

# COVID Vaccines Information Equity and Demand creation (COVIED) Program

Evidence-based Context Specific Messaging Strategies



# COVID Vaccines Information Equity and Demand creation (COVIED) Program

- CDC funded
- Focused on evidence-based context-specific/tailored messaging
- Evidence-base
  - National internet-based surveys
  - Human engagement: Focus/design groups and Ipsos panels
  - Iterative message development and testing
  - Dissemination + evaluation and new iterations

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*Program Director:* Robert Breiman (Emory and GHC3)

*Project Operations:* Leo Weakland (GHC3)

*Co-Directors:* Walt Orenstein and Jim Lavery (Emory) and Dan Salmon (Johns Hopkins University)

*Communications lead:* Brandy Mai (GHC3)

*Key Program Partners:* Rhonda Holiday (Morehouse School of Medicine), Gail Brooks (Black Cross), Veronica Womack (Georgia College), Lilly Kan (National Association of County and City Health Officials), Rikki Sargent and Shaelyn Laurie (RIWI)

# RIWI Technology and Methodology



Random Web user  
lands on an otherwise  
inactive domain



RIWI **validates country**  
and delivers appropriate  
survey or message test



User **anonymously**  
and **safely** can  
choose to respond



Data delivered **real-time** via interactive  
dashboard

# RIWI Technology and Methodology

1

## REACH

- Respondents anywhere where there is Web access
- Diverse, including quiet, voices

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- Respondents in every region in the world where there is Web access
- Randomized methodology
- Diverse, including quiet, voices

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## SECURITY

- No personally identifiable data are ever captured, stored or transferred

# RIWI Technology and Methodology

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## REACH

- Respondents in every region in the world where there is Web access
- Randomized methodology
- Diverse, including quiet, voices

2

## SECURITY

- No personally identifiable data are ever captured, stored or transferred
- Data anonymity ensures all-country privacy compliance
- Data stored on secure 24/7 online interactive Web dashboard

3

## INSIGHTS

- Always-on technology and real-time delivery and analysis
- Rapid and continuous data collection

# RIWI Limitations

1

## WEB-BASED

- Can only access Web-using populations

2

## NO INCENTIVES

- Lower levels of retention

3

## ANONYMOUS

- Cannot collect repeated measures
- Unable to determine opt-in bias

# Surveys Specs:

## Study 1: Vaccination intention, attitudes, and barriers

- Timeline: March 30 - May 1
- Opt-in  $N = 78,697$ ; Complete-case  $N = 11,369$



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- Opt-in  $N = 34,284$ ; Complete-case  $N = 5,486$

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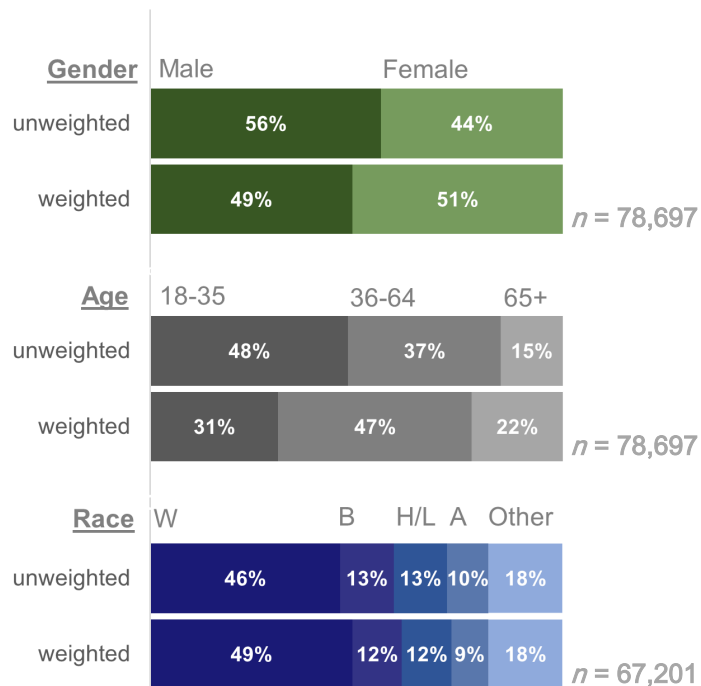
- Timeline: April 30 - May 13
- Opt-in  $N = 34,284$ ; Complete-case  $N = 5,486$

## Study 3: Influences and influencers

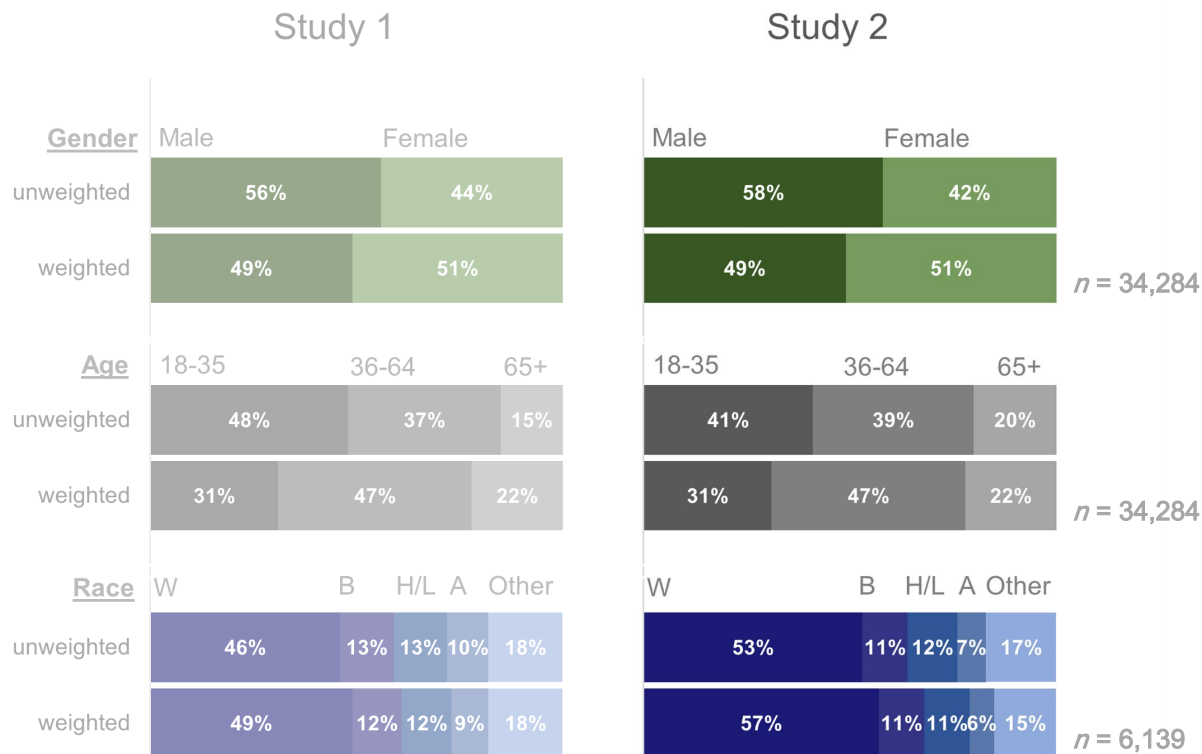
- Timeline: June 30 - July 26
- Opt-in  $N = 63,853$ ; Complete-case  $N = 14,152$

# Survey Demographics

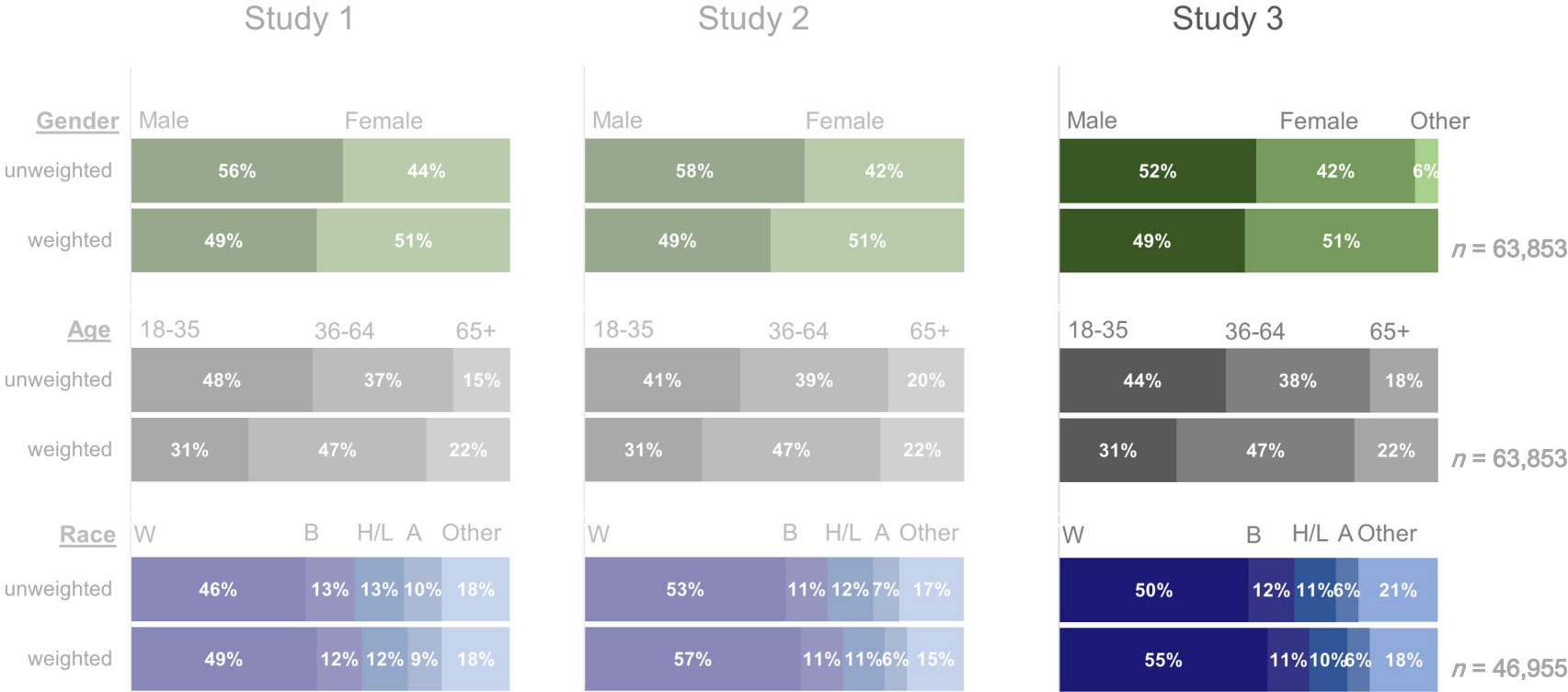
## Study 1



# Survey Demographics

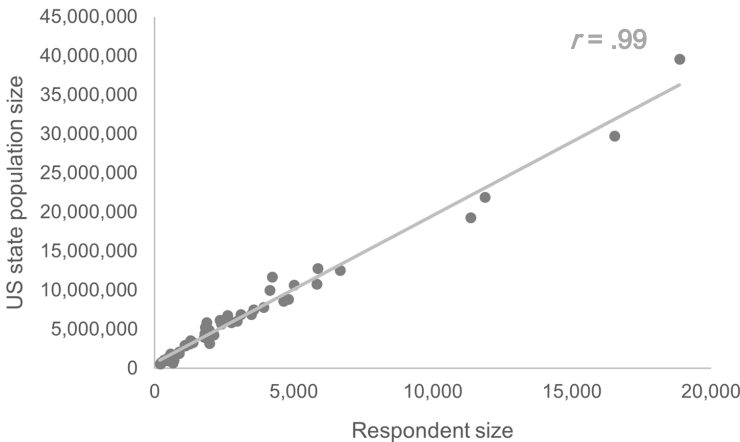


# Survey Demographics



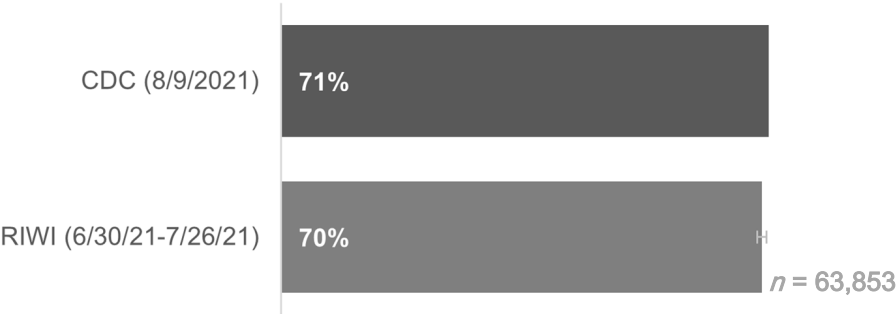
# RIWI Validation

US state population size (2021) vs.  
state sample size



$N = 176,834$ , lowest state sample size = 185 (Wyoming)

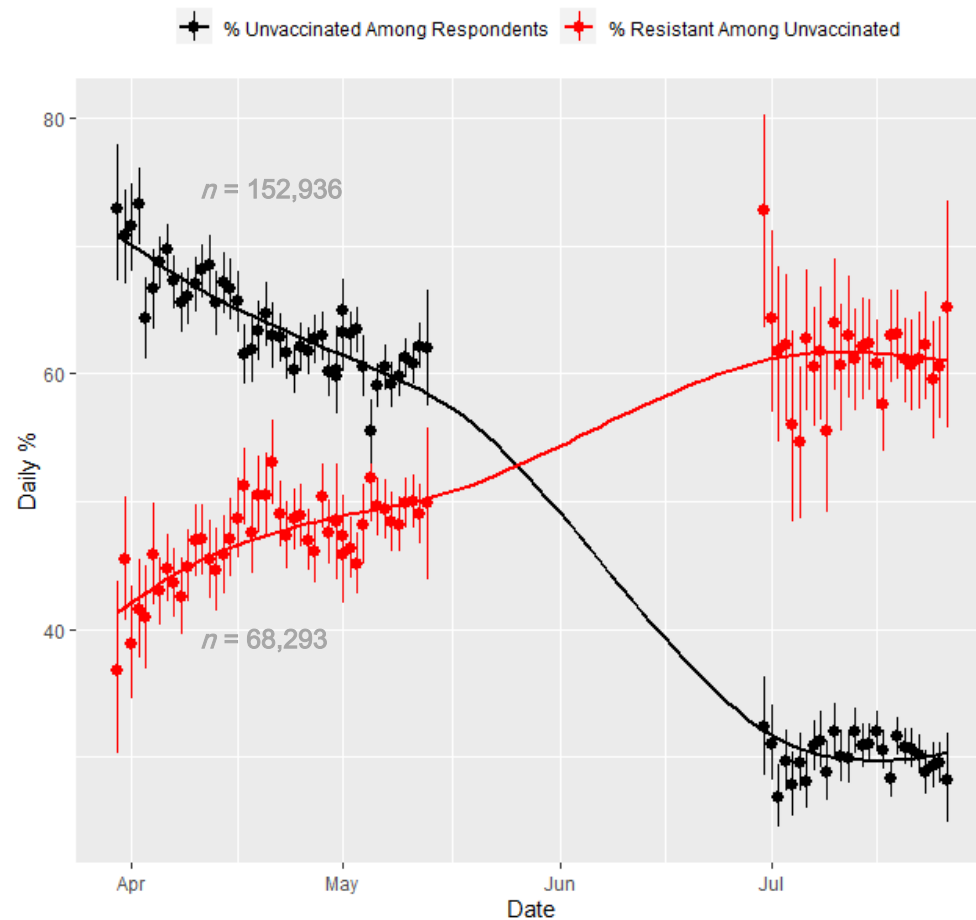
%, received at least one dose of the  
COVID-19 vaccine among adult population



# Resistance Across Time

“What will you do when it is your turn to get the COVID -19 vaccine, at no cost?”

1. I have already received at least one dose of the vaccine
2. I will definitely get it as soon as I can
3. I will likely get it as soon as I can
4. I will likely get it but not right away
5. I will likely not get vaccinated
6. I will definitely not get vaccinated



# Information about the J&J Pause

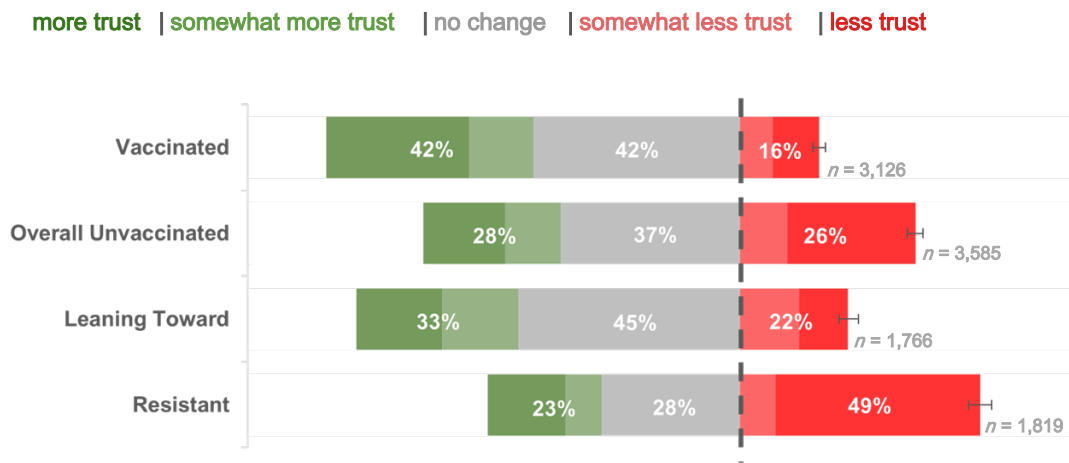
“On April 13, the CDC and FDA paused the use of the J&J vaccine in the US after reports of six people developing a rare and severe type of blood clot after getting the J&J vaccine. During the pause, the FDA and CDC conducted a thorough review of the available data. They determined that the vaccine’s benefits still outweigh its risks, as the chance of these clots occurring is very low. The FDA and CDC also reached out to healthcare providers to ensure they were aware of and could manage these potential adverse events. On April 25, the CDC and FDA lifted the pause and use of the J&J vaccine resumed.”



# Trust in the Vaccine Safety Monitoring System

“On April 13, the CDC and FDA paused the use of the J&J vaccine in the US after reports of six people developing a rare and severe type of blood clot after getting the J&J vaccine. During the pause, the FDA and CDC conducted a thorough review of the available data. They determined that the vaccine’s benefits still outweigh its risks, as the chance of these clots occurring is very low. The FDA and CDC also reached out to healthcare providers to ensure they were aware of and could manage these potential adverse events. On April 25, the CDC and FDA lifted the pause and use of the J&J vaccine resumed.”

“How does this information impact your trust of the safety monitoring system in place for vaccines?”  
%, among vaccinated and unvaccinated respondents

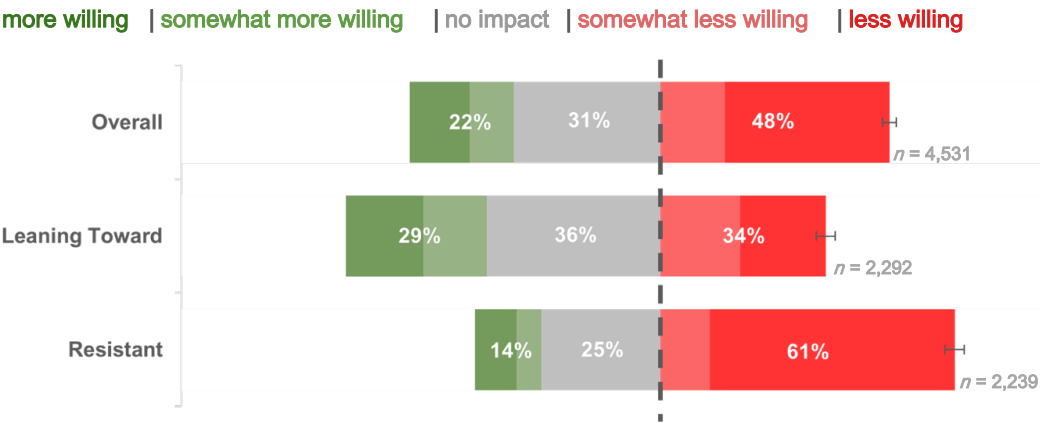


# Willingness to get the J&J Vaccine

“On April 13, the CDC and FDA paused the use of the J&J vaccine in the US after reports of six people developing a rare and severe type of blood clot after getting the J&J vaccine. During the pause, the FDA and CDC conducted a thorough review of the available data. They determined that the vaccine’s benefits still outweigh its risks, as the chance of these clots occurring is very low. The FDA and CDC also reached out to healthcare providers to ensure they were aware of and could manage these potential adverse events. On April 25, the CDC and FDA lifted the pause and use of the J&J vaccine resumed.”

“How does this information impact your willingness to get the J&J vaccine?”

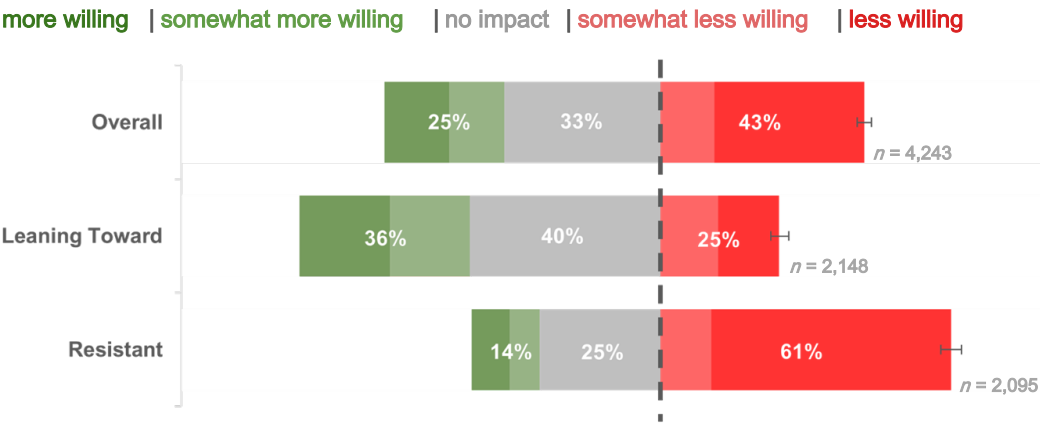
%, among unvaccinated respondents



# Willingness to get an mRNA Vaccine

“On April 13, the CDC and FDA paused the use of the J&J vaccine in the US after reports of six people developing a rare and severe type of blood clot after getting the J&J vaccine. During the pause, the FDA and CDC conducted a thorough review of the available data. They determined that the vaccine’s benefits still outweigh its risks, as the chance of these clots occurring is very low. The FDA and CDC also reached out to healthcare providers to ensure they were aware of and could manage these potential adverse events. On April 25, the CDC and FDA lifted the pause and use of the J&J vaccine resumed.”

“How does this information impact your willingness to get a different COVID -19 vaccine (Pfizer or Moderna)?”  
%, among unvaccinated respondents



# Willingness to get any COVID-19 Vaccine

“Are you aware of any recent reports  
(within the last couple of weeks) of side  
effects associated with COVID -19  
vaccines?”

Yes (46%)

No

# Willingness to get any COVID-19 Vaccine

“Are you aware of any recent reports  
(within the last couple of weeks) of side  
effects associated with COVID -19  
vaccines?”

Yes (46%)

No

“Which part of the body was reported to be  
affected by the COVID -19 vaccines?  
(select all that apply)”

Heart (26%)

Brain

Lung

Skin

Blood

Liver

Bone

None of the above

# Willingness to get any COVID-19 Vaccine

“Are you aware of any recent reports (within the last couple of weeks) of side effects associated with COVID -19 vaccines?”

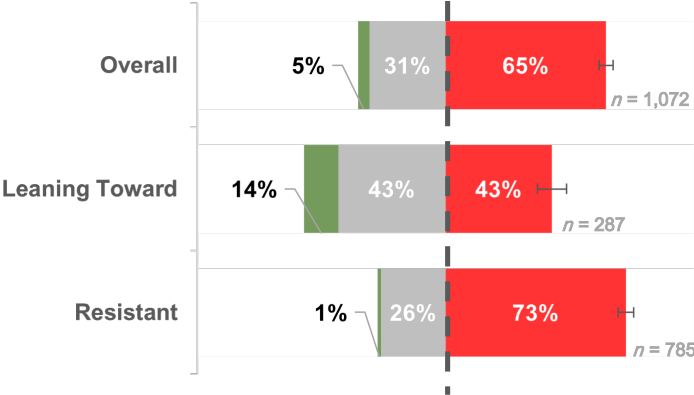
Yes (46%)  
No

“Which part of the body was reported to be affected by the COVID -19 vaccines? (select all that apply)”

- Heart (26%)
- Brain
- Lung
- Skin
- Blood
- Liver
- Bone
- None of the above

“Does this information make you:”  
%, among unvaccinated respondents who heard about heart side effects

more likely to get vaccine | no impact | less likely to get vaccine



## Reactions to Changing Masking Behavior

64%

of unvaccinated respondents  
are **a little** or **not at all**  
concerned that fewer people are  
wearing masks in public

# Reactions to Changing Masking Behavior

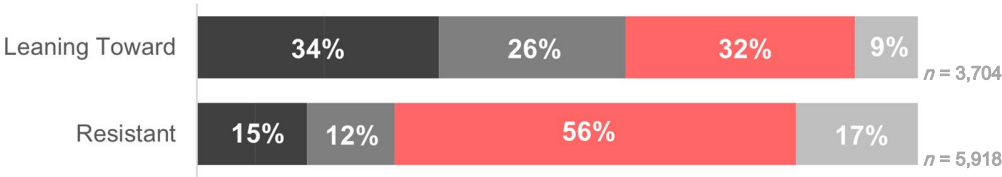
64%

of unvaccinated respondents  
are **a little** or **not at all**  
concerned that fewer people are  
wearing masks in public

“Since the new policy guidelines on mask wearing,  
fewer people are wearing masks in public settings.  
How does that shift make you feel?”

%, among unvaccinated respondents

very/ moderately concerned | a little concerned | not at all concerned | not aware





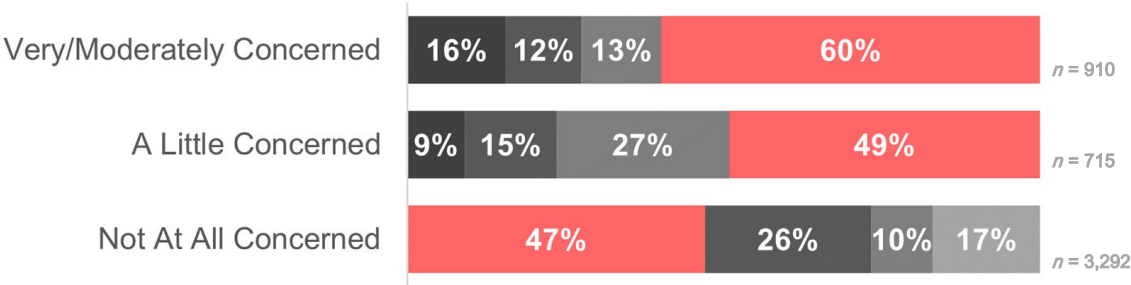
# Reactions to Changing Masking Behavior

“Since the new policy guidelines on mask wearing, fewer people are wearing masks in public settings. How does that shift make you feel?” by

“How often do you currently wear a mask in stores?”

%, among resistant respondents

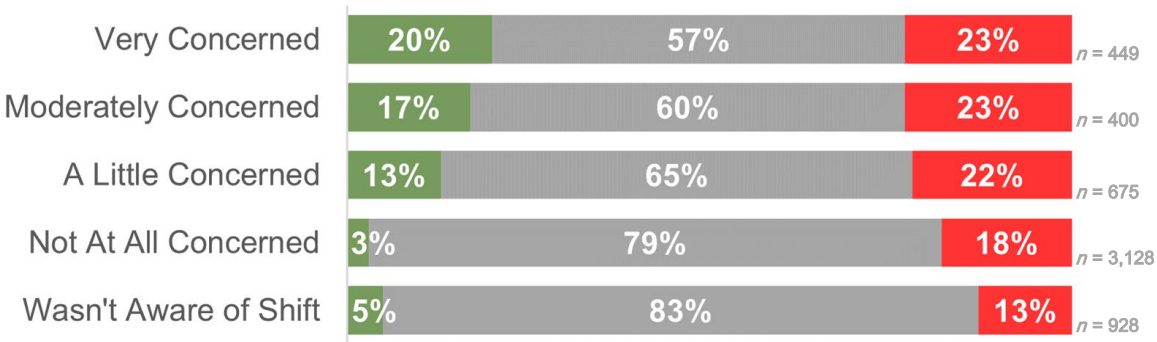
never | only if store requires | sometimes | always



# Reactions to Changing Masking Behavior

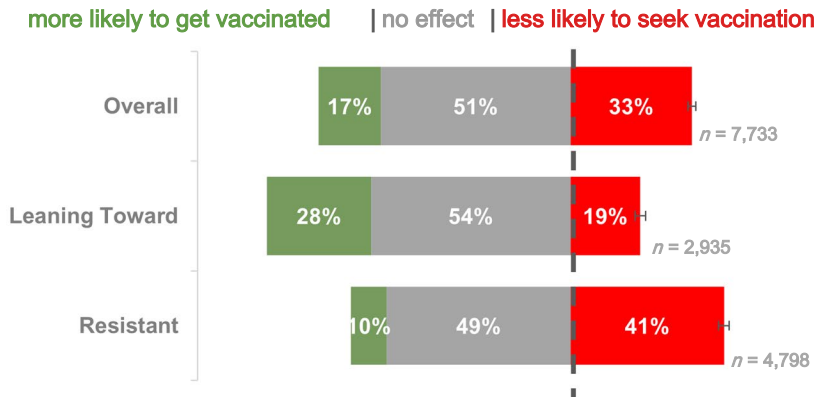
“Since the new policy guidelines on mask wearing, fewer people are wearing masks in public settings. How does that shift make you feel?” by  
“Are you more or less likely to get a COVID -19 vaccine now that fewer people are wearing masks in public?”  
%, among resistant respondents

more likely | no effect | less likely



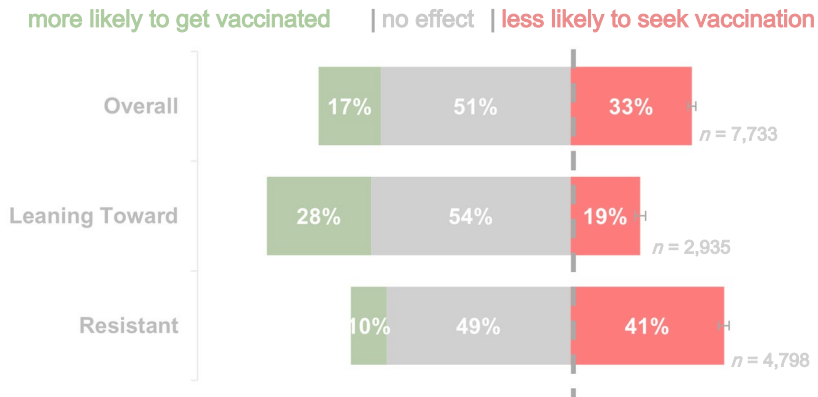
# Incentives

“If I was given an incentive like a \$25 gift card for getting fully vaccinated against COVID -19...”  
%, among unvaccinated respondents

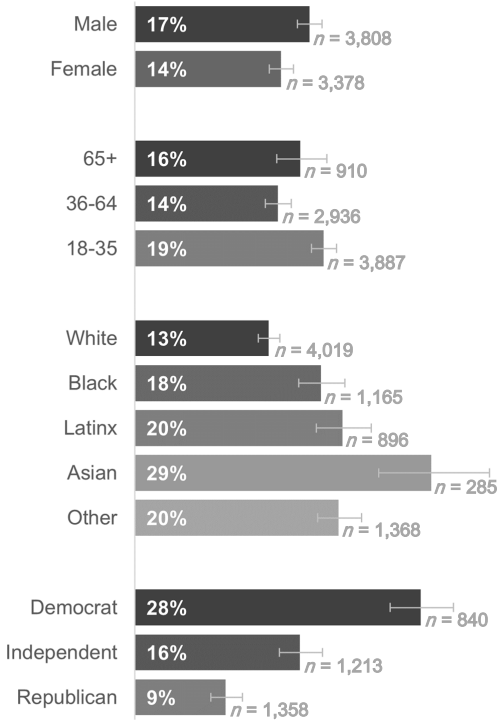


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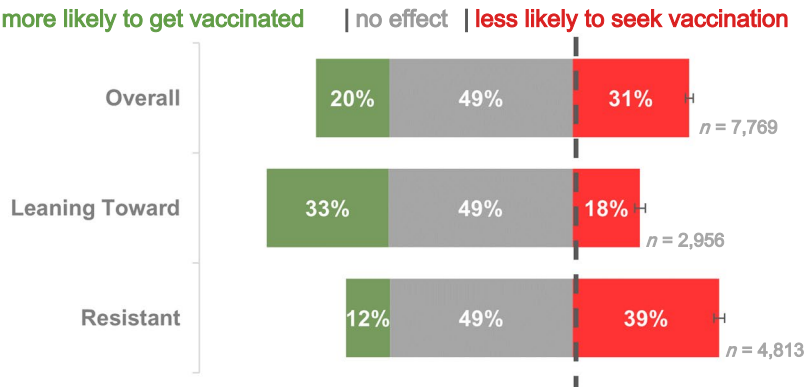
% more likely to get vaccinated by gender, age, race, and political affiliation



# Incentives

“If I was automatically enrolled in a lottery when I got fully vaccinated against COVID -19 and could win \$100,000...”

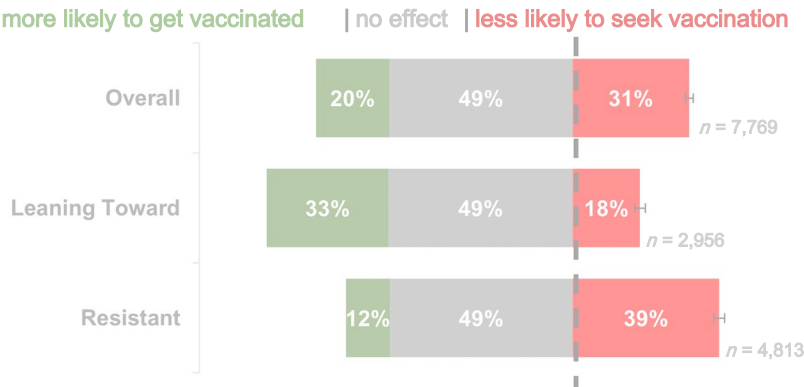
% , among unvaccinated respondents



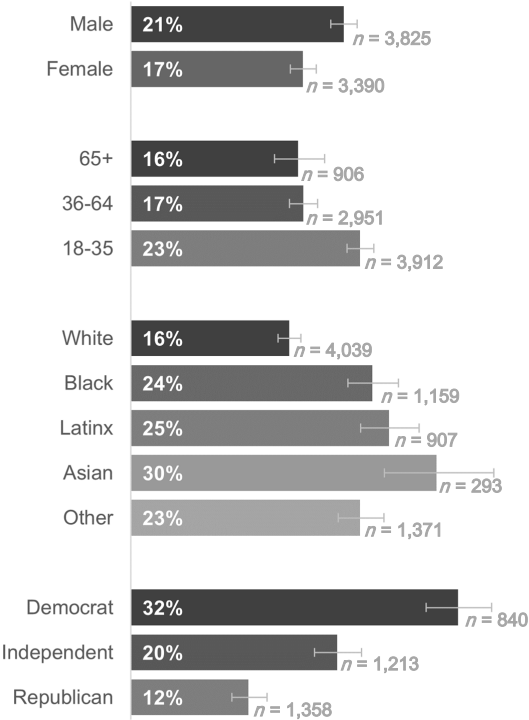
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% more likely to get vaccinated by gender, age, race, and political affiliation



# Work Requirements

“If my employer required me to get the COVID -19 vaccine...”

%, among unvaccinated respondents

42%

of employed unvaccinated respondents would **not** get vaccinated

27%

of employed unvaccinated respondents are **unsure**

31%

of employed unvaccinated respondents **would** get vaccinated

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%, among unvaccinated respondents

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“If my employer required me to get the COVID vaccine...”  
%, among unvaccinated respondents

would not get vaccine | not sure | would get vaccine





# Doctors or Health Care Providers

“Have you discussed getting the COVID-19 vaccine with your doctor or other health care provider?”  
%, among unvaccinated respondents

32%

of unvaccinated respondents  
discussed getting the COVID-19  
vaccine with their doctor or other  
health care provider

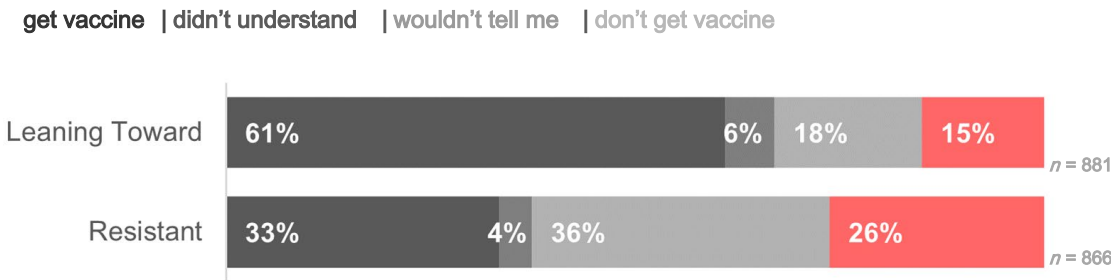
# Doctors or Health Care Providers

“Have you discussed getting the COVID-19 vaccine with your doctor or other health care provider?”  
%, among unvaccinated respondents

32%

of unvaccinated respondents  
discussed getting the COVID-19 vaccine with their doctor or other health care provider

“What did your doctor or other health care provider tell you?”  
%, among unvaccinated respondents who discussed with doctor



# Doctors or Health Care Providers

“Have you discussed getting the COVID-19 vaccine with your doctor or other health care provider?”

%, among unvaccinated respondents

68%

of unvaccinated respondents **did not discuss** getting the COVID-19 vaccine with their **doctor or other health care provider**

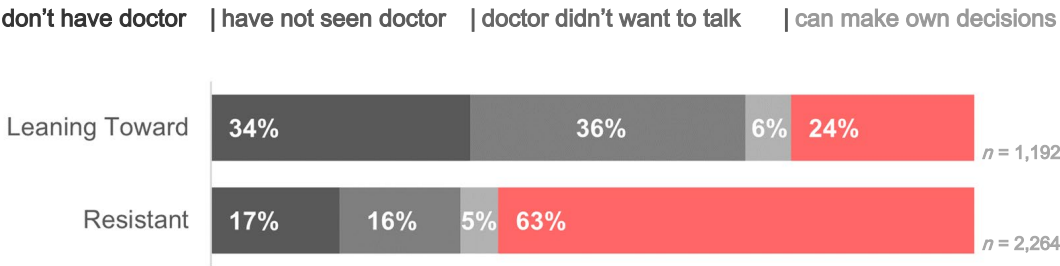
# Doctors or Health Care Providers

“Have you discussed getting the COVID-19 vaccine with your doctor or other health care provider?”  
%, among unvaccinated respondents

68%

of unvaccinated respondents **did not discuss** getting the COVID-19 vaccine with their **doctor or other health care provider**

“Why have you not discussed the COVID -19 vaccine with your doctor or another health care provider?”  
%, unvaccinated respondents who did not discuss with doctor



# Most Important Reason Against Vaccination

What are your main reasons against getting a COVID -19 vaccine? Select up to 4

1. The medical system has mistreated people like me
2. People like me were not part of the vaccine studies
3. I am not at risk of getting sick from COVID -19
4. The vaccines will not protect me
5. I am worried about vaccine safety
6. I am worried about feeling ill from the vaccine
7. It is inconvenient to get the vaccine
8. I have a health condition and do not know how the vaccine will impact me
9. Herd immunity (enough people are vaccinated that I don't need it)
10. It is against my religion
11. The vaccine information is confusing
12. The pandemic is almost over anyway
13. The vaccine development was rushed
14. I don't like needles/injections

Of the vaccine concerns you selected, what is your most important concern?

# Most Important Reason Against Vaccination

Leaning Toward n = 942

19%

were worried about vaccine safety

18%

believed the vaccine was rushed

15%

were worried about feeling ill

Resistant n = 2,417

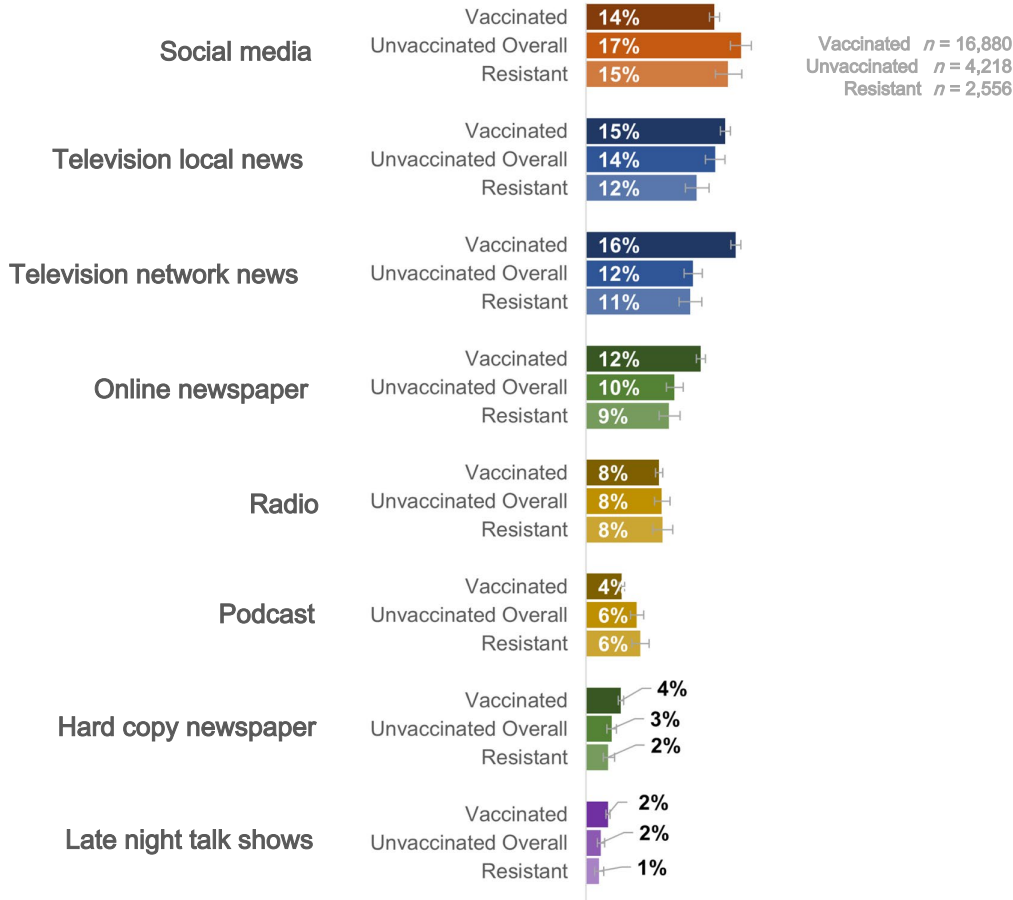
23%

believed the vaccine was rushed

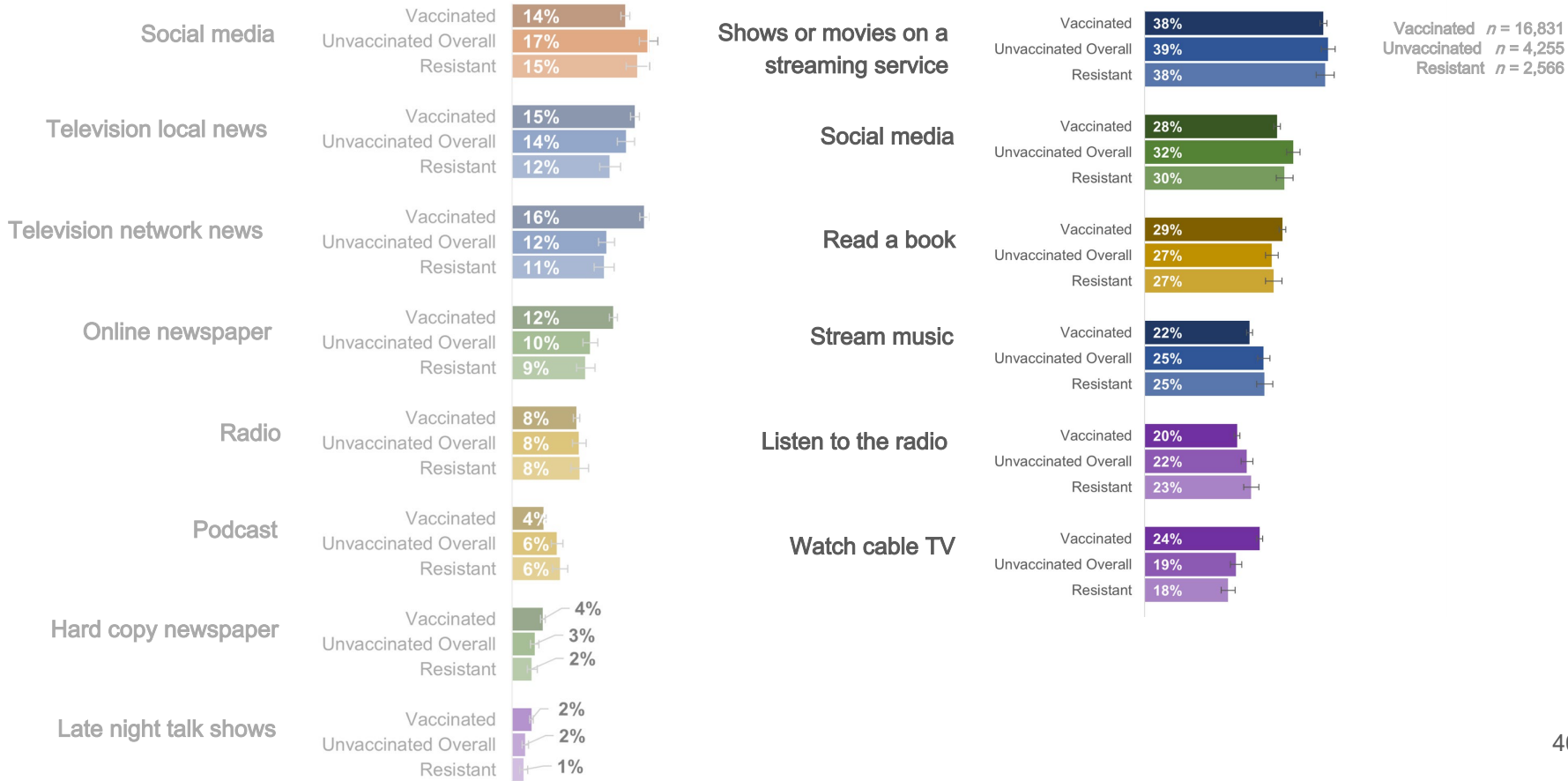
18%

were worried about vaccine safety

# News and Entertainment Sources



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# COVID Vaccines Information Equity and Demand creation (COVID) Program

Evidence-based Context Specific Messaging Strategies



# Surveys Specs:

## Study 1: Vaccination intention, attitudes, and barriers

- Timeline: March 30 - May 1
- Opt-in  $N = 78,697$ ; Complete-case  $N = 11,369$

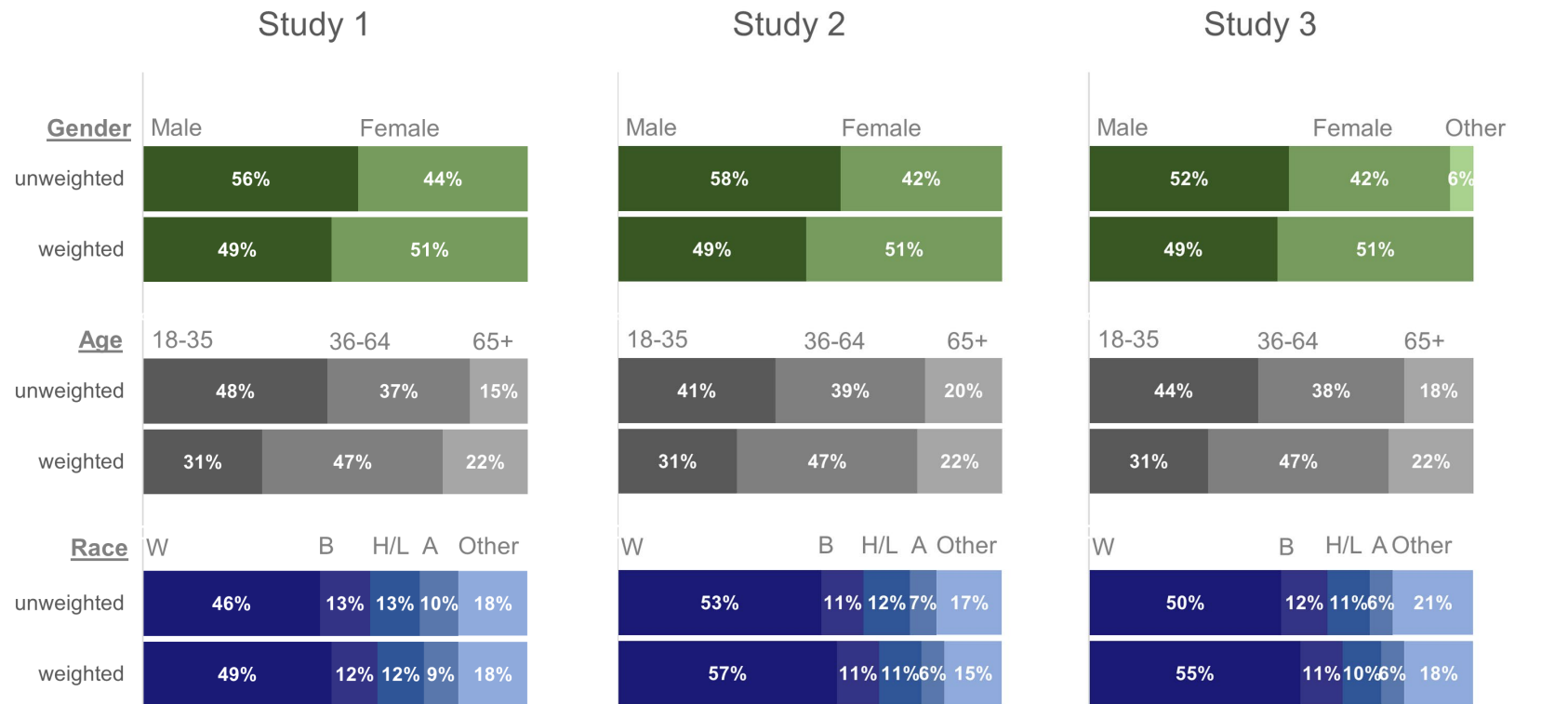
## Study 2: J&J pause rapid response

- Timeline: April 30 - May 13
- Opt-in  $N = 34,284$ ; Complete-case  $N = 5,486$

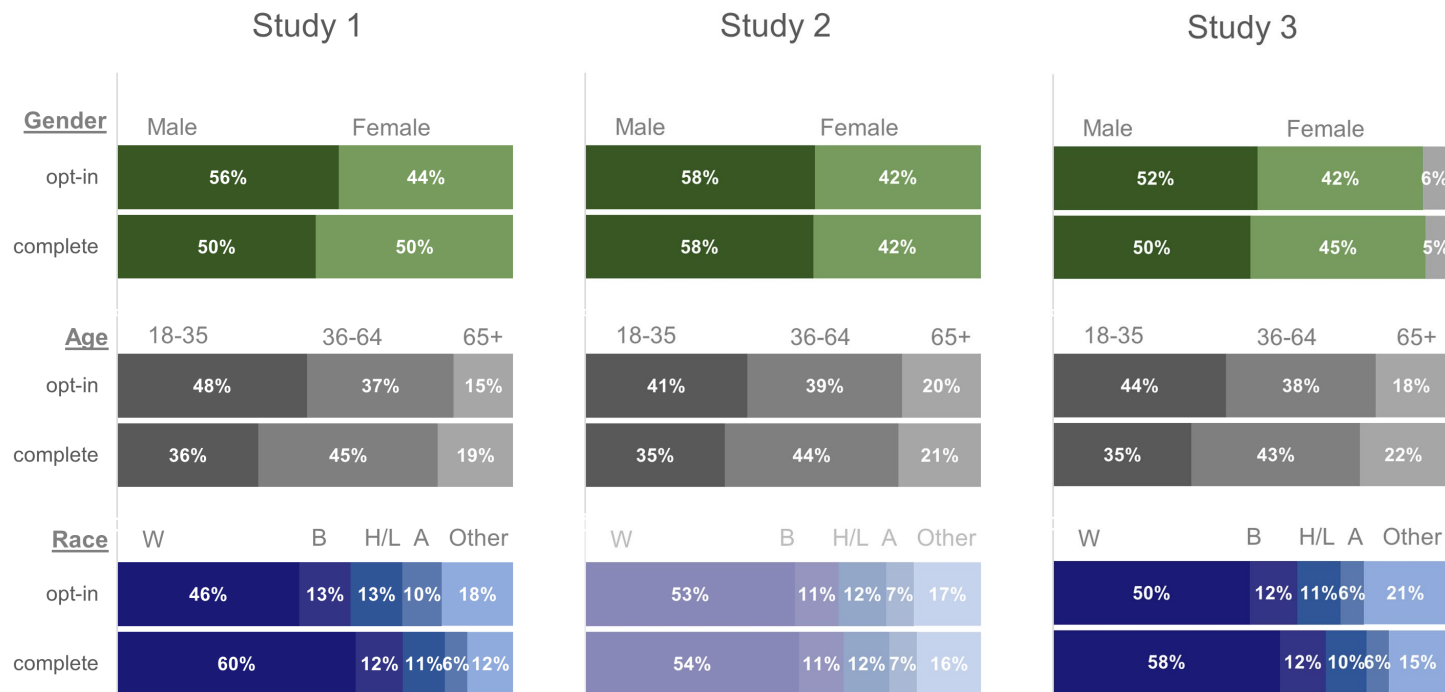
## Study 3: Influences and influencers

- Timeline: June 30 - July 26
- Opt-in  $N = 63,853$ ; Complete-case  $N = 14,152$

# Survey Demographics

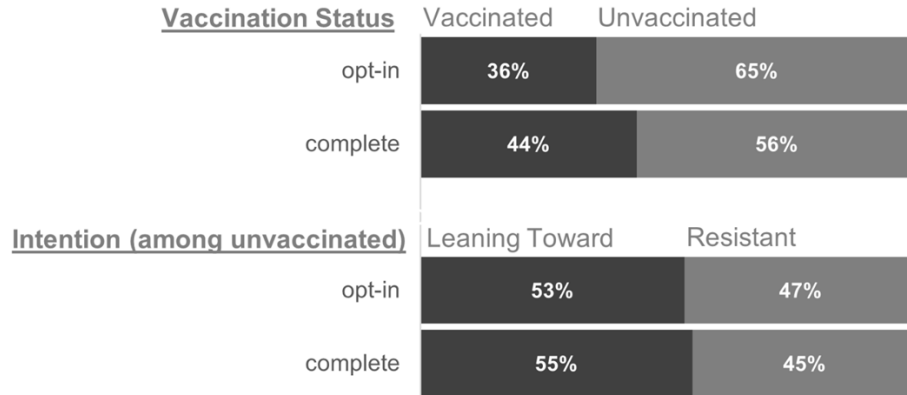


# Survey Demographics (Opt-in v. Complete)



# Survey Demographics (Opt-in v. Complete)

## Study 1



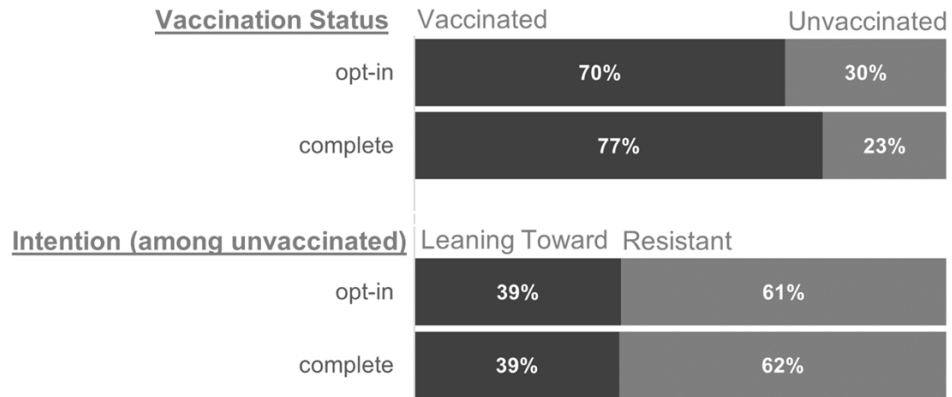
# Survey Demographics (Opt-in v. Complete)

## Study 2

<u>Vaccination Status</u>		Vaccinated	Unvaccinated
opt-in		39%	61%
complete		48%	52%
<u>Intention (among unvaccinated)</u>		Leaning Toward	Resistant
opt-in		51%	49%
complete		48%	52%

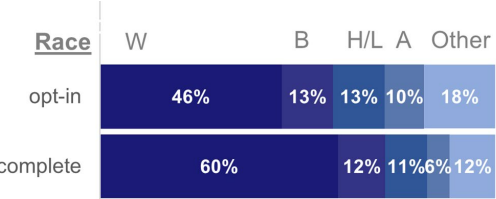
# Survey Demographics (Opt-in v. Complete)

## Study 3



# Survey Demographics (Race/Ethnicity)

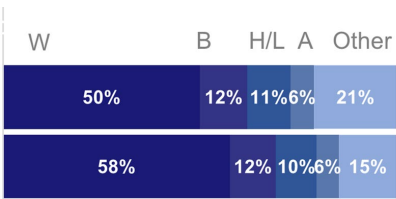
Study 1



Study 2

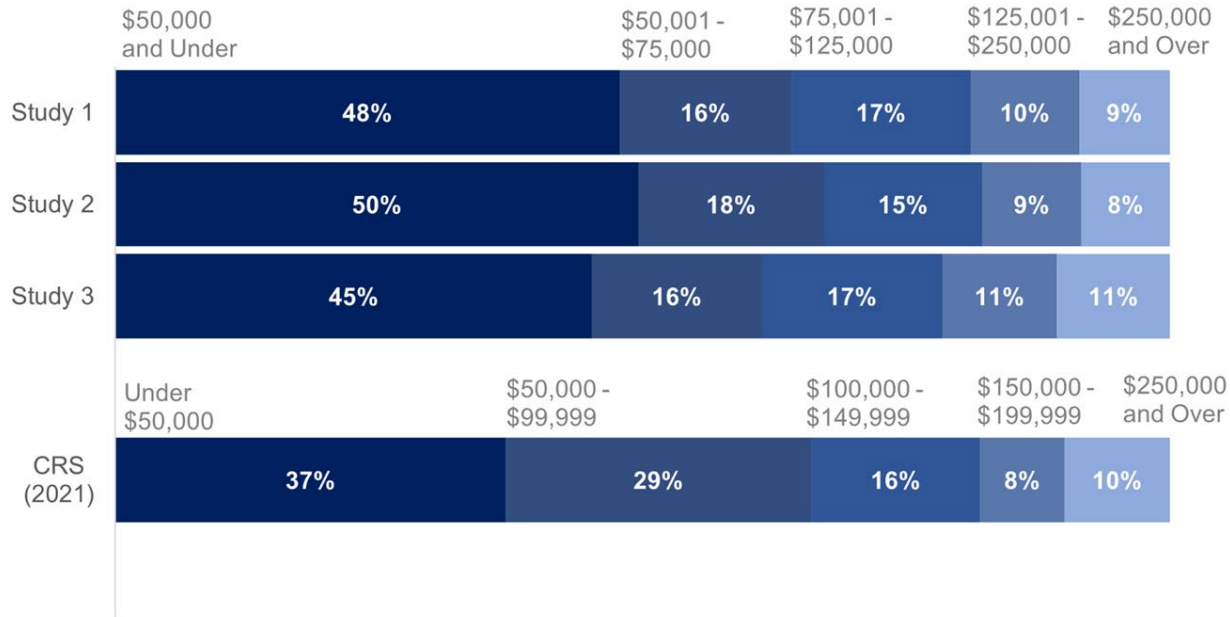


Study 3





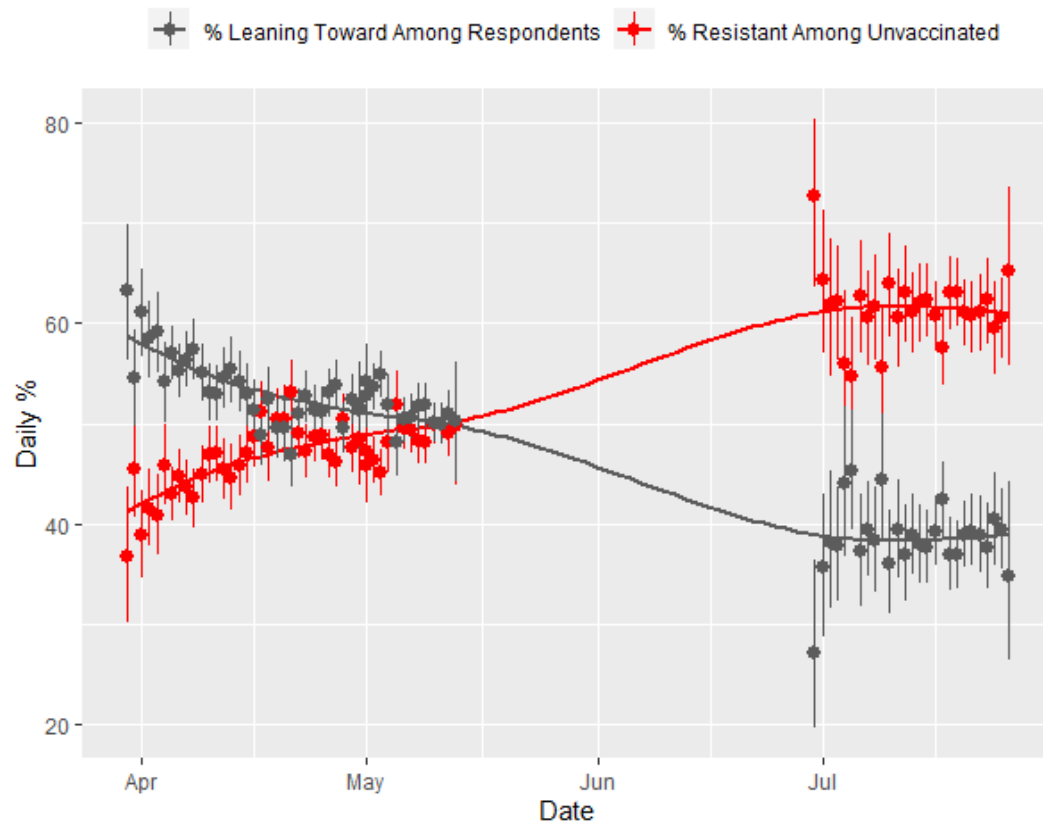
# Survey Demographics (Annual Household Income)



# Intention Across Time

What will you do when it is your turn to get the COVID -19 vaccine, at no cost?

1. I have already received at least one dose of the vaccine
2. I will definitely get it as soon as I can
3. I will likely get it as soon as I can
4. I will likely get it but not right away
5. I will likely not get vaccinated
6. I will definitely not get vaccinated



# Intention Across Time

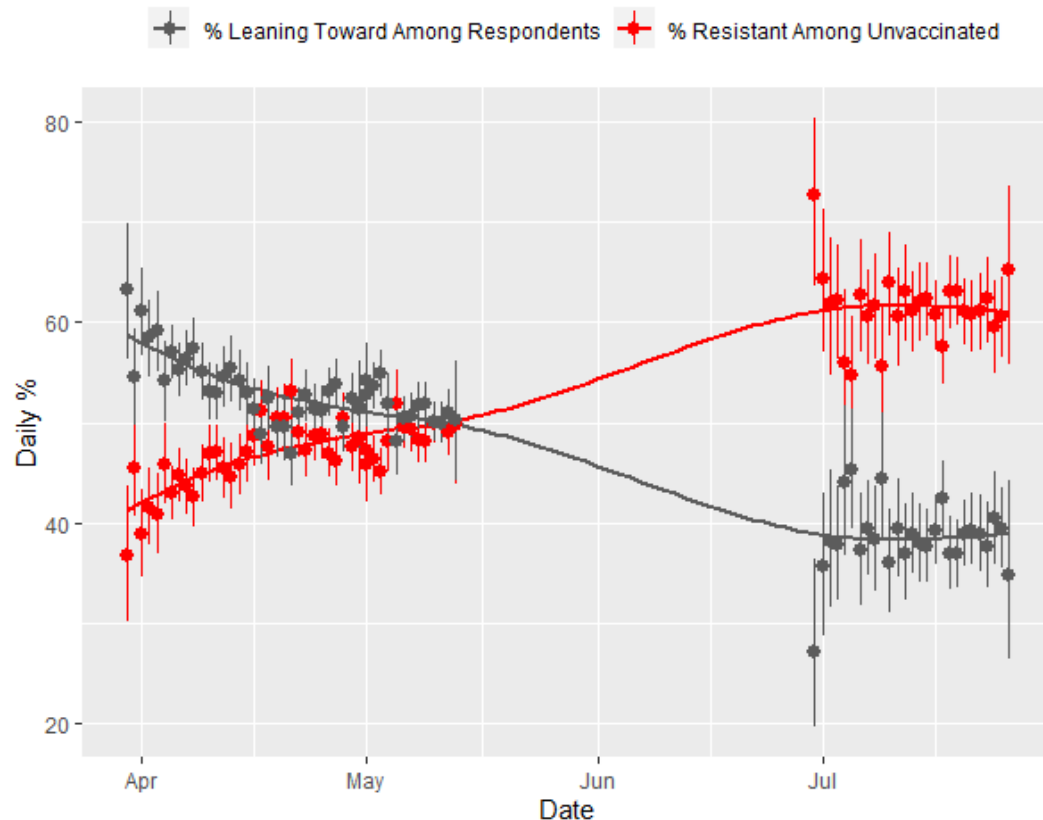
## Study 3 wording

Have you personally received the COVID - 19 vaccine?

1. Yes, a single-dose vaccine (J&J)
2. Yes, the first of two doses (Moderna or Pfizer)
3. Yes, both doses of a two -dose vaccine (Moderna or Pfizer)
4. I have not received the vaccine

Do you plan to get the COVID - 19 vaccine?

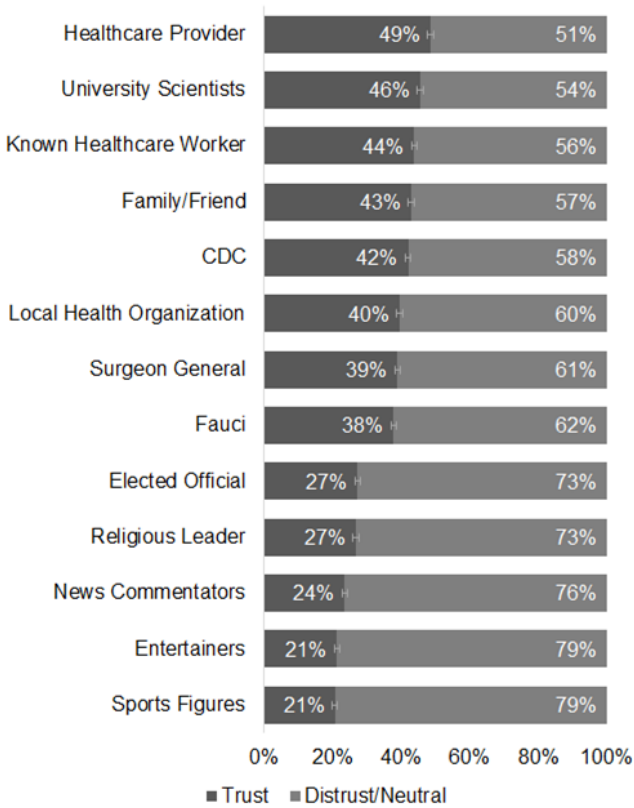
1. I will definitely get it as soon as I can
2. I will likely get it as soon as I can
3. I will likely get it but not right away
4. I will likely not get vaccinated
5. I will definitely not get vaccinated



# Trust

How much do you trust the below [enter target] to help you decide on whether or not to receive the COVID -19 vaccine?

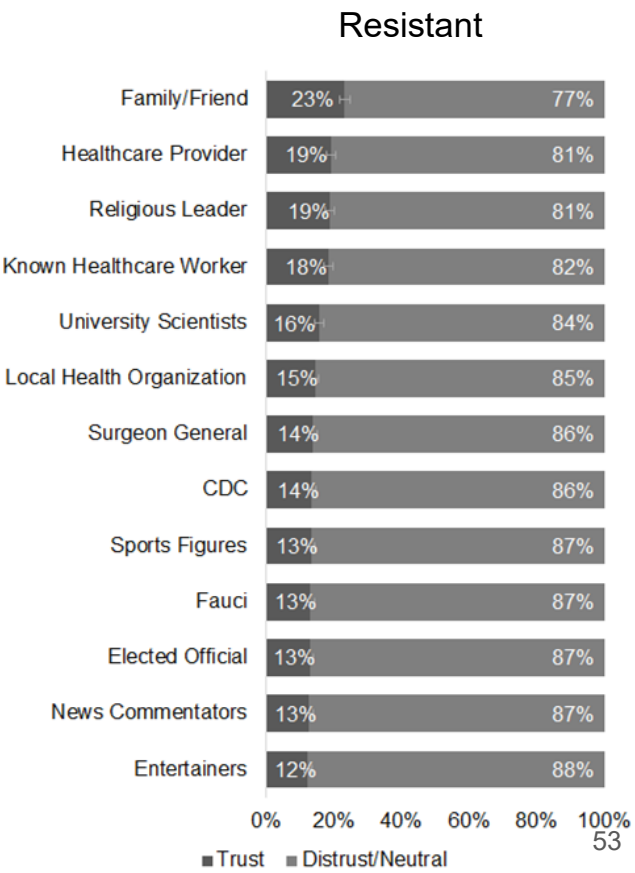
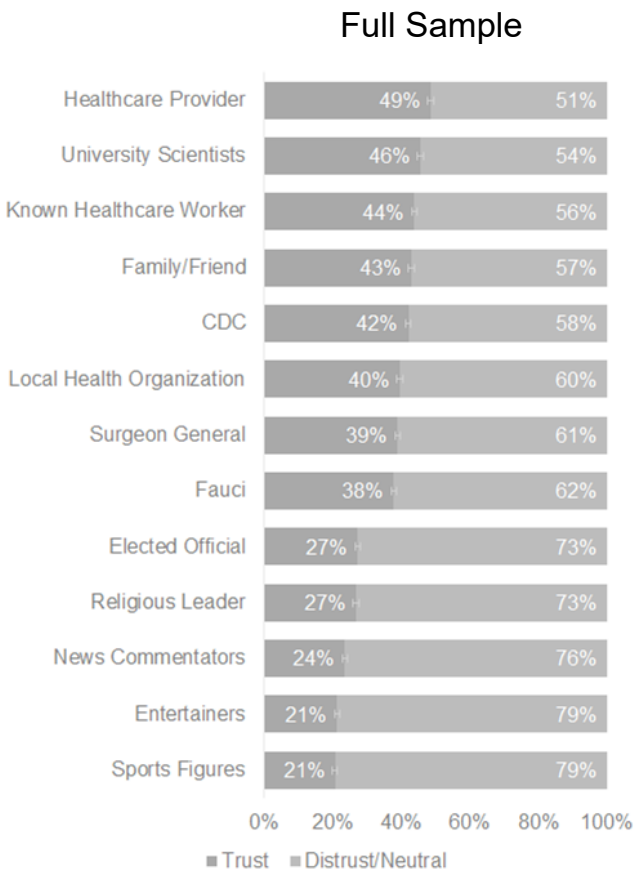
- 1. Highly distrust
- 2. Neutral
- 3. Highly Trust



# Trust

How much do you trust the below [enter target] to help you decide on whether or not to receive the COVID -19 vaccine?

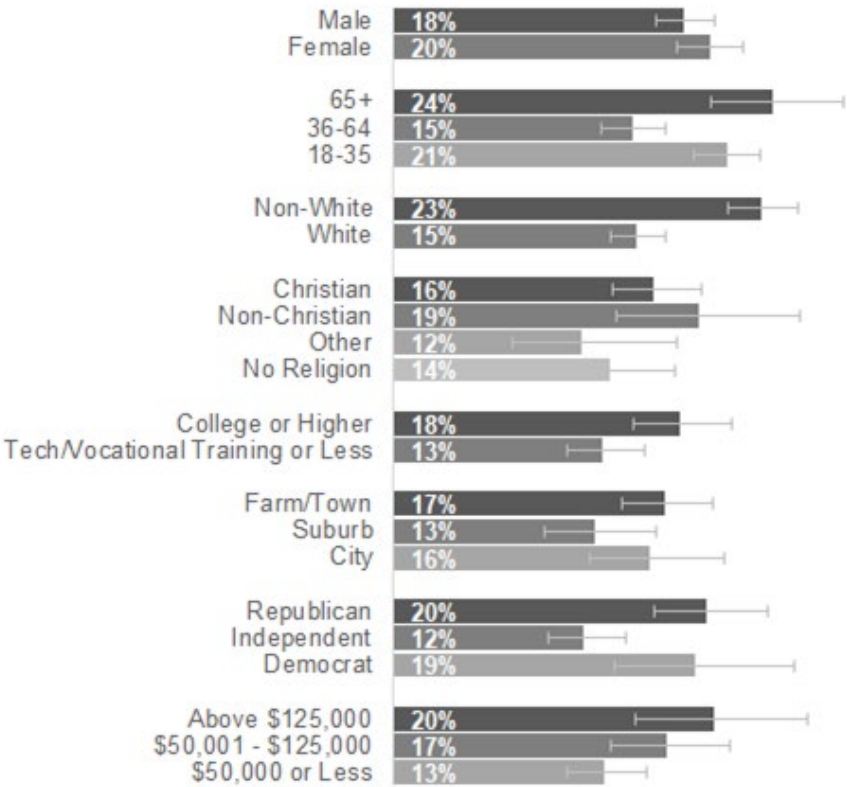
- 1. Highly distrust
- 2. Neutral
- 3. Highly Trust



# Trust: Religious Leader

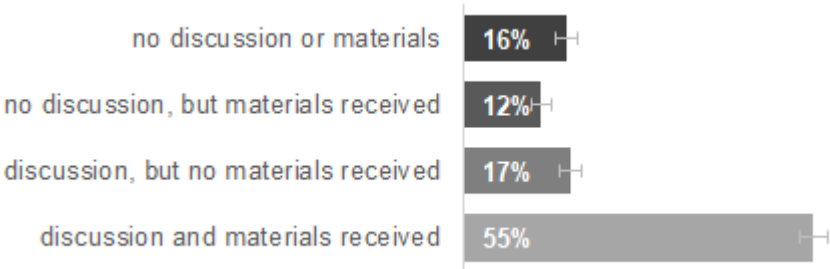
19%

of **resistant respondents**  
trusted their **religious leader** to  
help them decide on whether or  
not to receive the COVID-19  
vaccine

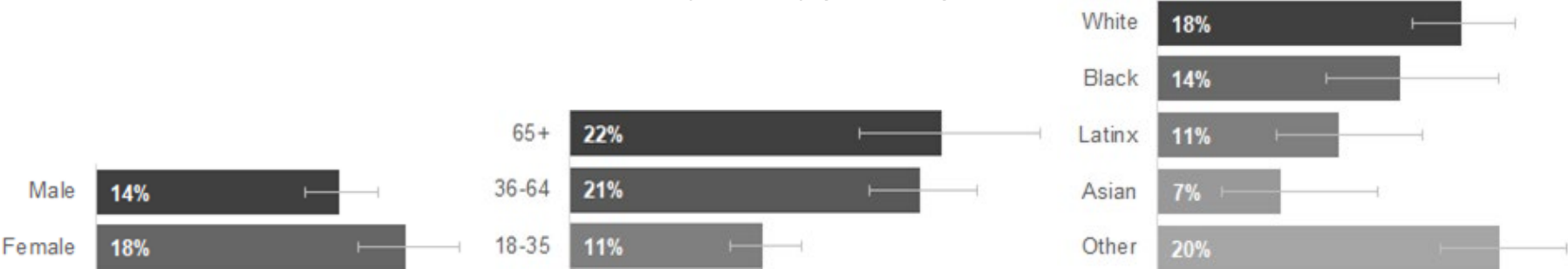


# J&J Vaccine

after J&J pause, % who received information about the J&J safety issue



% who received *no information* about the J&J safety issue by gender, age, and race



# Top Reasons Against Vaccination

Leaning Toward n = 1,395

31%

were worried about vaccine safety

28%

believed the vaccine was rushed

24%

were worried about feeling ill

Resistant n = 4,004

33%

believed the vaccine was rushed

29%

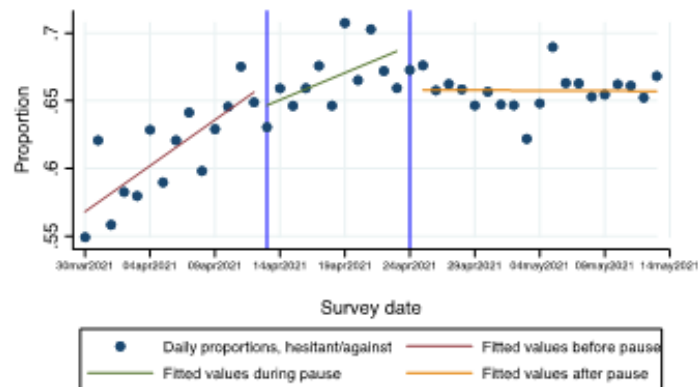
were worried about vaccine safety



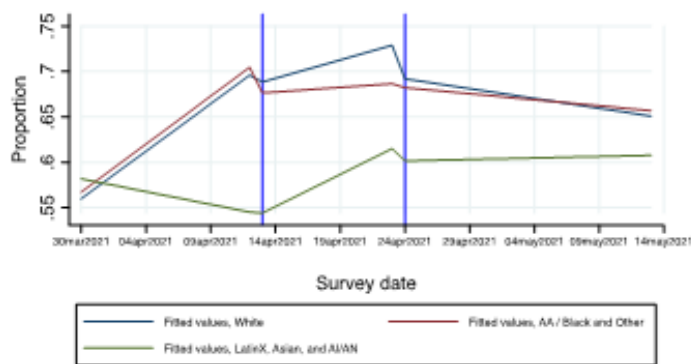
### Association between J&J pause and hesitant among unvaccinated individuals (n=54727)

Trends using daily proportion of unvaccinated respondents (n=56193) who are hesitant, 30 March - 13 May

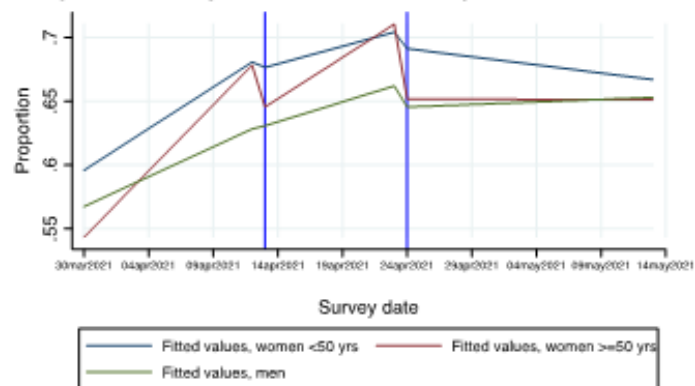
#### Overall



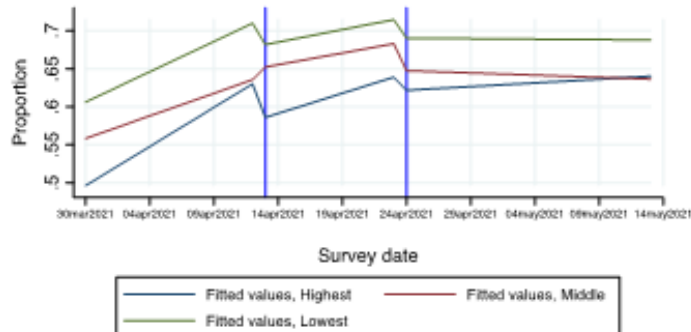
#### By race/ethnicity



#### By women <50 years old, women >=50 years old, and men



#### By COVID-19 vaccination coverage-based regions

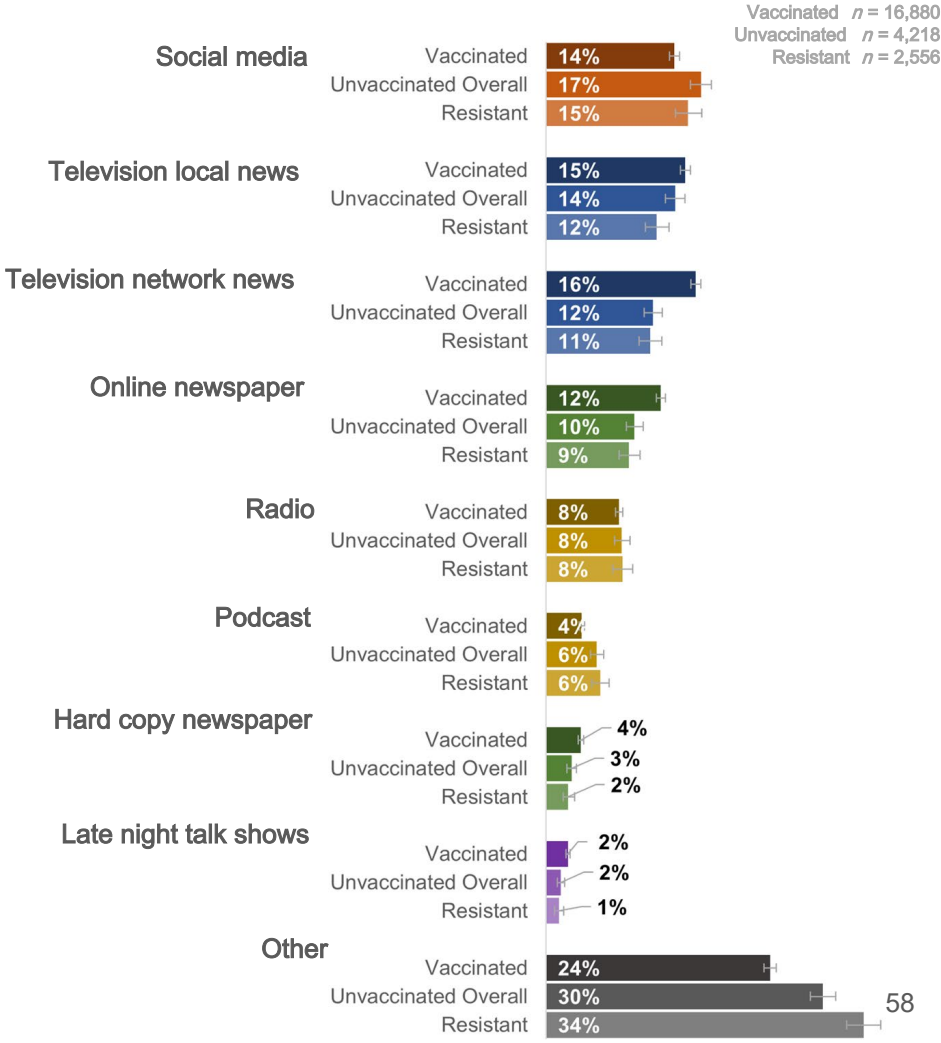


# News of the Day Sources

## Vaccinated



## Resistant



# News of the Day Sources

## Vaccinated



The New York Times

n = 2038

## Resistant



n = 276

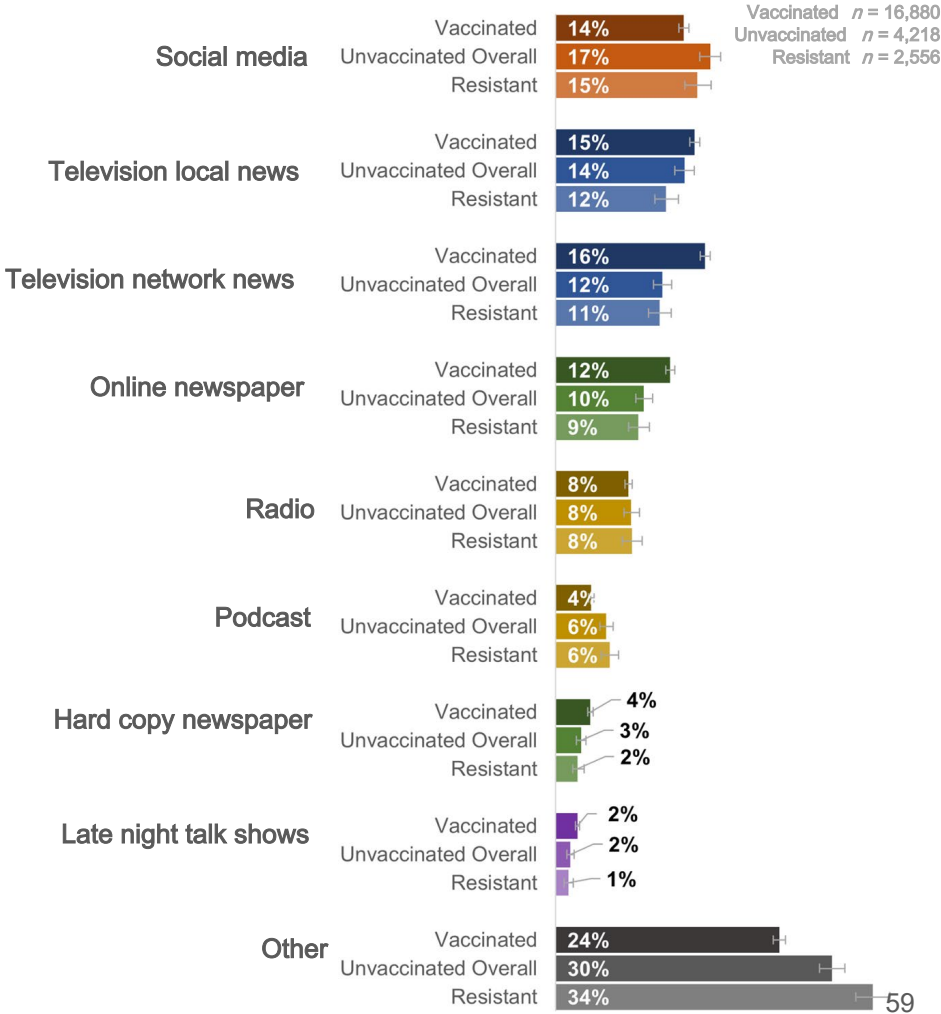
The New York Times



USA TODAY

The Washington Post

n = 225



# Trust: Religious Leader

19%

of **resistant respondents** trusted their **religious leader** to help them decide on whether or not to receive the COVID-19 vaccine

