What has the BU Developing Minds Lab been up to?

The Developing Minds Lab at Boston University has been busy this year! We have presented ongoing research at conferences, brought on two new lab members, and started conducting experiments for some brand new studies. And we could not have done any of it without your help! If you have any questions about our lab or research, you can email us at devmind@bu.edu or phone us at 617-358-1830.

Developing Minds Lab on the road

Some of our research findings were presented at the 2017 Bi-Ennial Cognitive Development Society conference in Portland, Oregon. Third year graduate student, Jessica Beal, presented her research on children’s perception of value for objects (pictured above). Head Research Assistant, Alexis Smith, presented her work on children’s decision making when faced with social information from peers (pictured right). Fifth year graduate student Telli Davoodi presented her work on children’s understanding of mental states. We are headed to the Vision Sciences Society Conference and the International Conference on Infants Studies this summer to present some of our new findings!

Welcoming our new senior researchers!

The DML welcomed a few new members this year to expand our research! Our Post-Doctoral Researcher, Dr. Tashauna Blankenship, comes to us from Virginia Tech. Dr. Blankenship is interested in the flexibility of episodic future thinking and how it develops throughout childhood. We also welcomed 1st year graduate student, Praveen Kenderla, who hopes to explore working memory and the development of attention. Welcome Praveen and Tashauna!

Visit us at the Museum of Science!

We are conducting some of our research in the Discovery Center. Stop by and see us!

What’s new at the DML

This past year, we have started some exciting new research programs. In one series of studies (pictured left), we are interested in how children plan and think about future events! During the studies, children see a series of actions involving our “magic box” and then receive prizes for engaging in the correct actions learned. In our new eye-tracking study (pictured right), we are exploring similar abilities in infants. We are also conducting some new studies expanding on some of our previous work. We are continuing to explore how the value of an object impacts memory for that object. We are also examining children’s ability to keep track of multiple objects and to remember the features of those objects when they are hidden from view. Stay tuned for updates!
What’s your goal? Infants know – and remember!

Results from our recent study show that 6-month-old infants can learn about another person’s preference for one object over another, and keep track of that person’s preferred object, even when it is hidden from their view. Not only that, but 6-month-olds predicted where the person would search for her hidden object – infants looked more often at the preferred object’s location right before the person reached for that object. These results show that young infants are capable of social inference even in complex scenarios.

Recent collaborations explore early visual attention and memory

We have teamed up with other researchers from BU and at UMass Boston to explore visual cognition in infants and adults. We have made some new discoveries about the development of visual attention in infants, and about the neural computations supporting visual memory in adults. These results were recently published in the journals Infancy and Psychological Science, respectively. Check out our website to read our latest papers!

Reality, fantasy, or science fiction?

Some of our little scientists may remember taking part in our study on children’s understanding of fiction. We found that 4-6-year-old children distinguished between different types of unrealistic fiction, but preferred realism when given a choice. We recently published the paper with these findings in Psychology of Aesthetics, Creativity, & the Arts. Our findings were also recently featured in a Science News article!

Toddlers learn from the past to plan for the future

We have found that 2-year-olds are able to successfully remember associations between actions and outcomes and use that information to achieve goals. In our study, children learned that performing different actions on a “magic box” caused the box to produce different color beads. They were then able to use what they learned to retrieve beads for two different stuffed animal characters. These studies show that 2-year-olds are able to connect the past and the future, and use what they know to make new plans.

Thank You!

Thank you so much for making our research possible! With your help, we have learned so much about infant and child development, and we hope to see your family in our lab again soon!

If you or anyone you know is interested in participating in our research, you can learn more about our lab on our website:
http://bu.edu/cdl/developing-minds-lab
or connect with us on Facebook:
http://facebook.com/DevelopingMindsLabBU/