Appendix A: Supplemental methods information

The Danish facemask debate

We studied facemask-related misinformation in Denmark, a country with high trust in the government (OECD, 2021; Shahi et al., 2021) and the media (Pew, 2018), during the first wave of the pandemic (February - November 2020) and before the second lockdown in December 2020. Given the nature of our single case study, we cannot necessarily expect similar results in countries with lower trust, other misinformation topics, or different social media platforms.

We focused on facemask-related misinformation, given its importance in the Danish COVID-19 debate. This was the largest misinformation theme of those we identified (see below). We identified 8,330 unique tweets containing both a COVID-19-related and misinformation-related keyword, of which 68.6% related to the facemask theme. While this does not necessarily mean that there was more misinformation on facemasks compared to other themes (e.g., vaccines), it suggests greater Twitter engagement within this particular period.

Twitter

Our study uses Twitter data, following other papers studying misinformation (Chen et al., 2020; Gallotti et al., 2020; Shahi et al., 2021; Vosoughi et al., 2018). On Twitter, users can interact without mutual connection, enabling us to study the dynamics of misinformation on a platform where users engage outside their usual social network. Additionally, Twitter data is easily accessible. In Denmark, Twitter is a politically important platform attracting traditional media, politicians, and opinion-makers (Illumi, 2021), although only 7% of the Danish population actively use Twitter (Dam, 2019). Danish men are nearly three times more prone to use Twitter once a week than women, and it is most popular with middle-aged users (34% of those between 30-49 use Twitter) and those between 15-17 years (20%), though not with those over 60 (2%) (Dam, 2019). While our findings may not be directly applicable to other social media platforms (e.g., Facebook), they provide unique insights into the dynamics between users engaging with misinformation.