



# Child Development Laboratories Newsletter - Fall 2018

The Child Development Laboratories at the University of Ottawa, are a group of researchers studying language, cognitive, social and moral development in children. This newsletter will keep you informed about our current projects, findings and other research activities. We would like to thank all families and daycares who have participated in our studies!

## CHILDHOOD THINKING LABORATORY

### Completed studies

#### The cognitive mechanisms underlying selective learning in early childhood

We have just completed a series of studies on selective learning in young children, which had been ongoing since the inauguration of our lab in 2015. The results confirm that, on average, 3- to 5-year-olds prefer to believe the claims of a confident rather than hesitant individual as well as of individuals who have been right in the past rather than wrong. However, we were interested in learning if children were consistent in their answers when playing this sort of game repeatedly, whether it's two similar games on the same day or the same game twice a week apart. Children do appear to be somewhat consistent in their responses, but this consistency is much lower than expected: Many children seem to change their learning preferences substantially from one time to the next, which suggests that these responses are not determined by a stable attribute in children of this age. Part of the results of this project were recently published in the *Journal of Cognitive Development*, and two PhD students from the lab, Isabelle Cossette and Aimie-Lee Juteau, had the opportunity to present these results at a conferences in St Catherines, Ontario and Amsterdam, Holland in the spring of 2018. Thanks again to all of our little participants and their families for your collaboration!

### Ongoing studies

#### Toddlers' attention to the credibility of others

The aim of this study is to learn how toddlers between 32-38 months use non-verbal and verbal cues of confidence to decide whether or not to learn from and imitate the actions of an informant.

#### Attention to confidence and overconfidence in preschoolers

In this research we are interested in evaluating the circumstances under which 4- and 5-year-olds may fall prey to claims of overconfident informants. So far we have tested 100 children and we hope to gain insight on how children weigh differences in confidence and accuracy between individuals when determining the credibility of these individuals.

#### Social reasoning in parents of young children

We are looking for parents of children ages 12- to 30-months (1 year to 2 ½ years) interested in participating in an online research study on parental social reasoning and the parent-child relationship. This study requires filling a survey available online, which includes general questions about yourself and your family, questions pertaining to hypothetical scenarios and stories, your relationship with your child and questions about your interactions with other children and adults. Participants are eligible for a draw of one of three \$50 Chapters/Indigo gift cards. If you wish to participate, please visit:

[https://uottawapsy.azl.qualtrics.com/jfe/form/SV\\_ahA5NYci2m4gBiR](https://uottawapsy.azl.qualtrics.com/jfe/form/SV_ahA5NYci2m4gBiR)



## SOCIAL AND MORAL DEVELOPMENT LABORATORY

### Completed studies

#### [Happily Unhelpful: Infants' Everyday Helping and its Connections to Early Prosocial Development](#)

We have just published a study on toddlers' *unhelpful helping*, the ways in which toddlers participate in routines in the home (e.g., cleaning up; throwing out trash) that are not always helpful to parents (e.g., throwing a TV remote in the trash), but are nevertheless encouraged and valued as part of toddlers becoming "little helpers". The study is available to view at:

<https://www.frontiersin.org/articles/10.3389/fpsyg.2018.01770/full>

### Ongoing studies

#### [Ottawa Toddler Study: The development of cooperation in the first years of life](#)

We are looking for 3-month-olds (and their parents), currently residing in Canada, to participate in a study exploring the development of cooperation over the first year of life. You and your baby will take part in everyday interactions and games, and fill-out questionnaires asking about motor development, and activities in the home. Best of all, you can take part in our study from the comfort of your home, joining us by Skype or FaceTime. [N.B. You will require a camera-equipped computer or phone to take part in the study]

## CHILDHOOD COGNITION AND LEARNING LABORATORY

### Completed studies

#### [Children's behavior and spontaneous talk in a future thinking task](#)

In this study, 3-, to 5-year-olds had to think ahead to meet a future physiological need (desire for food) or psychological need (avoiding boredom). One group of children alternated between a room with candy and a room without candy, spending 3 minutes per visit. Children were asked which room they wanted to put extra candy in for a future visit to the lab (correct answer: room without candy). A second group of children underwent the same procedure but with toys as the resource instead of food. With food, 3- to 5-year-olds all placed candy in the correct room more often than would be expected by chance, suggesting they were thinking about the future and acting to fulfill a desire for food. With toys, only 4- and 5-year-olds were above chance.

We also assessed children's spontaneous future thinking by recording and analyzing their speech while in the two rooms. Children who solved the task spoke more about the future and past than children who failed. This research highlights the importance of varying stimuli in future thinking tasks and developing methods to capture spontaneous future thinking in young children. This research, conducted by one of our doctoral students, Julian Caza, was recently published in the journal *Psychological Research* and is available to view at:

<http://link-springer-com-443.webvpn.jxutcm.edu.cn/article/10.1007%2Fs00426-018-1089-1>

### Ongoing studies

#### [Preschoolers' Understanding of Changes in their Own Past Preferences](#)

Studies on future thinking reveal that younger preschoolers (3- and 4-year-olds), but not older preschoolers (5-year-olds), have difficulty recognizing that their current preferences (e.g., Play-Doh) will be different in the future or, when they're "all grown up" (e.g., crossword puzzles). But would we find this same difference in age when asking preschoolers to think about changes in their past preferences? To explore this, we are currently asking preschoolers (3-, 4-, and 5-year-olds) to choose between child- (e.g., Play-Doh) and baby- (e.g., rattle) preferable items according to what they like best "now" and what they think they used to like best as a baby. Will it be easier for younger preschoolers to think about changes in their own past preferences compared to their future preferences? We will find out!

#### [How do young children save for the future?](#)

Saving for the future is an important and useful behaviour. It is something we do every day, from putting money in the bank to keeping a snack for later. Saving involves imagining ourselves in a future situation and then using this information to inform our present decision to save. Thinking about the future is something we start doing in early childhood, but we still don't know exactly how and when saving abilities develop. Our study uses a fun saving task, where 3-7-year-old children get to choose how to save and spend tokens for small food rewards. We are trying to learn about how saving abilities emerge, develop, and relate to other factors like age and whether or not you are given the suggestion to save or the opportunity to set a goal to save. This is new research that uses a new experimental approach, so we do not yet know what we will find. However, finding an improvement of saving abilities with age and with a suggestion to save would be consistent with research in this area. We look forward to learning more about this and we are excited to share this research with you.



## LANGUAGE DEVELOPMENT LABORATORY

### Ongoing studies

#### Understanding bilingual and monolingual language acquisition via brain waves

In this study we are interested in observing how 9-month-old infants' brain process words that either match or don't match associated objects. To do so, we are using electroencephalography (EEG). This (painless and non-invasive) method involves the use of a cap equipped with 32 electrodes that record brain activity.

#### Using words to form categories

Previous research has shown that babies as young as 6-months-old can understand some words in everyday situations. In this study, we are investigating whether babies can differentiate between two categories. We will present them with 8 different objects from the same category (eg. dinosaurs), paired with the same nonsense word. Once they are bored with this, they will be presented with an object from a different category (eg. a fish), alongside a new object from the initial category. If babies this age can categorize the objects, then we expect them to look more to one of the two objects, indicating that they tell them apart.

#### Infants' attention to sound details

This research focuses on speech discrimination in 8-month-old infants. We are interested in investigating how monolingual and bilingual infants perceive differences in sounds, specifically, their ability to discriminate vowel contrasts, /E/ versus /I/ (as in bet and bit). Your baby will see a checkerboard pattern while listening to one nonsense word being repeated. We will play this for the baby until s/he gets bored. We will then play your baby something new: a new word that is only slightly different from the one s/he was hearing. We will video tape your baby's face to see his/her reaction to this new stimulus (looking time). If s/he has noticed the fine difference between the sounds, then s/he should look longer at the checkerboard when the sound change occurs. We are also going to use another, subtler measure to determine how your baby is attending to and discriminating the two vowels: their heart rate. Infants' heart rates change pace as their attention changes. We will measure their heart rate via two heart rate monitors attached to their chest, which we will ask you to place on their chest. The monitors are very easy to place on the chest and will easily come off after the study.



## VISIT US AT THE CANADA SCIENCE AND TECHNOLOGY MUSEUM!

The Childhood Cognition and Learning Laboratory and The Language Development Laboratory also conduct research at the Living Lab, located at the Canada Science and Technology Museum. We invite you and your children to visit us, while you are at the museum, to take part in our fun game-like studies! For more information about the Living Lab, please visit:

<https://uottawalivinglab.weebly.com/>

## HELP US SPREAD THE WORD!

We're always looking for new participants! If you or anyone you know would like to participate, please don't hesitate to contact us: (613) 562-5800 ext. 4446 [child.thinking@uottawa.ca](mailto:child.thinking@uottawa.ca)

To participate, please visit: <http://socialsciences.uottawa.ca/childhood-thinking/participate>



Isabelle Cossette, graduate student in the Childhood Thinking Lab, presenting research findings at the Jean Piaget Society Annual Meeting in Amsterdam, Holland.