

# **The Role of Attention and Norm Perception in Online Comments' Impact on Attitudes toward Sunscreen: An Eye-Tracking Approach**

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Online comments have been shown to influence users' beliefs and attitudes by reflecting the views of the majority when comments are predominantly supportive or opposing an issue. Readers may perceive these comments as normative cues and align their judgments accordingly. However, previous research has largely overlooked how individuals selectively attend to online comments based on their prior attitudes and behaviours, and the extent to which the majority norms reflected in online comments influence perceived offline norms—an important factor in shaping attitudes. This overlooked mechanism may explain why the impact of online comments on attitude change appears to be limited.

Given the rise of misinformation videos about sunscreen on social media platforms, which may pose public health risks related to skin cancer, this study examined real-time comments following a YouTube video that spread false information about sunscreen. We utilized a randomized controlled design with two conditions: one featuring comments supporting sunscreen use and the other featuring comments opposing it. Eye-tracking technology measured participants' attention to the comments, using two metrics: the duration of viewing and the number of fixations on the comments area. We explored whether attention to pro- versus anti-sunscreen comments was moderated by participants' prior attitudes and sunscreen use behaviours. Additionally, we examined whether this attention influenced perceptions of online user norms and offline social norms, and whether these perceptions subsequently impacted attitudes toward sunscreen.

The results indicate that individuals tend to selectively attend to comments consistent with their prior attitudes. Interestingly, participants with more frequent sunscreen use paid greater attention to anti-sunscreen comments. Attention to comments predicted changes in perceived online norms only in the anti-sunscreen condition; however, these changes did not translate into shifts in attitudes toward sunscreen. Perceptions of offline social norms—more salient predictors of attitude change—were unaffected by attention to online comments. Overall, the findings suggest that the influence of online comments on attitude change is limited, primarily due to biased attention and the confinement of their impact to the online space without affecting offline normative perceptions.