

Alexandria A. Viegut, M.S.

University of Wisconsin – Madison
453 Educational Sciences | Madison, WI 53706
aviegut@wisc.edu | (715) 305-6686

EDUCATION

- 2019 M.S. in Educational Psychology
Graduate Minor in Quantitative Methods for Education Sciences
University of Wisconsin – Madison
Thesis: *From Number Sense to Fraction Sense: Using Analogy to Improve Fraction Understanding*
- 2017 B.A. in Psychology, summa cum laude
University of Notre Dame
Honors Thesis: *Can finger gesture help preschool children understand cardinality?*

RESEARCH INTERESTS

Mathematical cognition and learning, including the role of different visual representations of math concepts and the use of intuitive and informal knowledge for formal learning. Bridging cognitive developmental psychology with education.

FELLOWSHIPS, HONORS, AND AWARDS

- 2020 Madison Education Partnership Graduate Research Scholar
- 2020 Invited participant at AERA-NSF Institute on Statistical Analysis for Early Math Education
- 2017-present Interdisciplinary Training Fellowship in Education Sciences, Wisconsin Center for Education Research, University of Wisconsin – Madison
- 2017 Phi Beta Kappa, University of Notre Dame
- 2013-2017 Glynn Family Honors Program, University of Notre Dame
- 2013-2017 National Merit Scholarship

PUBLICATIONS

- Park, Y., **Viegut, A. A.**, Matthews, P. G. (under review). More than the sum of its parts: Exploring the development of ratio magnitude vs. simple magnitude perception.
- Viegut, A.A.** (in preparation). Causal pathways from fraction knowledge to algebra.
- Viegut, A. A.**, Matthews, P. G. (in preparation). From number sense to fraction sense: using analogy to improve fraction estimation.
- Viegut, A. A.** & Matthews, P. G. (in preparation). Moving past model-fitting: A criterion validity approach to young children's number line estimation.
- Viegut, A. A.**, Donovan, A. M., Brown, S. A., Matthews, P. G., Alibali, M. W. (in preparation). Gesture and strategy use in a nonsymbolic and symbolic fraction comparison task.

CONFERENCE PRESENTATIONS

Peer-Reviewed Conferences:

Viegut, A. A., Tian, J., McMullen, J., Jordan, N. C. (cancelled due to COVID-19). *Fraction Interventions from Lab to Classroom*. Symposium organized for Mathematics Cognition and Learning Society Conference, Dublin, Ireland.

Viegut, A. A., Donovan, A. M., Brown, S. A., Matthews, P. G., Alibali, M. W. (cancelled due to COVID-19). *Gesture use in a nonsymbolic and symbolic fraction comparison task*. Poster to be presented at Mathematics Cognition and Learning Society Conference, Dublin, Ireland.

Viegut, A. A., Matthews, P. G. (June, 2019). *Modeling median estimates overstates regularity in children's number line estimation*. Poster presented at Mathematics Cognition and Learning Society Conference, Ottawa, Canada.

Viegut, A. A., Park, Y., Matthews, P. G. (March, 2019). *Number line estimation is more than numerical: Evidence from nonstandard number lines*. Poster presented at Society for Research in Child Development Conference, Baltimore, MD.

Park, Y., **Viegut, A. A.**, Matthews, P. G. (March, 2019). *The development of multiple non-symbolic ratio representations in children*. Poster presented at Society for Research in Child Development Conference, Baltimore, MD.

Viegut, A. A., Park, Y., Hubbard, E. M., & Matthews, P. G. (September, 2018). *Differential improvement in fraction estimation in 2nd vs. 5th grade children: Longitudinal analysis*. Poster presented at International Mind, Brain, and Education Society Conference, Los Angeles, CA.

McNeil, N. M., O' Rear, C. D., Petersen, L. A., **Viegut, A. A.**, Bohnsack, A. E., & Boehm, A. (October, 2017). *Translating cognitive developmental theory to improve children's understanding of counting*. Talk presented at Cognitive Development Society Conference, Portland, OR.

Non-Refereed Regional Conference Presentations:

Viegut, A. A., Matthews, P. G. (September, 2018). *Cross-format productions of symbolic and nonsymbolic ratios: Toward a perceptual intervention for fraction learning*. Poster presented at First Year Project Symposium, University of Wisconsin – Madison, Madison, WI.

Viegut, A. A., McNeil, N. M. (May, 2017). *Can finger gesture help preschool children understand cardinality?* Paper presented at Undergraduate Research Symposium, University of Notre Dame, South Bend, IN.

PROFESSIONAL SOCIETY MEMBERSHIPS

American Educational Research Association (AERA)
Cognitive Science Society (CSS)
International Mind, Brain, and Education Society (IMBES)
Mathematical Cognition and Learning Society (MCLS)
Phi Beta Kappa
Society for Research in Child Development (SRCD)

TEACHING EXPERIENCE

Teaching Assistantships

Introduction to Psychology, University of Wisconsin-Madison, Fall 2018
Honors Calculus, University of Notre Dame, Spring 2017

Guest Lectures

Mathematics Development in Infancy and Early Childhood (video lecture)
Ed Psych 320 Child Development, University of Wisconsin-Madison, Fall 2020

Classic theories of learning: Piaget and Vygotsky

Ed Psych 331 Child & Adolescent Development, University of Wisconsin-Madison, Spring 2019

Generalized Magnitude System

Ed Psych 506 “Exploring Number Sense”, University of Wisconsin-Madison, Fall 2019

Pedagogical Training

Inclusive Teaching Workshop, Delta Program in Research, Teaching, and Learning, University of Wisconsin-Madison, Fall 2018

DEPARTMENTAL SERVICE

Social Committee Chair, Educational Psychology Student Association (Fall 2018 – 2019)
Co-Founder, Math Intervention Journal Club for Graduate Students (Spring 2018-Fall 2018)