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The Development in Emotional Content of Children's Writing: Are Children Getting Less Happy?

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Abstract

Emotion is closely associated with language, but we know little about how children express emotion in their own writing. We used a large-scale data-driven approach to investigate whether emotional expression via writing changes through development, and whether it varies for boys and girls. We first used a lexicon-based bag-of-words approach to identify emotional content in a large corpus of stories written by 7- to 13-year-old children ($N > 100,000$). Generalized Additive Models were then used to model changes in sentiment across age and gender. Two other approaches (BERT and TextBlob) validated and extended these analyses, revealing converging findings that positive sentiments in children's writing decrease with age. These findings echo previous studies showing lower mood and increased acquisition of negative emotion words across development. We also found stories by girls contained more positive sentiments than boys. Future experimental work should further investigate the complex relationships between written language and emotion across development.