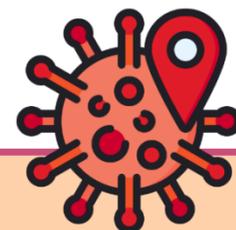# Impact of Spatial Distance on Public Attention and Sentiment during the Spread of COVID-19

BACKGROUND

- The COVID pandemic impacted the **mental health** of people worldwide
- It is important to understand which factors impact people's **emotions** during global disasters
- **Social media** grants access to people's natural emotional responses to COVID in real-time
- Psychological theories suggest the **distance** to an event influences people's perceptions

AIM: How does people's physical distance to COVID affect their (1) attention and (2) emotions towards COVID?

METHOD

1. Collected 2.7m **COVID-related tweets** during its global spread in 2020
2. **Distance to COVID** was measured in km from the user's home country to the nearest country infected by COVID at the time, further categorized into Close, Bordering, and Far
3. Emotions were measured through **sentiment analysis** of tweets, from -1 to +1
4. Attention was reflected by the **number of tweets**
5. Confounders such as time and number of infections were controlled for
6. Statistically tested the effect of distance on (1) number of tweets and (2) tweet sentiment

FINDINGS

Distance predicted number of tweets: more tweets were made closer to COVID, and this effect became more extreme over time

Effect of distance on public sentiment: overall and on most days, users were most negative Close to COVID (M = -0.051), followed by Far from COVID (M = -0.045), and Bordering COVID (M = -0.035).
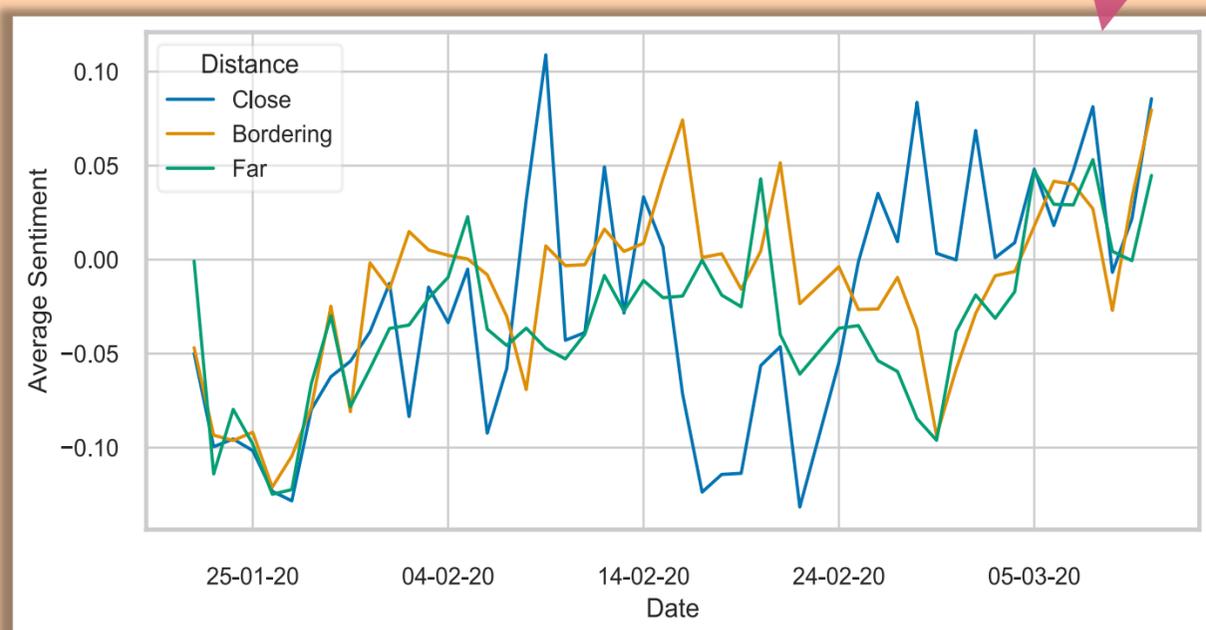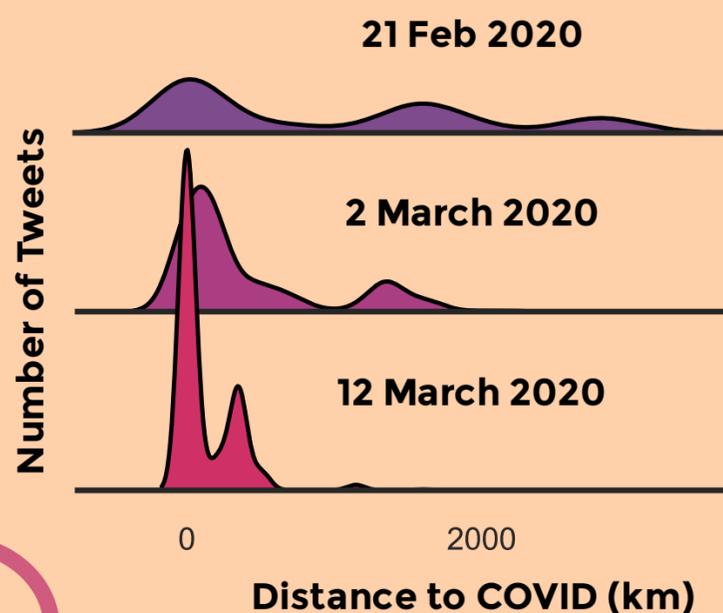
Organizations should clearly communicate disease risks to people further away, so they take preventive measures before it spreads close

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People pay more attention and feel more negative towards COVID when the disease comes physically closer from all across the world

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