



# AMERICAN PSYCHOLOGICAL ASSOCIATION

May 2, 2022

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Chief of Staff  
Office of the Surgeon General  
Department of Health and Human Services  
200 Independence Avenue, SW  
Hubert H. Humphrey Building, Suite 701H  
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*Submitted electronically via Regulations.gov*

RE: Impact of Health Misinformation in the Digital Information Environment in the United States  
Throughout the COVID-19 Pandemic Request for Information (RFI)

Dear Mr. Lesko –

The American Psychological Association (APA) appreciates the opportunity to comment on the Department of Health and Human Services (HHS) request for information about the impact of health misinformation throughout the COVID-19 pandemic. This request represents a step in the right direction towards ensure relevant stakeholders provide necessary input to ensure any future regulatory changes are informed by the relevant research. APA is the largest scientific and professional organization representing psychology in the U.S., numbering over 133,000 researchers, educators, clinicians, consultants, and students. Psychologists and other mental and behavioral health professionals play a vital role in a comprehensive response to public health emergencies and must be considered when developing strategic plans for preparation and response.

As the COVID-19 pandemic continues, it is increasingly important to understand how misinformation affects people's understanding of the public health crisis and their decision making. The World Health Organization has declared we are experiencing an "infodemic that continues to undermine the global response and jeopardizes measures to control the pandemic" ([WHO](#), 2020). This infodemic is exemplified by an overabundance of both online and offline information and co-evolved with the COVID-19 epidemic; to improve communication, equal consideration should be given to the health and information aspects ([Gallotti et al.](#), 2020). Misinformation is dangerous; without being able to believe the information being shared, people may opt not to use all available tools to improve their safety and the safety of the larger community. For example, a survey of over 1,000 adults between March and July 2020 found that 15% of respondents believed the pharmaceutical industry created the coronavirus and more than 28% believed the virus is a bioweapon made by the Chinese government ([Romer & Jamieson](#), 2020) and these beliefs appear in other countries ([Roozenbeek et al.](#), 2020). While research into the impact of

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misinformation on COVID-19 outcomes is ongoing, early studies show many factors that impact a person's willingness to believe misinformation. Conspiracy beliefs serve to inhibit health-protective behaviors and social media furthers those beliefs by serving as a primary source for misinformation ([Allington et al.](#), 2021). New research has identified three aspects of the infodemic, susceptibility, spread, and immunization against misinformation ([Van Der Linden.](#), 2022).

## **Why do people believe misinformation?**

Researchers have identified some risk and protective factors that appear to make people more or less susceptible to believing misinformation respectively. Some of those factors are discussed below.

*Risk factors:* Researchers have investigated why some people are more likely to believe misinformation than others and found a variety of influencing factors. Outlined below are some individual differences identified by researchers, but care must be taken to not generalize across groups. Non-white racial ethnic groups and those using social media were more likely to believe that the vaccine is harmful ([Romer & Jamieson](#), 2020). Men tend to believe conspiracy theories more than women ([Cassese et al.](#), 2020). Those with a tendency to see the world as a nonrandom, threatening place and those who use intuition over analytical thinking are more likely to believe in conspiracy theories ([Swami et al.](#), 2014). Additionally, a study found that those who were less willing to engage in deliberative and reflective cognitive processes were more likely to believe the pandemic was a hoax ([Stanley et al.](#), 2021). High exposure to negative information about COVID-19 vaccines, especially through social media were associated with lower vaccine acceptability ([Al-Amer et al.](#), 2021). Researchers have found that lower institutional trust, lower digital health literacy, and more rejection of official accounts associated with stronger belief in COVID-19 misinformation ([Pickles et al.](#), 2021).

*Protective factors:* In contrast to the risk factors above, studies have found some protective factors that may help explain why some people are less likely to believe misinformation. More emotionally perceptive participants in a research study were less likely to believe misinformation, possibly because those participants were able to see beyond the emotional aspects of the story and critically assess the information ([Preston et al.](#), 2021). This same group found that those with higher educational attainment were better at identifying misinformation and theorize that this may due to differences in critical thinking skills gained through education ([Preston et al.](#), 2021). Research indicates that better performance on numeracy tasks and those who trust scientists more are less likely to believe fake COVID-19 information ([Rozenbeek et al.](#), 2020).

*Other considerations:* The anti-vaccination message is likely effective, in part because it is passed through established, well-connected communities, amplifying the messages of a few people ([Germani & Biller-Andorno](#), 2021). Research on the US/Mexico border highlights the need for culturally specific research that isn't centered on "whiteness" and allows for cultural differences in information dissemination. The researchers have 3 recommendations – 1) public health communication should be



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multi-generational, 2) explain how scientific and health knowledge is developed and allow the community to be involved in how to communicate that information, 3) be mindful of local cultures and circumstances (cultural care constructs: trust, respect, and bedside manner) ([Soto-Vásquez et al., 2020](#)). In rural Alabama, African American or black adolescents had high exposure to misinformation related to vaccine side-effects and reported governmental distrust – messaging should be tailored to specific communities. Older adults and Church officials have the influence to promote vaccination ([Budhwani et al., 2021](#)). These cultural differences in how information is obtained and disseminated may play a significant role in society's ability to reduce the spread of misinformation.

## What can be done?

Psychological research suggests several methods for countering misinformation as general warnings have proven ineffective ([Greene & Murphy, 2021](#)). One method is to debunk incorrect information once it's been shared; however, a more effective method of “prebunking” has been developed. This methodology warns people that specific information is incorrect and explaining why a source may be wrong, before people encounter the information on their own ([Van Der Linden et al., 2017](#)). In an experimental setting, exposure to misinformation significantly increased the likelihood that participants would promote a mock social media post endorsing the misinformation. This tendency to share misinformation could be mitigated by refutations of the misinformation ([Macfarlane et al., 2021](#)).

Another method for reducing people's willingness to believe misinformation is to help them deliberate and think about the information ([Bao et al., 2020](#)). Data suggest that people share information on social media without giving much thought to its accuracy, but, when prompted, in a lab setting, to assess the validity of an unrelated headline, participants were then more discerning in what information they would share. The authors hypothesize that inattention plays a significant role in the sharing of misinformation on social media ([Pennycook et al., 2020](#)). Further evidence supporting the theory that helping people to slow down and deliberate about the information they are consuming is research that found people are more susceptible to misinformation when they fail to carefully consider the information, regardless of whether it aligns with their political beliefs ([Bago et al., 2020](#)). Additionally, morality plays a significant role in people's acceptance of corrective information (pointing out what is untrue) and tailoring messages correcting COVID-19 misconceptions to connect with the morality of the recipients helps them receive the information ([Trevors & Duffy, 2020](#)). Narrative methods for disseminating information may be more effective in influencing actual health attitudes and behaviors ([Gesser-Edelsburg, 2021](#)). This is supported by another research group who found that using people-centered, first-person narratives with emotional language may help communicate pro-vaccine messages, by using narrative stories to personalize the issue ([Germani & Biller-Andorno, 2021](#)).

Further research is needed to understand the complex interactions between demographic factors such as age and misinformation. To reach the broadest possible audience, public health authorities must



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work to build relationships with trusted, influential stakeholders and media companies in order to reach culturally and linguistically diverse groups ([Pickles et al.](#), 2021).

APA again thanks you for the opportunity to provide information in response to this Request for Information. If APA can be of any further assistance, please contact Corbin Evans, Senior Director of Congressional and Federal Relations, at [CEvans@APA.org](mailto:CEvans@APA.org).

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