest Cognition Conference, San Antonio, TX.
- Kimball, D.R. & **Smith, T.A.** (2007, October). *Correlations among false recall, veridical recall, and association strength: Testing the fSAM model.* Paper presented at the annual ARMADILLO: The Southwest Cognition Conference, San Antonio, TX.
- Kimball, D.R., & Smith, T.A. (2007, August). *Testing the fSAM model of false recall: Association strengths and true-false correlations*. Poster session presented at the 29th Annual Cognitive Science Society, Nashville, TN.
- Kimball, D.R., **Smith, T.A.**, & Kahana, M.J. (2006, November). *Modeling false recall: Semantic encoding and retrieval in associative memory models*. Paper presented at the annual meeting of the Psychonomic Society, Houston, TX.
- Kimball, D.R., **Smith, T.A.**, & Kahana, M.J. (2006, October). *Conjunctive semantic retrieval in an associative model of false memory*. Paper presented at the annual ARMADILLO: The Southwest Cognition Conference, Lubbock, TX.
- Kimball, D.R., **Smith, T.A.**, & Kahana, M.J. (2006, July). *Modeling false recall: Beyond a simple associative model*. Paper presented at the annual meeting of the Society for Mathematical Psychology, Vancouver, BC.

Smith, T.A. (2002, April). *The search for a new understanding of literacy in a technological society.* Paper presented at the Great Plains Honors Council Conference, Fort Worth, TX.

PROFESSIONAL ORGANIZATIONS AND CERTIFICATIONS

- American Psychological Association, Student Affiliate
- Association for Psychological Science, Student Member
- Cognitive Science Society, Student Member
- National Council of Teachers of Mathematics, Member
- Texas Educator Certificate Classroom Teacher, Mathematics, Grades 8-12

SERVICE AND VOLUNTEER ACTIVITY

- Coordinator for departmental Cognitive Seminar (Spring 2010)
- Developed and delivered *Programming with Python for Experiments and Simulations in Psychology* training program for graduate students and faculty at the University of Oklahoma (2009)
- Served as faculty sponsor for the Joshua High School computer science UIL team (2003-2005)
- Volunteered as an assistant coach for the Joshua High School debate team (2004-2006)

AWARDS AND HONORS

- Graduate Dean's Award, Annual Celebration of Excellence by Students, UT Arlington (2008)
- Golden Key National Honor Society (2001)
- Alpha Chi National College Honor Scholarship Society (2001)
- Instructor of the Year, ITT Technical Institute Arlington campus (1999)

COMPUTER PROGRAMMING SKILLS AND TRAINING

Proficient in:

- Python, including NumPy and SciPy
- Matlab
- SAS 9.1
- E-prime 2.0, including custom scripting in EBasic

Familiar with / trained in:

- Web development, including Dynamic HTML and Javascript
- C++
- Java

REFERENCES

Daniel R. Kimball, J.D., Ph.D. J.R. Morris Associate Professor, Cognitive Psychology

University of Oklahoma Phone: (405) 325-4599 Email: dkimball@ou.edu

Joseph L. Rodgers, Ph.D.

Professor, Quantitative, Social/Personality Psychology

University of Oklahoma Phone: (405) 325-4511 Email: jrodgers@ou.edu

Rick P. Thomas, Ph.D.

Assistant Professor, Cognitive Psychology

University of Oklahoma Phone: (405) 325-4511

Email: rthomas@psychology.ou.edu