



# A Causal Test of Moral Contagion in Social Networks

Jino Kwon, Margaret Carroll, William Brady, and Jay Van Bavel  
New York University

wjb260@nyu.edu

## Introduction

- Discussions of political ideas that strike at our deeply held intuitions about what is right and wrong increasingly occur in online social networks.
- Recent research has begun investigating factors that make some moral ideas gain more popularity than others.
- Moral contagion refers to the effect where expression of moral emotions increases the diffusion of moral ideas in online networks (Brady et al., 2017).
- Previous work testing the moral contagion effect were *correlational* in nature thus preventing any causal claims. Here, we manipulate the morality and emotion expression of fictitious Twitter message about the contentious topic of gun control to test the *causal* impact of moral emotion expression on diffusion of political messages in social networks.

## Hypothesis

**Hypothesis** : The combination of moral and emotional language will yield the greatest intention to retweet

- Double main effect* : emotion is sufficient but not necessary for moral contagion
- Interaction* : emotion is necessary and sufficient for moral contagion

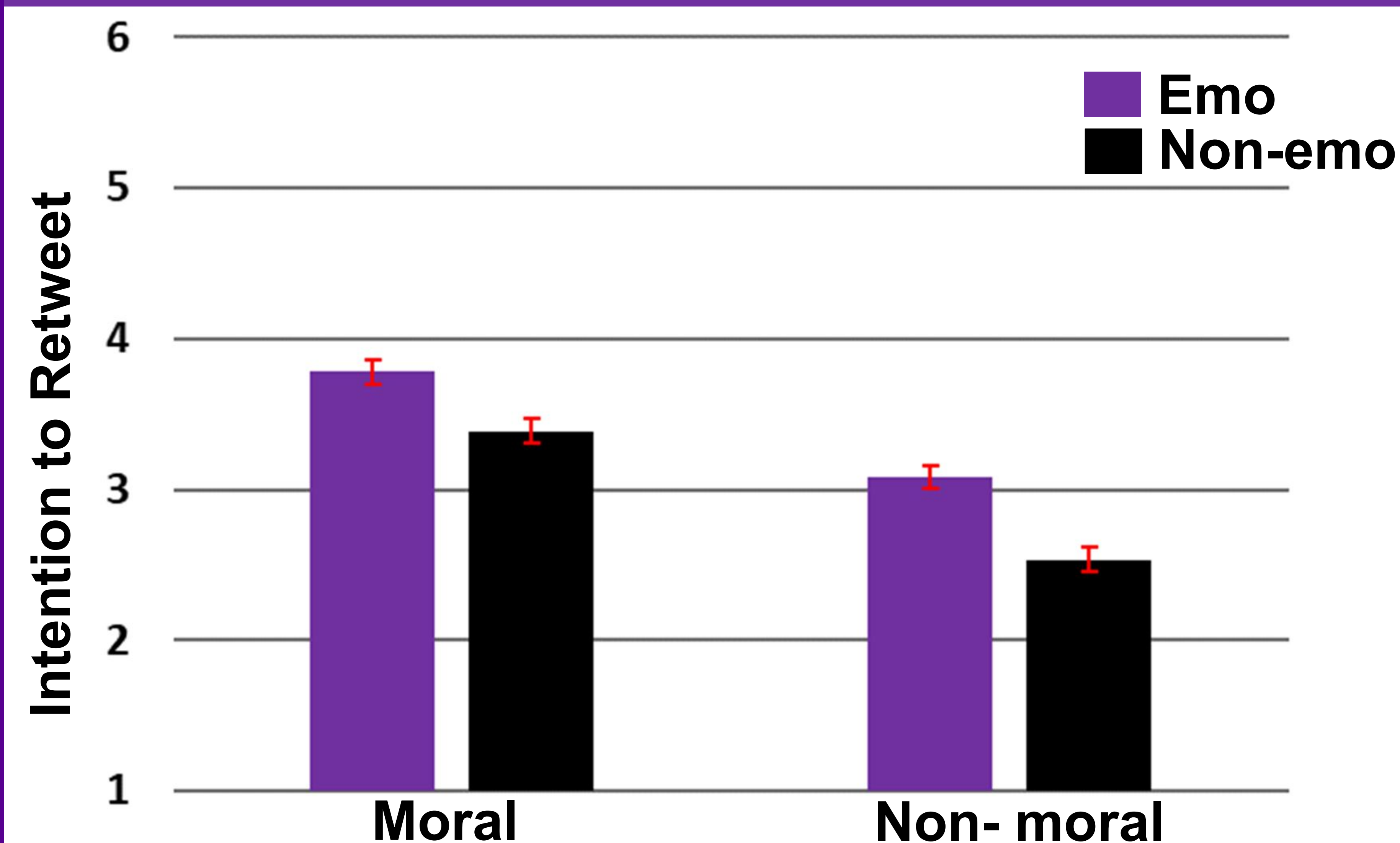
## Method

- N= 201 (134 female and 67 male)
- Manipulated message content in political tweets on the topic of gun control (see *stimuli*)
- Participants exposed to ideologically-congruent messages
- IV: 2 (moral/non-moral) x 2 (emotional/non-emotional)
- DV: How likely are you to retweet this message?

## Results

- Main effect of morality,  $F(1,161)=105.19$ ,  $p<.001$ ,  $\eta^2p=.40$ . People were more likely to intend to retweet messages containing moral words.
- Main effect of emotion,  $F(1,161)=63.91$ ,  $p<.001$ ,  $\eta^2p=.28$ . Participants were more likely to intend to retweet messages containing emotional words.
- No significant interaction between moral and emotional language on intention to retweet,  $F(1,161)=2.06$ ,  $p=.154$ ,  $\eta^2p=.01$ .
- Analysis of simple effects showed that tweets containing moral-emotional words yielded the highest intention to retweet, ME-M:  $t(161) = 4.97$ ,  $p<.001$ .

## Results



## Discussion

- These results confirm large-scale correlational studies on Twitter suggesting that the combination of moral and emotional content yields the largest retweet engagement.
- Our pattern of results suggests that emotional content is sufficient but not necessary for the moral contagion effect.
- These findings offer empirical insight into how moral and political messages gain exposure and influence as political discourse on social media becomes more ubiquitous both for the public and political elites.
- Our stimuli have high ecological validity, but trade off some control of content surrounding the target word.
- Future work should use a between-subjects design to keep the message context constant but substitute single words only.

## Stimuli

| ME   | E   |
|--|---|
| <p>With gun assaults on the rise, we need better #guncontrol policy for a better future</p>  | <p>We are accepting of people who don't like guns, but we still #carry a gun.</p> |
| M  | (N)   |
| <p>Better #GunControl will help protect our country from people who shouldn't have a gun</p> | <p>We prefer if people keep guns they use bullet-less type of guns</p>            |