

# Reading and Language In School-Age Children

*A study of language, memory, and reading in children*

Investigators: Drs. Lisa Archibald and Marc Joanisse  
Department of Psychology, The University of Western Ontario

## THANK YOU!

Thank you to all parents and children who participated in our study! You have helped further our understanding of language and reading in children.

## RECORD NUMBERS!

In May and June of 2007, we enrolled 400 children from 9 schools in our study! Thanks to you, we learned more about what kids can do and when they can do it because we had so many children participate in our study.

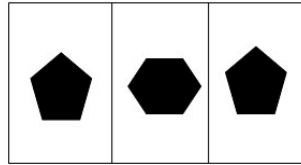
## STUDY TASKS

In our study, your child heard 'funny words' or sentences said over a computer, and was asked to repeat them into a microphone.



There were other language, memory, and reading activities too. Like these...

Find the odd one out:



Read this made up word:

*biffle*

Point to the second large black circle:



## WHAT HAVE WE LEARNED SO FAR?

Children learn to talk and read at different rates. Some children have more trouble learning language even though they have good thinking skills, and learn other things quickly.

One thing that may help children learn more quickly is their *working memory*, their ability to remember and manipulate information over short periods of time. An example of a working memory task is to repeat back a series of numbers in backwards order!

Say these in backwards order:  
9-6 -2- 4

Hmm

In our study, we wanted to know if children who are having trouble learning language also have weaker working memory skills. And the answer is: sometimes they do, and sometimes they don't!

We based this answer on the findings from this study. Some children had poor language skills, some poor working memory, and some had both poor language and working memory skills. Other children had no difficulties at all.

These findings are important because they help us understand why some children struggle to learn to talk and read. We now know some of the best tasks for determining if a child is having trouble with language, reading, or memory.

The results of the study also tell us something about the way the brain is organized: separate language and memory

systems that work closely together.

## FUTURE STUDIES!

Here are some of the next studies we are planning:

### Word learning

This study will explore how children learn new words. How many times do they need to hear it? Are words that are harder to say harder to learn?

In one part of this study, the children will say words while holding a gummy bear between their teeth! Then they can choose to eat the gummy bear, or spit it out! Which would you choose?



### Brain waves

Here, we're interested in how the signals in the brain change depending on the sounds a child hears.

For this study, the children visit our lab at the University of Western Ontario and wear a cap that allows us to record brain activity!



A hard working brain!

### Improving language and memory

This study focuses on what it's like to have poor language or memory skills, and what we can do to help.

We'll visit the children in their classroom, and invite some into our clinic. We're interested in developing new and effective ways of helping children improve their language, reading, and memory skills.



## WHO CAN HELP?

The studies will include children with or without difficulties in language and/or memory skills.

We'll be in touch in the next few months with more information!

## SPECIAL THANKS!

We'd like to say a special thanks to all those who helped us organize and complete our study:

### **TVDSB Language and Memory Group:**

Allison Brown, Jane Donkervoort, Danielle Grigg, Jane Hawley, Elaine Henderson, Beth Mencil, Kelly Millard, Cindy Nicholson, Donna Psutka, Nancy Vanbussel, Julie Vaughan-Sharpe, Cindy Woo

**School Personnel:** All teachers and principals providing assistance, in particular, Suzanne Barr, Janice Beckett, Carolyn Conning, Wendy Crocker, Karen Hills, Allison Hubert, Susan Kjeldguard, Deb Laverty, Tom Pint, Lyn Thompson, Elaine Turner, Tina Vanderwallen-Howey, Eileen Wise

**TVDSB Personnel:** Vesna Fernandez, Steve Killip

### **UWO Undergraduate Students:**

Safiyya Devraj, Amanda Hermsen, Navaz Khory, Adam Morawski, Natalia Ng, Lauren Rogenstein, Melany Shepherd, Lindsay Schreiber, Lisa Spiegel, Laura Switzer, Lauren Vannus

### **UWO Graduate Students:**

Allison Beier, Jean Boyle, Becky Bradley, Shelley Cavill, Andrea Chance, Colleen Chapman, Rhonda Cheng, Kaitlin Clark, Julie Cohn, Michelle Colli, Brenda Dakin, Jessica Docker, Courtney Dorrington, Melissa Dreyer, Terri-Lynn Gagnon, Remika Gautam, Genna Hammell, Melissa Heydon, Ilana Katz, Angela Kaufman, Victoria Lewis, Adriana Lopez, Gillian Lucas, Melissa McCabe, Julie McDermit, Carrie McGregor, Jenna Merritt, Rachael Millard, Ajay Mysore Narasimha, Angela Nicholson, Nicole O'Donnell, Jacquie Reid, Erin Robb, Tina Saxon, Ellyn Thompson, Olivia Tontini, Nadia Torrier, Adrienne Trevisonn, Megan Wells, Jennifer Westgate, Karen Yanch, Yvonne Yee, Jana Zalamanowiz

## CONTACT US!

If you would like more information, please do not hesitate to contact us.

Our contact information appears at the bottom of this sheet. We'd love to hear from you!