# Why Some People Choose to Vaccinate and Others Do Not

**MOSAIC** Data Brief

### **AUTHORS**

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# **MOSAIC Data Brief Series**

MOSAIC (Measuring Online Social Attitudes and Information Collaborative) is a collaboration between SSRS, Georgetown University, and the University of Michigan. This collaboration will focus on understanding how to leverage survey data and social media data to better capture public opinion in reliable, valid, and scientifically rigorous ways. This data brief series is intended to share public opinion results to inform researchers and decision makers with information about attitudes in the United States related to different aspects of the COVID-19 pandemic. Data briefs will utilize open-ended survey responses, social media posts, and/or both in order to gain different perspectives on public attitudes. More information can be found at https://mosaic.mdi.georgetown.edu.



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The rate of vaccination among adults in the U.S. has slowed considerably since the spring, not long after coronavirus shots became widely available. Figure 1 shows that over 63% of those vaccinated in our sample, received at least one shot in the spring, between March and May. In recent months, however, some eligible individuals who initially declined to get it have been vaccinated. There were many reasons that Americans might have come around to the idea of getting vaccinated, ranging from external requirements for travel or a job to a desire to protect themselves or their families. To understand what forces might be motivating those who were initially hesitant<sup>1</sup> and what might be holding back those who did not, we followed up with a group of 97 Americans who told us why they were not getting vaccinated in the spring. We examine both their original reasons for not getting vaccinated in the spring, as well as reasons those who subsequently got vaccinated gave for doing so.

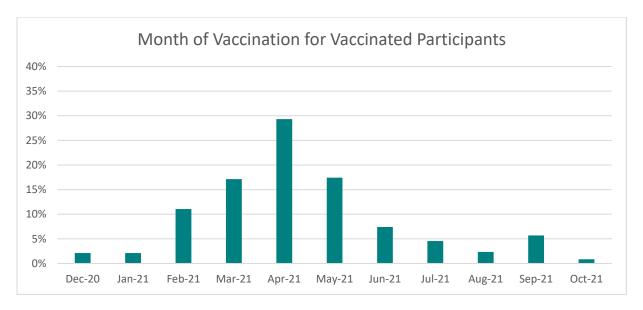


Figure 1.

### Why the Change of Heart?

Overall, we found that a relatively small portion of the unvaccinated individuals we interviewed had come around to the idea of vaccination. 21 individuals, representing a weighted 29.4% of holdouts, had changed their minds, and more than 70% remained unvaccinated. Those who changed their minds were most likely to cite their family's health or needing to stop the spread as the primary reasons for getting a shot (38%), followed by job requirement (24%) and personal safety and health (19%) (see Figure 2).

<sup>&</sup>lt;sup>1</sup> The original question they answered in the spring was "What are the main reasons you would not get a coronavirus vaccine?" The question they answered in October was "What were your main reasons for getting vaccinated?"

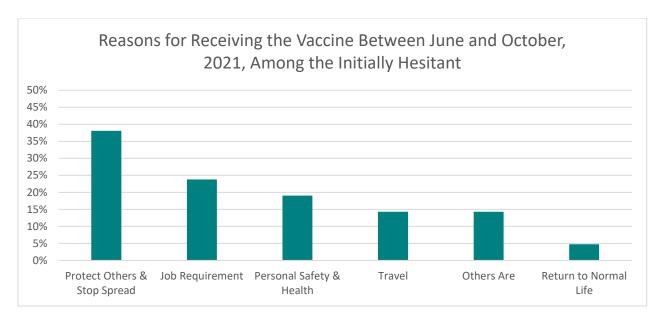


Figure 2

### Why Remain Unvaccinated?

Some of the reasons that individuals initially provided for not getting vaccinated in the spring appear to have been at best partial explanations. Although 19 Americans had initially expressed concerns that it was too early to get a shot and another 3 reported that they were waiting for FDA approval, the passage of time and full approval of the vaccine made little difference in their behaviors. A mere 3 of the individuals who said it was too early decided to vaccinate and none of those ostensibly waiting for approval abandoned their hesitancy. Similarly, despite growing evidence that a bout of COVID-19 would not prevent reinfection with the prevalent Delta wave,<sup>2</sup> none of 8 who cited a prior case as their reason for skipping a shot seem to have chosen to increase their immune response with a vaccine. Instead, the only predictor of changes in vaccination behavior was the inability to articulate the reasons for hesitancy in the first place. The more topics people listed about why they did not plan to vaccinate last spring, the more committed they were to not doing so by mid-October. These results suggest that those who remain unvaccinated are likely highly entrenched in their views and even the emerging Omicron wave is unlikely to alter their decisions.

## Methodology

Survey & Social Media Data Collection. The MOSAIC recruitment survey was conducted via the SSRS Opinion Panel and invited U.S. adults aged 18 and older who use the internet to participate. The SSRS Opinion Panel is a probability-based web panel of U.S. adults (including

<sup>&</sup>lt;sup>2</sup> This survey was conducted before the emergence of the Omicron variant.

Hawaii and Alaska) and is recruited randomly based on a nationally representative ABS (Address Based Sample) probability design. Full Panel data collection was conducted via the web from March 11 – June 13, 2021, resulting in a sample of 9,544 panelists in English (9,468) and Spanish (76). Data were weighted to represent the target U.S. adult population. A subset of the panel participated in new data collection via the web from October 11 – 20, 2021, resulting in a sample of 1,003 participants. Data were weighted to represent the target U.S. adult population.

Topic Coding of Open-ended Responses. The exact responses to open-ended questions were transcribed by interviewers and coded using semi-supervised topic modeling. Preprocessing steps included capitalization standardization, punctuation removal, and stopword removal. Frequently occurring words and phrases were identified by identifying the frequency with which respondents used different unigrams, bigrams, and trigrams. Experts looked through the list of frequently occurring words and phrases, identifying ones that could be used to represent seed topics. These seed topics were inputs into a generative topic model and used to generate more complete topics and possibly new topics. This topic list was manually adjusted by experts. For some of the smaller subsamples, the full set of open-ended responses was double handcoded.

### **Suggested Citation**

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