

Elizabeth A. Gunderson, Ph.D.

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EDUCATION

Doctor of Philosophy, Developmental Psychology, University of Chicago 2012
Dissertation: *Individual differences in early number knowledge: Variation in the learner and the learning environment*

Bachelor of Arts, Computer Science & Psychology, Yale University 2005
Honors: *Magna Cum Laude*, Phi Beta Kappa

FACULTY POSITIONS

Assistant Professor (tenure track), Department of Psychology 2013-present
Temple University, Philadelphia, PA

RESEARCH POSITIONS

Postdoctoral Scholar, Department of Psychology, University of Chicago 2012
Chicago, IL, Laboratory of Dr. Susan Levine

Graduate Student, Department of Psychology, University of Chicago 2007-2012
Chicago, IL, Laboratory of Dr. Susan Levine

ONGOING GRANTS

James S. McDonnell Foundation Scholar Award, Sole PI: Gunderson 2018-2024
Developing Mathematical Skills and Motivation
Total Costs: \$600,000

NSF ECR, 1760144, PI: Gunderson 2018-2023
Co-Is: Hindman, Newcombe, Newton, Weinraub
Developing STEM Achievement and Motivation: The Role of Spatial Skills and Parent-Child Interactions
Total Costs: \$2,434,948

NSF CAREER Award, DRL-1452000, Sole PI: Gunderson 2015-2020
CAREER: Spatial Foundations of Symbolic Numeracy Skills in Young Children
Total Costs: \$1,227,559

RECOMMENDED GRANTS

NICHD, 1R01HD094762-01, PI: Gunderson Recommended (Aug. 2018)
Co-Is: Hindman, Newcombe, Weinraub
Developing Achievement and Motivation in Math and Spatial Skills: The Role of Parent-Child Interactions
Total Costs: \$2,681,935
Was recommended for funding. Declined due to scientific overlap with funded grant NSF ECR 1760144.

MENTEE GRANTS / FUNDING FOR MENTORED RESEARCH

National Study of Learning Mindsets Early Career Fellowship , PI: Sorhagen <i>Relations Between Motivation, Math Anxiety, and Math Achievement</i> Total Costs: \$8,000 Role: Collaborator	2018-2019
Creative Arts, Research and Scholarship (CARAS) Project Grant , Temple University Mentor: Gunderson, Undergraduate Student Mentee: Pepper (\$2,925) <i>Gender differences in parents' motivational praise during spatial activities</i>	2018
Creative Arts, Research and Scholarship (CARAS) Travel Award , Temple University Mentor: Gunderson, Undergraduate Student Mentee: Ham (\$1,000) <i>Poster presentation at the Cognitive Development Society (CDS) Conference</i>	2017
Liberal Arts Undergraduate Research Awards (LAURA) , Temple University Mentor: Gunderson, Undergraduate Student Mentee: Wrobel (\$2,000) <i>The importance of parent language and gesture for children's spatial reasoning</i>	2017
Diamond Research Scholars Program , Temple University Mentor: Gunderson, Undergraduate Student Mentee: Ham (\$4,000) <i>The influence of familiarity on children's proportional reasoning knowledge</i>	2017
Creative Arts, Research and Scholarship (CARAS) Travel Award , Temple University Mentor: Gunderson, Undergraduate Student Mentee: Wrobel (\$1,000) <i>Poster presentation at the Eastern Psychological Association (EPA) Conference</i>	2017
Creative Arts, Research and Scholarship (CARAS) Travel Award , Temple University Mentor: Gunderson, Undergraduate Student Mentee: Ham (\$994) <i>Poster presentation at the International Mind, Brain, and Education Society (IMBES)</i>	2016

AWARDS, HONORS, & FELLOWSHIPS

International Mind, Brain, and Education Society (IMBES) Early Career Award	2018
James S. McDonnell Foundation Scholar Award	2018
Excellence in Undergraduate Mentoring, Temple University Psychology Honors Program	2018
APS Rising Star Award	2015
APA Achievement Award for Early Career Psychologists	2014
Institute for Education Sciences (IES) Outstanding Pre-Doctoral Fellow Award	2012
Institute for Education Sciences (IES) Pre-Doctoral Fellowship	2007-2012
Norman H. Anderson Research Fund	2011
Yale College Dean's Research Fellowship	2003

PUBLICATIONS

(Mentee Roles: ^Post-doc, **Graduate Student, *Post-Bac, †Undergraduate Student)

Newcombe, N. S., Booth, J. L., & **Gunderson, E. A.** (in press). Spatial skills, reasoning, and mathematics. In J. Dunlosky & K. Rawson (Eds.), *Cambridge Handbook on Cognition and Education*.

§Spaepen, E., §**Gunderson, E. A.**, Gibson, D., Goldin-Meadow, S., & Levine, S. C. (2018). Meaning before order: Cardinal principle knowledge predicts improvement in

understanding the successor principle and exact ordering. *Cognition*, 180, 59-81.
doi:<https://doi.org/10.1016/j.cognition.2018.06.012>

§Both authors contributed equally.

- Gunderson, E. A.**, Donnellan, M. B., Robins, R. W., & Trzesniewski, K. H. (2018). The specificity of parenting effects: Differential relations of parent praise and criticism to children's theories of intelligence and learning goals. *Journal of Experimental Child Psychology*, 173, 116-135. doi: 10.1016/j.jecp.2018.03.015
- Gunderson, E. A.**, Sorhagen, N. S., Gripshover, S., Dweck, C., Goldin-Meadow, S., & Levine, S. C. (2018). Parent praise to toddlers predicts fourth grade academic achievement via children's incremental mindsets. *Developmental Psychology*, 54(3), 397-409. doi: 10.1037/dev0000444, 10.1037/dev0000444.supp (Supplemental)
- Gunderson, E. A.**, Park, D., Maloney, E. A., Beilock, S. L., & Levine, S. C. (2018). Reciprocal relations among motivational frameworks, math anxiety, and math achievement in early elementary school. *Journal of Cognition and Development*, 19(1), 21-46. doi: 10.1080/15248372.2017.1421538
- Gunderson, E. A.**, **Hamdan, N., Sorhagen, N. S., & *D'Esterre, A. P. (2017). Who needs innate ability to succeed in math and literacy? Academic-domain-specific theories of intelligence about peers versus adults. *Developmental Psychology*, 53(6), 1188-1205. doi: 10.1037/dev0000282
- **Hamdan, N., & **Gunderson, E. A.** (2017). The number line is a critical spatial-numerical representation: Evidence from a fraction intervention. *Developmental Psychology*, 53(3), 587-596. doi: 10.1037/dev0000252, 10.1037/dev0000252.supp (Supplemental)
- Park, D., **Gunderson, E. A.**, Tsukayama, E., Levine, S. C., & Beilock, S. L. (2016). Young children's motivational frameworks and math achievement: Relation to teacher-reported instructional practices, but not teacher theory of intelligence. *Journal of Educational Psychology*, 108(3), 300-313. doi: 10.1037/edu0000064
- Suskind, D. L., Leffel, K. R., Graf, E., Hernandez, M. W., **Gunderson, E. A.**, Sapolich, S. G., Suskind, E., Leininger, L., Goldin-Meadow, S., & Levine, S. C. (2016). A parent-directed language intervention for children of low socioeconomic status: a randomized controlled pilot study. *Journal of Child Language*, 43(02), 366-406. doi: 10.1017/S0305000915000033
- Gunderson, E. A.**, Spaepen, E., Gibson, D., Goldin-Meadow, S., & Levine, S.C. (2015). Gesture as a window onto children's number knowledge. *Cognition*, 144, 14-28. doi: <http://dx.doi.org/10.1016/j.cognition.2015.07.008>
- Gunderson, E.A.**, Spaepen, E., & Levine, S.C. (2015). Approximate number word knowledge before the cardinal principle. *Journal of Experimental Child Psychology*, 130, 35-55. doi: 10.1016/j.jecp.2014.09.008
- Maloney, E. A., Ramirez, G., **Gunderson, E. A.**, Levine, S. C., & Beilock, S. L. (2015). Intergenerational effects of parents' math anxiety on children's math achievement and anxiety. *Psychological Science*, 26(9):1480-1488. doi: 10.1177/0956797615592630

- 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 SUBMITTED FOR PUBLICATION

(Mentee Roles: [^]Post-doc, ^{**}Graduate Student, ^{*}Post-Bac, [†]Undergraduate Student)

Gibson, D. J., **Gunderson, E. A.**, & Levine, S. C. (under review). Causal effects of parent number talk on preschoolers' number knowledge.

Gibson, D. J., **Gunderson, E. A.**, Spaepen, E., Levine, S. C., & Goldin-Meadow, S. (under revised review). Number gestures predict learning of number words.

Gunderson, E. A. & Sorhagen, N. S. (under review). Math person, verbal person, or both? Entity theories of intelligence increase dimensional comparisons between math and verbal abilities.

Gunderson, E. A., ^{**}Hamdan, N., ^{*}Hildebrand, L., & ^{*}Bartek, V. (under review). Number line unidimensionality is a critical feature for promoting fraction magnitude concepts.

[†]Ham, L., & **Gunderson, E. A.** (under revision). Utilizing analogical reasoning to aid children's proportional reasoning understanding.

Ramirez, G., Fries, L., **Gunderson, E. A.**, Schaeffer, M., Maloney, E. A., Beilock, S. L., & Levine, S. C. (under revised review). Reading anxiety - An early affective impediment to children's success in reading.

^{§**}Ren, K., ^{§*}Lin, Y., & **Gunderson, E. A.** (under revision). The role of inhibitory control in strategy change: The case of linear measurement.
[§]*Both authors contributed equally.*

MANUSCRIPTS IN PREPARATION

^{*}Black, C., ^{*}Hildebrand, L., [^]Hallinen, N., & **Gunderson, E. A.** (in prep). High working memory hinders performance on an approximate symbolic calculation task.

^{*}Hildebrand, L., ^{*}Lin, Y., ^{*}Black, C., & **Gunderson, E. A.** (in prep). Spatial predictors of number line performance: A case for non-symbolic proportional reasoning.

^{**}Ren, K., & **Gunderson, E. A.** (in prep). Malleability of whole-number and fraction biases in decimal comparison.

INVITED TALKS

Campaign for Grade Level Reading (GLR) Week, Philadelphia, PA	July 2018
Character Lab Research Seminar, University of Pennsylvania	May 2017
Psychology Brownbag, Rutgers University-Camden	Mar. 2017
Keynote speaker, Southeastern-Massachusetts Quantitative Engagement & Literacy (SEQuEL) Conference, Bridgewater State University	Jan. 2017
Workshop on Education, University of Chicago	May 2016
Psychology Department Colloquium, Villanova University	Mar. 2016
"Space and Mathematics: What's the Connection?", University of Chicago	Nov. 2015
Center for Children, Relationships, and Culture Seminar Series, University of Maryland	Oct. 2015

“Good Job! The Profound Impact of Praise on Your Child”, TeenSHARP Parent Network	Oct. 2015
Grand Rounds, Department of Psychiatry, University of Vermont	May 2015
Current Work in Developmental Psychology Seminar, Yale University	Oct. 2013
Institute of Education Sciences Principal Investigators Meeting	Sep. 2013
Developmental Seminar, University of Illinois at Urbana-Champaign	Nov. 2011
Harvard Achievement Gap Initiative (AGI) Research-to-Practice Conference, Harvard University	Jun. 2011
Workshop on Education, University of Chicago	Apr. 2011
Developmental Psychology Seminar, University of Chicago	Feb. 2011
Spatial Intelligence and Learning Center Research Seminar, Temple University	Feb. 2011
Spatial Intelligence and Learning Center Research Seminar, Northwestern University	Feb. 2011
Comparative Human Development Workshop on Culture, University of Chicago	Feb. 2011
Research Seminar, Stanford University	May 2010
Developmental Psychology Seminar, Stanford University	May 2010
Workshop on Education, University of Chicago	Jan. 2010
Developmental Psychology Seminar, University of Chicago	Nov. 2009

CONFERENCE PRESENTATIONS (SINCE 2013)

(Mentee Roles: ^Post-doc, **Graduate Student, *Post-Bac, †Undergraduate Student)

*Bartek, V., Fuhs, M., & **Gunderson, E.A.** (March 2019). Flexible attention to numerical and spatial magnitudes in pre-K through first graders. Poster submitted for presentation at the Society for Research in Child Development (SRCD) Biennial Meeting, Baltimore, MD.

†Cannon, A., *Hildebrand, L., & **Gunderson, E.A.** (March 2019). Self-reported proportional reasoning strategies as predictors of performance. Poster submitted for presentation at the Society for Research in Child Development (SRCD) Biennial Meeting, Baltimore, MD.

Gunderson, E.A. (March 2019). Longitudinal relations among spatial and numerical skills in pre-k to fourth grades. Talk submitted for presentation at the Society for Research in Child Development (SRCD) Biennial Meeting, Baltimore, MD.

*Hildebrand, L. & **Gunderson, E.A.** (March 2019). Proportional reasoning as a spatial foundation of number line estimation. Poster submitted for presentation at the Society for Research in Child Development (SRCD) Biennial Meeting, Baltimore, MD.

*Hildebrand, L., Jirout, J., Newcombe, N. S., & **Gunderson, E.A.** (March 2019). The development of gender stereotypes about spatial, math, and reading domains. Talk submitted for presentation at the Society for Research in Child Development (SRCD) Biennial Meeting, Baltimore, MD.

†Pepper, S., **Ren, K., *Bartek, V., & **Gunderson, E.A.** (March 2019). Mothers’ and fathers’ motivational talk to first-graders: Praise, enjoyment, and high expectations. Poster

submitted for presentation at the Society for Research in Child Development (SRCD) Biennial Meeting, Baltimore, MD.

Ren, K. & **Gunderson, E.A. (March 2019). Malleability of whole-number and fraction biases in decimal comparison. Poster submitted for presentation at the Society for Research in Child Development (SRCD) Biennial Meeting, Baltimore, MD.

Ren, K., Newcombe, N. S., & **Gunderson, E.A. (March 2019). Parent praise during spatial tasks: Mothers, fathers, and longitudinal relations to math and spatial skills. Talk submitted for presentation at the Society for Research in Child Development (SRCD) Biennial Meeting, Baltimore, MD.

Gunderson, E. A. (April 2018). Number line uni-dimensionality is key to promoting fraction representations. Talk presented at the 1st Mathematical Cognition and Learning Society Conference, Oxford, UK.

Gunderson, E. A., Park, D., Maloney, E. A., Beilock, S. L., & Levine, S. C. (April 2018). Reciprocal relations among motivational frameworks, math anxiety, and math achievement in early elementary school. Talk presented at the 1st Mathematical Cognition and Learning Society Conference, Oxford, UK.

†Ham, L., & **Gunderson, E. A.** (March 2018). Utilizing analogical reasoning to aid children's proportional reasoning understanding. Poster presented at the 2018 Eastern Psychological Association Meeting, Philadelphia, PA.

Winner of Psi Chi Eastern Regional Research Award.

†Ham, L., ^Hallinen, N., & **Gunderson, E. A.** (October 2017). The influence of narrative context on children's proportional reasoning performance. Poster presented at the 2017 Cognitive Development Society Biennial Conference, Portland, OR.

Hamdan, N., *Bartek, V., *Hildebrand, L., & **Gunderson, E. A. (October 2017). The role of number line unidimensionality in young children's fraction magnitude learning. Poster presented at the 2017 Cognitive Development Society Biennial Conference, Portland, OR.

*Hildebrand, L., Jirout, J., Newcombe, N., & **Gunderson, E. A.** (October 2017). The development of gender stereotypes about spatial skills, reading, and general academic ability. Poster presented at the 2017 Cognitive Development Society Biennial Conference, Portland, OR.

*Lin, Y., **Ren, K., & **Gunderson, E. A.** (October 2017). Inhibitory control predicts improvement in elementary school students' measurement strategies. Poster presented at the 2017 Cognitive Development Society Biennial Conference, Portland, OR.

Ren, K., *Lin, Y., & **Gunderson, E. A. (October 2017). Inhibitory control and the development of fraction concepts: The role of the whole-number bias. Poster presented at the 2017 Cognitive Development Society Biennial Conference, Portland, OR.

*Hildebrand, L., Jirout, J., Newcombe, N., & **Gunderson, E. A.** (October 2017). The development of gender stereotypes about spatial skills, reading, and general academic

ability. Poster presented at the NSF ADVANCE/GSE Program Workshop, Washington, DC.

Gunderson, E. A. (September 2017). Young children's spatial skills and number line estimation. Roundtable talk presented at the NSF ECR PI Convening, Washington, DC.

*Black, C., ^Hallinen, H., & **Gunderson, E. A.** (April 2017). High working memory hinders initial performance on approximate symbolic calculation, but practice leads to a strategy shift. Poster presented at the Society for Research in Child Development (SRCD) Biennial Meeting, Austin, TX.

Hamdan, N., †Ham, L., ^Hallinen, H., & **Gunderson, E. A. (April 2017). The mediating role of linear measurement skill in the relation between mental transformation and number line estimation in young children. Poster presented at the Society for Research in Child Development (SRCD) Biennial Meeting, Austin, TX.

†Ham, L., *Hildebrand, L. & **Gunderson, E. A.** (March 2017). Number line performance predicts magnitude comparison fluency in young children. Poster presented at the Annual Meeting of the Eastern Psychological Association, Boston, MA.

*Hildebrand, L. & **Gunderson, E. A.** (March 2017). Spatial predictors of number line performance: A case for non-symbolic proportional reasoning. Talk presented at the Annual Meeting of the Eastern Psychological Association, Boston, MA.

†Wrobel, A., *Hildebrand, L., & **Gunderson, E.A.** (March 2017). ANS as a predictor of spatial and numerical skills. Poster presented at the Annual Meeting of the Eastern Psychological Association, Boston, MA.

Gunderson, E. A. (February 2017). Parents' impact on early math learning and motivation. Talk presented at the American Association for the Advancement of Science (AAAS) 2017 Annual Meeting, Boston, MA.

*Black, C., †Brandley, J., & **Gunderson, E. A.** (September 2016). More is not always better: High working memory hinders performance on an approximate symbolic calculation task. Poster presented at the 2016 International Mind, Brain, and Education Society (IMBES) Conference, Toronto, Ontario, CA.

Hamdan, N., †Ham, L., & **Gunderson, E. A. (September 2016). Linear measurement mediates the relation between mental transformation and number line estimation in young children. Poster presented at the 2016 International Mind, Brain, and Education Society (IMBES) Conference, Toronto, Ontario, CA.

*Hildebrand, L., †Wrobel, A., & **Gunderson, E. A.** (September 2016). Spatial predictors of number line performance: A case for non-symbolic proportional reasoning. Poster presented at the 2016 International Mind, Brain, and Education Society (IMBES) Conference, Toronto, Ontario, CA.

Winner of IMBES Best Poster Award.

*Lin, Y., †Brown, R. L., & **Gunderson, E. A.** (September 2016). Mental rotation and verbal confounding: Comparing the relations of different mental rotation tasks to early

arithmetic calculation. Poster presented at the 2016 International Mind, Brain, and Education Society (IMBES) Conference, Toronto, Ontario, CA.

Gunderson, E. A., *Hildebrand, L., *Black, C., *Lin, Y., & **Hamdan, N. (August 2016).

Development of gender differences in children's number line estimation, but not spatial skills. Poster presented at Spatial Cognition 2016, Philadelphia, PA.

Gunderson, E. A. (May 2016). Gender differences in children's number line estimation, but not spatial skills. Poster presented at the 2016 NSF ADVANCE/GSE Program Workshop, Baltimore, MD.

Gunderson, E. A. & **Hamdan, N. (October 2015). The number line as a critical spatial representation: Evidence from a fraction intervention. Talk presented at the *Development of Spatial Thinking* Preconference to the Biennial Meeting of the Cognitive Development Society, Columbus, OH.

†Femovich, M. R., †Gray, C. R., **Hamdan, N., *D'Esterre, A., & **Gunderson, E. A.** (October 2015). The role of gender in verbal versus spatial mental rotation strategies. Poster presented at the Biennial Meeting of the Cognitive Development Society, Columbus, OH.

†Gray, C. R., †Femovich, M. R., **Hamdan, N., *D'Esterre, A., & **Gunderson, E. A.** (October 2015). Developmental trajectory of fraction area model strategy use in second and third graders. Poster presented at the Biennial Meeting of the Cognitive Development Society, Columbus, OH.

Hamdan, N., *D'Esterre, A., †Femovich, M. R., †Gray, C. R., *Hildebrand, L., *Black, C., & **Gunderson, E. A. (October 2015). Fraction number line training leads to learning and transfer in early elementary students' fraction magnitude concepts. Poster presented at the Biennial Meeting of the Cognitive Development Society, Columbus, OH.

Hamdan, N., & **Gunderson, E. A. (June 2015). Math class apprehension mediates the relation between adolescents' implicit theories of intelligence and success expectations. Talk presented at the Cross-University Collaborative Mentoring Conference (CUCMC), Philadelphia, PA.

Gunderson, E. A., **Hamdan, N., & *D'Esterre, A. (March 2015). The development of academic motivation: Children's beliefs about the role of innate ability in math and literacy success. Poster presented at the 1st International Convention of Psychological Science, Amsterdam, The Netherlands.

*D'Esterre, A., **Hamdan, N., & **Gunderson, E. A.** (March 2015). "Not a math person": Development and consequences of domain-specific theories of intelligence. Poster presented at the Society for Research on Child Development Biennial Meeting, Philadelphia, PA.

Gibson, D., **Gunderson, E. A.**, & Levine, S. C. (March 2015). Number word learning: A parent-driven training study. Talk presented at the Society for Research on Child Development Biennial Meeting, Philadelphia, PA.

Gripshover, S., Sorhagen, N., **Gunderson, E. A.**, Dweck, C., Goldin-Meadow, S., & Levine, S. C. (March 2015). Parent praise in early childhood predicts fourth grade academic

achievement. Talk presented at the Society for Research on Child Development Biennial Meeting, Philadelphia, PA.

Gunderson, E.A., Jirout, J., & Newcombe, N. (March 2015). Improving spatial scaling in preschool: Effects of training and prior skill. Talk presented at the Society for Research on Child Development Biennial Meeting, Philadelphia, PA.

Gunderson, E. A., Spaepen, E., Gibson, D., Goldin-Meadow, S., & Levine, S. C. (March 2015). Numerical approximation in preschool using number gestures and number words. Talk presented at the Society for Research on Child Development Biennial Meeting, Philadelphia, PA.

Hamdan, N., *D'Estes, A., & **Gunderson, E. A. (March 2015). Effect of number line training on children's fraction magnitude concepts. Poster presented at the Society for Research on Child Development Biennial Meeting, Philadelphia, PA.

Levine, S. C., **Gunderson, E. A.**, Maloney, E., Ramirez, G., & Beilock, S. L. (March 2015). The role of parents in young children's math learning: Cognitive and emotional factors. Talk presented at the Society for Research on Child Development Biennial Meeting, Philadelphia, PA.

Maloney, E., **Gunderson, E. A.**, Ramirez, G., Levine, S. C., & Beilock, S. L. (March 2015). Teachers' stereotype endorsement hinders girls' math achievement and increases their math anxiety. Talk presented at the Society for Research on Child Development Biennial Meeting, Philadelphia, PA.

Park, D., **Gunderson, E. A.**, Maloney, E., Beilock, S. L., & Levine, S. C. (March 2015). Children's motivational frameworks moderate the effect of parents' intrusive homework help on achievement. Talk presented at the Society for Research on Child Development Biennial Meeting, Philadelphia, PA.

Gunderson, E. A., Park, D., Beilock, S. L., & Levine, S. C. (February 2015). Fixed mindsets in early elementary school lead to academic stereotypes, anxieties, and lower achievement. Poster presented at the 16th Annual Meeting of the Society for Personality and Social Psychology. Long Beach, CA.

Gibson, D., **Gunderson, E. A.**, & Levine, S. C. (October 2013). The effects of small and large number talk on children's number knowledge. Poster presented at the Eighth Biennial Meeting of the Cognitive Development Society. Memphis, TN.

Park, D., Greenwood, E., Ramirez, G., **Gunderson, E. A.**, Levine, S. C., & Beilock, S. L. (October 2013). Students who believe in the malleability of intelligence show a pronounced negative relation between anxiety and performance. Poster presented at the Eighth Biennial Meeting of the Cognitive Development Society. Memphis, TN.

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.

TEACHING EXPERIENCE

Graduate

Instructor, Topical Seminar in Developmental Psychology: Mathematical Development, PSY 8510, *Temple University*, Philadelphia, PA, Spring 2014, Spring 2018

Undergraduate

Instructor, Capstone: Psychology in Education, PSY 4696, *Temple University*, Philadelphia, PA, Spring 2016, Fall 2017, Spring 2018

Instructor, Phases of Development: Infancy, PSY 3301, *Temple University*, Philadelphia, PA, Spring 2015, Fall 2018

Instructor, Cognitive and Language Development, PSY 3305, *Temple University*, Philadelphia, PA, Fall 2014, Spring 2015, Fall 2015, Spring 2016

Instructor, Capstone: Mathematical Cognition & Development, PSY 4596, *Temple University*, Philadelphia, PA, Spring 2013

MASTER'S STUDENTS AND PROJECTS/THESES SUPERVISED

Corey Elise Young, Master's Student, Neuroscience Program, Temple University 2017-present
Co-mentors: Gunderson & Reilly
Processing decimal magnitudes, strategies of numerical representation, and insights to mathematics anxiety

Lindsey Hildebrand, M.Ed. in Urban Education, Temple University 2015-2018
Mentor of Master's Thesis research project: *The development of children's gender stereotypes about spatial skills, reading and general academic ability*
Note: Ms. Hildebrand completed her M.Ed. while concurrently working as a full-time research assistant in my lab.

DOCTORAL STUDENTS AND PROJECTS/DISSERTATIONS SUPERVISED

Kexin (Cathy) Ren, Doctoral Student, Temple University 2016-present
Noora Hamdan, Doctoral Student, Temple University 2013-2018
Committee Chair, Preliminary Exam Dec. 2016

MENTORING: DOCTORAL STUDENT COLLABORATORS

Nicole Sorhagen, Laboratory of Dr. Marsha Weinraub, Temple University, 2013-2014
Mentor of Research Assistantship

PRELIMINARY EXAM AND DISSERTATION COMMITTEE SERVICE: TEMPLE UNIVERSITY

Rachel Myer, Preliminary Exam Committee, Dept. of Psychology	Defended April 2018
Jill Rabinowitz, Dissertation Committee, Dept. of Psychology	Defended April 2017
Laura Young, Dissertation Committee, College of Education	Defended April 2017
Ashley Drew, Dissertation Committee, Dept. of Psychology	Defended April 2017
Preliminary Exam Committee, Dept. of Psychology	Defended April 2015
Corinne Holmes, Dissertation Committee, Dept. of Psychology	Defended Jan. 2017
Preliminary Exam Committee, Dept. of Psychology	Defended June 2014
Junko Kanero, Dissertation Committee, Dept. of Psychology	Defended July 2016
Preliminary Exam Committee, Dept. of Psychology	Defended Feb. 2015
Jessa Reed, Dissertation Committee, Dept. of Psychology	Defended June 2015
Steve Weisberg, Dissertation Committee, Dept. of Psychology	Defended Dec. 2014
Nicole Sorhagen, Dissertation Committee, Dept. of Psychology	Defended Aug. 2014
Ilyse Resnick, Dissertation Committee, Dept. of Psychology	Defended May 2013

MENTORING: UNDERGRADUATE STUDENTS, TEMPLE UNIVERSITY

Alysa Cannon, Research Intern, Summer Intern, & Honors Thesis	Fall 2017-present
Daniel Keefer, Research Intern & Summer Intern	Spring 2018-present
Sarah Pepper, Research Intern, Summer Intern, & Honors Thesis	Spring 2018-present
Maya Rahman, Research Intern & Summer Intern	Spring 2018-present
Carrie Weaver, Research Intern	Spring 2018
Sania Latif, Research Intern	Fall 2017-Spring 2018
Kyle McCloskey, Research Intern	Fall 2017-Spring 2018
RJ Nair, Research Intern	Fall 2017-Spring 2018
Marly Pred, Research Intern	Fall 2017-Spring 2018
Anza Thomas, Research Intern	Fall 2017-Spring 2018
Lillian Ham, Research Intern, Summer Intern, & Honors Thesis	Spring 2016-Spring 2018
Jaeyong Sung, Research Intern	Fall 2016-Spring 2018
Audrey Wrobel, Research Intern & Summer Intern	Fall 2015-Fall 2017
Cory Ardekani, Research Intern & Summer Intern	Fall 2016-Fall 2017
Christin Kim, Research Intern	Spring 2017-Fall 2017
Amma-Sika Adomako, Research Intern	Fall 2017
Stephy Sebastian, Research Intern	Fall 2017
Elizabeth Kohlbrenner, Research Intern & Summer Intern	Fall 2016-Summer 2017
Synclaire Arthur, Research Intern	Fall 2016-Spring 2017
Tyler Burger, Research Intern	Fall 2016-Spring 2017
Olivia Dermody, Research Intern	Fall 2016-Spring 2017
Nicole Lee, Research Intern	Fall 2016-Spring 2017
Samantha McLaughlin, Research Intern	Fall 2016-Spring 2017
Jessica Palmarini, Research Intern	Fall 2016-Spring 2017
Yesha Dave, Research Intern	Spring 2017
Brittany Worthington, Research Intern	Spring 2017
Najah Young, Research Intern	Spring 2017
Jiai Jung, Research Intern	Fall 2015- Fall 2016
Gabriella Riccardo, Research Intern	Spring 2016-Fall 2016
Sherly Smith, Research Intern	Fall 2016
Riley Brown, Research Intern & Summer Intern	Fall 2015-Summer 2016
Jennifer Brandley, Research Intern & Summer Intern	Spring 2016-Summer 2016
John Durison, Research Intern	Fall 2015-Spring 2016
Maya Johnson, Research Intern	Fall 2015-Spring 2016
Shuo Liu, Research Intern	Fall 2015-Spring 2016
Victoria McLaughlin, Research Intern	Fall 2015-Spring 2016
Sumaiya Nusrath, Research Intern	Fall 2015-Spring 2016
LiaJo DeStefano, Research Intern	Spring 2016
Mahala Femovich, REU Summer Intern	Summer 2015
Courtney Gray, REU Summer Intern	Summer 2015
Brooke Singer, Research Intern & Honors Thesis	Fall 2013-Spring 2015
Alaina Chlebek, Research Intern	Fall 2014-Spring 2015
Marisol Savage, Research Intern	Fall 2014-Spring 2015
Kate Knebels, Research Intern	Fall 2013-Spring 2014

MENTEE AND STUDENT AWARDS

Lillian Ham, Psi Chi Eastern Regional Research Award	2018
Lindsey Hildebrand, Poster Award, International Mind, Brain, and Education Society	2016

SERVICE TO THE DEPARTMENT, TEMPLE UNIVERSITY

Outreach and Translation Committee , Psychology Department	2017-present
Student Awards Committee , Psychology Department	2017-present
Cognitive Faculty Search Committee , Psychology Department	2014-2016
Diversity Committee , Psychology Department	2015-2016
Faculty Awards Committee , Psychology Department	2014-2015
Colloquium Committee , Psychology Department	2013-2015
Undergraduate Committee , Psychology Department	2013-2014

JOURNAL REVIEWER

Consulting Editor, *Journal of Cognition and Development* (2016-present)
Consulting Editor, *Child Development* (2017-present)

Ad-hoc reviewer:

<i>Behavioral and Brain Functions</i>	<i>Infant and Child Development</i>
<i>Child Development Research</i>	<i>Journal of Abnormal Child Psychology</i>
<i>Cognition</i>	<i>Journal of Educational Psychology</i>
<i>Cognitive Development</i>	<i>Journal of Experimental Child Psychology</i>
<i>Cognitive Processing</i>	<i>Journal of Numerical Cognition</i>
<i>Cognitive Psychology</i>	<i>Journal for Research in Mathematics Education</i>
<i>Cognitive Science</i>	<i>Learning and Individual Differences</i>
<i>Contemporary Educational Psychology</i>	<i>Mind, Brain, and Education</i>
<i>Developmental Psychology</i>	<i>Personality and Social Psychology Bulletin</i>
<i>Developmental Science</i>	<i>Perspectives on Psychological Science</i>
<i>Educational Psychology</i>	<i>PLoS ONE</i>
<i>Educational Psychology Review</i>	<i>Proceedings of the National Academy of Sciences</i>
<i>European Journal of Developmental Psychology</i>	<i>Psychological Science</i>
<i>Fields Mathematics Education Journal</i>	<i>Review of Philosophy and Psychology</i>
<i>Frontiers in Psychology: Developmental Psychology</i>	<i>Sex Roles</i>

GRANT REVIEWER

Ad hoc reviewer, National Science Foundation (NSF), Behavioral and Cognitive Sciences (BCS) and Research on Learning in Formal and Informal Settings (DRL)	
Review panel member, Institute for Education Sciences (IES), Early Intervention and Early Childhood Education	2015
Ad hoc reviewer, Austrian Science Fund	2015

CONFERENCE REVIEWER

Conference reviewer, Society for Research on Child Development Biennial Meeting	2018
Program committee member, 40 th Annual Meeting of the Cognitive Science Society	2018
Conference reviewer, Biennial Meeting of the Cognitive Development Society	2017
Program committee member, 38 th Annual Meeting of the Cognitive Science Society	2016
Conference reviewer, Society for Research on Child Development Biennial Meeting	2012
Conference reviewer, Third Annual inter-Science of Learning Center (iSLC) Conference	2010

PROFESSIONAL AFFILIATIONS

Mathematical Cognition and Learning Society	2018-present
American Psychological Association	2013-present
Association for Psychological Science	2009-present

Cognitive Development Society
Society for Research in Child Development

2009-present
2009-present

PROFESSIONAL POSITIONS HELD

Consultant, Oliver Wyman

2005-2007