How do you persuade uncertain Americans to get vaccinated against COVID-19?

*Civis Analytics + Made to Save*

Research fielded April 28-May 3, 2021
Introduction

Five months after the first doses of the COVID-19 vaccine were administered across the U.S., 44.7 percent of all Americans have received at least one dose, and 32.3 percent have been fully vaccinated. However, there are signs that there’s a dropoff in demand, and those who remain to be vaccinated still have questions as they try to navigate the process and make their decision.

In addition to overcoming the anti-vaccine rumors, misinformation, and conspiracy theories fueling this vaccine hesitancy, public health organizations and their partners must conquer another critical challenge: too many campaigns promoting vaccine acceptance are using messaging that’s not as effective as it can be.

When organizations collect data to inform public health campaigns, often that means turning to focus groups, conducting surveys, or using what has generated good outcomes in past campaigns. Each of these strategies has unique strengths. But, after years of testing different ways to talk to the public about vaccines, we know we need to do more to reduce bias, particularly because people aren’t always able to identify which messages will persuade them to take action.

Civis has studied vaccine messaging for several years: check out our previous research on flu (2018), HPV (2019), and COVID-19 vaccines (2020 national study; 2021 employer-specific study). Even though Civis studied COVID-19 vaccine messaging in the recent past, we know things can — and, as the research below illustrates, do — shift over time.

To isolate persuasion effects and minimize bias, Civis set up a randomized controlled trial using its on-demand Creative Focus tool to determine which types of messages are most effective in persuading people to receive the COVID-19 vaccine. We partnered with Made to Save, a national grassroots effort to ensure communities hardest hit by the pandemic have access to the COVID-19 vaccines and information, to generate ideas for potential message frameworks to test.

Please feel free to reach out with thoughts, questions or ideas.

-- Crystal Son, MPH, Director of Healthcare Analytics at Civis Analytics
Methodology

From April 28 to May 3, 2021, we tested six distinct message themes in an online randomized controlled trial (considered the scientific gold standard for research) of 4,215 American adults. While Civis’s previous message tests looked at the entire U.S. population, this study focused on Americans who as of April 2021 are most likely to be uncertain about vaccination. Each participant is a member of one or more of the following “likely to be uncertain” demographic groups, with each group including at least 500 participants:

- Black Americans
- Latino/a Americans
- Americans without a college degree
- Americans under the age of 50
- Americans making less than $50K/year
- Republicans

Participants saw one of the following messages:

- **“Vaccine Safety”** highlighted the safety of the COVID-19 vaccines: the rigorous FDA process that was followed, the diversity of clinical trial participants, and the rarity of serious side effects.

- **“Getting Back to Normal”** emphasized the daily activities that vaccinated individuals can enjoy, and highlighted experiences that may be off-limits to non-vaccinated individuals, such as concerts and international travel.

- **“Personal Story”** told the tale of a healthy, 30-year-old woman's battle with COVID, recounting her fear of long-term effects and inability to resume activities like running.

- **“Scary COVID Statistics”** focused on the dangers of COVID (even for young adults), and the vaccine's potential to stop these statistics from rising.

- **“Patriotism”** positioned the vaccines as an example of American ingenuity, trumpeting vaccination as the ultimate expression of freedom, liberty, and country.

- **“Personal Decision”** emphasized that it’s normal to have questions about the vaccine, encouraged learning more, and positioned vaccination as a person's individual choice.

- The final group (the control group) saw no message.

Before testing the different messages, we asked a few qualifying questions allowing us to break up findings by subgroups such as race, age, gender, and previous COVID diagnosis. Respondents were then randomly exposed to one of the messages or a control message. After displaying the
messages, we asked respondents about their intent to get vaccinated; a statistical model calculated the impact of each treatment compared to the non-treated group, while controlling for respondent characteristics.

1. All respondents asked standard demographic Qs
2. Respondents split into treatment and control groups
3. Respondents asked post-message Qs to measure against key metrics
4. Build a model and score a representative sample
Findings

Two messages stood out for use with all vaccine-uncertain groups: “Getting Back to Normal” and “Personal Decision.” Each increased likelihood to vaccinate by 5 percentage points (pp) on average. “Safety,” “Scary COVID Stats,” and “Patriotism” were all ineffective, and “Personal Story” had the highest likelihood of backfiring.

Shaded areas represent 95% credible interval.
These findings largely hold true when broken down by subgroup, but there are a few interesting differences. The “winning” messages were particularly impactful with a few specific groups:

<table>
<thead>
<tr>
<th>Getting Back to Normal (average effect is 5pp)</th>
<th>Personal Decision (average effect is 5pp)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2020 Trump voters (+6pp)</td>
<td>Republicans / 2020 Trump voters (both +6pp)</td>
</tr>
<tr>
<td>Men (+7pp)</td>
<td>People that did not vote in 2020 (+7pp)</td>
</tr>
<tr>
<td>Black (+6pp), Latino/a (+7pp), and Asian (+7pp) Americans</td>
<td>White Americans (+6pp)</td>
</tr>
<tr>
<td>People that get news from public radio, MSNBC, <em>The Wall Street Journal</em> and/or TikTok (+7pp each)</td>
<td>People that watch Fox News (+8pp)</td>
</tr>
<tr>
<td>Income over $75k/year (+7pp)</td>
<td></td>
</tr>
<tr>
<td>Roman Catholics (+8pp)</td>
<td></td>
</tr>
</tbody>
</table>
Additionally, the Personal Story backfired among men (-5pp), and had no effect at all among women.

In a message test conducted in August 2020, we found that a personal story describing a young, otherwise healthy individual who died after contracting COVID-19 was the most persuasive — essentially the opposite finding of what we are reporting here. Possible explanations for this difference:

- **Sentiment toward vaccination has changed dramatically since August 2020.** This change in sentiment has been driven by many different factors, including the authorization and rollout of the vaccine itself: in August, a COVID-19 vaccine was still a hypothetical, but as of May 2021, over 30 percent of Americans have been fully vaccinated against the virus. Given these differences, we would expect to see changes in which messages do and don’t work, confirming the importance of repeat testing over time.

- **The August 2020 test was conducted on a sample of the general population, whereas this latest message test specifically targeted individuals belonging to groups that are uncertain about getting vaccinated, resistant to the idea, or still unable to secure access to the vaccine.**
The Personal Story message has a clear undertone of fear. Our Scary Statistics message also did not perform well. So it may be that fear-based messaging is what caused the Personal Message to be ineffective.

Below are the most persuasive messages for each “likely to be uncertain” demographic group:

- **Black Americans**: Getting Back to Normal (+6pp)
- **Latino/a Americans**: Getting Back to Normal (+7pp)
- **Americans without a college degree**: Personal Decision (+6pp)
- **Americans under the age of 50**
  - 18-34-year-olds: Getting Back to Normal (+5pp)
  - 35-49-year-olds: Getting Back to Normal and Personal Decision (both +6pp)
- **Americans making less than $50K/year**: Personal Decision (+5pp)
- **Republicans**: Personal Decision (+6pp)

**Conclusions**

In reviewing the results of this message test, we can make a few high-level recommendations for talking about the COVID-19 vaccines:

1. Lead with a message of hope and optimism, emphasizing that the vaccines are a way to get back to the moments we miss the most, and that forgoing vaccination may mean it takes longer to resume activities.
2. Empathize with concerns, and acknowledge that questions are natural and normal. Encourage people to seek the information they need to make a decision.
3. Be prepared to respond to concerns about safety and side effects with accurate and straightforward responses, but don’t lead with a message of safety.

In any outreach campaign — whether the mission is encouraging completion of U.S. Census forms, increasing the number of women at risk of breast cancer to come in for free mammograms, or getting people on board with COVID-19 vaccinations — reaching some segments of the population requires relatively little effort, while connecting with other segments requires more effort. At every stage, from planning to execution, data and technology can lead to fundamental differences in campaign success.

The findings in this report again confirm that testing different messages is a requisite follow-up to collecting data via survey. Sure, survey respondents typically cite safety concerns as the biggest barrier preventing them from receiving the COVID vaccine, but message testing in a treatment vs. control framework reveals that campaigns emphasizing vaccine safety are ineffective — and can even backfire with certain key populations.
These results also serve as another reminder that one-and-done testing is not enough. Think again of how the personal story that resonated so favorably in August 2020 fell flat this time around. Attitudes can and do change, even in a short matter of months.

We will continue to study vaccine-related messaging. With the FDA poised to approve vaccinating teens and children against COVID-19, we will most likely focus next on parents vaccinating their kids.


About Civis Analytics and Made to Save

About Civis Analytics
Civis Analytics helps leading public and private sector organizations use data to gain a competitive advantage in how they identify, attract, and engage people. With a blend of proprietary data, technology and advisory services, and an interdisciplinary team of data scientists, developers, and survey science experts, Civis helps organizations stop guessing and start using statistical proof to guide decisions.

About Made to Save
Made to Save is national public education and grassroots mobilization effort on a mission to build trust in the COVID-19 vaccines, and increase access and promote equity for people of color whose health and safety have been especially impacted by the ongoing pandemic. The campaign works with a variety of non-profit, labor, corporate, and healthcare partners to achieve its mission.