

## Elizabeth A. Gunderson

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### Education

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- 2012                      Ph.D., Developmental Psychology  
                                 University of Chicago
- 2005                      B.A., Computer Science & Psychology  
                                 Yale University  
                                 *magna cum laude, Phi Beta Kappa*

### Academic Appointments

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- 2013-present            Assistant Professor  
                                 Department of Psychology  
                                 Temple University
- 2012                      Postdoctoral Scholar  
                                 Department of Psychology  
                                 University of Chicago

### Grants & Fellowships

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- 2007-2012                Institute for Education Sciences (IES) Pre-Doctoral Fellowship in  
                                 Educational Research
- 2011                      Norman H. Anderson Research Fund
- 2003                      Yale College Dean's Research Fellowship

### Awards & Honors

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- 2012                      Institute for Education Sciences (IES) Outstanding Pre-Doctoral  
                                 Fellowship Award

### Publications

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- Gunderson, E. A., Gripshover, S. J., Romero, C., Dweck, C. S., Goldin-Meadow, S., & Levine, S. C. (2013). Parent praise to 1- to 3-year-olds predicts children's motivational frameworks 5 years later. *Child Development, 84*(5), 1526-1541. doi: 10.1111/cdev.12064
- Gunderson, E. A., Ramirez, G., Beilock, S. L., & Levine, S. C. (2013). Teachers' spatial anxiety relates to 1st- and 2nd-graders' spatial learning. *Mind, Brain, and Education, 7*(3), 196-199. doi: 10.1111/mbe.12027

- Ramirez, G., Gunderson, E. A., Levine, S. C., & Beilock, S. L. (2013). Math anxiety, working memory, and math achievement in early elementary school. *Journal of Cognition and Development, 14*(2), 187-202. doi: 10.1080/15248372.2012.664593
- Gunderson, E. A., Ramirez, G., Beilock, S. L., & Levine, S. C. (2012). The relation between spatial skill and early number knowledge: The role of the linear number line. *Developmental Psychology, 48*(5), 1229-1241. doi: 10.1037/a0027433
- Gunderson, E. A., Ramirez, G., Levine, S. C., & Beilock, S. L. (2012). New directions for research on the role of parents and teachers in the development of gender-related math attitudes: Response to commentaries. *Sex Roles, 66*(3), 191-196. doi: 10.1007/s11199-011-0100-8
- Gunderson, E. A., Ramirez, G., Levine, S. C., & Beilock, S. L. (2012). The role of parents and teachers in the development of gender-related math attitudes. *Sex Roles, 66*(3), 153-166. doi: 10.1007/s11199-011-9996-2
- Ramirez, G., Gunderson, E. A., Levine, S. C., & Beilock, S. L. (2012). Spatial anxiety relates to spatial abilities as a function of working memory in children. *The Quarterly Journal of Experimental Psychology, 65*(3), 474-487. doi: 10.1080/17470218.2011.616214
- Gunderson, E. A., & Levine, S. C. (2011). Some types of parent number talk count more than others: Relations between parents' input and children's number knowledge. *Developmental Science, 14*(5), 1021-1032. doi: 10.1111/j.1467-7687.2011.01050.x
- Levine, S. C., Gunderson, E. A., & Huttenlocher, J. (2011). Number development in context: Variations in home and school input during the preschool years. In N. L. Stein & S. W. Raudenbush (Eds.), *Developmental Cognitive Science Goes to School* (pp. 189-202). New York: Taylor and Francis.
- Beilock, S. L., Gunderson, E. A., Ramirez, G., & Levine, S. C. (2010). Reply to Plante et al.: Girls' math achievement is related to their female teachers' math anxiety. *Proceedings of the National Academy of Sciences, 107*(20), E80. doi: 10.1073/pnas.1003899107
- Beilock, S. L., Gunderson, E. A., Ramirez, G., & Levine, S. C. (2010). Female teachers' math anxiety affects girls' math achievement. *Proceedings of the National Academy of Sciences, 107*(5), 1860-1863. doi: 10.1073/pnas.0910967107
- Levine, S. C., Suriyakham, L. W., Rowe, M. L., Huttenlocher, J., & Gunderson, E. A. (2010). What counts in the development of young children's number knowledge? *Developmental Psychology, 46*(5), 1309-1319. doi: 10.1037/a0019671

### **Manuscripts Under Review and in Preparation**

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- Gunderson, E.A., Spaepen, E., & Levine, S.C. (under review). Approximate number word knowledge before the cardinal principle.
- Gunderson, E. A, Spaepen, E., Gibson, D., Goldin-Meadow, S., & Levine, S.C. (in prep). Gesture as a window into children's understanding of cardinal number

Park, D., Gunderson, E. A., Owens, W. L., Hussak, L. J., Levine, S. C., & Beilock, S. L. (under review). Wish me success, but in the right way: The impact of success expectations varies by attribution and target.

### **Invited Talks**

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Current Work in Developmental Psychology Seminar, Yale University, October 2013.

Institute of Education Sciences Principal Investigators Meeting, September 2013.

Developmental Seminar, University of Illinois at Urbana-Champaign, November 2011.

Harvard Achievement Gap Initiative (AGI) Research-to-Practice Conference, Harvard University, June 2011.

Workshop on Education, University of Chicago, April 2011.

Developmental Psychology Seminar, University of Chicago, February 2011.

Spatial Intelligence and Learning Center Research Seminar, Temple University, February 2011.

Spatial Intelligence and Learning Center Research Seminar, Northwestern University, February 2011.

Comparative Human Development Workshop on Culture, University of Chicago, February 2011.

Research Seminar, Stanford University, May 2010.

Developmental Psychology Seminar, Stanford University, May 2010.

Workshop on Education, University of Chicago, January 2010.

Developmental Psychology Seminar, University of Chicago, November 2009.

### **Conference Presentations**

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Gunderson, E. A., Spaepen, E., Gianesin, C., Norton, E., Goldin-Meadow, S., & Levine, S. C. (April 2013). Input effects on successor function understanding: An experimental training study. Talk presented at the Society for Research on Child Development Biennial Meeting, Seattle, WA.

Gunderson, E. A., Ping, R., Ramirez, G., Bradley, C., Beilock, S. L., & Levine, S. C. (May 2012). Teacher spatial anxiety: Consequences and relief. Talk presented at the Association for Psychological Science Annual Convention, Chicago, IL.

Owens, W. L., Schaeffer, M., Park, D., Gunderson, E. A., Levine, S. C., & Beilock, S. L. (May 2012). Children's domain-specific theories of intelligence relate to domain-specific academic anxieties. Poster presented at the Association for Psychological Science Annual Convention, Chicago, IL.

- Liu, L., Ramirez, G., Gunderson, E. A., Levine, S. C., & Beilock, S. L. (May 2012). Spatial ability relates to mathematics: But only among students with high working memory. Poster presented at the Association for Psychological Science Annual Convention, Chicago, IL.
- Park, D., Gunderson, E., Owens, W.L., Levine, S. C., & Beilock, S. L. (October 2011). Wish me success, but in the right way: The impact of success expectations varies by type and target. Poster presented at the Cognitive Development Society's Biennial Meeting, Philadelphia, PA.
- Ping, R. M., Bradley, C., Gunderson, E. A., Ramirez, G., Beilock, S. L., & Levine, S. C. (July 2011). Alleviating anxiety about spatial ability in elementary school teachers. Paper presented at the Annual Meeting of the Cognitive Science Society, Boston, MA.
- Gunderson, E. A., Gripshover, S., Romero, C., Dweck, C. S., Goldin-Meadow, S., & Levine, S. C. (March 2011). Naturalistic variation in parents' praise and the formation of children's theories about trait stability. Talk presented at the Biennial Meeting of the Society for Research on Child Development, Montreal, Canada.
- Gunderson, E. A., & Levine, S. C. (March 2011). The relation between young children's spatial skill and math knowledge. Poster presented at the Biennial Meeting of the Society for Research on Child Development, Montreal, Canada.
- Gunderson, E. A., Gripshover, S., Romero, C., Levine, S. C., & Dweck, C. S. (January 2011). The impact of naturalistic parental praise on children's stability beliefs. Poster presented at the 12<sup>th</sup> Annual Meeting of the Society for Personality and Social Psychology, San Antonio, Texas.
- Gunderson, E. A., & Levine, S. C. (July 2010). The relation between young children's mental rotation skill and math knowledge. Poster presented at the Annual Spatial Intelligence and Learning Center (SILC) Site Visit, Philadelphia, Pennsylvania.
- Gunderson, E. A., Ramirez, G., Levine, S. C., & Beilock, S. L. (May 2010). Developing math and spatial skills: The impact of students' and teachers' anxieties on student learning. Talk presented at the Third Annual inter-Science of Learning Center (iSLC) Conference, Boston, Massachusetts.
- Gunderson, E. A., Ramirez, G., Beilock, S. L., & Levine, S. C. (April 2010). "No Child Left Behind" *if* teachers are high in math knowledge. Talk presented at the Midwest Psychological Association Annual Meeting, Chicago, Illinois.
- Gunderson, E. A., Gripshover, S., Romero, C., & Levine, S. C. (April 2010). Naturalistic variation in parents' praise: Implications for children's theories about the stability of traits. Talk presented at the First Annual Chicago Psychology Graduate Student Research Symposium, Chicago, Illinois.
- Ramirez, G., Gunderson, E. A., Levine, S. C., & Beilock, S. L. (April 2010). The influence of math anxiety on young children's math achievement. Talk presented at the Midwest Psychological Association Annual Meeting, Chicago, Illinois.

Ramirez, G., Gunderson, E. A., Beilock, S.L. & Levine, S. (November 2009). Spatial ability, spatial anxiety, and working memory in early elementary school. Poster presented at the Science of Learning Centers Principal Investigators meeting, Washington, D.C.

Gunderson, E. A. & Levine, S. C. (October 2009). Some types of parent number talk count more than others. Poster presented at the Sixth Biennial Meeting of the Cognitive Development Society, San Antonio, Texas.

Gunderson, E. A., Ramirez, G., Levine, S. C., & Beilock, S. L. (June 2009). Early gender differences in math and spatial anxiety. Poster presented at the Annual Meeting of the Institute for Education Sciences, Washington, D.C.

Gunderson, E. A. & Levine, S. C. (April 2009). SES-related variations in early parent number input. Poster presented at the Society for Research in Child Development (SRCD) Biennial Meeting, Denver, Colorado.

Levine, S. C., Huttenlocher, J., Gunderson, E. A., Rowe, M. L., & Pruden, S. (April 2009). Preschoolers' number and spatial knowledge: Relation to early parent-child interactions. Symposium presented at the Society for Research in Child Development (SRCD) Biennial Meeting, Denver, Colorado.

Ramirez, G., Gunderson, E. A., Beilock, S. L. & Levine, S. C. (April 2009). Spatial anxiety affects spatial and math ability. Poster presented at the Spatial Intelligence and Learning Center Meeting, Philadelphia, Pennsylvania.

Gunderson, E. A. & Levine, S. C. (February 2009). Early parent number talk: Variations and relations to number development. Poster presented at the Second Annual Inter-Science of Learning Center (iSLC) Conference, Seattle, Washington.

Ramirez, G., Gunderson, E., Levine, S. C., & Beilock, S. L. (June 2008). Learning math and spatial skills: Working memory, performance stereotypes, and anxiety. Poster presented at the Annual Meeting of the Institute for Education Sciences, Washington, D.C.

Gunderson, E., Ramirez, G., Levine, S. C., & Beilock, S. L. (February 2008). Learning math and spatial skills: Working memory, performance stereotypes, and anxiety. Poster presented at the First Annual Inter - Science of Learning Center (iSLC) Conference, Pittsburgh, Pennsylvania.

## **Teaching Experience**

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Mathematical Cognition & Development, Temple University (2013)

Teaching Assistant, Intro to Developmental Psychology, University of Chicago (2009, 2011)

Teaching Assistant, Intro to Language Development, University of Chicago (2010, 2011)

## **Positions Held**

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Consultant, Oliver Wyman, 2005-2007

Research Assistant, Yale University Social Robotics Lab, 2004-2005

Research Assistant, Yale University Primate Cognition Lab, 2003

## **Professional Affiliations**

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Association for Psychological Science  
Society for Research in Child Development  
Cognitive Development Society

## **Professional Service**

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Ad-hoc reviewer, *Child Development Research, Cognition, Cognitive Psychology, Cognitive Science, Contemporary Educational Psychology, Developmental Psychology, Educational Psychology, Journal of Abnormal Child Psychology, Journal of Experimental Child Psychology, Journal of Cognition and Development, Psychological Science and Sex Roles*

Conference reviewer, Society for Research on Child Development Biennial Meeting (2012)  
Conference reviewer, Third Annual inter-Science of Learning Center (iSLC) Conference (2010)  
Registration volunteer, Sixth Biennial Meeting of the Cognitive Development Society (2009)

## **University Service**

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- Member, Undergraduate Committee, Temple University (2013)
- Student/Post-Doc Site Representative for the University of Chicago, Spatial Intelligence and Learning Center (SILC) (2010-2011)
- Member, Professional Development Committee, University of Chicago Psychology Graduate Student Organization (2010-2011)
- Graduate student representative, University of Chicago Psychology Department Curriculum Committee (2007-2008)

## **References**

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