

COVID-19: Rumors, Behaviors, and Trump Approval



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Introduction

Part 1: COVID-19 Behaviors

- Behaviors, such as wearing a mask in public and staying 6 feet away from others, are practiced to prevent the spread of the COVID-19 virus.
- This study looks at factors that may predict an individual's likelihood of adhering to behaviors that prevent the spread of COVID-19.

Part 2: COVID-19 Rumor Source

- Rumors are defined as unconfirmed statements or reports, presented as possibly true (Allport & Postman, 1947; Rosnow, 2001).
- Rumors arise during uncertain times as people try to make sense of ambiguous situations (Bordia & DiFonzo, 2004).
- The COVID-19 pandemic may be considered an uncertain time in relation to economic stability, national security, and public health.
- There is evidence to suggest that rumors affect public health (Rosnow, 1991).
- This study aims to better understand the nature of rumor transmission by examining the relationship between the source where a person receives a COVID-19 rumor, such as social media or texting, and an individual's belief in that rumor.
- This study also examines whether an individual's COVID-19 rumor source correlates to that individual's trust in people, belief in conspiracies, and approval of President Trump.

Research Questions

- Is COVID-19 anxiety a predictor of practicing preventative COVID-19 behaviors?
- Is approval of President Trump a predictor of practicing preventative COVID-19 behaviors?
- Is rumor source associated with rumor belief, Trump approval, conspiracy, and/or trust?

Hypotheses

- Hypothesis 1:** There will be a significant relationship between COVID-19 anxiety and adherence to preventative COVID-19 behaviors. Specifically, as COVID-19 anxiety increases, adherence to COVID-19 behaviors increases.
- Hypothesis 2:** There will be a significant relationship between Trump approval and adherence to preventative COVID-19 behaviors. Specifically, as Trump approval increases, adherence to preventative COVID-19 behaviors decreases.
- Hypothesis 3:** There will be a significant relationship between rumor source and Trump approval. There will be a significant relationship between rumor source and conspiracy. There will be a significant relationship between rumor source and trust. There will be a significant relationship between rumor source and rumor belief.

Results

The data show no significant correlation between COVID-19 anxiety and likelihood to adhere to preventative COVID-19 behaviors, $F(4, 117) = 1.52, p > .05$.

There is a significant relationship between both Trump approval measures and adherence to each of the three preventative COVID-19 behaviors, $r(121) = [-.29, -.33, -.30, -.27, -.28, -.26], p < .01$. Specifically, as Trump approval increases, adherence to preventative COVID-19 behaviors decreases. This function is presented below in Figures 1 and 2.

Figure 1. Mean adherence to 3 COVID-19 behaviors in relation to rating of Trump's COVID-19 outbreak management.

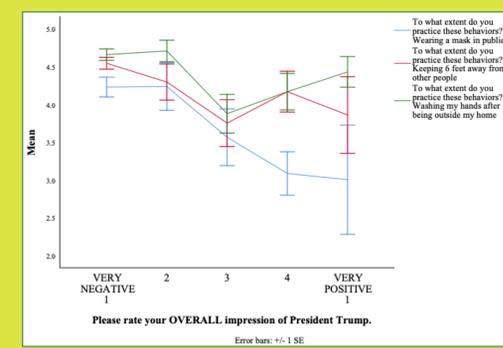
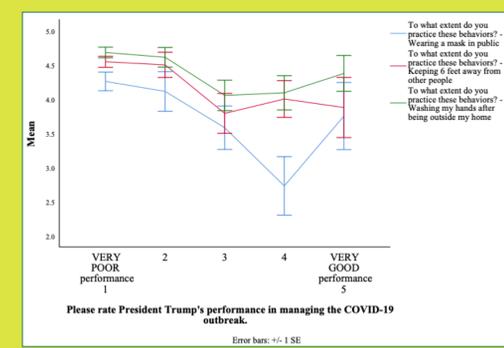


Figure 2. Mean adherence to 3 COVID-19 behaviors in relation to overall impression of Trump.

Four One-way ANOVAs were conducted with rumor source as the between-subjects factor. There was evidence to conclude that rumor source had a significant effect on Trump approval, $F(7, 490) = 7.17, p < .05$. Participants who reported that the source of their rumor was YouTube were significantly more likely to approve of Trump, score high on conspiracy rating, believe the COVID-19 rumor heard from YouTube is true, and have low trust in people. These means are presented below in Figures 3, 4, 5, and 6.

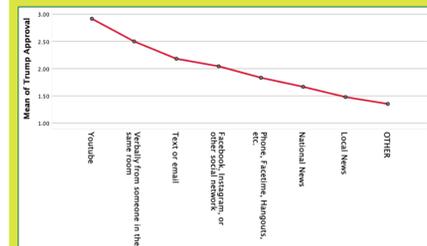


Figure 3. Mean Trump approval rating in relation to rumor 1 source.

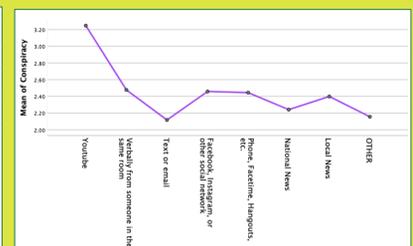


Figure 4. Mean conspiracy rating in relation to rumor 1 source.

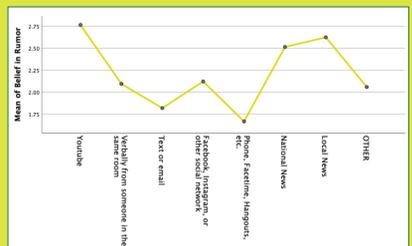


Figure 5. Mean belief in rumor rating in relation to rumor 1 source.

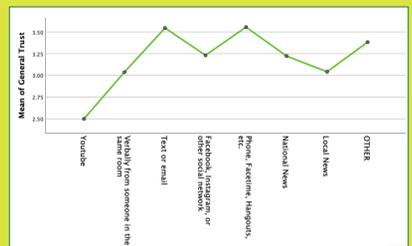


Figure 6. Mean general trust rating in relation to rumor 1 source.

Method

Participants. Of Amazon Mechanical Turk's subject pool, 122 voluntary participants (65% male) received \$1.75 for participating in a study examining COVID-19 rumors and beliefs. 498 COVID-19-related rumors were reported.

Materials and procedure. Participants were given an electronic link to the online survey and asked to complete it within one sitting. The survey consisted of 45 questions intended to measure a variety of personal beliefs about trust, conspiracy, healthcare, and Trump, as well as measures of demographics, such as age, gender, and education. Participants were asked to list every rumor they've heard about COVID-19, as well as follow-up questions related to the transmission of each rumor.

Measures

- COVID-19 anxiety.** Anxiety about COVID-19 measured by combining ratings of "right now, I am afraid of coronavirus," "thinking about the coronavirus makes me feel threatened," and "I am stressed around other people because I worry I will catch the coronavirus" (1= not at all, 5= completely agree).
- COVID-19 behavior.** Adherence to preventative COVID-19 behaviors measured by combining ratings of the extent participants report "wearing a mask in public," "keeping 6 feet away from other people," and "washing hands after being outside," (1= never, 5= always).
- Trump approval.** Attitude towards Donald Trump measured by combining ratings of "Trump performance in managing the COVID-19 outbreak" and "overall impression of Trump."
- Rumor source.** A single-choice question about the source of a reported rumor, given the choices "verbally from someone in the same room, text or email, phone (Facetime, Hangouts, etc.), YouTube, local news, national news, other."
- Belief in rumor.** Single-choice question measuring "When you heard the rumor, to what extent did you believe it?" (1= not at all, 5 = completely believed).
- Conspiracy.** A measure of conspiracy theory beliefs, measured by providing a definition of "conspiracy," then rating the level of agreement with the statement "I think that the official version of the events given by the authorities very often hides the truth," on a 5-point scale.
- Trust.** A general measure of trust, measured by rating the level of agreement with the statement "generally speaking, most people can be trusted," on a 5-point scale.

Discussion

General Discussion

- In this between-subjects correlational study, we used Pearson's Correlation to examine the relationships between COVID-19 anxiety, Trump approval, and COVID-19 behaviors. One-way ANOVAs were used to examine the relationships between COVID-19 rumor source and belief in rumor, conspiracy, trust, and Trump approval.
- The data does not support Hypothesis 1, but Hypotheses 2 and 3 were supported by the data.
- The most interesting finding from this study is that the source of the rumor differs depending on approval of Trump. Participants who reported the rumor source was YouTube had higher Trump approval ratings.

Limitations

- The main limitation of this study is that causality cannot be inferred between any of the variables because they were not experimentally manipulated. There may be other confounding variables that account for the correlations.

Future Research

- Since there is a significant association between rumor source and Trump approval, and Trump approval is a predictor of adherence to COVID-19 behaviors, future analyses should be done to find the relationship between rumor source and COVID-19 behaviors.
- Our findings suggest that YouTube may have a distinct role in rumor transmission compared to other rumor sources. Experimental studies should be done looking at the role of YouTube in the spread and belief of rumors.

References

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