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## Experimental Effects of Tweets Encouraging Social Distancing: Effects of Source, Emotional Appeal, and Political Ideology on Emotion, Threat, and Efficacy

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### Abstract

**Context:** Public health officials and celebrities use social media to provide guidance to reduce the spread of COVID-19. Messages apply different promotional strategies to motivate behavior change, likely yielding divergent reactions from partisan audiences. The Extended Parallel Process Model (EPPM) suggests that perceived threat for a negative outcome should impact perceived need for the advocated health behavior, which should be more appealing to an audience if perceived it to be efficacious and feasible.

**Objective:** This study examines the interactive effects of Tweet source, message emotional appeal, and audience political affiliation on US adults' perceptions of COVID-19 threat and social distancing efficacy during early months of the pandemic.

**Design and Setting:** This online survey experiment applies the EPPM to assess US adults' reactions to tweets encouraging social distancing. The experiment tests three emotional appeals (fear, humor, neutral) and two sources (CDC, celebrity) on adults' emotional reactions and perceptions of COVID-19 threat and social distancing efficacy.

**Participants:** The final sample included 415 US adults (242 Democrat and 173 Republican) recruited through Amazon's Mechanical Turk.

**Main Outcome Measures:** Outcome measures were adapted from the EPPM and include perceived susceptibility to and severity of COVID-19, and response- and self-efficacy regarding social distancing. Each was measured through the survey on a 7-point response scale.

**Results:** Humor and fear-appeal messages evoked less fear and guilt responses, compared to a neutral tweet from the CDC. Fear and guilt emotions predicted greater perceived threat, while hope and pride predicted efficacy constructs in relationships moderated by political ideology.

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**Conclusions:** Public health messages targeting a bi-partisan audience through social media may increase perceived threat by inducing fear of COVID-19 infection. EPPM theory suggests boosting efficacy is also critical to message acceptance and behavior change; thus, inducing feelings of hope and pride in addition to fear may be particularly effective.

### Keywords

COVID-19; EPPM; fear; emotion; political ideology

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As the novel severe acute respiratory syndrome coronavirus 2 (SARS-Cov-2) proliferated rapidly causing coronavirus disease 2019 (COVID-19) during Spring 2020, celebrities, politicians, and public health agencies like the Centers for Disease Control (CDC) utilized social networking channels to spread guidance designed to slow the virus' spread (e.g., handwashing; social distancing). Efforts by health communicators changed markedly during the course of the pandemic, with research showing that early messages focused on threat awareness, followed by individual and community-based motivations and eventually messages aimed at setting social norms.<sup>1</sup>

While stay-at-home orders made mass media an important tool for disseminating health information, the imminent threat posed by COVID-19 precluded careful audience research and message testing. Use of social media for COVID-19 information was not related to knowledge or adherence in one study,<sup>2</sup> though message impact likely varies by content and source.<sup>3</sup> As such, questions remain regarding what message promotion and audience targeting strategies public health communicators should use to best promote adherence to COVID-19 guidance. Because of the rapidly changing nature of public health emergencies and the speed with which information must be disseminated, health communicators must develop messaging strategies prior to the onset of the next public health emergency.

To that end, this study applies the Extended Parallel Process Model (EPPM) to experimentally evaluate US adults' reactions to tweets from CDC and celebrity sources, which use different emotional appeals to promote social distancing. Given differences in compliance along political lines, analyses also examine whether reactions to the tweets vary between Democrats and Republicans.

### The Extended Parallel Process Model (EPPM)

Public health messages frequently employ emotional appeals to gain attention and associate the target behavior with something of value to the audience.<sup>4</sup> Particularly common are fear appeals—emphasizing the risk of severe outcomes from noncompliance.<sup>5</sup> The EPPM contends that the effectiveness of fear-based messages depends on resulting perceptions of threat and efficacy.<sup>6</sup> Threat is comprised of two constructs: perceived *severity* of the outcome and personal *susceptibility* to the threat.

In the EPPM, efficacy consists of two constructs: perceived *response efficacy* (whether the advocated behavior will reduce the threat) and *self-efficacy* (whether the individual is able perform the advocated behavior). Perceiving both high threat and high efficacy, people are motivated to cope with their fear by adopting protective measures.<sup>7</sup> When people process a

high threat but have low perceived efficacy, they are more likely to attempt to mitigate their fear through counterproductive behaviors such as avoiding the message, counter-arguing, and risk denial.<sup>8</sup>

Since its development in the 1990s, EPPM has consistently predicted attitudes and behavioral responses to threat messaging.<sup>9</sup> In early COVID-19 research, fear of COVID-19 was the strongest predictor of behavioral changes.<sup>10</sup> Yet, further studies suggested that increasing efficacy is more impactful than threat.<sup>11, 12</sup>

## Emotional reactions

When health messaging induces fear, respondents feel more at-risk and believe that the outcome is severe.<sup>11</sup> However, evidence conflicts on whether a fear appeal is needed, or a more neutral message can induce threat.<sup>11,13</sup> Fear may induce anxiety, distracting attention from the advocated health behavior.<sup>14</sup>

Humor appeals could maintain attention to health messages, reduce counter-arguing, enhance recall, and promote word of mouth diffusion.<sup>14–18</sup> Mass media campaign organizers use humor to minimize or derogate unfavorable competing behaviors or to diffuse tension when an advocated behavior is controversial.<sup>16</sup> However, humorous content may lead viewers to trivialize or misunderstand a message, leading to offense or reduced perceptions of threat.<sup>19</sup>

Recent attention has focused on how additional emotional reactions may function within the EPPM framework. In one study, hopeful reactions predicted greater self-efficacy, and hope and self-efficacy interacted in their positive effects on intentions and behavior.<sup>20</sup> Emphasizing harmful effects of noncompliance may also induce feelings of guilt or pride, depending on past behavior. Like fear, guilt is a negative emotion that could motivate action to reduce discomfort.<sup>4</sup> Pride in prior performance of the advocated behavior or anticipatory pride from expected behavior may<sup>21</sup> motivate sustained behavior, in part by bolstering response- and self-efficacy.<sup>21</sup>

This study assesses US adults' fear, guilt, hope, and pride reactions to neutral-, fear-, and humor-appeal tweets urging social distancing. Fear-appeal messages should induce feelings of fear and greater threat perceptions, though it is unclear whether the other emotion responses may also occur or their influence on the EPPM threat and efficacy constructs.

## Message source

Public health messages vary regarding the nature of the individual or organization delivering the persuasive message. Celebrities often serve as spokespersons, as they can draw attention from media and may communicate to an audience a topic is important, through recognizability and appeal.<sup>22–24</sup> Moreover, the audience may transfer positive attitudes toward the celebrity to the advocated cause or behavior.<sup>25</sup> However, they likely perceive guidance from an expert or organization as more credible.<sup>24</sup> When information about a new health threat must be distributed, it is not clear whether a celebrity or health expert might

be a more effective spokesperson. While the celebrity may garner more attention and appeal, information from expert sources may benefit from greater credibility.

## Political ideology

Adherence to advocated COVID-19 mitigation strategies has varied, with compliance diverging along political ideological lines.<sup>26</sup> Research indicates that Republicans were less compliant with stay-at-home orders<sup>27,28</sup> and less likely to practice social distancing.<sup>12</sup> Democrats, though, were more likely to heed stay-at-home orders given by Republican governors.<sup>29</sup> This may be due in part to the different messages sent by partisan leaders, with Republican leaders and media often downplaying COVID-19 severity, and Democrats and more liberal outlets stressing the risks.<sup>12</sup>

Influence of political affiliation on the effectiveness of public health messages deserves further attention, particularly given the contentious nature of COVID-19 risk reduction mandates in the US. Of interest is whether differing compliance rates reflect divergent reactions to messages encouraging COVID-19 guidance based on political ideology; and thus, whether messages with certain emotional appeals may be more effective among political party adherents.

## This Study

Using an online survey experiment, this study applies the EPPM to assess US adults' reactions to tweets encouraging social distancing in an early stage of the COVID-19 outbreak (Figure 1). Analyses assess participants' emotional reactions to the tweets with varying emotional appeals (fear; humor; neutral) and message source (CDC; celebrity), as well as relationships between emotional reactions and participants' threat and efficacy. Political party affiliation is included as a moderator to test for differences among Republicans and Democrats. Results will shed light on whether commonly used emotional appeals and message sources impact US adults' perceived threat of COVID-19 infection and illuminate what strategies might be effective in motivating adults who identify with the two major US political parties.

## Methods

### Experimental Stimuli

Six experimental tweets were created using an online generator ([Tweetgen.com](https://www.tweetgen.com)), which applies user specifications and content to generate realistic tweets. George Clooney was selected as the celebrity source because he is a well-known and popular actor across age groups, and as of April 21, 2020, he had not posted comments regarding COVID-19 or social distancing which participants could have previously encountered. The content for each emotional appeal were identical across sources (Table 1). The fear tweet statistic was the estimated mortality rate as of mid-April, 2020.<sup>30</sup>

## Procedure

Participants were recruited to this 10-minute online survey experiment on April 21, 2020, from the Mechanical Turk (MTurk) platform. MTurk is an online crowdsourcing platform through which respondents receive a nominal fee to participate in research (opt-in). Adults 18 and older living in the US were eligible to participate. The High Point University Institutional Review Board approved this study.

Consented participants answered demographic questions and additional cross-sectional background questions not included here (e.g., food insecurity). Then, they were randomly assigned by the survey program (Qualtrics) to receive one of the six experimental tweets. After viewing the tweet, participants responded to the emotional response, susceptibility, severity, response efficacy, and self-efficacy items.

## Measures

**Demographics and political ideology.**—Respondents reported age, gender, race and ethnicity, educational attainment, and household income. Participants reported the extent to which they had been practicing social distancing between March-April 2020, from (1) not at all to (5) a lot. One item measured political ideology: “Regardless of how you may vote, what do you usually consider yourself?” Response options were collapsed into 3 categories: (1) Republican = Republican/conservative ( $n = 145$ ) and Independent, but lean Republican/conservative ( $n = 28$ ); (2) Democrat = Democrat/liberal ( $n = 209$ ) and Independent, but lean Democrat/liberal ( $n = 33$ ); (3) Independent/other = Independent/no party affiliation ( $n = 84$ ) and Other party ( $n = 1$ ). Participants classified as Independent/other were omitted from analyses.

**Emotion reactions.**—After viewing the experimental tweet, respondents reported the extent to which they felt several emotions while reading the tweet. On a 5-point response scale from 1 - not at all to 5 - a lot, respondents indicated whether they felt (1) fear about getting COVID-19 ( $M = 2.90$ ,  $SD = 1.30$ ); (2) guilty about the idea of not social distancing ( $M = 2.66$ ,  $SD = 1.44$ ); (3) proud that I have been doing social distancing ( $M = 3.67$ ,  $SD = 1.31$ ), and (4) hopeful that we can stop the spread of COVID-19 ( $M = 3.56$ ,  $SD = 1.14$ ).

**EPPM constructs (dependent variables).**—The EPPM survey items from Witte<sup>6</sup> were adapted for this study. All EPPM items had a corresponding 7-point response scale from 1 - strongly disagree to 7 - strongly agree. Susceptibility was calculated by taking the mean of three survey items (e.g., “I am at risk for getting Covid-19”;  $\alpha = .82$ ; scale  $M = 4.21$ ,  $SD = 1.50$ ). Severity was calculated from the mean of three items (e.g., “I believe that Covid-19 can kill me”;  $\alpha = .84$ ; scale  $M = 4.91$ ,  $SD = 1.56$ ). The three self-efficacy items were similarly combined (e.g., “I am able to protect myself from getting Covid-19”;  $\alpha = .73$ ; scale  $M = 4.71$ ,  $SD = 1.24$ ). Three response efficacy items were also averaged together (e.g., “Social distancing is effective in preventing Covid-19”;  $\alpha = .82$ ; scale  $M = 5.48$ ,  $SD = 1.23$ ).

## Statistical Analysis

Analyses were conducted using Stata 14.2. We used a two-sided hypothesis test and an  $\alpha < 0.05$  was considered significant. Chi square analyses tested differences between

Republican and Democrat respondents (see supplemental Sample Characteristics table). To assess study research questions and hypothesis, structural equation modeling (SEM) was used to test paths from the experimental conditions to the emotional responses, and from the emotional responses to the dependent variables. Analyses also assessed differences in the paths between Republicans and Democrats (Figure 1), with Wald statistics indicating which paths were significantly different. The neutral appeal message from the CDC was excluded as the referent group, and post-estimation tests compared relative effects on emotional responses between the other experimental conditions. All equations were estimated simultaneously (using maximum likelihood), and error terms for the mediator and dependent variables were correlated. Goodness of fit statistics indicated acceptable model fit ( $RMSEA = 0.035$ ;  $CFI = 0.989$ ;  $TLI = 0.963$ ).

## Results

### Sample

The final sample consisted of 415 adults. The supplemental table displays sample characteristics and characteristics of respondents who reported they were Democrat/lean Democrat ( $n = 242$ ) and Republican/lean Republican ( $n = 173$ ). Notably, 30% of the sample was younger than 30, and 63% had a Bachelor degree or more education. Democrats were more likely to be female and younger, while Republican respondents were more likely to be White/non-Hispanic. Democrats reported slightly higher rates of prior social distancing.

### Analyses

Results indicated small to moderate significant positive relationships between the emotional reactions ( $r = .26 - .47$ ) and between the dependent variables ( $r = .14 - .46$ ), indicating a multivariate approach was appropriate.

**Effects of tweets on emotional reactions.**—Results are presented in separate tables, although the SEM analysis was conducted simultaneously for all equations. Table 2 contains standardized path coefficients for relationships between the experimental tweet conditions and emotional reactions among Democrats and Republicans. Compared to the neutral message from the CDC, fear- and humor-appeals from the CDC led to lower fear reactions only among Democrats. Among Democrats, fear- and humor-appeal messages from the celebrity and the humor-appeal from the CDC led to significantly lower guilt. The CDC humor-appeal message also caused less guilt among Republicans. The fear-appeal message from the CDC inspired less hopefulness among Democrats, compared to the neutral-appeal CDC message. However, the Wald tests indicated no significant differences between Republican and Democrat path coefficients.

**Effects of emotional reactions on EPPM constructs.**—Table 3 displays relationships between the four emotional reactions and the four EPPM constructs. As predicted, fear reactions positively predicted perceived susceptibility and severity among Democrats and Republicans. Guilt reactions were also related to greater susceptibility among all respondents. Pride predicted greater perceived severity among Democrats,

while more hope predicted greater severity among Republicans. The differences between Democrat and Republican path coefficients were nonsignificant.

Hope was related to greater perceived response efficacy among Democrats and Republicans, and greater self-efficacy among Republicans. Pride was also positively predictive of response efficacy among Democrats and Republicans. Wald tests indicated that hope reactions were more strongly predictive of response efficacy among Republican respondents compared to Democrats. Fear reactions predicted greater social distancing self-efficacy among Republicans. A Wald test indicated a significant difference in path coefficients. Similarly, greater feelings of pride predicted greater self-efficacy among Democrats but was not related to self-efficacy among Republicans. These paths were also significantly different.

## Discussion

This study provides insight about how public health practitioners could use messaging strategies to motivate risk reduction behaviors. Combinations of emotional appeal and message source espoused different emotional reactions, causing differences in perceived threat of COVID-19 and efficacy in social distancing. COVID-19 risk reduction compliance has become a political issue in the US, and participants' responses to social media messaging varied somewhat by political affiliation.

Fear is a primary component of the EPPM model, which asserts that the combination of threat and efficacy perceptions motivate health message acceptance. US adults, particularly those with Democratic ideology, reacted with less fear to humorous messages from the CDC, compared to the neutral CDC message. It is not clear why this was not also true of the humorous message from the celebrity. One possibility is that a light-hearted post from a prominent health organization relieves fear, while the novelty of even a humorous message from a celebrity may give viewers greater sense that the pandemic is harmful.

The CDC fear-appeal induced less fear emotion than did the neutral message, particularly among Democrats. Respondents may have detected the blatant fear attempt or may have become desensitized to fear-appeal messages about COVID-19. As predicted, fear reactions were related to perceptions of COVID-19 susceptibility and severity. Guilt also predicted greater perceived susceptibility. Notably, Republicans with greater fear reactions to the tweets reported greater self-efficacy. To the extent that a heightened sense of threat and efficacy motivates compliance with COVID-19 mitigation behaviors, health organizations should consider using emotionally neutral messages in their campaigns, as neutral messages induced greater feelings of fear and guilt than fear or humorous approaches.

Hopeful and proud emotions largely did not vary by emotional appeal or tweet source. Even neutral tweets and those framed around outcomes like death made respondents feel hopeful about stopping the pandemic or pride about their prior social distancing behavior. In fact, the neutral-appeal message from the CDC induced each of the emotional reactions at the same or higher rates as the messages with emotional appeals. One possibility is that the extent of existing real-world COVID-19 messages primed participants to respond emotionally to all health messages.



Notably, a hopeful emotional reaction predicted three of the four EPPM constructs for Republicans. Paralleling prior findings,<sup>20,31</sup> hope predicted greater self-efficacy to socially distance among Republicans. Hope also positively predicted response efficacy for adults of both parties, though significantly pronounced for Republicans. Increasing hope that a strategy will work may motivate individuals to consider politically controversial messages, rather than counter-arguing them.<sup>31</sup> Campaigns that inspire hope and response efficacy may be needed to offset Republicans' greater worry that social distancing will harm the US economy<sup>12</sup>.

Feeling proud of prior social distancing behavior associated with three of the four constructs among Democrats, perhaps due in part to Democrats' higher rates of prior social distancing. The findings may also reflect a collective political identity among this audience segment, given that Democrat leaders and media particularly emphasized the danger of COVID-19 and importance of social distancing.<sup>12</sup> An intriguing question is whether activating anticipatory pride might increase self-efficacy among Republicans, given their lower rates of social distancing.

Notably, pride reactions predicted greater response-efficacy among respondents from both parties.<sup>32</sup> Pride in already following advocated risk mitigation behavior likely promotes belief that the behavior is effective. Feelings of pride may be continuously reinforcing, such that messages and actions that induce pride motivate sustained behavior.<sup>21</sup> Given prior research suggesting the critical roles of self- and response-efficacy in motivating behavior change,<sup>11</sup> messages that inspire pride and hope may motivate COVID-19 guidance compliance through these routes across partisan divides.

Surprisingly, feelings of pride also predicted greater perceptions of COVID-19 severity among Democrats, while hopeful feelings were significantly related to severity for Republicans. Reversed directions of the relationships is possible, such that perceptions of COVID-19 severity led people to react with more pride in prior social distancing and more hope about stopping the spread when they encountered COVID-19 messaging.

## Limitations

Several study limitations should be acknowledged. First, adults who participated in this online study may differ than those who did not, limiting generalizability. Second, the survey measured participants' self-reported responses. Future studies should determine if self-reported differences result in behavior change and include stimulus pre-tests. Third, this study evaluated only two sources of the messaging. George Clooney is also known for supporting politically liberal causes, which may have impacted participants' reactions. Future research should also assess responses to social media posts from politically conservative and ambiguous celebrities. Moreover, people may respond differently to messages originating from celebrities than celebrity retweets. Future research should examine whether celebrities may be effective amplifiers of messages from public health organizations.



## Conclusion

Individual risk-reduction behaviors, such as social distancing, mask wearing, and vaccine up-take remain the primary interventions available in virus spread reduction. We must understand how public health messages can be tailored to motivate behavior compliance in order to reduce the spread of COVID-19 and future outbreaks. Exposure to a tweet encouraging social distancing induced various emotional responses from US adults across political parties, which associated with perceptions of COVID-19 threat and social distancing efficacy in-turn. While additional research is needed, findings suggest that campaigns targeting a bi-partisan audience may increase perceived efficacy by inducing feelings of hope and pride in the behavior.

## Supplementary Material

Refer to Web version on PubMed Central for supplementary material.

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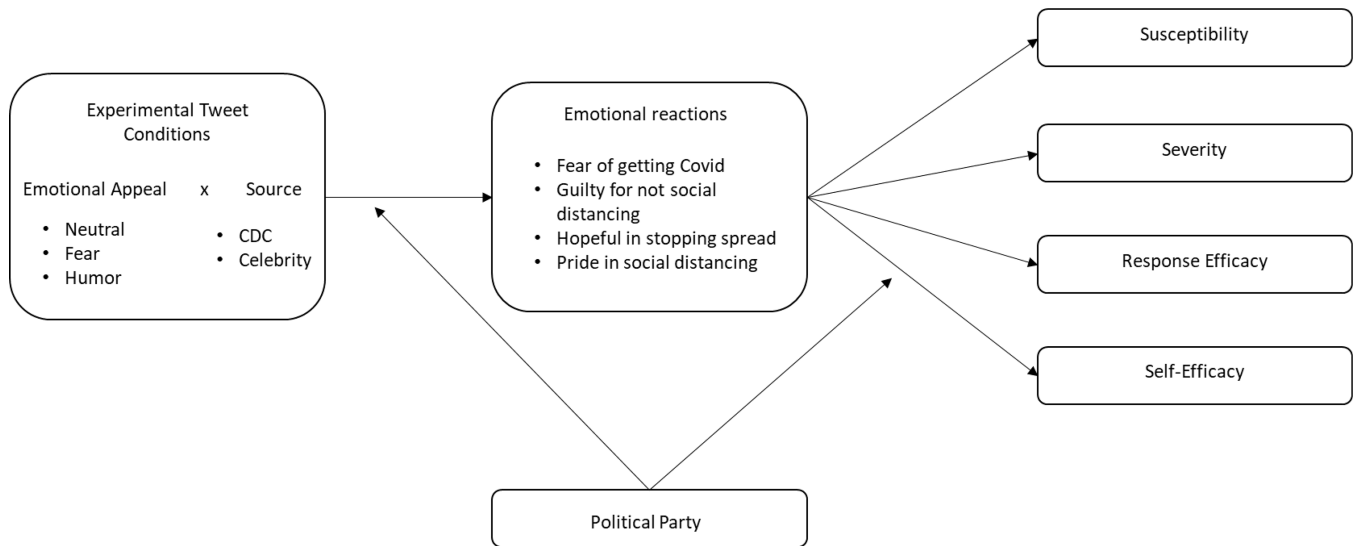
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### Implications for Policy and Practice

- The interplay between audience characteristics, message content, and persuasive goals is critical when designing and disseminating public health messages. The urgency of information dissemination during global pandemics necessitates application of theory and relevant prior research.
- Although fear can be motivating for personal risk reduction behavior, public health messages may backfire if they engender threat in an audience without effectively communicating efficacy of the advocated behavior.
- Communicating risk in an emotionally neutral way may be sufficient for spurring individuals' perceptions of personal risk during a global pandemic, as opposed to more explicit fear-based appeals.
- Public health messages may enhance perceived efficacy of an advocated risk reduction behavior if they engender hope among Republicans and pride in prior behavior among Democrats.



**Figure 1.**  
Conceptual model of hypothesized relationships

**Table 1.**

## Experimental tweet contents

<b>Emotional appeal</b>	<b>Tweet contents</b>
Neutral	<i>Keep yourself healthy! Commit to social distancing to stop the spread of Covid-19. Stay home when you can and keep at least 6 feet away from others if you have to go out. Stay home and stay healthy!</i>
Fear	<i>Keep yourself healthy! Your chance of dying from Covid-19 is 34x higher than from flu. Stay home when you can and keep at least 6 feet away from others if you have to go out. Stay home and stay healthy!</i>
Humor	<i>What do you call someone who lives in their sweatpants, never leaves their house, and desperately needs a haircut?? Healthy! Keep yourself healthy by staying home when you can and keeping at least 6 feet away from others if you have to go out.</i>

**Table 2.**

Impacts of tweet conditions on emotion reactions

Tweet features (appeal; source)	Fear of getting COVID			Guilt of not distancing			Hopeful in stopping spread			Pride about distancing				
	b (se b)	CI b	b (se b)	CI b	b (se b)	CI b	b (se b)	CI b	b (se b)	CI b	b (se b)	CI b		
Neutral; CDC (constant)														
Democrat	3.45 (0.41)***	[2.64, 4.26]	3.55(0.46)***	[2.65, 4.44]	3.12(0.36)***	[2.43, 3.82]	2.15(0.39)***	[1.38, 2.92]	3.43 (0.44)***	[2.35, 4.07]	2.66(0.41)***	[1.86, 3.45]	2.27(0.44)***	[1.40, 3.14]
Republican	-0.14 (0.29)	[-0.70, 0.43]	-0.01(0.32)	[-0.64, 0.61]	0.18(0.25)	[-0.30, 0.67]	-0.02(0.28)	[-0.56, 0.52]	-0.10(0.34)	[-0.77, 0.57]	0.29(0.31)	[-0.33, 0.90]	0.38(0.34)	[-0.29, 1.06]
Neutral; Celebrity														
Democrat	-0.58(0.29)*	[-1.16, -0.006]	-0.57(0.33)†	[-1.21, 0.06]	-0.53(0.25)*	[-1.03, -0.04]	-0.42, 0.28)	[-0.97, 0.13]	-0.11(0.33)	[-0.76, 0.54]	0.12(0.31)	[-0.48, 0.72]	-0.15(0.33)	[-0.81, 0.50]
Republican	-0.26 (0.27)	[-0.79, 0.27]	-0.63(0.30)*	[-1.21, -0.04]	-0.03(0.23)	[-0.48, 0.42]	-0.28(0.26)	[-0.79, 0.22]	-0.33(0.35)	[-1.02, 0.35]	0.11(0.32)	[-0.52, 0.74]	-0.24(0.35)	[-0.93, 0.45]
Fear; CDC														
Democrat	-0.85 (0.29)**	[-1.41, -0.29]	-0.64(0.32)*	[-1.26, -0.01]	-0.39(0.24)	[-0.87, 0.08]	-0.36(0.27)	[-0.90, 0.17]	-0.49 (0.33)	[-1.14, 0.16]	0.10(0.31)	[-0.50, 0.70]	-0.20(0.34)	[-0.86, 0.46]
Republican	-0.17(0.27)	[-0.71, 0.36]	-0.62(0.30)*	[-1.21, -0.03]	0.02(0.23)	[-0.44, 0.47]	-0.11(0.26)	[-0.62, 0.40]	-0.15(0.38)	[-0.89, 0.59]	-0.03(0.35)	[-0.71, 0.65]	0.06(0.38)	[-0.69, 0.80]
Humor; Celebrity														
Democrat	-0.01(0.08)	[-0.17, 0.15]	-0.07(0.09)	[-0.25, 0.11]	0.14(0.07)*	[0.005, 0.28]	0.43(0.08)***	[0.27, 0.58]	-0.09(0.09)	[-0.26, 0.07]	0.18(0.08)*	[0.02, 0.33]	0.31(0.09)***	[0.14, 0.48]
Republican	-0.09(0.09)	[-0.26, 0.07]	-0.16(0.09)†	[-0.34, 0.02]	-0.16(0.09)†	[-0.34, 0.02]	-0.16(0.09)†	[-0.34, 0.02]	-0.09(0.09)	[-0.26, 0.07]	-0.16(0.09)†	[-0.34, 0.02]	-0.16(0.09)†	[-0.34, 0.02]

N = 415. Values represent unstandardized coefficients from a structural equation model.

\*\*\*  
p<.001

\*\*  
p<.01

Wald tests indicated no significant differences between Democrat and Republican path coefficients.

\*  $p < .05$   
†  $p < .10$ .

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**Table 3.** Impacts of emotions reactions on perceived susceptibility, severity, response efficacy, and self-efficacy

	Susceptibility			Severity			Response Efficacy			Self-Efficacy		
	b (se b)	CI b	b (se b)	CI b	b (se b)	CI b	b (se b)	CI b	b (se b)	CI b	b (se b)	CI b
Fear												
Democrat	0.31(0.08)***	[0.16, 0.47]	0.33(0.08)***	[0.19, 0.47]	0.03(0.05)	[-0.07, 0.14]	-0.12(0.07)†	[-0.25, 0.02]				
Republican	0.31(0.10)**	[0.12, 0.50]	0.42(0.10)***	[0.22, 0.62]	0.17(0.08)*	[0.01, 0.32]	<b>0.22(0.08)*</b>	<b>[0.05, 0.38]</b>				
Guilt												
Democrat	0.16(0.07)*	[0.02, 0.29]	-0.004(0.06)	[-0.12, 0.12]	0.03(0.05)	[-0.06, 0.12]	0.08(0.06)	[-0.04, 0.20]				
Republican	0.26(0.08)**	[0.10, 0.42]	0.11(0.09)	[-0.06, 0.27]	0.04(0.07)	[-0.09, 0.17]	0.02(0.07)	[-0.12, 0.16]				
Hopeful												
Democrat	-0.08(0.10)	[-0.27, 0.11]	0.15(0.09)†	[-0.02, 0.32]	<b>0.15(0.06)*</b>	<b>[0.02, 0.28]</b>	0.12(0.08)	[-0.04, 0.29]				
Republican	0.04(0.10)	[-0.16, 0.25]	0.25(0.11)*	[0.04, 0.47]	<b>0.42(0.08)***</b>	<b>[0.26, 0.59]</b>	0.30(0.09)**	[0.12, 0.48]				
Pride												
Democrat	0.12(0.0.09)	[-0.05, 0.30]	0.25(0.08)**	[0.10, 0.40]	0.24(0.06)***	<b>[0.12, 0.35]</b>	<b>0.23(0.08)**</b>	<b>[0.08, 0.38]</b>				
Republican	0.05(0.10)	[-0.15, 0.25]	0.12(0.11)	[-0.09, 0.33]	0.07(0.08)	[-0.09, 0.23]	-0.09(0.09)	[-0.26, 0.08]				
Prior Social Distancing												
Democrat	-0.17(0.09)†	[-0.36, 0.02]	0.20(0.08)*	[0.03, 0.37]	0.35(0.06)***	<b>[0.23, 0.48]</b>	0.09(0.08)	[-0.07, 0.25]				
Republican	-0.01(0.09)	[-0.19, 0.16]	0.11(0.09)	[-0.07, 0.30]	0.34(0.07)***	[0.20, 0.48]	0.15(0.08)†	[-0.005, 0.30]				

N = 415. Values represent unstandardized coefficients from a structural equation model.

\*\*\* p<.001

\*\* p<.01

\* p<.05

† p<.10.

Bold italicized values indicate Wald tests significant at p < .05.

Italicized values indicate Wald test marginally significant at p < .10.