INFANT LEARNING PROJECT

Developments

Volume 5, Issue 1 Spring/Summer 2013



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Current News:

The Infant-Directed/Adult-Directed **Speech Study**

Did you and your baby participate in our recent study in which mothers were videotaped while talking to their babies in infant-directed (ID) speech and to adults in adult-directed (AD) speech?

We are happy to report the results of this study! ID speech is the type of speech used by adults and children when talking to babies. The speech has a singsong melody and is usually spoken with higher pitch than AD speech. It is thought that ID speech may help infants learn language since words are spoken more slowly and with greater exaggeration and repetition compared to AD speech.

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Graduation Announcement

The Infant Learning Project would like to congratulate Fariba Davoodi on graduating from UT Dallas with her B.S. in Psychology/ CLDP this Spring semester. Fariba has been working in our lab for two semesters.

She has been accepted into the



for Psychological Sciences at UT Dallas and plans to attend in the Fall. We are very proud of her and wish her all the best in her future endeavors.

Current Projects:

Approving/Comforting Messages: **ETIDFa**

1 Visit: 6 month old infants

Is there a research question we should address in our next newsletter?

We hope you find our newsletter helpful as you navigate your way through parenthood. If you would like our next newsletter to focus on a specific topic related to infant development, please let us know and we'll look for relevant research findings related to the topic and hopefully put it in our future newsletters!

Infant Learning Project



Thank You!

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

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The Infant-Directed/Adult-Directed Speech Study

We expected infants to look differently at the faces depending on three factors: (1) the familiarity of the face (their mothers vs. a stranger); (2) the infant-directedness of the speech in the videos (ID vs. AD speech); and (3) whether each video had audio, a moving image, and/or a still image. The main hypothesis was that babies who watched their own mothers speaking ID speech in videos with both audio and movement (i.e., the video clip was not altered) would look longer at their mothers' mouth than eyes when compared to their visual fixations to (1) their mothers' AD speech videos, and (2) the fixations of babies who viewed strangers' videos. If our results supported this hypothesis, we would have evidence that mothers' faces during ID speech are viewed differently by 6month-olds compared to how they view AD faces and strangers' faces. Further, there is a commonly held view that attention to the mouth of a speaking face is related in some way to infants' language development. Thus, if babies looked longer at their mothers' mouth than eyes during ID vs. AD speech and compared to their fixations to strangers' faces, then the familiarity of the mother and the infantdirectedness of the speech may have been supportive of a special role in mothers' speech to their babies in regards to fostering language development.

The results of the study indicated that indeed, the 6-monthold infants looked longer to the mouth versus eyes of the faces during the videos with audio (i.e., not the silent videos or the still images). However, attention to the mouth did not depend on whether the face was familiar nor whether the speech was ID versus AD. Additional analyses tested whether baby girls looked differently at the faces compared to baby boys. We found interesting results suggesting that baby girls looked longer at their mothers' mouth than eyes, but baby girls who viewed strangers did not look longer at the strangers' mouth versus eyes (i.e., they looked at both the eyes and mouth). Interestingly, baby boys did not look longer at the mouth versus eyes of familiar faces nor unfamiliar faces. If language development is truly related to infants' attention to the mouth of speaking faces, then perhaps baby girls' increased attention to the mothers' mouth from an early age (i.e., at least by 6 months) is at least somewhat related to the typical finding that girls have better language skills than boys. Additional research might confirm these

findings by testing a larger group of girls and boys and by comparing the language skills of these infants at about the age of 2.

This dissertation research is the final requirement for the doctoral degree in Psychological Sciences for Kate Shepard, M.S., CCC-SLP. She is eternally grateful to the families who participated in this research in support of the science of understanding how babies learn to communicate.



Games Mothers and Fathers Play with Their Infants

By Madeeha Mian

Several studies of interactions between parents and their infants reveal that both mothers and fathers establish social relationships with their infants simply by playing with them. Games and play between fathers and infants and mothers and infants are not only a social activity; in fact, it may be through play that infants learn a wide variety of social and cognitive skills.

In a study by Dr. Michael W. Yogman, play between fathers and young infants, aged one to six months, was recorded, studied, and compared with play between the mothers and their infants. Six healthy infants and their mothers (the primary caretakers) and fathers were recruited in the study. In the study, the play was categorized into different types, which included tactile games, visual games, limb movement games, pure verbal games, and games which combined several of these activities. Nine sessions were recorded for each infant with his or her mother and father, from four weeks of age to twenty-four weeks.

The results reveal that games occurred during most sessions but were more likely to occur during sessions with fathers than with mothers (mother played games with their infants during 75% of the sessions, whereas fathers played games during 87% of the sessions). Of the games that were played, tactile, verbal, or a combination of the two, were common with both parents. The most common type of game that mothers played were visual games, in which the parent appears to be maintaining the visual attention of the infant by motor movements (such as a mother wiggling her fingers in front of her infant, who is very attentive to the fingers). Of all games played by mothers, 36% were visual games, whereas only 20% of all games played by fathers were visual games.

On the other hand, the most common type of father-infant games were tactile games, which occurred in 27% of all father-infant sessions. Additionally, in comparison to mothers, fathers engaged in limb movement games more often. In limb



movement game, the parent's purpose appears to be arousing the infant by moving the infant's limbs in space without a traditional role, such as holding an infant's hands and shaking them. Limb movement games accounted for 21% of all father-infant games while representing only 4% of all mother infant games. The limb movement games that mothers played were actually categorized in conventional limb movement games, in which the mother moves the infant's limbs in space with a traditional role, such as waving "bye-bye". Conventional limb movement games occurred significantly less often with fathers than with mothers.

The data from this study suggests that interactive parent-infant games, even during the first six months of life, provide a variety of experiences for the infant. Visual and conven-

tional limb movement games, which were more commonly played by mothers, may establish basic social skills and facilitate later language development. Moreover, limb movement games, which were more common with fathers, aroused infants more, which may facilitate alternate forms of social play as the infant develops.

Source:

Yogman, Michael W., MD. "Games Fathers and Mothers Play with Their Infants." Infant Mental Health Journal 2.4 (1981): 241-48.

New Students

We would like to welcome five new students to the Infant Learning Project team. We appreciate their hard work and enthusiasm in the lab!

Spring 2013 Students

Summer 2013 Students

Alifya Parekh

Mariah Fowler

Dolores Gonzalez

Dolores Gonzalez

Madeeha Main

Claire Noonan, B.A.

Fariba Davoodi

Ashley DiFabio-Borthick, B.S.

Ashley DiFabio-Borthick, B.S.

Kate Shepard, M.S., CCC-SLP

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Kate Shepard, M.S., CCC-SLP

Parent-Infant Interactions

By Fariba Davoodi

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Early parent-infant relationship is significant for children's developmental outcomes. A warm relationship between parent and infant sways the personal, social, psychological, emotional, and cognitive development of the child later in life. Sensitive, responsive, and stimulating parenting is considered to be the primary component of an environment that is most likely to promote optimal psychological and behavioral functioning of the child (O'Brien, Johnson, & Anderson-Goetz, 1989). In contrast, less ideal parenting is associated with difficulties in the child's development and behavior, probably resulting in poor peer

relationships and school-related problems as they grow up.



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This research was led by A. Janneke B.M. Maasa, Charlotte M.J.M. Vreeswijka, Hedwig J.A. van Bakela (2013) and focused on the quality of parent-infant interactive behavior in different situations and activities. In addition, they also assessed the parent responsiveness and warmness of interactions throughout the study.

Observations of the parent-infant relations were conducted in the participant's home setting. The mother and infant were visited in their homes when the infants were 6 months old. In a semi controlled procedure the mother-infant interaction was videotaped in three different conditions and activities. First, mother and infant were asked to interact face-to-face without toys while the baby was placed in front of the mother. The second part of experiment was caregiving situation and diaper change was observed. In the last part of observation mother and infant played with a normal set of toys. Furthermore, in all three situations, mothers were instructed to "interact with your child as you would normally do", and to try to ignore the camera.

The quality of parent sensitivity/responsivity to infant distress and non-distress interactive behavior assessed. Sensitivity/responsivity to distress was defined as the degree to which the parent responds consistently, promptly, and appropriately to the infant's cries, frets, or other expressions of negative affect. Sensitivity/responsiveness to non-distress situation was also assessed to figure out how the parent observes and responds to the infant's social gestures, expressions, and signals in the non-distress state.

Moreover, intrusiveness of parents was evaluated to find out the extent to which the parents are over controlling and overinvolved in their infant's lives. And then the experimenters looked at detachment/disengagement between parents and infants which assessed the degree to which the parent appears emotionally uninvolved or disengaged, or if the parent was unaware of the infant's needs for appropriate interaction to facilitate involvement.

In summation, the results of this notable study revealed clear differences in the quality of * parent-infant interaction at 6 months of age between mother and child through different conditions and activities. This study also has shown infants were more sociable and displayed more positive mood when mother played face-to-face with them, which may suggest that these interactions in infancy at a young age also evoke more positive interactive behaviors for the child's later interactions with others and his/her development.

* Go to the source:

A. Janneke B.M. Maasa, Charlotte M.J.M. Vreeswijka, Hedwig J.A. van Bakela (2013). Effect of Situation on Mother-Infant Interaction: Infant Behavior & Development 36, 42-49
