Benjamin D. Katz | Curriculum Vitae

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Education

Ph.D. in Education and Psychology — University of Michigan, Ann Arbor

Expected 2017

Dissertation: "The Effects of Individual Differences and Motivation on Cognitive Training"

Committee: John Jonides, Pam Davis-Kean, Fred Morrison, Priti Shah (Chair)

M.S. in Psychology - University of Michigan, Ann Arbor

2015

B.A. in Psychology and Film Studies — Columbia College, Columbia University

2006

Journal Articles

Katz, B.a, Au, J.a, Buschkuehl, M., Abagis, T., Zabel, C., Jaeggi, S. M., & Jonides, J. (in press). Individual differences and long-term consequences of tDCS-augmented cognitive training. *Journal of Cognitive Neuroscience*.

Rhodes, R., & Katz, B. (in press). Working memory plasticity and aging. Psychology and Aging.

Jantz, T., Katz, B., & Reuter-Lorenz, P. (2016). Uncertainty and promise: The effects of transcranial direct current stimulation on working memory. *Current Behavioral Neuroscience Reports*, 3(2), 109-121.

Au, J.a, Katz, B.a, Buschkuehl, M., Kimberly, B., Senger, T., Zabel, C., Jaeggi, S. M., & Jonides, J. (2016). Enhancing working memory training with transcranial direct current stimulation. *Journal of Cognitive Neuroscience*, 28(9), 1419-1432.

Katz, B., Jaeggi, S., Buschkuehl, M., Stegman, A., & Shah, P. (2014). Differential effect of motivational features on training improvements in school-based cognitive training. *Frontiers in Human Neuroscience*, 10.

Wang, Z.^a, **Katz**, **B.**^a, & Shah, P. (2014). New directions in intelligence research: Avoiding the mistakes of the past. *Journal of Intelligence*, 2(1), 16-20.

Sternberg, D. A., Ballard, K., Hardy, J. L., **Katz, B.**, Doraiswamy, P. M., & Scanlon, M. (2013). The largest human cognitive performance dataset reveals insights into the effects of lifestyle factors and aging. *Frontiers in Human Neuroscience*, 7.

Book Chapters & Letters

Katz, B., Jones, M., & Shah, P., Buschkuehl, M., Jaeggi, S. M. (in press). Individual differences and motivational effects in cognitive training research. In *Cognitive Training: An Overview of Features and Applications*. Berlin, Germany: Springer.

Katz, B. & Shah, P. (in press). Logical and methodological considerations in cognitive training research. In *The Oxford Handbook of Cognitive Training*. Oxford, UK: Oxford University Press.

Katz, B., & Shah, P. (2016). The jury is still out on working memory training. *Journal of the American Medical Association: Pediatrics.* Advance online publication.

In Submission & Revision

Katz, B., & Shah, P. The role of child socioeconomic status in cognitive training outcomes. *In revision, The Journal of Applied Developmental Psychology*.

Katz, B., Shah, P., & Meyer, D. How to play 20 questions with nature and lose: reflections on 100 years of brain training. *In submission*.

Moser, J., Dougherty, A., Mattson, W., Katz, B., Moran, T., Guevarra, D., Shablack, H., Ayduk, O., Jonides, J., Berman, M., & Kross, E. Third-person self-talk facilitates emotional control without engaging cognitive control: Converging evidence from ERP and fMRI. *In submission*.

Katz, B., Jaeggi, S., Buschkuehl, M., Shah, P., & Jonides, J. The effect of monetary compensation on cognitive training. *In submission*.

Conference Presentations

- **Katz, B.** Training working memory with concurrent tDCS. In F.J. Morrison (chair) *Neuroscience and Development of Executive Function*. Symposium conducted at the meeting of the International Mind, Brain, and Education Society, 2016 Sep 15-17; Toronto, ON.
- Katz, B., & Shah, P. Socioeconomic status and cognitive plasticity in adolescents. Poster session presented at American Association of Education Research Conference, 2016, April 8-12; Washington D.C.
- Ibrahim, A., Katz, B., Grammer, J., Davis-Kean, P., & Morrison, F. Executive function and numerical abilities. Poster session presented at Cognitive Development Society Annual Meeting, 2015, October 9-10; Columbus, OH.
- Ahmed, S., Katz, B., Waters, N., Stillwell, S., Grammer, J., & Morrison, F. Classroom-based measures of executive function predict academic achievement in young children. Poster session presented at Cognitive Development Society Annual Meeting, 2015, October 9-10; Columbus, OH.
- Katz, B., & Shah, P. The role of school-level socioeconomic status in cognitive plasticity following executive function training in adolescents. Poster session presented at Division E Business Meeting of American Association of Education Research Conference; 2015, April 16-20; Chicago, IL.
- Katz, B., Park, I., Jantz, T., Brink, K., & Shah, P. The influence of childhood activities on adult executive function and thinking dispositions. Poster session presented at Society for Research in Child Development Biennial Meeting; 2015 Mar 19-21; Philadelphia, PA.
- Rhodes, R., & Katz, B. Effects of spacing and individual differences on learning a working memory task. Poster session presented at: Association for Psychological Science Annual Convention; 2014 May 22-25; San Francisco, CA.
- Katz, B., Jaeggi, S., Buschkuehl, M., Shah, P., & Jonides, J. The effect of compensation on transfer following dual n-back training. Poster session presented at: Psychonomic Society Annual Meeting; 2013 Nov 14-17; Toronto, ON.
- Ng, N., Sternberg, D., Katz, B., & Hardy, J. L. Improving cognitive capacities in school-aged children: A large, multi-site implementation of a web-based cognitive training program in academic settings. Poster session presented at: Second Annual Meeting of the Entertainment Software and Cognitive Neurotherapeutics Society; 2013 Mar 15-17; Los Angeles, CA.
- Katz, B., & Shah, P. Socioeconomic status as a moderator of improvements in executive function following cognitive training in adolescents. Poster session presented at: Determinants of Executive Function and Dysfunction Conference; 2013 Jan 17-18th; Boulder, CO.
- Sternberg, D. A, Hardy, J. L, **Katz, B.**, Ballard, K., & Scanlon, M. The brain performance test: Preliminary findings of transfer from cognitive training to a repeatable, dynamically generated online assessment. Poster session presented at: Society for Neuroscience; 2012 Oct 13-17; New Orleans, LA.
- Hardy, J. L., Sternberg, D. A., Ballard, K., **Katz, B.,** & Scanlon, M. Relationships between lifestyle factors and cognitive performance, an online study including >160,000 participants. Poster session presented at: Society for Neuroscience; 2012 Oct 13-17; New Orleans, LA.
- Ballard, K., Katz, B., & Scanlon, M. Rates of age-related cognitive decline and training improvement depend on task modality: baseline and training effects across the lifespan in a sample of over 20,000 individuals training in four distinct cognitive domains. Poster session presented at: Cognitive Neuroscience Society Annual Meeting; 2012 Mar 31-Apr 3; Chicago, IL.
- Katz, B., Tieming, J., Hardy, J. L, & Scanlon, M. The influence of age and education on cognitive plasticity in a worldwide sample of 88,000 individuals. Poster session presented at: First Annual Meeting of the Entertainment Software and Cognitive Neurotherapeutics Society; 2011 Sep 19-20; San Francisco, CA.
- Tieming, J., Hardy, J. L., Katz, B., & Scanlon, M. Model successfully predicts relative degree of transfer of cognitive training under natural use conditions for a web-based training program. Poster session presented at: First Annual Meeting of the Entertainment Software and Cognitive Neurotherapeutics Society; 2011 Sep 19-20; San Francisco, CA.
- Katz, B., Hardy, J. L., & Scanlon, M. Improvements in arithmetic abilities between the ages of 15 and 17 in a worldwide sample of over 440,000 adolescents and young adults playing an online game. Poster session presented at: Learning and the Brain; 2011 Feb 17-19; San Francisco, CA.

Awards & Fellowships

Pat Gurin Distinguished Lecture	2016
Rackham Predoctoral Fellowship	2016
Rackham Outstanding Graduate Student Instructor Award	2016
Psychology Outstanding Graduate Student Instructor Award	2016
Rackham Distinguished Faculty & Graduate Student Seminar Grant	2015
National Science Foundation GRFP Honorable Mention	2013, 2014
Outstanding Poster Award, Determinants of Executive Function & Dysfunction Conference	2013
International Max Planck Research School on the Life Course (Michigan Fellow)	2013-2016
University of Michigan Rackham Regent's Fellowship	2012-2015
Dean's List, Columbia University	2004-2006

Teaching Experience

Educational Psychology and Human Development — University of Michigan, Ann Arbor	2015
Average teaching evaluation (instructor rating as lead instructor, 5-point scale): 4.75	
Independently taught undergraduate course for pre-service math, science, and music teachers	

Introduction to Cognitive Psychology — University of Michigan, Ann Arbor	2015
Average teaching evaluation (instructor rating, 3 section average, 5-point scale): 5.00	
Led three discussion sections of introductory course with substantial writing component	

Introduction to Cognitive Psychology — University of Michigan, Ann Arbor	2014
Average teaching evaluation (instructor rating, 3 section average, 5-point scale): 4.76	

Patents

Hinman, T., Katz, B., Hardy, J.L., Drescher D. Systems and methods for enhancing cognition. U.S. Patent No. US8821242 B2 Granted (September 2nd, 2014)

Hinman, T., **Katz, B.**, Hardy, J.L. Systems and methods for assessment of fluid intelligence. U.S. Patent Application No. 61/653,060, Application (December 5th, 2013)

Related Work Experience

Product Manager and Game Designer — Lumos Labs, Inc. (Lumosity.com), San Francisco, CA	2009-2012
Lead Game Designer — Enspire Learning, Inc., Austin, TX	2006-2009
Student Assistant — Columbia Law School Dept of Educational Technology, New York, NY	2002-2006

Organized Conferences and Symposia

Led three discussion sections of introductory course in cognitive psychology

Neuroscience and Development of Executive Function — IMBES Conference, Toronto, ON	2016
University of Michigan Symposium on Improving Intelligence & Reasoning — Ann Arbor, MI	2015

Service

Reviewer, Psychological Science	2016
Reviewer, Journal of Clinical Child and Adolescent Psychology	2016
Reviewer, Journal of Cognitive Neuroscience	2016
Reviewer, AERA Open	2016
Combined Program in Education and Psychology Admissions Committee	2015
Reviewer, Frontiers in Psychology	2015
Reviewer, Neuropsychologia	2015
Reviewer, Journal of Experimental Education	2015
Reviewer, Psychology & Aging	2015
Reviewer, Cerebral Cortex	2014
Reviewer, Perspectives on Psychological Science	2014
Reviewer, Psychological Bulletin	2014
Reviewer, Journal of Experimental Psychology, General	2014
Reviewer, Journal of Educational Psychology	2013
Reviewer, Journal of Experimental Psychology: Applied	2013
Combined Program in Education and Psychology Colloquium Committee	2012-2016

Mentoring

Sitao Chen, Honor's Thesis, "Executive Functioning and Childhood Activities"
Sheebani Talati, Honor's Thesis, "Offline vs. Online tDCS with Working Memory Training"

Professional Affiliations

Psychonomic Society

AERA Division C (Learning & Instruction)

APA Division 15 (Educational Psychology)

Society for Research in Child Development

International Mind, Brain, and Education Society

Society for Neuroscience

Cognitive Neuroscience Society