

EARLY DEVELOPMENT RESEARCH GROUP



2014 NEWSLETTER

WHAT IS THE EDRG?

The Early Development Research Group (EDRG) is a group of five research centres in UBC's Department of Psychology. We study the development of language, learning, and social understanding in infants and children up to 9 years old.

THANK YOU, PARTICIPANTS!

We would like to extend our **sincere thanks** to the hundreds of parents and children that have supported our research this past year by participating; we would not have been able to do it without you!

WOULD YOU LIKE TO PARTICIPATE WITH YOUR CHILD IN ONE OF OUR DEVELOPMENT STUDIES?

SIGN UP ONLINE AT
<http://edrg.psych.ubc.ca>

OR CONTACT US AT
(604) 822-9540
earlydev@psych.ubc.ca



RECENT FINDINGS FROM THE INFANT STUDIES CENTRE

The Infant Studies Centre focuses its research on the development of language, and is directed by Dr. Janet F. Werker.

Near Infrared Spectroscopy (NIRS) is a fascinating technique that allows our researchers at the Infant Studies Centre to see how young babies' brains work while speech sounds are being played to them. One facet of perceiving and understanding language is the ability to extract the relations among speech sounds and detect the underlying structure of the language. In a series of NIRS studies conducted at the BC Women's Hospital, we've demonstrated that even newborn infants (only a few days old!) are able to detect the structural relationships among language sounds. For instance, newborns were able to successfully detect the sound patterns that adhere to languages with "AAB" and "ABB" structures, and were also able to distinguish between the two patterns. Such findings suggest that these foundations of language acquisition are in place from birth!

OUR RESEARCH IN THE NEWS

The Globe and Mail: Bilingual Babies Not Overburdened by Demands of Two Languages

RECENT FINDINGS FROM THE CENTRE FOR INFANT COGNITION

The Centre for Infant Cognition (CIC), directed by Dr. Kiley Hamlin, studies the role of evaluative processes in infants' everyday cognitions about the world.

Previous studies from the CIC have shown that infants prefer "nice guys" over "mean guys" in various ways. Recently, our researchers have conducted a study to further elaborate on these findings, and results suggest that infants actually prefer those who harm (rather than help) a character who was mean in the past, whereas they prefer those who help (rather than harm) a character who has been nice in the past. "These results are really exciting," says Dr. Hamlin. "They suggest that 4-month-olds can already track the interactions of several different individuals over time, remembering who did what to whom, and can interpret helpful and harmful behaviors in a larger context. That infants already do this by 4 months of age – when many of them might not even have seen an act of retaliation yet – suggests that notions of deservingness are foundational aspects of the infant social mind."



DID YOU KNOW?

We have studies available for children of all ages between **3 months old** and **9 years old!**



RECENT FINDINGS FROM THE K.I.D. STUDIES CENTRE

The Knowledge, Imagination, and Development (K.I.D.) Studies Centre focuses on topics related to children's social reasoning, and is directed by Dr. Susan Birch.

The researchers at the K.I.D. Studies Centre recently conducted a study where children 4-5 years old were presented with two models from which to learn new information. In the first condition, children saw a confident model and an uncertain model, and as expected, they preferred to learn from the confident model. In a second condition, the models behaved the same way, but, this time, children were shown a 'history phase' in which one model exhibited a history of being confidently wrong and the other model a history of being hesitantly correct. When the model's confidence contradicted her past accuracy, older children preferred to learn from the previously accurate (but hesitant) model. This tendency for children to give more weight to a person's prior accuracy than to her confidence increased with age. These exciting results show an interesting developmental progression in children's ability to weigh different sources of information to choose the most credible source. It also highlights the important changes in critical thinking that occur across the preschool period!



WE'RE ALSO AT SCIENCE WORLD!

The **Living Lab** is an exciting partnership between UBC and Science World that provides opportunities for museum visitors to participate in real research studies while engaging science experts in areas from psychology, linguistics, neuroscience and education. We're open 7 days a week and have active studies for anyone over 6 months of age, including parents! The Living Lab is directed by UBC's Dr. Andrew Baron (livinglab@psych.ubc.ca).

RECENT FINDINGS FROM THE LANGUAGE DEVELOPMENT CENTRE

The **Language Development Centre (LDC)**, directed by Dr. Geoff Hall, investigates how children solve the challenging problem of learning the meanings of the words of their native language.

Babies typically start producing words around their first birthday, but recent research indicates that they understand a number of labels as early as six months of age. Words for caregivers (such as "Mommy" and "Daddy") are among the earliest expressions that children appear to comprehend, yet it remains unclear exactly how children understand these labels. Are they words for specific individuals (i.e., for only their own parents) or for entire categories of individuals (i.e., for any women or men)? In the LDC, we are currently exploring 6-month-olds' understanding of words for their caregivers and other familiar people. Our study is still in progress, but our preliminary findings are consistent with the possibility that 6-month-olds have mapped labels like "Mommy" and "Daddy" to specific individuals. These findings are helping us to understand the nature of babies' earliest vocabularies.

In one of our studies with infants (3 to 21 months old), we are examining how they feel toward people who speak their native language compared with those who speak a foreign language. Thus far, we have found that infants are positively disposed toward speakers of their native language and they have no negative feelings toward speakers of a foreign language. This is interesting because other research has shown that by 5 years old, children do in fact hold less favorable attitudes toward speakers of a foreign language. We are currently exploring the source of this apparent developmental change.

In another study, we explored the flexibility of 5 to 14 year olds' unconscious (or implicit) preferences for social groups. We discovered that these preferences might be more flexible at younger ages even though, with age, children gain greater cognitive flexibility. This finding is really cool because it suggests that, like language development, there might be a critical period in development during which parents, educators and caregivers may have the best opportunity to shape more egalitarian views in the minds of children. For more updates about our research, please visit www.scienceworld.ca/lab.

