



UNIVERSITY OF
TORONTO
MISSISSAUGA

2020-2021 Newsletter

Infant and Child Studies Centre

FROM THE DIRECTORS

The Infant and Child Studies Centre at the University of Toronto Mississauga would like to start off by thanking all the families who have participated in our studies. We are learning so much about early language, gender, cognitive, and social-emotional development in infants and children. Without your help, none of this research would be possible. It is our pleasure to share some of our recent findings

with you. Please share this newsletter with anyone else you feel would be interested in learning more about our studies or would like to participate.

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DIRECTORS

Dr. Elizabeth Johnson
Dr. Tina Malti
Dr. Samuel Ronfard
Dr. Doug VanderLaan

VISIT US ON
INSTAGRAM

@UTMCHILDLANGUAGELAB



POSTDOCTORAL FELLOWS

Dr. Félix Desmeules-Trudel
Dr. Sebastian Dys
Dr. Joanne Filippelli
Dr. Ruth Speidel
Dr. Thomas St. Pierre
Dr. Melis Yavuz-Muren

KEEP CALM AND RESEARCH ON

In light of recent events, Dr. Elizabeth Johnson's Child Language and Speech Studies (CLASS) lab has transitioned to online testing, enabling families to participate in our research from the comfort of their own homes! Families simply meet with a researcher for a 5-10 minute Zoom meeting, and then we email a link to an

PARTICIPATE
ONLINE AT
HOME!

GRADUATE STUDENTS

Erin Acland
Priscilla Fung
Emma Galarneau
Jida Jaffan
Laura MacMullin
Madeleine Yu



HOW DO I PARTICIPATE?

For more information on how you can participate, email us at:
juniorscientist@utoronto.ca

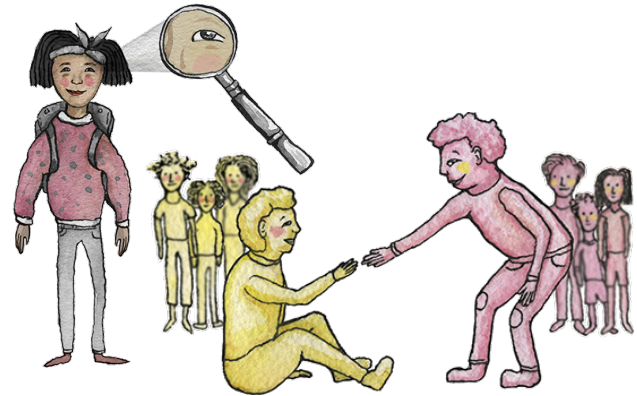
experiment that can be completed at families' convenience. Currently we have a number of ongoing experiments exploring different aspects of children's language processing, including children's abilities to recognize voices in various contexts and their evaluations of speaking styles portrayed in children's media. We even have online studies that parents and teachers can take part in. Dr. Samuel Ronfard's Childhood Learning and Development (ChiLD) lab and Dr. Doug Vanderlaan's Biosocial Investigations of Gender (BIG) lab will also be offering opportunities to participate in online studies this fall.

WHAT DO BABIES UNDERSTAND? IS "FIDO" A DOG, OR JUST "FIDO"?

Kids begin understanding words earlier than you might think. By 6 months of age, children show evidence of understanding a few common words. For example, they look to the picture of a dog when hearing "dog." But do these young infants understand words in the same way as older children and adults? For example, do they understand that a Great Dane and a Chihuahua are both dogs? And do they understand that both their dog's name (e.g., "Fido") and "dog" refer to their family pet? To begin to answer these questions, researchers in Dr. Elizabeth Johnson's CLASS lab are looking at 6- to- 15-month-olds' comprehension of the label dog and the name of a child's dog (e.g., "Fido"). Customized videos are created for each child, including pictures of their own dog and other children's dogs. Infants hear sentences like "Hey! Look! X! Find X!" where X could be their dog's name, or a category label for dogs (e.g., "doggy"). Preliminary results demonstrate that 15-month-olds show a much more nuanced understanding of these terms than younger children. We look forward to continuing these studies when we re-open for in-person testing.



WHERE YOU FOCUS IMPACTS HOW YOU FEEL



At some point in their lives, virtually all children do something unfair or hurtful to another person. Afterwards, most children will feel sorrow or remorse, but some children will feel happiness—feelings that will motivate them to repeat such behaviour in the future. Why do children experience such contrasting feelings? In Dr. Tina Malti's Lab for Social-Emotional Development and Intervention (SEDI) we found that what children pay attention to plays an important role. In a recent study, we asked children watching an illustrated scenario to imagine they were breaking a moral rule, such as stealing a treat from another child. At the same time, we tracked which parts of the illustrated scenario children were paying attention to using an eye tracker. We found that children who paid more attention to the victim of their actions were more likely to say they would feel remorseful. The same was not true for children who paid more attention to the benefits of breaking this rule, such as the stolen treat. These children were more likely to say they'd feel happy for acting this way. After a child breaks moral rules, it may be helpful for parents to take whatever a child is engrossed by, like a toy or treat, out of their view, and then ask them to think about the victim's feelings. In doing so, parents and teachers can help children learn from their misdeeds.

DO CHILDREN TEST WHAT THEY ARE TOLD?

Which of the objects in the picture below is the heaviest? Most children will say the biggest one. But when they are told that the smallest one is the heaviest, how do they react? Prior work has found that 6-8 year olds are more likely than younger children to test whether the surprising claim is true by picking up the objects. Dr. Samuel Ronfard's Childhood Learning and Development (ChiLD) lab asked whether the identity of the person providing the surprising claim also influenced whether children tested that claim. Children were told that a smaller object was heavier than a bigger object by an adult who spoke with either a native local accent or with a non-native accent. We found that children were



less likely to believe and test the claim that the smaller object was the heaviest when it was told to them by the adult with a non-native accent (this was true even for children routinely exposed to non-native accents). Thus, older children are more willing to believe the surprising claim pending further investigation but only when they are informed by someone they believe to be reliable (the adult with a native local accent).

DO YOU SPEAK TODDLER?

If a toddler said they wanted a "nana", would you understand that they were hungry for a banana? In the CLASS lab, PhD student Madeleine Yu is investigating who best understands toddlers. In a task that involves transcribing toddler speech, we are comparing performance of different types of human listeners (e.g. university students, mothers with young children) with the performance of non-human listeners (e.g. Siri). Unsurprisingly, adults outperformed Siri. Interestingly, mothers outperformed the adults who had little interaction with children. Mothers' superior performance was especially striking with speech by 2.5-year-olds. This fall we plan to extend this study to test preschool and kindergarten teachers. If you fit into this category, and would like to participate, please email us for more information.

HOW DO CHILDREN RECOGNIZE VOICES?

Adults are good at recognizing voices. For example, if you are on a conference call with friends, it is easy to identify who is talking. Children, however, do not develop adult-level talker recognition abilities until adolescence. Why is this? Are younger children worse in using acoustic cues or is it because they rely on other cues? PhD student Priscilla Fung of the CLASS lab investigated this question with 6-8-year-olds and adults. The task required them to identify a voice they previously heard. Results suggest that 6-year-olds rely mainly on acoustic cues to identify talkers (e.g., how fast a person speaks). 8-year-olds and adults, in contrast, also use linguistic cues (e.g., how speakers pronounce words). This suggests that when children become more experienced in a language, their increased use of linguistic cues helps them identify talkers more accurately. So for the next conference call, don't be disappointed if your nephews or nieces don't recognize your voice. Give it time – they will get better!



CULTURE SHAPES CHILDREN'S PREFERENCES

Societal beliefs about how girls and boys should behave are called gender norms and influence who children prefer as playmates. Girls prefer playmates who are interested in dolls, whereas boys prefer playmates who are interested in cars and trucks. Dr. Doug VanderLaan's Biosocial Investigations of



Gender (BIG) lab teamed up with the University of Hong Kong to compare friendship preferences of Chinese and Canadian children. Chinese culture is often stricter about following social norms, so we thought Chinese children's friendship preferences might be more strongly influenced by gender norms. Children 4- to 9-years-old participated in the study, with half from Mississauga and half from Hong Kong. All the children completed the same experiment in which they watched slideshows about different girls and boys who were either behaving in feminine ways or in masculine ways. Afterwards, the children were asked which of the girls and boys they would prefer as friends. As we suspected, compared with Canadian children, the influence of gender norms was about two-times stronger among children from Hong Kong. It appears culture shapes children's friendship preferences based on how strict the culture is about following gender norms.

RECENT PUBLICATIONS

Cooper, A, Fecher, N. & Johnson, E.K. (2020). Identifying children's voices. *The Journal of the Acoustical Society of America*, 148, 324 - 333.

Nabbijohn, A. N., MacMullin, L. N., Kwan, K. M. W., Santarossa, A., Peragine, D. E., Wong, W. I., & VanderLaan, D. P. (2020). Children's bias in appraisals of gender-variant peers. *Journal of Experimental Child Psychology*, 196, 104865.

Malti, T., Peplak, J., & Zhang, L. (2020). The development of respect in children and adolescents. *Monographs of the Society for Research in Child Development*, 85(3), 1 - 93.



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