REASON doctoral school & Developmental Psychology
-- Invitation to Lecture --

Wednesday, June 3, 14:00, Zoom

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Reasoning with Data in Children and Adults

Drawing conclusions from data is a critical task in science education. One goal of my work is to learn about how children and adults reason about data based on the features of the data, such as different levels of variability. In this talk, I will review a series of studies examining how children and adults reason when presented with data in different reasoning contexts. Sets of data have unique features that summarize the set, such as measures of central tendency and variance. When these values are varied systematically, participants from primary school children to university students can use these features in drawing conclusions, even without formal training in statistics. In addition, the framing and goal of the task can affect the salience of the characteristics and their use. I will end with a brief discussion of an additional line of working examining a text-based approach to addressing science misconceptions.

Bio

Professor Amy Masnick earned her Ph.D. in human development from Cornell University. She then worked as a postdoctoral research associate in the Psychology Department at Carnegie Mellon University before joining the Hofstra faculty in 2003. Dr. Masnick teaches undergraduate courses such as Introduction to Psychology, Child Development, Research Methods, and the Research Seminar in Developmental Psychology. She serves as a core faculty member in the B.A. program in psychology

Her main research interests are in the area of cognitive development, specifically focused on scientific reasoning in children and adults. Recent research has included explorations of children's reasoning about data characteristics and about variability in outcomes when running simple science experiments. Other interests include studying the development of scientific literacy skills and reasoning about anomalous information.