Comprehension of verbal irony among children with hearing loss

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Verbal irony, a discrepancy between the form and intended meaning of an utterance, often underlies humour in conversation. Irony can be conveyed by prosodic cues, which may be less accessible to listeners with hearing loss (HL), and relies on theory of mind (ToM) and working memory (WM) skills, which may be delayed among children with HL. This raises the question of whether children with HL will have difficulty interpreting ironic utterances. If so, this might account for some of the challenges experienced by children with HL in understanding and constructing humour.

We hypothesised that children with HL would be less accurate at interpreting ironic statements than peers with normal hearing (NH), but that, if this were due to poorer prosodic perception, lower accuracy would be observed for spoken, but not written, irony. Alternatively, if irony comprehension difficulties were due to factors such as ToM and WM, both spoken and written irony may be affected.

Thirty 9-13-year-old children with HL (hearing aid and/or cochlear implant users), thirty 9-13year-old children with NH and thirty adults with NH completed an online task to assess irony comprehension. Participants were presented with written and spoken vignettes in which a character made a statement that was either a literal compliment, literal criticism, or ironic criticism. For each vignette, participants answered a comprehension question about the character's intended meaning.

Preliminary results from a subset of participants indicated that all groups were less accurate at interpreting written ironic statements compared to all other conditions, perhaps reflecting ambiguities in interpreting irony without prosodic cues. No differences between groups were found, suggesting that children with HL may be capable of comprehending irony like their NH peers. Results from a greater number of participants will be presented and implications for irony interpretation in more challenging real-world communicative situations will be discussed.