Lip-reading helps babies learn to speak

BOCA RATON, Fla., Jan. 17 (UPI) -- U.S. researchers collected empirical evidence that infants engage in lip-reading when learning how to talk and this may help diagnose autism.

David J. Lewkowicz, a professor at Florida Atlantic University, and Amy Hansen-Tift, a doctoral student, said they found infants learn how to talk by listening and looking.

Lewkowicz and Hansen-Tift tested groups of 4-, 6-, 8-, 10- and 12-month-old infants, presenting videos of women who could be seen and heard talking either in the infants' native language (English) or in a non-native language (Spanish).

As the videos played, the researchers recorded the infants' eye gaze with an eye-tracking device and recorded how much time they spent looking at the eyes and the mouth.

"Our research found that infants shift their focus of attention to the mouth of the person who is talking when they enter the babbling stage and that they continue to focus on the mouth for several months thereafter until they master the basic speech forms of their native language," Lewkowicz said in a statement. "In other words, infants become lip readers when they first begin producing their first speech-like sounds."

The findings suggest a potential new way for diagnosing autism spectrum disorder earlier than the current 18 months of age, because by age 2, autistic children focus their attention on the mouth of a talker.

"Contrary to typically developing children, infants who are as yet undiagnosed but who are at risk for autism may continue to focus on the mouth of a native-language talker at 12 months of age and beyond," Lewkowicz said. "If so, this would provide the earliest behavioral confirmation of impending developmental disability."