# Today’s piece was prepared by Becky Richards, MD and is based on a story from NPR, entitled “[The Human Voice May Not Spark Pleasure In Children With Autism](http://www.npr.org/blogs/health/2013/06/17/192753499/the-human-voice-may-not-spark-pleasure-in-children-with-autism).”

# This article (and audio clip) reports the results of a Stanford study published in Proceedings of the National Academy of Science in June 2013. The researchers evaluated responsiveness to human voice of children with autism compared to typically developing peers using functional MRI to examine connections between two functional regions within the brain: those that receive and process speech and those associated with reward through dopamine release. They concluded that brains of autistic children did not have a strong dopamine release in response to speech when compared with these brain region’s responses to speech of typically developing children. They concluded that the circuit is not broken, but there is less incentive to spontaneously use it without the repeated dopamine reward, and that this deficit may contribute to delayed social communication skills.

Data have long supported a theory that children with autism spectrum disorder exhibit a relative indifference to human voices, but a specific etiology for this difference has remained elusive. This article astutely summarizes the important findings of the study, and the author successfully explains a very complicated topic in easily understood terms. However, it fails to emphasize the complicated nature of speech comprehension and development, both of which can be problematic for autistic children. These data represent the power of new imaging techniques in studying many poorly understood neurological disorders. Importantly, it also underscores the putative mechanism of Applied Behavioral Analysis (popularly known as “ABA”) in providing an alternative to voice as positive reinforcement toward shaping behavior.

**RESOURCES ON AUTISM FOR FAMILIES:**

[Association for Science in Autism Treatment](http://asatonline.org/treatment/treatments/applied.htm) *Information on Applied Behavioral Analysis and other scientifically supported treatments*

[Autism Speaks](http://www.autismspeaks.org/) *A wide range of information for families regarding autism, including research, advocacy and management*

**Original article**

<http://www.pnas.org/content/early/2013/06/12/1302982110>

And that’s today’s Developmental & Behavioral Pediatrics: IN THE NEWS!