

My interest in development was sparked by my background in childcare. I could sit for hours and watch a toddler explore a new toy or unceasingly navigate up and down a staircase. Inside my mind was a constant stream of inquiries; I wanted to know what the child was thinking, what purpose each action served, and how I could go about answering these questions. In high school I was introduced to developmental psychology and knew instantly that this was the only path for me.

I spent four years in the UCLA Baby Lab, where I worked closely with Dr. Scott Johnson to extend a body of work examining infant statistical learning. We found that infants could detect shape strings that followed an artificial grammar, or set of rules, from randomly generated shape strings. My window into development was widening slightly, but my list of questions only grew longer. Following this work, I became interested in infant's perception of patterns within social categories. My Honor's Thesis investigated infants' ability to distinguish point light display walkers based on emotion information from movement cues. We found that infants looked longer at angry and happy movements than neutral movements, and longer at neutral movements than sad movements. After further analyses, we discovered that this pattern of looking also reflected the amount of motion in each category of displays. It is known that infants tend to look more at displays with more motion, so follow-up studies are underway to test this explanation of the looking behavior.

This work showed me how exciting science can be—crafting a creative study to ask a specific question and then letting the data tell a story about development. I was anxious to continue this work, but I also wanted to learn more about behavioral methods, because my interest had always been driven by behavior I observed. I have spent the last year as a research staff member with Dr. Karen Adolph here at NYU. One project, a collaboration with Dr.

Catherine Tamis-LeMonda, examines the real-time and developmental progression in learning about the designed actions of everyday objects and toys. Every time I conduct a data collection, I get re-inspired by the fascinating exploratory behaviors the children display, and I love designing behavioral codes to capture their intricacy. We are finding a progression from exploration, to discovery of the designed action, to implementation. I presented a poster from this project at ISDP (2017).

My second study uses head-mounted eye tracking, EEG, motion tracking, and video to examine behavioral flexibility in preschoolers' tool use. This is the first developmental study to combine these technologies, and I played a central role in designing this challenging procedure. Each child responds to the technology differently. To successfully place the gear on the children and keep them excited and focused on the task instead of distracted by the technology, I had to learn to read each child's behavior and tailor my responses accordingly. Developing this precision in behavioral observation has led to new discoveries that pushed my projects in exciting directions. Using these innovative technologies, we show a cascade of events—where children direct their attention leads to differences in neural processing, which in turn, informs movement. I co-authored presentations to CDS, ISDP, SFN (2017), and CNS (2018).

My extremely rewarding work in this lab has reaffirmed my decision to pursue graduate study, and I believe the Cognition and Perception Program at NYU is the ideal fit. I want to extend my work with Dr. Adolph and examine the social, perceptual, and biomechanical factors involved in learning the designed actions of everyday objects. For example, I plan to use head mounted eye tracking to examine if children are focusing their attention on the correct information during teaching of the designed action. I plan to pursue a career in academia and NYU's focus on creating independent researchers is vital for my future success.