Does language experience shape accent adaptation abilities in toddlers?

Priscilla Fung & Elizabeth K. Johnson

University of Toronto

Monolingual 25-month-olds reliably recognize words in unfamiliar accents. And those who receive multi-accent input or have larger vocabularies are better at accent adaptation. But how about bilingual children? On one hand, bilinguals tend to have smaller vocabularies in one of their two languages when compared to monolinguals, but on the other hand, they tend to encounter more variety of accented speech. Here, we directly compare monolingual and bilingual toddlers' (22-24 months) accent adaptation abilities. To avoid a ceiling effect, we include multiple accents and test children's ability to activate lexical representations in the absence of visual references. In the experiment, participants saw two images side-by-side on a screen and heard a label. On some trials, the named target appeared on-screen (Target Present), sometimes the target was replaced by an object sharing its colour properties (Colour-matched Distractor), and sometimes neither presented object matched the target or its properties (Target Absent). Notably, Colour-matched trials required children to access the spoken targets when the visual target was absent. Half the participants heard a locally-dominant accent (Canadian English), with others hearing a mix of four unfamiliar accents. We predict monolinguals and bilinguals to perform similarly in the Target Present and Target Absent trials, regardless of accent condition. But in Color-matched trials, we predict both groups will perform more poorly in the unfamiliar-accent condition, and that the degree of this impact will vary by group. Preliminary results with monolinguals (N=15; target N=24) support our first prediction, supporting research that shows at this age children can cope with unfamiliar accents spontaneously. However, monolinguals look longer at the colour-matched object only in the familiar-accent condition, suggesting that children's accent adaptation ability is not fully robust under more challenging listening conditions. Ongoing data collection with bilinguals will shed light on how linguistic experience impacts children's speech processing ability.