

iPads may help boost speaking skills in kids with autism: study

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Combining use of device with therapy sessions helped minimally verbal children talk, interact.

(HealthDay)—Adding access to a computer tablet to traditional therapy may help children with autism talk and interact more, new research suggests.

The study compared language and social communication treatment—with or without access to an iPad computer tablet—in 61 [young children](#) with an autism spectrum disorder (ASD) and found that the device helped boost the effect of the treatment.

"All the children improved, but they improved more if they had access to the iPad," said Connie Kasari, professor of [human development](#) and psychology and psychiatry at the University of California, Los Angeles' Semel Institute for Neuroscience and Human Behavior.

The children used the iPad when they were engaged in play, she said. "It focused on helping them initiate conversation, using the iPad to comment on what they were doing. The iPad worked because it is a visual stimulant with [auditory feedback](#)," she explained. For instance, children would mispronounce a word, hear it pronounced correctly on the iPad, and then learn to say it correctly, she said.

But, Kasari emphasized, "The iPad is just a tool." It worked because it was used within a treatment aimed at helping improve the children's communication skills, she noted.

The study was published in the June issue of the *Journal of the American Academy of Child & Adolescent Psychiatry*. Autism Speaks, a research and advocacy organization, funded the study.

Autism spectrum disorders are a group of developmental disorders. Communication and social problems are hallmarks of ASDs. As many as one in 68 U.S. children has an autism spectrum disorder, according to estimates from the U.S. Centers for Disease Control and Prevention.

Children in the study were between the ages of 5 and 8. All were considered "minimally verbal," which experts define as speaking fewer than 20 functional words, Kasari said. "The majority had far fewer." About 30 percent of children with an autism spectrum disorder are minimally verbal, she said, sometimes even after years of treatment.

For the first three months, all of the children received two sessions a week, totaling two to three hours a week. At the three-month mark, nearly 78 percent of children in the iPad-added group had an early response, but just 62 percent of those in the group without it did, the investigators found.

An early response was defined as an improvement of 25 percent or more

in half of the 14 measures, such as the number of spoken words and the use of new words, Kasari said.

If a child was not progressing at the three-month mark, the researchers added the tablet. But adding it later was not as effective as using it from the start, Kasari's team found. The researchers followed the children for three years.

"The idea of using an iPad is a novel approach," said Dr. Ruth Milanaik, an attending physician at the Cohen Children's Medical Center in New Hyde Park, N.Y. Milanaik treats children with autism and reviewed the study's findings.

"The idea of technology being used to help children who really need different approaches is so important," she said. It's crucial, however, she agreed, to understand that the iPad "was simply a tool" and that it was an adjunct to the traditional interventions that aimed to improve communication and other developmental advances.

While a 25 percent improvement—the measure used to define response—may not seem like much to some, Milanaik said that "every small step, for the parents of an autistic child, is monumental."

Kasari and her team are continuing to study the iPad, planning to enroll about 200 [children](#) in four cities during a planned five-year study.

If the research continues to bear out, the hope would be to use the iPads in school programs and to train parents in its use at home, both experts agreed.

More information: To learn more about continuing autism research, visit [Center for Autism Research and Treatment](#).

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