

Babies In Womb Can Absorb Language

New research reveals that newborn babies are able to tell the difference between their native language and foreign languages within hours of birth. The finding, which will soon be published in the journal *Acta Paediatrica*, indicates that babies begin picking up language while they are still in the womb.

Experts have known for a long time that a baby's ability to detect complex rules in language outshines that of adults.

After thirty weeks of pregnancy, brain mechanisms related to hearing are fully developed. Unborn babies from that point on are able to hear what their mothers say and absorb elements of the language. They are able to use what they're heard during the final ten weeks of pregnancy and at birth to differentiate languages.

Patricia Kuhl, co-author and co-director of the Institute for Learning & Brain Sciences at the University of Washington, said: "The mother has first dibs on influencing the child's brain. The vowel sounds in her speech are the loudest units and the fetus locks onto them."

Previous research found that within a month of birth newborns are able to learn and differentiate sounds of language; however **this finding is the first of its kind to indicate that learning begins before birth while the baby is still developing.**

Infants initially hear sounds of language, and only later on listen to meanings. This study appears to show that very early on, even before the baby is born, the fetus may be doing more than just listening to language sounds.

Christine Moon, lead author and a professor of psychology at Pacific Lutheran University in Tacoma, Wash, said:

"This is the first study that shows fetuses learn prenatally about the particular speech sounds of a mother's language. This study moves the measurable result of experience with speech sounds from six months of age to before birth."

A total of 40 newborns about 30 hours old were involved in the study in Tacoma and Stockholm. They all listened to sounds in their native language as well as foreign languages while in nursery.

The researchers were able to assess their reaction to sounds by measuring how long they sucked on a pacifier for. Short sucking was associated with familiar sounds while long sucking was associated with unfamiliar sounds. This means that the newborns can differentiate what they hear in utero.

The babies were found to suck on the pacifier for a longer period when they heard foreign languages as opposed to their native language.

Young children are the fastest learners as they can easily absorb new information, the researchers note that understanding how they do this could help find ways of improving learning at later years. Kuhl concluded: "We want to know what magic they put to work in early childhood that adults cannot. We can't waste that early curiosity."

Written by Joseph Nordqvist

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