CIVIS

How Do You Persuade People to Get a Flu Shot? Emphasize How it Can Help Others.

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Introduction

The 2017-18 flu season was the worst in many years. The Center for Disease Control (CDC) estimated roughly 80,000 Americans died as a result of the flu last season, well above any other season's total in the last 40 years. In addition, the vaccination rate among adults was down to only 37.1%, the lowest in at least seven years, and well below the CDC's goal of 70%. We set up a randomized controlled trial using our on-demand Creative Focus tool to determine what types of messages may be most effective in persuading people to get a flu shot.

Methodology

We tested three distinct messages in an online randomized controlled trial (considered the scientific gold standard for research) of 2,163 Americans. Messages tested were as follows:

- The "Big Sad Numbers Message" highlighted the adult and juvenile death totals from last year, noting that a large portion of the juvenile victims had not received a flu shot.
- The "Altruism Message" emphasized that certain people may be more susceptible to the flu, even after getting a flu shot, which makes it important for everyone to get a flu shot so that these more vulnerable individuals are protected.
- The "Personal Story Message" told the story of a healthy 15-year-old boy who died within 24 hours of exhibiting flu symptoms. He had not received a flu shot.

Before testing the different messages, we asked a few questions about vaccination history, and whether getting a flu shot is convenient. Respondents were then randomly exposed to one of the messages or a control message. After displaying the messages, we asked respondents whether they thought it was a good idea to get a flu shot, whether they would get a flu shot this year, and if not, what was their reason.. We ran a statistical model that calculated the impact of each treatment compared to the non-treated group, while controlling for respondent characteristics.

Findings

We determined that the most persuasive message is the "Altruism Message," with an estimated 8% increase in intent to vaccinate (Figure 1). This effect was persistent over a wide range of subgroups. The next best message was the "Personal Story Message" but it carried a slight risk of a negative reaction among certain subgroups. The message quoting the CDC's "Big Sad Numbers" was the least effective message among nearly all subgroups, with a significant risk of dissuading people from getting a flu shot.

OVERALL

WILL GET A FLU SHOT THIS YEAR

ALTRUISM   PERSONAL STORY   BIG SAD NUMBERS

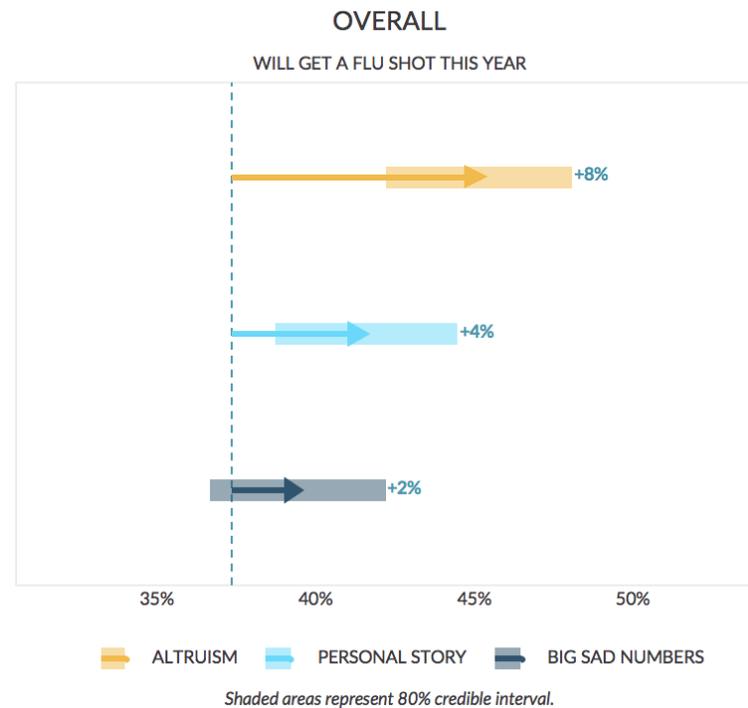*Shaded areas represent 80% credible interval.*

Figure 1. Overall, the most effective message for persuading people to get their flu shot was the "Altruism Message".

The effectiveness of the various messages was largely consistent across subgroups, even after breaking down by region of the country, gender, age, and whether a respondent had received a flu shot last year or not. However, while the "Altruism Message" was the most effective across every subgroup we examined, with nearly the same magnitude of effect, the other two messages showed some slight variation between groups.

The largest difference was between U.S. regions. In the South, the "Personal Story Message" was quite effective, with an estimated five percent increase in intent to vaccinate. In contrast, the same message exhibited only a two percent response in the Northeast, and showed a strong risk of backlash.
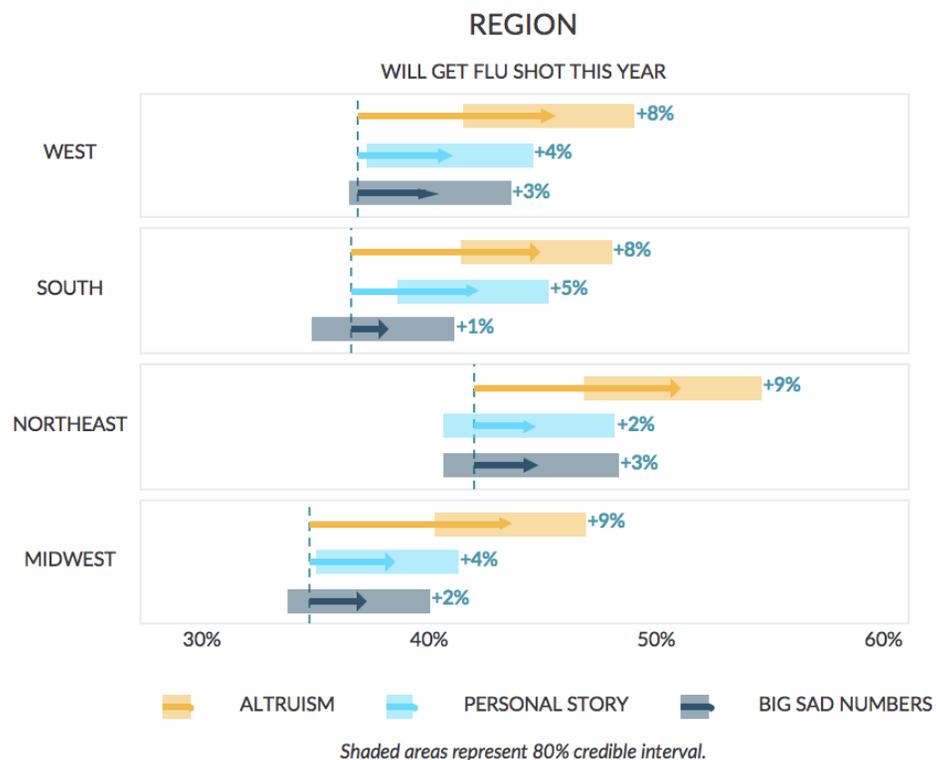
REGION

WILL GET FLU SHOT THIS YEAR

WEST	+8%	+4%	+3%
SOUTH	+8%	+5%	+1%
NORTHEAST	+9%	+2%	+3%
MIDWEST	+9%	+4%	+2%

30% 40% 50% 60%

ALTRUISM   PERSONAL STORY   BIG SAD NUMBERS

Shaded areas represent 80% credible interval.

Figure 2. The most significant difference in opinion was seen when comparing responses regionally.

Women showed a slightly better response to the "Personal Story Message", without the slight risk of backlash that the message had among men.
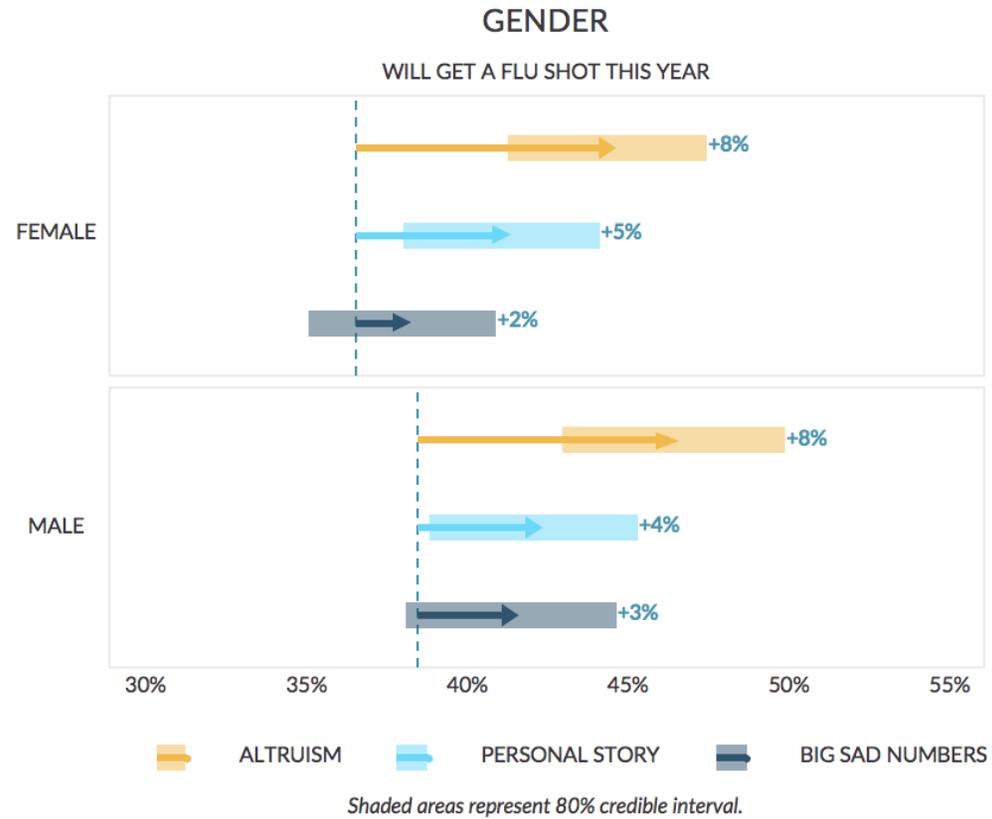
GENDER

WILL GET A FLU SHOT THIS YEAR

FEMALE
+8%
+5%
+2%

MALE
+8%
+4%
+3%

30% 35% 40% 45% 50% 55%

ALTRUISM   PERSONAL STORY   BIG SAD NUMBERS

Shaded areas represent 80% credible interval.

Figure 3. Our findings revealed that women responded slightly better to the "Personal Story Message".

We found no significant difference in the effectiveness of the messages across age, income, education, or political affiliation.
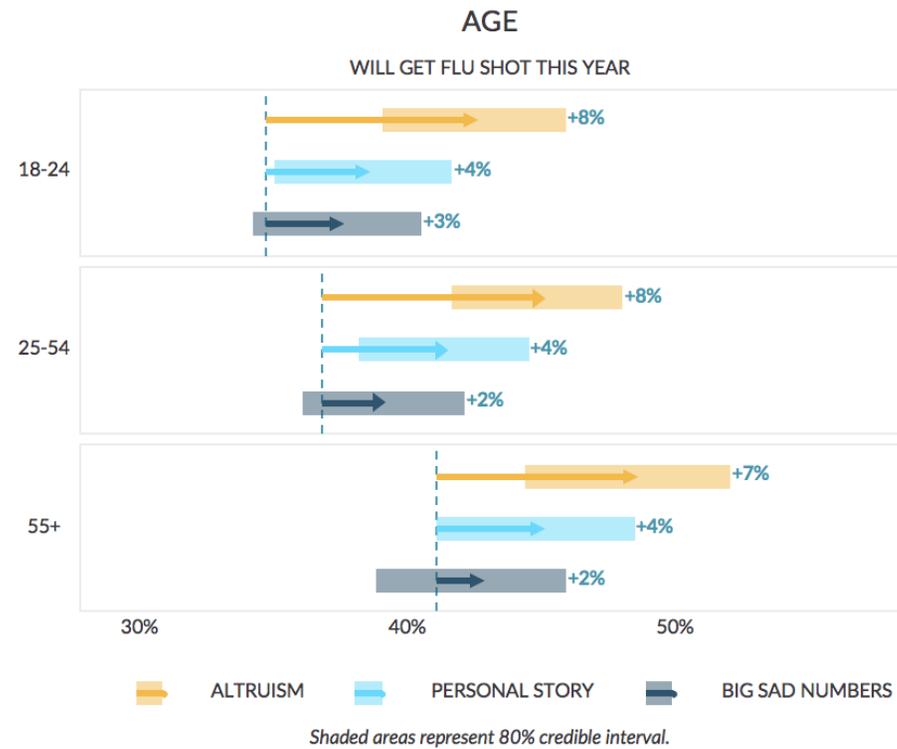

Figure 4. Age did not seem to impact how participants responded to the messages.

Even among people who did not receive a flu shot last year, the "Altruism Message" and "Personal Story Message" were effective at persuading some of the respondents to get one this year.
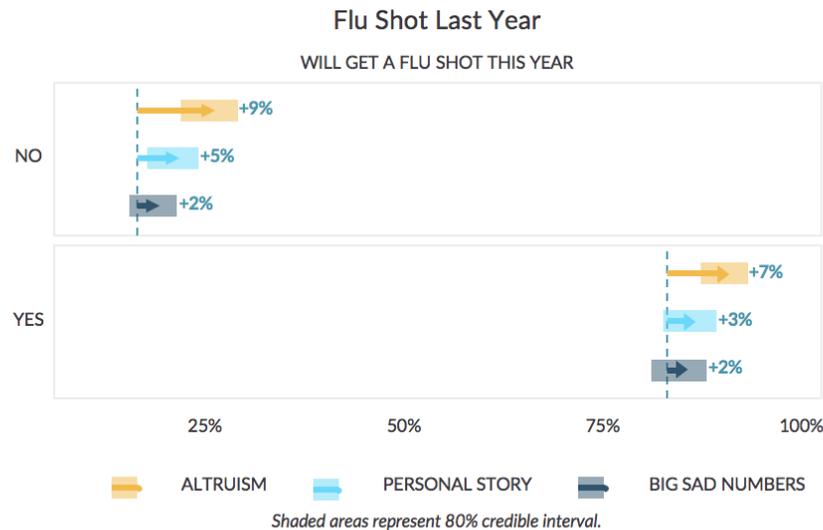

Figure 5. Even among people who did not receive a flu shot last year, the "Altruism Message" and "Personal Story Message" were effective at persuading some of the respondents to get one this year.

Lastly, we also found that among people who responded that they will not get a flu shot this season, 38 percent stated that they did not think they needed it. Another 17 percent reported that the flu shot caused the flu. Only 7 percent reported that they could not afford it or didn't have time to get it.

Conclusions

Using a message that emphasizes how vaccination in healthy adults can help protect more vulnerable populations appears to be most effective in persuading Americans to get a flu shot. The effectiveness of the message may be related to the fact that so many people--38 percent of people reporting that they won't get a flu shot this season--don't think they personally need a flu shot. By emphasizing that

other people's health is related to an individual's decision to get a flu shot, the focus shifts the away from the person's own health towards the health of more vulnerable individuals. Notably, while personal stories have a [reputation](#) for being persuasive and have been [used extensively](#) in anti-vaccination campaigns, we did not find these messages to be particularly effective in persuading people to get a flu shot.

Authors

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Crystal Son is an Applied Data Science Manager and Healthcare Lead at Civis Analytics. At Civis, she ensures the successful delivery of client solutions by managing projects and the often cross-functional teams that are working together on them. She began her career as an epidemiologist, first at the New York City Department of Public Health & Mental Hygiene and then as an Infection Prevention epidemiologist at Memorial Sloan-Kettering Cancer Center. Prior to Civis, she served clients across all industries as a management consultant focusing in advanced analytics. She graduated from Williams College with a B.A. in History/Pre-Medical Studies and Columbia University with a Masters in Public Health with a concentration in Epidemiology.

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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. Learn more about Civis at www.civisanalytics.com.