

Amplification of emotion on social media

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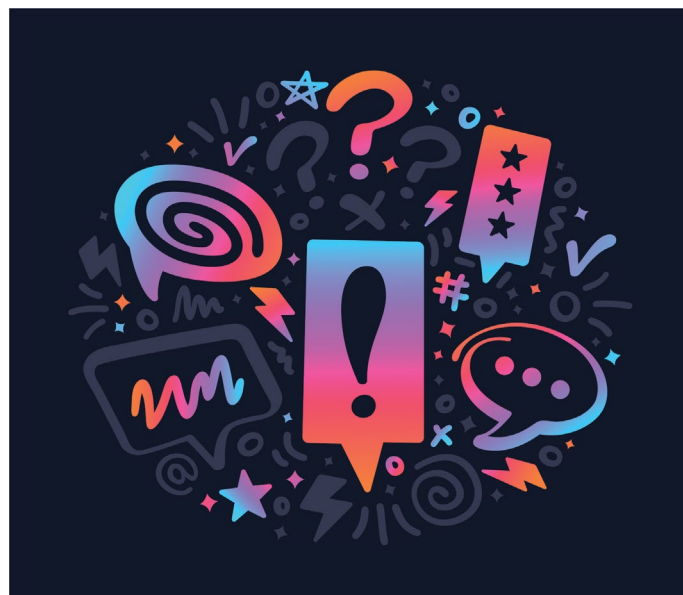
Why do expressions of emotion seem so heightened on social media? Brady et al. argue that extreme moral outrage on social media is not only driven by the producers and sharers of emotional expressions, but also by systematic biases in the way people that perceive moral outrage on social media.

Many people perceive social media as a setting in which interpersonal expressions of emotion are greatly amplified, with hypothesized ramifications for individual well-being and societal division. Research has mostly studied general engagement with social media and well-being rather than pinpointing the effects of specific types of content, but a recent article has argued that detrimental effects on well-being are caused by negative emotions that are frequently shared online¹.

But so far, research has primarily focused on the production of emotional expressions: the content created by users – promoted and diffused by other users – and the way that social media companies further amplify such content. For example, research suggests people are motivated to express more anger on social media to signal their group membership or to influence others². People are also more likely to share negative emotional content in political contexts³, even in political celebrations⁴. Additionally, strong emotional expressions are promoted by the feed algorithms of social media platforms, increasing the reach and spread of these expressions⁵ and creating a self-reinforcing cycle of emotional content⁶.

In this issue of *Nature Human Behaviour*, Brady et al.⁷ take an important, complementary perspective to these findings by shifting focus to the perception of emotional expressions on social media, and find that perceivers of emotional expressions have a critical role in the amplification of emotion on social media. This research suggests that – in addition to amplification in emotion production – there is a complementary process by which perceivers interpret moral outrage to be stronger than the actual, experienced outrage of producers. This overestimation of the moral outrage of others is further catalysed by a generalization process in which people overestimate collective emotion. This overestimation shapes observers' understandings of what levels of emotion and hostility towards the outgroup are normative – a dynamic that could in turn shape the perceivers' own behaviour on social media. Thus, the findings of Brady et al. suggest that amplification by perceivers could have an important role in the escalation of emotion on social media.

In their studies, Brady et al. examined amplification as the discrepancy between levels of emotion inferred by perceivers and those reported by producers of content. As above, the authors also suggest that amplification in the evaluation of expressed emotion affects how people perceive collective emotion. It seems therefore that there are at least three layers of emotion amplification: first, amplification in the expression of emotions, which has been the focus of most previous






research; second, amplification in the interpretation of the emotions expressed by producers; and third, further amplification in how people evaluate collective emotions – these last two are suggested by the current project.

How can amplification in the evaluation of collective emotions affect how groups react to political events? Research on digital emotion contagion suggests that emotional reactions tend to converge with how people perceive the emotions of others in their social media feeds⁵. If people estimate the collective emotion to be stronger than it actually is, then they should tend to conform to stronger emotions than others in fact feel. This in turn could amplify others' emotions and emotional expressions, because of emotion contagion. Recent theoretical accounts⁸ and computational models of collective emotion formation⁹ have begun incorporating this dynamic in their models, showing that it does indeed contribute to escalation.

These processes of emotion amplification not only affect emotional contagion, but also influence the people with whom users choose to interact. Recent work suggests that people prefer associating with peers who express stronger outrage on social media¹⁰. It seems, therefore, that amplification in the evaluation of collective emotions has an important role not only in driving contagion, but also in motivating the peers to whom people pay attention. This process is likely to further amplify emotion on social media.

In conclusion, Brady et al.'s paper is one of the first to examine the role of the perceiver in amplification of the emotions of collectives. This work should begin a larger shift of attention from the dynamics that drive the production of emotion to a greater focus on consumption. This shift can help to provide a more complete understanding of the many potent factors that drive the escalation and diffusion of emotion online.

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Competing interests

The authors declare no competing interests.