

Mitigating the impact of misinformation: Examining the effectiveness of emotion-based interventions on false news sharing

Anjali Chauhan, Steve Joordens

Department of Psychology, University of Toronto Scarborough

Introduction

Background:

- False news can spread farther than true news online [1].
- However, people are worse at discerning true from false news when considering sharing it than when considering if it's accurate [2]; factors other than accuracy may affect the spread.
- Moral-emotional content relates to false news spread online [3].
- Anger is a moral emotion [4] that may relate to false news sharing.
- This warrants an intervention against false news sharing that brings attention to emotion in online information.
- Studied interventions include the accuracy nudge and the training message, which ask people to consider the accuracy of online information [5, 6]. These inform the current study,

Research Questions

- Does a simple intervention which brings attention to emotionality in a news headline decrease likelihood of sharing false, but not true, news?
- Is this intervention more effective when it is coupled with a training message than when it is not?

Methods

Sample: 764 social media users recruited from MTurk

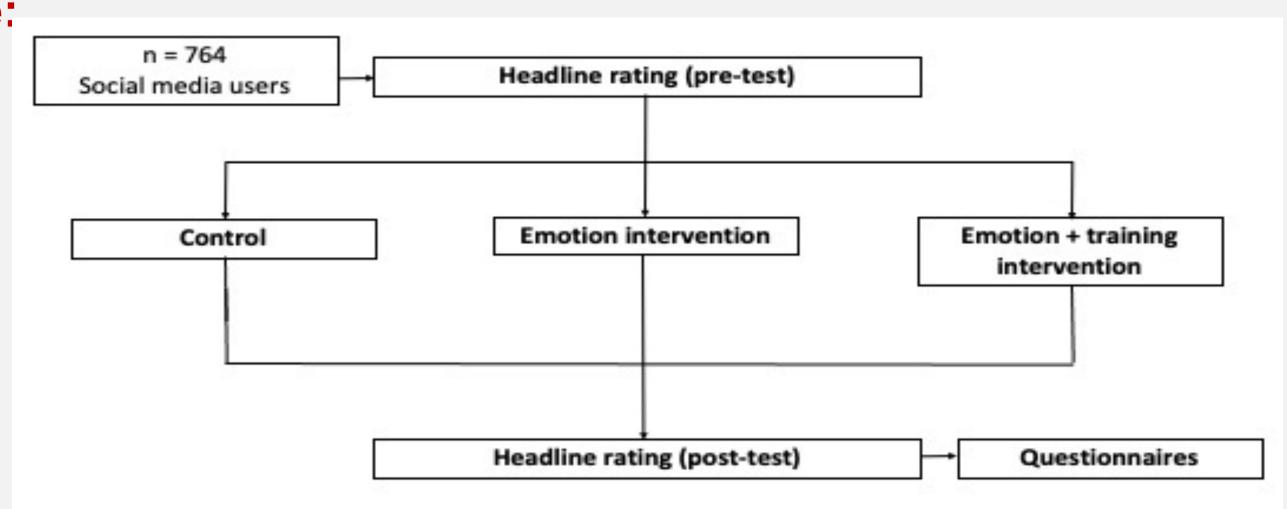
Materials/Measures:

- Headline-rating task
 - Rating likelihood of sharing of 20 headlines (10 true, 10 false) on a four-point scale from "Extremely unlikely" to "Extremely likely"

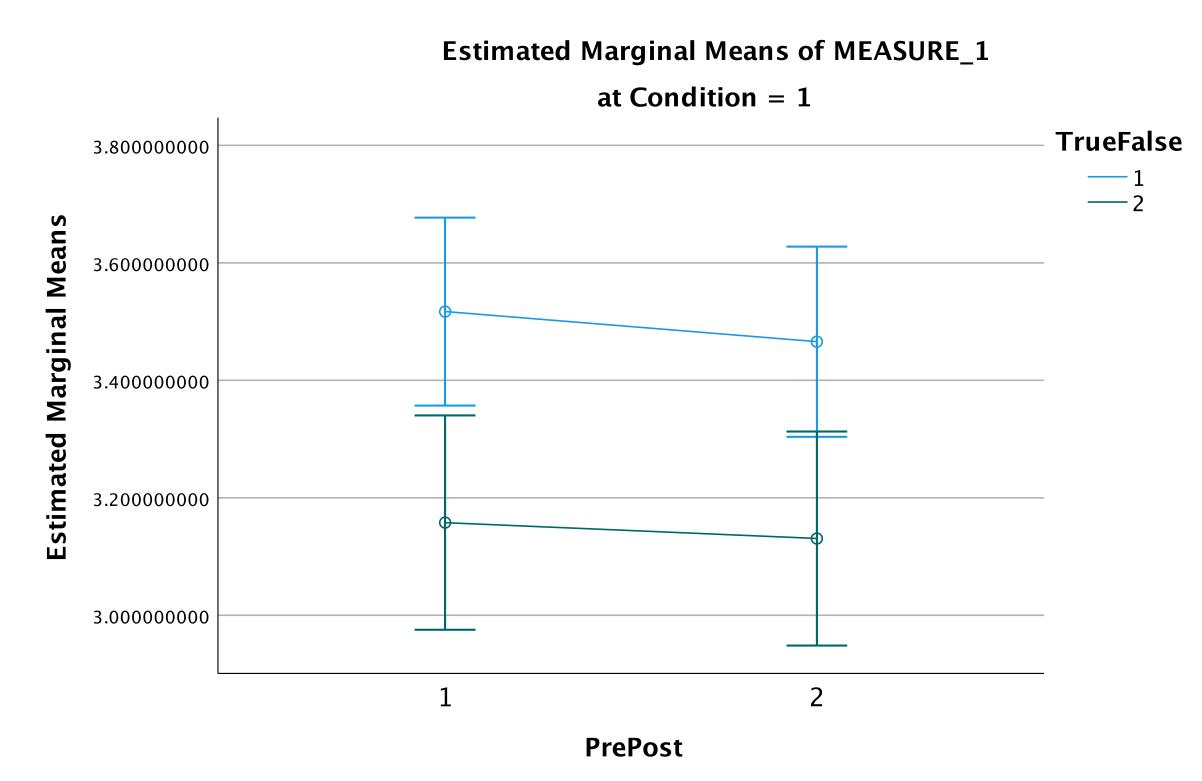


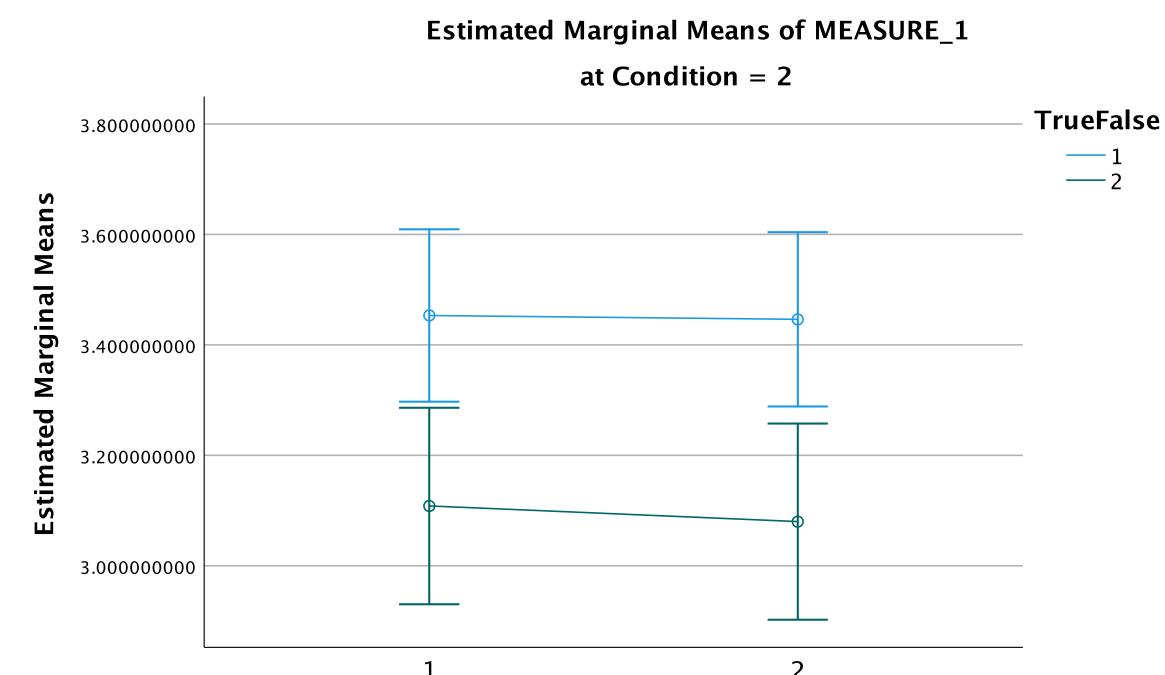
- **Emotion intervention**
- Rating emotionality, especially anger, in one headline unrelated to COVID-19 on a four-point scale from "Not at all emotional" to "Very emotional"
- Emotion and training intervention
- Emotion intervention with four-sentence message about the link between negative emotion and false news
- Questionnaires
- E.g. 6-item Need for Cognition Scale, Trust in Science and Scientists Inventory

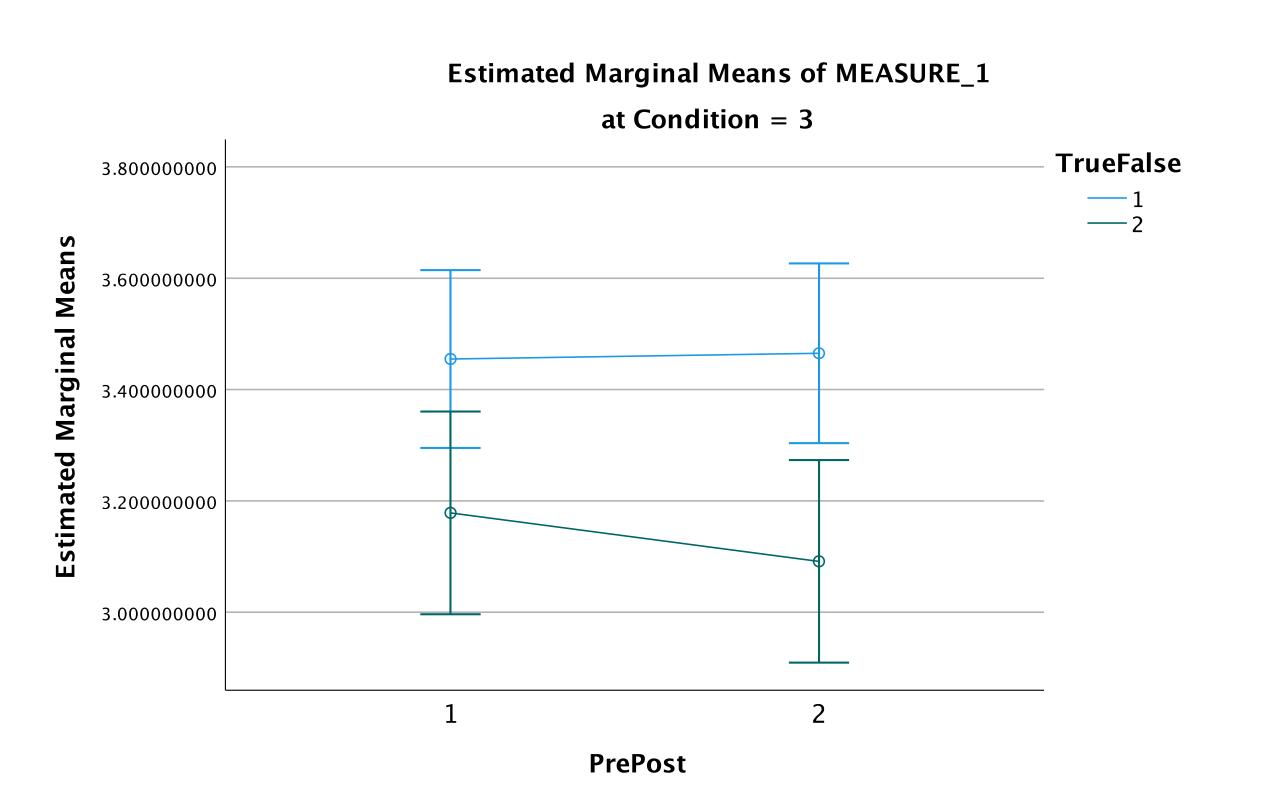
Procedure:



Results & Analyses







- Negative correlation between raters' emotionality ratings and likelihood of sharing (r = -0.315)
- Three-way mixed ANOVA (time point x headline veracity x intervention condition)
 - Main effect of veracity higher likelihood of sharing true than false news
- No other main effects or interactions
- Three two-way repeated measures ANOVA (time point x headline veracity for three conditions)
 - Main effect of veracity for all three
 - Interaction in emotion and training intervention decreased likelihood of sharing false, but not true news from pre- to post-test

Discussion

Conclusions:

- Evidence that directing attention to emotionality in news and explicitly explaining its link to false news improves discernment between true and false news when deciding whether to share it
- Effectiveness is unclear given low effect size and lack of difference between conditions
- No evidence that directing attention to emotionality alone improves sharing discernment.
- Social media users appear to be good at discerning true from false news headlines
- There may be cues in the posts that indicate unreliability (e.g., a lesser-known website name)

Emotional headlines were less likely to be shared

Implications and Future Directions

Development of educational interventions which direct attention to emotionality in false news

inycook, G., McPhetres, J., Chang, Y., Lu, J. G., & Rand, D. (2020). Fighting COVID-19 misinformation on social medi

Contact: anjali.chauhan@mail.utoronto.ca, steve.joordens@utoronto.ca

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