Feeling Seen: Analyzing Emotions in #StayAtHomeMom TikTok Videos

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Introduction

- Social media parenting content (i.e. "sharenting") is becoming more widespread [1]. One form is sharenting is through posting TikTok videos.
- Parents may wonder whether sharing vulnerable moments publicly or expressing certain emotions is appropriate [2].
  - This study seeks investigate how viewers respond to **emotions** expressed by Stay at Home mothers (#SAHM) on TikTok.
- Parents balance protecting their child's privacy with sharing relatable, authentic content [3, 4].
  - This study examines whether **relatability** moderates (change the strength/direction of) or **mediates** (serve as the pathway through which) how emotions impact **engagement**.
- Because parenting demands evolve significantly over time, the emotional tone of content likely differ depending on the child's age.
  - To investigate these shifts, we analyze videos across 5 stages: **Pregnancy** (<0 mo), **Newborns** (0-1 yr), **Toddlers** (1-5 yrs), **Elementary** (6-11 yrs), **Teens** (12-17 yrs).

Research question:

How do emotions in #SAHM TikTok videos influence engagement across child developmental stages, and what role does relatability play?

Methods

- **Data:**
  - 5000 randomly selected #SAHM videos
  - 1000 from each of the 5 age-groups
  - Filtered by: 2024, USA, > 0 view + like + comment counts
    - Original dataset: data from 2018-2025, 2M+ videos

- **Variables:**
  - **Age-group**: age1-age5, mutually exclusive hashtags
  - **Emotions**: 28 emotions, multilabel, using Cirimus's ModernBERT-base model, trained from Reddit comments[5]
  - **Relatability**: score from 0 to 1 on how relatable the video description is, using the DistilBERT base model[6]
  - **Engagement**: (like + comment + share)/view

- **Analyses with regressions:**
  1. Sig. main effects: lm(engagement ~ emotion)
  2. Sig. interactions: lm(engagement ~ emotion*relatability)
  3. Mediate(m1, m2): m1 = lm(emotion ~ relatability)
     m2 = lm (engagement ~ relatability)

Results

Emotion classification

Across all age groups, **love** was the most common emotion (see *Figure 1*). Grief and relief were not classified as the primary emotion for any videos. Disgust and nervousness were not classified for videos on newborns to elementary children.
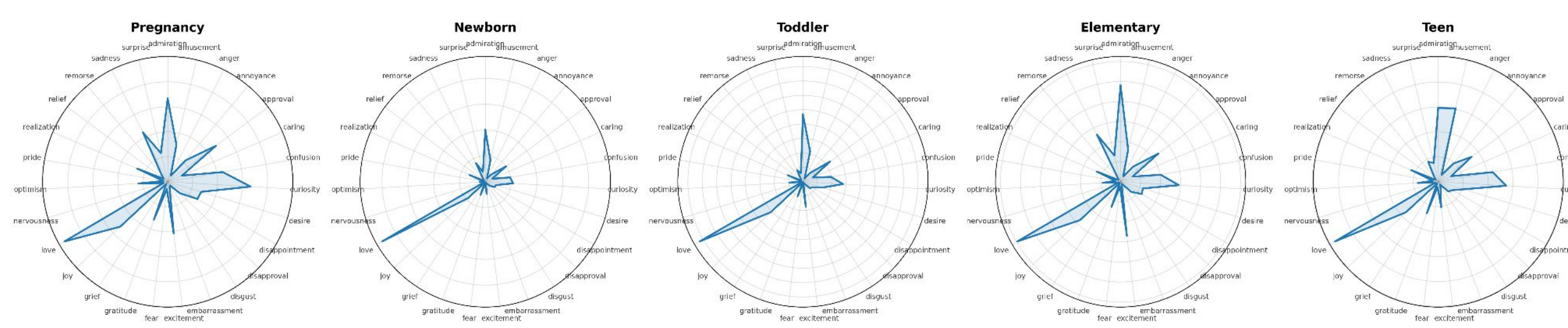

Figure 1. Average emotion classification scores across age groups.

Finding 1: Main effects of emotions on engagement

Positive emotions generally predict **higher** engagement, while some **negative** emotions (e.g., disapproval, grief) predict **lower** engagement.
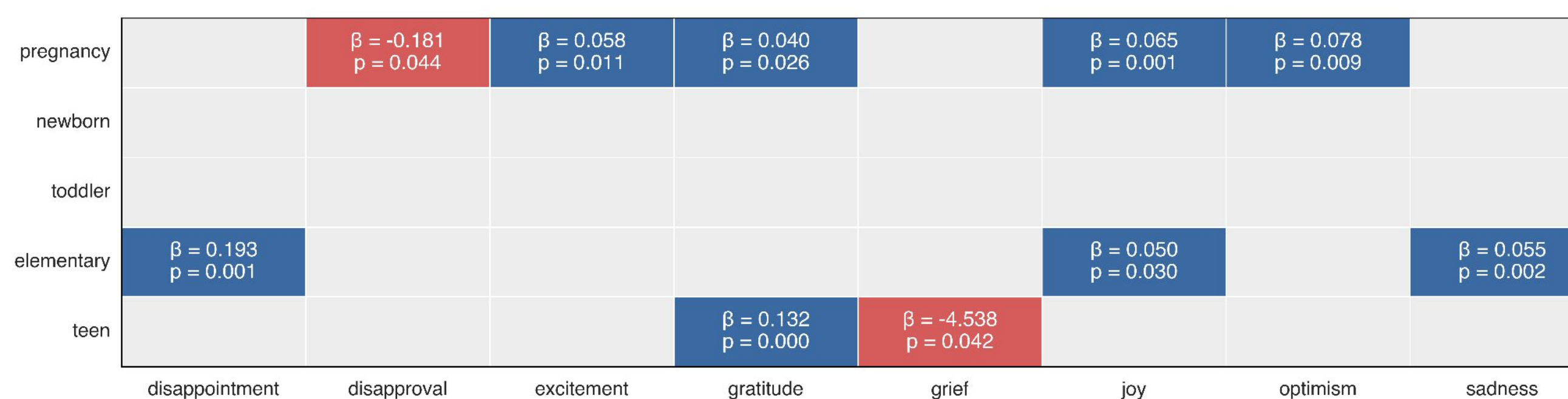

Figure 2. Significant relationships between emotions and engagement. Each cell shows the coefficient (β) and p-value for emotions that significantly predict engagement. Red and blue cells indicate negative and positive β respectively.

Finding 2: Relatability as a moderator

Relatability moderated the effect of emotions on engagement, varying across age groups (see *Table 1*). For example, **grief** increased engagement with higher relatability in newborns but decreased engagement in teens.
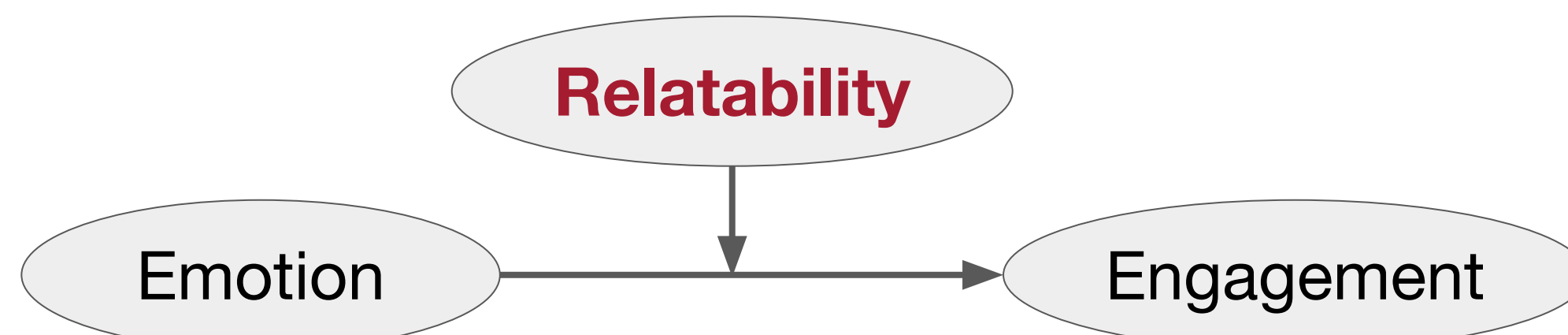

Age-group	Emotion	$\beta_{emotion}$	$\beta_{emotion:relatability}$
Pregnancy	approval	0.092	-0.387*
	gratitude	0.022	0.184**
Newborn	grief	1.196	9.437*
Teen	curiosity	0.074	-0.485**
	gratitude	0.109***	0.190*
	grief	-0.300	25.512*

Table 1. Significant interactions indicates that relatability acts as a moderator between emotion and engagement. Positive regression coefficients (β) for the interaction term indicate higher engagement when relatability is high, while negative values indicate lower engagement with higher relatability. Significance: *** p < 0.001, ** p < 0.01, * p < 0.05.

Finding 3: Mediation by relatability

Mediation effects were found only in the **newborn** age group. In particular, emotions affected engagement primarily through relatability (red line), with minimal to no direct effects on engagement (black dotted line).
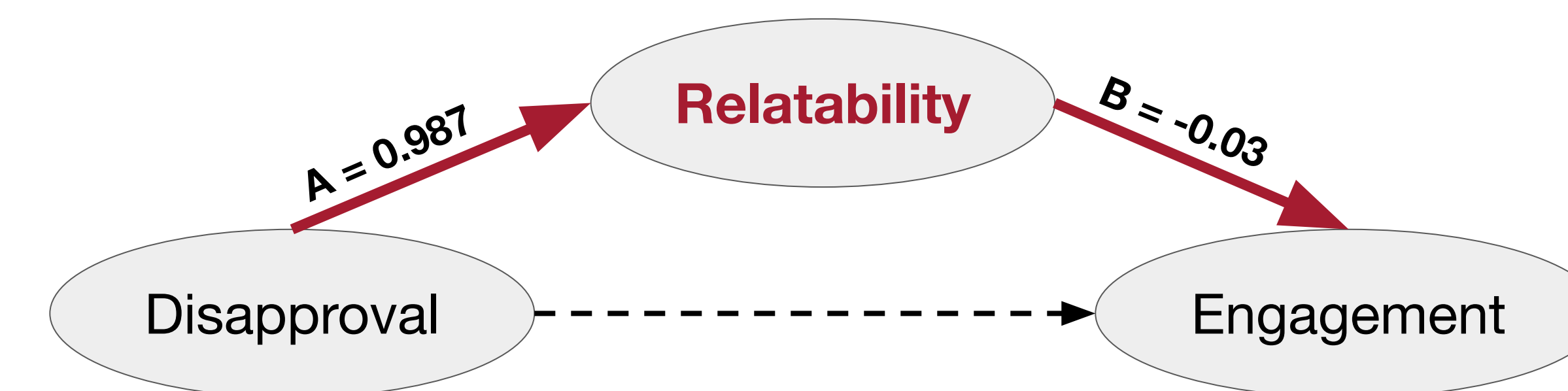
Emotion	ACME	Prop_med	Path A	Path B
admiration	-0.01***	-1.039	0.338***	-0.028**
annoyance	-0.025**	0.300	0.967*	-0.026**
approval	-0.045**	0.492	1.745***	-0.026**
caring	-0.040***	0.417	1.548***	-0.026**
disapproval	-0.026*	0.296*	0.987*	-0.026**
relief	-0.283*	0.234	10.86**	-0.026**

Table 2. ACME (average causal mediation effect) indicates the indirect effect through relatability. Path A shows the effect of the emotion on relatability, Path B shows the effect of relatability on engagement, and Prop_med is the proportion of the total effect that can be explained by the indirect path. Significance: *** p < 0.001, ** p < 0.01, * p < 0.05.

Discussion

- Positive emotions are generally more well received.
- Creating relatable content may be more appropriate for certain age groups than others. For example, expressing highly relatable grief may not be as appropriate for videos about teenagers.
- Some emotions influence engagement indirectly through relatability (e.g., disapproval increases relatability, which in turn, lowers engagement).
- Future studies can track creators who post over multiple years to examine how emotion expressions change across development
- Because this dataset is observational, causal claims about emotions driving engagement cannot be made, including ones about mediation. Future studies could explore this relationship more rigorously.

References: [1] Motevalli et al. (2025) *F1000 Research.* [2] Walrave et al. (2023) *Frontiers in Psychology.* [3] Blum-Ross et al. (2017) *Popular Communication.* [4] Steinberg (2016) *Emory Lj.* [5] typeform/distilbert-base-uncased-mnli. [6] cirimus/modernbert-base-go-emotions.

Github: