When do emotion words emerge in children’s vocabulary: evidence from developmental language corpora

Background & Aim

Language and Emotion
- Language is a key ‘ingredient’ in the development of different aspects of emotion understanding (e.g., Lindquist et al., 2017).
- Particularly, emotional vocabulary (e.g., Dunn et al., 1999; Streubel et al., 2020).

Different Language Experiences
- As compared to speech, written language is more decontextualised and lexically richer (Dawson et al., 2021).
- Written language provides access to more diverse and nuanced language about emotions and mental states (Nation et al., 2022).

Aim
When do emotion words emerge in children's language experience, and how are they used by children in their own writing?

Corpus name | Source | Age Range | Size (Type) | Size (Tokens)
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Child-Directed Speech | CHILDES-UK (MacWhinney, 2000) | 0-5 | 24129 | 3853976
Picture Book | ReadOxford (Dawson et al., 2021) | 0-5 | 11561 | 248791
Children’s Reading Corpus | Oxford Children’s Language Corpus - Reading 2019 | 5-16 | 37108 | 63494697
Children’s Writing Corpus | Oxford Children’s Language Corpus - Writing 2019 | 4-13 | 194531 | 36935999

Emotion words investigated: 336 emotion and mental state words for children from 4- to 16-year-olds (Baron-Cohen et al., 2010).

Distribution of Emotion words
- All follow a Zipfian distribution.
- Emotion words in written language are less clustered and are lower in frequency.

Diversity of Emotion Words
- For the language children hear, picture books contain more diverse emotion words than speech.
- Older children’s reading books use more diverse emotion words. This is also reflected in children’s own writing.

Discussion & Future Directions
Written language experience via shared and independent reading allows children to encounter more diverse emotion words compared to speech. There is also an age-related increase in the use of diverse emotion words in children’s own writing. What next?

1. Context-based analysis
   - Sentiment analysis
   - Use of pronouns with emotion words
   - Correlation between contextual valence and word valence

2. Linking language input to output:
   - Additional data collection
   - Linking children’s language ability and print exposure and children’s production of emotion words in storytelling

References