Self-Identification of Emotion through Edtech Tools by First and Second Graders

Background & Design

Emotion knowledge involves two steps:

- 1. Understanding what an emotion feels like
- 2. Knowing how to label and properly recognize emotions in others ¹⁻³

Emotion knowledge is vital for emotional regulation² and strong emotional regulation positively impacts many academic skills,⁴⁻⁶ while negative emotions can negatively impact academic performance.⁷⁻⁸

Regular emotion check-ins can facilitate increased emotion knowledge,⁹⁻¹⁰ and an avenue for this to occur more frequently is through edtech tools.

Data from 1^{st} and 2^{nd} graders from a small suburban district was captured over a three-year period resulting in nearly 80,000 observations. Students would identify a mood when logging in (~3 times / week) and relationships between mood & engagement (denoted by a) or) and mood & post-activity quiz scores were explored.

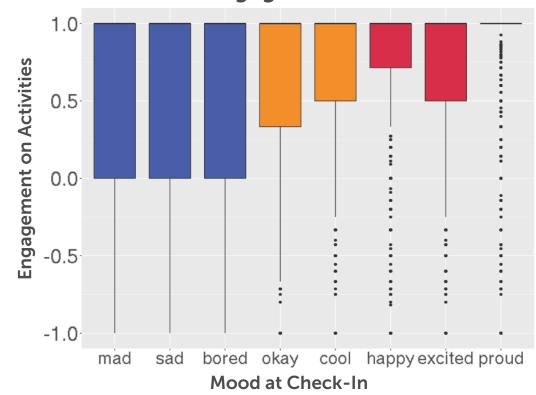
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Relationship between Mood and Engagement on Activities



Results & Next Steps

- Hypothesized relationships between mood & engagement were not supported (r² = 0.019).
- Hypothesized relationships between mood & post-activity quiz score were not supported ($r^2 = 0.005$); however, mean quiz score for negative moods was significantly different than that of positive moods (happy, excited, proud, p < 0.001), though with a small effect size (d = 0.10).

The mood visuals may have been too complex for the age range, and next steps will include reducing the number of options and more clearly delineating the moods.

