

Curriculum Vitae

SEAN H. K. KANG

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EDUCATION

- 2001 B.A. with Merit (Psychology), National University of Singapore
Undergraduate Thesis: *Social Interaction and Ambulatory Cardiovascular Activity: The Role of Trait Anger*
- 2002 B.Soc.Sc. with Honours (Psychology), National University of Singapore
Honours Thesis: *Consonants, Vowels, and Sonority in Letter Search*
- 2006 A.M. (Cognitive Psychology), Washington University in St. Louis
Masters Thesis: *Test Format and Corrective Feedback Modulate the Effect of Testing on Memory Retention*
- 2009 Ph.D. (Cognitive Psychology), Washington University in St. Louis
Dissertation: *The Influence of Test Expectancy, Test Format, and Test Experience on Study Strategy Selection and Long-term Retention*
Advisor: Dr. Kathleen B. McDermott
Committee: Drs. David A. Balota, Henry L. Roediger, Pascal Boyer, R. Keith Sawyer, Desiree A. White

POSITIONS HELD

- Jan 2002 – Jul 2003 Research Assistant, Psychological Studies Academic Group,
National Institute of Education, Nanyang Technological University (Singapore)
- Oct 2008 – Mar 2009 Visiting Researcher, Department of Psychology, University of California, San Diego
(Primary Mentor: Dr. Harold Pashler)
- Apr 2009 – Jun 2012 Post-doctoral Research Scholar, Department of Psychology, University of California,
San Diego (Primary Mentor: Dr. Harold Pashler)
- Jul 2012 – current Assistant Professor, Department of Education, Dartmouth College

RESEARCH INTERESTS

- Human learning and memory
 - Applying cognitive science to education
 - Effects of testing on long-term retention
 - Distributed / spaced practice
 - Effects of guessing / errors on later learning
 - Metacognition and strategic learning
 - Effects of interleaving on category learning
- Visual word recognition
 - Interplay of reading and memory processes

RESEARCH PUBLICATIONS

- Kang, S. H. K., McDermott, K. B., & Roediger, H. L. (2007). Test format and corrective feedback modify the effect of testing on long-term retention. *European Journal of Cognitive Psychology, 19*, 528–558.
- Agarwal, P. K., Karpicke, J. D., Kang, S. H. K., Roediger, H. L., & McDermott, K. B. (2008). Examining the testing effect with open-book and closed-book tests. *Applied Cognitive Psychology, 22*, 861–876.
- Kang, S. H. K., McDermott, K. B., & Cohen, S. M. (2008). The mnemonic advantage of processing fitness-relevant information. *Memory & Cognition, 36*, 1151–1156.
- Kang, S. H. K., Balota, D. A., & Yap, M. J. (2009). Pathway control in visual word processing: Converging evidence from recognition memory. *Psychonomic Bulletin & Review, 16*, 692–698.
- Butler, A. C., Kang, S. H. K., & Roediger, H. L. (2009). Congruity effects between materials and processing tasks in the survival processing paradigm. *Journal of Experimental Psychology: Learning, Memory, and Cognition, 35*, 1477–1486.
- Roediger, H. L., Agarwal, P. K., Kang, S. H. K., & Marsh, E. J. (2010). Benefits of Testing Memory: Best Practices and Boundary Conditions. In G. M. Davies & D. B. Wright (Eds.), *Current Issues in Applied Memory Research* (pp. 15–49). East Sussex, UK: Psychology Press.
- Kang, S. H. K. (2010). Enhancing visuospatial learning: The benefit of retrieval practice. *Memory & Cognition, 38*, 1009–1017.
- Kang, S. H. K., Pashler, H., Cepeda, N. J., Rohrer, D., Carpenter, S. K., & Mozer, M. C. (2011). Does incorrect guessing impair fact learning? *Journal of Educational Psychology, 103*, 48–59.
- Kang, S. H. K., Yap, M. J., Tse, C.-S., & Kurby, C. A. (2011). Semantic Size Does *Not* Matter: “Bigger” Words Are Not Recognized Faster. *Quarterly Journal of Experimental Psychology, 64*, 1041–1047.
- Kang, S. H. K., McDaniel, M. A., & Pashler, H. (2011). Effects of testing on learning of functions. *Psychonomic Bulletin & Review, 18*, 998–1005.
- Kang, S. H. K., & Pashler, H. (2012). Learning painting styles: Spacing is advantageous when it promotes discriminative contrast. *Applied Cognitive Psychology, 26*, 97–103.
- Carpenter, S. K., Cepeda, N. J., Rohrer, D., Kang, S. H. K., & Pashler, H. (2012). Using spacing to enhance diverse forms of learning: Review of recent research and implications for instruction. *Educational Psychology Review, 24*, 369–378.
- Pashler, H., Kang, S. H. K., & Mozer, M. C. (2013). Reviewing erroneous information facilitates memory updating. *Cognition, 128*, 424–430.
- Pashler, H., Kang, S. H. K., & Ip, R. (2013). Does multitasking impair studying? Depends on timing. *Applied Cognitive Psychology, 27*, 593–599.
- Kang, S. H. K., Gollan, T. H., & Pashler, H. (2013). Don't just repeat after me: Retrieval practice is more effective than imitation for foreign language learning. *Psychonomic Bulletin & Review, 20*, 1259–1265.
- Kang, S. H. K., & Pashler, H. (2014). Is the benefit of retrieval practice modulated by motivation? *Journal of Applied Research in Memory and Cognition, 3*, 183–188.

Kang, S. H. K., Lindsey, R. V., Mozer, M. C., & Pashler, H. (2014). Retrieval practice over the long term: Should spacing be expanding or equal-interval? *Psychonomic Bulletin & Review*, 21, 1544–1550.

(PDFs of the above publications can be viewed at <http://www.dartmouth.edu/~cogedlab/publications.html>)

MANUSCRIPTS IN PREPARATION

Kang, S. H. K. *The influence of test format expectancy on study strategy and retention.*

Kang, S. H. K., Mozer, M. C., & Pashler, H. *Willingness to guess the answer predicts subsequent learning.*

Kang, S. H. K., Pashler, H., & Rohrer, D. *The effects of spaced rereading and retrieval practice on prose recall.*

PRESENTATIONS

National Conferences

Kang, S. H. K., & Rickard Liow, S. J. (2002, August). *Consonant-vowel processing in skilled readers of Malay.* Paper presented at the 6th International Symposia on Malay/Indonesian Linguistics, Bintan, Indonesia.

Lee, K., & Kang, S. H. K. (2003, April). *Attentional efficiency and English achievement.* Poster presented at the Society for Research in Child Development 2003 Biennial Meeting, Tampa, FL.

Weekes, B. S., Holliday, R. E., Lee, K., Kang, S. H. K., & Hayward, E. (2003, November). *False memory effects on spoken word recognition among bilingual speakers.* Poster presented at the 44th Annual Meeting of the Psychonomic Society, Vancouver, Canada.

McDermott, K. B., Kang, S. H. K., & Roediger, H. L. (2005, January). *Test format and its modulation of the testing effect.* Paper presented at the 6th Biennial Meeting of the Society for Applied Research in Memory and Cognition, Wellington, New Zealand.

Kang, S. H. K., McDermott, K. B., & Roediger, H. L. (2005, May). *Testing enhances memory retention, but which test format is better?* Poster presented at the 17th Annual Convention of the American Psychological Society, Los Angeles, CA.

McDaniel, M. A., Kang, S. H. K., Anderson, J., McDermott, K. B., & Roediger, H. L. (2005, November). *Retrieval and memory: Test-enhanced learning.* Paper presented at the 46th Annual Meeting of the Psychonomic Society, Toronto, Canada.

Agarwal, P. K., Karpicke, J. D., Kang, S. H. K., Roediger, H. L., & McDermott, K. B. (2006, May). *Open-book or closed-book tests? Effects of testing on learning depend on feedback.* Poster presented at the 18th Annual Convention of the Association for Psychological Science, New York, NY.

Agarwal, P. K., Karpicke, J. D., Kang, S. H. K., Roediger, H. L., & McDermott, K. B. (2006, November). *Long-term retention is greater following closed-book tests than open-book tests.* Poster presented at the 47th Annual Meeting of the Psychonomic Society, Houston, TX.

Kang, S. H. K., McDermott, K. B., & Cohen, S. M. (2007, November). *Planning for Survival Vs. Planning a Burglary: The Mnemonic Advantage of Processing Fitness-relevant Information.* Poster presented at the 48th Annual Meeting of the Psychonomic Society, Long Beach, CA.

- Kang, S. H. K., Balota, D. A., & Yap, M. J. (2008, November). *Pathway control in visual word processing: Consequences for memory performance*. Poster presented at the 49th Annual Meeting of the Psychonomic Society, Chicago, IL.
- Meyer, A. N. D., Logan, J. M., & Kang, S. H. K. (2008, November). *Subject-chosen feedback in the recognition of deceptive and non-deceptive sentences*. Poster presented at the 49th Annual Meeting of the Psychonomic Society, Chicago, IL.
- Szpunar, K. K., Kang, S. H. K., Umanath, S., Wilkie, L., McDermott, K. B., & Roediger, H. L. (2008, November). *Testing insulates against build-up of proactive interference*. Poster presented at the 49th Annual Meeting of the Psychonomic Society, Chicago, IL.
- Kang, S. H. K. (2009, February). *The influence of test expectancy on study strategy selection and retention*. Poster presented at the 2nd Annual Inter-Science of Learning Center Conference, Seattle, WA.
- Kang, S. H. K. (2009, May). *The influence of test expectancy on study strategy selection and retention*. Poster presented at the 21st Annual Convention of the Association for Psychological Science, San Francisco, CA.
- Kang, S. H. K., Carpenter, S. K., Rohrer, D., & Pashler, H. (2009, June). *Does guessing when one doesn't know the answer hurt subsequent learning?* Poster presented at the 4th Annual Institute of Education Sciences Research Conference, Washington, DC.
- Kang, S. H. K. (2009, November). *Enhancing visuo-spatial learning: The benefit of retrieval practice*. Poster presented at the 50th Annual Meeting of the Psychonomic Society, Boston, MA.
- Kang, S. H. K., Pashler, H., Rohrer, D., & Carpenter, S. K. (2009, November). *Is subsequent learning hurt by prior erroneous guessing?* Poster presented at the 50th Annual Meeting of the Psychonomic Society, Boston, MA.
- Kang, S. H. K., Mozer, M. C., & Pashler, H. (2010, May). *Testing enhances the updating of knowledge*. Poster presented at the 22nd Annual Convention of the Association for Psychological Science, Boston, MA.
- Rohrer, D., Taylor, K., Carpenter, S. K., Pashler, H., & Kang, S. H. K. (2010, June). *Tests can enhance the transfer of learning*. Poster presented at the 5th Annual Institute of Education Sciences Research Conference, National Harbor, MD.
- Pashler, H., Kang, S. H. K., & Mozer, M. C. (2010, July). *Effects of testing on memory*. Paper presented at the 16th Annual Conference of the Cognitive Science Association for Interdisciplinary Learning, Hood River, OR.
- Kang, S. H. K., Mozer, M. C., & Pashler, H. (2010, August). *Willingness to guess the answer predicts subsequent learning*. Poster presented at the 32nd Annual Conference of the Cognitive Science Society, Portland, OR.
- Kang, S. H. K., Lindsey, R., Pashler, H., & Mozer, M. C. (2010, October). *Distributed practice over the long-term: Should spacing be expanding or equal interval?* Paper presented at the Annual NSF Science of Learning Centers Awardees Meeting, Arlington, VA.
- Kang, S. H. K., Pashler, H., & Rohrer, D. (2010, November). *Effects of spaced rereading and retrieval practice on prose recall*. Poster presented at the 51st Annual Meeting of the Psychonomic Society, St. Louis, MO.
- Kang, S. H. K., & Yap, M. J. (2010, November). *Semantic size does not matter: Bigger words are not recognised faster*. Poster presented at the 51st Annual Meeting of the Psychonomic Society, St. Louis, MO.

- Pashler, H., Kang, S. H. K., & Mozer, M. C. (2010, November). *Testing prior knowledge facilitates its subsequent replacement*. Paper presented at the 51st Annual Meeting of the Psychonomic Society, St. Louis, MO.
- Kang, S. H. K., Gollan, T., H., & Pashler, H. (2011, June). *Practise retrieving it, not just saying it: Retrieval practice is better than imitation for foreign language learning*. Paper presented at the 9th Conference of the Society for Applied Research in Memory and Cognition (SARMAC), New York, NY.
- Kang, S. H. K., Lindsey, R., Mozer, M. C., & Pashler, H. (2011, November). *Retrieval practice over the long term: Should spacing be expanding or equal-interval?* Poster presented at the 52nd Annual Meeting of the Psychonomic Society, Seattle, WA.
- Kang, S. H. K., & Pashler, H. (2012, May). *Does motivation modulate the benefit of retrieval practice?* Poster presented at the 24th Annual Convention of the Association for Psychological Science, Chicago, IL.
- Kang, S. H. K., & Pashler, H. (2012, November). *Is the benefit of retrieval practice modulated by motivation?* Paper presented at the 53rd Annual Meeting of the Psychonomic Society, Minneapolis, MN.
- Pashler, H., Kang, S. H. K., & Harris, C. R. (2012, November). *Testing effects in memory: "On the hook" in simulated classrooms*. Paper presented at the 53rd Annual Meeting of the Psychonomic Society, Minneapolis, MN.
- Kang, S. H. K., Lindsey, R., Mozer, M. C., & Pashler, H. (2013, June). *Retrieval practice over the long term: Should spacing be expanding or equal-interval?* Paper presented at the 10th Conference of the Society for Applied Research in Memory and Cognition (SARMAC), Rotterdam, Netherlands.
- Eglington, L. G., Kang, S. H. K., & Yap, M. J. (2014, May). *Forward vs. backward semantic priming: What movement dynamics during lexical decision reveal*. Poster presented at the 26th Annual Convention of the Association for Psychological Science, San Francisco, CA.
- Cheng, M., Cho, S. H., Chu, S. B., Eglington, L. G., & Kang, S. H. K. (2014, October). *Interleaving of exemplars improves inductive learning of organic chemistry compounds*. Poster to be presented at the 54th Annual Meeting of the New England Psychological Association, Lewiston, ME.
- Eglington, L. G., & Kang, S. H. K. (2014, November). *Scientific category learning: Benefits of interleaving for chemistry*. Poster to be presented at the 55th Annual Meeting of the Psychonomic Society, Long Beach, CA.

Invited Talks

- Kang, S. H. K. (2008, January). *Improving learning and memory through testing*. Presented at the Department of Psychology, Concordia College, Moorhead, MN.
- Kang, S. H. K. (2008, January). *Improving learning and memory through testing*. Presented at the Memory Disorders Research Center, Boston University School of Medicine, Boston, MA.
- Kang, S. H. K. (2008, February). *Improving learning and memory through testing*. Presented at the Department of Psychology, Auburn University, Auburn, AL.
- Kang, S. H. K. (2008, February). *Improving learning and memory through testing*. Presented at the Department of Psychology, Texas Tech University, Lubbock, TX.

- Kang, S. H. K. (2009, January). *The influence of test expectancy, test format, and test experience on study strategy selection and long-term retention*. Presented at CogFog, University of California, Los Angeles, CA.
- Kang, S. H. K. (2009, August). *Testing and spacing: Keys to enhancing learning and retention*. Presented at the Temporal Dynamics of Learning Center, University of California, San Diego, CA.
- Kang, S. H. K. (2010, April). *Enhancing learning and memory through testing*. Presented at the Institute of Cognitive Science, University of Colorado, Boulder, CO.
- Kang, S. H. K. (2011, January). *More research on the benefits of retrieval practice and spacing for learning*. Presented at CogFog, University of California, Los Angeles, CA.
- Kang, S. H. K. (2011, February). *Retrieval practice over the long term: Should one practise at equal or expanding intervals?* Presented at the James S. McDonnell Foundation Collaborative Activity Award Meeting, San Diego, CA.
- Kang, S. H. K. (2011, August). *The benefits of retrieval practice and spacing for learning*. Presented at the School of Psychology, University of Western Australia, Perth, Australia.
- Kang, S. H. K. (2011, September). *The benefits of retrieval practice and spacing for learning*. Presented at the Institute of Cognitive Science, University of Colorado, Boulder, CO.
- Kang, S. H. K. (2011, September). *Enhancing learning through testing: New findings*. Presented at the Center for Research on Training, University of Colorado, Boulder, CO.
- Kang, S. H. K. (2011, November). *The benefits of retrieval practice and spacing for learning*. Presented at the Department of Education, Dartmouth College, Hanover, NH.
- Kang, S. H. K. (2011, November). *The benefits of retrieval practice and spacing for learning*. Presented at the Department of Psychology and Education, Mt. Holyoke College, South Hadley, MA.
- Kang, S. H. K. (2013, January). *The benefits of retrieval practice and spacing for learning*. Presented at the Department of Pathology (Research and Review Seminar), Dartmouth-Hitchcock Medical Center, Lebanon, NH.
- Kang, S. H. K. (2013, February). *The benefits of retrieval practice and spacing for learning*. Presented at the Pediatric Grand Rounds, Dartmouth-Hitchcock Medical Center, Lebanon, NH.
- Kang, S. H. K. (2013, May). *Retrieval practice over the long term: Should spacing be expanding or equal-interval?* Presented at Conference on Improving Middle School Science Instruction Using Cognitive Science, National Research and Development Center on Cognition and Science Instruction, Washington, DC.
- Kang, S. H. K. (2013, October). *Enhancing learning and retention through retrieval practice and spacing*. Presented at the Department of Psychology, Colby College, Waterville, ME.
- Kang, S. H. K. (2013, November). *Enhancing learning and retention through retrieval practice and spacing*. Presented at the Department of Psychology, Kent State University, Kent, OH.
- Kang, S. H. K. (2014, January). *Applying cognitive science principles to promote durable and efficient learning*. Presented at the Jones Seminar on Science, Technology, and Society, Thayer School of Engineering at Dartmouth, Hanover, NH.
- Kang, S. H. K. (2014, March). *Applying cognitive science principles to promote durable and efficient learning*. Presented at the Department of Psychology, University of Massachusetts, Amherst, MA.

Kang, S. H. K. (2014, December). *Applying cognitive science principles to promote durable and efficient learning*. To be presented at the Wisconsin Center for Education Research, University of Wisconsin, Madison, WI.

TEACHING

Previous

Introductory Psychological Statistics	2005	Teaching Assistant	Washington University
Experimental Psychology	2006	Teaching Assistant	Washington University
Human Learning & Memory	2006	Teaching Assistant	Washington University
Memory & Amnesia	2010-2011	Lecturer	UC San Diego

Current

Learning & Education Across Cultures		Assistant Professor	Dartmouth College
Language Acquisition & Development		Assistant Professor	Dartmouth College
Adolescent Development & Education		Assistant Professor	Dartmouth College
Applying Cognitive Psychology to Educ		Assistant Professor	Dartmouth College

GRADUATE STUDENT ADVISING

Luke G. Eglinton (Psychological and Brain Sciences Ph.D. program, Dartmouth)	2013 – current
Janica X. Tang (Psychological and Brain Sciences Ph.D. program, Dartmouth)	2014 – current

ACADEMIC HONORS

2003-2004	Washington University Fellowship
2003-2008	Washington University Conference Travel Grant
2004-2008	Washington University Summer Research Fellowship
2008	Dean's Dissertation Fellowship, Graduate School of Arts and Sciences, Washington University
2008	1 st Place, Social Sciences Division, Graduate Student Research Symposium, Washington University
2009	Travel Grant, Festschrift in Honor of Robert A. Bjork, UCLA

RESEARCH GRANTS

Temporal Dynamics of Learning Center (NSF Science of Learning Center). *Expanding vs. Equally Spaced Retrieval Practice and Long-term Retention*. PI (Trainee Grant). \$1,700. 10/2009–9/2010.

Temporal Dynamics of Learning Center (NSF Science of Learning Center). *Learning and Retention During Different Schedules of Spaced Retrieval Practice*. PI (Trainee Grant). \$2,000. 4/2011 – 3/2012.

Walter and Constance Burke Research Initiation Award (Dartmouth College). *Further Investigations into Testing as a Learning Tool*. PI. \$25,000. 10/2013 – 6/2018.

NSF. *Applying Cognitive Science Principles to Improve Learning and Reasoning in Science*. PI. \$644,035. Not funded. (The proposal was rated “highly competitive” by the review panel, and will be revised/resubmitted in January 2015.)

SERVICE

2012-current Co-founder of www.psychfiledrawer.org

ADHOC REVIEWING

Journals

Acta Psychologica
Aging, Neuropsychology, and Cognition
Applied Cognitive Psychology
Applied Psycholinguistics
BioMedCentral Psychology
Canadian Journal of Higher Education
Current Directions in Psychological Science
Developmental Science
Educational Psychology Review
Journal of Applied Research in Memory and Cognition
Journal of Cognitive Psychology
Journal of Educational Psychology
Journal of Experimental Child Psychology
Journal of Experimental Education
Journal of Experimental Psychology: Applied
Journal of Experimental Psychology: General
Journal of Experimental Psychology: Learning, Memory, and Cognition
Journal of Memory and Language
Language Learning
Learning and Instruction
Memory
Memory & Cognition
Perspectives in Psychological Science
PLOS ONE
Proceedings of the National Academy of Sciences (guest editor for a direct submission)
Psychological Science
Psychological Science in the Public Interest
Psychology Learning and Teaching
Psychonomic Bulletin & Review
Quarterly Journal of Experimental Psychology
WIREs Cognitive Science

Books / Book Proposals

Cambridge University Press
Harvard University Press
Psychology Press

Grant Proposals

German-Israel Foundation for Scientific Research and Development
NSF
The Chinese University of Hong Kong (external reviewer for research proposal)

Conference Submissions

Society for Applied Research in Memory and Cognition
Society for Research on Educational Effectiveness

MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS

Association for Psychological Science
Cognitive Science Society
Psychonomic Society
Sigma Xi: The Scientific Research Society
Society for Applied Research in Memory and Cognition

REFERENCES

Dr. Harold Pashler
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Dr. Henry (Roddy) Roediger
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Dr. Doug Rohrer
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Dr. Kathleen McDermott
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Washington University in St. Louis
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Dr. David Balota
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Dr. Michael Mozer
Department of Computer Science
University of Colorado, Boulder
Email: mozer@cs.colorado.edu