



**Stanford**  
**MEDICINE**

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## AUTHORS

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## TITLE

Defense Against Disinformation: Community-Based Interventions Build Resilience to False Claims About COVID-19

## ABSTRACT

Misinformation and disinformation about COVID-19 have proliferated over social media, spreading false claims about vaccines, side-effects, and the reality of the pandemic itself. Health misinformation threatens well-being at scale, particularly communities of color who are disproportionately targeted by disinformation campaigns and who often do not have equal access to resources. Interventions are needed to support people in developing the skills and resources to critically engage with online disinformation and promote credible health information in their communities.

To meet this need, we partnered with PEN America (<https://pen.org/knowning-the-news/>), a non-profit organization dedicated to advancing freedom of expression, and community leaders from Mi Familia Vota, the National Congress of American Indians, Asian Americans Advancing Justice, and the National Action Network. Together, we co-developed a series of four digital media literacy interventions to support communities in recognizing and responding to health misinformation. We conducted in-depth qualitative focus groups with leaders and activists with these organizations to understand their experiences. Using these insights, we tailored our interventions by discussing (1) misinformation exposure, (2) navigating historical sources of distrust in public health institutions, (3) finding culturally-relevant resources for credible news and fact-checks, and (4) addressing misinformation within the community through conversations and outreach.

Seventy participants completed the intervention, which took place on Zoom and was delivered by trained facilitators. We evaluated the impact of the intervention on participants' ability to discern true and false information (discriminant trust), critically evaluate claims, and find reputable sources for news (digital media literacy skills) by assessing pre- and post-intervention scores. Using linear mixed effects and logistic regression models, we found that our intervention was effective in improving participants' digital media literacy skills and discriminant trust - increasing their ability to discern health misinformation from a pre-intervention average of 56% to a post-intervention average of 83%. In addition, they were more likely to research claims after the intervention.

In the long-term, equipping diverse Americans with the skills and resources they need to be resilient to disinformation and capable of finding credible information is a vital part of the solution. Teaching them to evaluate the legitimacy of information by checking its sources and cross-checking its claims provides them with a framework to draw on to investigate claims they encounter in their everyday lives. In addition to protecting them from the harms that often come from false beliefs (e.g., COVID-19 misinformation), we can also stem the flow of misinformation by preventing them from sharing it and circulating it further. Our interventions provide individuals with the tools they need to not only protect themselves, their loved ones and their communities from disinformation, but also to begin to restore trust in credible sources of information. The spread of false information and increasing distrust of information is a fundamentally social problem: it propagates from neighbor to neighbor, friend to friend, and spouse to spouse when one shares misinformation or distrust. Improving the digital media literacy skills of an individual can produce positive network effects by "breaking the chain."

Preliminary results: To evaluate the efficacy of the interventions, we tested whether participants improved their (1) ability to discern between true and false news headlines, (2) willingness to investigate news headlines, and (3) comprehension of digital media literacy skills. We found that the intervention significantly improved participants' ability to discern between true and false news. Mixed effects logistic regression models were estimated to evaluate whether participation in the workshop (Time: 0 = before workshop, Time 1 = after workshop) changed participants' ability to correctly evaluate headline veracity. Accuracy scores were calculated by coding headline evaluations as correct if individuals rated false news as mostly to definitely false (1-3 on a 7-point scale), and true news as mostly to definitely true (5-7 on a 7-point scale); all other responses were coded as incorrect. Average accuracy scores were calculated for each participant before and after the workshop, and subjects were mod

## COMMUNITY PARTNER

PEN America, Knowing the News

## CATEGORY

Promotion of Health Awareness and Healthcare Access Through Education