INFANT LEARNING PROJECT

Developments

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Current Projects:

- Face
 Discrimination
 Study:
 3-4 and 8 months
- Other-Race Training Study:
 6 and 9 months
- ID Faces Study:6 months
- Facial Expression Study:6 and 10 months



Melanie Spence, Ph.D. Associate Dean

We are very proud to announce that Dr. Melanie Spence has accepted a position as the Associate Dean of Undergraduate Studies in the School of Behavioral and Brain Sciences. In August 2010, the University suffered a tragic loss when it was announced that Dr. Duane Buhrmester, the preceding Associate Dean, had been killed in a rock climbing accident. However, in the words of the Dean. Dr. Bert Moore, "[Dr. Spence's] able leadership of our graduate program in Psychological Sciences and her deep knowledge of the School and University, coupled with her commitment to

development of programs within the School, make her the ideal candidate to assume this leadership position under extraordinary and difficult circumstances." We are confident that Dr. Spence will excel in her new role, and we are committed to supporting her through continued research activity in the lab. Congratulations,

The Truth About Television and Your Infant

Brittney McCormick

According to the American Academy of Pediatrics, "Children of all ages are





Dr. Spence!

constantly learning new things. The first 2 years of life are especially important in the growth and development of your child's brain. During this time, children need good, positive interaction with other children and adults. Too much television can negatively affect early brain development. This is especially true at younger ages, when learning to talk and play with others is so important. Television is not recommended for children under the age of 2." [continued on p. 3]





Social Interaction Helps Infants Learn Language Sounds

Sarah Salomon

During the first year of life, infants begin to recognize the individual sounds of their native language. Even though infants rapidly learn these aspects of their native language, they nonetheless have the capacity to tell apart the sounds of all languages until about 6 months of age. After 6 months, the ability to discriminate between different foreign language phonetic characteristics, or speech sounds, quickly declines.

In order to discover what, if anything, might inhibit this decline, Kuhl and her colleagues (2003) devised a study to evaluate the early language learning capacity of infants. Nine -month-old English-speaking infants engaged in interactive play with an adult who spoke native Mandarin Chinese over the course of 12 short sessions. The researchers found that those infants were able to tell apart Mandarin Chinese sounds and did not exhibit the typical decline in their ability to tell apart foreign language sounds.

The researchers also wanted to see whether live social interaction played an important role in learning languages. A second group of infants watched and heard the foreign language being spoken in video recordings, while another group of infants only heard the foreign [continued on p. 3]

Infant-Directed Speech Helps Babies Learn Language

Lisa Keylon

Almost universally, adults speak to infants differently than they speak to other adults. This unique type of speech, with its higher frequency and slower rate of speaking, is called infant-directed speech (ID speech). Other traits of ID speech include clearer articulation, longer vowel sounds, and a wider pitch range used by the speaker.

ID speech is thought to help infants distinguish between different spoken sounds long before they can speak. Recent research has revealed ways in which ID speech could be helpful to infants when they're learning language. In a study

with 19-month-olds, who are learning words very rapidly, the slower speaking rate used during ID speech helped infants recognize and identify a familiar word more quickly (Song, Demuth, & Morgan, 2010). This suggests that ID speech could play an important role in word learning around this age in addition to the help it provides infants with speech processing earlier on.

What does this mean for parents? Using ID speech when you speak to your baby should not be considered "baby talk" but should be encouraged because research suggests it is useful in helping your child learn to understand and produce language.

Thank You

We thank our families for your participation. Without your support, our research would not be possible!

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[Television and Your Infant, p. 1]

How can TV negatively affect early brain development? Television takes away from the precious time babies have to interact with people and their environment. Babies' brains develop rapidly between birth and three years. Neural connections are constantly formed and strengthened as an infant explores new places and objects. Television is believed to "rewire" the infant brain, according to Dr. Dimitri A. Christakis, a lead researcher of the Child Health Institute at Children's Hospital and Regional Medical Center in Seattle, Washington. Previous studies have linked early television exposure to Attention Deficit Hyperactivity Disorder (ADHD), diagnosed in elementary-aged children who have difficulty focusing in the classroom. "In contrast to the way real life unfolds and is experienced by young children, the pace of TV is greatly sped up. Exposing children to flashing lights, scene changes, quick edits and auditory cuts may be over stimulating to developing brains. Quick scene shifts of video images become normal, to a baby when it's not natural. These videos may over-stimulate the brain, causing permanent changes in developing neural pathways," says Christakis. While developing children need new stimulation to learn, they benefit most through social engagement and play.

For more information, check out these websites:

Christakis et al.'s Pediatrics article:

http://pediatrics.aappublications.org/cgi/content/abstract/113/4/708

American Academy of Pediatrics' website on Media:

http://www.healthychildren.org/English/family-life/work-play/Media/Pages/default.aspx

[Social Interaction and Language, p. 2]

language being spoken. Neither of these groups of 9-month-olds were able to tell apart the Mandarin Chinese sounds. These results suggest that live social interaction might be vital to early language learning. Infants do not appear to learn language sounds from video recordings, such as television or movies. Live social interaction with communication partners, like parents or caregivers, appears to be the best way to help infants become experts in language.



We would like to extend a special thanks to Stacey and baby Samantha for volunteering for our photo session for UT Dallas!

Our Lab Students: Fall 2010

We are excited to welcome two new students to our lab, Brittney and Megan. We are also happy to welcome back our returning students:

- Rachel Beaulieu
- Lindsey Collins, B.S.
 - Lisa Keylon
- Brittney McCormick, B.S.
 - Sarah Salomon, B.S.
- Kate Shepard, M.S., CCC-SLP
 - Kaia Wakamiya, B.S.
 - Megan Wallace, B.S.