Dear Parents,

Thank you for participating with your children in the research being conducted at the Child Development Labs at UVa. Without your support and participation, we would not be able to carry out our research into early development or to train the next generation of developmental scientists.

We are excited to be welcoming two new faculty members to the Child Development Laboratories—Toby Grossman and Amrisha Vaish! Please see more about them on the right. They study younger children that we have studied lately, so we are hoping to bring more infants to the laboratories!

One big piece of news is that we are moving temporarily due to new construction taking place around our Millmont Street location. For the coming year, we will return to our old digs at Gilmer Hall, at the corner of Alderman and McCormick, 2 blocks north of UVa’s Scott football stadium. Participants in the EDL will normally park in front of on McCormick, in two spaces designated as Child Development Research; participants in the other three labs will normally go down a hill behind Gilmer (off Alderman, by the Acquatic and Fitness parking lot) to a protected space with ample parking by the Greenhouse. Directions are available here and will be provided after we contact you to participate. Because we cannot find a good space for it, we are unable to have our Open House this year—we hope to see you at other community events, and to resume Open Houses at Millmont next year.

Please note that you can keep up to date about all things CDL-related by following us on Facebook. If you know of others who might be interested in having their children participate in studies, please pass our information on to parents, school newsletters, and other venues! We always are looking for more children who might participate to help us better understand children’s development.

We are excited to update you by telling about several of the studies conducted during the past year. We hope you enjoy reading about this work, especially the studies in which you and your children participated.

Welcome Dr. Grossman and Dr. Vaish!

The Early Social & Brain Development Lab, directed by Dr. Tobias Grossmann, studies the early emergence of the social and affective competencies that enable infants to interact with others. By using non-invasive and child-friendly methods such as electroencephalography (EEG), functional near-infrared spectroscopy (fNIRS) and eye-tracking technology, we examine changes in infant brain function while important developmental milestones are achieved. We study these processes across a range of situations in which infants can glean social and emotional information from various different sources such as faces, voices, or motion. If you have an infant between 4 and 12 months old, we may be contacting you soon!
The Social & Moral Development Lab, directed by Dr. Amrisha Vaish, studies how young children perceive and respond to their social worlds. The main focus of our research is the development of social abilities that are essential to becoming moral and cooperative people. These include social emotions (such as sympathy and guilt), cognitions (such as the ability to evaluate moral actions and intentions), and behaviors (such as helping and sharing). We also study the development of more basic social and cognitive skills, such as when and how infants understand the emotions, desires, and actions of others. If you have a child between 2 and 5 years old, we may be contacting you soon!

Popular Press

- “This is when racial bias begins to impact a child’s empathy for pain, study suggests,” (March 4, 2014) Huffington Post

Your child, the scientist!

When children participate in studies at the CDL they are contributing to scientific knowledge, and they know it! (These are real comments from children who have participated in studies at the CDL.)

“I hope it was for the greater good!”

“Are we all done with our science yet?”

“I don’t like the endings of studies because I like the studies.”

About People

The Early Development Lab welcomes new graduate students Sierra Eisen and Jessica Taggart to the Child Development Labs!

Two graduate students from the Early Development lab recently defended their dissertations. They are moving on to do great things and will be sorely missed!

- Emily Hopkins is beginning a post-doctoral position at the University of Pennsylvania where she will be exploring the psychology of scientific understanding.
- Eric Smith is beginning a tenure-track Assistant Professor position at Murray State University in Murray, Kentucky.

Recent Publications

What’s going on at the Early Development Lab

Real or not?

How do children decide what is real and not real when they hear about new things? Graduate student Rebecca Dore wanted to find out whether one cue children use to decide whether something is real or not is how much information a speaker provides about it. In these studies, nine-year-olds watched short videos of conversations between two adults describing something children hadn’t heard of before (using made-up words like “cusk” or “tulver”) and then asked them if they thought that thing was real or not real. Not surprisingly, children were more likely to believe in the new things that were described with substantive details. Then, in another study she showed the same videos but told children that the videos “weren’t working very well” and covered most of the audio with bursts of static. So in this study, children could see the speakers providing information but could not hear the information itself. Children were more likely to believe in the new things when the speakers just appeared to provide more information than they were to believe in the new things that speakers didn’t provide any details about. These studies show that it is the fact that the speaker intended to provide information, not the specific information provided, that children use as a cue.

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http://www.virginia.edu/psychology/childdevelopmentlabs/news.html

resistance to misleading testimony. Developmental Science.
Eating healthy is bearable!

Children’s storybooks often include animal characters with human traits (e.g., Clifford). However, limited research has explored how these characters affect children’s ability to learn and apply information from such stories. Former graduate student Eric Smith examined whether anthropomorphic characters affected children’s abilities to recognize and apply the lesson of *The Berenstain Bears and Too Much Junk Food*. Four- and five-year-olds listened to either the standard version of the storybook or a matched storybook with human characters (see picture). After, they answered questions about the lesson of the story and had an opportunity to consume candy and/or vegetables. Overall, children recognized the lesson of the storybook. However, not all children readily applied it: Those children who heard the story with anthropomorphic characters and were more familiar with the storybook were most apt to consume vegetables. Moreover, children’s abilities to recognize the lesson of the story had little bearing on whether they demonstrated theme-consistent behavior (i.e., ate vegetables in lieu of candy). This work suggests that children’s comprehension of stories and behavioral application of lessons conveyed within them may be independent processes. Future work will examine how children’s familiarity with storybook characters might affect their willingness to learn from them.

Does mindfulness aid executive function?

Executive function (EF) abilities, which include attention, memory, and problem solving skills, are important for life success. Contemplative practices, such as meditation, have been shown to improve EF in adults, but can these activities also be used to aid EF performance in preschoolers? This is the question graduate student Katherine Boguszewski set out to investigate. Children took part in EF tasks, for example, a Simon-Says-type game. In this game, children are told a set of rules in which when an experimenter tells them to perform an action, they are really supposed to perform its opposite (i.e. touch your head when you hear “touch your toes”). This engages EF by demanding that the children inhibit and act against the dominant response to do exactly what the experimenter said. Children then engaged in contemplative practices, including breathing and focused attention exercises. In one such exercise, children placed a stuffed animal on their stomach and were asked to "watch it go up when you breathe in, and down when you breathe out." After the contemplative practices, children again completed a set of EF tasks. Results showed that children’s performance on the EF tasks improved after engaging in the contemplative practices. Therefore, contemplative practices may provide a way to enhance children’s EF abilities.
What’s going on at the Child Language and Learning Lab

Can you help me remember?

Children may need to ask parents, friends, or teachers for help when remembering past experiences. When do children decide to ask for help rather than relying on their own memory? Graduate student Shaina Rowell recently examined whether 5-year-olds will defer to someone else only when that person’s memory is likely to be stronger than their own. Children played a game on a computer touch screen in which they had to decide whether to answer a question themselves or pass it to a helper. The results show that 5-year-olds will defer when they feel unsure about their memory, but they don’t consider whether the other person is more likely to remember the information than they are. At this age, it seems that children are too strongly focused on their own confidence and do not incorporate what they know about others into their decisions. We are continuing research that explores how this changes as children grow older, and what this means for the development of the memory system.

Apologies repair relationships

What can a transgressor do to help make a victim feel better? In graduate student Marissa Drell’s work this year, 6- and 7-year-olds played a game in which they built cup towers alongside an adult. Before they had a chance to finish, children were asked to stop and imagine that the adult accidentally knocked over their tower and responded in one of four ways: said she would help rebuild the tower, apologized spontaneously, apologized after being prompted to do so, or did nothing. Children then ranked how these four responses would make them feel from best to worst. Children expected that an offer to help rebuild the tower and spontaneous apology would make them feel better than a prompted apology or no apology.

When a different group of children actually did have their towers accidentally knocked over, children who received a spontaneous apology and prompted apology felt just as sad as children who did not receive an apology. Only an act of restitution, or helping the child rebuild the tower, served to ameliorate their disappointment. However, when children heard an apology, they later shared just as many stickers with the adult as children who received restitution and more stickers than children who did not receive an apology. In this situation, restitution helped to mitigate hurt feelings and repair relationships while apologies only served to repair relationships.

Give back!

When adults receive something from another person, they often feel obligated to give something back. In a study conducted by undergraduate student Angelica Chang, we asked whether children also feel obligated to return favors. In the study, 3- to 7-year-olds heard a story about a character (A) who gives some stickers to another
character (B). Later, B has the chance to give A some marbles or to give A a high-five, and children decide which way the story should end. Children usually expect B to reciprocate in kind—that is, that B should give A some marbles rather than a high-five. A different group of children heard a story in which A did not initially give B anything. These children were less likely to expect B to give A some marbles; they thought giving a high-five rather than marbles would be perfectly acceptable. In on-going work, we are looking at how powerful this urge to reciprocate is when there are other competing interests, like need, at hand.

**More than fair**

A true sense of fairness entails objecting both when one receives fewer resources than another, equally deserving individual and when one receives more. Even toddlers dislike getting less than someone else, but it has traditionally been assumed that children are not uncomfortable getting more until age 7 or 8. Undergraduate distinguished majors student *Nora Kramer* conducted a study showing that there are circumstances when even 4- and 5-year-olds dislike receiving more than someone else. She found that preschoolers were more likely to decline an offer where they would receive 4 pennies and a partner would receive just 1 when they saw the number "4" in front of them and the number "1" in front of their partner than when they saw 4 pennies in front of them and 1 penny in front of the partner. It can be hard for children (and adults!) to act fairly when the desirable stuff is actually right in front of them; using symbols can help!

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From all of us at the Child Development Laboratories at UVa, we thank you again for your interest and participation in our research!