

A Note from the Director:

This has been another exciting year in the Baby Language Lab. ManyBabies (our

multi-lab project examining babies' preference for infant-directed speech, or "babytalk") is in full swing. To date over 80 laboratories around the world have expressed interest in participating, and well over a dozen have begun collecting data for the project. This is truly a revolutionary way to do science – I like to refer to it as "crowd-sourcing" science. We are extremely honoured, as one of the core laboratories organizing this project, at the response from our fellow labs. This groundswelling of response will allow us to examine some really important questions to improve our methods, by seeing how things vary across laboratories with different methods. It will also allow us to examine how infants' responses to infant-directed speech vary from one language to another and across different cultures, which use infant-directed speech in different ways. These are questions we simply couldn't begin to ask without our crowdsourced project.

In other news, we were recently awarded the prestigious Digging into Data grant for our project, Analyzing Child Language Environments around the World (ACLEW). This project is bringing together child language researchers (like yours truly) with speech processing experts on both sides of the Atlantic. Our goal is to begin to address questions about how language experiences differ (or are the same) for children in different cultures using very large recordings of children's real everyday experiences. To do this, we have to invent new tools, because transcribing all that data by hand is simply impractical.

I hope you enjoy reading about some of the things we've found out over the last year and join me in congratulating our recent graduates and awardees from the lab. As always, this is my opportunity to thank you, the participants, without whom we simply could not do our research. Have a great summer!

Melanie Soderstrom



Newsletter 2016/2017 info@babylanguagelab.org

Studies This Year

Bilingual Study

(Shayna Pierce and Laurisa Adams – 5 to 12 months)

In this study, we are looking at what German-English and French-English bilingual babies, as well as babies learning only English, understand about the vowel sounds in their language(s). In our first study, English-only babies did not discriminate (tell apart) the two vowel contrasts they were tested on this year, even though both contrasts are present in English. We are currently testing the same vowel sounds in a different procedure with the English-only babies, as well as continuing to test our bilingual babies. Stay tuned for more findings!

Preterm – Full-term Study

(Brenna Henrikson – 5 to 24 months)

Brenna's Masters thesis is examining whether infants who are born early (preterm) learn to icentify sounds differently from infants who are born on time (full term), because of their different experiences with sounds inside and outside the womb. The sounds this study focused on are called fricatives - sounds like "s" and "sh", which are not heard well in the womb. In English, "sh" is more commonly heard with "r" sounds (e.g. "shriek"), but "s" is more common with "I" sounds (e.g. "sleep"). Common and uncommon sound pairs are played for full term and preterm infants in order to determine which sounds the infants prefer listening to, which lets us know whether the infants have learned what is common in our language. In this study, which is wrapping up this summer, our findings suggest that preterm and full term infants learn about these sound pairings at a similar rate.

Lab Staff

Dr. Melanie Soderstrom (Lab Director)

Dr. Soderstrom started the Baby Language Lab upon her arrival at the U of M in the summer of 2008. She is an expert in infant speech perception and the language-learning environment.

Karmen McDivitt (Graduate Student)

Karmen joined the lab in September 2014 after completing a B.A. Honours degree from the University of British Columbia. This past year Karmen has completed her Masters Thesis and began her first year of the PhD program in Clinical Psychology.

Brenna Henrikson (Graduate Student)

Brenna joined the lab in September 2015 and is in the process of completing her M.A. in the Clinical Psychology Program at the University of Manitoba. She is very excited to defend her thesis and begin her PhD program in Clinical Psychology.

Laurisa Adams (Perceptual Studies Coordinator)

Laurisa joined the lab in spring of 2015 as a volunteer, and is now currently the Perceptual Studies Lab Coordinator. She is graduating this fall with an advanced degree in Linguistics and a minor in Psychology. She will be applying for a Masters program in Speech-Language Pathology.

More Studies This Year

Name in Speech Noise Study

(Dana Bernier – 5, 9 and 12 months)

This study was looking at whether infants can detect their own name against a noise background of multiple talkers (like during a really noisy mom's group). This year we showed that infants as young as 5 months old can hear their own name when it's 10 decibels louder than the background noise. They can even tell their own name apart from another similar name! This is an important skill for babies. However, it's still harder for them than for us adults, so keep the noise down when possible!

Young Mothers Study

(Karmen McDivitt – 0 to 24 months)

Do young mothers provide different language environments when compared to older mothers? If so, in what ways? Karmen's study captures the natural language environments of infants born to young mothers using special recording devices called "LENA". These devices record the language an infant is exposed to, and automatically provide estimates of the child's talk or babbling, and how much language they hear from adults.

Karmen's Masters Thesis found that young mothers know less about general infant knowledge compared to a normative general sample of mothers. She also found that young mothers performed similarly to a low socioeconomic sample of mothers on general infant development knowledge. The more knowledge of infant development the mothers had, the more speech the infant understood and produced, as reported on a survey completed by the mother. Her results may provide support for the connection between knowledge of infant development in mothers leading to positive results in the form of language skills in their child. For her PhD, she will be looking at the use of infant-directed speech ("babytalk") by young mothers.

Lab Staff continued

Kelsey Dyck (Undergraduate Research Assistant/Annotator)

Kelsey joined the lab in spring of 2016 where she started her summer research position. This summer she will be continuing this position by running our 'Manybabies' study through an Undergraduate Research Award. This fall she will be applying for graduate school to pursue a career in Speech-Language Pathology.

Shayna Pierce (Undergraduate Research Assistant)

Shayna joined the lab in the summer of 2016 as a research assistant for the Bilingual Study. She hopes to go on to med school and specialize in pediatrics.

Annotators/ Transcribers in the lab:

Kelsey Dyck Jessica Kirby Jessica Klassen Mercedes Mulaire Sarah McEwan

Our Helpful Volunteers:

Shayla Livingstone Mercedes Cesar Paris Ginakes Kaila Baloun

Special Congratulations:

- Welcome back to a lab alum, Jona Frohlich! She is returning to the University of Manitoba after completing a Masters at University of Alberta to do a PhD in clinical Psychology.
- Laurisa Adams, Shayla Livingstone and Mercedes Mulaire for their upcoming graduation of their Linguistics/Psychology Undergraduate degrees, in October.
- Jessica Klassen for her graduation and acceptance into the Speech-Language Pathology Graduate Program at the University of Alberta.
- Karmen McDivitt on her completion of her Masters degree in Clinical Psychology.
- Aleah Fontaine for her graduation and acceptance into the Clinical Psychology Graduate program.
- Kelsey Dyck on her Undergraduate Research Award.
- Sarah McEwan on her summer internship award from CHRIM.

If your child is over 30 months:

Extra Special Thanks:

Your child has officially graduated from the Baby Language Lab – most of our studies are for infants under 30 months. We very much appreciate your past participation, and hope that you will consider letting us know if you have any new additions to your family!

If you have participated in more than one study:

Every visit means a lot to us. We try to make your visits as enjoyable as possible so you will want to come back to visit us ⁽²⁾ While even just one visit makes a big difference for our research, we want to extend a special thank you to those of you who have come to the lab for multiple visits!

If you have spread the word to your friends and family:

Participant recruitment is always our biggest challenge in the lab. If you know someone with a child under 24 months, it would be awesome if you helped spread the word about our lab! If you have already done so, thank you for helping us with this important part of our research!

THANK YOU

We are still actively recruiting infants between 3 and 24 months for our ongoing studies, and are especially recruiting Bilingual infants, Preterm infants and Young mothers!

Participation Opportunities in another U of M Lab!

Are you a woman between the ages of 18-40 who is pregnant or has had a child within the past year? If so, we want to hear from you!

We are interested in learning about women's understanding of anxiety during the pregnancy and postpartum periods, as well as their desire for information in this area.

Participants will receive a <u>\$10 gift card</u> for completing an online survey, which will take about 25 minutes to finish. If you are interested in participating, <u>please follow this link to complete the survey</u> <u>online</u>: https://umanitobapsych.az1.qualtrics.com/jfe/form/SV_3BH0GwJF4Fghc69

Questions? Contact Dr. Kristin Reynolds at 204-474-9528 or Kristin.Reynolds@Umanitoba.ca

Our lab has been involved in a number of publications this year. If you would like a copy of any of the below papers, please feel free to contact the lab!

VanDam, M., Warlaumont, A. S., Bergelson, E., Cristia, A., Soderstrom, M., DePalma, P., & MacWhinney, B. (2016). HomeBank, an online repository of daylong child-centered audio recordings. *Seminars in Speech and Language*, *37*, 128-142. DOI: 10.1055/s-0036-1580745

Reimchen, M., & Soderstrom, M. (2016). Do Questions Get Infants Talking? Infant Vocal Responses to Questions and Declaratives in Maternal Speech. Infant and Child Development. DOI: 10.1002/icd.1985

Frank M, Bergelson E, Bergmann C, Cristia A, Floccia C, Gervain J, Hamlin JK, Hannon, EE, Kline M, Levelt C, Lew-Williams C, Nazzi T, Panneon R, Rabagliati H, Soderstrom M, Sullivan J, Waxman S, Yurovsky D. (2016). A collaborative approach to infant research: Promoting reproducibility, best practices, and theory-building. *Infancy*. For more information or to book an appointment, Contact us by: Phone: (204) 474-8798 Email: info@babylanguagelab.org Facebook: www.facebook.com/BabyLanguageLab

Website: www.babylanguagelab.ca

We are still accepting donations for You Can't Spoil a Baby – a volunteeroperated project that delivers gifts of once-loved/new baby clothes and items to help Manitoba families in need with the first year of baby's life. If you have gently used baby items you would like to bring in, please ask a research assistant about our donation box.



youcantspoilababy.org

Research in our lab is approved by the Psychology/Sociology Research Ethics Board.

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If it has been five years since your last appointment, this will be your last newsletter, if you would like to continue receiving a newsletter, please contact us!