

# M Karl Healey

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University of Pennsylvania  
Department of Psychology  
3401 Walnut Street  
Philadelphia, PA 19104

☎ 215-746-3504  
FAX 215-746-6848  
✉ healeym@sas.upenn.edu  
📄 <http://karlhealey.github.com>

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## Academic Appointments

2011–Present	Postdoctoral Fellow	University of Pennsylvania Supervisor: Michael Kahana
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## Education

2011	Ph.D. Psychology	University of Toronto Supervisor: Lynn Hasher
2006	M.A. Psychology	University of Toronto Supervisor: Akira Miyake
2004	B.Sc. (Hons) Psychology	Memorial University Supervisor: Rita Anderson

## Honors and Awards

2012	APA New Investigator Award: Division 3 for <i>The stability of working memory: Do previous tasks influence complex span?</i> in <i>JEP:G</i>
2009	1st place graduate student poster competition for Division 3 at APA convention
2009	Ontario Graduate Scholarship (\$15,000)
2009	Men's Service Group Graduate Student Fellowship (\$6900)
2007	Ontario Graduate Scholarship (\$15,000)
2005	Mary H. Beatty Scholarship (\$5000)
2004-06	Natural Sciences and Engineering Research Council Post-Graduate Scholarship (\$17,300/yr)
2004	Offered an Ontario Graduate Scholarship (\$15,000/yr; declined in favor of NSERC PGS)

## Training

2010	European Society for Cognitive Psychology Summer School in Computational and Mathematical Modeling of Cognition
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## Ad Hoc Reviewing

- JEP: Learning, Memory, and Cognition
- Psychonomic Bulletin & Review
- Memory
- Psychology and Aging
- Consciousness and Cognition
- Experimental Aging Research
- Journal of Experimental Social Psychology
- Aging, Neuropsychology and Cognition

## Professional Memberships

- Association for Psychological Science

## Courses Taught

- Statistics II (PSY202 - University of Toronto)

- Covering experimental design, multiple regression, and ANOVA

### Teaching Assistantships (at the University of Toronto)

- Biological Rhythms
- Introduction to Cognition
- Introduction to Psychology
- Memory and Learning Lab
- Statistics I – 4 times
- Statistics II

### Potential Future Courses

- Statistics
  - Introductory and upper-level statistics courses
- Computational Modeling
  - Basics of computer programming, model development, and parameter optimization algorithms
- Memory
  - Introduction to memory research
- Cognitive Aging
  - An upper-level undergraduate course or a graduate seminar
- Individual Differences in Memory and Intelligence
  - An upper-level undergraduate course or a graduate seminar

### Mentorship

2007	Jamie Benoit	Senior Thesis Project
2007	Elena Danilova	Senior Thesis Project
2007	Lauren Long	Senior Thesis Project
2008	Lynn Ossher	Senior Thesis Project
2008	Margot Sullivan	Senior Thesis Project
2009	Jane Kouptsova	Senior Thesis Project
2010	Polong Lin	Senior Thesis Project

### Publications

1. Burke, J. F., Sharan, A. D., Evans, J., Ramayya, A., **Healey, M. K.**, Sperling, M. R., and Kahana, M. J. (in press). Theta and high-frequency activity mark spontaneous episodic retrieval during free recall. *Journal of Neuroscience*.
2. **Healey, M. K.**, Crutchley, P., and Kahana, M. J. (in press). Individual differences in memory search and their relation to intelligence. *Journal of Experimental Psychology: General*. [PDF](#).
3. **Healey, M. K.** and Kahana, M. J. (2014). Is memory search governed by universal principles or idiosyncratic strategies? *Journal of Experimental Psychology: General*, 143, 575–596. [PDF](#).
4. **Healey, M. K.**, Ngo, K. W. J., and Hasher, L. (2014). Below baseline suppression of competitors during interference resolution by younger but not older adults. *Psychological Science*, 25, 145–151. [PDF](#).
5. **Healey, M. K.**, Hasher, L., and Campbell, K. L. (2013). The role of suppression in resolving interference: evidence for an age-related deficit. *Psychology and Aging*, 28, 721–728. [PDF](#).
6. Campbell, K. L., Zimmerman, S., **Healey, M. K.**, Lee, M. M. S., and Hasher, L. (2012). Age differences in visual statistical learning. *Psychology and Aging*, 27, 650–656. [PDF](#).
7. **Healey, M. K.**, Hasher, L., and Danilova, E. (2011). The stability of working memory: do previous tasks influence complex span? *Journal of Experimental Psychology: General*, 140, 650–656. **(Earned APA New Investigator Award)**. [PDF](#).

8. **Healey, M. K.**, Campbell, K. L., Hasher, L., and Ossher, L. (2010). Direct evidence for the role of inhibition in resolving interference in memory. *Psychological Science*, 21, 1464–1470. [PDF](#).
9. **Healey, M. K.** and Hasher, L. (2009). Limitations to the deficit attenuation hypothesis: aging and decision making. *Journal of Consumer Psychology*, 19, 17–22. [PDF](#).
10. **Healey, M. K.** and Miyake, A. (2009). The role of attention during retrieval in working-memory span: a dual-task study. *Quarterly Journal of Experimental Psychology*, 62, 733–745. [PDF](#).
11. **Healey, M. K.**, Campbell, K. L., and Hasher, L. (2008). Cognitive aging and increased distractibility: Costs and potential benefits. In W. S. Sossin, J. C. Lacaille, V. F. Castellucci, & S. Belleville (Eds.) *Progress in Brain Research, Vol. 169: Essence of Memory* (pp. 353–363). Amsterdam, the Netherlands: Elsevier. [PDF](#).
12. Kim, S., **Healey, M. K.**, Goldstein, D., Hasher, L., and Wiprzycka, U. J. (2008). Age differences in choice satisfaction: a positivity effect in decision making. *Psychology and Aging*, 23. [PDF](#).

### Manuscripts Under Review or Revision

1. **Healey, M. K.** and Kahana, M. J. (Submitted (2<sup>nd</sup> round) at *Psychological Review*). A new approach to understanding age-related memory impairments. [PDF](#).

### Manuscripts in Preparation

1. **Healey, M. K.** (invited contribution in prep). Interference. In S. K., Whitbourne (Ed.), *The Encyclopedia of Adulthood and Aging*. New York: Wiley-Blackwell.
2. **Healey, M. K.**, Goldstein, D., Hasher, L., and Kim, S. (in prep). Age differences in decision styles: maximizing, satisficing, and regret.
3. **Healey, M. K.**, Ngo, K. W. J., Zacks, R. T., Hasher, L., and Helder, E. (in prep). Working memory, long-term memory, and fluid intelligence: the role of interference control.
4. **Healey, M. K.**, Rowe, G., Stergiopoulos, E., Hasher, L., and Zacks, R. T. (in prep). Complex span does not correlate with fluid intelligence under free recall instructions.
5. Anderson, J. A. E., **Healey, M. K.**, Peterson, M. A., and Hasher, L. (in prep). An age-related deficit in the use of suppression during figure-ground perception.

### Conference Presentations

1. **Healey, M. K.** & Kahana, M. J (2014, May). A new approach to understanding age-related memory impairments. Data Blitz Talk at the Context and Episodic Memory Symposium, Philadelphia, PA, USA.
2. **Healey, M. K.** (2014, May). Commentary on: Long-term memory representations limit the capacity of free recall of unrelated words. Commentary at the Context and Episodic Memory Symposium, Philadelphia, PA, USA.
3. **Healey, M. K.** & Kahana, M. J (2014, April). A new approach to understanding age-related memory impairments. Paper presented at the Cognitive Aging Conference, Atlanta, GA, USA.
4. **Healey, M. K.**, Crutchley, P., & Kahana, M. J. (2013, November). Individual differences in memory search and their relation to intelligence. Poster presented at the 54<sup>th</sup> annual meeting of The Psychonomic Society, Toronto, ON, Canada.
5. **Healey, M. K.**, Ngo, K. W. J., & Hasher, L. (2013, November). Below baseline suppression of competitors during interference resolution by younger but not older adults. Poster presented at the 54<sup>th</sup> annual meeting of The Psychonomic Society, Toronto, ON, Canada.
6. **Healey, M. K.** & Kahana, M. J. (2013, May). Memory search is governed by universal principles—not idiosyncratic strategies. Data Blitz Talk at the Context and Episodic Memory Symposium, Philadelphia, PA, USA.

7. **Healey, M. K.** (2013, May). Commentary on: Why do participants initiate their immediate free recall of short lists of words with the first list item?. Commentary at the Context and Episodic Memory Symposium, Philadelphia, PA, USA.
8. Crutchley, P., **Healey, M. K.**, & Kahana, M. J. (2013, May). Individual differences in memory search and their relation to intelligence. Poster presented at the Context and Episodic Memory Symposium, Philadelphia, PA, USA.
9. Crutchley, P., **Healey, M. K.**, & Kahana, M. J. (2012, July). Individual differences in free recall and intelligence. Poster presented at the 45<sup>th</sup> Annual Meeting of the Society for Mathematical Psychology, Columbus, OH, USA.
10. **Healey, M. K.**, Lohanas, L. J., & Kahana, M. J. (2012, May). Understanding age related memory impairments: New data and a model-based approach to theory development. Poster presented at the Context and Episodic Memory Symposium, Bloomington, IN, USA.
11. **Healey, M. K.**, Lohanas, L. J., & Kahana, M. J. (2012, April). Understanding age related memory impairments: New data and a model-based approach to theory development. Poster presented at the Cognitive Aging Conference, Atlanta, GA, USA.
12. **Healey, M. K.**, Ngo, K. W. J., & Hasher, L. (2012, April). Semantic interference resolution in memory. Poster presented at the Cognitive Aging Conference, Atlanta, GA, USA.
13. Campbell, K., Zimmerman, S., **Healey, M. K.**, Lee, M. M. S., & Hasher, L. (2012, April). Age differences in visual statistical learning. Poster presented at the Cognitive Aging Conference, Atlanta, GA, USA.
14. **Healey, M. K.**, Lohanas, L. J., & Kahana, M. J. (2011, July). Extending the context Maintenance and Retrieval model to understand age related memory impairments. Poster presented at the 44<sup>th</sup> Annual Meeting of the Society for Mathematical Psychology, Medford, MA, USA.
15. **Healey, M. K.** (2011, May). Commentary on: The processes and process dissociations of recognition memory. Commentary at the Context and Episodic Memory Symposium, Philadelphia, PA, USA.
16. **Healey, M. K.**, Ngo, K. W. J., & Hasher, L., (2011, May). Below baseline suppression of competitors in semantic interference resolution. Poster presented at the Context and Episodic Memory Symposium, Philadelphia, PA, USA.
17. **Healey, M. K.**, Campbell, K. L., Hasher, L., & Osher, L. (2010, November). The role of inhibition in interference resolution: Evidence of an age related deficit. Poster presented at the 51<sup>st</sup> annual meeting of The Psychonomic Society, St. Louis, MO, USA.
18. **Healey, M. K.**, Campbell, K. L., Hasher, L., & Osher, L. (2010, May). The role of inhibition in interference resolution: Evidence of an age related deficit. Poster presented at the Context and Episodic Memory Symposium, Philadelphia, PA, USA.
19. **Healey, M. K.**, Campbell, K. L., Hasher, L., & Osher, L. (2009, November). Direct evidence for the role of inhibition in resolving interference. Poster presented at the 50<sup>th</sup> annual meeting of The Psychonomic Society, Boston, MA, USA.
20. **Healey, M. K.**, Campbell, K. L., Hasher, L., & Osher, L. (2009, August). Direct evidence for the role of inhibition in resolving interference. Poster presented at the 2009 APA Annual Convention, Toronto, ON, Canada.
21. **Healey, M. K.**, Hasher, L., Danilova, E., & Zacks, R. T. (2008, November). Determinants of working memory span: The effect of consecutive cognitive tasks. Poster presented at the 49<sup>th</sup> annual meeting of The Psychonomic Society, Chicago, IL, USA.
22. Harada, E. T., Mori, K., **Healey, M. K.**, Suto, S., & Goldstein, D. (2008, July). Does the maximizer-satisficer distinction explain why older adults do not want new artifacts? Paper presented at the International Congress of Psychology 2008, Berlin, Germany.

23. **Healey, M. K.**, Goldstein, D., Hasher, L., & Kim, S. (2008, April). Age differences in maximizing and satisficing: Older adults tend toward satisficing and experience less regret. Poster presented at the Cognitive Aging Conference, Atlanta, GA, USA.
24. **Healey, M. K.**, Kim, S., Long, L., Goldstein, D., & Hasher, L. (2008, April). Evidence of preserved conscious and non-conscious decision making processes in older adults. Poster presented at the Cognitive Aging Conference, Atlanta, GA, USA.
25. Hasher, L., **Healey, M. K.**, & Campbell, K. L. (2007, October). Aging and susceptibility to distraction. Paper presented at the Aging and Speech Communication Conference, Indiana University, Bloomington, IN, USA.
26. **Healey, M. K.**, Kim, S., Hasher, L., & Goldstein, D. (2006, November). Distinction bias among older adults: Does the relationship between joint and separate evaluation change with age?. Poster presented at the 47<sup>th</sup> annual meeting of the Society for Judgment and Decision Making, Houston, TX, USA.
27. Kim, S., Goldstein, D., Hasher, L., Wiprzycka, U. J., Tomas, S., & **Healey, M. K.** (2006, May). Age differences in decision satisfaction. Poster presented at the Southern Ontario Behavioural Decision Research Conference, Toronto, ON, Canada.
28. Kim, S., Goldstein, D., Hasher, L., Wiprzycka, U. J., Tomas, S., & **Healey, M. K.** (2006, April). Age differences in decision satisfaction. Poster presented at the Cognitive Aging Conference, Atlanta, GA, USA.
29. **Healey, M. K.** & Miyake, A. (2005, November). The role of attention during retrieval in working memory span: A dual-task study. Poster presented at the 46<sup>th</sup> annual meeting of The Psychonomic Society, Toronto, ON, Canada.
30. Anderson, R. E., **Healey, M. K.**, Arlett, C., & OKeefe, C. M. (2003, November). Occurrence and consequences of AHA events in mental synthesis. Paper presented at the 44<sup>th</sup> annual meeting of The Psychonomic Society, Vancouver, BC, Canada.
31. Anderson, R. E., Arlett, C., **Healey, M. K.**, & OKeefe, C. M. (2003, April). Are there consequences of an AHA event in mental synthesis? Paper presented at the 8<sup>th</sup> European Workshop on Imagery and Cognition, Pavia, Italy.
32. **Healey, M. K.** (2003). Aha events in mental synthesis: Consequences for memory. Paper presented at the 27<sup>th</sup> annual Atlantic Provinces Council on the Sciences Student Psychology Conference, St. Johns, NL, Canada.

## Departmental Talks

1. **Healey, M. K.** (2013, November). The nature and sources of individual and age differences in episodic memory. Paper presented at Ebbinghaus Empire (departmental talk series), Toronto, ON, Canada.
2. **Healey, M. K.**, Crutchley, P., & Kahana, M. J. (2012, April). Variability in Free Recall Effects. Paper presented at Cognitive Tea (departmental talk series), Philadelphia, PA, USA.
3. **Healey, M. K.** & Kahana, M. J. (2011, February). Understanding Age Related Memory Impairments: Using Computational Models to Test Verbal Theories. Paper presented at Cognitive Tea (departmental talk series), Philadelphia, PA, USA.
4. **Healey, M. K.**, Campbell, K. L., Hasher, L., & Osher, L. (2009, November). Direct evidence for the role of inhibition in resolving interference. Paper presented at Ebbinghaus Empire (departmental talk series), Toronto, ON, Canada.
5. **Healey, M. K.**, Campbell, K. L., Hasher, L., & Osher, L. (2009, November). Direct evidence for the role of inhibition in resolving interference. Paper presented at the Rotman Research Institute, Toronto, ON, Canada.

6. **Healey, M. K.**, Danilova, E., & Hasher, L. (2008, March). Intra-individual differences in working memory span: The cumulative effect of consecutive cognitive tasks. Paper presented at Ebbinghaus Empire (departmental talk series), Toronto, ON, Canada.
7. **Healey, M. K.**, Goldstein, D., Hasher, L., & Kim, S. (2007, September). Maximizing is for kids: Older adults tend toward satisficing and experience less regret. Paper presented at Ebbinghaus Empire Data Blitz (departmental talk series), Toronto, ON, Canada.
8. **Healey, M. K.**, Kim, S., Goldstein, D., Hasher, L., & Wiprzycka, U. J. (2007, January). Age differences in choice satisfaction. Paper presented at Ebbinghaus Empire Data Blitz (departmental talk series), Toronto, ON, Canada.
9. **Healey, M. K.**, Kim, S., Hasher, L., & Goldstein, D. (2006, September). Distinction bias among older adults: Does the relationship between joint and separate evaluation change with age?. Paper presented at Ebbinghaus Empire Data Blitz (departmental talk series), Toronto, ON, Canada.
10. **Healey, M. K.** & Miyake, A. (2005, September). The role of attention during retrieval in working memory span: A dual-task stud. Paper presented at Ebbinghaus Empire Data Blitz (departmental talk series), Toronto, ON, Canada.

## References

### **Lynn Hasher**

Professor  
Department of Psychology  
University of Toronto  
hasher@psych.utoronto.ca

### **Michael J Kahana**

Professor  
Department of Psychology  
University of Pennsylvania  
kahana@psych.upenn.edu

### **Rose T Zacks**

Professor Emerita  
Department of Psychology  
Michigan State University  
zacksr@msu.edu