

How - and for whom- social media news shape trust in science, conspiracy beliefs, and the public support for future containment measures against COVID-19

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Abstract

Many studies have examined how social media impacts public beliefs, particularly in the health domain, but few have been able to observe cognitive mechanisms and their potential effects on behaviors. Emerging evidence suggests that the infodemic associated with the COVID-19 crisis may have reinforced a more generalized conspiracy mentality and heightened skepticism toward scientific expertise compared to the pre-COVID-19 period among segments of the population. This may have lasting implications for how individuals perceive and respond to future public health threats. The objective of this study is to examine the direct and indirect role of social media in the acceptance of future COVID-19 containment measures. In particular, we investigate how social media use for information seeking can - or cannot, depending on cognitive abilities - contribute to the rise of distrust in science and conspiracy beliefs that, ultimately, might influence the acceptance of hypothetical future COVID-19 containment measures. Based on the available literature, we developed a theoretical framework which included cognitive abilities as a potential moderator of the undesirable effects of social media news, tested through structural equation modeling (SEM). Data were collected through an online survey conducted in September and October 2022 with a representative sample of the French population, stratified by age, gender, region, and socio-professional category. Results of the SEM analysis (N = 854) indicate that distrust in science has a direct negative effect on acceptance of new restrictions, while the effect of conspiracy beliefs on acceptance of new restrictions is fully mediated by science mistrust. While news seeking on traditional media is directly associated with the acceptance of new restrictions, social media use is not. The effect of news seeking on social media on containment measure acceptance is subtler: by fostering science distrust and conspiracy beliefs, social media use indirectly reduces individuals' propensity to accept new restrictions. However, individuals with high analytical thinking abilities are partially immune to these chaining mechanism, as if they are more able to discern fake news on social media.

Keywords: Containment measures; Science distrust; Conspiracy mentality; Traditional media; Social media; Cognitive reflection test.