

# 14116 Conversation app helps parents boost child's language

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A CHILD'S development depends on the world around them and chatting with parents is crucial. But around 1.3 million children in the US alone have trouble picking up language skills, meaning their parents must visit therapists to learn strategies to help them communicate. An app that listens to their every word might help.

The system, called TalkBetter, was designed by computer scientists in South Korea, working with speech-language pathologists at a university in Seoul. It helps parents by listening to and analysing the ebb and flow of talk between them and their child. It then gives clinically relevant nudges to guide the interaction and improve the child's language skills.

Parents wear a Bluetooth earpiece and microphone while the child just wears a microphone, all connected to a smartphone. Software on the phone examines the exchanges between the two, watching out for when the parent speaks too fast, doesn't give their child enough time to respond, or ignores speech from the child. If any of these things happen, it alerts the parent via the earpiece.

Feedback from some of the 13 parents that took part in an early trial in Seoul was enthusiastic. "Can we buy this now? How much is it?" wrote one. The system will be presented at a computer conference in Baltimore, Maryland, this month.

Full clinical trials of TalkBetter are under way, but its lead researcher already has additional ideas for it. "We developed a preliminary app which targets and monitors group discussion, trying to give real-time feedback," he says. "If one person dominates the conversation, for instance, then the smartphone might give a gentle reminder to let others speak."

Stephen Hannon, president of The LENA Research Foundation in Boulder, Colorado – a charity dedicated to early language development – sees the potential in real-time feedback on parent-child conversations, but worries about the effect of micromanaging parents in this way.

This month, Hannon's group will employ a similar system in a bid to close the gap in language development between richer and poorer families in Providence, Rhode Island. Children growing up in low-income families in the US hear millions fewer words than their richer peers, which is thought to affect their academic development.

The Providence Talks project will use body-worn microphones and speech-analysis software to measure the amount of talking that children in poorer families hear every day. The organisation will then coach parents in how to boost home conversation. Hannon aims to enrol 2500 families in 2014.