

Visualizing Global COVID-19 Vaccine and Perceptions in 100+ Countries

Data and Insights from the COVID Behaviors Dashboard

September 21, 2021, 9:30 AM EDT

Susan Krenn

Executive Director

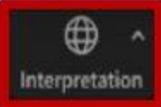
Johns Hopkins Center for Communication Programs

Welcome!

- The webinar is being recorded in English and French.
- We will share the slides and recording with all registrants after the webinar.
- Everyone is on mute during the presentations.
- Please submit questions by typing in the Q&A panel.
- For technology help, send a **private chat**:
 - **English:** Marcela Aguilar
 - **French:** Cynthia Irakoze

Select Your Preferred Language/ Choisissez votre langue préférée

Windows | macOS

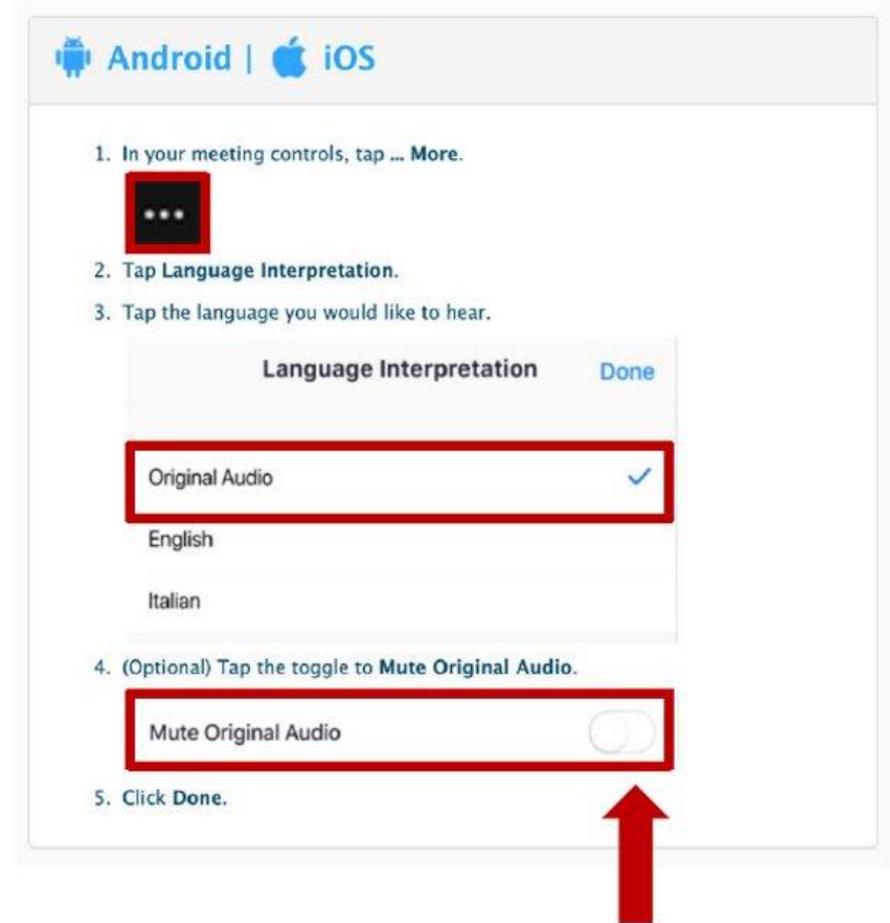
1. In your meeting/webinar controls, click **Interpretation**.

2. Click the language that you would like to hear.

3. (Optional) To only hear the interpreted language, click **Mute Original Audio**.

- Veuillez regarder en bas de votre écran Zoom et repérer l'icône du globe terrestre qui indique "L'Interprétation".
- Veuillez sélectionner votre langue préférée, l'Anglais ou le Français.
 - Si vous choisissez le français, vous pouvez cliquer sur le son original en sourdine si vous ne voulez pas entendre la narration en anglais en arrière-plan.

Select Your Preferred Language/ Choisissez votre langue préférée

- Si vous utilisez sur un appareil mobile Android ou Apple, dans le contrôle de votre réunion, appuyez sur les 3 points, puis sur la langue de l'interprétation.
- Appuyez sur Anglais ou Français.
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Mettre en sourdine

Jeni A. Stolow, Ph.D., MPH

Social and Behavioral Sciences

Temple University College of Public Health
GOARN-Research Risk Communication and
Community Engagement Focal Point

Dominick Shattuck, PhD

Director, Monitoring, Evaluation & Learning
Johns Hopkins Center for Communication Programs

Data Utilization

COVID Behaviors Dashboard is a data utilization project

Goal: Provide timely data about attitudes and behaviors related to COVID-19 vaccines and prevention to public health communication professionals and policymakers.



Collaboration



Carnegie Mellon University

DELPHI GROUP

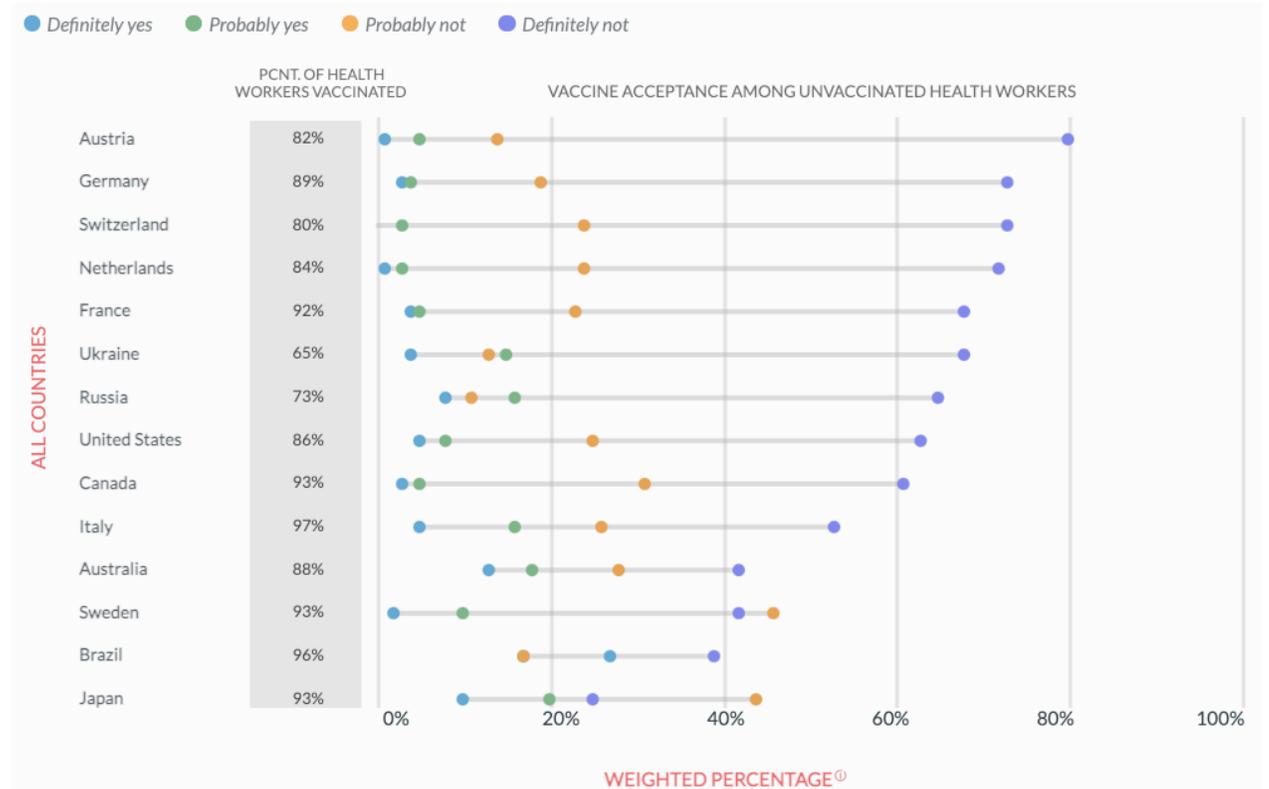
facebook



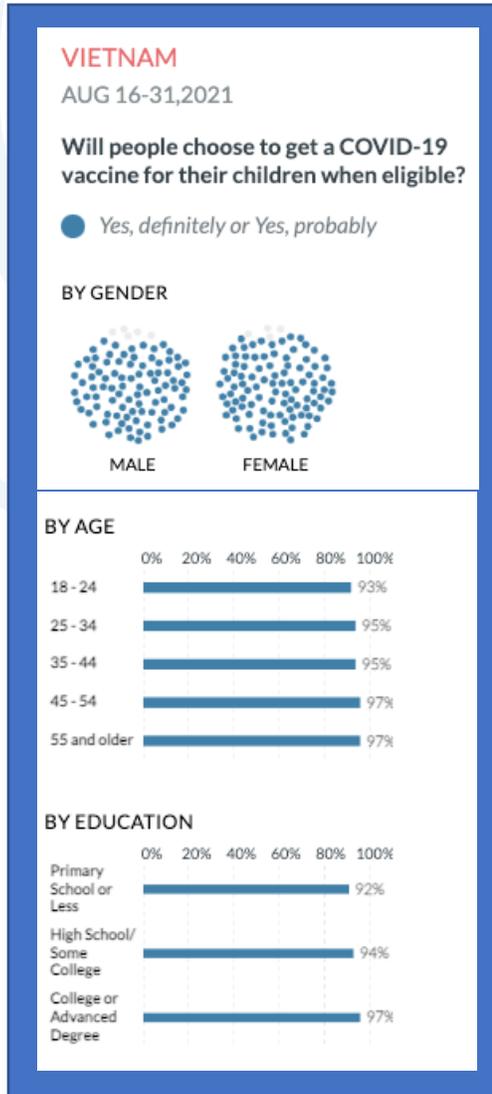
Survey

- COVID-19 Trends and Impact Survey (CTIS)
 - Launched May 20, 2021
 - Updated Symptoms Survey (v. 11)
 - Shift in focus to: Vaccine acceptance and barriers to uptake
 - Dashboard presents data from
 - 1st – 15th
 - 16th – end of month

How does vaccine acceptance among health workers vary across countries?



Survey Content

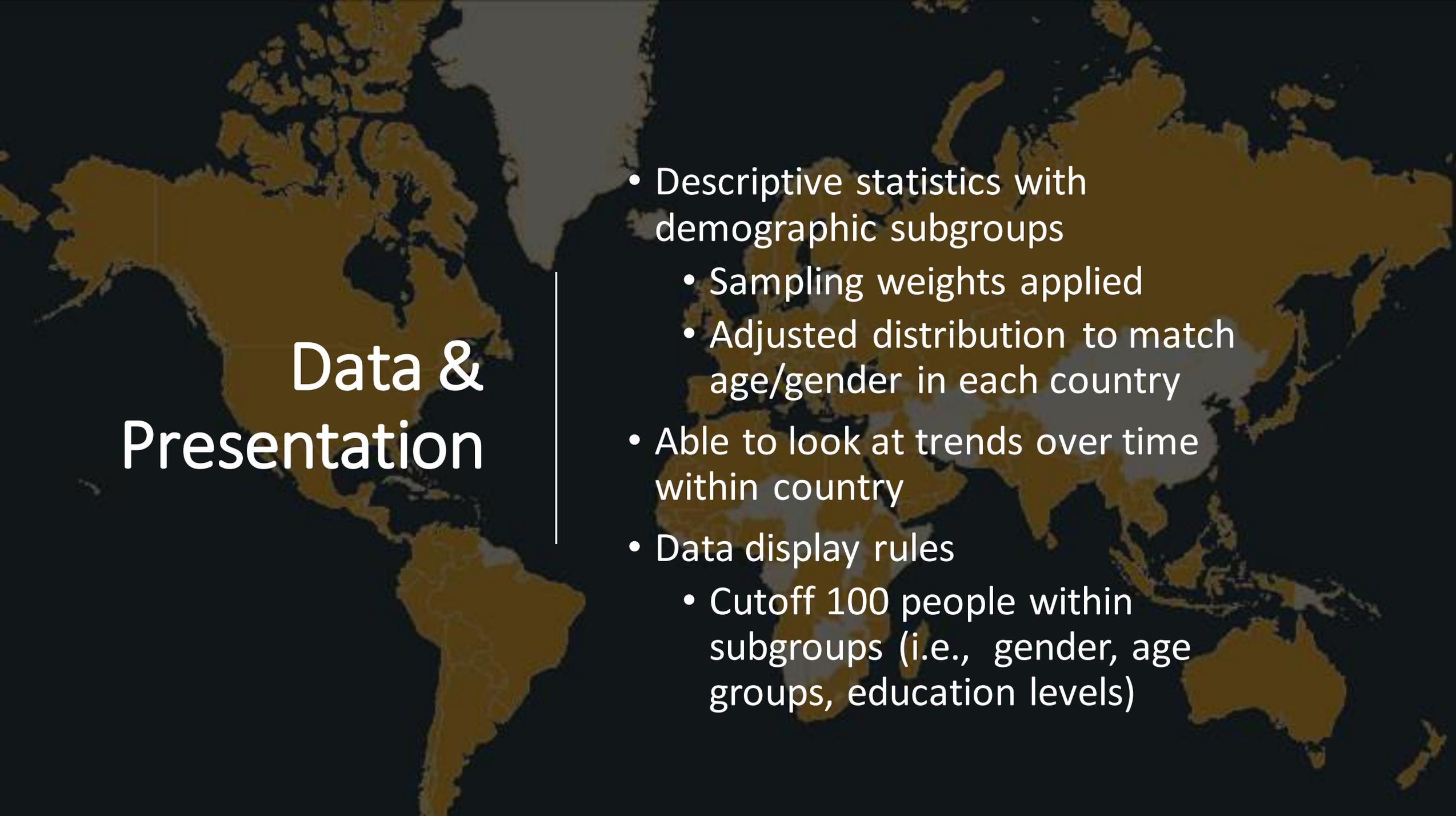


- Main Sections

- COVID Symptoms
- Testing
- Vaccine Acceptance
- Prevention behaviors

- Modules

- Randomly assigned to half of participants
 - A: beliefs and norms, knowledge and information, healthcare
 - B: well-being, parenting behaviors
- Impact
 - Not all participants provide data on all topics limiting interpretation

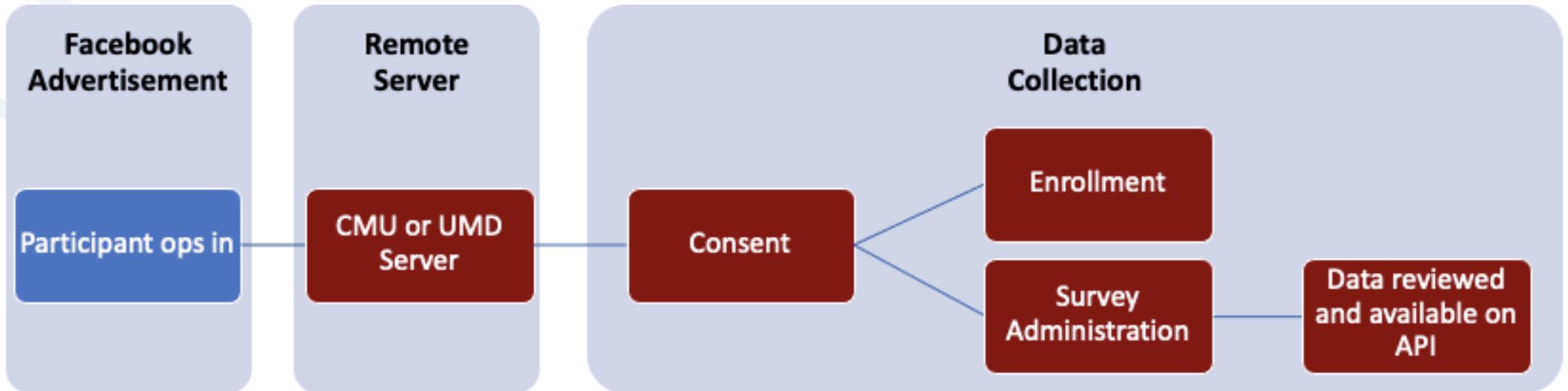
A dark-themed world map with landmasses in a golden-brown color. The map is centered on the Atlantic Ocean, showing North and South America on the left and Europe, Africa, and Asia on the right.

Data & Presentation

- Descriptive statistics with demographic subgroups
 - Sampling weights applied
 - Adjusted distribution to match age/gender in each country
- Able to look at trends over time within country
- Data display rules
 - Cutoff 100 people within subgroups (i.e., gender, age groups, education levels)

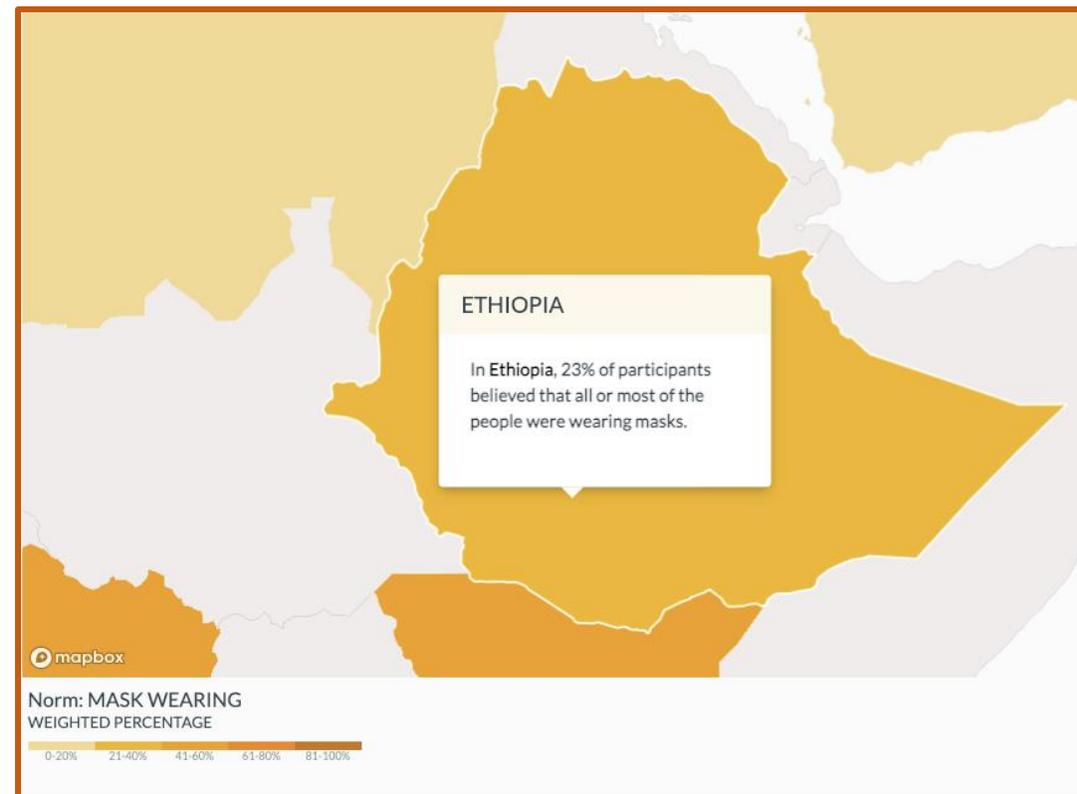
Participant Recruitment

- Only summary statistics are shared with Facebook.
- No individual level responses are shared.



Coming Soon

- Subnational view coming
 - Will be limited in some settings
- Country specific PDFs
 - Download and go
- Guided PowerPoint Template
 - Provides instructions for downloading images
 - Interpretation guidance
- Technical Briefs
 - Regional and country specific analyses



Tuo-Yen Tseng, MA, PhD candidate

Data Analyst

Johns Hopkins School of Public Health

COVID Behaviors Dashboard

EXPLORE: Global and Regional View of Vaccine Acceptance and Related Behaviors

Johns Hopkins Center for Communication Programs' COVID Behaviors Dashboard presents data from a global survey of knowledge, attitudes and practices around COVID-19. This analysis is generated from the Delphi Group at Carnegie Mellon University COVID-19 Trends and Impact Survey and University of Maryland Social Data Science Center COVID-19 Trends and Impact Survey (CTIS), in collaboration with Facebook.

Analysis and content on the COVID Behaviors Dashboard is developed by Johns Hopkins Center for Communication Programs and the World Health Organization's (WHO) Global Outbreak Alert and Response Network (GOARN). Scroll down to explore the data for a country or WHO region.

WHO REGION 

COUNTRIES 

ALL 

ALL 



 mapbox

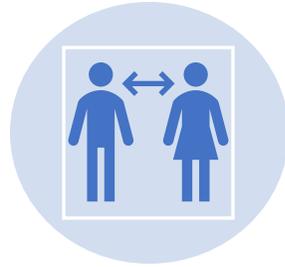
 Available countries based on the last survey period. [Click to see sample size](#)

<https://covidbehaviors.org>

Four Topic Areas



Vaccine



Behavior



Knowledge &
Information



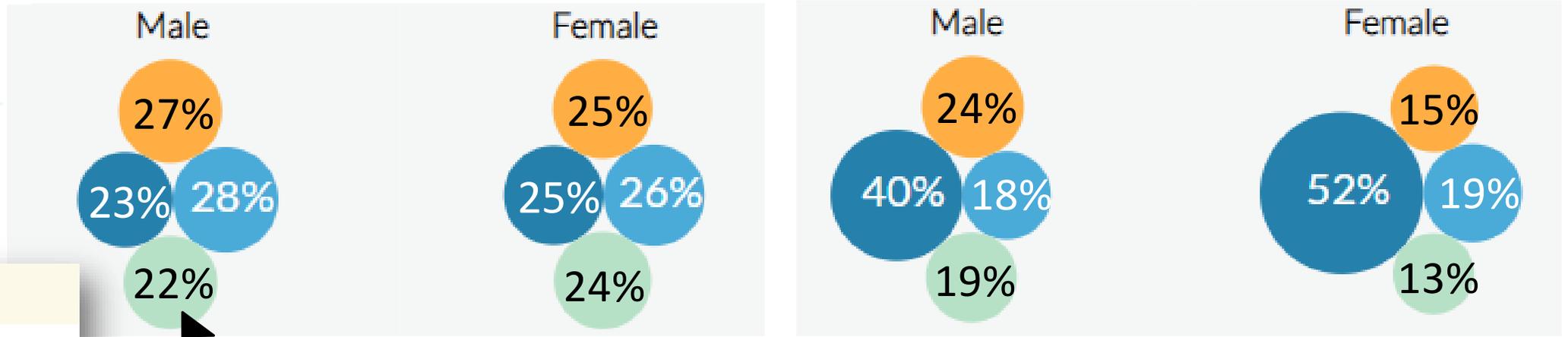
Testing



Among unvaccinated participants, who is most willing to accept a vaccine?

Argentina, Aug 16-31

Brazil, Aug 16-31



ARGENTINA

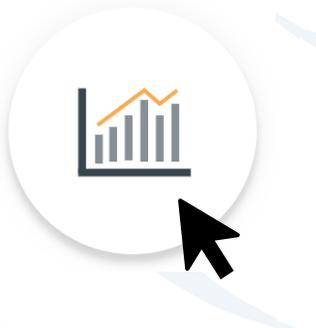
Among unvaccinated male participants in Argentina, 22% said they would probably not get vaccinated in the future.

● Will definitely get vaccinated ● Will probably get vaccinated ● Will probably not get vaccinated ● Will definitely not get vaccinated

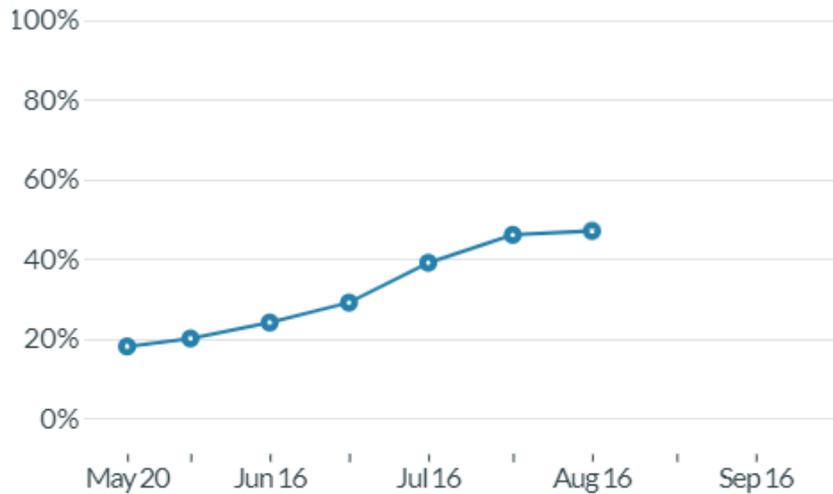




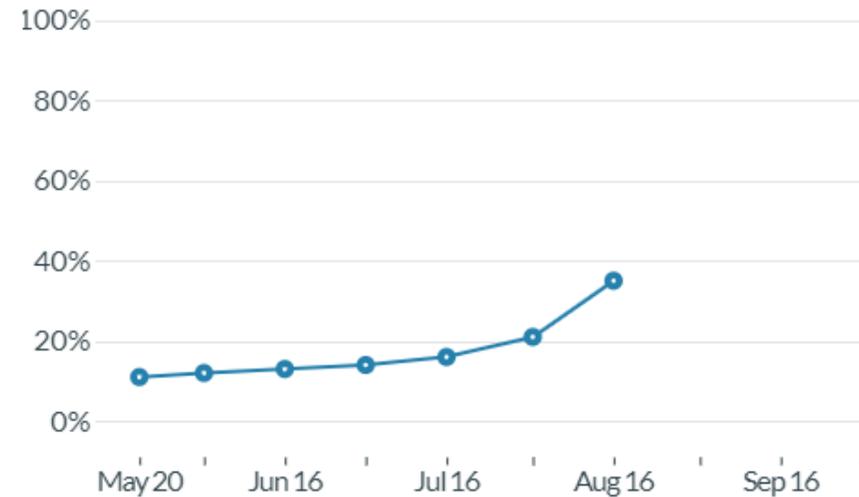
How is vaccine hesitancy among unvaccinated participants changing over time?



Argentina



Brazil



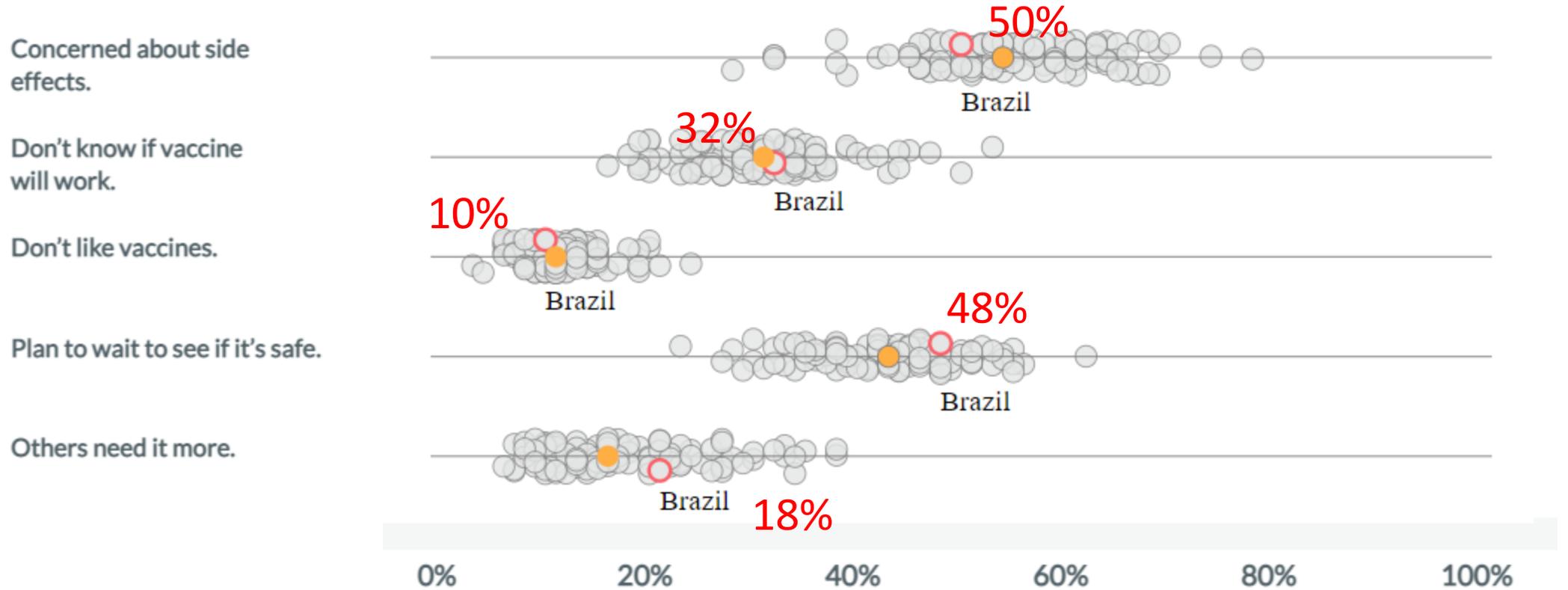
● *Unvaccinated reporting they will probably or definitely **not** get vaccinated*





Reasons driving vaccine hesitancy among unvaccinated participants in Brazil

● Represents the *Weighted Percentage* for one country. ● The global median ○ The selected country Aug 16-31, 2021

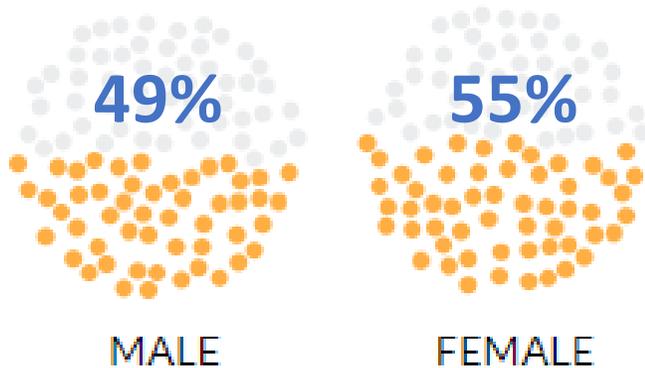




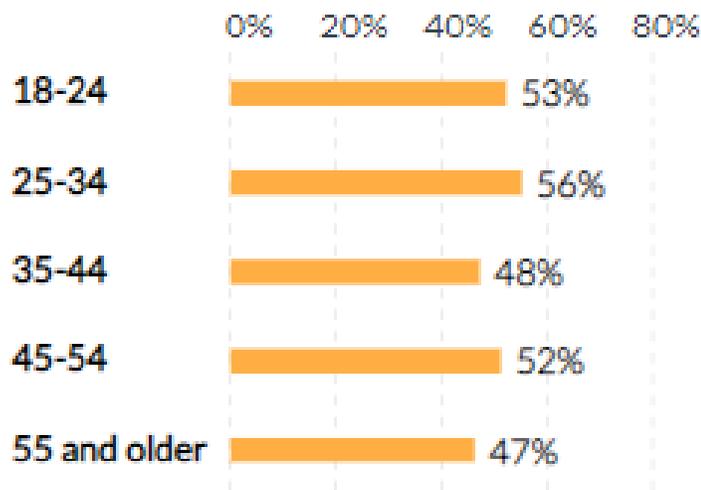
Concerns about side effects among unvaccinated participants in different demographic groups

Brazil, Aug 16-31

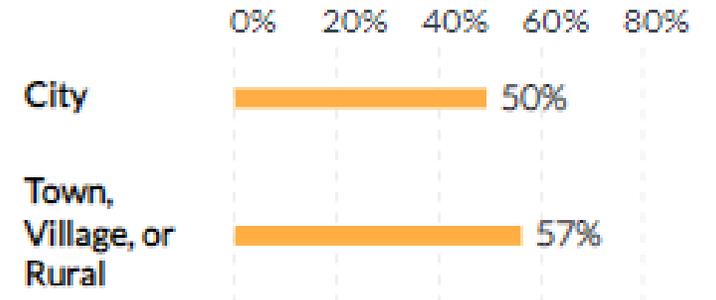
BY GENDER



BY AGE



BY RESIDENCE



Vaccine

Behavior

Knowledge & Info

Testing

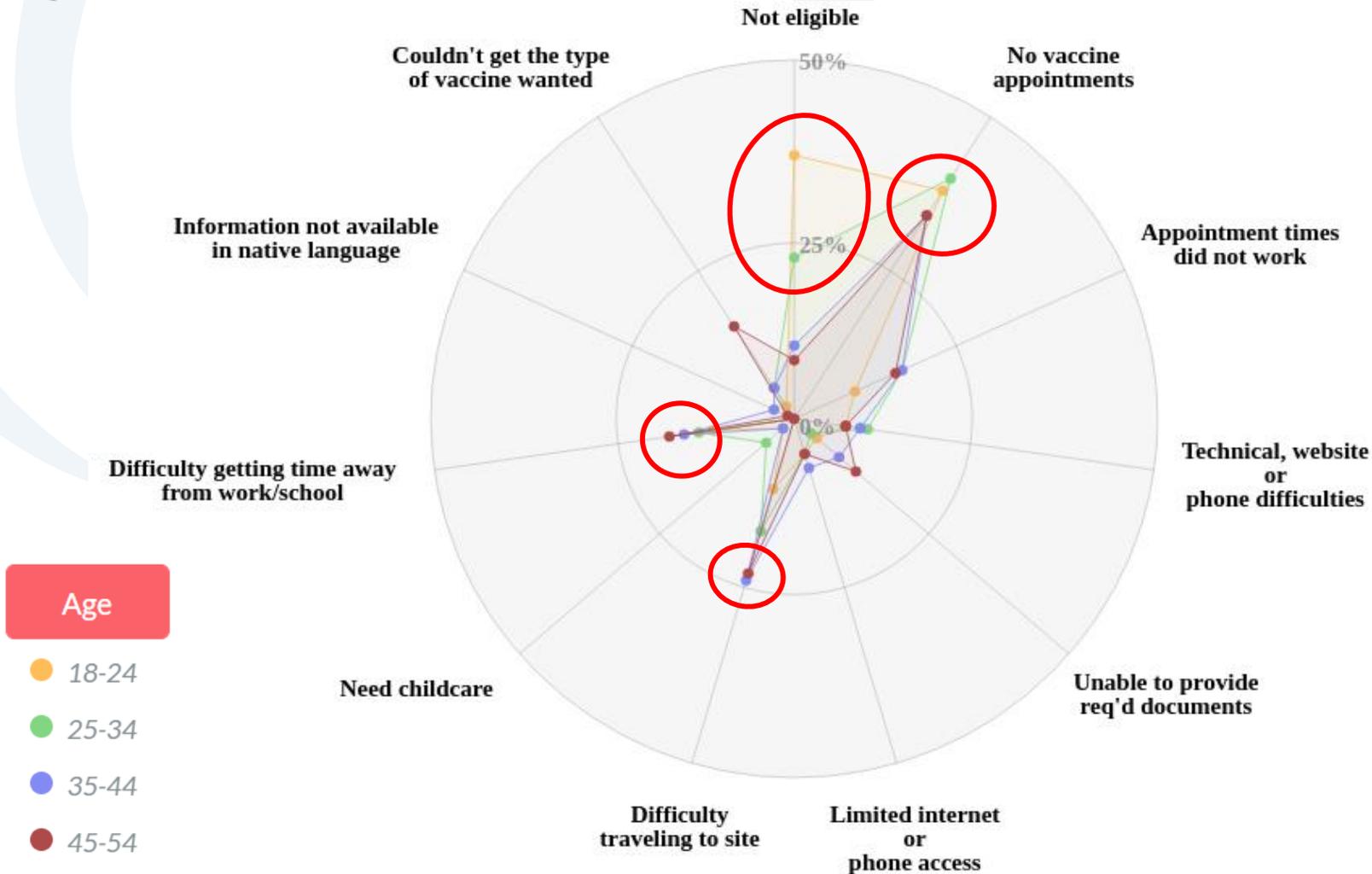


Structural barriers to vaccination

Brazil | Aug 16-31, 2021

Top structural barriers:

1. No vaccine appointments (34%)
2. Not eligible (23%)
3. Difficulty traveling to site (15%)
4. Appointment times did not work (14%)
5. Difficult to leave work or school (13%)





PLAY

MAY

20-31

JUN

01-15

JUN

16-30

JUL

01-15

JUL

16-31

AUG

01-15

AUG

16-31

SEPT

01-15

SEPT

16-30

OCT

01-15

OCT

15-30

NOV

1-15

NOV

15-30

DEC

1-15

DEC

15-30

SELECT DEMOGRAPHIC GROUP

Total

Gender

Age

Education

Residence

CLEAR ALL

LEGEND
DEMOGRAPHIC GROUPS

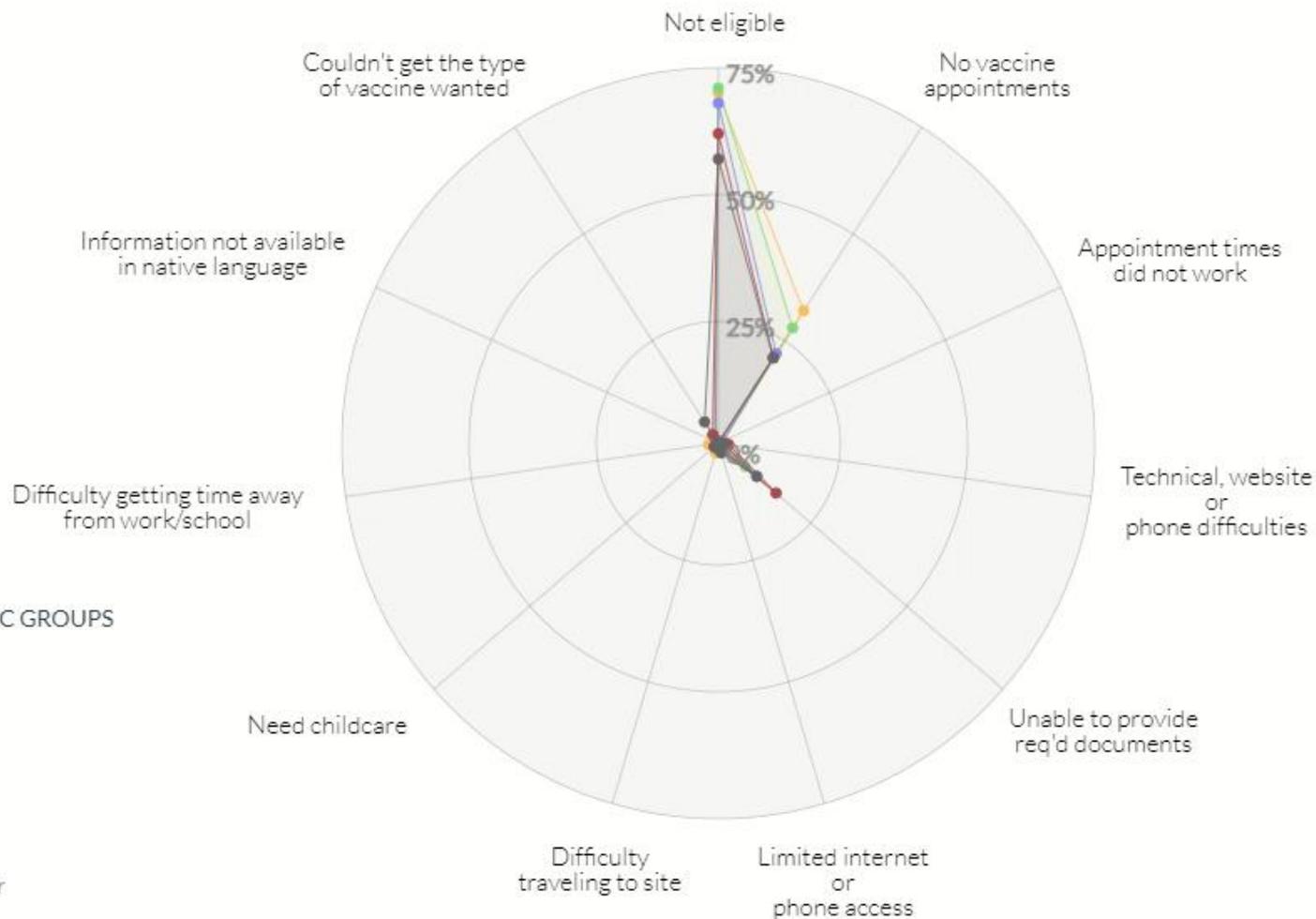
18-24

25-34

35-44

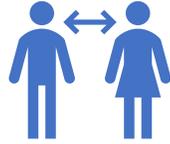
45-54

55 and older



Brazil

Changes in reported structural barriers to vaccination over time



COVID-19 prevention behaviors





Returning to daily activities

● Went to work or school

● Went to an indoor market

● Ate or drank at a restaurant

● Spent time indoors with others

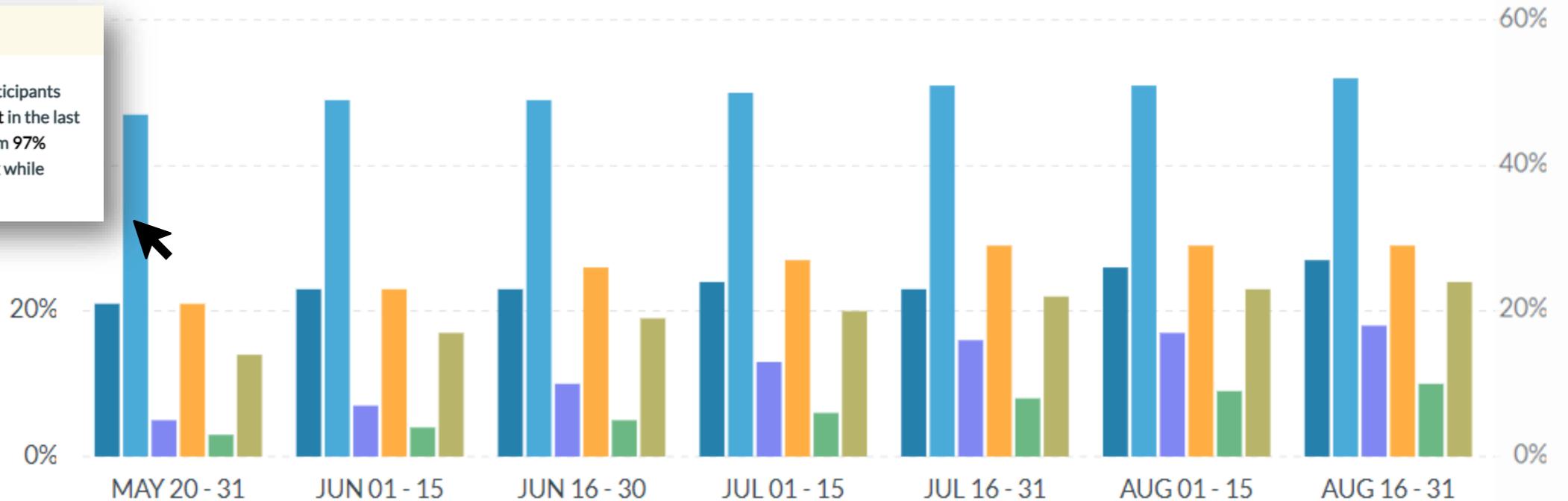
● Attended an indoor event with 10+ people

● Used public transit

Argentina

ARGENTINA

In Argentina, 47% of participants went to an indoor market in the last 24 hours and among them 97% reported wearing a mask while performing this activity.





Returning to daily activities

● Went to work or school

● Went to an indoor market

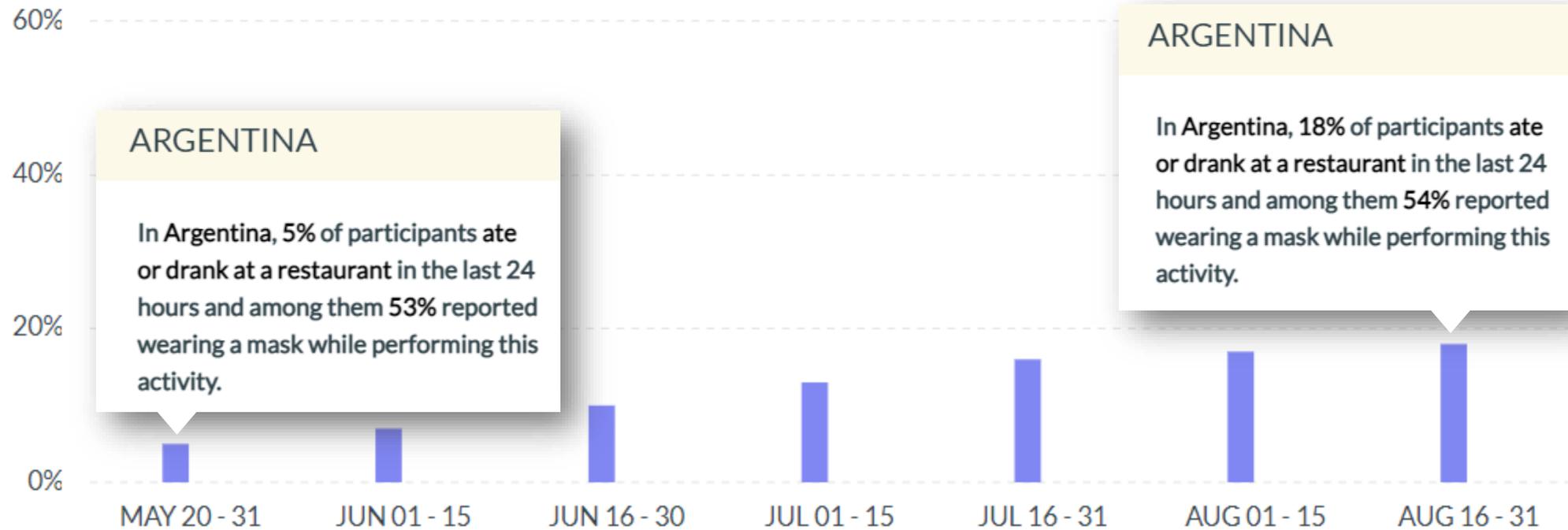
● Ate or drank at a restaurant

● Spent time indoors with others

● Attended an indoor event with 10+ people

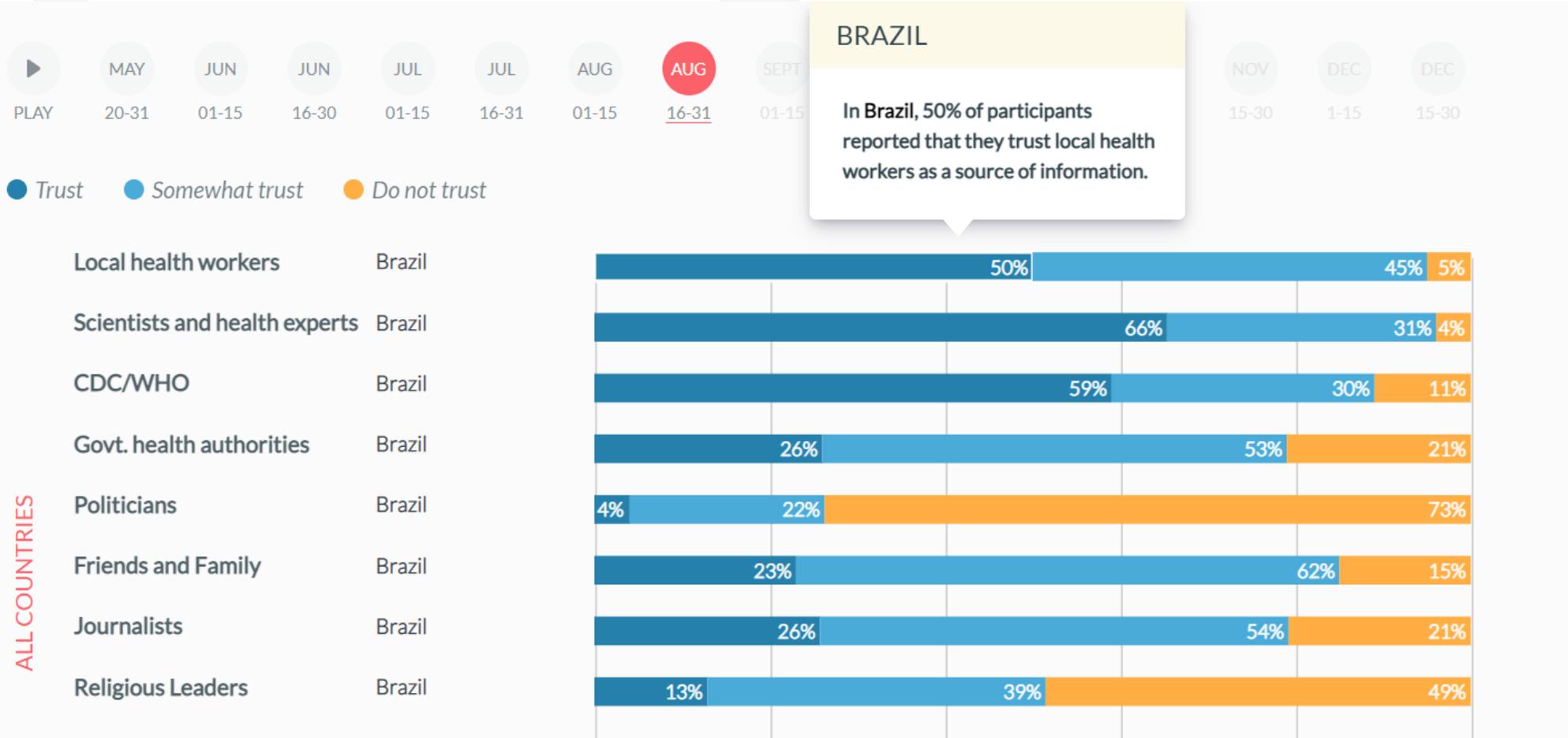
● Used public transit

Argentina





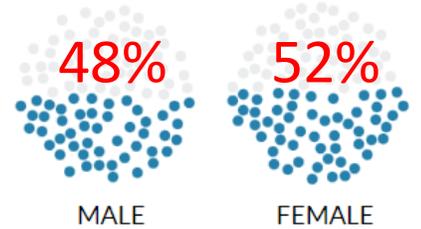
Trust in information sources



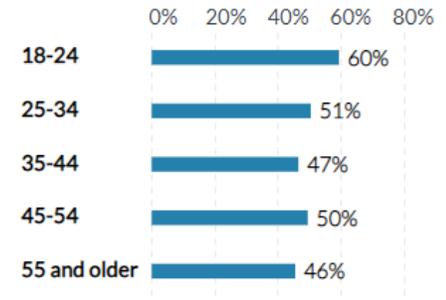
LOCAL HEALTH WORKERS

● Trust

BY GENDER



BY AGE



Vaccine

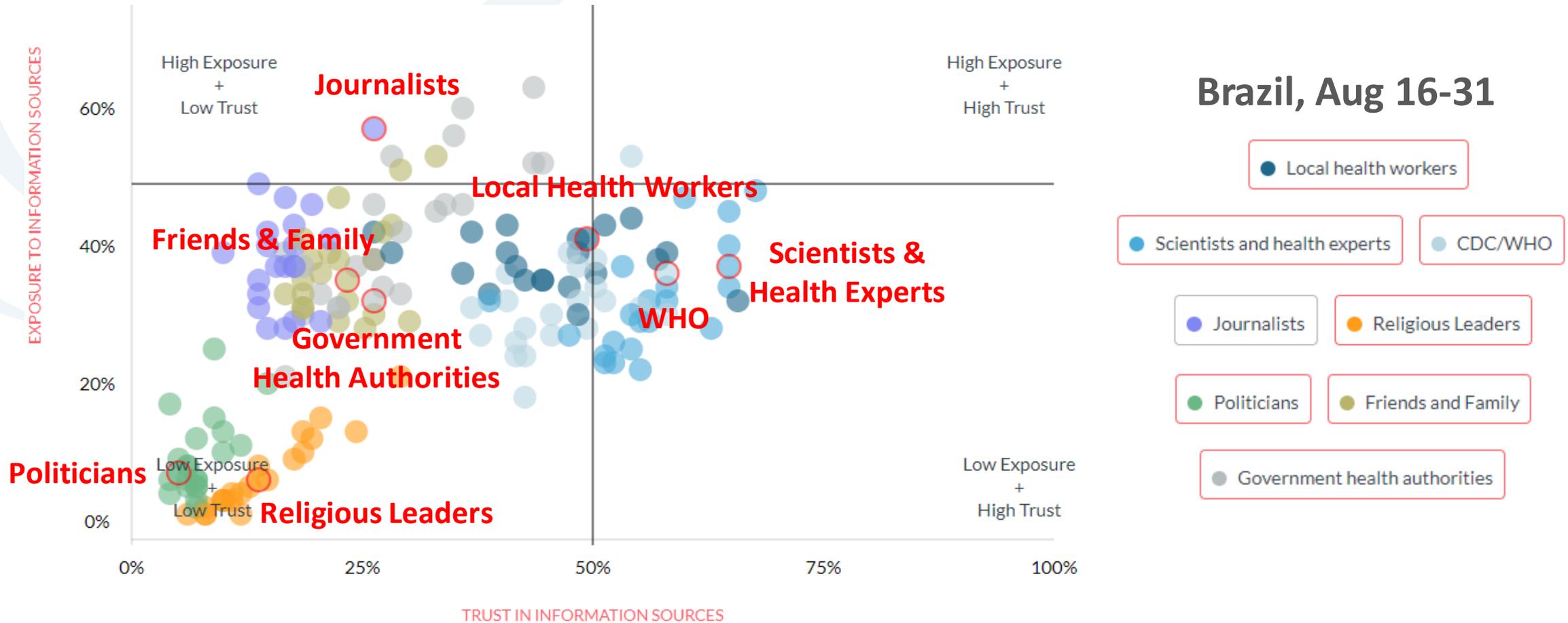
Behavior

Knowledge & Info

Testing

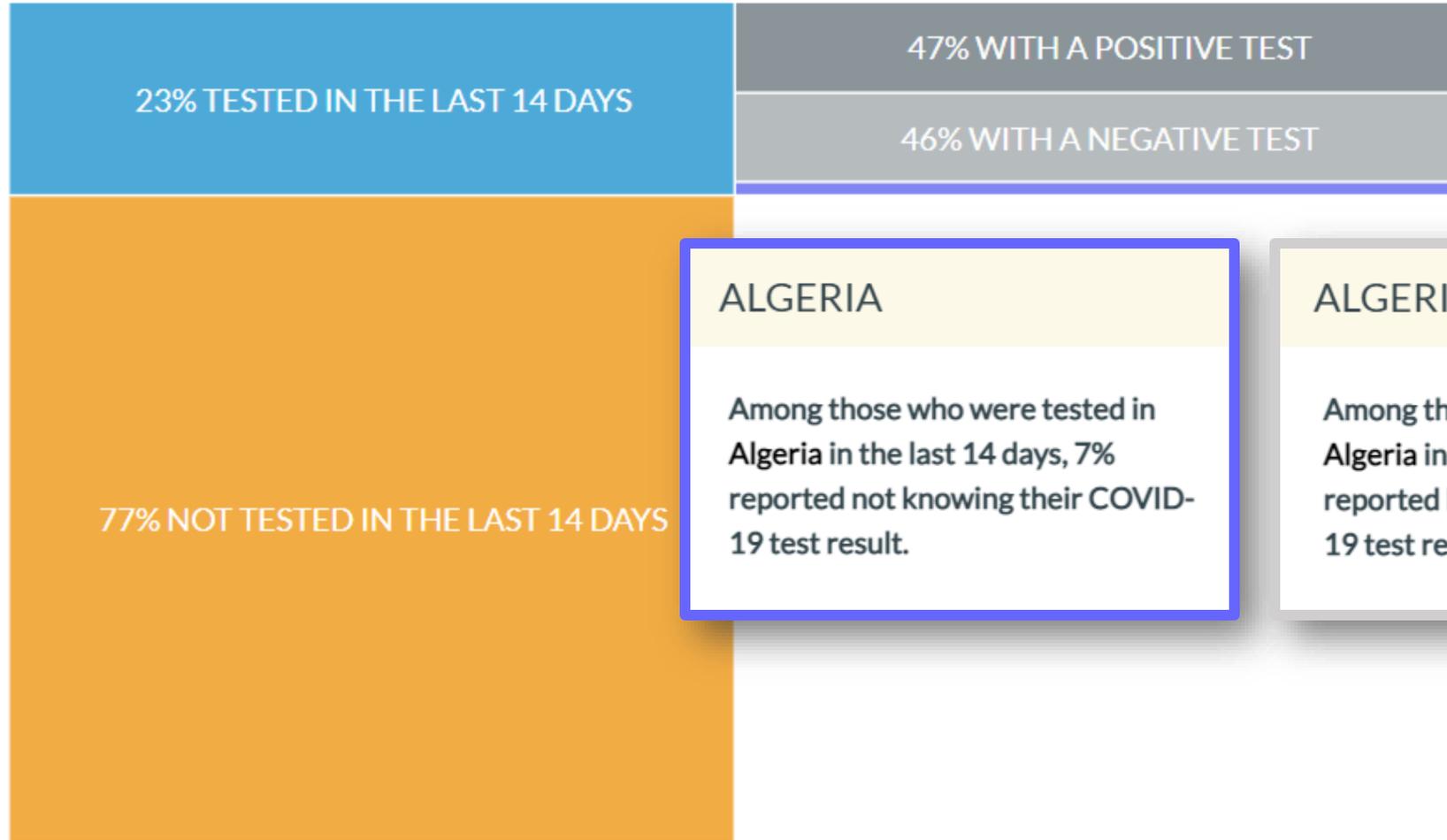


Trusted & accessed information sources for COVID-19





COVID-19 testing rates



ALGERIA AUG 16-31, 2021

Among those who were tested in Algeria in the last 14 days, 47% reported having a positive COVID-19 test result.

ALGERIA

Among those who were tested in Algeria in the last 14 days, 7% reported not knowing their COVID-19 test result.

ALGERIA

Among those who were tested in Algeria in the last 14 days, 46% reported having a negative COVID-19 test result.



J. Douglas Storey, PhD

Associate Professor, Johns Hopkins Center
for Communication Programs

Use of the dashboard for strategic planning

Examples from 3 BA countries

- Nigeria
- Indonesia
- Guatemala

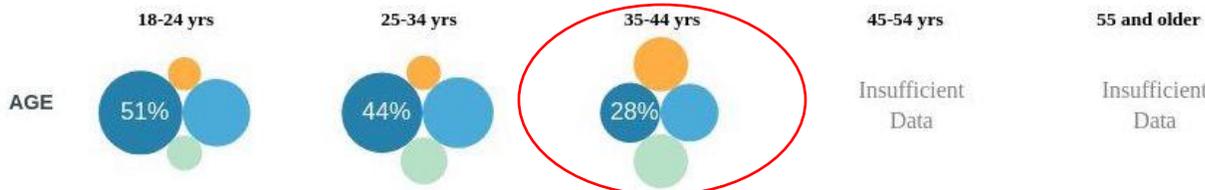
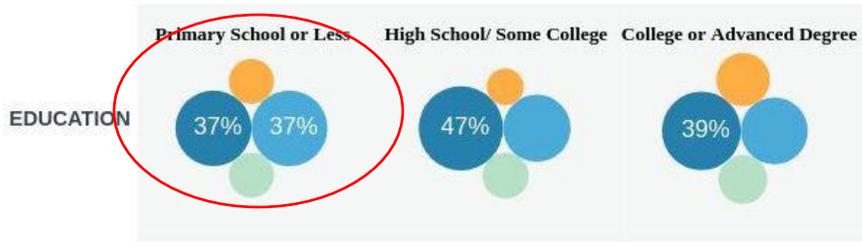
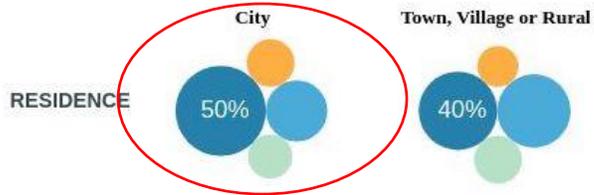
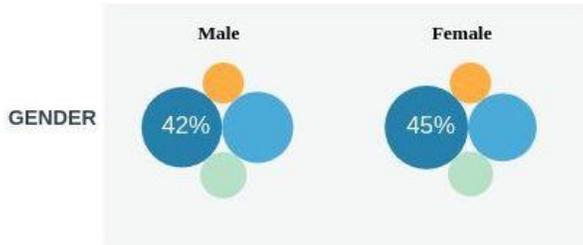
Opportunities for use of dashboard data

- Identifying a target audience
- Selecting intervention channels
- Identifying potential mechanisms/levels of change
- Identifying message content

Identifying an audience: Guatemala—Demographic differences in acceptance



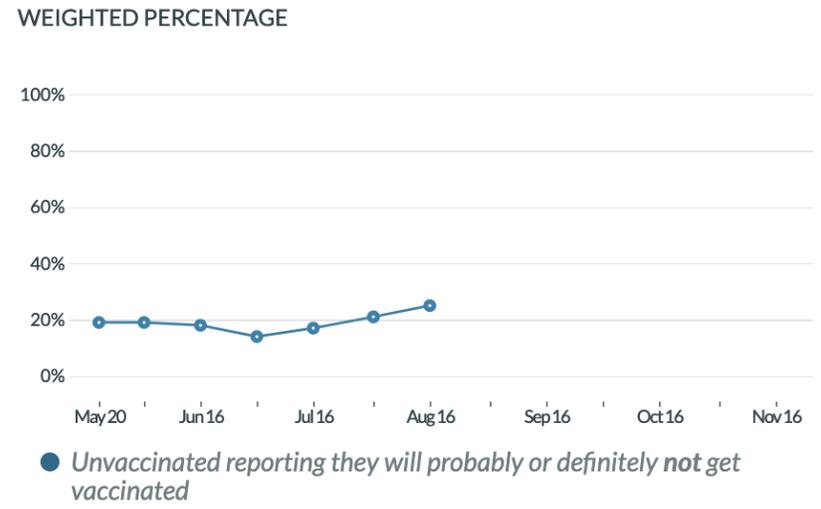
● Will definitely get vaccinated
● Will probably get vaccinated
● Will probably not get vaccinated
● Will definitely not get vaccinated



73-75% total, but rural residents, lower education, and older are less certain
*** Focus on them?**

Vaccine resistance has fluctuated, but has increased some from 15% in early July to 25% in late August
*** Focus on rising concerns or focus on those who are receptive to change?**

HOW IS VACCINE HESITANCY CHANGING IN GUATEMALA OVER TIME? ✕



DURING THE REPORTING PERIOD FROM **AUG 16-31, 2021** IN **GUATEMALA**:

- 25% of unvaccinated participants reported they will probably or definitely not get vaccinated

Identifying an Audience: Indonesia & Nigeria: Fewer demographic gaps

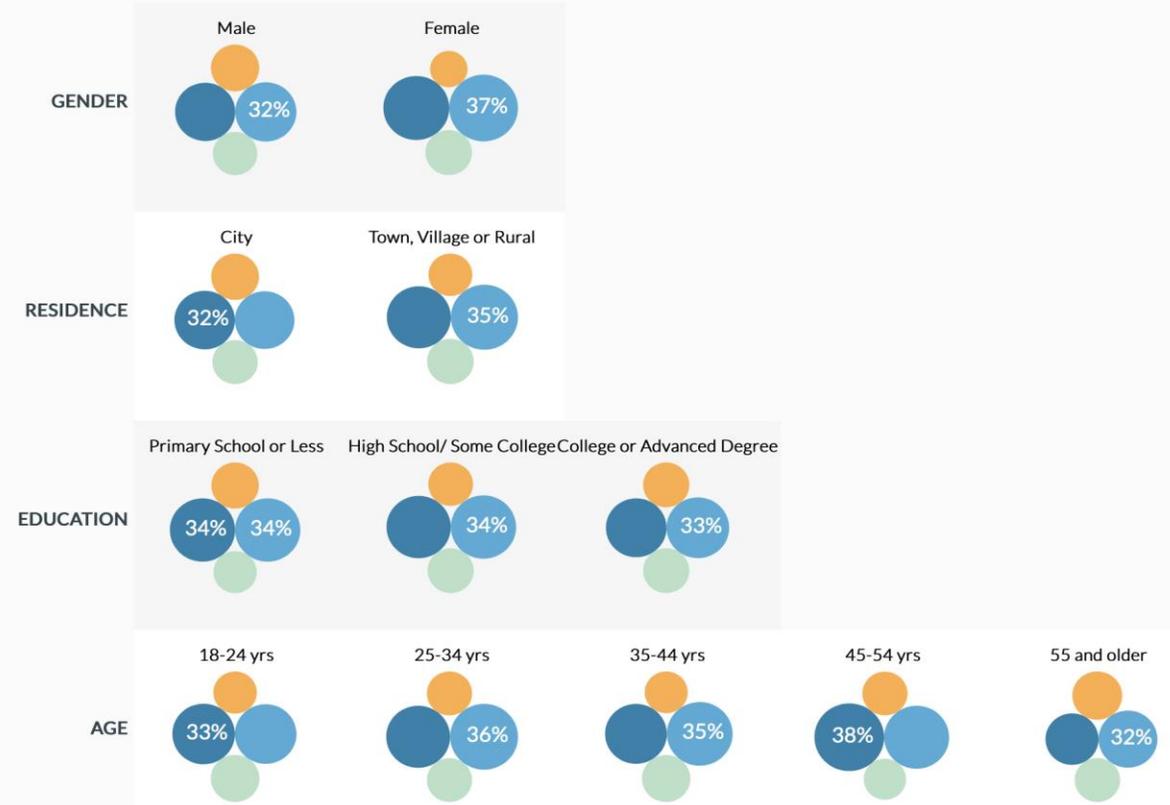
Hesitancy levels are more stable than in Guatemala

*** A general public campaign may be possible**

INDONESIA—August 2021

Unvaccinated Participants

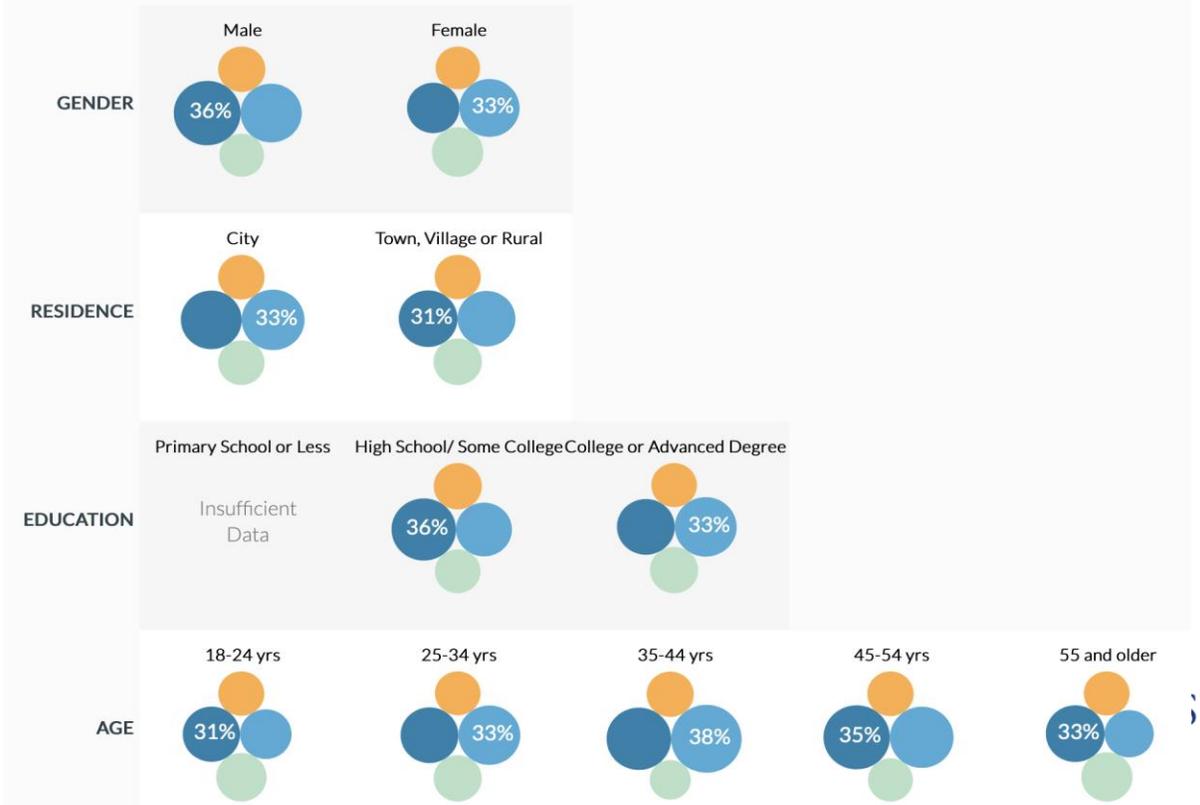
● Will definitely get vaccinated ● Will probably get vaccinated ● Will probably not get vaccinated ● Will definitely not get vaccinated



NIGERIA—August 2021

Unvaccinated Participants

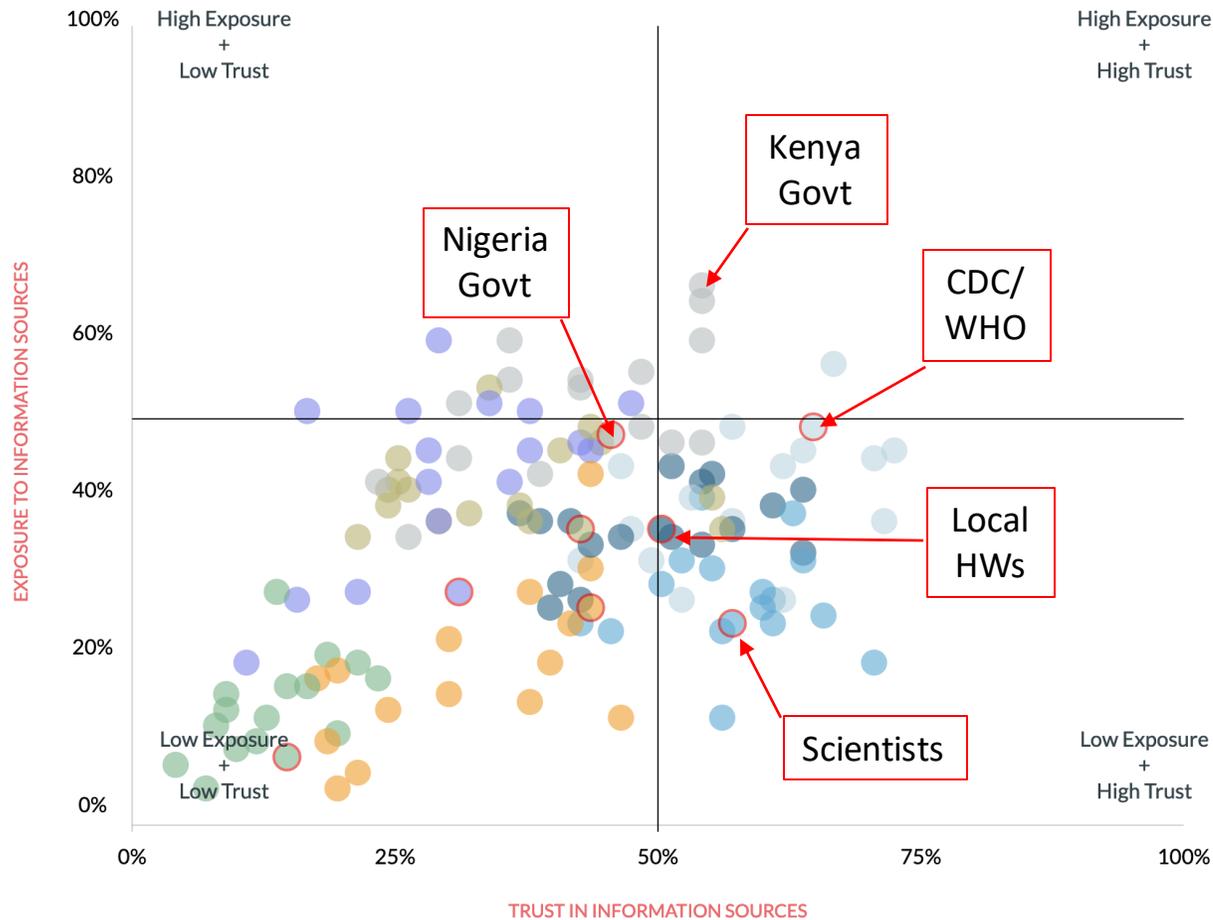
● Will definitely get vaccinated ● Will probably get vaccinated ● Will probably not get vaccinated ● Will definitely not get vaccinated



Selecting Intervention Channels: Nigeria—Exposure to & trust in sources

- Local health workers
- Scientists and health experts
- CDC/WHO
- Journalists
- Religious Leaders
- Politicians
- Friends and Family
- Government health authorities

**CDC was asked in the US, WHO in all other countries*



Generally want to use channels that are most trusted AND reach the most people

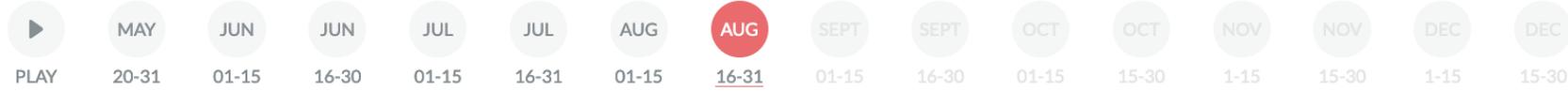
Source	Trust (%)	Reach (%)
CDC/WHO	66	49
Scientists/health experts	57	24
Local health workers	51	36
Government	46	48
Politicians	14	7

Compare Nigeria to Kenya, where trust in (55%) and exposure to (66%) government information sources are both higher.

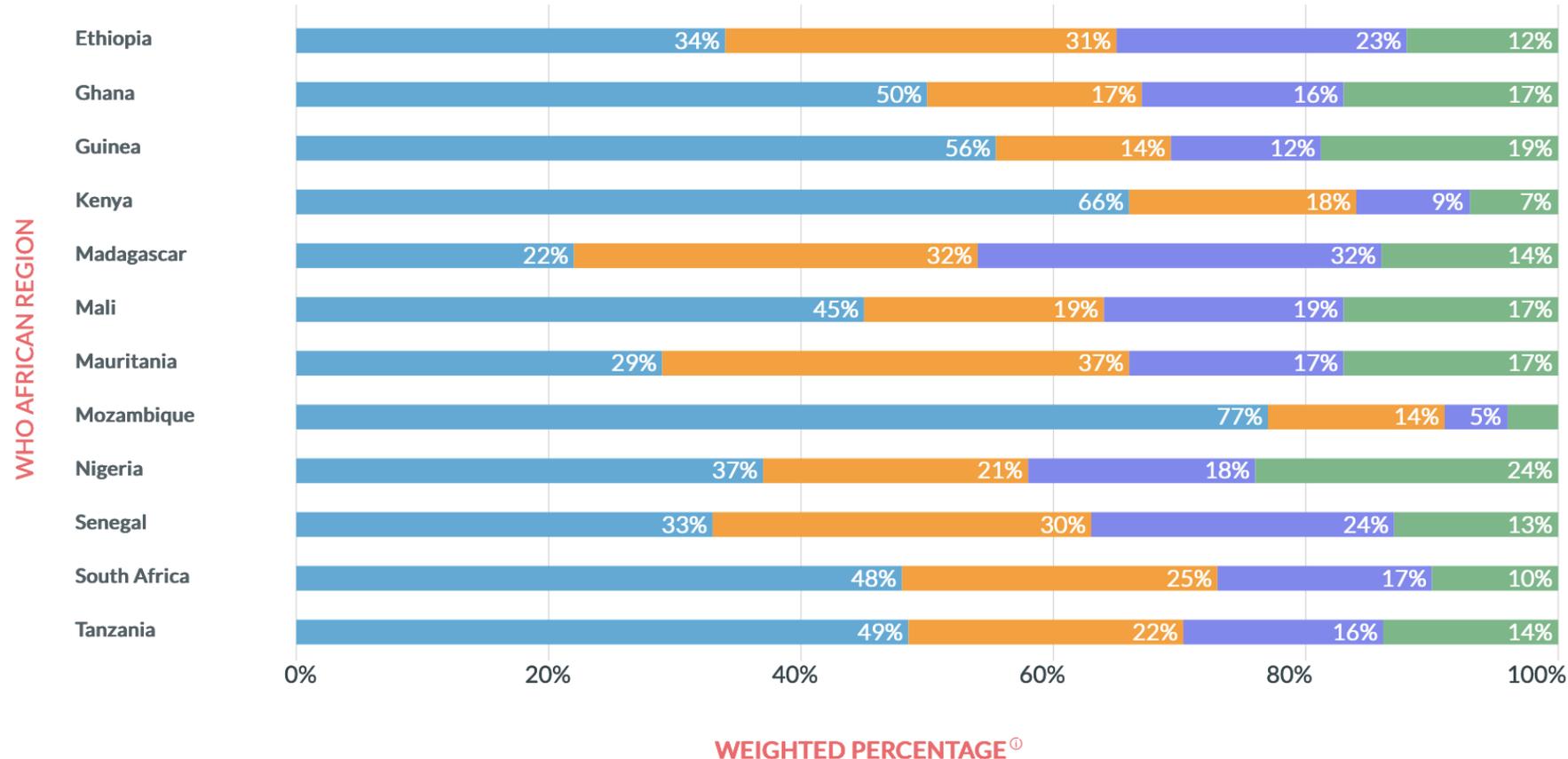
*** Increase reach of local HWs; Improve reputation of government sources**

Identifying Mechanisms of Change

Nigeria: Threat perception as motivator



● *A great deal* ● *A moderate amount* ● *A little* ● *Not at all*



Only two other countries in the African Region report lower levels of perceived threat of COVID compared to Nigeria, yet over 20% of people in the country believe that they have had COVID.

Behavior change theories generally show that perceived threat motivates protective action.

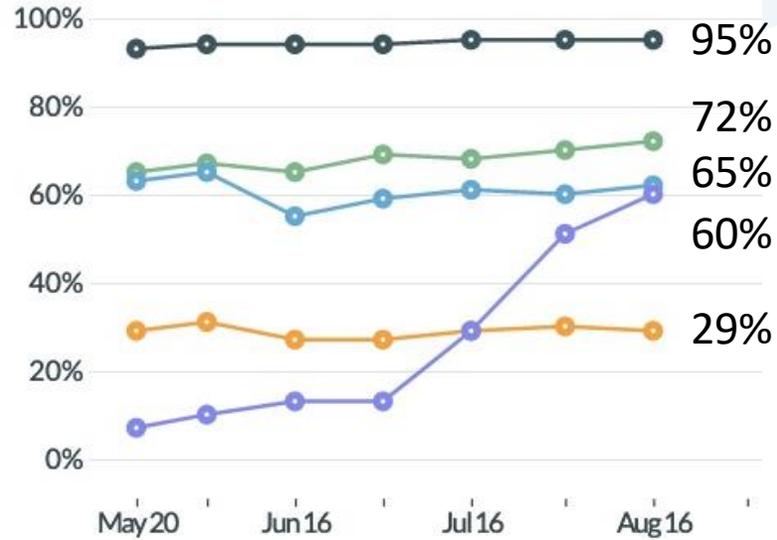
*** Consider messages about current infection rates to help people correctly understand their risk.**

Identifying Mechanisms of Change

Norms as motivator

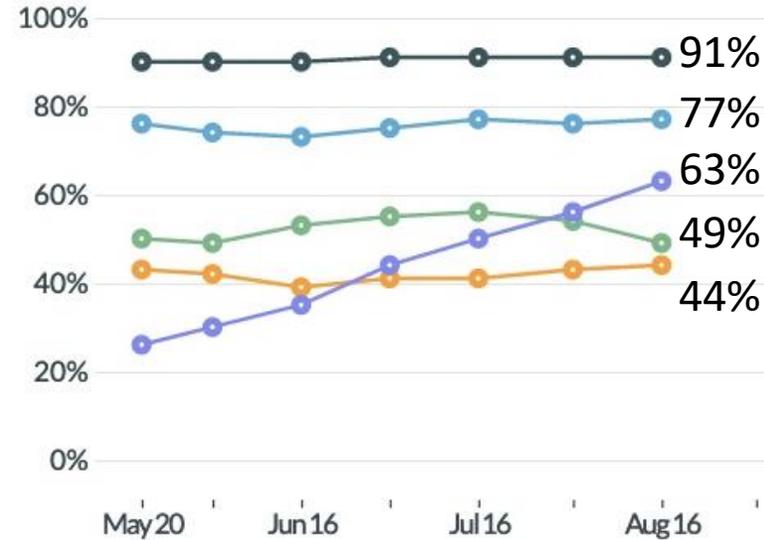
Guatemala

WEIGHTED PERCENTAGE



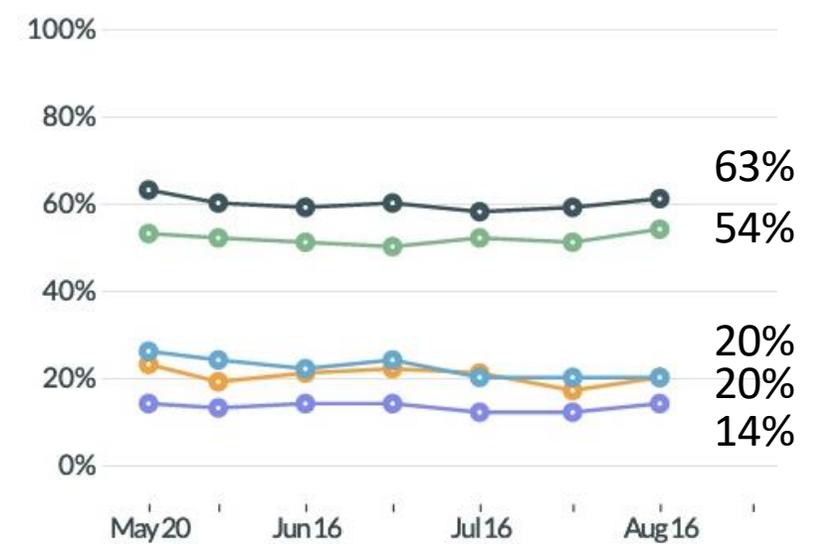
Indonesia

WEIGHTED PERCENTAGE



Nigeria

WEIGHTED PERCENTAGE



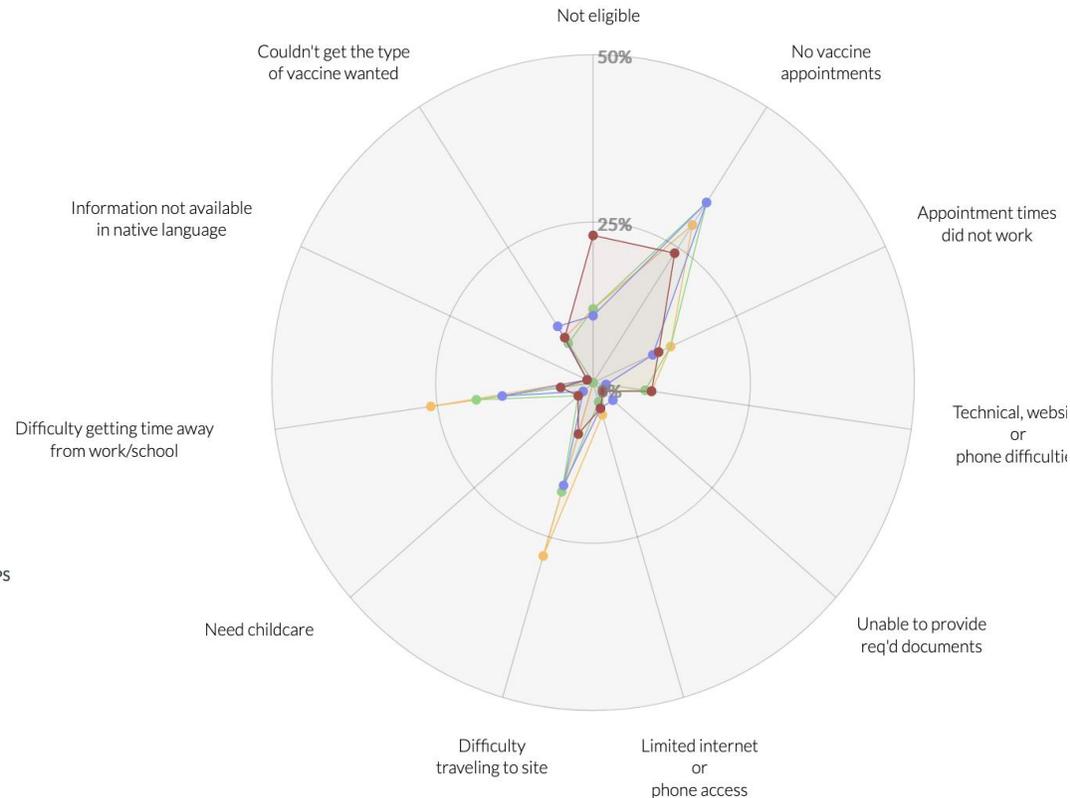
- *Norm: all or most people wear a mask*
- *Norm: all or most people are vaccinated*
- *Norm: all or most people maintain the locally recommended distance*
- *Behavior: avoid contact all or most of the time*
- *Behavior: wear a mask all or most of the time*

Vaccination norms rising in Guatemala & Indonesia, not in Nigeria
Perceived masking norms lower (20%) than actual masking behavior (53%) in Nigeria

*** Reinforce positive norms, publicize gap between actual and perceived behavior.**

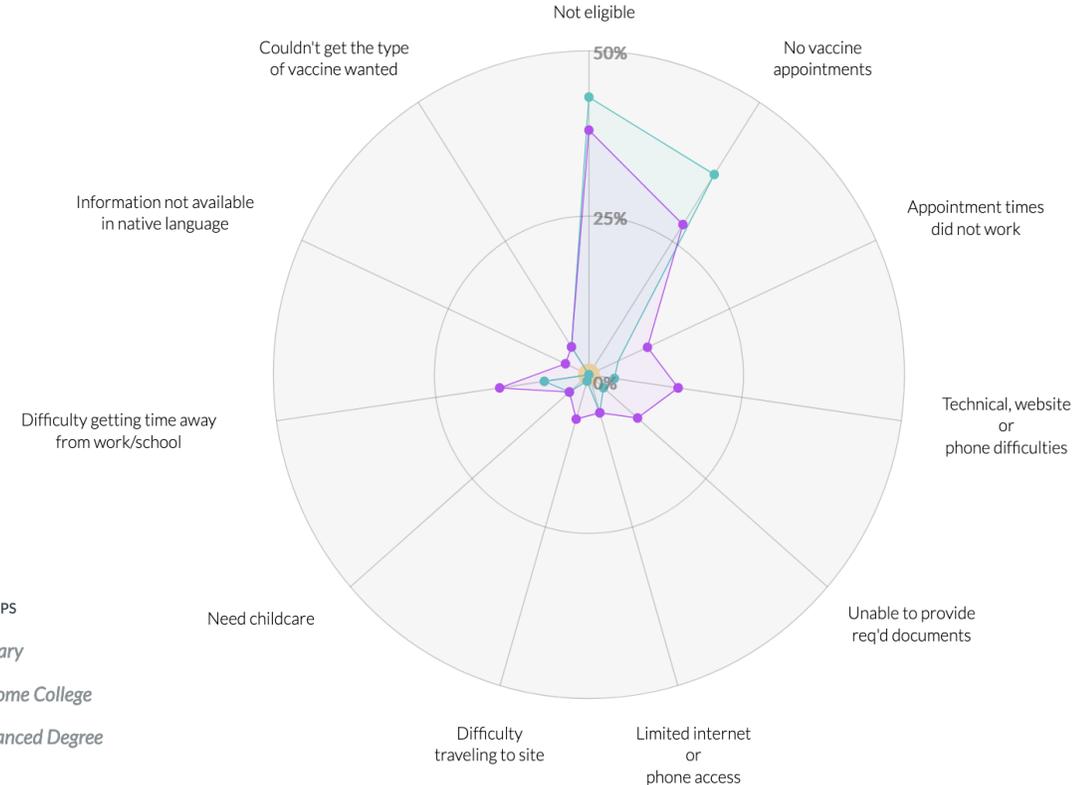
Identifying Mechanisms of Change Indonesia & Guatemala—Structural & policy barriers

Indonesia: Age differences



Younger Indonesians: Time & travel constraints
Older Indonesians: Eligibility, no appointments available
*** Consider travel subsidies, time off from work, school-based programs, change eligibility rules**

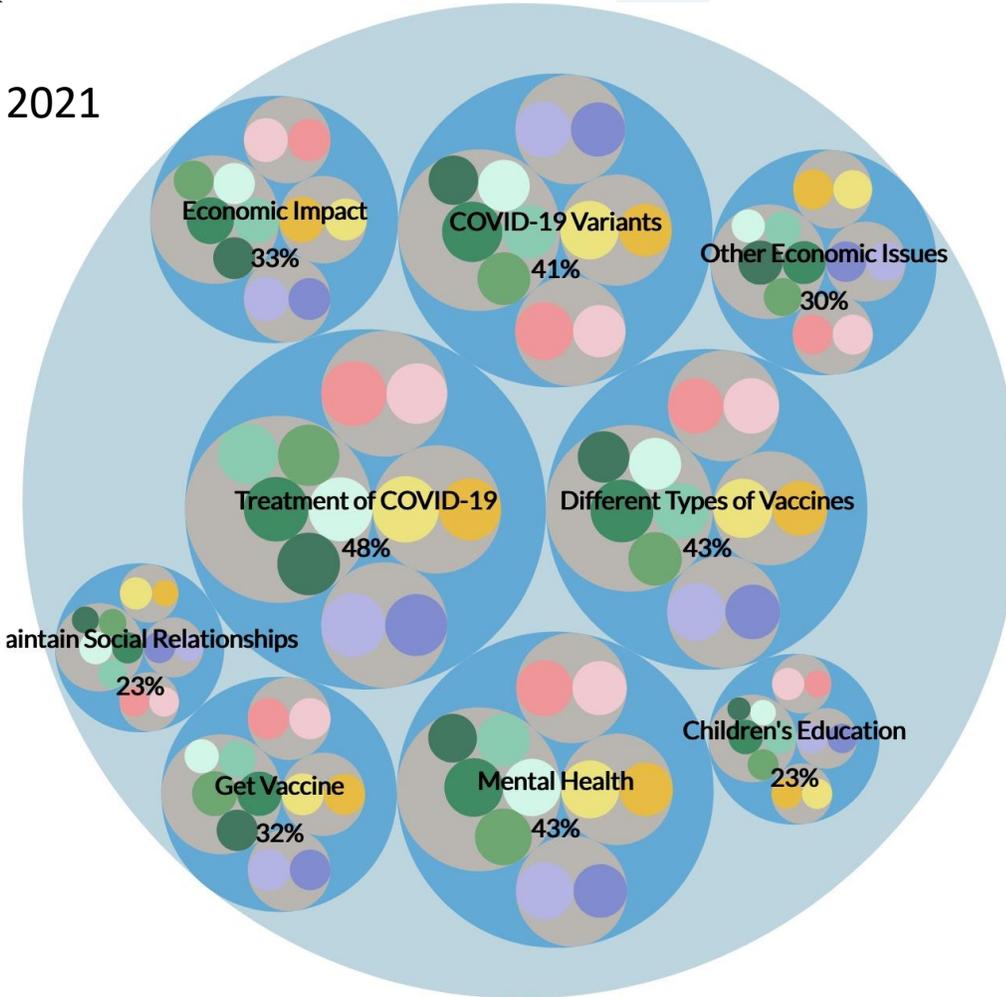
Guatemala: Education differences



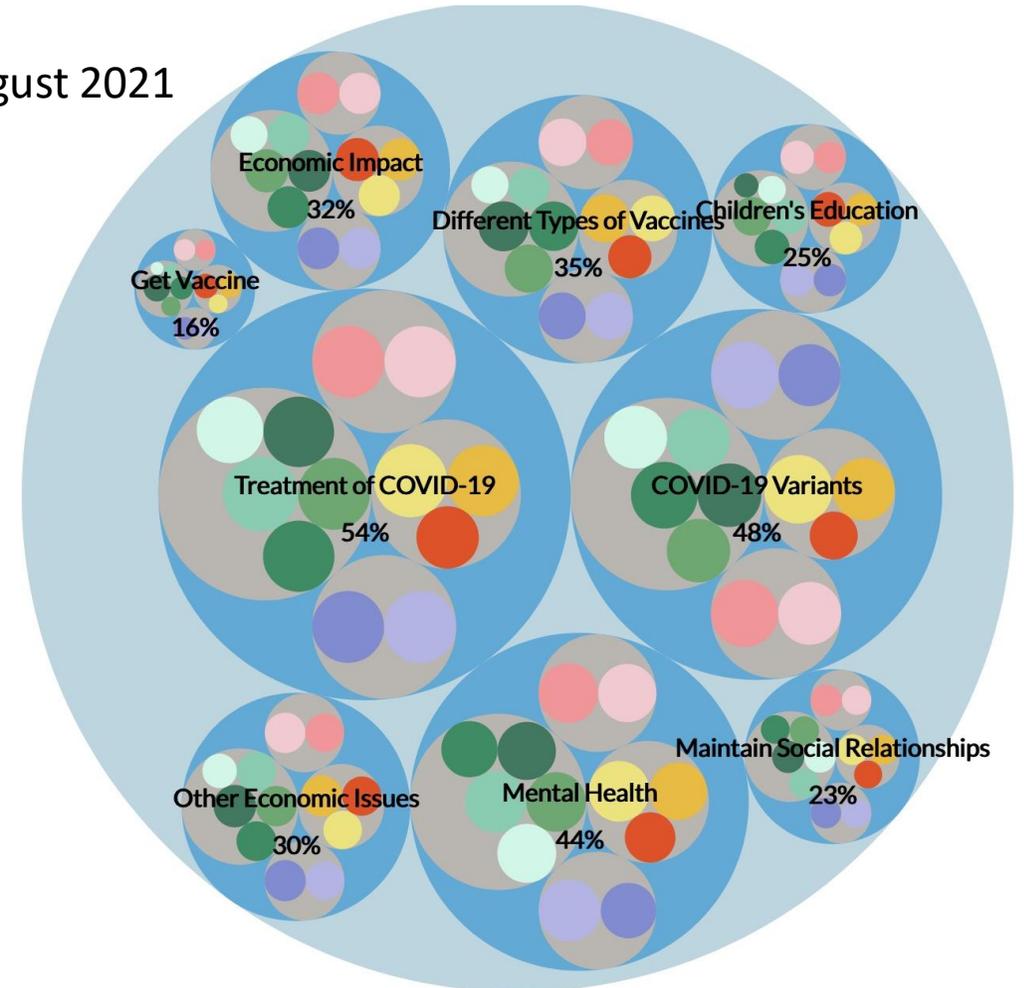
Middle education: Eligibility, no appointments available
Higher education: Time, travel, technology issues
*** Consider changing eligibility rules, improve online and mobile access**

Messaging: Informational focus Guatemala — May to August

May 2021



August 2021



Interest in information about COVID variants has grown while interest in different types of vaccines has declined. Interest in mental health issues has increased. Interest in treatment of COVID remains high.

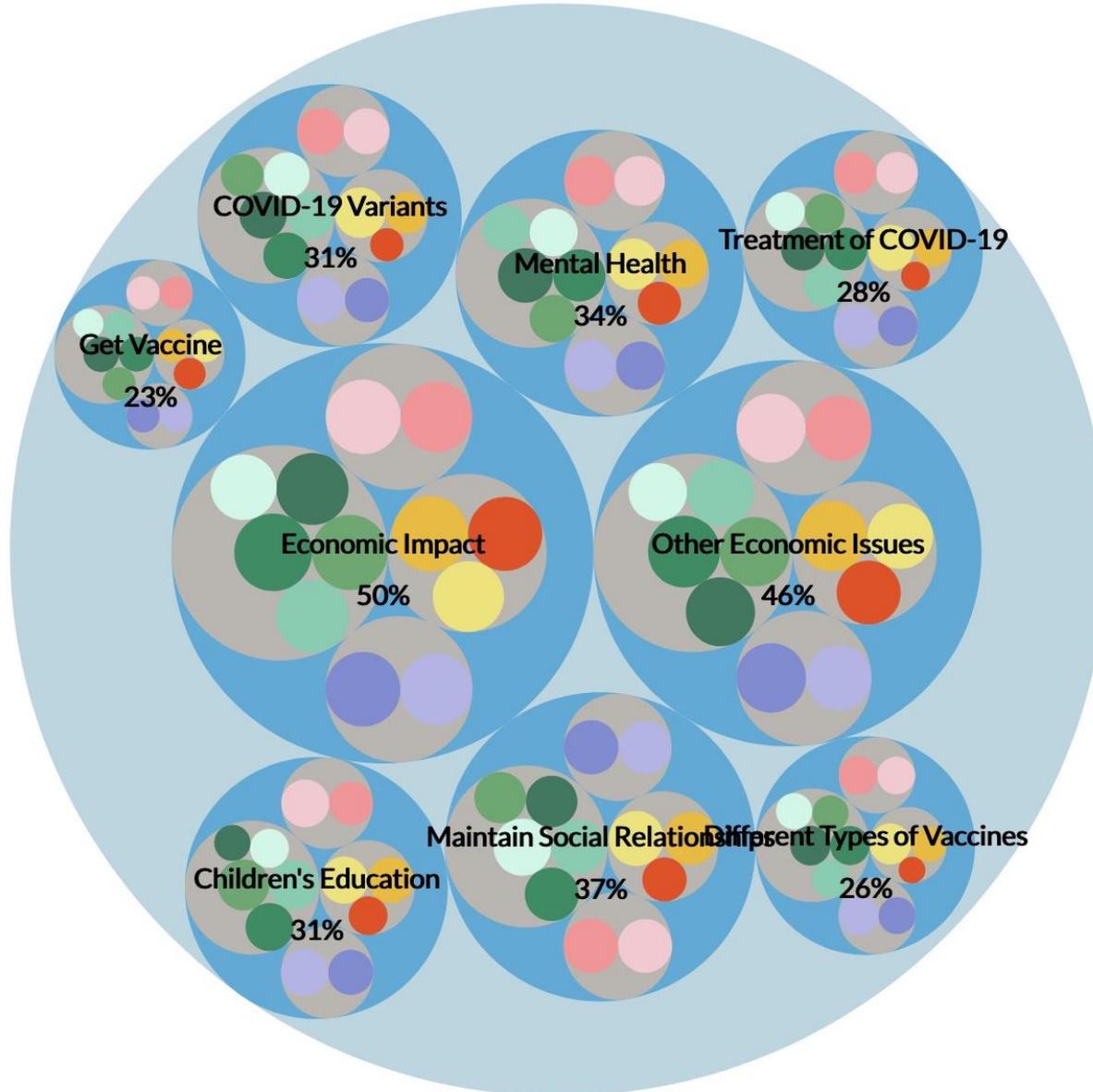
*** Consider increasing messages that emphasize risks of new variants, how to maintain mental health under stress. Provide updates on scientific evidence related to treating COVID symptoms.**

Messaging: Informational focus

Indonesia—August

HOW TO
INTERPRET A
CIRCLE GRAPH

- Country
- Issues
- Demographic Category



Compared to Guatemala, more interest in impact of COVID on economic and employment issues.

Higher interest in how to maintain social relationships in the midst of lockdown and social isolation.

*** Consider increasing message content to emphasize government response to economic hardship, alternative ways to stay in touch with friends and family.**

Questions

Thank you!
covidbehaviors.org