

GROWING WITH BROCK

SPRING 2020



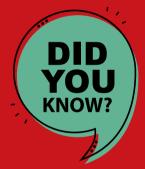
THIS ISSUE

PhD Student Published in Top Developmental Psychology Journal

New Funding Helps to Purchase Lab Equipment for the Campbell Neurocognitive Aging Lab

Team Travels to New Orleans to Share Important Findings

Can Children Recognize Facial Expressions?



4- to 6-year-old children overestimate their ability to remember to do something in the future, but after they have some experience with the memory task, they more accurately reflect on their performance (Lavis & Mahy, in preparation; based on Lydia Lavis's Masters project)



PHD STUDENT PUBLISHED IN TOP DEVELOPMENTAL PSYCHOLOGY JOURNAL

Tessa Mazachowsky, 3rd year PhD student in the Developing Memory and Cognition lab, just published a paper with Dr. Caitlin Mahy in one of the field's top journals, Developmental Psychology.

This paper focused on the development and evaluation of a parent questionnaire on children's future thinking and memory. This paper included 4 studies and Tessa had been working on this research since she began her Masters 4 years ago!

We wish to thank our Growing with Brock families as many of you have participated in these studies where you filled out a questionnaire and your child did a number of activities measuring saving ability, delay of gratification, future thinking, planning, and remembering to carry out a future intention.

You can read more about the project and access the paper on the Developing Memory and Cognition web page:

www.brockdmclab.com



NEW FUNDING HELPS TO PURCHASE EQUIPMENT FOR THE CAMPBELL NEUROCOGNITIVE AGING LAB

Dr. Campbell recently received government funding to complete her research on age differences in attentional control. The funds were awarded to her through a Canada Foundation for Innovation (CFI) grant to purchase an electroencephalography (EEG) system, used to measure brain activity, and a new eye-tracking system.

The advantage of these systems is that they allow for very fast recordings of the brain and eyes, so can be used to study certain phenomena that other methods are too slow to detect. Dr. Campbell and her graduate students will use this equipment to study how distracting information is encoded in the brain and whether it affects memory for events in everyday life. This equipment will ultimately help to advance Dr. Campbell's long-term goals of learning more about the aging brain in terms of memory, focus, and healthy aging.

http://www.brockcnalab.com/



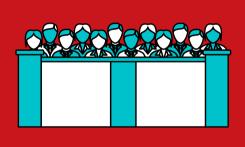
TEAM TRAVELS TO NEW ORLEANS TO SHARE IMPORTANT FINDINGS

The Social-Cognitive Development Lab recently traveled to New Orleans to present their research at the Annual Conference of the American Psychology-Law Society. They presented findings on a variety of topics including cues to (dis)honesty, children's understanding of Asking versus Telling, as well as children's understanding of implied meaning in questions. <u>http://www.brockscdlab.com/</u>



THE JURY IS OUT

Younger adults provided significantly lower capability ratings for older adult jurors compared to older adults, mainly based on beliefs that older adults suffered from poor health and hold 'biased' beliefs. (O'Connor & Evans, 2020)



Recent findings indicated that older adults (over 65 years of age) tend to hold a stronger truth bias than younger adults resulting in poor lie-detection scores. Older adults also rate children as more competent to testify in court, credible, honest, believable, and likeable than younger adults. (O'Connor & Evans, 2019)



ASKING & TELLING

Have your kids ever said they wanted to ask you something and then told you something instead? Kids learn the difference between asking and telling around 5-yearsold. Before this, they have a tendency to over apply the word asking, rather than using telling.



FACE LEARNING PATTERNS IN OLDER ADULTS

In the world of unions a well-known policy is 'last hired, first fired'. PhD student, Claire Matthews, has just discovered that the same policy holds for face learning and recognition. She is writing a manuscript describing tasks that older adults from GWB completed. Older adults performed just like young adults on some tasks, but made more errors on others--the exact pattern shown by children. Stay tuned for more details...



CAN CHILDREN RECOGNIZE FACIAL EXPRESSIONS?

Results from a Face Perception Lab Study help give us the answer.

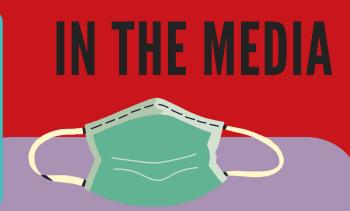
Most studies help children by providing them with emotion categories (e.g., houses labeled with fearful, sad, and angry faces). The Face Perception Lab gave children and adults a stack of photos containing sad, fearful, angry and disgusted facial expressions. They were asked to make as many piles as they wanted, making sure that each pile contained all of the people who 'felt the same way'. This allowed children to make their own categories.

Children didn't make more piles than adults, but they were much more likely to mix emotions up. Many children put sad and fearful faces into the same pile; they also put angry and disgusted faces into the same pile. By asking children to label each pile we discovered that language development plays a key role; children who did not produce the words 'fearful' and 'disgusted' were more likely to make errors.

This work was just accepted for publication in Emotion, a top journal in the field (Matthews, Thierry, & Mondloch, in press). The take-home? If you look disgusted, your young child just might think you are angry!

https://brocku.ca/psychology/research/faceperceptionlab.htm

Congratulations to the Campbell **Neurocognitive Aging** Lab who completed the Walk for Alzheimer's and raised over \$1400. What a great turn out!



Dr. Angela Evans was recently interviewed by Molly Bloom and kid co-host Elena about Lie Detection as part of the **Brains** On! podcast. Brains On! is a podcast for curious kids and adults from American Public Media. Take a listen here!

Dr. Cathy Mondloch, an expert on the development of face processing across the lifespan, was interviewed by the New York Times about children's reactions to face masks. Learn more about what Dr. Mondloch, and other experts, recommend here.

Find the answer with Dr. Karen Campbell. Karen Campbell is a Canada **Research Chair in Cognitive** Neuroscience of Aging. She researches attention and memory and why explicit memory declines with age. Learn more here!



children's lie-telling. When do children start lying?

Find the answer with Dr. Angela Evans!

Check out this recent piece in The Conversation by **Dr.** Caitlin Mahy on children's ability to remember future intentions.



The Social-Cognitive Development Lab and The Face Perception Lab completed the Amazing Race Niagara in support of The Kristen French Child Advocacy Centre Niagara. They raised over \$2300 across the two labs. The two teams competed against 19 other teams solving clues and completing challenges from paintball to chocolate tasting, pushing RV trailers to virtual reality, all while racing across Niagara!