

Protective or destructive? How does social media use affect adolescent mental health in the era of pandemic-related social distancing?

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Background

Although critical for minimizing infection, COVID-19-related social distancing guidelines carry potential consequences. Social connectedness is important to mental health, particularly during adolescence, a period of high social activity. As school moved online and extracurricular activities were canceled to combat COVID-19, adolescents' social lives changed drastically. Social media, which can be detrimental to mental health, became the primary way to connect. The goal of this study was to examine if/how online activity has influenced adolescent mental health during the pandemic.

Method

- Participants were 332 adolescents (average age = 16.5) recruited through social media in spring 2020.
- They completed online questionnaires about depression and anxiety (PHQ-9, GAD-7), and the degree to which they feel part of an online community
- Participants also reported average screen time and time spent on social media (SMT) across five time points from March through December 2020.

Results

- SMT was associated with higher levels of depression and anxiety (PHQ-9; $B=0.01$, $p=.036$, GAD-7; $B=0.01$, $p=.004$).
- Online belongingness was associated with lower levels of depression and anxiety (PHQ-9; $B=-0.50$, $p<.0001$, GAD-7; $B=-0.31$, $p<.0001$).
- Belongingness online may moderate the effects of SMT on mental health; Participants who spent a lot of time on social media *and* reported high online belongingness had *lower* depression and anxiety scores (PHQ-9, $B=-0.50$, $p<.0001$; GAD-7, $B=-0.31$, $p<.0001$).

Results continued

- Depression was lowest (PHQ-9; $M=11.4[7.2]$) in August, relative to other months while average anxiety scores (GAD-7; $M=9.2[6.0]$) declined across follow-ups from the baseline in March.
- SMT ($M=225[100]$ minutes) and overall screen time ($M=416[137]$ minutes) decreased from March to August but then increased from October to December.

Figure 1. Depression scores over time for adolescents reporting low versus high online belongingness.

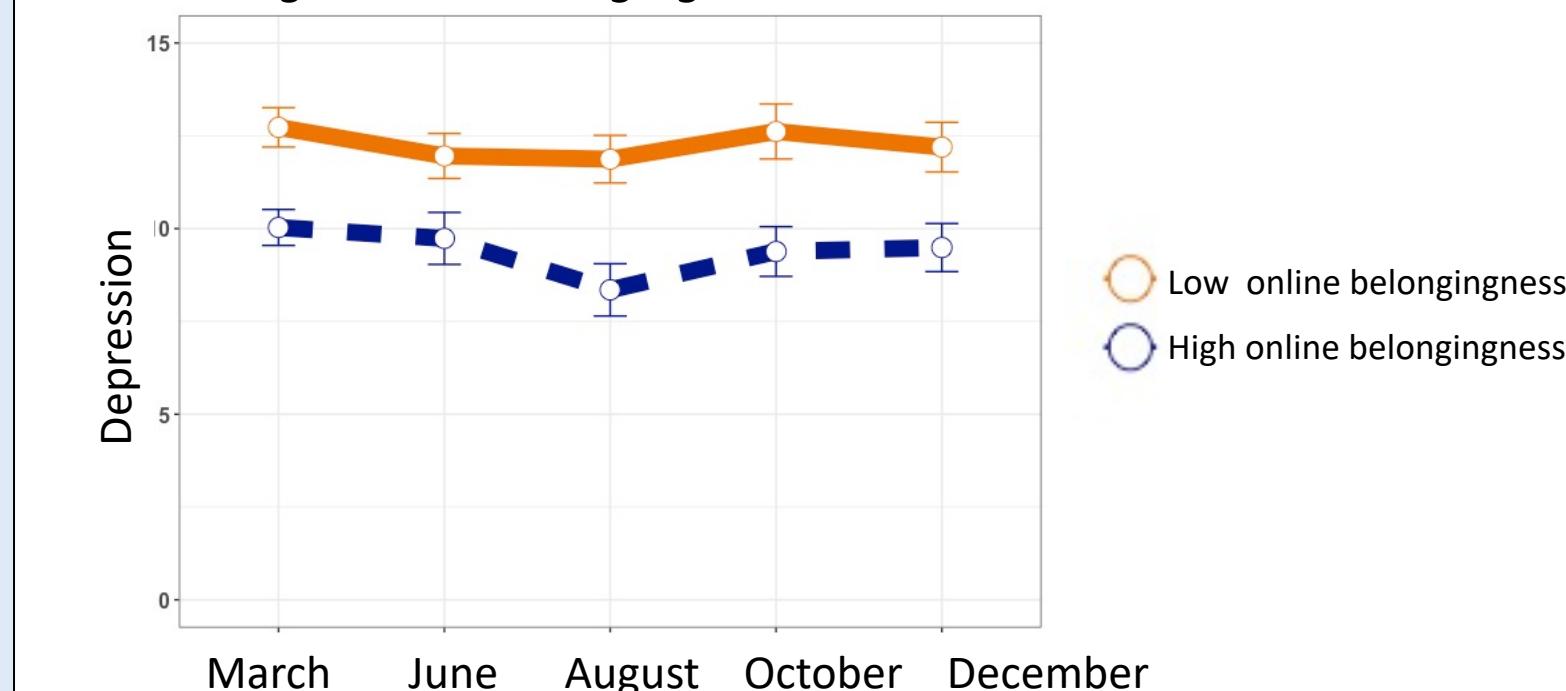
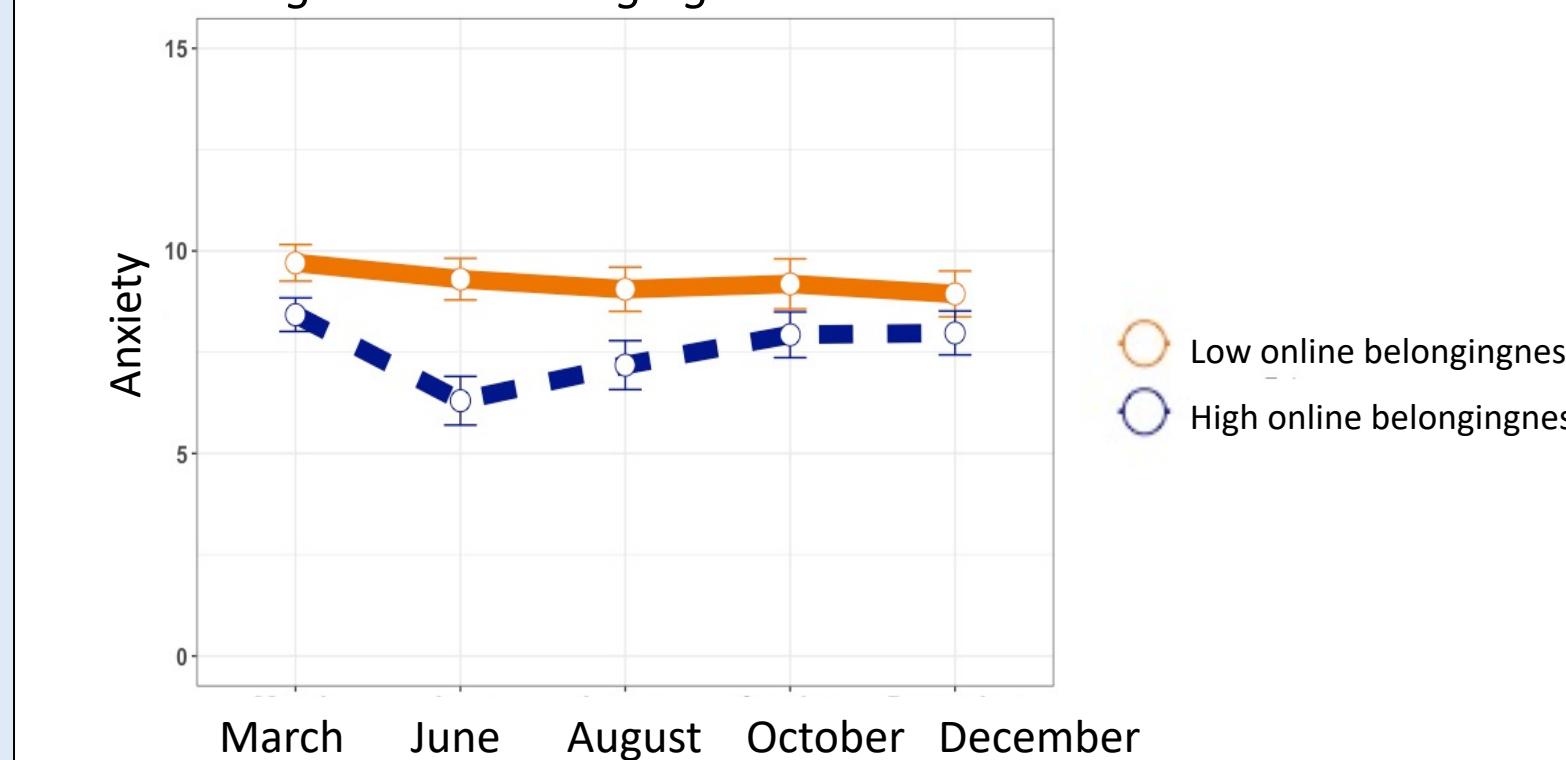


Figure 2. Anxiety scores over time for adolescents reporting low versus high online belongingness.



Discussion

- Adolescents' depression and anxiety was at its worst under strict COVID-19-related quarantine in the spring.
- Youth who have a strong sense of community and feel supported online may experience protective effects from social media. Those whose time online is not as positive, may experience increased mental health concerns with higher levels of social media use.
- Future research investigating the impact of social media should consider the nature of adolescents' online experiences, not just the amount of time spent.

