Thank you parents!

This note is a follow-up to your child's participation in research at the Early Development Lab. We want to thank you for your support and your time. Without the participation of families like yours, our research would not be possible. In this newsletter we would like to share with you what your efforts have helped us to learn.

INFANTS’ LEARNING FROM VIDEO

Learning from Baby Videos

There are a lot of videos on the market claiming to be educational for babies. How effective are they?

Infants (12 to 18 months) in this month-long study were visited 3 times in their homes. Each time the researcher showed pairs of objects and asked children to identify the item she labeled (such as a lamp or chair). One item in each pair was an object featured in Baby Wordsworth.

Throughout the month, some children watched Baby Wordsworth without their parents, others watched Baby Wordsworth with their parents, and some were taught words from a list or book by their parents. Another group of children did no extra activities (no videos or special teaching). We randomly chose families to be in one of the groups.

Infants whose parents were assigned to teach them learned the most words during the month. Infants who watched Baby Wordsworth with their parents learned moderately. In contrast, when watching alone, infants learned no more words from Baby Wordsworth than children did who received no extra experiences.

This study suggests that infants learn best directly from people, not from baby videos. However, when watching videos, interaction with parents (talking about what is on the screen, pointing, etc.) may be important for helping infants learn.

Using Emotions from Video

In this study, 1-year-old infants sat on their parent’s lap and watched as an adult pointed to a toy and talked about it. She either gave a neutral message about the toy (“There it is”), a positive message (“I like it!”) or a negative message (“This is bad!”). Infants were then given a chance to play with the toys.

Some infants saw the adult appear in front of them in a window. Other infants saw the adult appear on a video screen in the window.

As sometimes happens in science, the results of this study were inconclusive. Infants had no preference for the positively labeled toys compared to the other toy in the pair, but did avoid the negatively labeled toys. This happened regardless of whether they saw the adult in the window or on the video.

What does this mean for babies and baby videos?

• Like toddlers, older infants (12-18 months) often learn better from people than they do from videos. We are not certain whether or not this extends to younger children (12 months and younger).

• Parents can help children learn from video by engaging with their children. Asking questions about the people and objects on the screen, pointing, and playing along may highlight important information. Consider treating video like you would treat picture books or toys – as a learning experience that you share with your child.
Does it matter if a person on video talks to the viewing child or to someone else on screen? We predicted that children might learn better by watching people conversing. In this study, 2-1/2-year-olds also played with some new toys. The children watched a demonstration in which an adult labeled one of the toys with a new word, “toma.”

For half of the children, the researcher who labeled the toy was present in the room. She spoke directly to some of the children from across the table and for the rest she conversed with another adult while the children watched from across the room.

For half of the children, the researcher who labeled the toy appeared on a video. She spoke straight into the camera for some of the children and for the rest she conversed with another adult on the screen while the children watched.

To make the situations as similar as possible, the children never got to play with the toys during the labeling, whether they were watching real people or TV.

We found that:

• Children learned the new word from listening to two adults converse, whether the adults were present in the room or on video. Therefore, it appears that toddlers can pick up information when a person on TV talks to someone else.

• Children had trouble learning the new word when the person on the video screen faced the camera. We think this may happen because toddlers have figured out that people on TV cannot really have a conversation with the viewer.

• To our surprise, the children also had trouble learning the word from the adult who was present and addressed them directly. Why could this be? From other research (and from raising toddlers) we know children of this age learn words by talking to adults.

We wondered whether the problem was not letting the children touch the toys during the labeling (remember, this was done so that watching the “live” adult was like watching the adult on video). With the researcher across the table and the toys within arm’s reach, the children may have been frustrated not to be able to touch them and “tuned out” the adult who didn’t share. Sure enough, when we let another group of toddlers briefly play with the toys during the labeling, the children learned the word.

This study suggests that toddlers learn best in an “intact” social situation: either watching two people converse (in person or on video) or when the person who is addressing them responds normally (can talk back to them and/or shares objects).
Learning from “Interactive” Videos

Many popular videos for young children have been designed to be “interactive”, meaning the main character (Dora the Explorer, Diego in Go Diego, Joe (or Steve) on Blue’s Clues) appears to talk to the viewing child, asking questions and pausing for a response. These videos promote learning in preschoolers, but what about toddlers? We looked at toddlers’ learning of new words and their imitation of new actions (assembling toys) from watching videos.

For this study, we visited parents and children in their homes. Two-year-olds in this study watched episodes of a short homemade video, Greta’s Games, which was designed to have all the interactive features of the commercial TV programs. During the videos, Greta labeled one of two new objects with a new word (“modi” or “toma”). Children were then asked to identify the object that Greta had labeled.

Children were visited once or twice, and those who were visited twice watched either Greta’s Games or Thomas & Friends (a non-interactive video) between the visits. Children who were visited twice also watched a short video of a different woman putting together rabbit and rattle toys, and then were given the toys to assemble. To answer our research questions, we randomly picked families to watch the different kinds of video and to assign the number of times visited.

As was true in the earlier studies (Word Learning and Overhearing), toddlers still had trouble learning words from a person on video. While all children struggled with the task, children in the group who saw Greta all week did the best job of remembering the words she had taught. Also, they assembled the rattle and rabbit toys more completely than children who watched the non-interactive program Thomas & Friends.

What have we learned about toddlers and video?

- Toddlers may have expectations for social exchanges such as “taking turns” when speaking or allowing both people to handle the object of interest. When the social partner is on video and doesn’t respond, children may not be primed to learn like they are when they are interacting “face-to-face” with people.

- Video may not be an especially effective teaching medium for two-year-olds, but repeated experiences watching interactive-style videos (with a person who appears to be responsive to viewers) may help toddlers learn.

WHAT DO TODDLERS LEARN FROM VIDEO?

Participant Criteria: toddlers 18 to 36 months

Description: We are examining how very young children first understand and use simple symbols such as video images and pictures, compared to interactions with adults to solve problems. The research activities include a game where children imitate an adult playing with toys or learn new words and use them in their play. Sessions are about 1 hour long.

Compensation: Children will choose a book or toy to take home.

VIDEO GAMES AND VISUAL-SPATIAL ABILITY

We are also collecting data to see what effect video games have on the way people think about the world. At this time we are having adults fill out a short online questionnaire. These data will help us to develop future in-lab studies on children. If you are interested in taking the questionnaire or would like more information about the study, please visit http://tinyurl.com/VanderbiltStudy.

If you are interested in participating or learning more about our studies, please contact us at (615) 343-4681 or trosethlab@gmail.com. You can see these studies along with many other Vanderbilt research opportunities listed at http://kc.vanderbilt.edu/site/services/studyfinder/default.aspx.