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Angry, sad, or scared? Within-valence mapping of emotion words to facial and body cues in 2- to 4-year old children

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Abstract

Previous studies report that children acquire emotion words gradually during ages 3–5 and beyond (e.g., Widen, 2013). Most of this work, however, has used tasks that are demanding for young children (e.g., asking children to produce emotion labels in a free-labeling task), and has asked children to map emotion labels to facial configurations alone. In our study, we tested children's ability to comprehend, rather than produce, emotion words, and used not only facial configurations but also body language. In two pre-registered online experiments, two to four-year-old children (N = 96) were asked to connect emotion words, including happy, sad, angry, and scared, to either facial configurations (Experiment 1) or to combined facial configurations and body postures (Experiment 2). While we found an overall pattern consistent with prior work (i.e., better performance when distractors were from opposite valences than when they were of the same valence), we also found much earlier competence in understanding same-valence emotions. Even 2-year-olds succeeded in differentiating the three negative emotion words and connecting them to facial cues (Experiment 1). Experiment 2 replicated this pattern and further showed that children performed equally well (but not substantially better) given additional body cues. These results suggest that before children can produce emotion words in an adult-like manner, they have some systematic understanding of those words and can map them to emotion cues within valence domains. (Preprint: psyarxiv.com/ka3ed)