FASS Summer Research Award: Abstract

Kunio Hessel

I did my research this summer under the supervision of Dr. Deepthi Kamawar in the Children’s Representational Development Lab. Before conducting an experiment in psychology, a lot of training is required; this is especially true when working with children—in my case, 4- and 5-year-olds. As such, much of my summer was devoted to training in psychology research, under the supervision of a Master’s student from the lab, Katherine Andrews. I helped create the stimuli for her project on moral development, I observed her as she tested the first few participants, and eventually I graduated to testing the children on my own. Throughout this training process, I learned how to conduct research in psychology, and I gained valuable experience working with children. Throughout the summer I also learned about working in a lab, coding and inputting data for analysis, and all the little things that go into running an experiment, like ethics, anonymity, and photocopying 700 pages’ worth of consent packages.

The project I started this summer—and that will eventually become my honours thesis—has to do with moral development in 5-year-olds. The core concept in my study revolves around variations of the trolley dilemma, which is a thought experiment in moral philosophy. Here is a quick summary of the story adults hear. A runaway train is heading down a track towards five helpless construction workers. You have access to a switch that will make the train change tracks towards one helpless construction worker. If you flip the switch, the one worker will surely die, and if you choose not to flip the switch, the one workers will surely die. Do you, or do you not, flip the switch? This has been a popular question in philosophy for decades, and has recently become a common dilemma in experimental psychology as well. This problem is designed to see if participants will follow utilitarian moral judgments—which means maximizing good or minimizing harm for the greatest number of people. Choosing to flip the switch is the utilitarian option in this dilemma, as it leads to the death of one rather than five workers.

My project aims to adapt this famous dilemma for 5-year-olds. Clearly, people cannot be killed by trains in my stories, so one of the biggest challenges when designing the experiment was creating stories that are both plausible and age-appropriate. For example, one story involves a wind-up truck that travels across a daycare floor towards five Lego towers being built by five children. The truck will destroy the towers unless our story character—let’s call him Johnny—rolls his ball to divert the truck; in that case, a single Lego tower being built by one child would be destroyed. Johnny rolls the ball and diverts the truck; did he do the right thing?

Throughout the summer, I reviewed much of the relevant literature involving moral development in children, as well as literature about trolley problem experiments with adults. Moral development using this type of scenario has not been studied extensively in children this young. I find the trolley dilemma fascinating, and the prospect of adapting it for young children really intrigued me. There have been experiments involving trolley-type stories for young children, but the literature is certainly sparse; in my review, I found fewer than five such studies. I wanted to add something new to my experiment rather than replicate the work of others, so in addition to the typical negative outcome stories, I will also include positive outcome versions, which to my knowledge have never been studied before. For example, one story involves an ice cream truck driver choosing between two parks: one with five children and one with one child. Our character—perhaps Melanie this time—knows how many children are in each park, and informs the driver that he should go to park A where there are more children. Should she have done that? The design of the experiment is well underway, as is my training and the bulk of the literature review, and I expect to have ethics submitted soon so I can begin testing in the fall. I will also be running a similar study with undergraduates using the SONA system to serve as an adult comparison group. Ultimately, I hope to expand the scope of the literature in this exciting, yet underexplored field.