Medical Xpress

Infant learning: Is more really better?

September 8 2015

Many parents and caregivers believe that multi-sensory stimulation during infancy promotes developmental growth and learning, but researchers who conducted eye movement experiments on preverbal infants show that this is not always true.

The team discovered that 8 to 10 month old infants could learn basic abstract rules, such as sequences, but only when the audio and visual stimuli were "congruently" or "consistently" paired. If a smiling face was paired with a crying sound, the infants were confused, and they did not learn the rule.

The findings indicate that having both visual and audio inputs—or more than one sensory stimulation—does not guarantee successful learning. They have to match each others' nature.

"How to match stimulation from visual, audio, tactile, and other sensory systems into a unified manner is the key to help our little ones fully benefit from it," said Dr. Chia-huei Tseng, senior author of the Developmental Science study.

More information: Tsui, A. S. M., Ma, Y. K., Ho, A., Chow, H. M. and Tseng, C.-h. (2015), Bimodal emotion congruency is critical to preverbal infants' abstract rule learning. *Developmental Science*. DOI: 10.1111/desc.12319

Provided by Wiley