



Communicating Research in Clear Language

Maternal Gesture Use and Speech in Children with Fragile X Syndrome

What is the research about?

Babies who are cared for by people who talk and describe things to them tend to develop richer speech than do babies who don't live in such environments. This study looked at whether or not young children with Fragile X Syndrome (FXS) make greater gains in both speaking and understanding speech if their mothers use gestures such as pointing, compared to children whose mothers don't do so.

What did the researchers do?

The researchers recruited 27 families of children diagnosed with FXS, living in the United States. The researchers made videotapes of the children during infancy and toddlerhood. All of the videos were of mothers playing and carrying out their daily routines with their child. The videos were later viewed by students who had no knowledge of the children's diagnosis or the intent of the study. They recorded every instance of a mother making a gesture when speaking with her child and what kind of gesture she used. Examples of gestures included pointing to a nearby object or person or one at a distance, nodding or shrugging, and offering to give or to take an object. The researchers also looked for times when the mother asked a "wh question", that is, where, what, why, when, (and how), when using a gesture.

What did the researchers find?

The researchers found the children in both age groups developed better use and understanding of language if their mothers pointed to nearby objects when naming them. If the mother also asked "wh- questions" when pointing, the effect was even greater, as it made communication clearer for the child.

Take home message

When mothers usually used pointing gestures, especially if they combined them with asking "wh" questions when talking to their child with FXS, the child's ability to learn new words and speak was much better than in the children whose mother's did not use these gestures. This is a simple, easily adopted way for parents to help their children improve their ability to understand and use language.

NOTE: The original [Research Report](#) was written by L. Hahn and colleagues and was published in the *American Journal of Speech-Language Pathology*, 2014.