These last few years have been quite unique, to say the least. We hope that your family has been doing well and that there is excitement with summer here!

As you may imagine, many of our in-person studies were put on hold due to the COVID-19 pandemic. As a result, many of our researchers and graduate students had to quickly pivot their research projects to a virtual setting, where they could still examine and pursue the research questions they were interested in investigating. Although this was new territory for us and difficult at first, we are so excited for the avenue this opened up for us as a research lab because we got to meet lots of amazing kids and youth on the other side of the screens from all over the province (including some in the US). None of our research would have been possible without them, so we are incredibly grateful for the constant support.

Since our last newsletter, we have continued pursuing various research questions that examine children’s ability to interact successfully with others. We are thrilled to share our work with you here, including some recent studies that were pivoted to online formats – and look forward to discussing our work with fellow researchers at upcoming conferences this summer.

As well, we are pleased that we have been able to attend in-person community events this summer. Engaging with our community is a valuable aspect of our work.

We want to thank all of our families for past participation, as well as for your patience and understanding with pivoting our research studies to remote platforms. A heartfelt thanks to you!
Over the last few decades, adolescents’ interactions with peers have increasingly transitioned online. Social media provides multiple avenues for positive communication between peers. However, youth can also experience harmful online peer interactions, with such experiences negatively impacting their well-being. We investigated the impact of perspective-taking prompts (e.g., messages encouraging a user to consider the feelings/perspective of a recipient) on teens’ online communication. We found that after viewing a perspective-taking message, adolescents more often chose prosocial comments to send to a recipient.

We also asked adolescents to tell us about their social media use, levels of empathy and their mood at the time they were doing the task. We found that youth who reported lower moods or more frequent social media use made fewer prosocial comments on the social media task. Finally, adolescents with higher levels of self-reported affective empathy (e.g., ability to experience another’s emotions) made more prosocial choices on the app. In addition, gender was found to be an important factor for teens’ online choices, with girls endorsing more prosocial communication than boys.

This work, published within the *Journal of Adolescence*, provides new insights into the ways in which teens navigate their online world.

This line of research is being continued in the lab – see the section below on current studies!
DO SCHOOL-AGE CHILDREN UNDERSTAND HOW PROSOCIAL LIES MAY AFFECT THE EMOTIONS OF THE RECIPIENT OF THE LIE?

Prosocial lies (also known as “white lies”) are lies that are used to make someone feel better. They are widely used in everyday communication and have many social benefits. We were interested in learning about what impacts how children interpret prosocial lies. More specifically, we were interested in how empathy and listener knowledge relate to children’s understanding of prosocial lies, and how they think people feel after a prosocial lie. To answer these questions, we met with 80 children (8-11 years) online, and they listened to/watched a conversation where a speaker makes a statement to a listener.

We found that children with high empathy had a better understanding of lies when the listener in the story did not know they were being lied to, and more difficulty when the listener may have suspected they were being lied to. This shows that children with high empathy understand the purpose of lies – that it makes sense to use them when the other person isn’t aware of the lie.

When children rated how the characters felt after the lie, results showed that listeners were perceived as feeling better, even when the listener may have known about the lie. Children rated speakers as feeling better regardless of whether the listener is knowledgeable or ignorant of the true events. Results show that children are able to reflect on the emotional impact of prosocial lies, and that hearing/saying a positive statement will boost the speaker and listener’s moods.

This work provides insight into how children learn the nuances and social functioning of various language forms, such as nonliteral forms.

This work is being presented at a conference this summer, Development 2022.
4 HOW DO INDIVIDUAL CHARACTERISTICS AND OTHERS’ COMMENTS INFLUENCE YOUNG ADULTS’ ONLINE COMMENTS?

There are many differences between online and in person communication, with one salient difference being that online communication involves fewer cues from communicative partners. This difference has prompted researchers to propose that online communication may be more aggressive because people feel disinhibited when they don’t receive information from a communicative partner.

We were interested in learning more about how young adults communicate online and whether their own characteristics as well as the communicative context influence the sort of responses they provide within social media platforms. We addressed these questions using a simulated Reddit task in which undergraduate participants made comments on posts. We also included comments that were presumably from other viewers that were either all negative (critical) or were mainly negative, but included one supportive comment to see if this affected how participants responded. We coded participants’ comments according to whether the comments reflected ideas that were consistent or inconsistent with the original post as well as whether they were more or less aggressive/prosocial in their tone.

We found that others’ comments did not influence participants’ own comments. However, participants’ individual characteristics were associated with the types of responses they made. For instance, individuals who reported more social media use in their everyday lives tended to provide less consistent and more aggressive responses. Those individuals who reported using maladaptive strategies to regulate their emotions tended to make less prosocial comments while those who reported adaptive strategies (e.g., cognitive reappraisal) made more prosocial comments.

Together, this work (being presented at the Canadian Psychological Association Annual Convention) suggests that emotion regulation is an important factor for understanding how individuals communicate online within social media platforms.

5 DO CHILDREN PAY ATTENTION TO THE NONVERBAL CUES OF THEIR COMMUNICATIVE PARTNER?

As many parents may attest, young children’s attempts to communicate are not always clear. For example, if a 5-year-old child were trying to tell her mother to look at a specific car on the road, she might just say, “look at the car”, without providing any information about which car she was referring to. In response, her mother might look confused and say, “which car do you mean?”. The young girl might then repair her message by saying, “the red one”, making it clear which car she was referring to. This skill of repairing ambiguous messages was the focus of a recent study in our lab.

We asked, 4- and 5-year-old children to provide descriptions about how to find a prize hidden in a box to another child (presented via video).

When the children provided an ambiguous description, the other child indicated confusion either verbally or nonverbally (i.e., looking confused).

We found that children were most likely to attempt to repair their messages and provide additional information when they were provided with verbal feedback from the listener. That is, when the listener verbally told them their message was unclear.

This means that verbal feedback is more helpful for teaching children to communicate clearly compared to nonverbal feedback.

We also found that children’s thinking skills (called executive functions) and their ability to understand emotions in others were related to their ability to repair their messages.

The findings can help parents by showing how to best support their children’s development as speakers: that is, the findings show that telling children when they have provided an unclear message can help them to repair their messages more effectively. As well, these findings can help us understand the thinking skills involved in communication and how children learn to become clearer speakers over time.

This work has been accepted for publication in the scientific journal, Cognitive Development.
We wanted to let you know about a study that is currently running for older youth. One of our graduate students, Celina, is focusing her work on adolescents’ communication in social media – a timely topic given that over the last decade youths communication has increasingly transitioned online. Here are the details about this study – we will be reaching out to families on our database, but please feel free to contact us if this is of interest.

**Phase 1 online study:** 45 mins
**Phase 2 online study:** 30 mins
*Approx. 6 months apart*

Examines how adolescents convey and understand the motivations of other users on social media.

**WHAT DO I GET?**
Participants receive community volunteer time or a $5 gift card for each phase of the study.

**OVERVIEW**
Adolescents will be asked to participate in a simulated Instagram social media task and complete additional questionnaires.

**TIME?**
Youth 13-16 years old

**AGE?**
Parents are asked to complete a short demographic survey and consent form.

**PARENT TASKS**
Examines how adolescents convey and understand the motivations of other users on social media.

**YOUTH TASKS**
We are also hoping to start up an in-person study in the Fall – this was one that was started pre-pandemic, but had to be put on hold.

This study, in partnership with colleagues from Computer Science, involves children interacting with a social robot, namely teaching the social robot a new concept to see if the children also benefit in terms of their learning.

This is a new area of research for the lab and we’re excited about this study. Stay tuned!

In addition to our newsletter, a good way to stay up to date on lab activities is through our social media platforms. We have started a series of new themes on our social media such as Suggested Books, Featured Research, Ask a Researcher, and Meet our Lab Members.

Our Suggested Books posts feature books that highlight themes or topics that we study in the lab, such as sharing or perspective-taking – and our books that our researchers find particularly engaging as an activity with little ones.

Our Featured Research posts highlight findings from recently completed research studies in our lab (that many of you will have participated in!).

Our ask a Researcher posts is an opportunity for our researchers to dive into the research literatures to answer your questions about children and adolescents’ cognitive development – we love receiving questions from you, so please feel free to reach out if there are things that you are wondering about.

Lastly, our Meet our Lab Members posts give you a look behind the scenes at the people who keep our lab running! Joining our community online is a great way to learn about new opportunities and findings to better understand and connect with youth on their developmental journey!
Cognitive Development Lab
College & university
Psychology researchers at @uofwaterloo studying how children’s cognitive abilities influence the way they interact with those around them.

Please feel free to follow us on Instagram to stay up to date with what we have going on in the lab!

Thank You

For any questions or to sign up to participate, email childresearch@uwaterloo.ca

For more information about our research, visit our website at https://uwaterloo.ca/cognitive-development-lab/

Check out our Instagram at @uwcogdevlab