

**MW: Statement of Academic Purpose (Application to Department of Psychology)**

The Chinese philosopher Zhuangzi tells a fable of a frog sitting in a well, picturing the well and the sky above it as its entire universe. As children grow up and learn more about the world – either through personal contact, formal education, or media and literature – they are like frogs climbing from the well, gradually reaching a broader viewpoint of the world. I am interested in how this “climb” shapes childhood social cognition. More precisely, I am interested in researching how variability in childhood experience shapes our beliefs about the statistics of the social world, as well as the cognitive and emotional consequences of learning new data that conflict with our prior beliefs. This process requires developing cognitive capacities, such as the ability to reason about abstract social distributions (e.g., knowledge, attitudes, preferences) that are not visually accessible to children like physical distributions and has strong social implications, since our beliefs also guide our following behaviors and decisions. For example, our beliefs about the prevalence of a preference for an electoral candidate may affect whether or not we believe that our vote “counts,” and even whether we vote at all, and our beliefs about how resources are distributed may affect how willing we are to share and help. My previous research experiences, ranging in both basic cognitive science and applied social psychology, have provided me with a strong theoretical foundation, as well as extensive empirical training, in both cognitive and social development research.

Working with Dr. LS, I witnessed how an elegant experiment can reveal when and how children develop certain cognitive skills and capacities. I worked on projects related to emotion reasoning, including one that examined whether infants could associate within-valence emotional expressions with their probable cause. In our initial design, we used a box searching paradigm to see if children would search a box longer if an experimenter produced a vocalization inconsistent with the object put into it. To address issues with individual differences in motivation and persistence, I proposed an alternative design: Before the experiment, the experimenter would bring two distinct toys to the infant and observe the infant’s preference. Then, the experimenter would put them into identical boxes and mix them up. Next, the experimenter would peek into the boxes and make corresponding vocalizations. Finally, the experimenter would pass both boxes back to the infant and see which one the infant picks. Designing experiments was the most rewarding aspect of my work with Dr. S; I am fascinated by how abstract, theoretical questions are transformed into a concrete research plan, and how with the appropriate design, cognitive science can reveal new insights into the childhood experience.

Working as a summer intern with Dr. HG, I expanded my experience in basic cognitive science research. I researched children’s use of statistical information in making friend choices – specifically if 4- to 5-year-olds prefer to befriend an agent with a rare shared preference versus one with a common shared preference. We designed an experiment in which children were led to perceive that one of their choices of toys was rare and the other was common and found that children preferred to befriend a puppet with the common preference over one with the rare preference. When considering why children showed an opposite pattern to adults, I realized that more than half the children struggled with the check questions testing their understanding of the provided rarity information, and when the adults in the adult study were considering how common their preferences were, they were generating the statistical information themselves (unlike the children who were shown how commonly liked each toy was). These findings pushed me to think more deeply about children’s representation of social information: Is reasoning about social distributions (e.g., how common a preference is) more cognitively challenging than physical distributions? If so, is it because children’s priors will interfere, or because of the lack of visual representation? These are questions that I would be eager to pursue as a Ph.D. student.

These hands-on experiences furthered my critical thinking skills, exposed me to individual variations in children's experiences and environment, and inspired me to conduct research with real social impact. I was a part of Dr. SC's Family Development Project, a comprehensive study of immigration- and acculturation-related stressors among Chinese immigrant families, for three years. I devised codebooks, data entry templates, and data management procedures; I trained RAs on these data management procedures, and we collected nearly 400 measures from over 300 children and their parents. I was particularly interested in measures that related to children's perception of social class. I noticed that children's perceptions of their social class did not always match their parent-reported family income, and this finding sparked my interest in how children form representations of the social world and draw comparisons between themselves and others. I explored these questions in my senior thesis and found that, although we recruited a socioeconomically diverse group of children, most children tended to view themselves as middle class. In addition, we found that children associated being high-status with being White and that this association predicted whom children themselves wanted to associate with. I was intrigued by how children's representation of their social world predicted important real-world outcomes.

Eager to learn more about how children form biases, I joined Drs. SR and CS in starting the SCD Lab at S as its inaugural lab manager. I managed several large-scale projects throughout the year, researching how children's and adults' descriptive-to-prescriptive tendency, representation of God as a White man, concepts of racial ancestry, and reactions to praise foster social cognition and stereotyping. Although these projects varied in topic, I noticed that they could each inform policy, practice, and education. For example, if parents learned how language describing group norms guide how children think individuals should interact with others, they might be more strategic in their language. Inspired by the social impact of these projects and motivated by my previous interests, I launched a project with Drs. R and S, examining how variability in high- and low-status children's experiences may affect how they think most others in the world are doing socioeconomically. We are also examining how these children may differ in how they reason about the distribution of resources, picture an ideal world, evaluate monetary value, and react when they learn factual data about others' socioeconomic status (i.e., realize that they are, in fact, privileged or disadvantaged). I am excited to see my past experiences and current interests culminate in this project.

NYU's psychology program provides the perfect setting for me to research both the cognitive and social aspects of children's representation of the social world. In particular, I am eager to work with Dr. MR to examine the amount (e.g., one piece of extremely strong evidence versus multiple pieces of relatively strong evidence) and kind (e.g., personal experience versus learned data) of information required for children to develop and revise their beliefs about the social world. I would also be excited to explore the social implications of children's reasoning about statistical information and social distributions. For example, do children's beliefs about the statistics of the social world (e.g., the distribution of knowledge in a classroom) impact their judgments and behaviors (e.g., their decision whether or not to raise their hand and ask a question)? Do children consider rarity information when providing and evaluating exemplars? I would also be interested in working with Dr. AC to research if children make associations between statistical information and stereotypes and norms or with Dr. AV to research how personal experiences affect children's understanding of words with relative meaning (e.g., "difficult", "successful"). The collaborative, interdisciplinary environment of NYU's program and the expertise of its faculty are ideally suited for my research interests and to support and expand my goal of furthering our understanding of the complex ways in which children learn about the world and their place in it.