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Proceedings of the Annual Meeting of the Cognitive Science Society

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Journal

Proceedings of the Annual Meeting of the Cognitive Science Society, 44(44)

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Publication Date

2022

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Peer reviewed

Is there an Own-Age Advantage in Talker Recognition?

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Abstract

Adults are far better at identifying adult talkers than child talkers (e.g., Cooper et al., 2020). Why is this the case? Are child talkers acoustically less distinguishable (e.g., Lee et al., 1999)? Or perhaps adults better identify adult talkers, while children better identify child talkers (e.g., see Anastasi & Rhodes, 2005, for evidence that an own-age advantage exists in face recognition). Here, we test adults (N=72) and 6.5-year-olds (N=71) on a voice identification task featuring single word recordings by 8 children and 8 adults. While all listeners successfully identified all talkers above chance ($p < .05$), adults significantly outperformed children with both adult ($M_{adult} = 0.66$ vs. $M_{child} = 0.54$; $p < .001$) and child talkers ($M_{adult} = 0.64$ vs. $M_{child} = 0.57$; $p < .05$). Thus, we find no evidence of an own-age advantage in talker recognition. Rather, we find additional evidence that adults are more skilled than children in voice identification tasks, suggesting that talker recognition skills take time to fully mature.