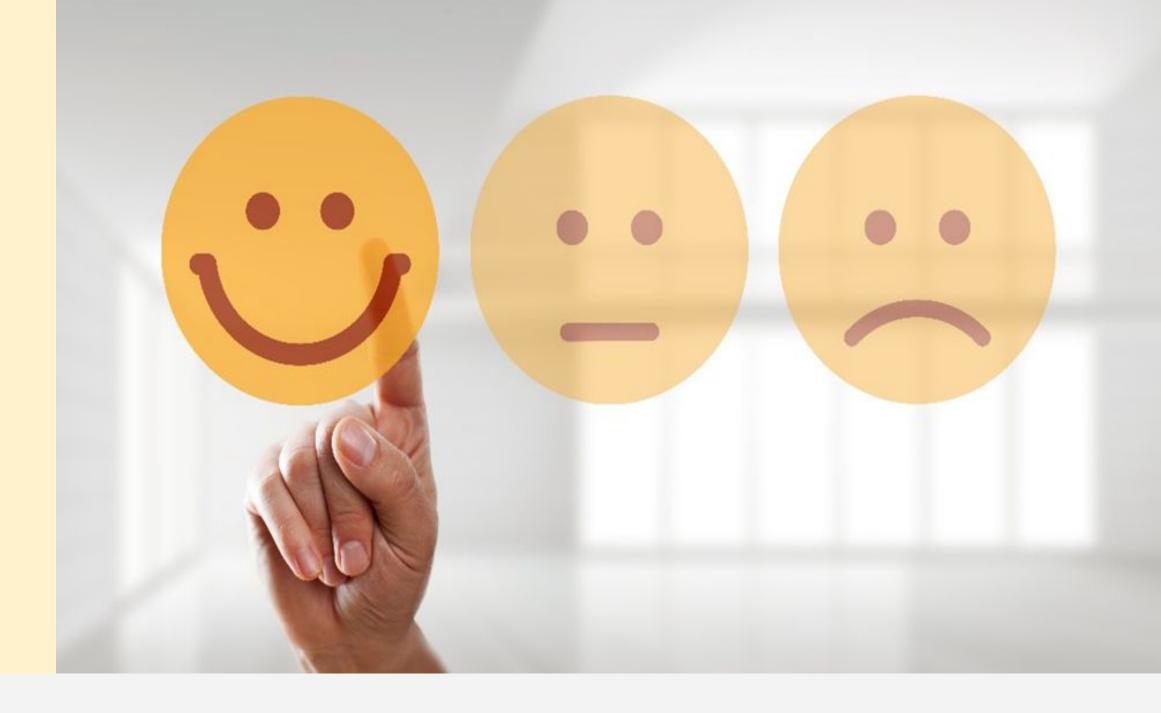# TikTok, WhatsApp, Instagram, YouTube, and Snapchat Usage and Adolescent Well-being: Evidence from Appnomes and EMAs

INTRO & OBJECTIVES

The (bi)-directional relationship between social media use and adolescent well-being remains debated. The current study:

- Introduced the **Appnome** – a new objective social media data collection and analysis approach – to to map individual app usages
- Conducted <u>between- and within-person level</u> analyses through intensive longitudinal data to study the dynamics of app usage and adolescent well-being
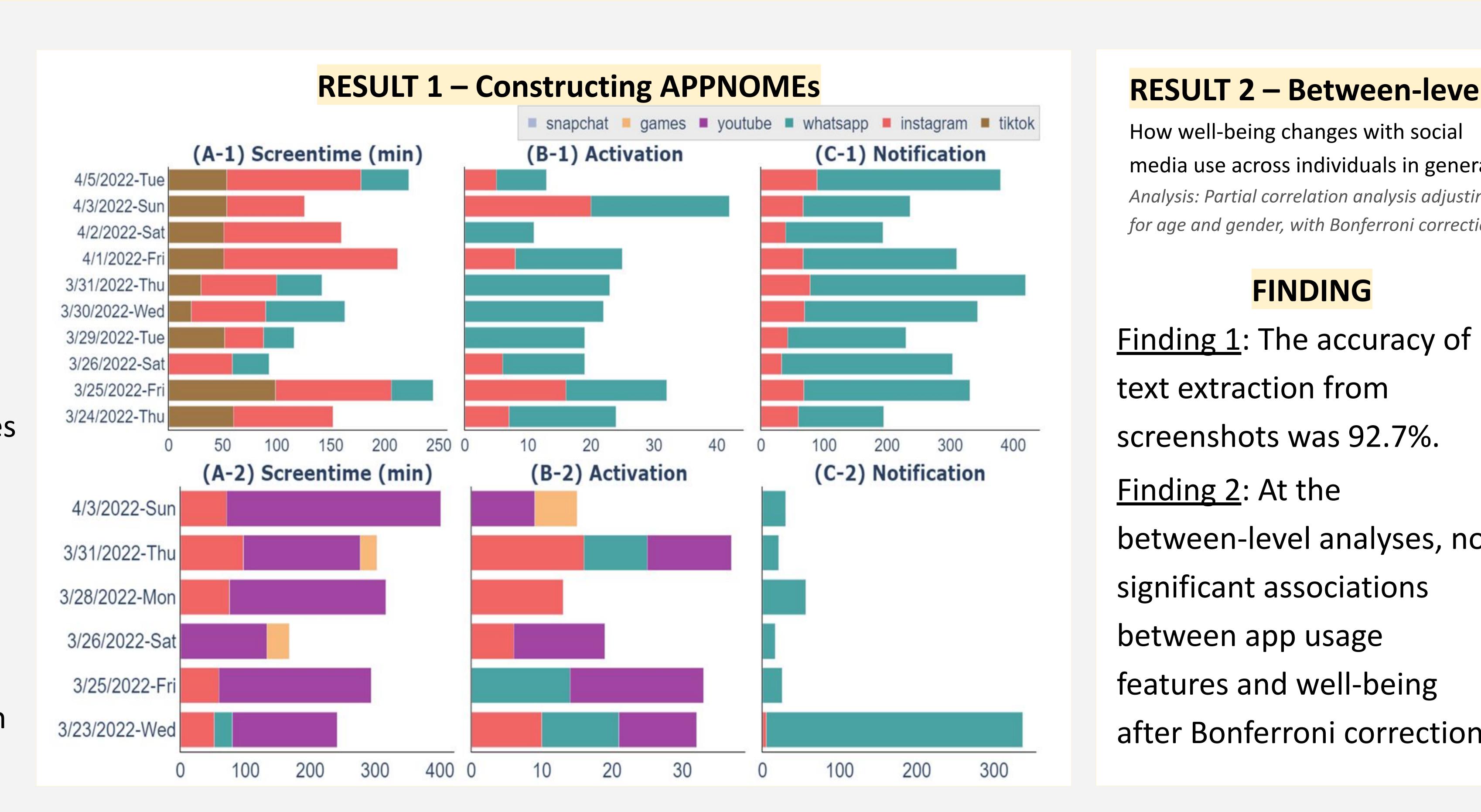
DATA COLLECTION & METHOD

Ecological momentary assessments (EMAs) with 374 Swiss adolescents (Mean age= 15.71; SD age= .82; with 62.8% female) from four high schools over 14 days.

Outcomes: hedonic and eudaimonic well-being
Variables: user-donated screenshots from setting page

Applying Tesseract OCR, we developed a pipeline to read text from image.
I.e., from (B) → 238 total unlocks, 56 from WhatsApp, 47 from Instagram, and 32 from Spotify
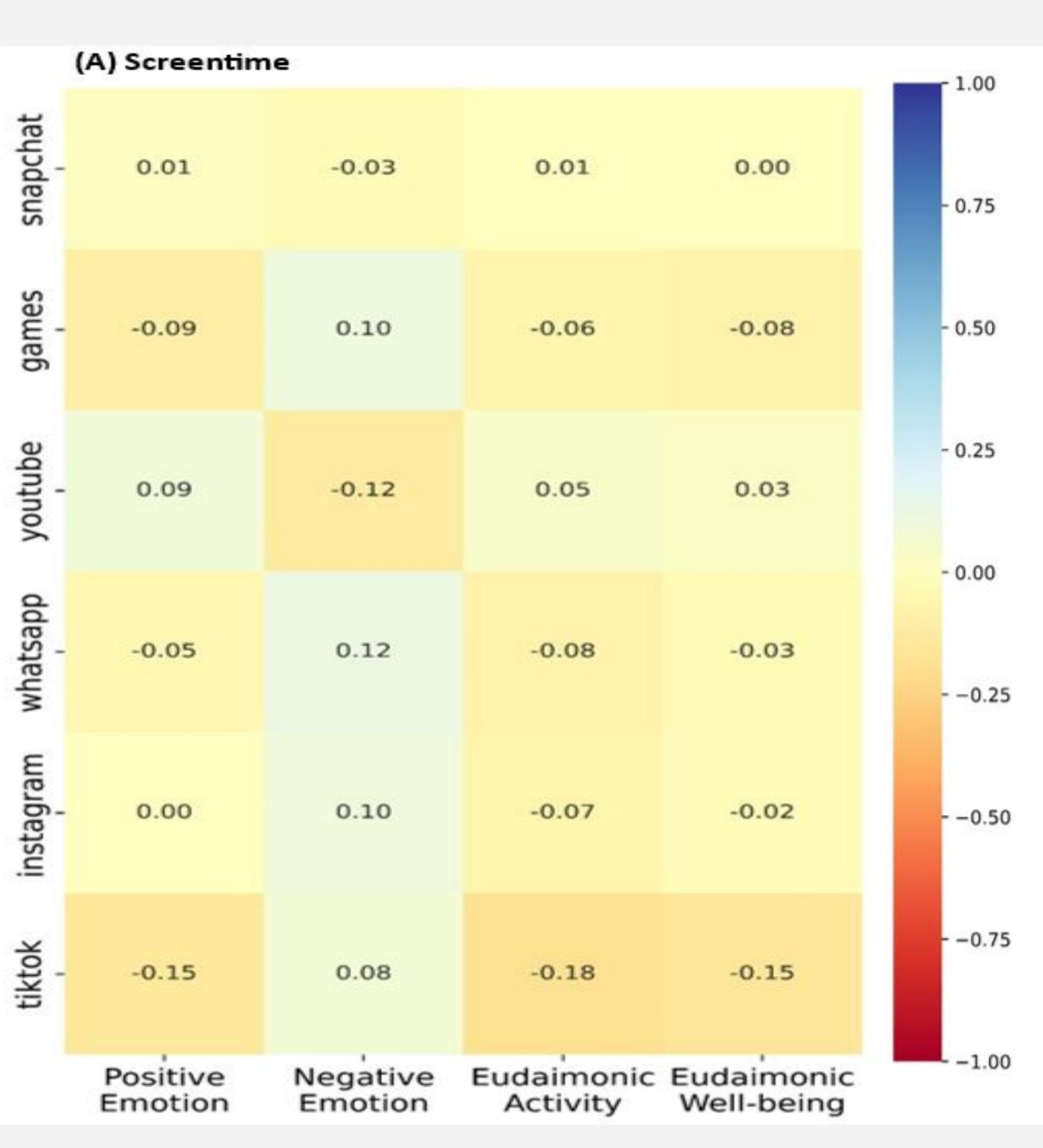
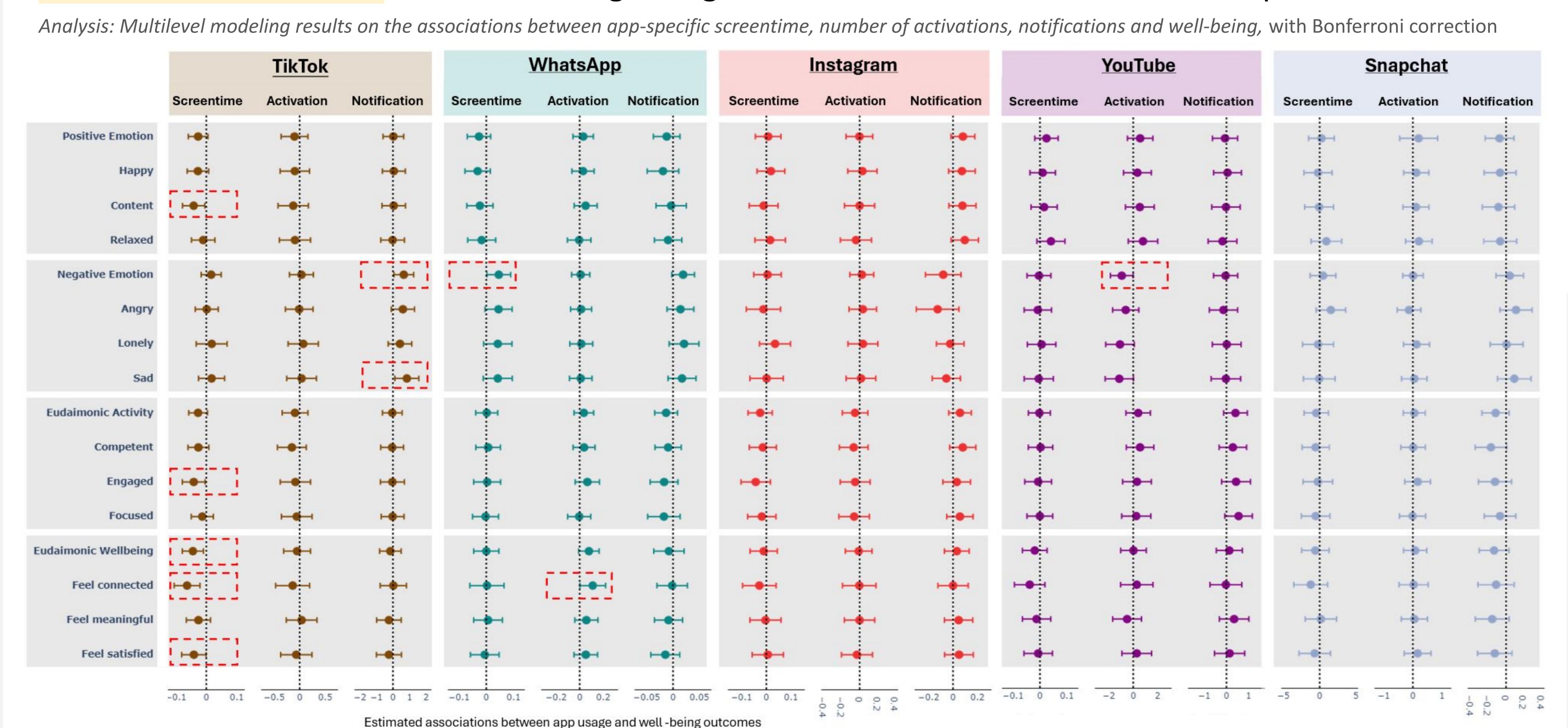## RESULT 1 – Constructing APPNOMEs

RESULT 2 – Between-level

How well-being changes with social media use across individuals in general
Analysis: Partial correlation analysis adjusting for age and gender, with Bonferroni correction

FINDING

<u>Finding 1</u>: The accuracy of text extraction from screenshots was 92.7%.

<u>Finding 2</u>: At the between-level analyses, no significant associations between app usage features and well-being after Bonferroni correction.

RESULT 3 – Within-level: How well-being changes with social media use for the same person over time

Analysis: Multilevel modeling results on the associations between app-specific screentime, number of activations, notifications and well-being, with Bonferroni correction

<u>Finding 3</u>: At the within-level, longer TikTok screentime is related to lower eudaimonic well-being (β =-.04*) on the same day but higher positive emotion (β =-.04*) next day; YouTube unlocks were associated with lower negative emotions (β=-.94*) on the same day.

IMPLICATIONS

<u>Implication 1</u>: Our finding challenge the prevalent moral panic about social media's detrimental impact on teen well-being

<u>Implication 2</u>: future research should continue exploring the mechanisms of social media use and well-being (by content-level data).

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