

# Audiologist Forges Tech to Screen Hearing in Noise



Audiologist Jessica Sullivan’s chance meeting with a psychologist at a conference led to their creating a first-of-its-kind screener app for childhood hearing loss, with support from a university grant and SmartyEars. The Hearing Assessment in Response to Noise Screening (HeARS) app asks children to choose the word they hear in various levels of noise, instead of in the traditional noiseless space.

“We picked noise levels typically found in the environment,” says Sullivan. “We wanted it to be realistic.”

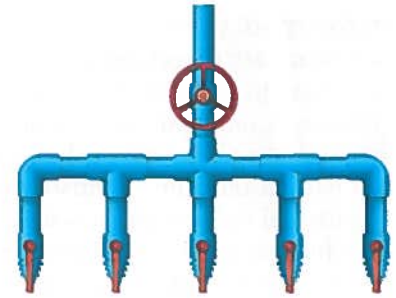
An assistant professor of communicative sciences and disorders at Hampton University, Sullivan studies auditory training in interrupted noise for children with hearing loss. This focus intersects with collaborator Julia Irwin’s interest in children with hearing and visual intervention. Sullivan and Irwin, a psychology professor at Southern Connecticut State University, joined forces with SmartyEars CEO Barbara Fernandes, an SLP and app developer.

The team plans to begin collecting normative data this summer. With funding from a University of Connecticut grant and product development by SmartyEars, the HeARS app will be available early next year in the Apple Store.



## Beyond the beep

“What if we had a screener that could identify some of these kids that are going to have deficits later that we don’t quite see? Because if you do the traditional audiology hearing screening, there’s no real language to confirm it. ‘Did you hear the beep?’ ‘Yeah, I heard the beep,’ and they go on.”



## Referral pipeline

“I can see this being used by a lot of school districts and could help get referrals made. Again, it’s a screener, so we want people to go get full audiological exams, since some of the things we’re screening for may not show up on an audiogram.”

## No word reserves

“If a person has a better vocabulary, that helps them stave off any negative effects of noise because they have a wider vocabulary to draw from. But if they have sensory deficits, or a poor vocabulary, or limited language, they lack resources to draw from when noise happens.”



## The COVID gap year

“We have a whole year where there were no mass screenings in schools in a lot of places. What about the at-risk kids who were going to be identified who are already behind?”

We haven’t realized what we’re going to have to deal with in the future, so any way that we identify those kids early on and connect them to services will help.”