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MANAGEMENT & CAREERS

Alexa: Don't Let My 2-Year-Old Talk to You That Way

Children are using voice-activated technology at far younger ages than other devices, but some parents worry they're picking up rude habits

*By Sue Shellenbarger*Updated July 11, 2018 10:17 am ET

Parents, your child may have a new secret friend: your smart speaker.

Drawn by the devices' voice-activated interfaces and warm, playful tone, children as young as 1 are interacting with Amazon's Alexa, Google's Assistant or Apple's Siri long before they can type or swipe, new research shows.

This is new territory for families. For the first time, children who are too young to distinguish fantasy from reality are engaging with devices powered by artificial intelligence. Many see smart speakers as magical, imbue them with human traits and boss them around like a Marine drill instructor, according to several new studies in the past year.

Hunter Walk, a San Francisco venture capitalist, worried that his family's Amazon Echo "is turning our daughter into a raging asshole," he wrote in a blog post in 2016, because of the 4-year-old's tendency to boss it around. He has since set rules around how to talk to the device and said he hasn't noticed any rude behavior by his daughter, who is now 6.

"I still have concerns," Mr. Walk says. "Cognitively, I'm not sure a kid gets why you can boss Alexa around but not a person."

He has a point. Children do blur the boundaries between smart speakers and humans, with varying effects based on their stage of development. Here is a rundown.

Ages 0 to 3

Parents are often apprehensive when they see their 1-year-olds interacting with smart speakers, citing concerns about the impact on their social skills, according to a 2018 study of 75 households

at Carnegie Mellon University.

One mother was annoyed that her preschooler had learned to order Alexa to skip songs her parents liked. The child also claimed she understood Alexa better than other family members did.

"It's kind of creepy," the mother told researchers. "It's totally weird that my daughter is friends with a tower that sits on my counter."

Other parents see benefits. Jesse Freedman of Brooklyn says his 14-month-old daughter Shayla likes dancing to songs on their Echo Dot so much that he has been able to reduce her TV time.

Children under 4 typically can't distinguish fantasy from reality. "Could Alexa be a small woman inside a machine? To a 3-year-old, absolutely, she could," says David Hill, chairman of the American Academy of Pediatrics council on communications and media. Parents can help children learn to test their perceptions, asking, "Have you ever seen anybody who was small enough to fit in there?" says Dr. Hill, an author and a Wilmington, N.C., pediatrician.



Jesse and Penny Freedman play with their daughter Shayla, who likes dancing to songs on their Echo Dot so much that her parents have been able to reduce her TV time. **PHOTO:** BRIGHT FAMILY PHOTOGRAPHY

Children as young as 3 tend to see voice assistants as friendly and trustworthy, according to a 2017 study of 26 children at the MIT Media Lab in Cambridge, Mass. Although the devices typically have a hard time understanding them, young children still work hard at communicating, repeating themselves again and again if necessary, says a 2018 study of 14 preschoolers at the University of Washington. Such give-and-take can be helpful to children.

Matt Zwahlen of Clinton, Utah, says Siri is helping his 3-year-old son Connor, who has had some speech delays, improve his diction. "If Connor gets frustrated because Siri can't understand him, I say, 'Buddy, let's slow it down a little,' "Mr. Zwahlen says. Connor sees Siri as real and finds her entertaining, Mr. Zwahlen says.

However, some psychologists worry that children who personify smart speakers will prefer their company over humans'. Also, being fed a string of facts in response to questions doesn't teach a child to listen well or to gather information in other ways.

Ages 4 to 6

Children at this stage are just learning that other people have thoughts and feelings separate from their own. They are also practicing the conversational give-and-take that marks healthy relationships. Talking to smart speakers could complicate that process because children attribute thoughts and feelings to interactive devices but regard them as less-than-human, according to a 2013 review of 37 studies at the University of Washington.

Ella Alkire, 8, knows the voice platform that powers her family's Amazon Echo Dot "is just a machine," she says. But her 6-year-old sister Sophia has a more complicated view, seeing Alexa as a combination of human and machine: "I think it's a robot, but she has her head in the clouds, and her body is like, here," referring to the physical device, Sophia says.

Like most children, Sophia's most common request of Alexa is to play music, says her father, Bryan, of Portage, Mich. When the Echo plays the wrong song, Sophia sometimes takes it personally, gets angry and yells, "Alexa isn't doing what I told her," says Mr. Alkire, an at-home dad and blogger.

Sophia adds: "I have to tell her again and again. Sometimes she never gets it."

The Carnegie Mellon study confirms that some children order smart speakers around like servants. One grandmother told researchers she corrected her preschool grandson for telling Alexa it was stupid, instructing him, "That's not nice."

That bossy behavior is more likely to spill over in interactions with peers than with parents, says Solace Shen, co-author of several studies on social robots and a researcher at Robinhood Markets Inc., a Menlo Park, Calif., investment platform.

Dr. Hill of the American Academy of Pediatrics adds, "If they practice rudeness at home with something they perceive to be their servant, then what is to keep them from being equally rude to the cleaning staff at school" or anyone in a service role.

Amazon recently offered new parental controls for its Echo speakers, as well as praise for children who remember to say "please."

Ages 7 to 10

Most children can distinguish reality from fantasy by this stage and know smart speakers can't eat, sleep or think. The most common requests by children in this age bracket include homework

help, music, weather reports and calling people, with such usage peaking from ages 11 to 14 then tapering off, says a 2018 survey of 1,980 children by the British market-research firm Childwise.

Still, 93% of 8- and 9-year-olds, and 80% of 14- and 15-year-olds, say they would confide in a virtual voice assistant about a personal problem too embarrassing to bring up with parents or friends, according to unpublished data from a 2015 study of 60 children by Dr. Shen.

The No. 1 reason, she says: They know the device won't be critical or judgmental.

Regardless of how old their children are, parents should educate themselves about security concerns, check their devices' privacy settings and review voice recordings from time to time.

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Corrections & Amplifications

The United States Marine Corps employs drill instructors. An earlier version of this column incorrectly made reference to Marine drill sergeants. (July 11, 2018)

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