

COVID-19 VACCINE NUDGE STUDY SOUTH AFRICA

Final findings

JULY 2022



Acknowledgment

This report is based on an evaluation conducted by Project Last Mile and Ipsos in 2022, in close partnership with the National Department of Health and United States Agency for International Development (USAID).

The contents are the responsibility of Project Last Mile and Ipsos and do not necessarily reflect the views of USAID or the United States Government.



Use of behavioural nudges for COVID-19 vaccination



Behavioural nudges, or nudge theory, works on the principle that **small, low-cost interventions can significantly impact a person's behaviour** and encourage (not force!) people to make one decision over another.

Recent research in behavioural science highlights that **nudge theory can be applied to increase and speed up COVID-19 vaccinations at close-to-zero marginal cost**. Text-based reminders designed to overcome barriers to scheduling can effectively encourage vaccinations across different demographic groups. (*Dai, H., Saccardo, S., Han, M.A. *et al.* 2021).

Evaluation of existing evidence base (e.g., the National Income Dynamics Study (NIDS) and Coronavirus Rapid Mobile Survey (CRAM) indicate that behavioural nudges are ideally built around the following:

- **Minimize hassle factors and time costs** that can drive intention-behaviour gaps (Volpp et al., 2020; Bloomberg Philanthropies, 2021)
- **Foreground the social benefits** of the vaccine by highlighting how it can fast-track economic recovery, including jobs and greater stability (Dzinamarira et al., 2021; WHO, 2020).
- **Provide opportunities to pre-commit** to getting a vaccine through pre-registration portals or sign-ups. (Volpp et al., 2020).
- **Leverage loss aversion in communications**, focusing on possible regret if people miss the opportunity to be vaccinated. In particular, messaging that a vaccine dose has been “reserved for you” invokes scarcity, loss aversion and reciprocity (Milkman et al., 2021).
- For two-dose regimens, **use evidence-based default scheduling and reminder messages** to maximise second dose completion (Milkman et al., 2021).
- **Increase the visibility of pro-vaccination social norms** by the purposeful selection of central sites for vaccination centres and providing ways for people to show that they have been vaccinated (WHO, 2020).

Study background

- While behavioural nudges and incentives have been shown to be effective in increasing the uptake of health-seeking behaviours, **there have been limited studies on the effectiveness of nudges and incentives for vaccine uptake in low and middle income countries (LMICs), especially in Africa**. A landscape review found that 82 studies had been undertaken on the topic, but only 18 were in a LMIC.¹
- Ipsos and PLM undertook the first **nationally representative study in South Africa** to understand and explore the feasibility of incentive programs and nudges to improve COVID-19 vaccination rates across different demographic segments.
- This work is to support the **ongoing efforts of NDoH and Risk Communication and Community Engagement (RCCE) partners in accelerating the uptake of COVID-19 vaccines**.
- This study was conducted from **March - May 2022**, and overlapped with the end of South Africa's national state of disaster.

Overview and study objectives

- As of July 2022, South Africa had fully vaccinated ~46% of its eligible population, with an additional ~5% partially vaccinated.
- As the vaccine roll-out has covered the early adopters and vaccine accepting, **additional efforts are required to motivate and incentivize vaccine uptake to achieve NDoH targets of 70% of the population fully vaccinated.**
- The research will aim to inform vaccine communications and nudge or incentives campaigns at the national and provincial levels to motivate vaccine uptake across a range of unvaccinated segments and demographics.

Study methodology

The sample size for this report was: n=5,000

- Random Digital Dialling (RDD)* with quota sampling
- Data collected between March and May 2022 across South Africa
- Meets the national distribution of:
 - Province
 - Age/gender (within province)
- Big enough to disaggregate via:
 - Urban/Rural, or
 - Primary language of respondents
- Big enough to understand findings at the district level. Cannot disaggregate gender/age/SEC within a district.
- Best practice to screen out strong “anti-vaxers” (Est. ~10% of population) for surveys. The sample presents higher vaccination rates than the current population; those willing to participate in the survey.

*There are no freely available lists of mobile phone numbers in South Africa and the mobile phone companies also do not sell subscriber lists. To overcome this obstacle, Ipsos uses a process called RDD (Random Digit Dialling) where a computer is programmed with all the prefixes of mobile phone numbers and then selects random numbers to be dialed automatically. Quota sampling was then instituted so that the sample would be population representative to the provincial level.

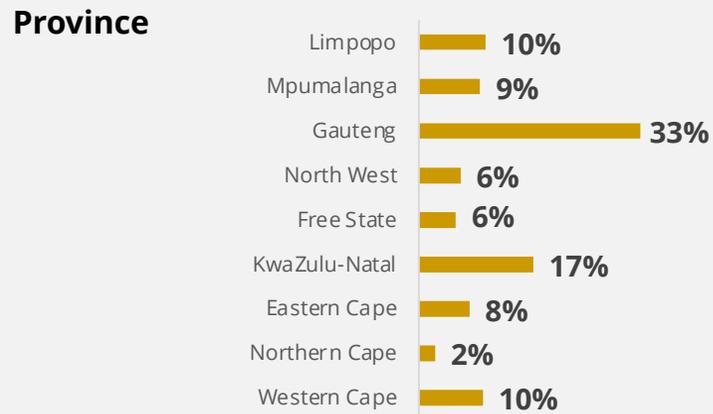
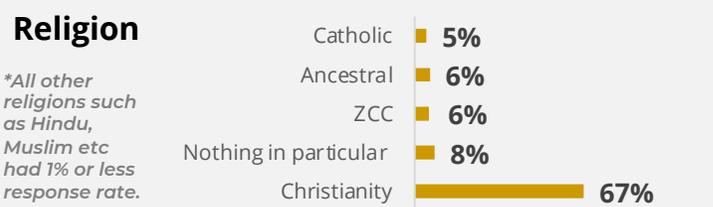
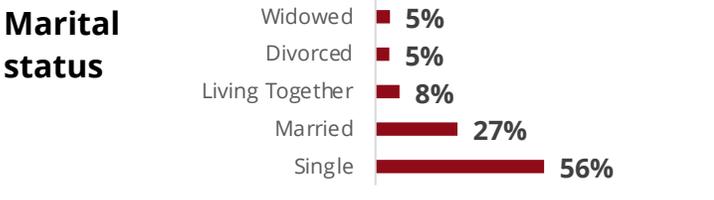
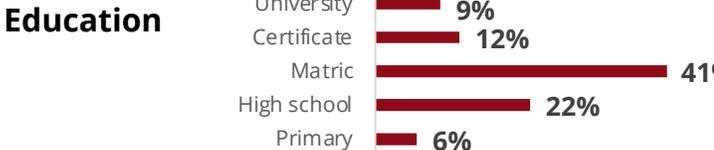
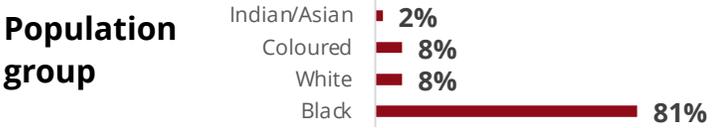
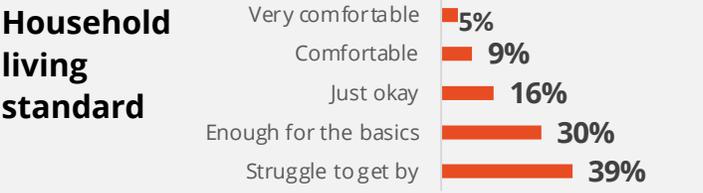
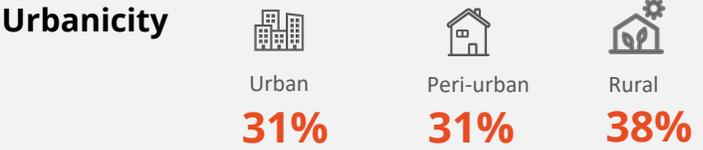
Context for a population representative study

- South Africa has a diverse population, with socio-economic and cultural variances between provinces.
- Accessibility and uptake of health services differs across South Africa's provinces, including for COVID-19 vaccines.
- Vaccine uptake rates by province and district have differed significantly since the start of the national roll-out.
- Inherent differences across provinces require tailored demand acceleration strategies.
- A representative study of the South African population was therefore recommended to enable provincial disaggregation and identify tailored provincial strategies.

Province	Total number of individuals adults vaccinated	Total Adults population [10 years & older]	Individuals vaccinated as a % of the adult population
Eastern Cape	2,243,561	4,099,543	54.73%
Free State	1,155,013	1,914,521	60.33%
Gauteng	5,426,597	11,317,325	47.58%
Kwazulu - Natal	3,200,231	7,219,795	44.33%
Limpopo	2,112,024	3,695,501	57.15%
Mpumalanga	1,386,747	3,039,520	45.62%
North West	1,330,563	2,693,247	49.40%
Northen Cape	439,455	847,545	51.74%
Western Cape	2,861,133	4,576,503	57.49%
Total	20,154,664	33,752,201	50.64%
Age Group	Total number of individuals adults vaccinated	Total Adults population [10 years & older]	Individuals vaccinated as a % of the adult population
18 - 34	6,704,453	17,788,511	37.69%
15 - 49	6,357,425	11,685,937	54.40%
50 - 59	3,194,151	4,817,271	66.31%
60 +	3,855,670	5,505,482	70.76%
Unidentified	2,933	0	0.00%
Total	20,154,664	39,795,201	50.64%

Source: SA Coronavirus, accessed 6th July

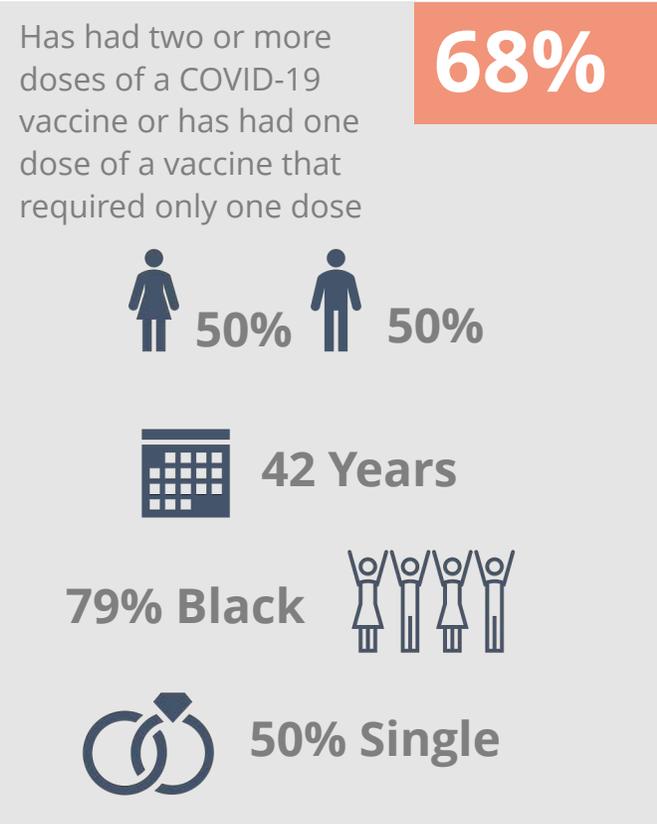
Sample: demographics



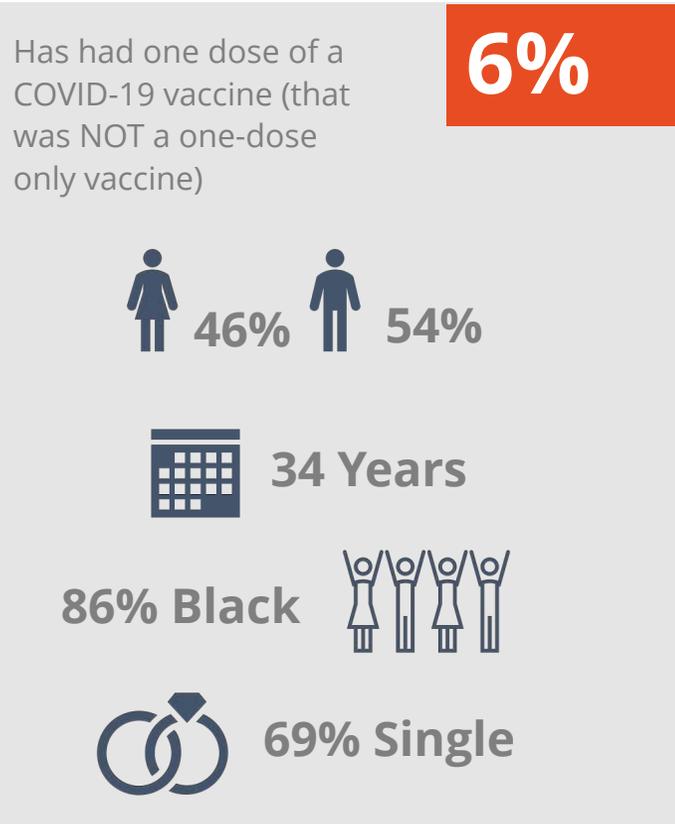
Sample: vaccination status and demographics

Attitudes towards COVID-19 vaccines

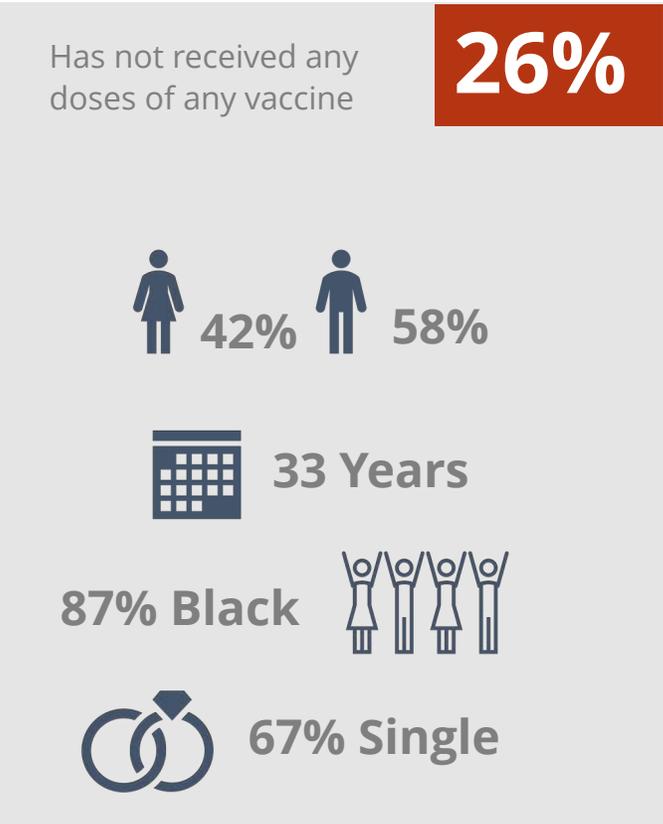
Vaccinated



Partially vaccinated

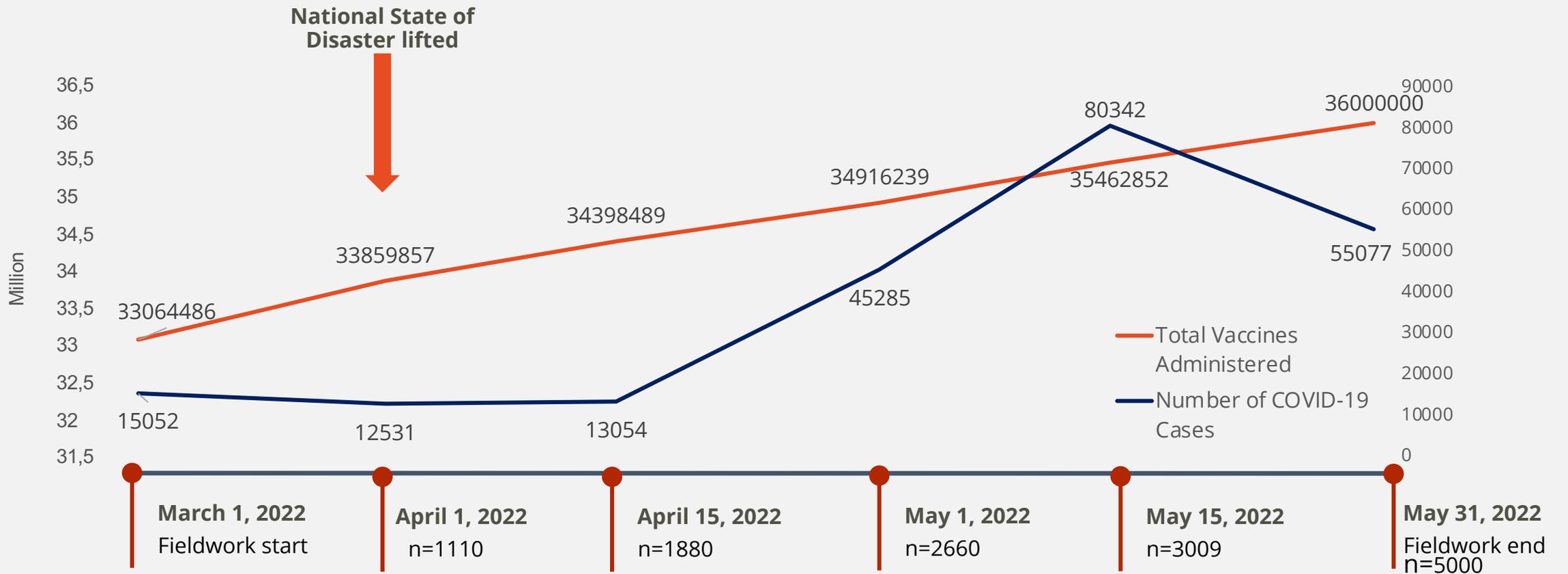


Unvaccinated**



**PLEASE NOTE: National fully vaccinated rate as of July 2022 is 46%. Best practice to screen out strong "anti-vaxers" (Est. ~10% of population) for surveys. Therefore, this sample presents higher vaccination rates than the current population; those willing to participate in the survey and not screened out as anti-vaxers"

Fieldwork timeline

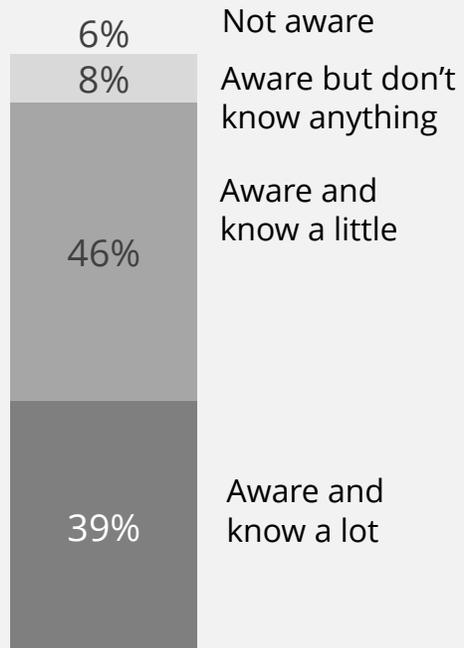




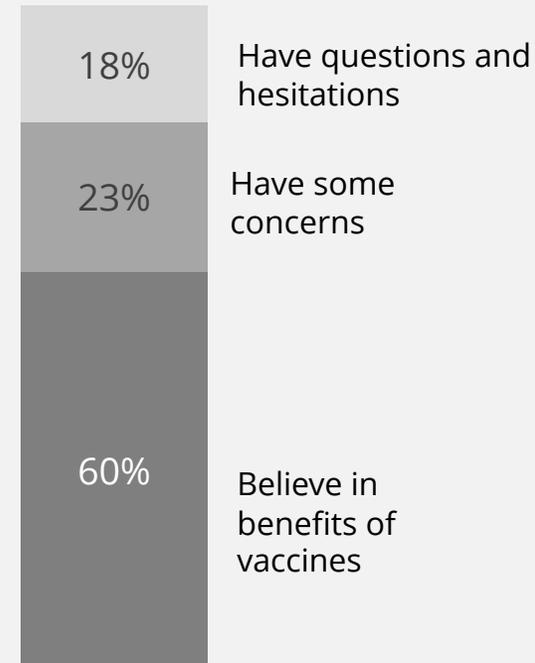
VACCINATION STATUS AND ATTITUDES

Attitudes towards vaccines

AWARENESS OF COVID-19 VACCINES



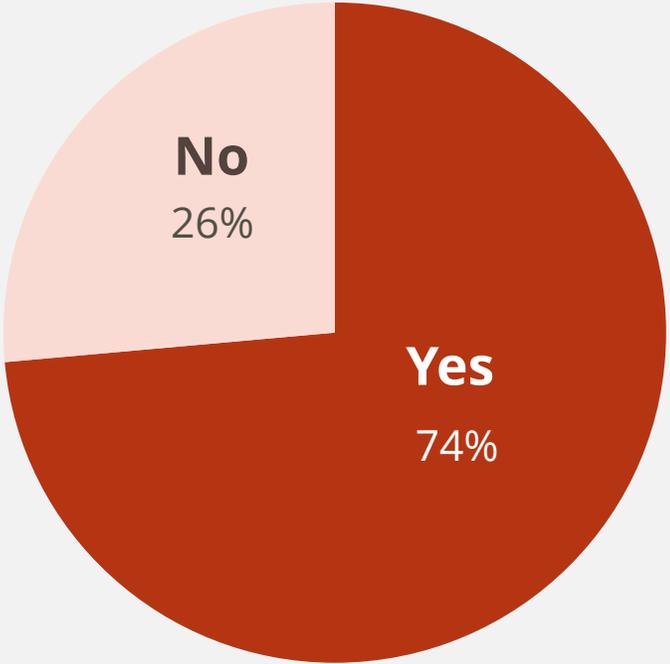
GENERAL ATTITUDES TOWARDS VACCINES



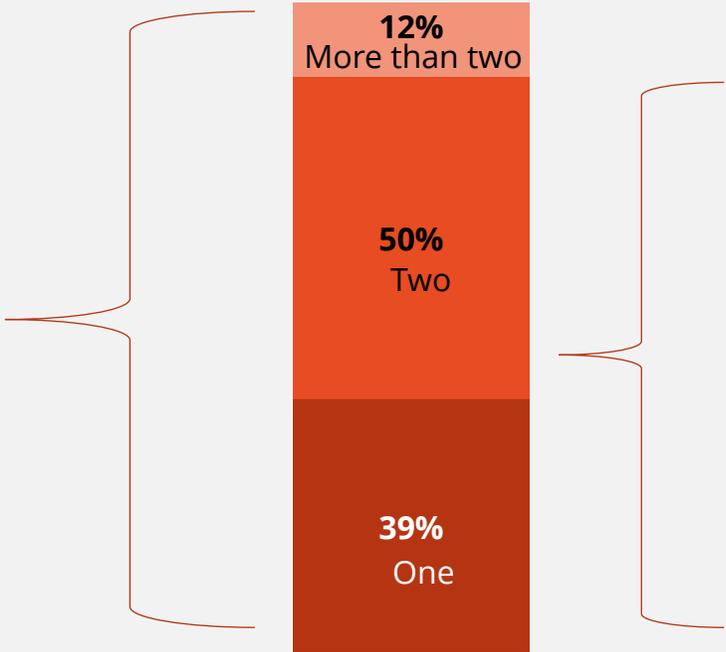
COVID-19 vaccination status

74% of respondents had received at least one dose of the COVID-19 vaccine.

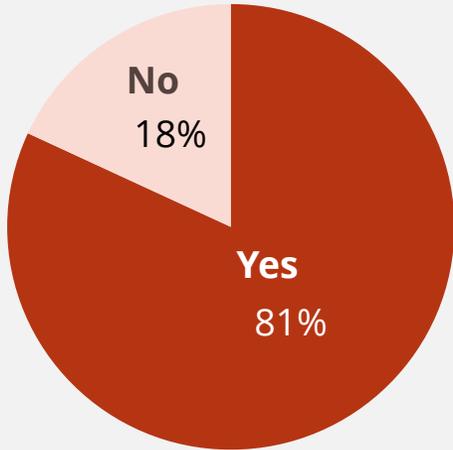
RECEIVED AT LEAST ONE DOSE



NUMBER OF DOSES RECEIVED

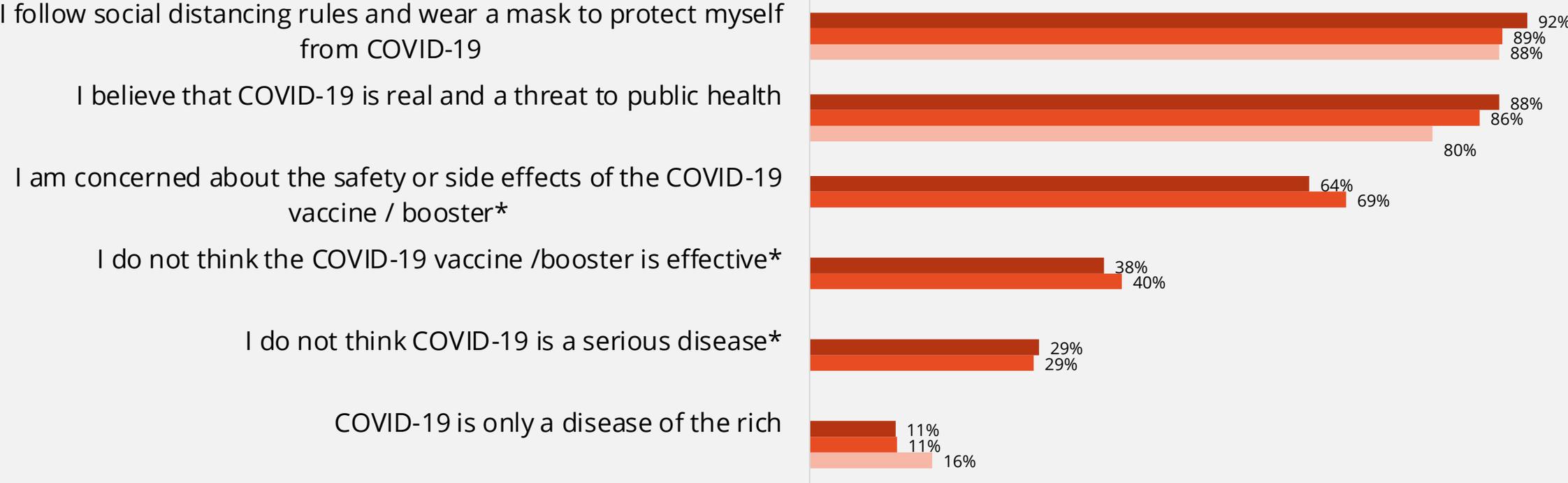


Does your vaccine only require one dose?



Unvaccinated respondents see COVID-19 as less of a threat than vaccinated respondents

GENERAL PERCEPTIONS OF COVID-19 (slightly or strongly agree)



■ Vaccinated ■ Partially Vaccinated ■ Unvaccinated

*Only asked to vaccinated or partially vaccinated respondents

Vaccination attitudes of vaccinated respondents

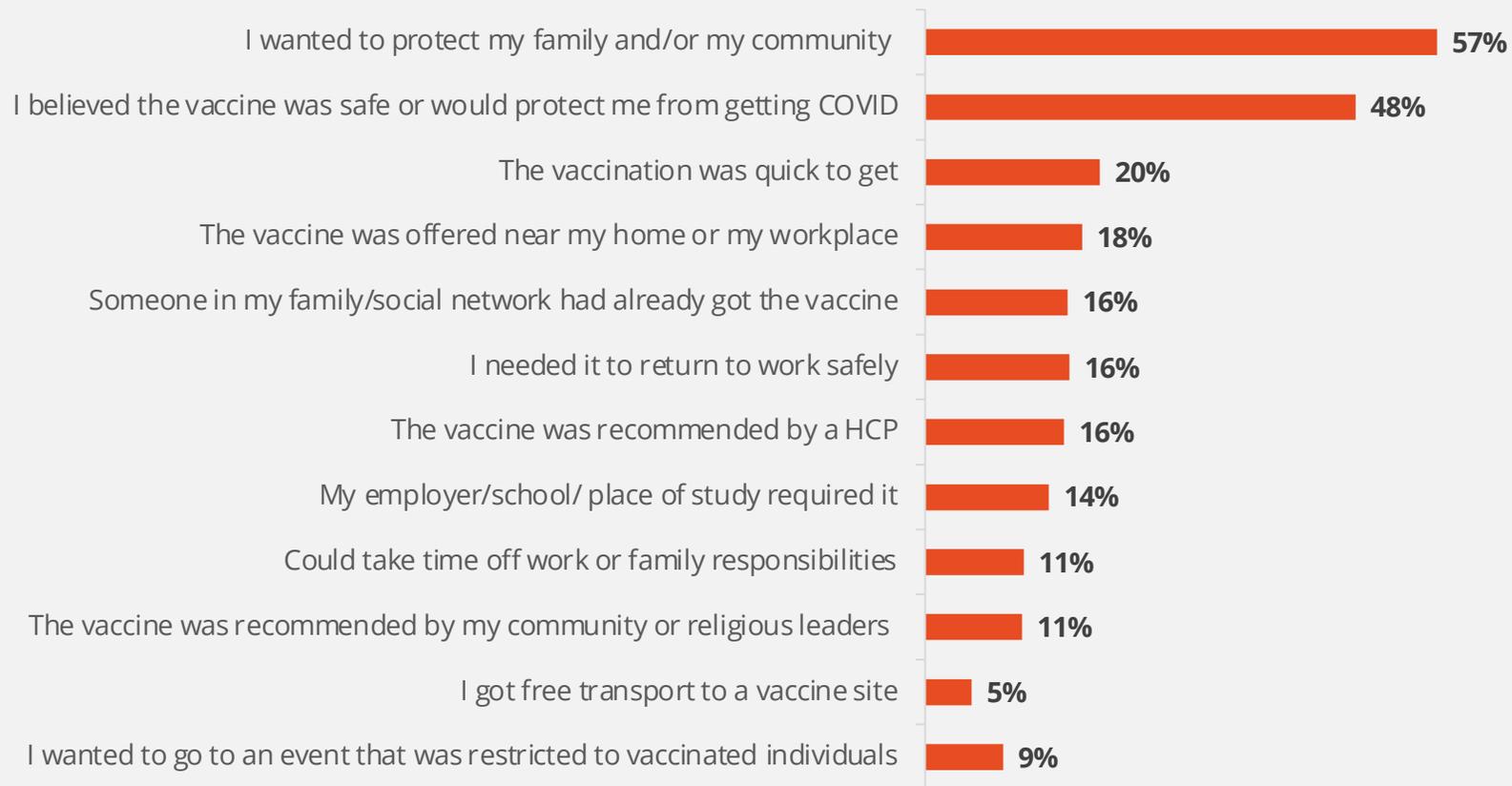


Vaccinated respondents were primarily motivated by trust that the vaccine would protect themselves and their family



Vaccinated

MOTIVATORS FOR GETTING VACCINATED

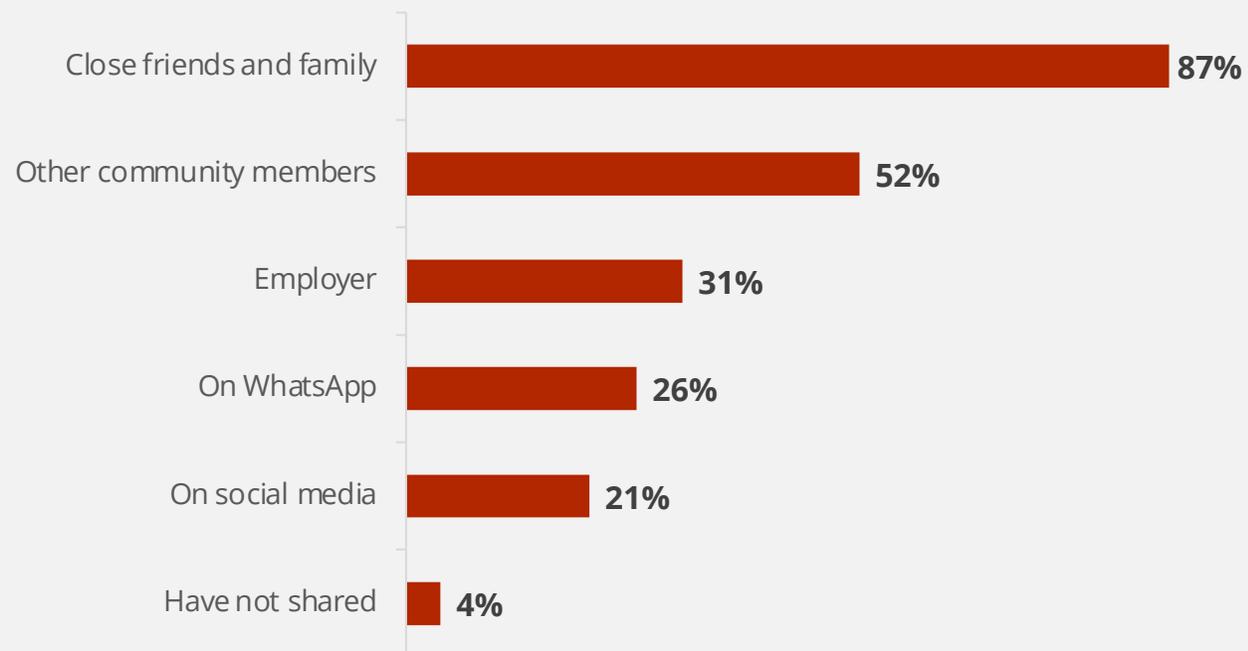


Vaccinated respondents were primarily motivated by trust that the vaccine would protect themselves and their family



Vaccinated

SHARED VACCINE STATUS WITH



While almost half of the vaccinated respondents got their vaccine immediately, for those that delayed, a lack of information and trust were the primary reasons



Vaccinated

HOW SOON RECEIVED FIRST DOSE AFTER VACCINE WAS AVAILABLE

46% As soon as it was available

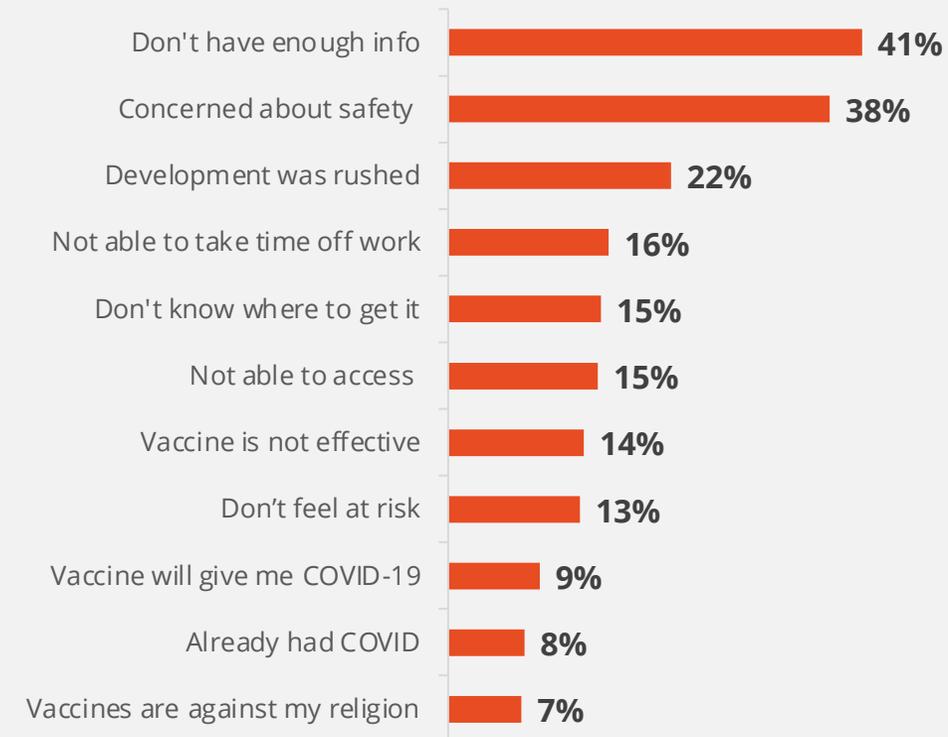
19% Less than 3 months

19% 3 to 6 months

8% 6 to 9 months

6% 9 months to a year

REASONS FOR NOT GETTING VACCINE AS SOON AS IT WAS AVAILABLE



More than half of the vaccinated respondents are open to receiving the booster, and don't perceive difficulty in accessing it



Vaccinated

LIKELIHOOD OF GETTING BOOSTER



PERCEIVED DIFFICULTY OF GETTING BOOSTER (of those who haven't gotten it)



Very difficult Fairly difficult Neutral Fairly easy Very easy

About half of respondents would wait to get the booster, citing safety and lack of information and trust as the top reasons

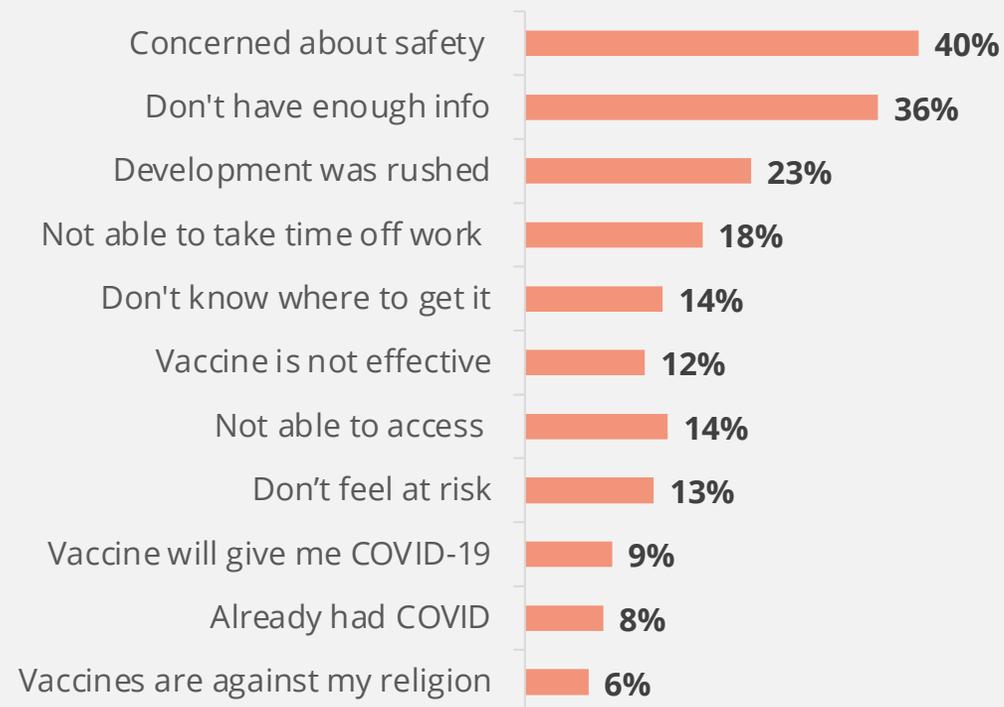


Vaccinated

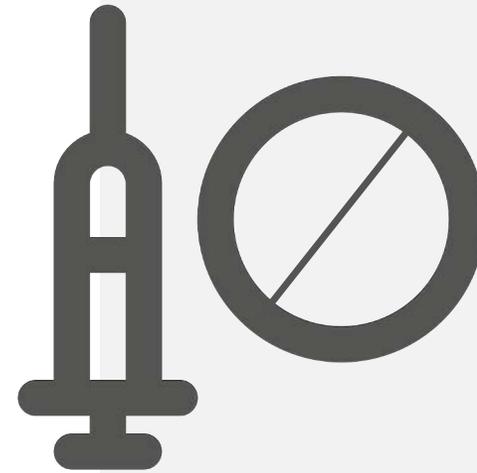
HOW SOON RECEIVED BOOSTER AFTER IT WAS AVAILABLE



REASONS FOR NOT GETTING BOOSTER AS SOON AS IT WAS AVAILABLE



Vaccination attitudes of
partially vaccinated respondents

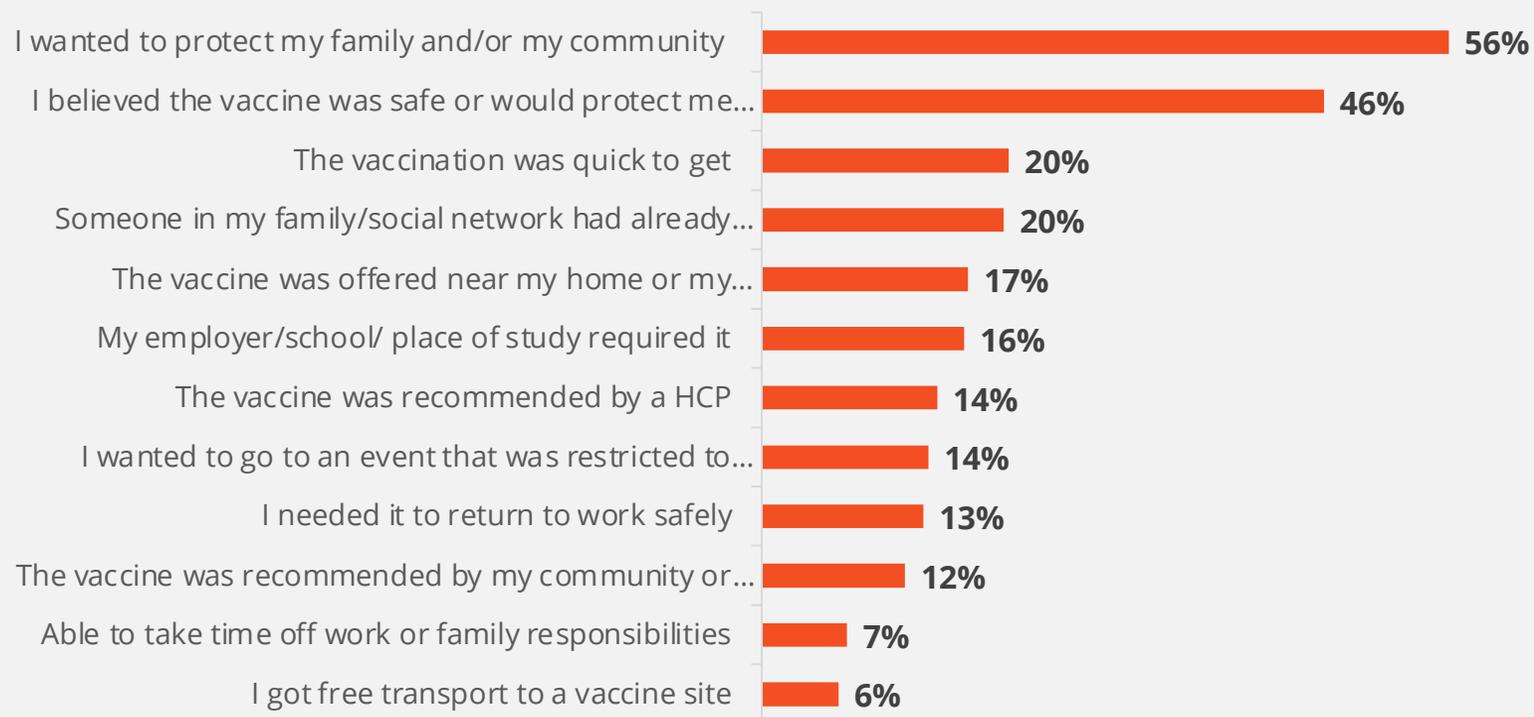


Recommended nudges by priority NDoH subgroups for COVID-19 vaccines

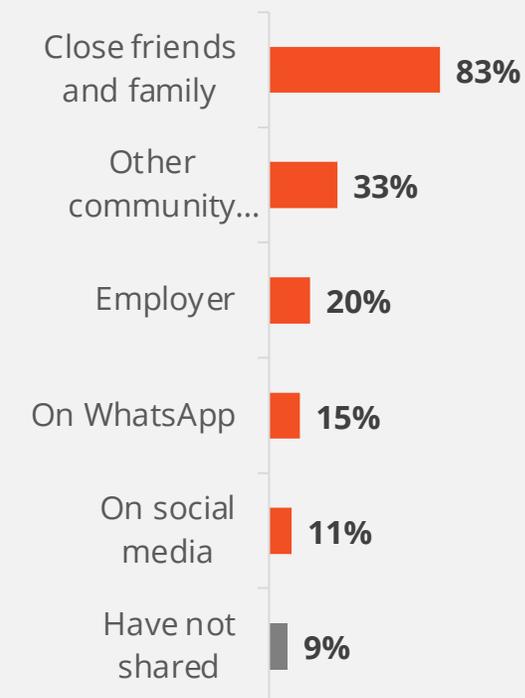


Partially
Vaccinated

MOTIVATORS FOR GETTING VACCINATED (PARTIALLY)



SHARED VACCINE STATUS WITH



Lack of information and concerns about safety also inhibited some partially vaccinated respondents from getting the vaccine as soon as it was available



Partially
Vaccinated

HOW SOON RECEIVED FIRST DOSE AFTER VACCINE WAS AVAILABLE

34% As soon as it was available

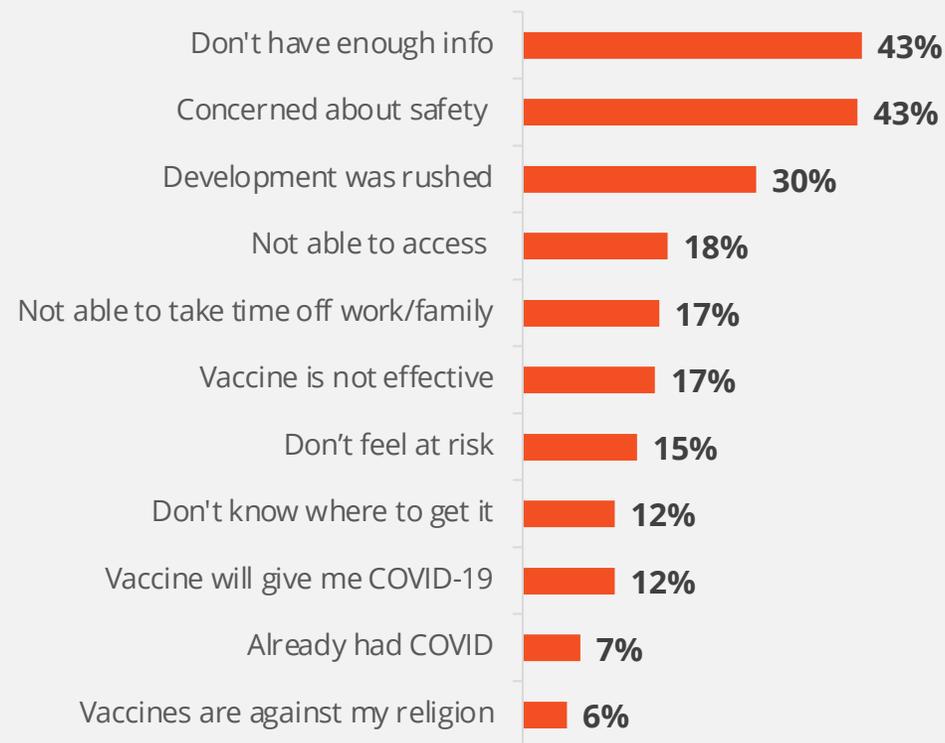
13% Less than 3 months

21% 3 to 6 months

11% 6 to 9 months

20% 9 months to a year

REASONS FOR NOT GETTING VACCINE AS SOON AS IT WAS AVAILABLE



Most partially vaccinated respondents plan to get their second dose within the next month

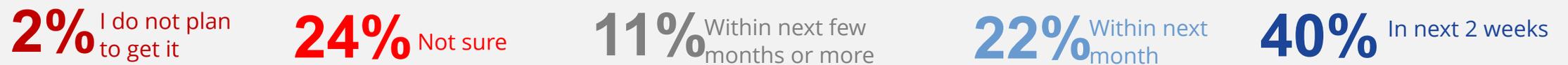


Partially Vaccinated

LIKELIHOOD OF GETTING SECOND DOSE OF VACCINE



HOW SOON WOULD GET AVAILABLE VACCINE



PERCEIVED DIFFICULTY OF GETTING VACCINE



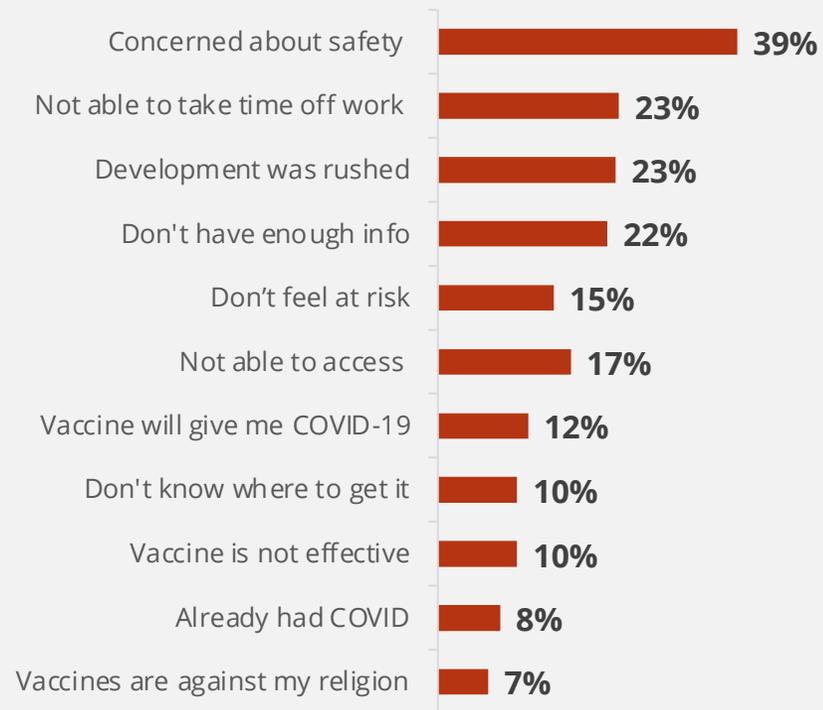
Very difficult Fairly difficult Neutral Fairly easy Very easy

Logistical reasons, like time off work, are a bigger barrier to the partially vaccinated than the unvaccinated

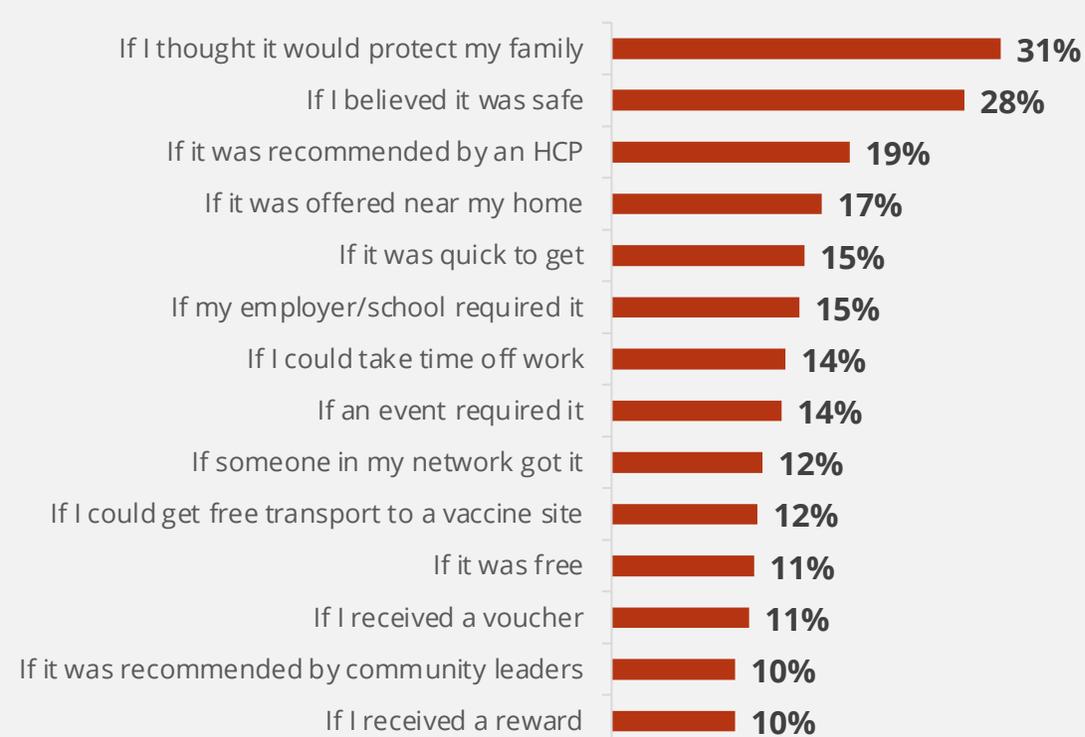


Partially
Vaccinated

REASONS FOR NOT GETTING SECOND DOSE



MOTIVATORS FOR GETTING SECOND DOSE

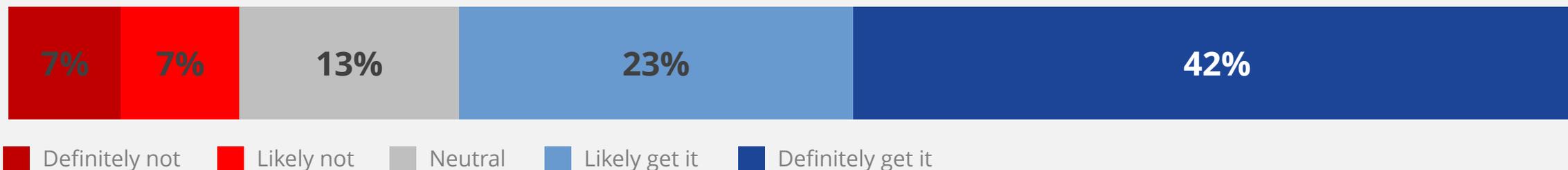


Over half of partially vaccinated respondents would take a booster as soon as it's available to them

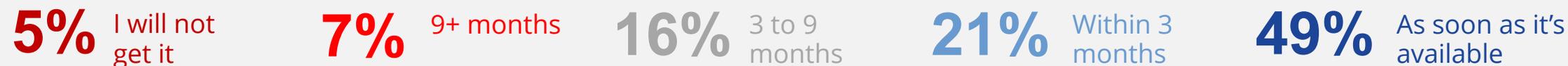


Partially
Vaccinated

LIKELIHOOD OF GETTING BOOSTER



HOW SOON WOULD GET AVAILABLE BOOSTER



Vaccination attitudes of unvaccinated respondents



About half of unvaccinated respondents are open to receiving the vaccine in the short to medium term, and don't perceive great difficulty in accessing it



Unvaccinated

LIKELIHOOD OF GETTING VACCINE



HOW SOON WOULD GET AVAILABLE VACCINE



PERCEIVED DIFFICULTY OF GETTING VACCINE



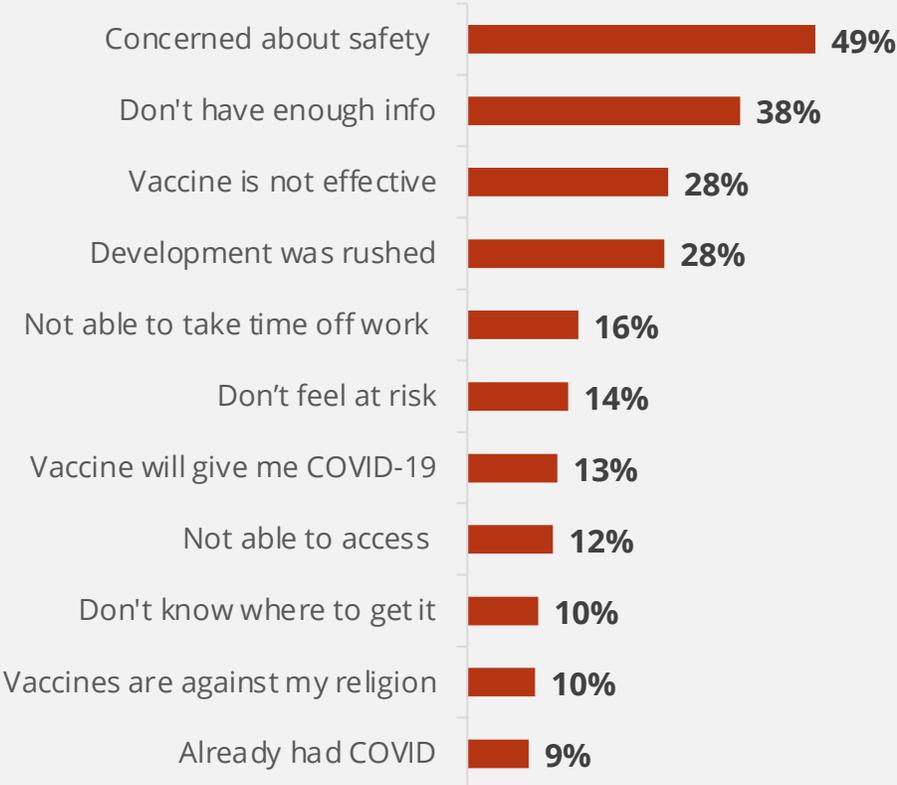
Very difficult Fairly difficult Neutral Fairly easy Very easy

Safety is more of a top concern for the unvaccinated than logistical issues

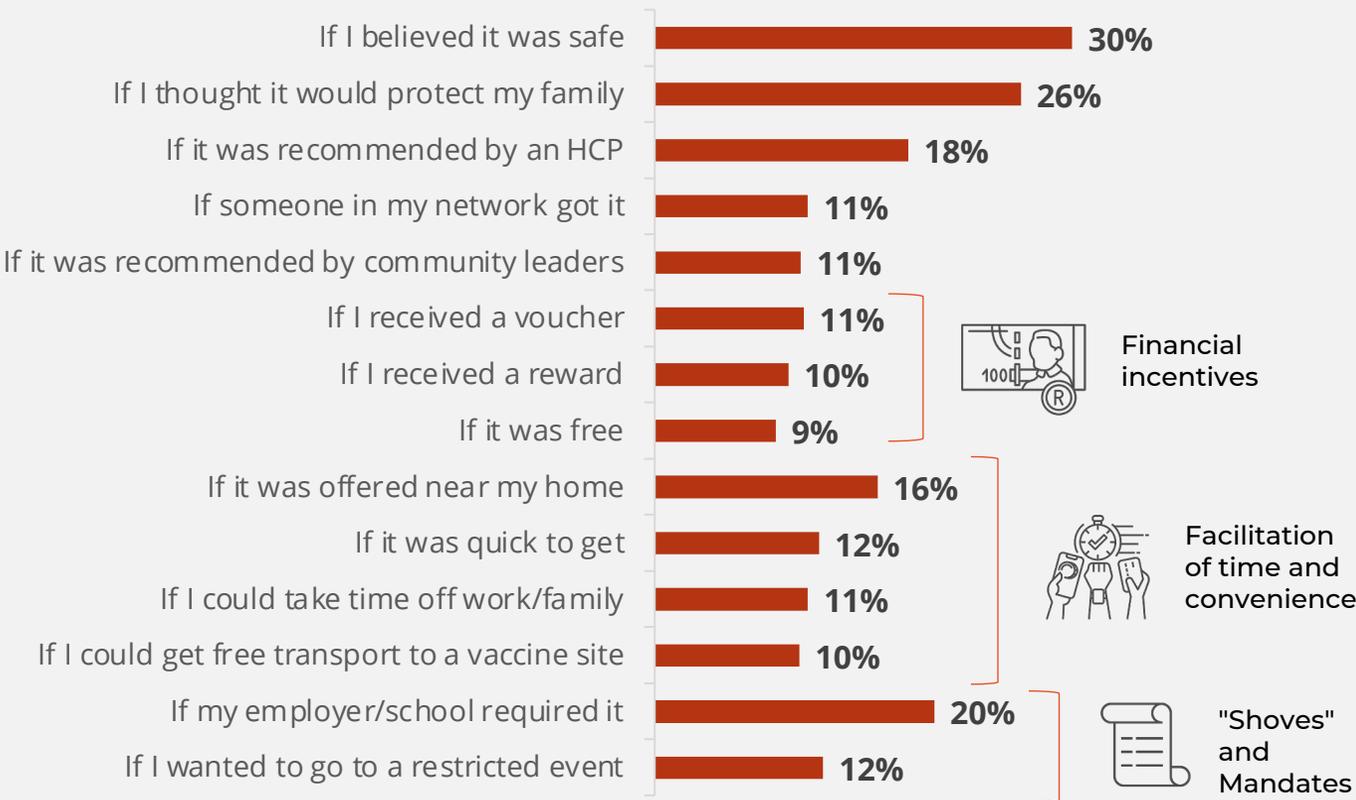


Unvaccinated

REASONS FOR NOT GETTING VACCINE



POTENTIAL MOTIVATORS FOR GETTING VACCINE





UNVACCINATED SEGMENTS

74% of respondents had received at least one dose of the COVID-19 vaccine

(full breakdown of fully vaccinated, partially vaccinated included on Pg 3 - reference Pg 7)

Segmentation overview



Segments included in the following analysis are comprised only of unvaccinated respondents, to focus solely on the population who require support to take action in the future and inform campaigns aiming to increase vaccination rates.

- Segmentation is a statistically robust tool to support vaccine roll-out strategy.
- By gaining an understanding of the proportions of these populations and the nature of their concerns, we can support them in making the decision to vaccinate.
- Especially for the unvaccinated, it is important to understand more to be able to engage in conversation on issues that matter to them.
- Segmentation can be used to inform the content of messaging campaigns and support provider/ consumer consultations.

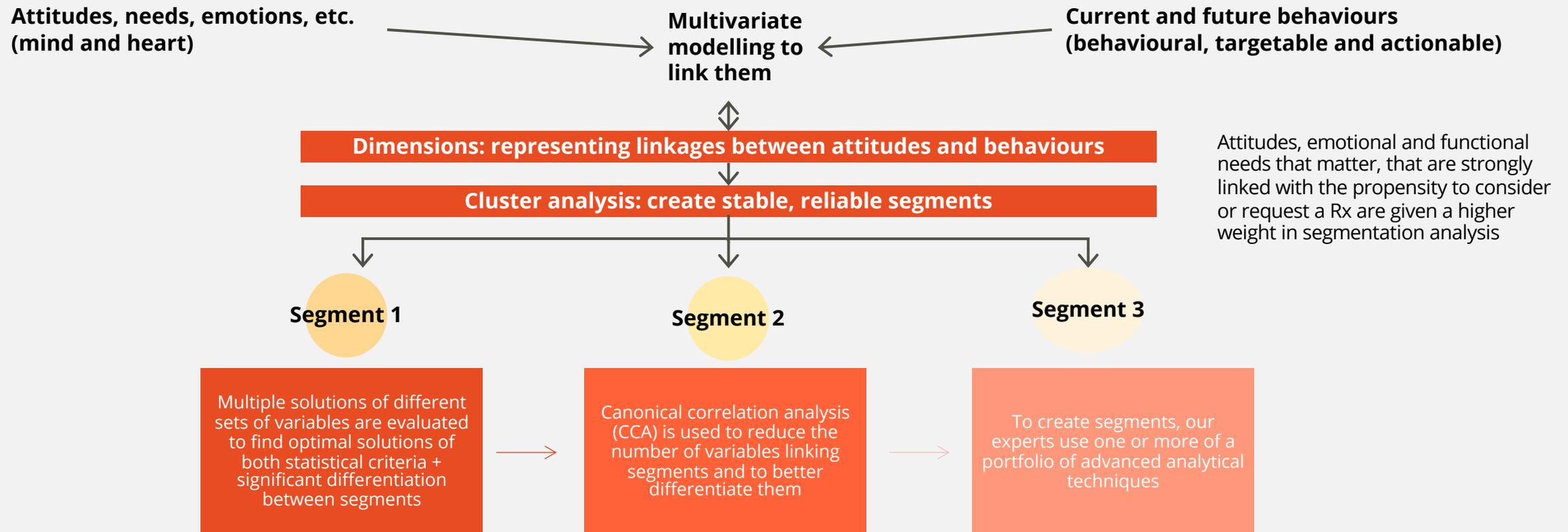
Using segmentation to leverage desired behaviour

- 1) Define where segments sit on the spectrum of propensity and likelihood to get a COVID-19 vaccine.
- 2) Understand the drivers and barriers to vaccination for each segment.
- 3) Use this information to develop strategies that increase willingness to get or stay vaccinated.



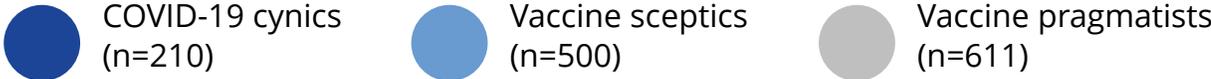
Segmentation analysis: creating and evaluating solutions

Targeted segmentation combines multiple dimensions into one segmentation strategy by leveraging the relationships between different types of information gathered. In this case, a mix of behavioural and attitudinal information (emphasising unmet needs, current and future prescribing behaviour, attitude to new products and expected speed of adoption).



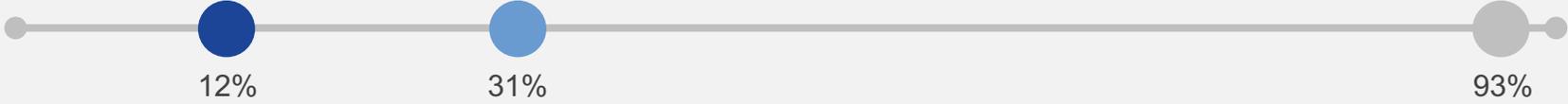
Summary of key segmentation metrics

Unvaccinated respondents



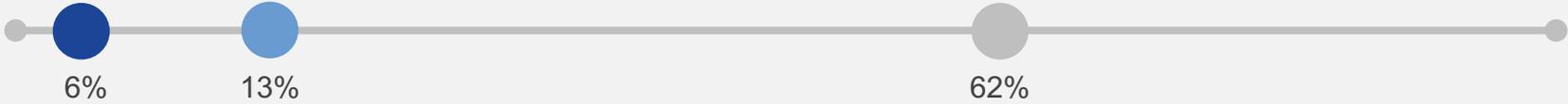
Likelihood of taking a COVID-19 vaccine

(% T2B – Definitely / likely)



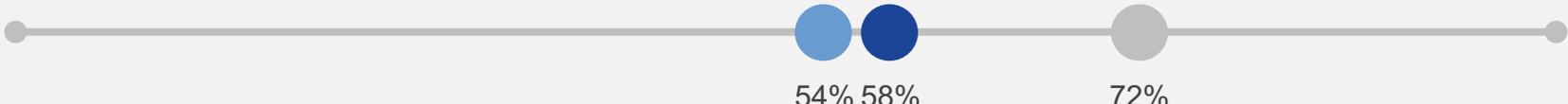
Speed of uptake of a COVID-19 vaccine

(% 'As soon as it's available')



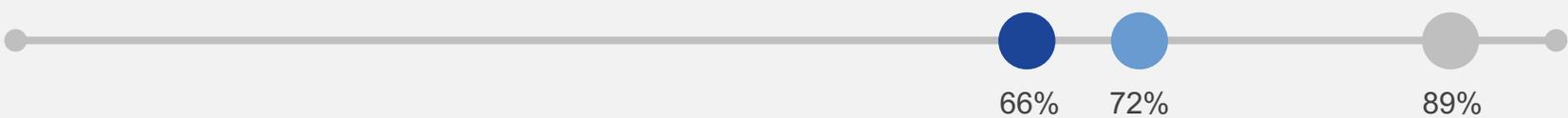
Perceived ease of the Vx process

(% T2B – Very easy/fairly easy)



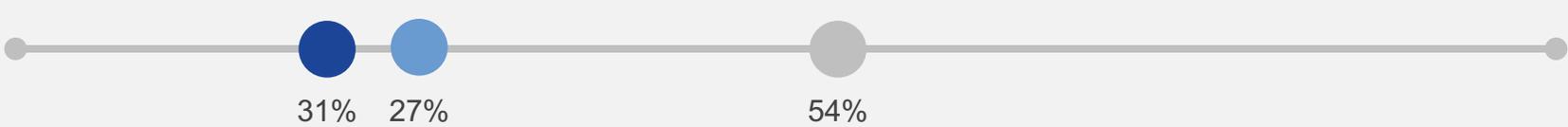
Perceived seriousness of COVID-19 disease

(%T2B – Strongly agree/agree)



Belief in effectiveness of vaccine

(%T2B – Strongly disagree/disagree that vaccine is not effective)



Segment demographics

Unvaccinated respondents

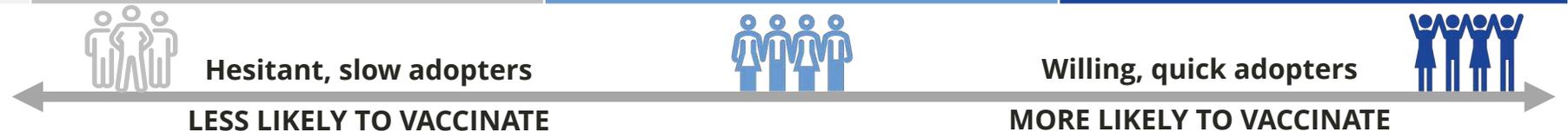
	COVID-19 cynics	Vaccine sceptics	Vaccine pragmatists
Gender	♂ 63% ♀ 37%	♂ 55% ♀ 45%	♂ 58% ♀ 42%
Age	<ul style="list-style-type: none"> 18-24 15% 25-34 35% 35-49 29% 50+ 21% 	<ul style="list-style-type: none"> 18-24 29% 25-34 39% 35-49 25% 50+ 7% 	<ul style="list-style-type: none"> 18-24 26% 25-34 37% 35-49 27% 50+ 11%
Province (top 6)	Gauteng 36% Mpumalanga 7% KwaZulu Natal 20% Eastern Cape 7% Western Cape 15% North West 6%	Gauteng 40% Limpopo 7% KwaZulu Natal 22% Eastern Cape 6% Mpumalanga 9% Western Cape 5%	Gauteng 35% Mpumalanga 9% KwaZulu Natal 21% Eastern Cape 8% Limpopo 11% North West 6%
Household living standard	<ul style="list-style-type: none"> Struggle with basics 26% Ok with basics but can't save 55% Comfortable 17% 	<ul style="list-style-type: none"> Struggle with basics 30% Ok with basics but can't save 51% Comfortable 18% 	<ul style="list-style-type: none"> Struggle with basics 51% Ok with basics but can't save 39% Comfortable 10%
Employment status	<ul style="list-style-type: none"> Working full-time 23% Working part-time 7% Self employed/informal 16% Not working 54% 	<ul style="list-style-type: none"> Working full-time 18% Working part-time 9% Self employed/informal 13% Not working 60% 	<ul style="list-style-type: none"> Working full-time 12% Working part-time 8% Self employed/informal 12% Not working 69%

▲ ▼ Significantly higher/ lower than all segments

Meet the segments (Attitudes from Unvaccinated respondents)

Confidence barriers exist across all segments to varying degrees, however, the majority of unvaccinated (Pragmatists) are more likely to get vaccinated if convenience and complacency barriers are addressed.

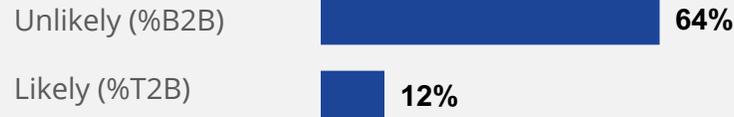
	COVID-19 cynics <i>Don't want vaccine</i>	Vaccine sceptics <i>On the fence</i>	Vaccine pragmatists <i>Want vaccine but can't get it</i>
% of population (unvaccinated and total)	16% of unvaccinated population 4% of total population	38% of unvaccinated population 10% of total population	46% of unvaccinated population 12% of total population
Summary	Strongly hesitant of COVID-19 threat and a COVID-19 vaccine. Mistrust in the vaccine's purpose and advocates means they will be slow to vaccine adoption, if at all. <small>*Note that hard-line anti-vaccination respondents were screened out of this survey.</small>	While they are convinced of COVID-19 as a public health threat, they are not convinced that they are personally at risk. Scepticism around vaccine safety and efficacy inhibits perceived benefit and quick uptake.	Convinced of COVID-19 threat and merits of a vaccine, and open to receiving it, but inhibited by practical and logistical barriers. Cost-benefit analysis of the process could cause uptake delay, though convenience could persuade them.
COVID disease perceptions	Low perceived risk and severity	Low perceived risk and moderate perceived severity	High perceived risk and severity
Likelihood of taking a COVID-19 vaccine	Very Low	Moderately low	High
Speed of uptake	More than a year or never	Wait at least 6-12 months or more	As soon as possible
Perceived ease of getting the vaccine	Very easy (with a subgroup at difficult)	Fairly easy	Very easy
Level of motivation to get the vaccine	Low	Neutral	High
Level of perceptual barriers	Neutral	High	Low
Level of physical barriers	Low	Neutral	High
World Health Organization 3C model	Has confidence barriers	Has confidence and complacency barriers	Has convenience barriers with some complacency



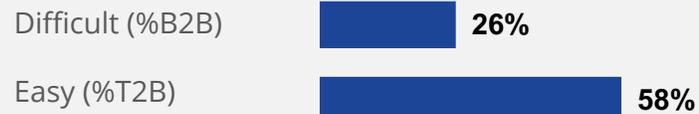
COVID-19 cynics



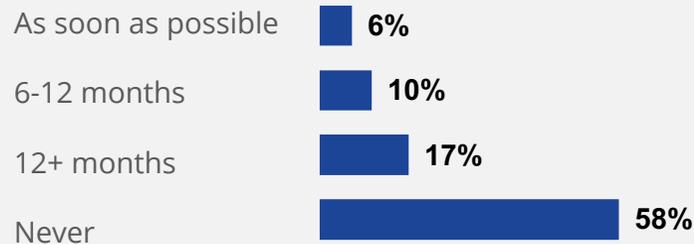
Will I take the COVID-19 vaccine? ▼



Perceived difficulty of getting the COVID-19 vaccine



When will I take the COVID-19 vaccine? ▼



What are my perceptions of COVID-19 risk and severity? (%T2B – Strongly agree/agree)

“Though I somewhat follow social distancing rules, I don’t really believe that COVID-19 poses a serious health risk to myself or others.”

I believe COVID-19 is real and a threat to public health ▼

65%

I think COVID-19 is a serious disease ▼

38%

I follow social distancing rules and wear a mask to protect myself from COVID-19 ▼

82%



What are my perceptions of the vaccine? (%T2B – Strongly agree/agree)

“I have some concerns about the side effects of the COVID-19 vaccine, and I have heard that it is not effective and maybe not even safe, and I’ve already decided against it.”

I am concerned about the safety or side effects of the COVID-19 vaccine

61%

I do not think the COVID-19 vaccine is effective ▲

40%

I am concerned my church or religious group would not allow me to get the COVID-19 vaccine

14%

▲ ▼ Significantly higher/ lower than all segments

COVID-19 cynics



This segment has strong beliefs regarding COVID-19 and does not see it as a serious threat to themselves or others. They have low confidence and trust in the effectiveness, and some concern about safety of the vaccine, often fuelled by rumours. They most frequently selected “other” responses when asked about barriers and motivations to getting the vaccine, indicating that they see themselves as outside of the common discourse on the topic. They would take a lot of convincing to change their opinions, as their mistrust of the vaccine means they will be slow to vaccine adoption, if at all.



Motivation to get vaccinated



Barriers with vaccination uptake



I know my own mind about COVID-19 and the vaccine, and **not much will convince me otherwise**



There are not many practical or physical things **that would motivate me to get a vaccine**



I am also unlikely to be convinced by new information, **though more assurances about safety could potentially help**



Belief that the **vaccine is not effective**



Some concern that the vaccine will **not protect me from getting COVID-19**



Has heard rumours that the **vaccine is not safe or has adverse side effects**



Worried that the **development of the vaccine may be rushed**, and it may not be thoroughly tested



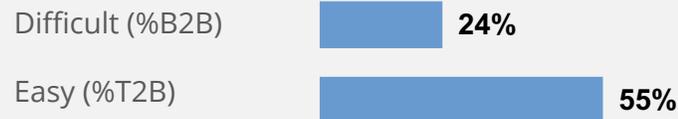
Vaccine Sceptics



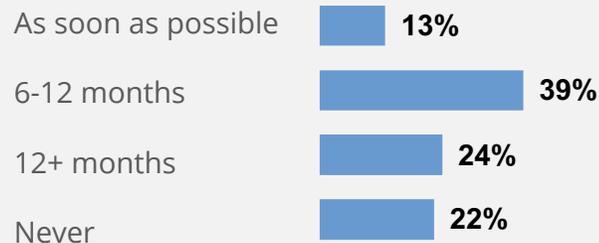
Will I take the COVID-19 vaccine? ▼



Perceived difficulty of getting the COVID-19 vaccine



When will I take the COVID-19 vaccine? ▼



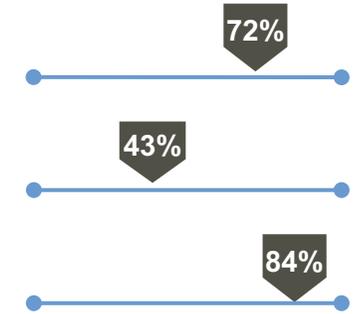
What are my perceptions of COVID-19 risk and severity? (%T2B – Strongly agree/agree)

“I believe that COVID-19 is a threat to public health, so I follow the protocols in place to distance, as I am concerned for my family and community.”

I believe COVID-19 is real and a threat to public health ▼

I think COVID-19 is a serious disease ▼

I follow social distancing rules and wear a mask to protect myself from COVID-19 ▼



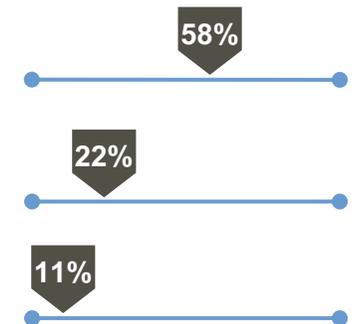
What are my perceptions of the vaccine? (%T2B – Strongly agree/agree)

“I need to be reassured about the safety of the COVID-19 vaccine, but overall, I think it is likely to be effective.”

I am concerned about the safety or side effects of the COVID-19 vaccine

I do not think the COVID-19 vaccine is effective ▲

I am concerned my church or religious group would not allow me to get the COVID-19 vaccine



▲ ▼ Significantly higher/ lower than all segments

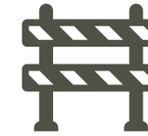
Vaccine Sceptics



This segment is motivated to play their part to protect their community and do what's best for the greater good. At the same, they do not think that they are personally at risk from COVID-19. They do not see many practical barriers to getting the vaccine, but instead are held back by their perceptions of the safety of the vaccine. They could be motivated if reassured about side effects and safety from the right sources. Additionally, they can be persuaded by mandates from employers or events.



Motivation to get vaccinated



Barriers with vaccination uptake



Part of my responsibility to **protect my family and community**



I want to be sure that the **vaccine is as safe as possible**



I need **reassurance from a health care worker or leader**



My **employer or school requires it**, or an **event I want to attend requires it**



Worried about the **safety or side effects of the vaccine**, including that it **could give me COVID-19**



Concerned that the vaccine will **not protect me from me getting COVID-19**



I am not **personally at risk** of catching COVID-19



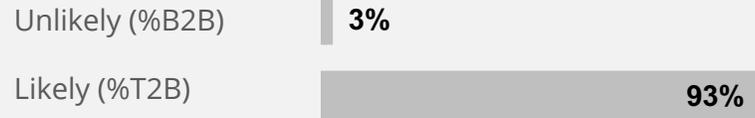
Worried that the **development of the vaccine may be rushed**, and it may not be thoroughly tested



Vaccine pragmatists



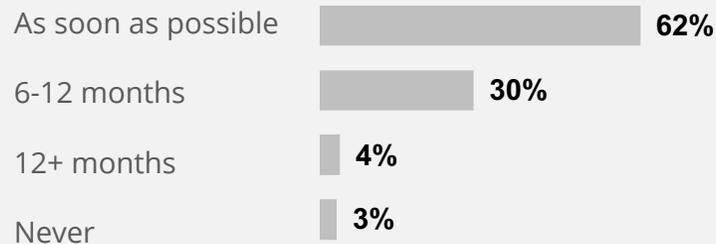
Will I take the COVID-19 vaccine? ▲



Perceived difficulty of getting the COVID-19 vaccine



When will I take the COVID-19 vaccine? ▲



What are my perceptions of COVID-19 risk and severity? (%T2B – Strongly agree/agree)

“COVID-19 is a real and severe threat to public health. I follow the protocols in place to distance and protect myself.”

I believe COVID-19 is real and a threat to public health

91%

I think COVID-19 is a serious disease

62%

I follow social distancing rules and wear a mask to protect myself from COVID-19

94%



What are my perceptions of the vaccine? (%T2B – Strongly agree/agree)

(%T2B – Strongly agree/agree)

“I have some concerns about the side effects of the COVID-19 vaccine, but overall, I think it is effective and I trust it.”

I am concerned about the safety or side effects of the COVID-19 vaccine

64%

I do not think the COVID-19 vaccine is effective

32%

I am concerned my church or religious group would not allow me to get the COVID-19 vaccine

21%

▲ ▼ Significantly higher/ lower than all segments

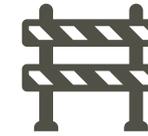
Vaccine pragmatists



This segment is very open to getting the vaccine. They believe that COVID-19 is a real and serious threat. While they have some concerns about the safety and would like more information, they have a level of trust and confidence in the vaccine. There are many potential motivating factors for this segment, but physical barriers are holding them back. They require more support and information in obtaining the vaccine and are also motivated by financial rewards.



Motivation to get vaccinated



Barriers with vaccination uptake



If the vaccine were convenient to get to, like **it was offered near my home or work** or **I could get free transport**



If I had the time to get it, like if I was able to take **time off work or family responsibilities** or if **it was very quick to get**



If it did not cost me anything and **was free** or, even better if I **received a reward or a voucher**



If someone in my family social network got it, I would feel more likely to also get it



I don't have enough information about the vaccine to make a decision



I am **not able to take time off from my work or family** responsibilities



I don't know where I can get the vaccine



I am **not able to access the vaccine**, or it is not available to me



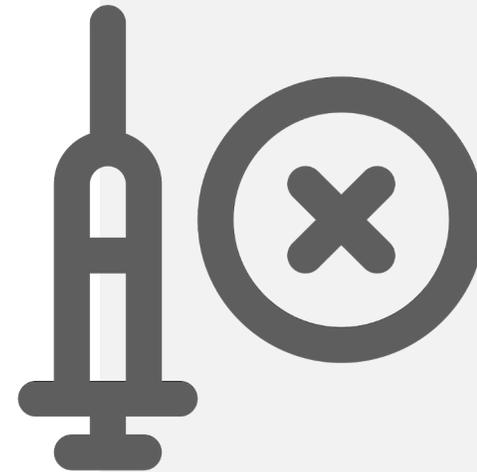
Motivation levers for getting vaccinated by subgroups of unvaccinated

		Unvaccinated segments			Age and gender			Working status		Province								
		COVID-19 Cynics	Vax Sceptic	Vax. prag.	Aged 18 to 34	Males aged 18 to 49	Aged 50+	Full-time	Part-time	WC	NC	EC	KZN	FS	NW	GP	MP	LP
<i>Is there anything that could convince you to get the COVID-19 vaccine?</i>																		
Financial incentives 	Received a reward	0%	11%	12%	11%	11%	6%	8%	7%	6%	11%	9%	12%	12%	8%	9%	13%	8%
	Received a voucher	0%	12%	13%	11%	12%	9%	6%	12%	6%	7%	9%	16%	8%	14%	9%	9%	12%
Facilitating convenience (reducing the financial and time barrier) 	Offered near house/work	0%	8%	28%	15%	17%	14%	19%	16%	14%	11%	21%	16%	22%	15%	15%	16%	17%
	Could take time off	1%	6%	18%	11%	12%	8%	10%	11%	6%	11%	12%	12%	13%	16%	11%	11%	8%
	Free transport	0%	7%	17%	11%	9%	11%	5%	8%	7%	7%	12%	10%	15%	12%	9%	12%	14%
	Quick to get	0%	5%	22%	12%	13%	11%	7%	17%	7%	11%	16%	14%	10%	7%	11%	13%	14%
"Shoves" and mandates 	Work/school mandate	1%	32%	17%	23%	20%	9%	25%	22%	17%	21%	20%	19%	23%	10%	19%	28%	26%
	Event required it	0%	17%	12%	13%	12%	9%	11%	12%	8%	4%	18%	9%	23%	12%	12%	16%	12%



INFORMATION SOURCES ON COVID-19

Information sources on COVID-19
Unvaccinated segments

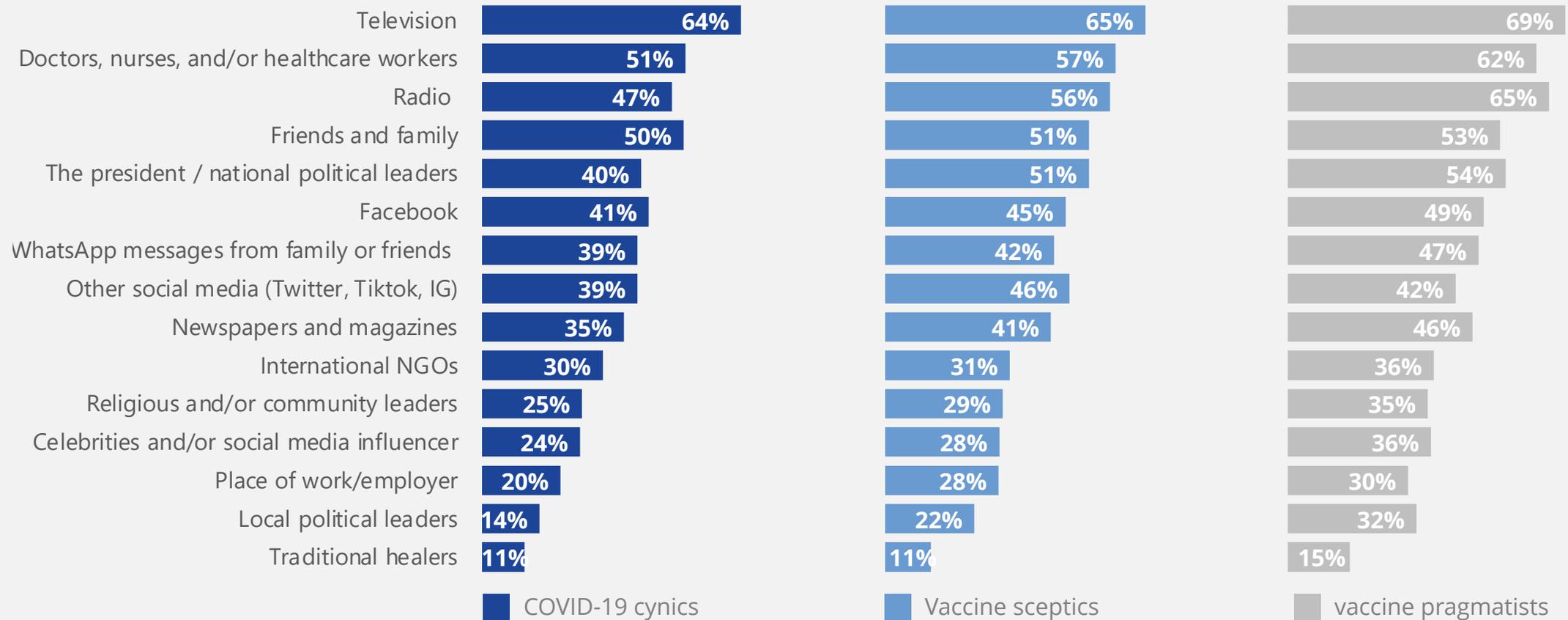


Across vaccination segments, the top three sources for information about COVID-19 were through television, healthcare professionals and the radio



Unvaccinated segments

Information sources used for COVID-19 and the vaccine in South Africa

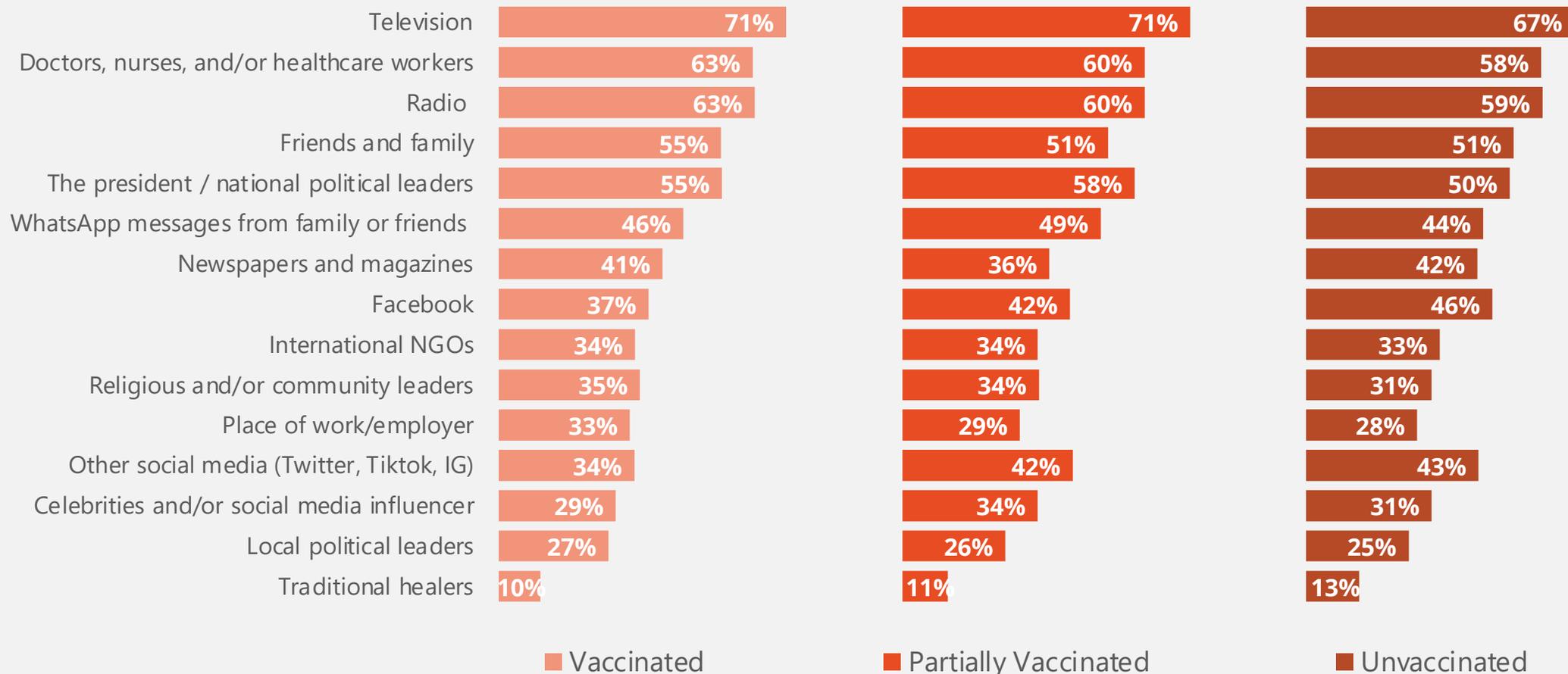


Across vaccination status, respondents noted the top three ways they received information about COVID-19 were through television, healthcare professionals and the radio. Unvaccinated respondents are more likely to get information from social media.



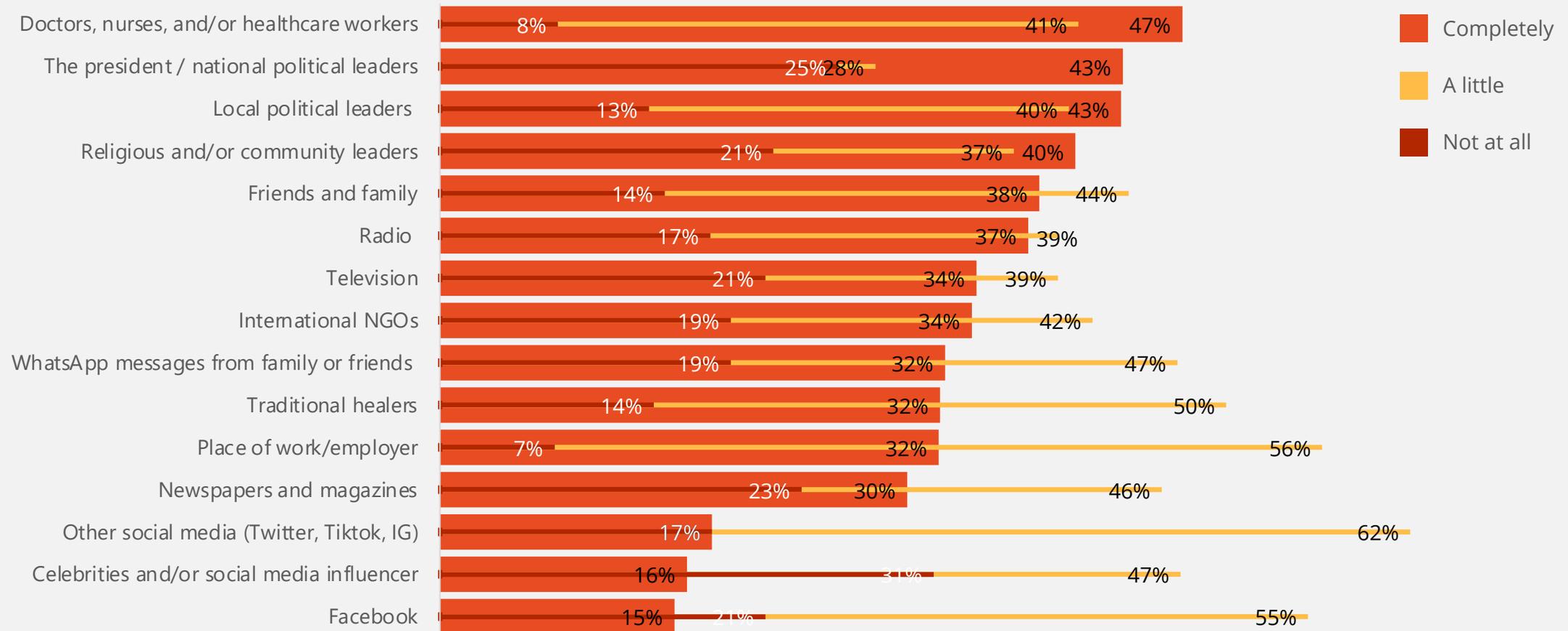
By vaccinated status

Information sources used for COVID-19 and the vaccine in South Africa



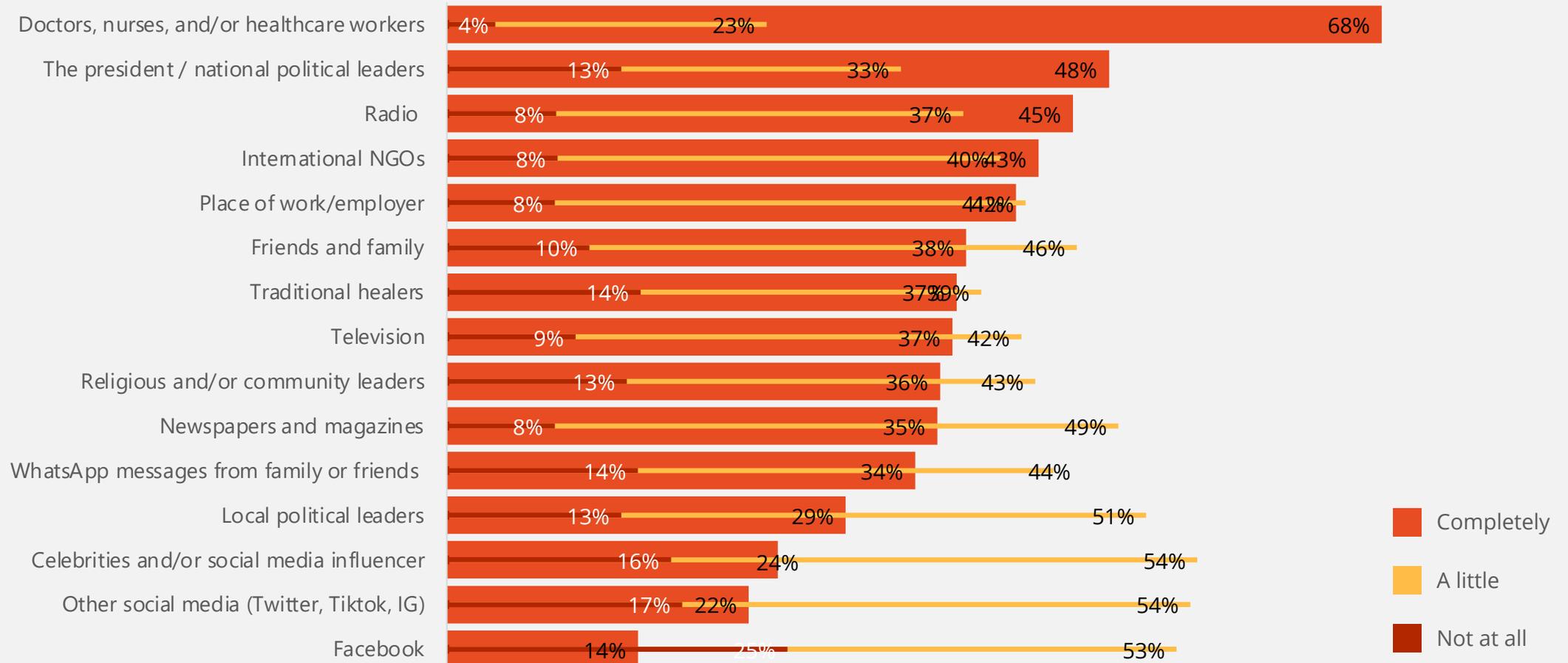
COVID-19 cynics have middling trust in healthcare workers, but are more likely to trust local political leaders, than the other segments

Trust in information sources among unvaccinated segments



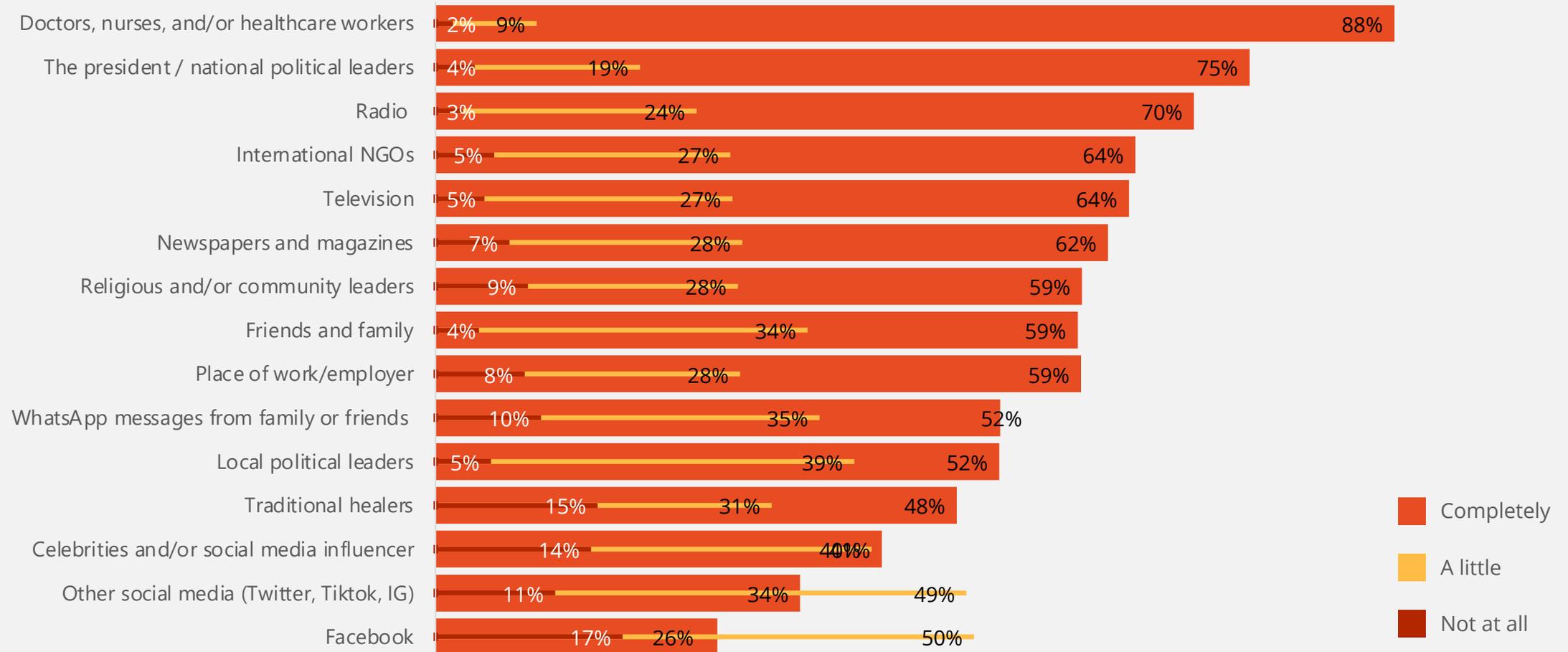
Vaccine sceptics also trust the radio and international NGOs as sources of information

Trust in information sources among unvaccinated segments



Vaccine pragmatists have more trust overall than other segments, including in mass media like television, radio, newspapers and magazines

Trust in information sources among unvaccinated segments

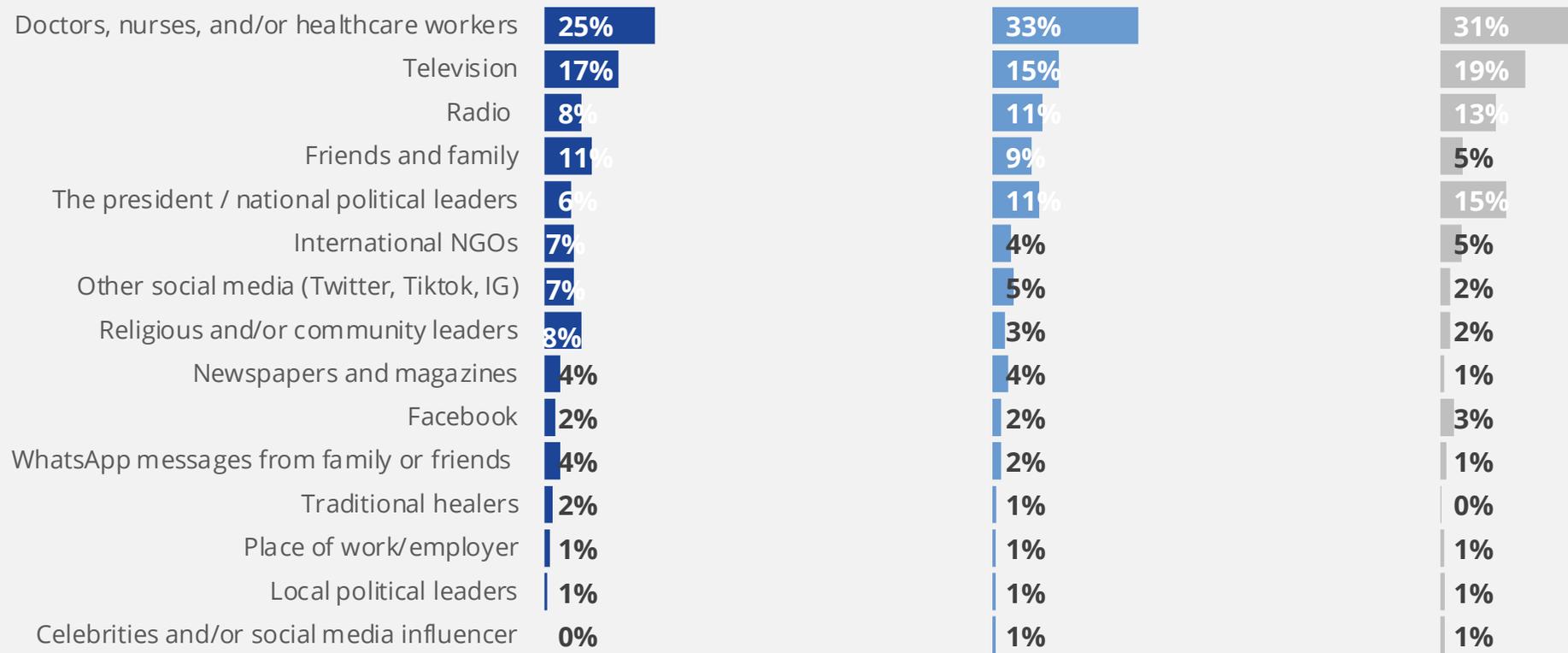


COVID-19 cynics have more trust in friends and family and community leaders than the other groups, while vaccine pragmatics are more likely to trust national political leaders



Unvaccinated segments

Most trusted information sources for COVID-19 and the vaccine in South Africa



COVID-19 cynics

Vaccine sceptics

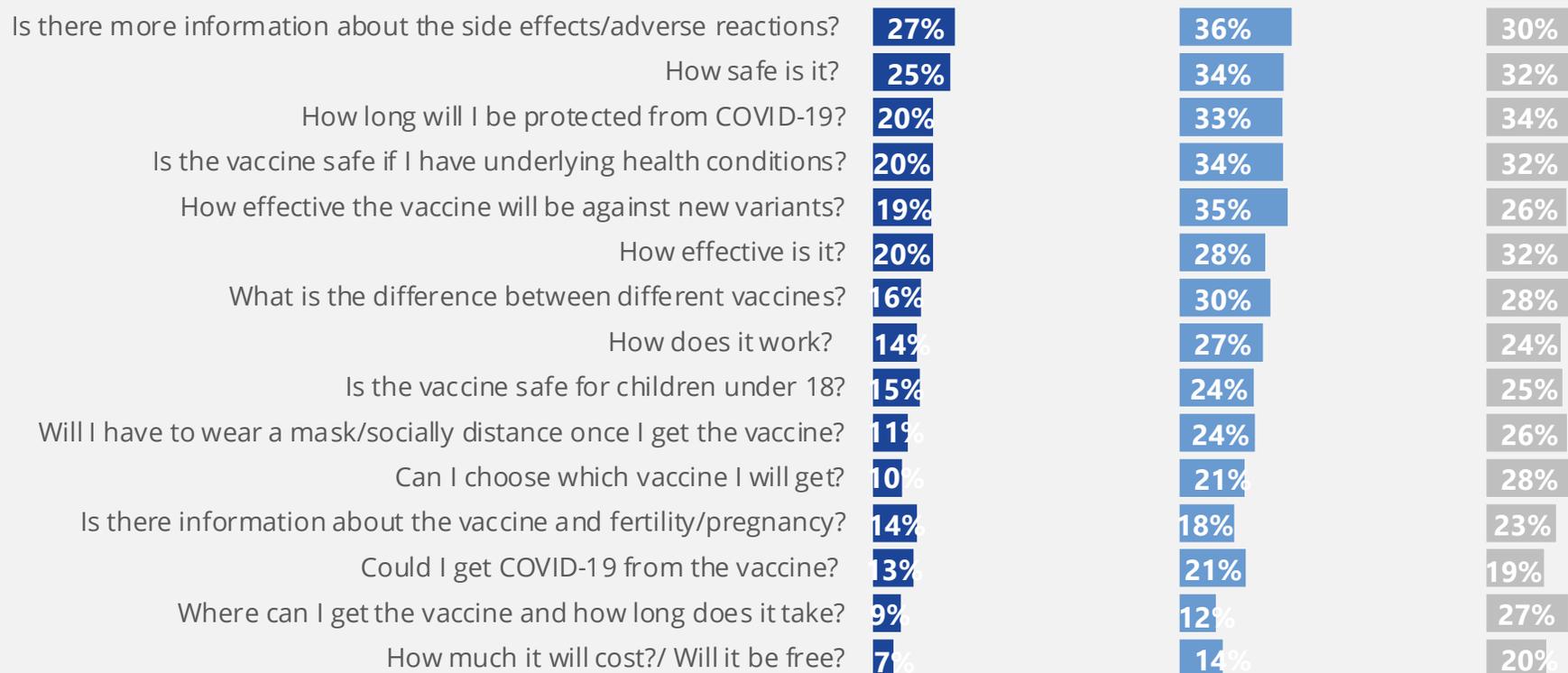
vaccine pragmatics

The vaccine sceptic group questions are more about safety, while the vaccine pragmatists want to know about access and effectiveness



Unvaccinated segments

Most sought after information about COVID-19 and the vaccine in South Africa

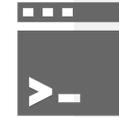


COVID-19 cynics

Vaccine sceptics

vaccine pragmatists

Information sources on COVID-19 by target demographics



Aged 18 to 34



Males aged
18 to 49



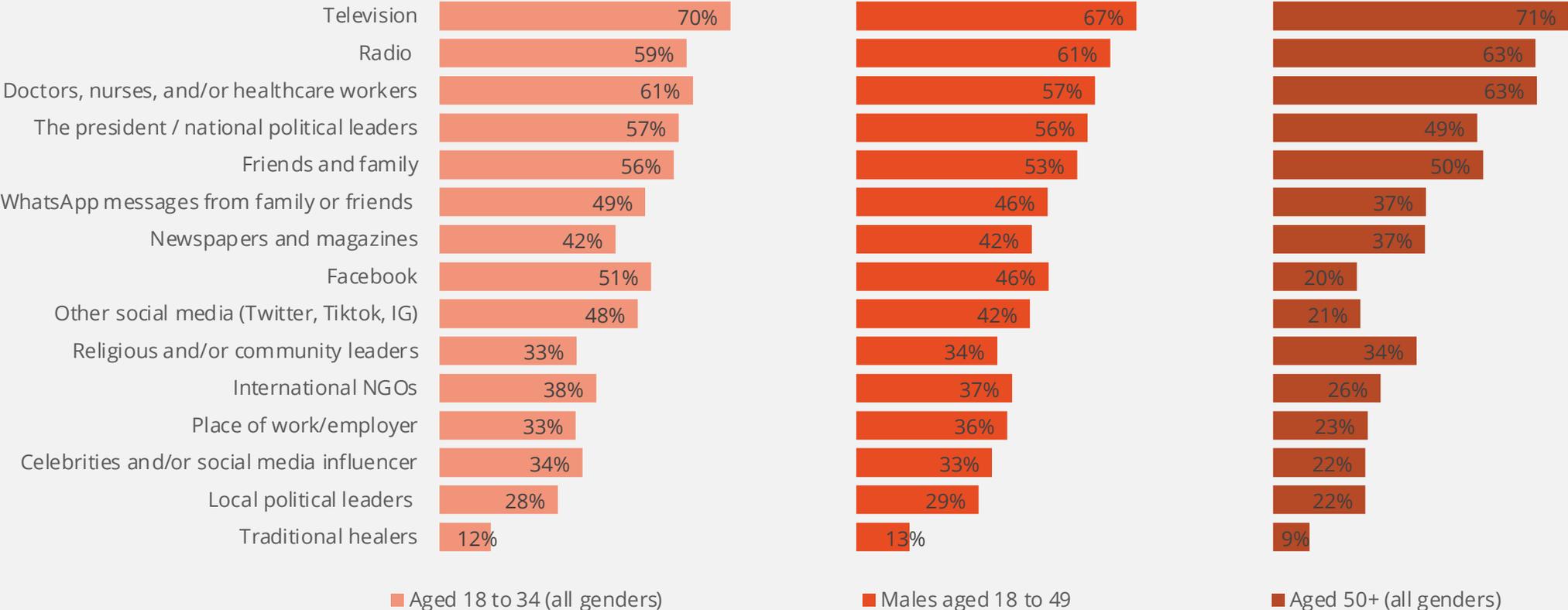
Aged 50+

Younger respondents are more likely to get information from social media, while older respondents use fewer information sources overall



By target demos

Information sources used for COVID-19 and the vaccine in South Africa

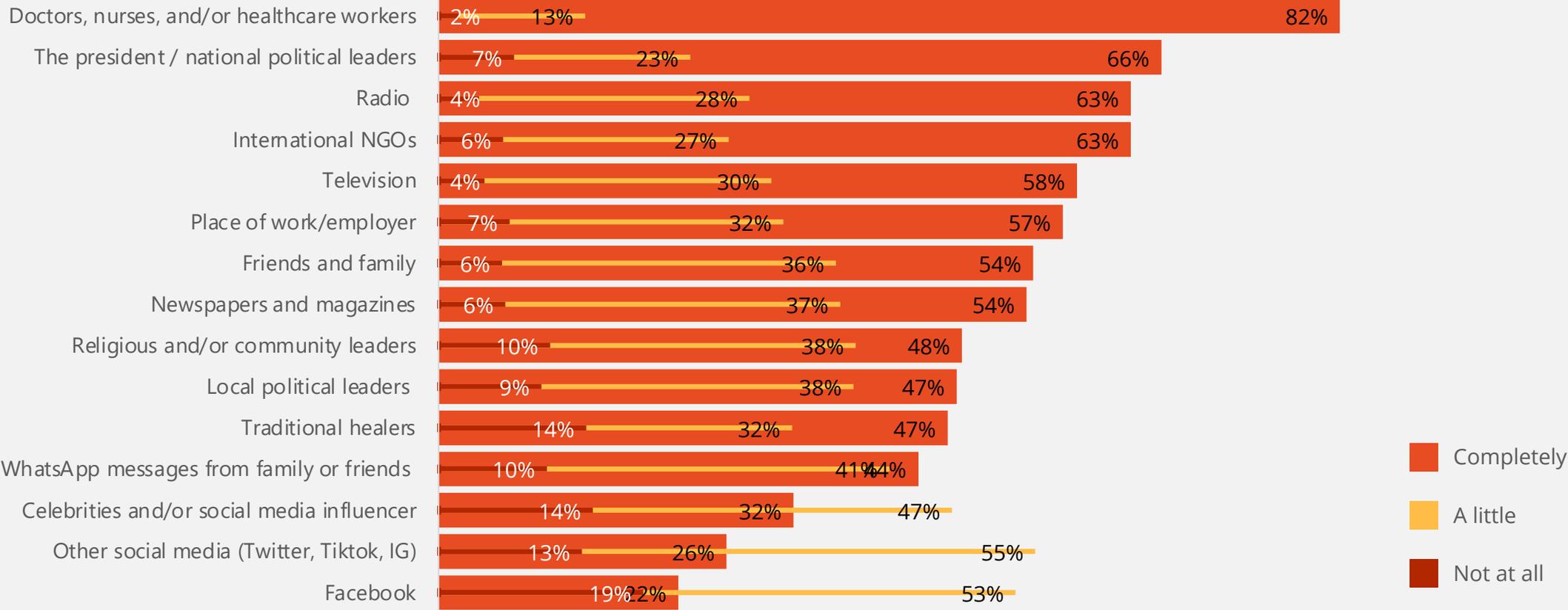


Younger respondents trust official sources, such as HCP, national political leaders and international NGOs, more than they trust informal sources like social media or their social networks



Age 18 to 34

Trust in information sources among respondents aged 18 to 34

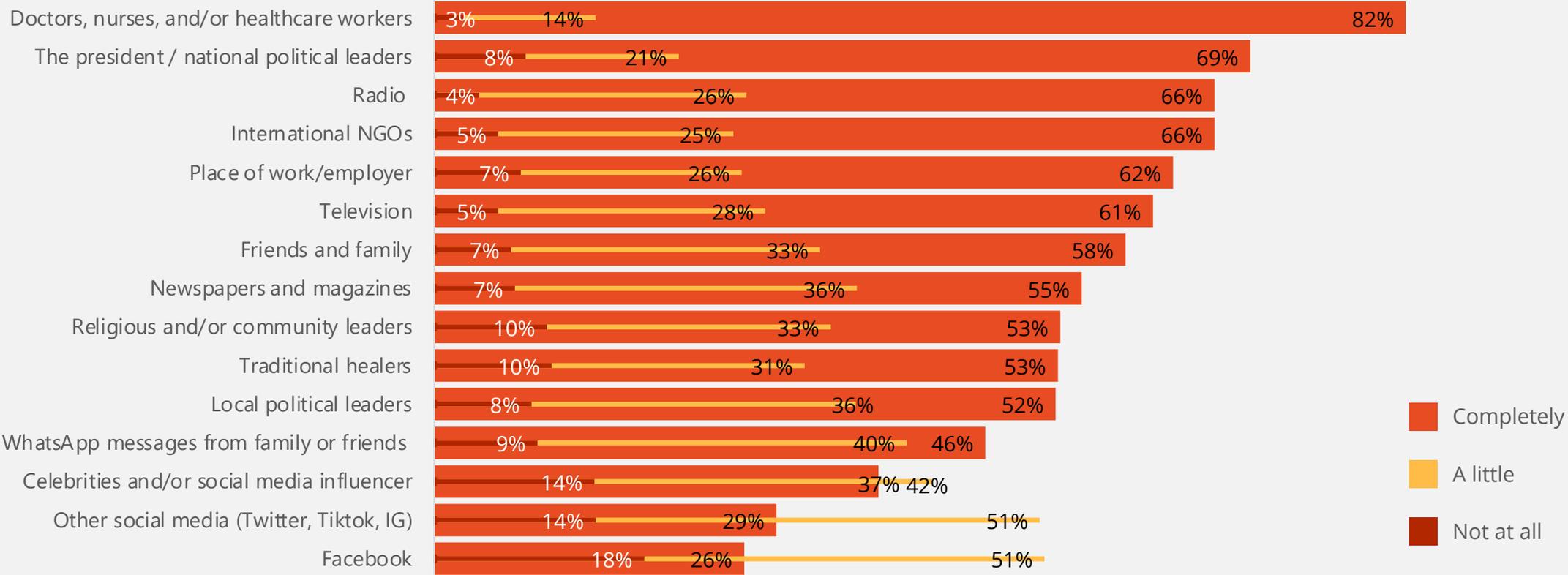


Males aged 18 to 49 also trust healthcare providers as their top source of information for COVID-19 and the vaccine



Males aged 18 to 49

Trust in information sources among males aged 18 to 49

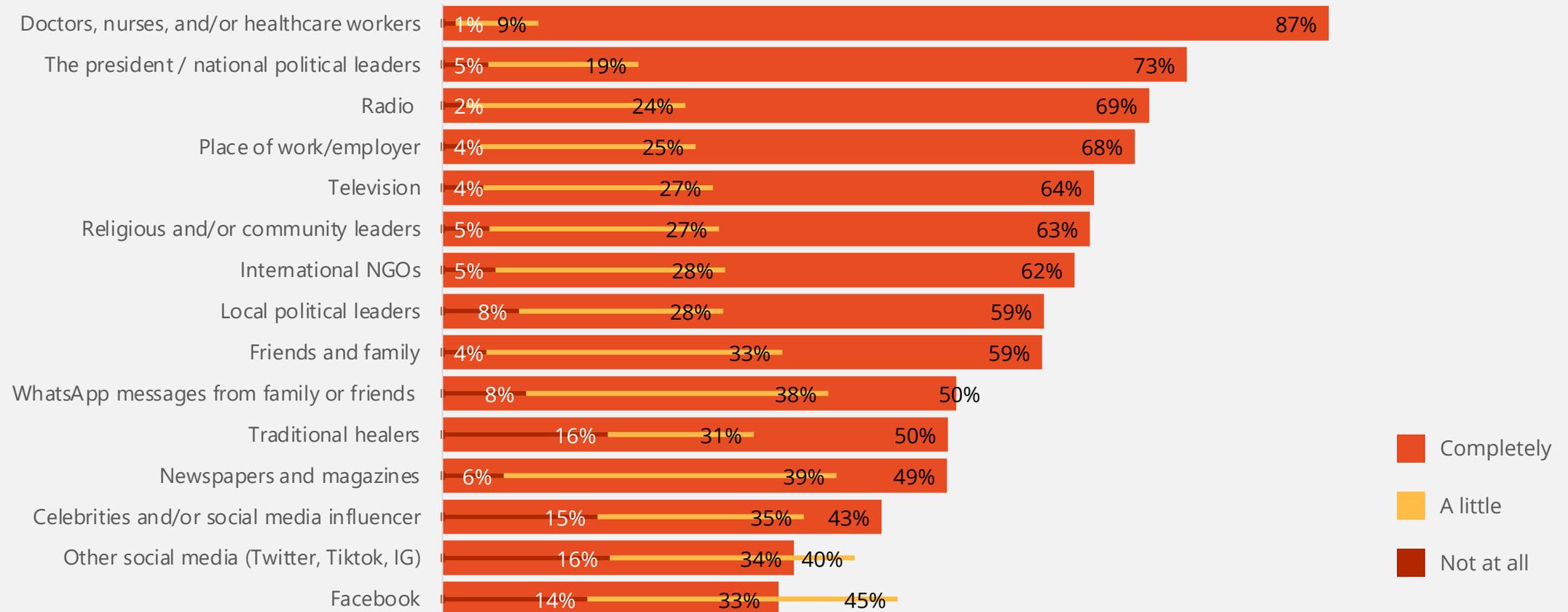


Television and radio are more trusted sources amongst older respondents than younger ones



Aged 50+

Trust in information sources among aged 50+ (all genders)

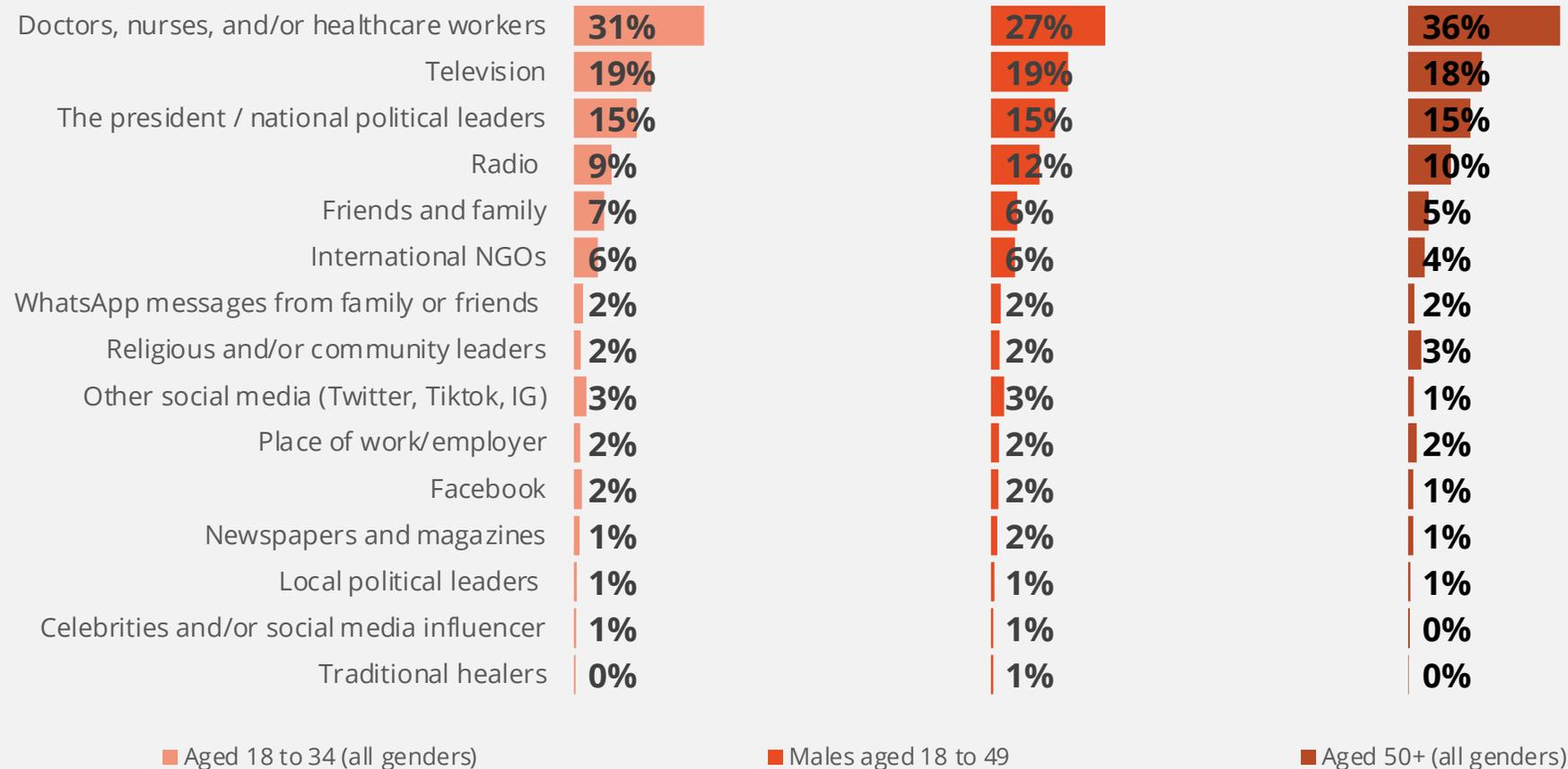


Across all age ranges, healthcare professionals are the most trusted source



By target demos

Most trusted information sources for COVID-19 and the vaccine in South Africa

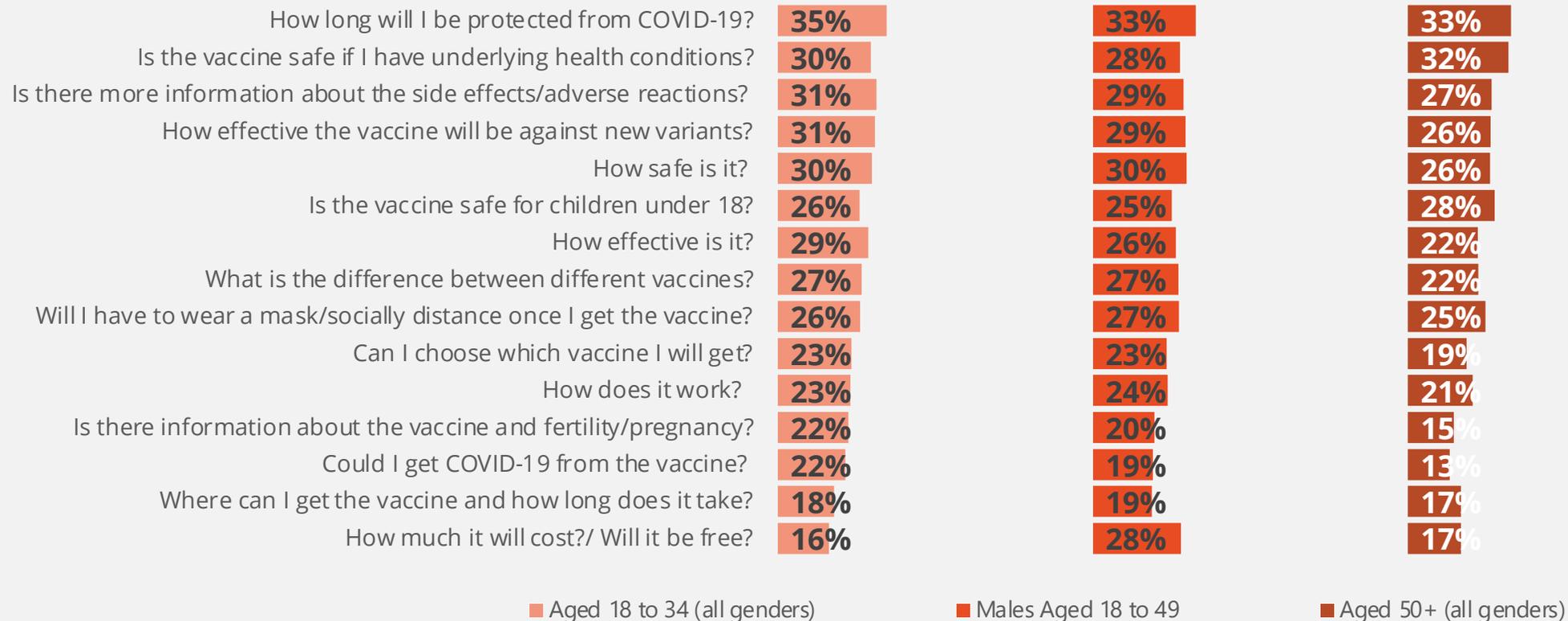


Information needs do not vary much by age or gender



By target demos

Most sought after information about COVID-19 and the vaccine in South Africa





NUDGES

Overview of nudges and methodology

- Respondents were asked about 6 different “nudges” or programs/incentives that are meant to encourage people to get vaccinated. These nudges included:
 - Nudge one: vaccine reservation
 - Nudge two: time compensation
 - Nudge three: routine doctor visit
 - Nudge four: vaccine “passport”
 - Nudge five: time sensitive and convenient
 - Nudge six: employer mandated [for labour force only]
- For each nudge, respondents were asked (1) if it was realistic, (2) if they supported or opposed it, and (3) how likely the program would be to influence them to get vaccinated.
- These six nudges were randomized in the survey program so that each respondent received them in a random order to eliminate order bias.
- After nudges were given, respondents then rated which of these programs/incentives were the most and least likely to influence them to receive a vaccine.

Message testing of the 6 different nudges is disaggregated into the following subgroups, to better inform campaign strategy:

- Segments of unvaccinated people
- Target age/gender demographics
- Employment status
- Province

Breakdown of nudges tested

Nudge one: vaccine reservation

Imagine that a free COVID-19 vaccine was automatically reserved for you at a location near to your work or home. You receive an SMS notification of this reservation for your first or next dose.

Nudge two: time/financial compensation

Imagine that you receive a R100 voucher to compensate you for the time it takes you to get your first or next COVID-19 vaccine dose.

Nudge three: routine doctor visit

Imagine that you receive your first or next COVID-19 vaccine dose as part of your routine doctor's check-up unless you indicate otherwise (opt-out).

Nudge four: vaccine "passport"

Imagine that you bought tickets to a football match, concert, festival, or another large gathering with your friends and family next week, but unless you are fully vaccinated, you will not be able to go.

Nudge five: time sensitive and convenient

Imagine a mobile vaccination clinic that is within a five-minute walk of your house and is offering free vaccinations in 15 minutes or less without the need for an appointment.

Nudge six: employer mandated [for labour force only]

Imagine that your employer, or a potential employer, requires all employees to be fully vaccinated against COVID-19.

Nudges and message testing
by unvaccinated segment



Nudge one – vaccine reservation



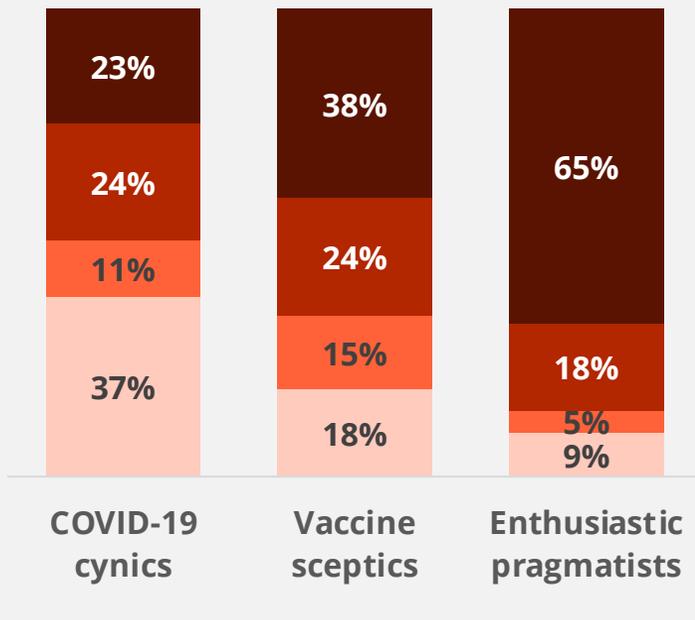
Unvaccinated segments



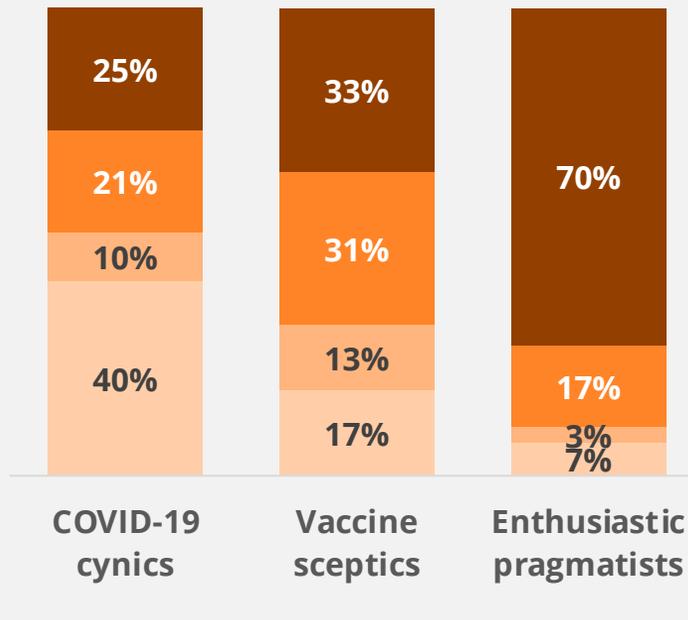
Facilitation of time and convenience

I'd like you to imagine that a free COVID-19 vaccine was automatically reserved for you at a location near your work or home. You receive an SMS notification of this reservation for your first or next dose. To start with, how realistic do you find a program like this?

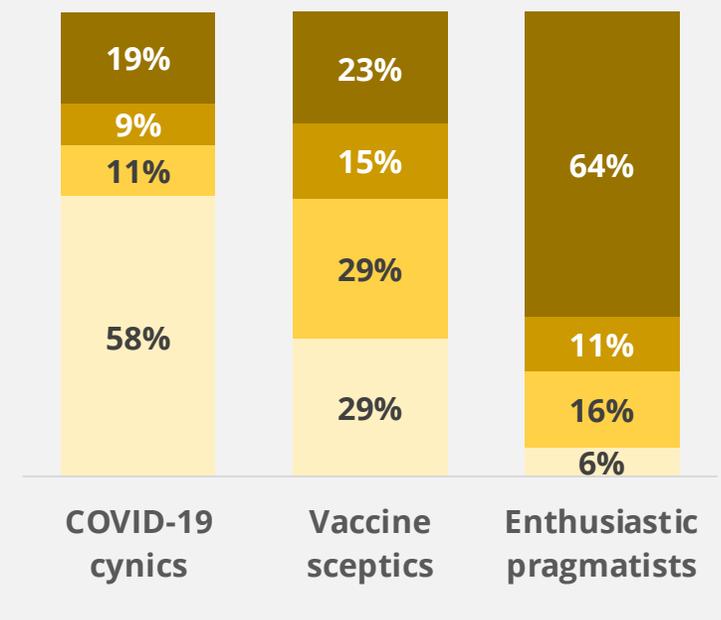
How realistic is this program?



How supportive would you be of this program?



How much would this program influence you to get a vaccine?



■ Completely unrealistic ■ Somewhat unrealistic
■ Somewhat realistic ■ Completely realistic

■ Strongly oppose ■ Somewhat oppose
■ Somewhat support ■ Strongly support

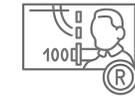
■ Not at all ■ A little bit
■ Somewhat ■ Very much

Nudge two – time compensation

I'd like you to imagine that you receive a R100 voucher to compensate you for the time it takes you to get your first or next COVID-19 vaccine dose. How realistic do you find a program like this?



Unvaccinated segments



Financial incentives

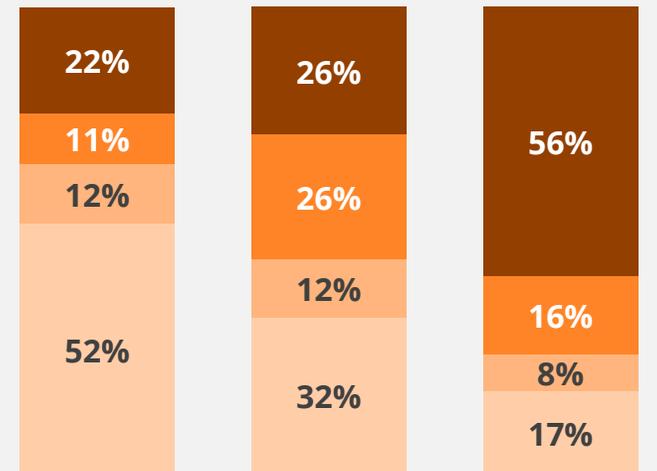
How realistic is this program?



COVID-19 cynics Vaccine sceptics Enthusiastic pragmatists

■ Completely unrealistic ■ Somewhat unrealistic
■ Somewhat realistic ■ Completely realistic

How supportive would you be of this program?



COVID-19 cynics Vaccine sceptics Enthusiastic pragmatists

■ Strongly oppose ■ Somewhat oppose
■ Somewhat support ■ Strongly support

How much would this program influence you to get a vaccine?



COVID-19 cynics Vaccine sceptics Enthusiastic pragmatists

■ Not at all ■ A little bit
■ Somewhat ■ Very much

Nudge three – routine doctor visit

I'd like you to imagine that you receive your first or next COVID-19 vaccine dose as part of your routine doctor's check-up unless you indicate otherwise (opt-out). How realistic do you find a program like this?

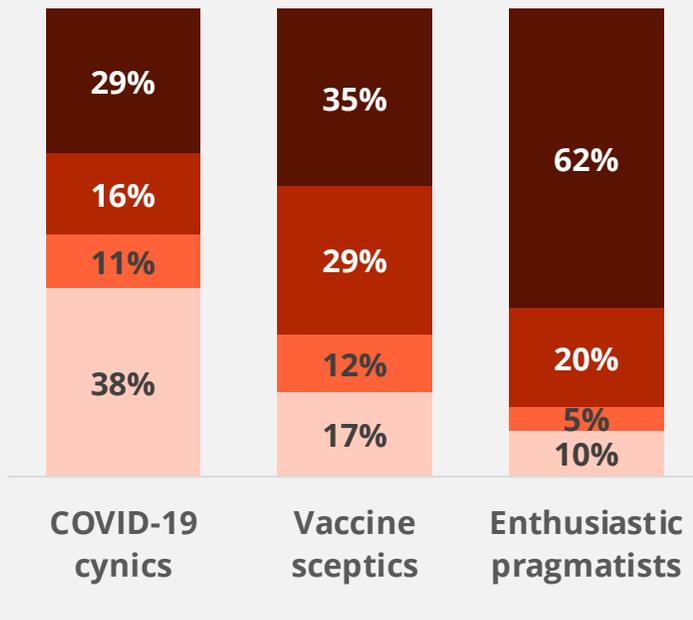


Unvaccinated segments

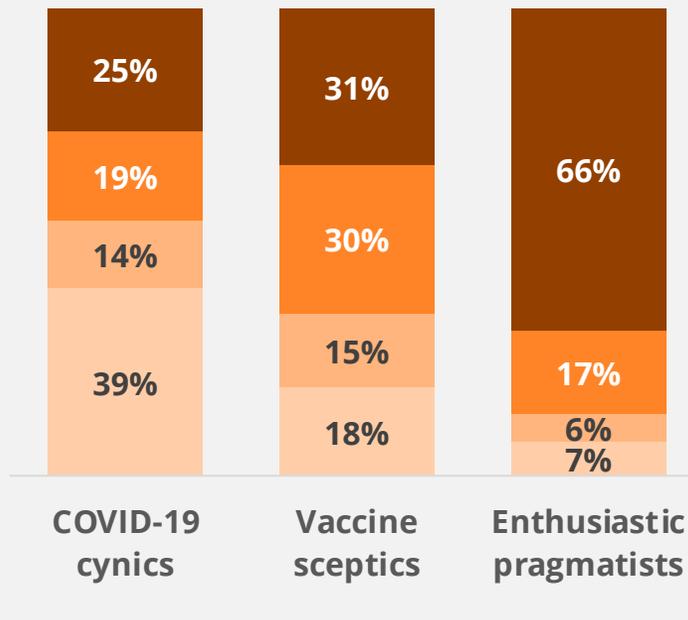


Facilitation of time and convenience

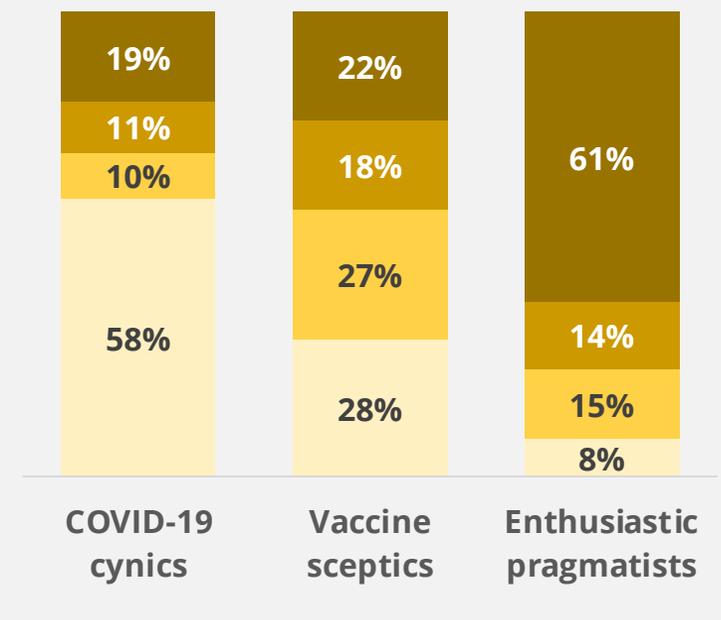
How realistic is this program?



How supportive would you be of this program?



How much would this program influence you to get a vaccine?



■ Completely unrealistic ■ Somewhat unrealistic
■ Somewhat realistic ■ Completely realistic

■ Strongly oppose ■ Somewhat oppose
■ Somewhat support ■ Strongly support

■ Not at all ■ A little bit
■ Somewhat ■ Very much

Nudge four – vaccine “passport”

I'd like you to imagine that you bought tickets to a football match, concert, festival, or another large gathering with your friends and family next week, but unless you are fully vaccinated, you will not be able to go. How realistic do you think a situation like this is?

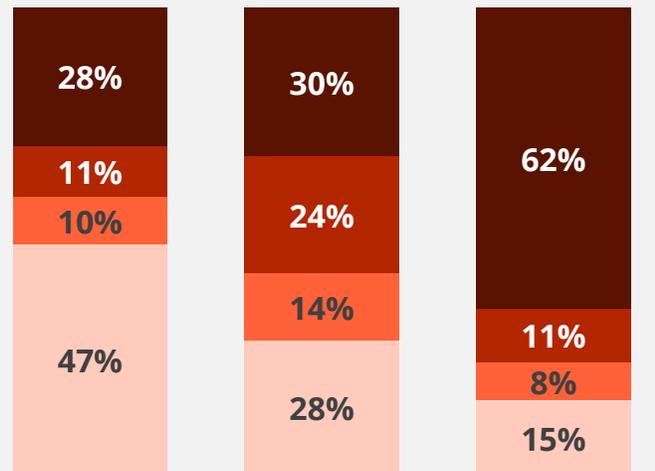


Unvaccinated segments



"Shoves" and mandates

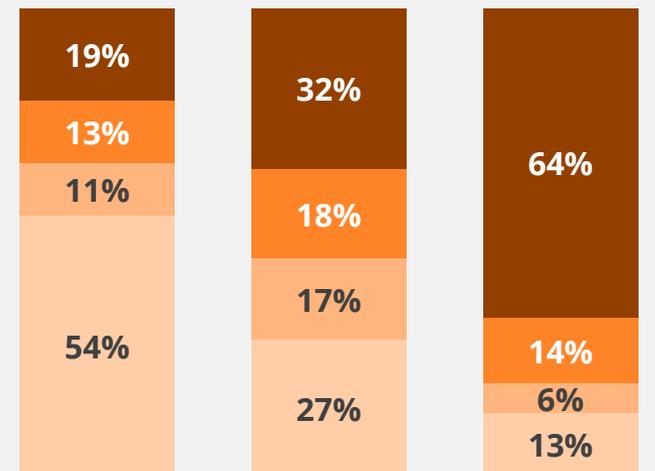
How realistic is this program?



COVID-19 cynics Vaccine sceptics Enthusiastic pragmatists

■ Completely unrealistic ■ Somewhat unrealistic
■ Somewhat realistic ■ Completely realistic

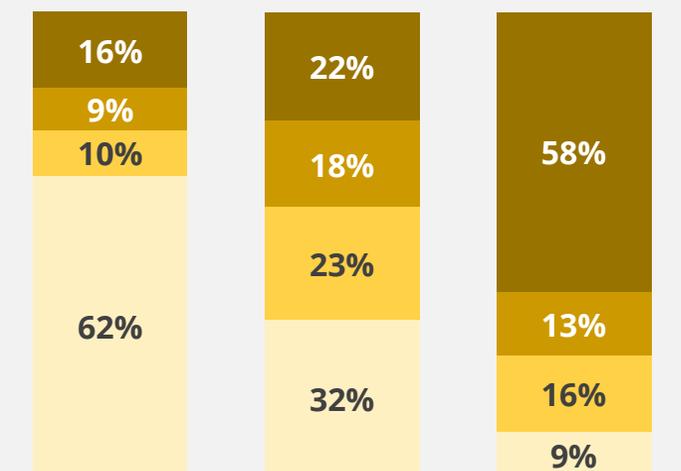
How supportive would you be of this program?



COVID-19 cynics Vaccine sceptics Enthusiastic pragmatists

■ Strongly oppose ■ Somewhat oppose
■ Somewhat support ■ Strongly support

How much would this program influence you to get a vaccine?



COVID-19 cynics Vaccine sceptics Enthusiastic pragmatists

■ Not at all ■ A little bit
■ Somewhat ■ Very much

Nudge five – time and convenience



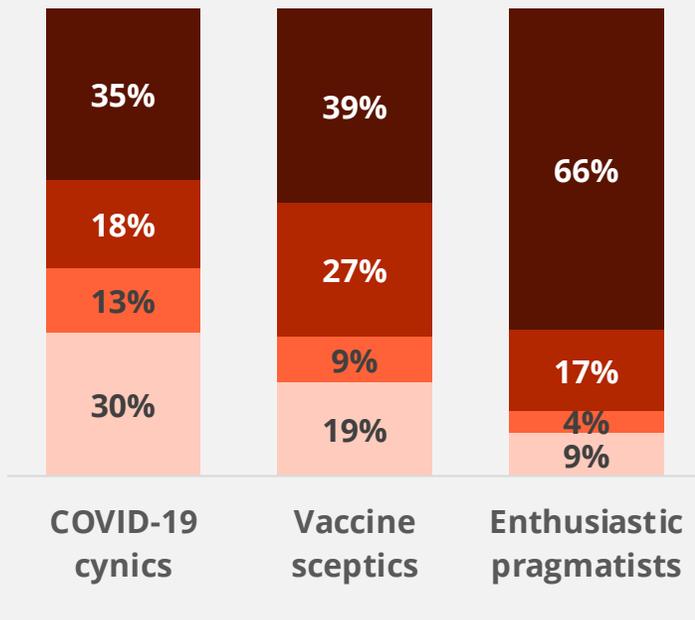
Unvaccinated segments



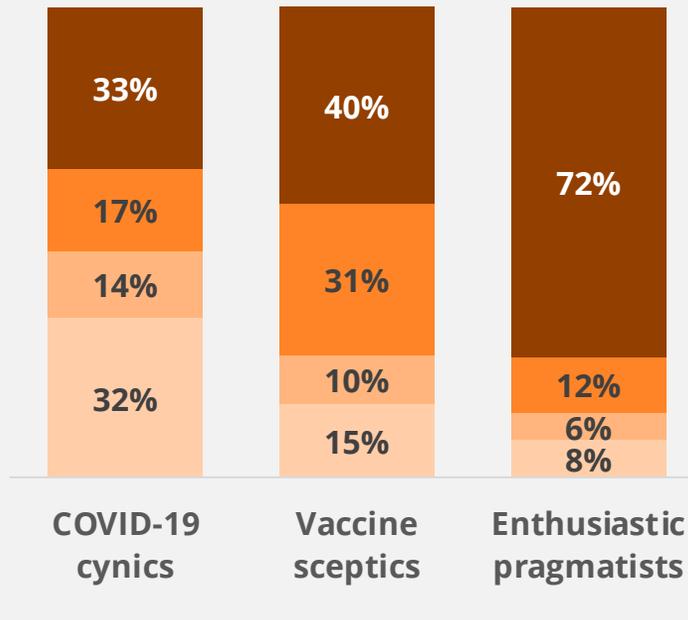
Facilitation of time and convenience

I'd like you to imagine that mobile vaccination clinic that is within a five-minute walk of your house and is offering free vaccinations in 15 minutes or less without the need for any appointment. How realistic do you find a program like this?

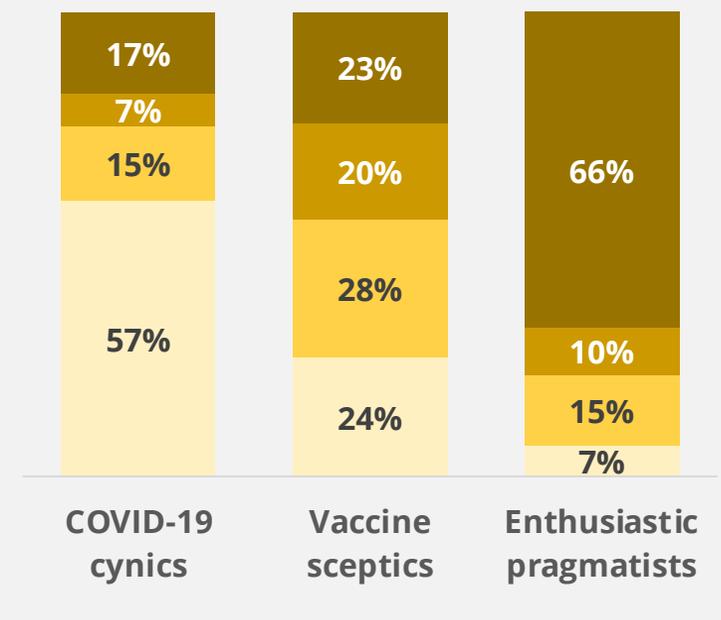
How realistic is this program?



How supportive would you be of this program?



How much would this program influence you to get a vaccine?



■ Completely unrealistic ■ Somewhat unrealistic
■ Somewhat realistic ■ Completely realistic

■ Strongly oppose ■ Somewhat oppose
■ Somewhat support ■ Strongly support

■ Not at all ■ A little bit
■ Somewhat ■ Very much

Nudge six – employer mandated

I'd like you to imagine that your employer, or a potential employer, requires all employees to be fully vaccinated against COVID-19. How realistic do you find a program like this?

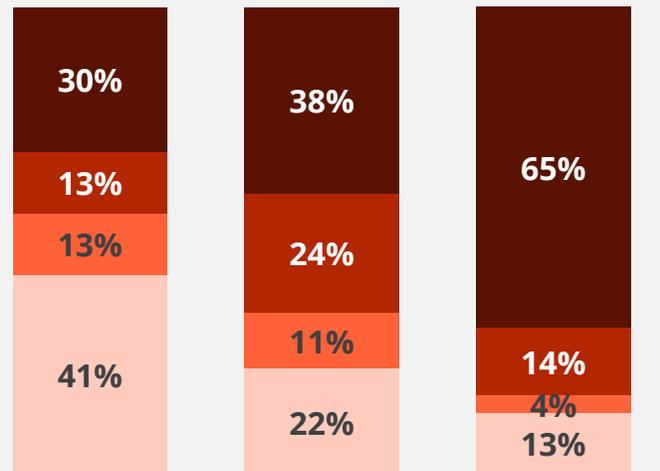


Unvaccinated segments



"Shoves" and mandates

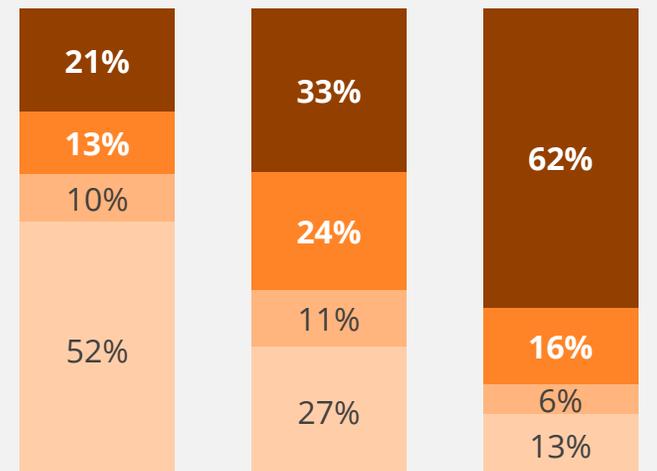
How realistic is this program?



COVID-19 cynics Vaccine sceptics Enthusiastic pragmatists

■ Completely unrealistic ■ Somewhat unrealistic
■ Somewhat realistic ■ Completely realistic

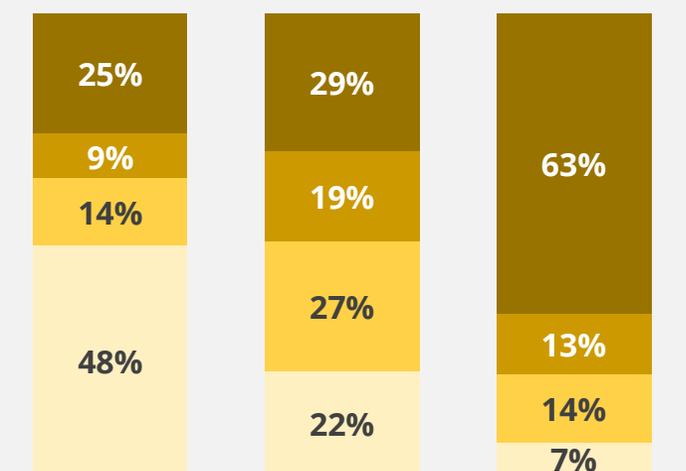
How supportive would you be of this program?



COVID-19 cynics Vaccine sceptics Enthusiastic pragmatists

■ Strongly oppose ■ Somewhat oppose
■ Somewhat support ■ Strongly support

How much would this program influence you to get a vaccine?



COVID-19 cynics Vaccine sceptics Enthusiastic pragmatists

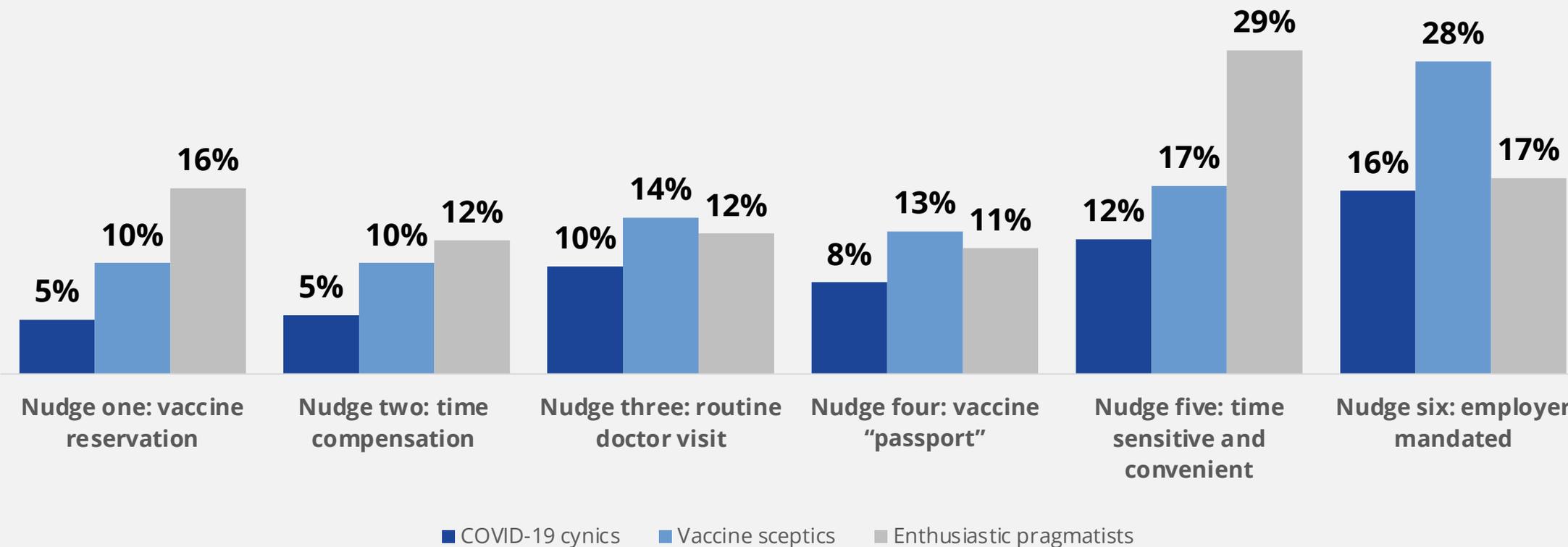
■ Not at all ■ A little bit
■ Somewhat ■ Very much

Nudge five and 6 are the most influential overall, with Nudge five being especially influential for vaccine pragmatists and Nudge six for vaccine sceptics



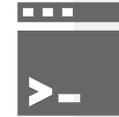
Unvaccinated segments

Program or incentive most likely to influence getting first or next vaccine dose



Nudges and message testing

By target demographics



Aged 18 to 34



Males aged
18 to 49



Aged 50+

Nudge one – vaccine reservation

I'd like you to imagine that a free COVID-19 vaccine was automatically reserved for you at a location near your work or home. You receive an SMS notification of this reservation for your first or next dose. To start with, how realistic do you find a program like this?

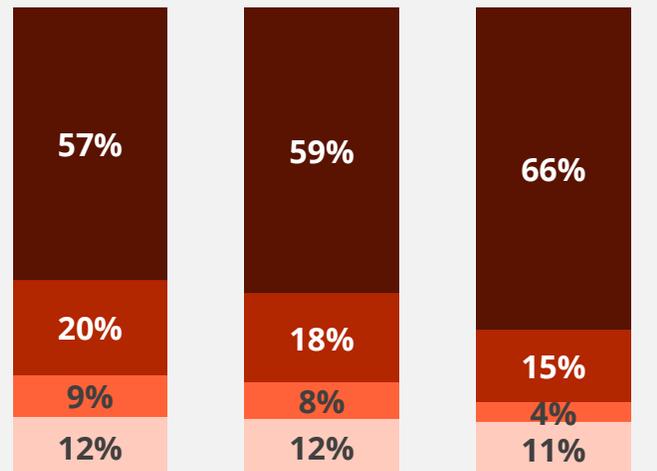


By target demos



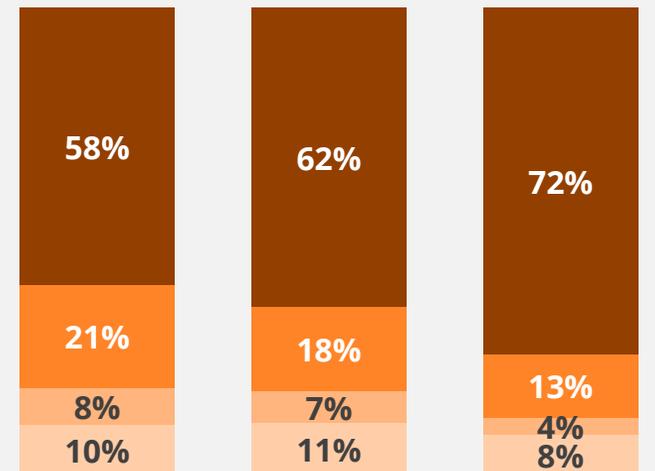
Facilitation of time and convenience

How realistic is this program?



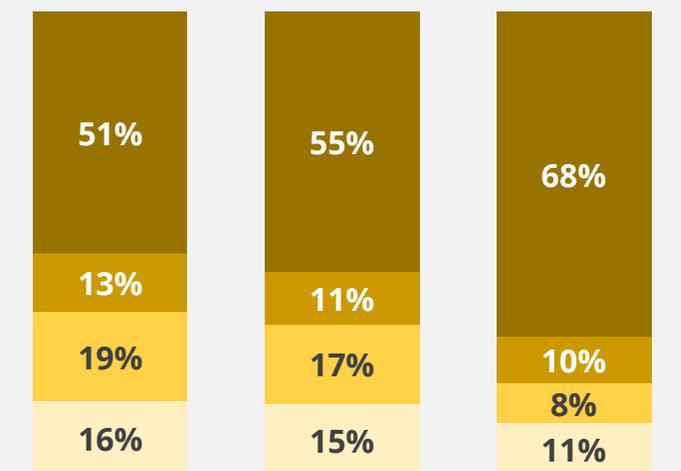
Aged 18 to 34 Males aged 18 to 49 Aged 50+

How supportive would you be of this program?



Aged 18 to 34 Males aged 18 to 49 Aged 50+

How much would this program influence you to get a vaccine?



Aged 18 to 34 Males aged 18 to 49 Aged 50+

■ Completely unrealistic ■ Somewhat unrealistic
■ Somewhat realistic ■ Completely realistic

■ Strongly oppose ■ Somewhat oppose
■ Somewhat support ■ Strongly support

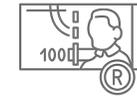
■ Not at all ■ A little bit
■ Somewhat ■ Very much

Nudge two – time compensation

I'd like you to imagine that you receive a R100 voucher to compensate you for the time it takes you to get your first or next COVID-19 vaccine dose. How realistic do you find a program like this?

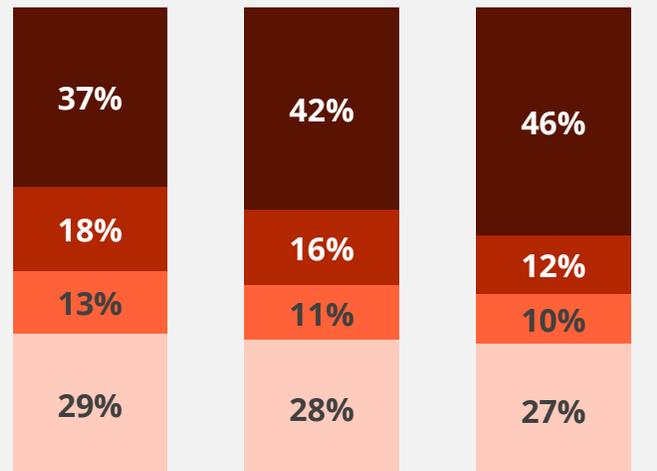


By target demos



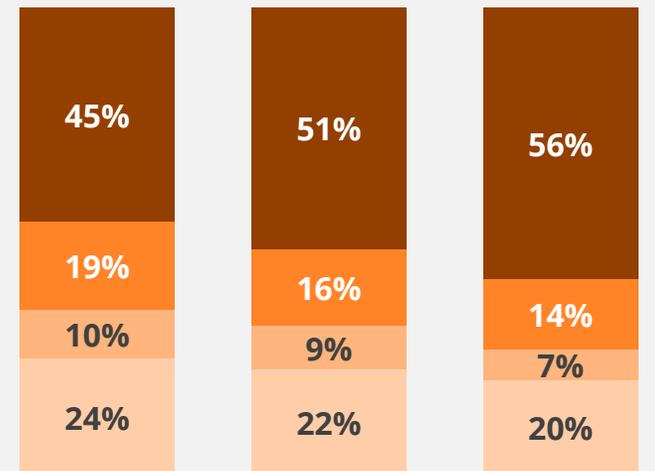
Financial incentives

How realistic is this program?



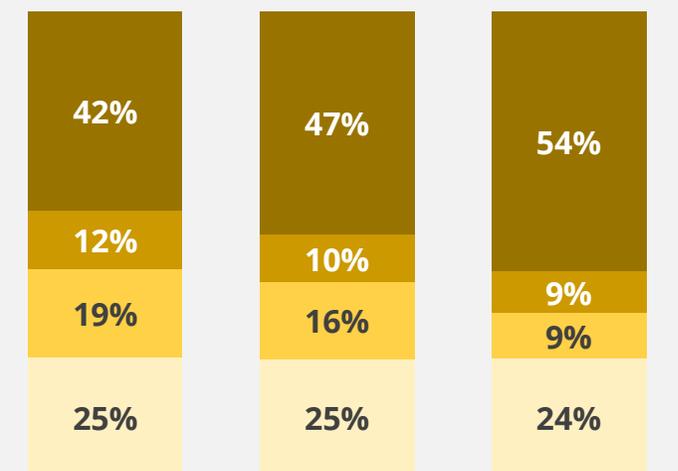
Aged 18 to 34 Males aged 18 to 49 Aged 50+

How supportive would you be of this program?



Aged 18 to 34 Males aged 18 to 49 Aged 50+

How much would this program influence you to get a vaccine?



Aged 18 to 34 Males aged 18 to 49 Aged 50+

■ Completely unrealistic ■ Somewhat unrealistic
■ Somewhat realistic ■ Completely realistic

■ Strongly oppose ■ Somewhat oppose
■ Somewhat support ■ Strongly support

■ Not at all ■ A little bit
■ Somewhat ■ Very much

Nudge three – routine doctor visit

I'd like you to imagine that you receive your first or next COVID-19 vaccine dose as part of your routine doctor's check-up unless you indicate otherwise (opt-out). How realistic do you find a program like this?

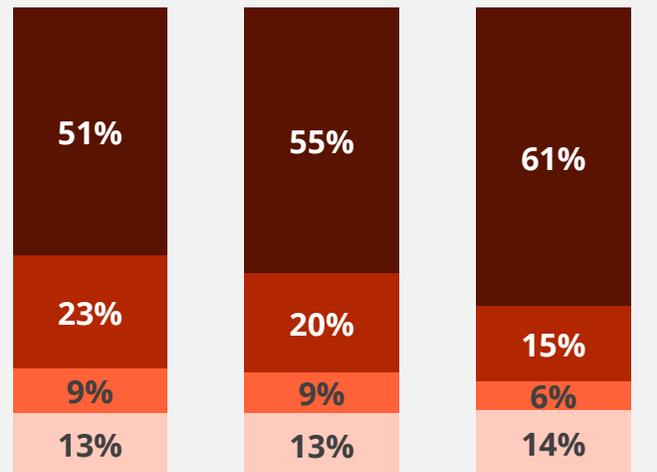


By target demos



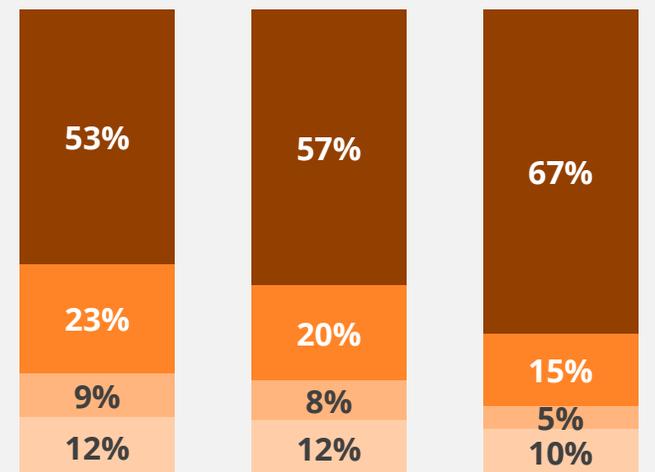
Facilitation of time and convenience

How realistic is this program?



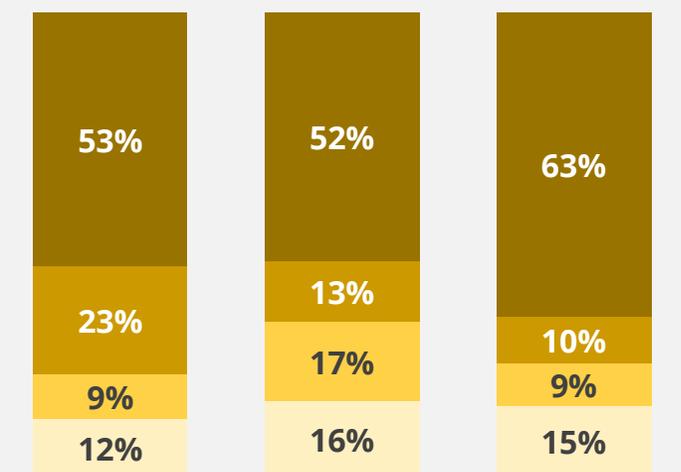
Aged 18 to 34 Males aged 18 to 49 Aged 50+

How supportive would you be of this program?



Aged 18 to 34 Males aged 18 to 49 Aged 50+

How much would this program influence you to get a vaccine?



Aged 18 to 34 Males aged 18 to 49 Aged 50+

■ Completely unrealistic ■ Somewhat unrealistic
■ Somewhat realistic ■ Completely realistic

■ Strongly oppose ■ Somewhat oppose
■ Somewhat support ■ Strongly support

■ Not at all ■ A little bit
■ Somewhat ■ Very much

Nudge four – vaccine “passport”

I'd like you to imagine that you bought tickets to a football match, concert, festival, or another large gathering with your friends and family next week, but unless you are fully vaccinated, you will not be able to go. How realistic do you think a situation like this is?

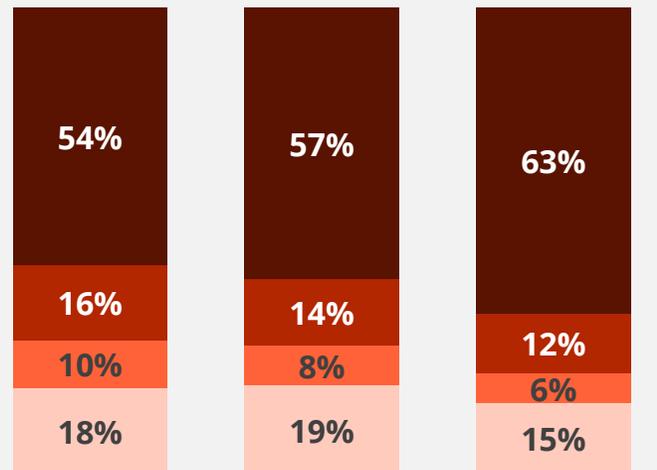


By target demos



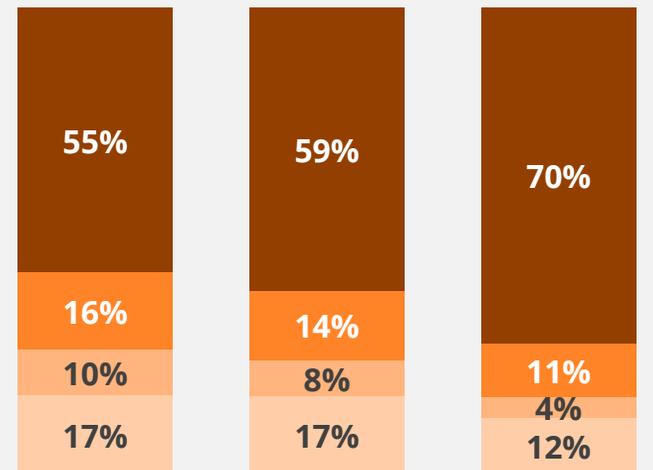
"Shoves" and mandates

How realistic is this program?



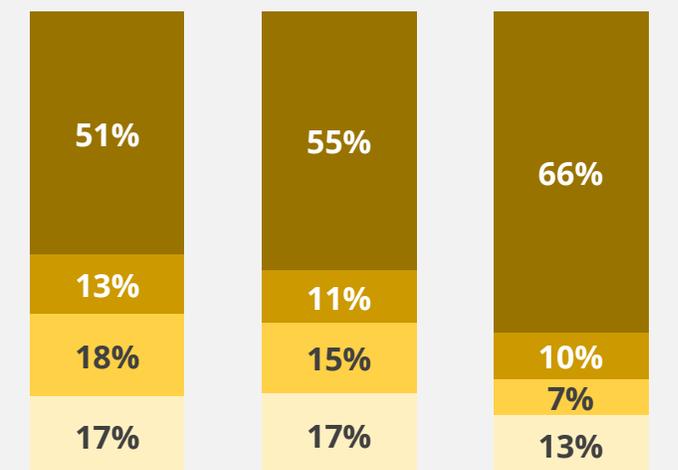
Aged 18 to 34 Males aged 18 to 49 Aged 50+

How supportive would you be of this program?



Aged 18 to 34 Males aged 18 to 49 Aged 50+

How much would this program influence you to get a vaccine?



Aged 18 to 34 Males aged 18 to 49 Aged 50+

■ Completely unrealistic ■ Somewhat unrealistic
■ Somewhat realistic ■ Completely realistic

■ Strongly oppose ■ Somewhat oppose
■ Somewhat support ■ Strongly support

■ Not at all ■ A little bit
■ Somewhat ■ Very much

Nudge five – time and convenience

I'd like you to imagine that mobile vaccination clinic that is within a five-minute walk of your house and is offering free vaccinations in 15 minutes or less without the need for any appointment. How realistic do you find a program like this?

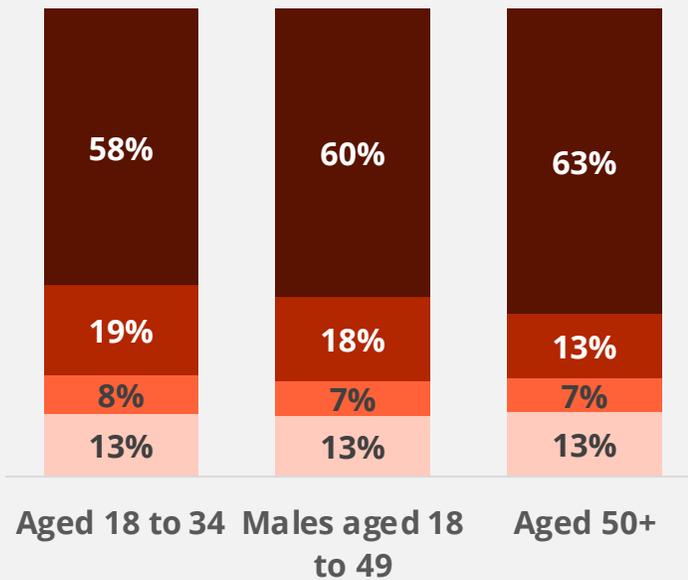


By target demos

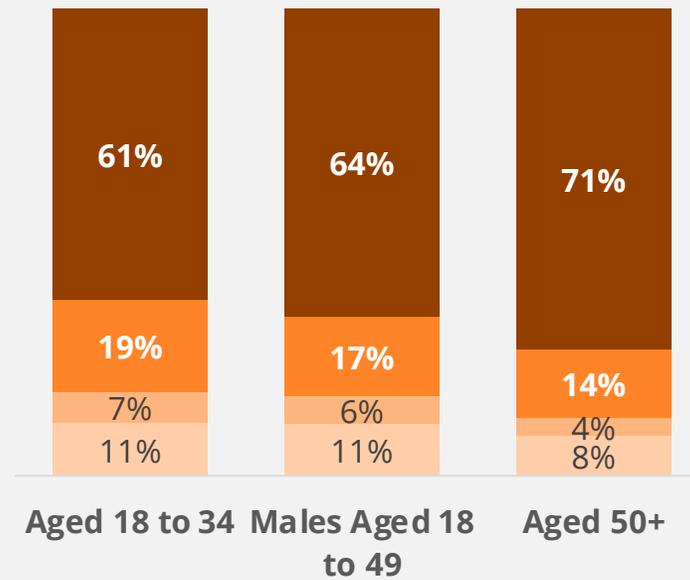


Facilitation of time and convenience

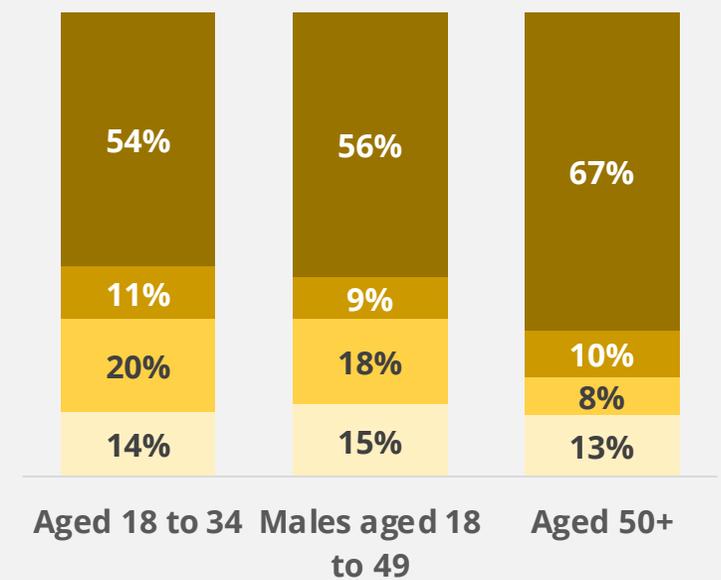
How realistic is this program?



How supportive would you be of this program?



How much would this program influence you to get a vaccine?



■ Completely unrealistic ■ Somewhat unrealistic
■ Somewhat realistic ■ Completely realistic

■ Strongly oppose ■ Somewhat oppose
■ Somewhat support ■ Strongly support

■ Not at all ■ A little bit
■ Somewhat ■ Very much

Nudge six – employer mandated

I'd like you to imagine that your employer, or a potential employer, requires all employees to be fully vaccinated against COVID-19. How realistic do you find a program like this?

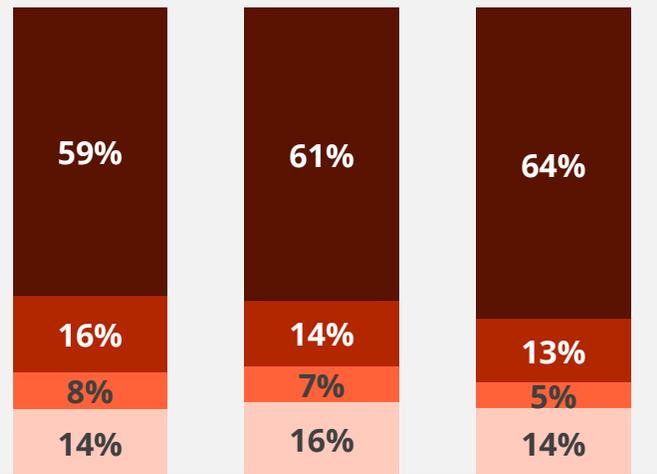


By target demos



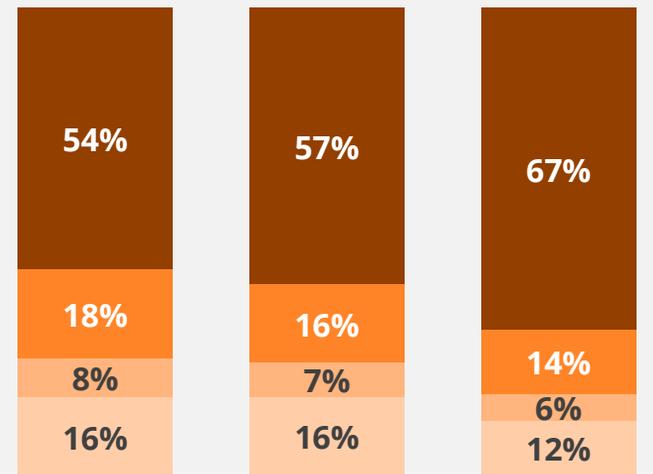
"Shoves" and mandates

How realistic is this program?



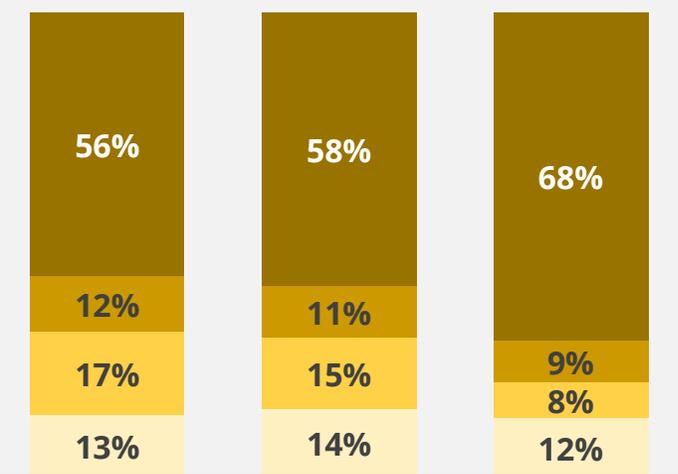
Aged 18 to 34 Males aged 18 to 49 Aged 50+

How supportive would you be of this program?



Aged 18 to 34 Males aged 18 to 49 Aged 50+

How much would this program influence you to get a vaccine?



Aged 18 to 34 Males aged 18 to 49 Aged 50+

■ Completely unrealistic ■ Somewhat unrealistic
■ Somewhat realistic ■ Completely realistic

■ Strongly oppose ■ Somewhat oppose
■ Somewhat support ■ Strongly support

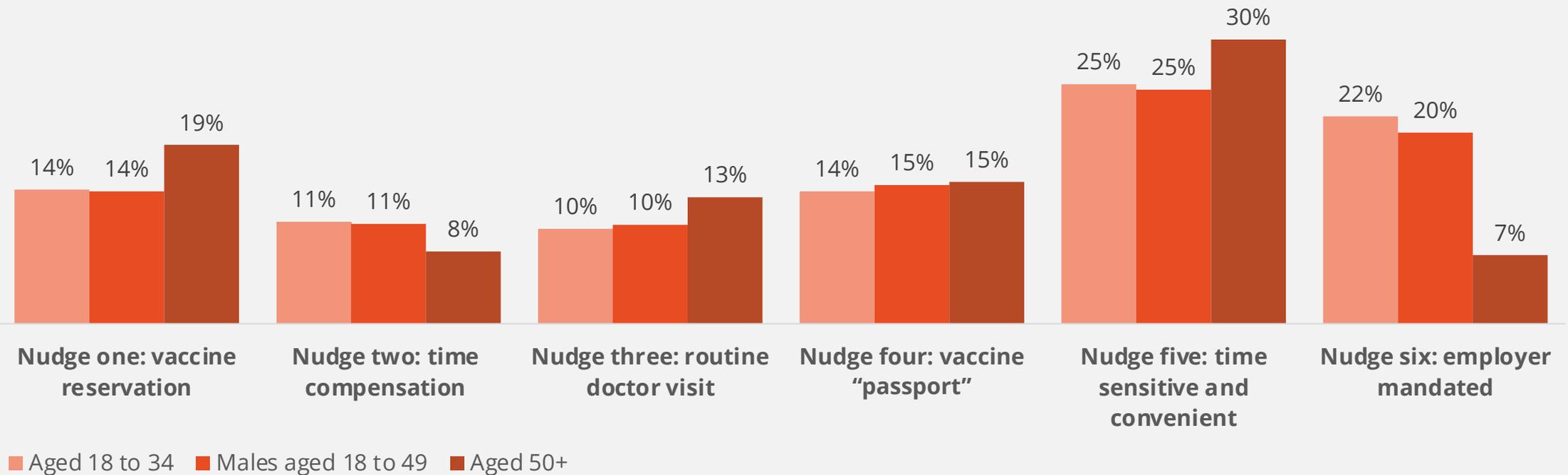
■ Not at all ■ A little bit
■ Somewhat ■ Very much

Vaccine reservation nudges (Nudge one) are more likely to influence older respondents than younger ones. Across demographics, respondents favour nudges which take into consideration having the vaccine be quick to get and easily accessible to them (Nudge five)



By target demos

Program or incentive most likely to influence getting first or next vaccine dose



Nudges and message testing by employment status



Nudge one – vaccine reservation



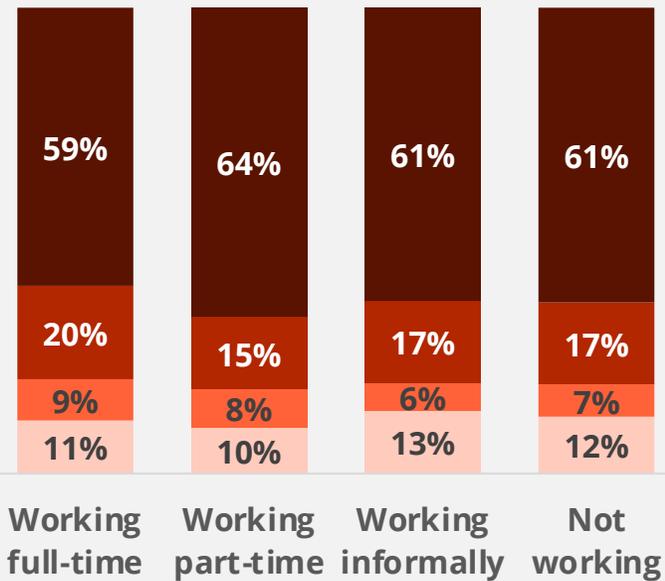
Employment status



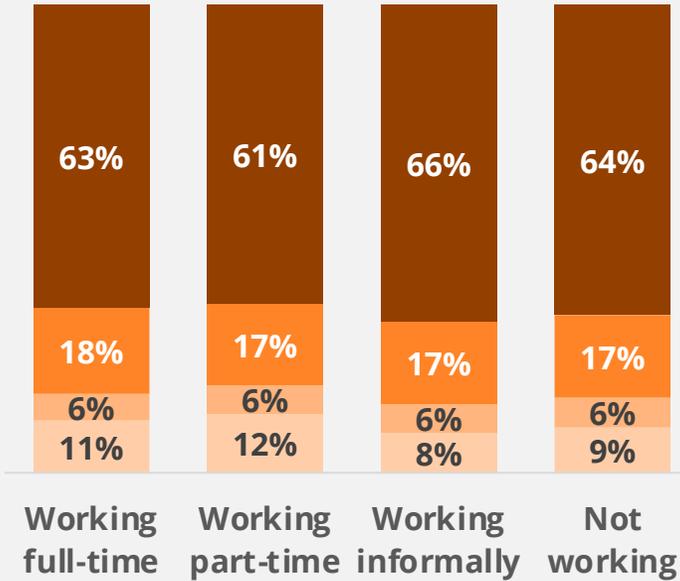
Facilitation of time and convenience

I'd like you to imagine that a free COVID-19 vaccine was automatically reserved for you at a location nearby to your work or home. You receive an SMS notification of this reservation for your first or next dose. To start with, how realistic do you find a program like this?

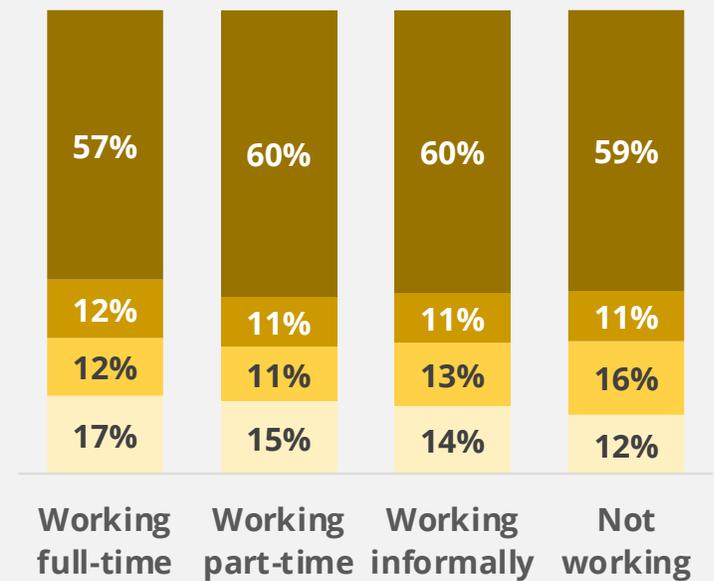
How realistic is this program?



How supportive would you be of this program?



How much would this program influence you to get a vaccine?



■ Completely unrealistic ■ Somewhat unrealistic
■ Somewhat realistic ■ Completely realistic

■ Strongly oppose ■ Somewhat oppose
■ Somewhat support ■ Strongly support

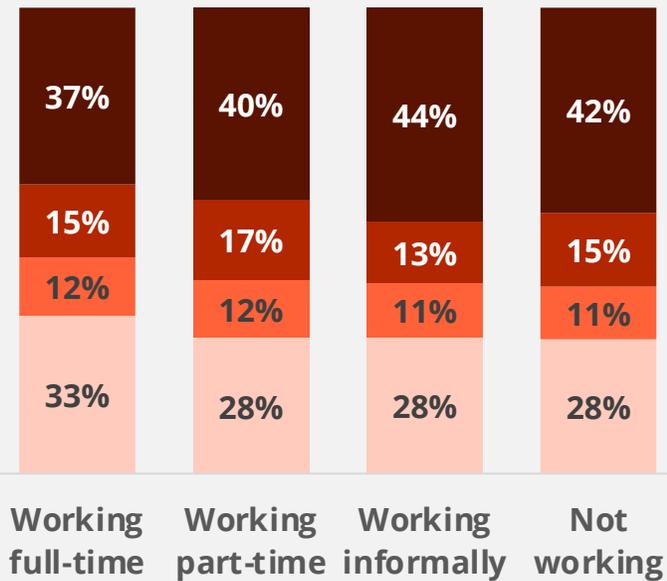
■ Not at all ■ A little bit
■ Somewhat ■ Very much

Nudge two – time compensation

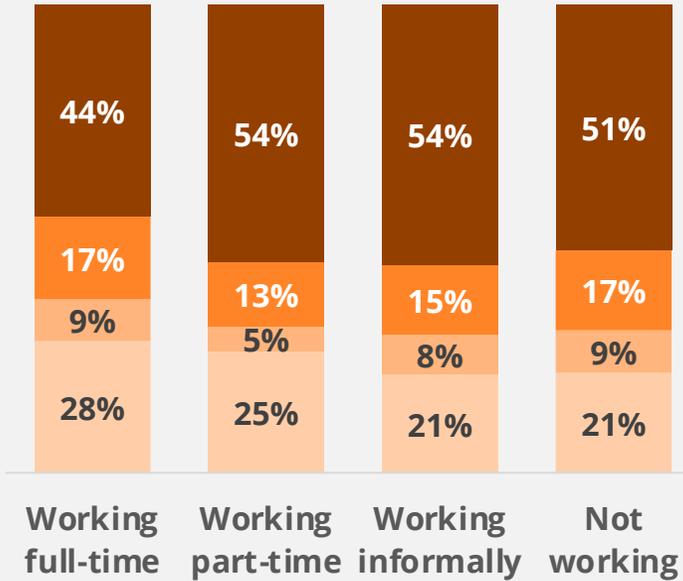


I'd like you to imagine that you receive R100 voucher to compensate you for the time it takes you to get your first or next COVID-19 vaccine dose. How realistic do you find a program like this?

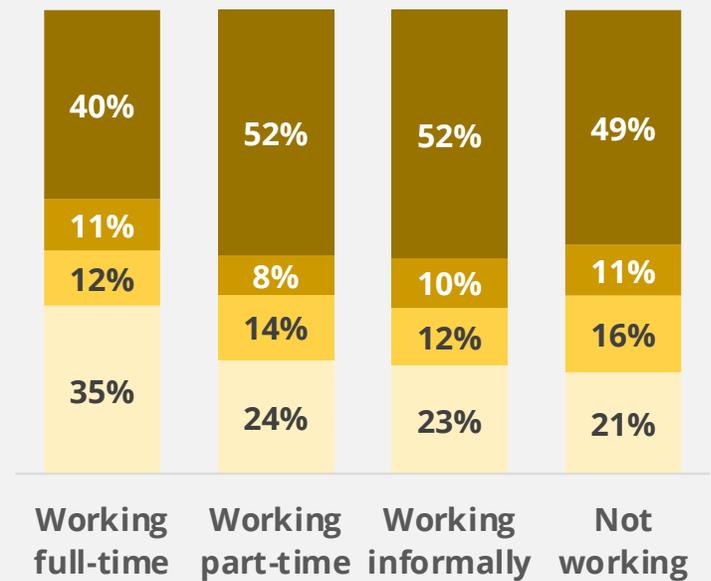
How realistic is this program?



How supportive would you be of this program?



How much would this program influence you to get a vaccine?

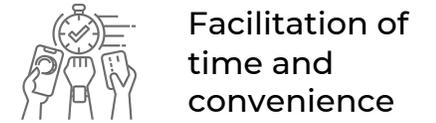


■ Completely unrealistic ■ Somewhat unrealistic
■ Somewhat realistic ■ Completely realistic

■ Strongly oppose ■ Somewhat oppose
■ Somewhat support ■ Strongly support

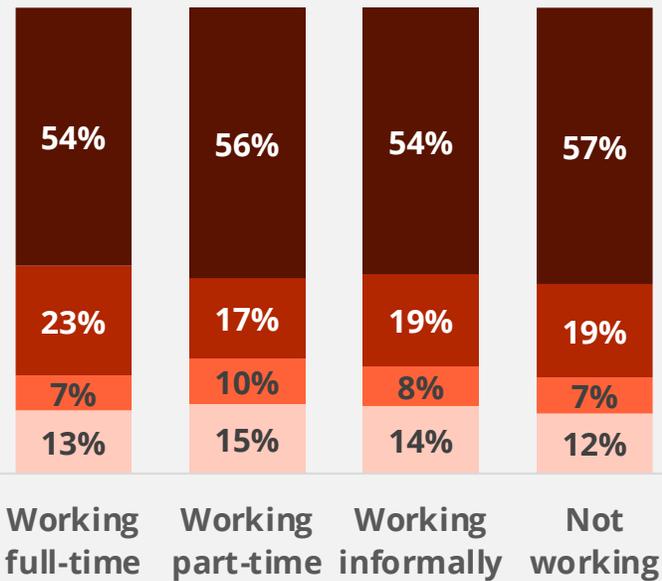
■ Not at all ■ A little bit
■ Somewhat ■ Very much

Nudge three – routine doctor visit

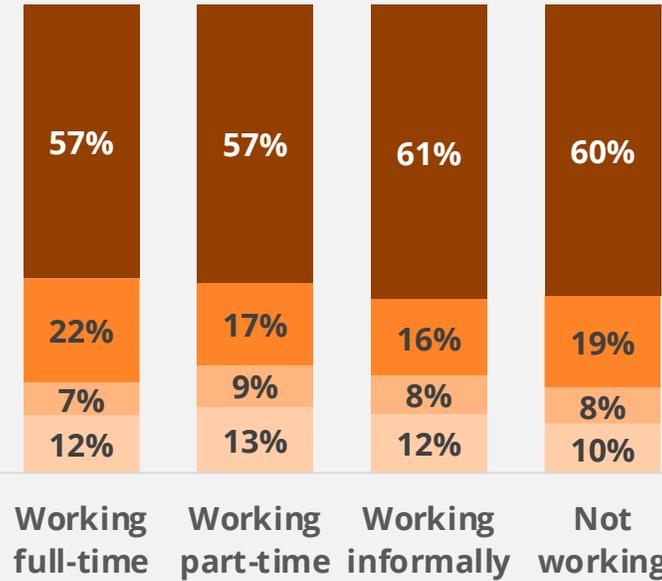


I'd like you to imagine that you receive your first or next COVID-19 vaccine dose as part of your routine doctor's check-up unless you indicate otherwise (opt-out). How realistic do you find a program like this?

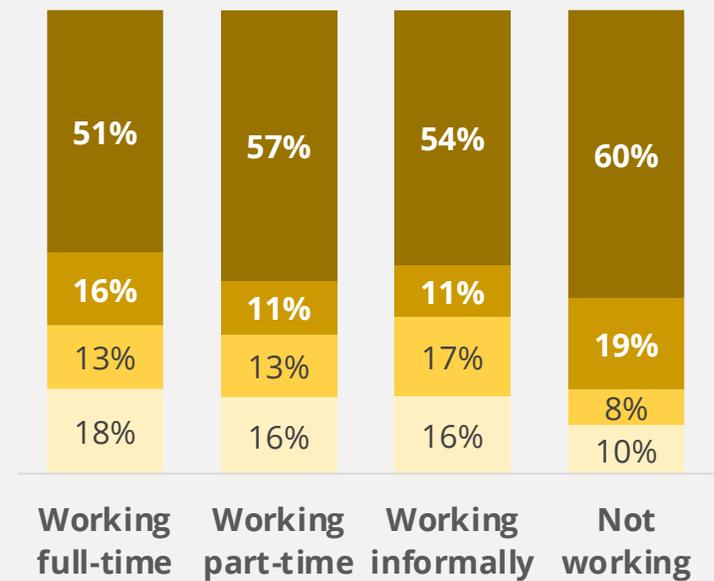
How realistic is this program?



How supportive would you be of this program?



How much would this program influence you to get a vaccine?

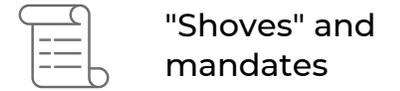


■ Completely unrealistic ■ Somewhat unrealistic
■ Somewhat realistic ■ Completely realistic

■ Strongly oppose ■ Somewhat oppose
■ Somewhat support ■ Strongly support

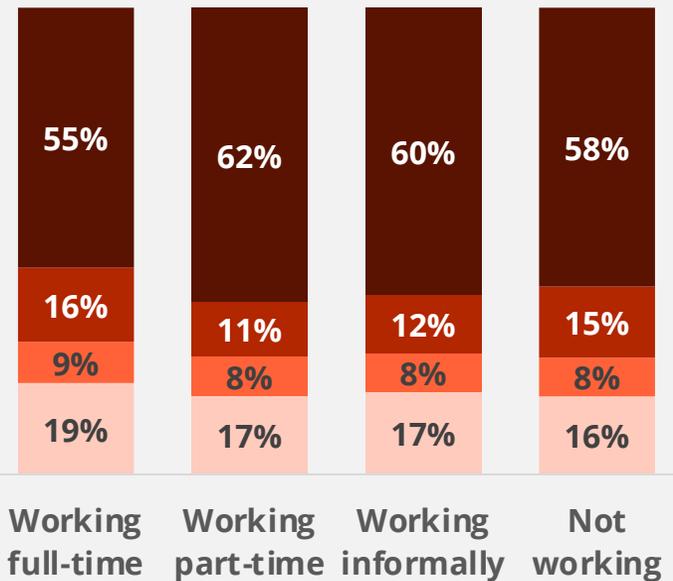
■ Not at all ■ A little bit
■ Somewhat ■ Very much

Nudge four – vaccine “passport”

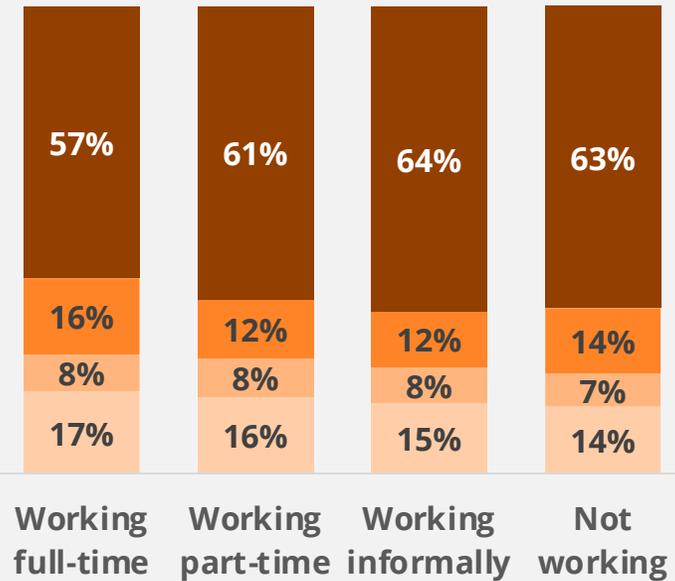


I'd like you to imagine that you bought tickets to a football match, concert, festival, or another large gathering with your friends and family next week, but unless you are fully vaccinated, you will not be able to go. How realistic do you think a situation like this is?

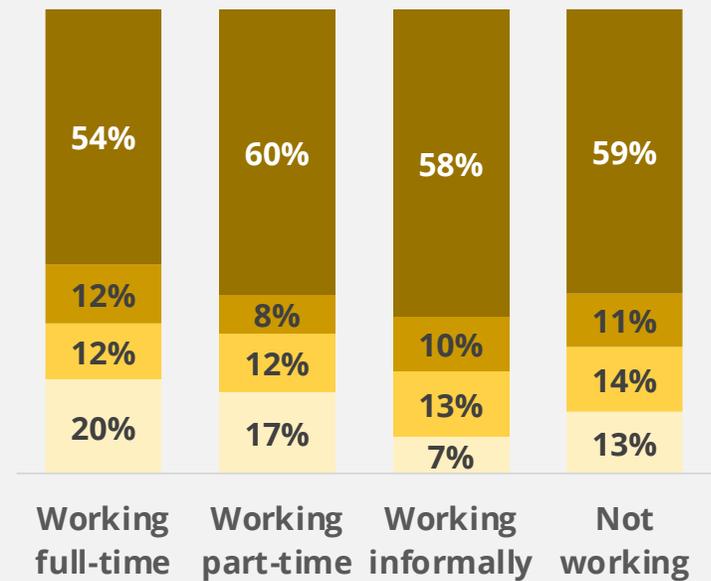
How realistic is this program?



How supportive would you be of this program?



How much would this program influence you to get a vaccine?



■ Completely unrealistic ■ Somewhat unrealistic
■ Somewhat realistic ■ Completely realistic

■ Strongly oppose ■ Somewhat oppose
■ Somewhat support ■ Strongly support

■ Not at all ■ A little bit
■ Somewhat ■ Very much

Nudge five – time and convenience



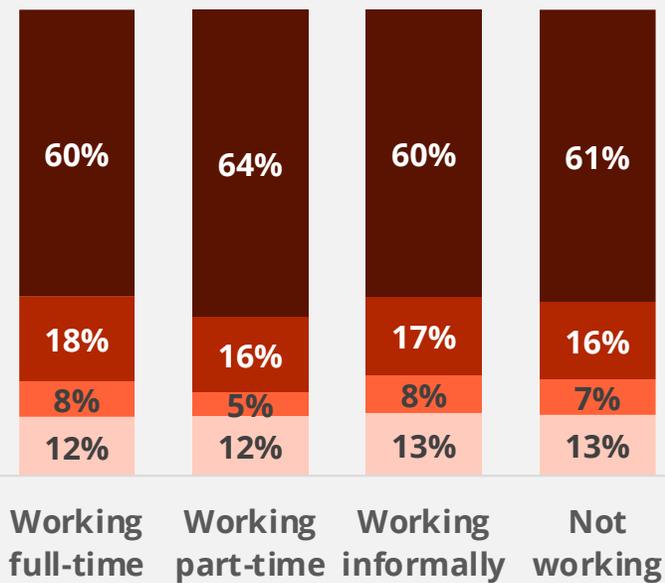
Employment Status



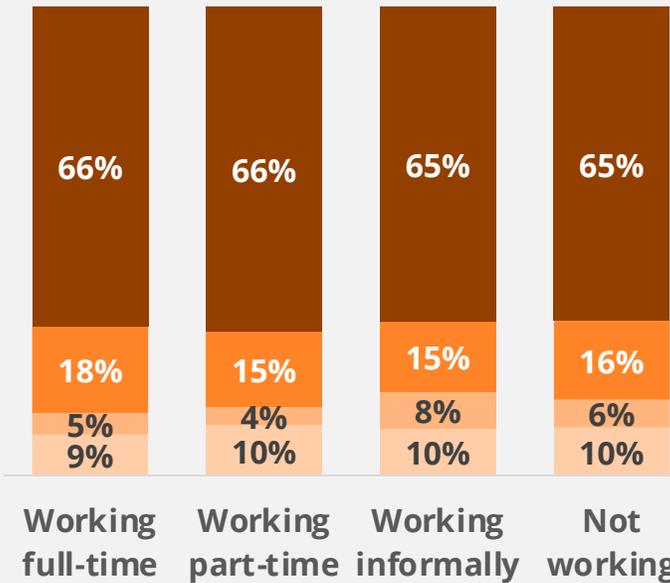
Facilitation of time and convenience

I'd like you to imagine that mobile vaccination clinic that is within a five-minute walk of your house and is offering free vaccinations in 15 minutes or less without the need for any appointment. How realistic do you find a program like this?

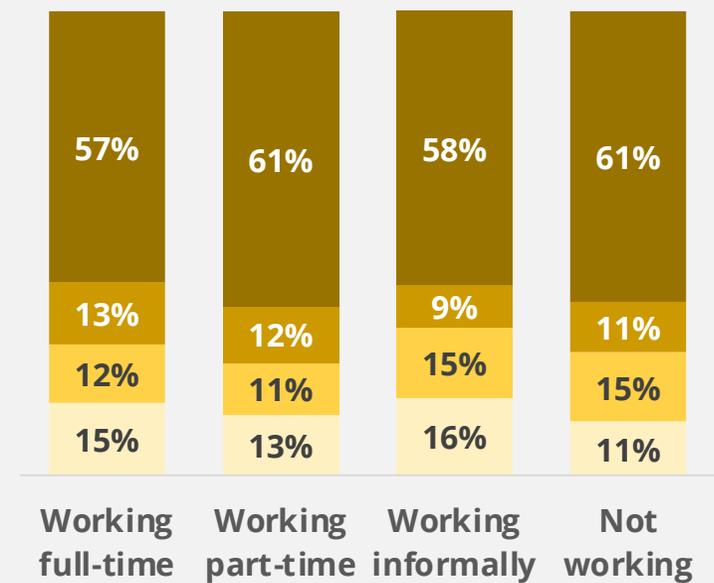
How realistic is this program?



How supportive would you be of this program?



How much would this program influence you to get a vaccine?

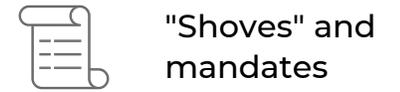


■ Completely unrealistic ■ Somewhat unrealistic
■ Somewhat realistic ■ Completely realistic

■ Strongly oppose ■ Somewhat oppose
■ Somewhat support ■ Strongly support

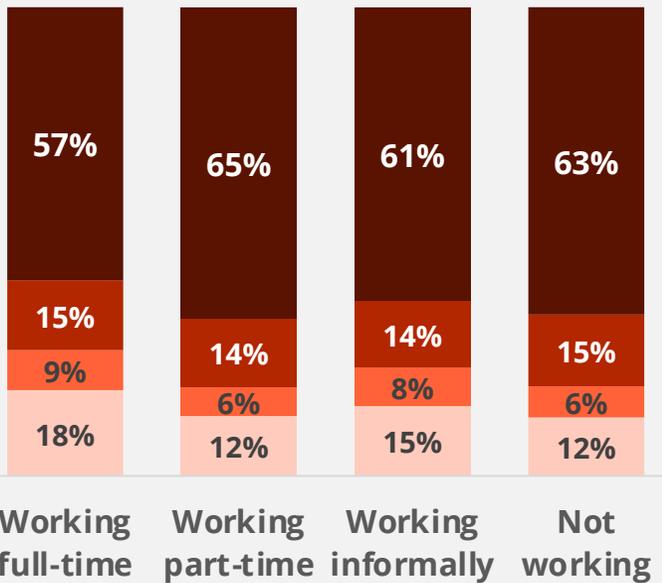
■ Not at all ■ A little bit
■ Somewhat ■ Very much

Nudge six – employer mandated

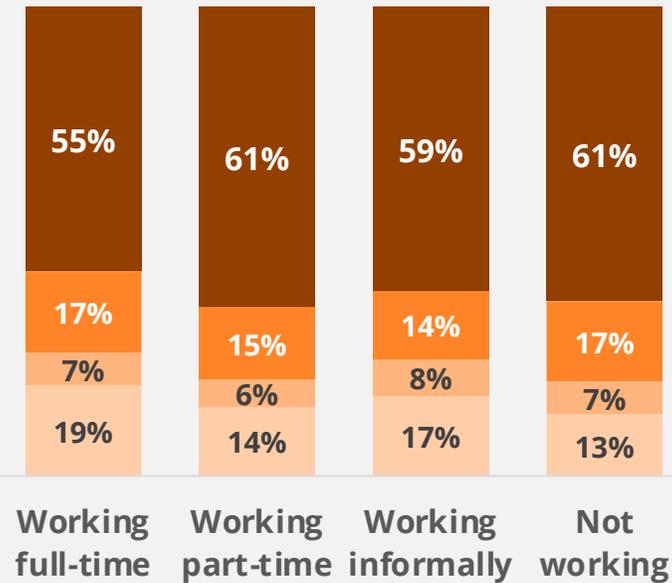


I'd like you to imagine that your employer, or a potential employer, requires all employees to be fully vaccinated against COVID-19. How realistic do you find a program like this?

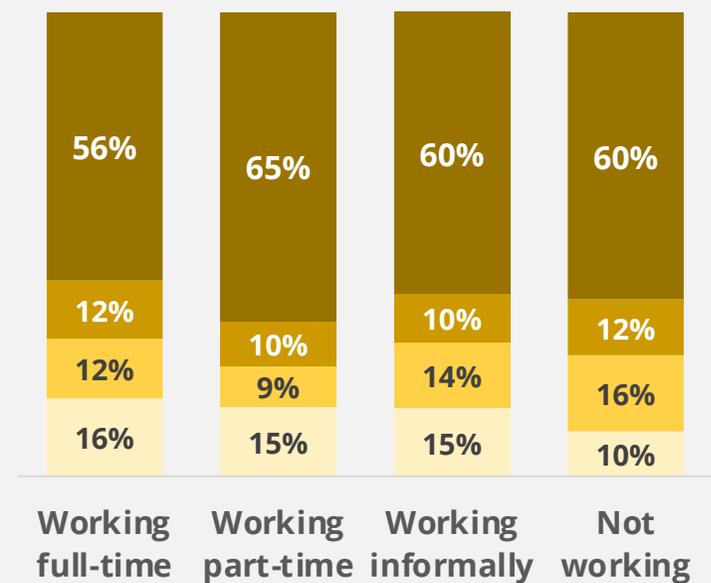
How realistic is this program?



How supportive would you be of this program?



How much would this program influence you to get a vaccine?



■ Completely unrealistic ■ Somewhat unrealistic
■ Somewhat realistic ■ Completely realistic

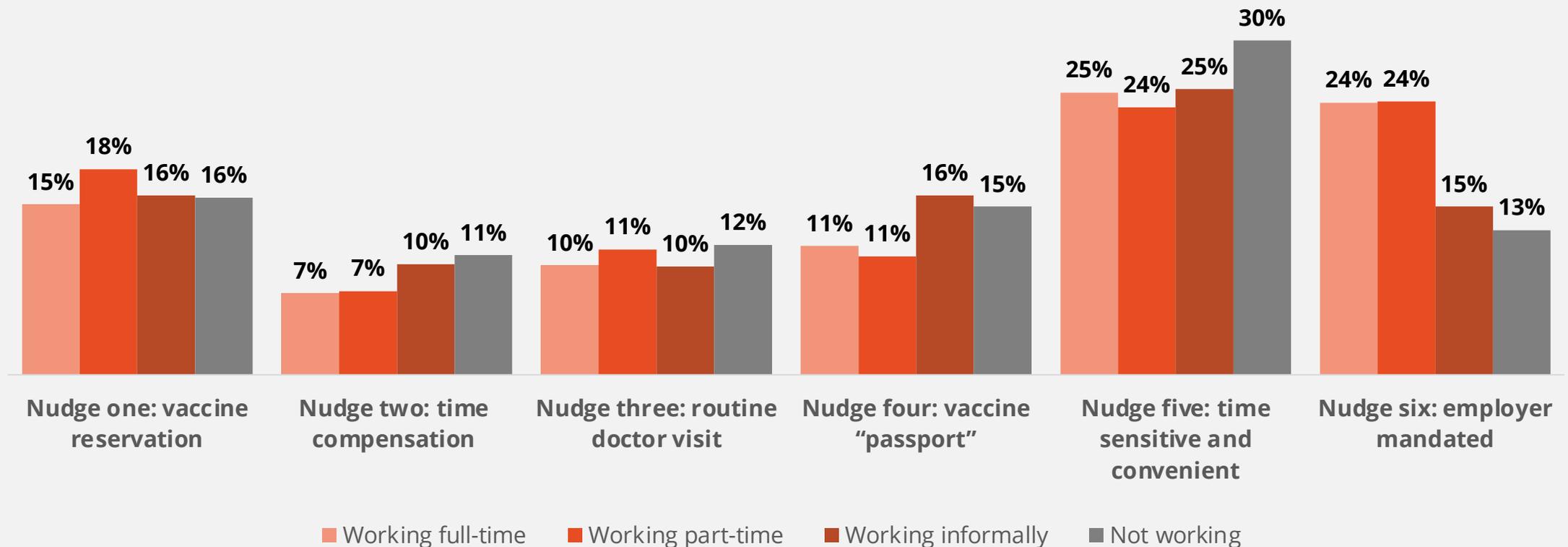
■ Strongly oppose ■ Somewhat oppose
■ Somewhat support ■ Strongly support

■ Not at all ■ A little bit
■ Somewhat ■ Very much

There is little variance amongst employment status in terms of most influential nudge, though Nudge five is slightly more appealing to those not working



Program or incentive most likely to influence getting first or next vaccine dose



Nudges and message testing by province



Nudge one – vaccine reservation

This nudge was most influential in the Western Cape across respondents. In KwaZulu Natal and the Eastern Cape, this nudge was more likely to influence older respondents, and women in the Northwest province.

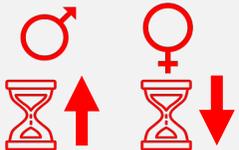
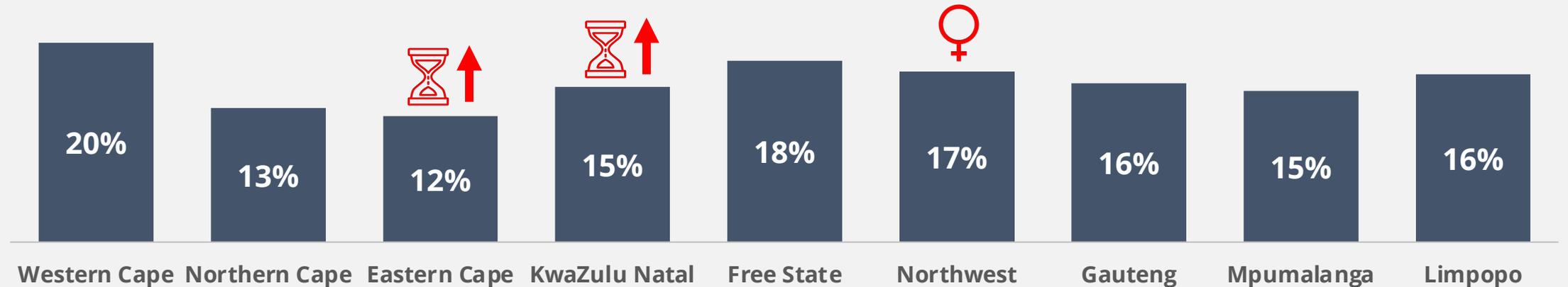


Facilitation of time and convenience



By province

Program or incentive most likely to influence getting first or next vaccine dose

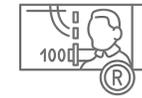


Statistically significant gender difference; this gender is more likely to find this nudge influential

Statistically significant age difference; younger or older are more likely to find this nudge influential

Nudge two – time compensation

Respondents in the Eastern Cape resonated with this nudge the most. However, in KwaZulu Natal and the Northwest, this nudge was also more likely to influence older respondents.

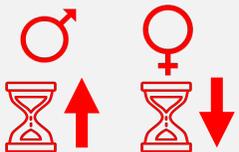
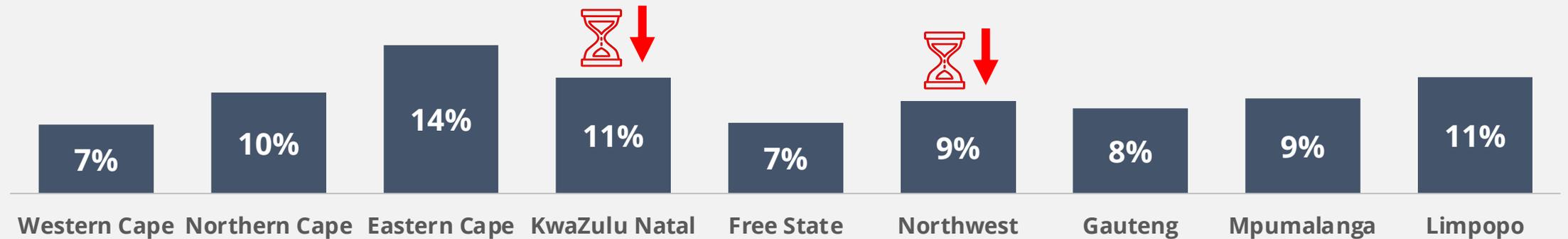


Financial incentives



By province

Program or incentive most likely to influence getting first or next vaccine dose



Statistically significant gender difference; this gender is more likely to find this nudge influential

Statistically significant age difference; younger or older respondents are more likely to find this nudge influential

Nudge three – routine doctor visit



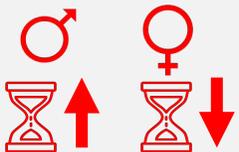
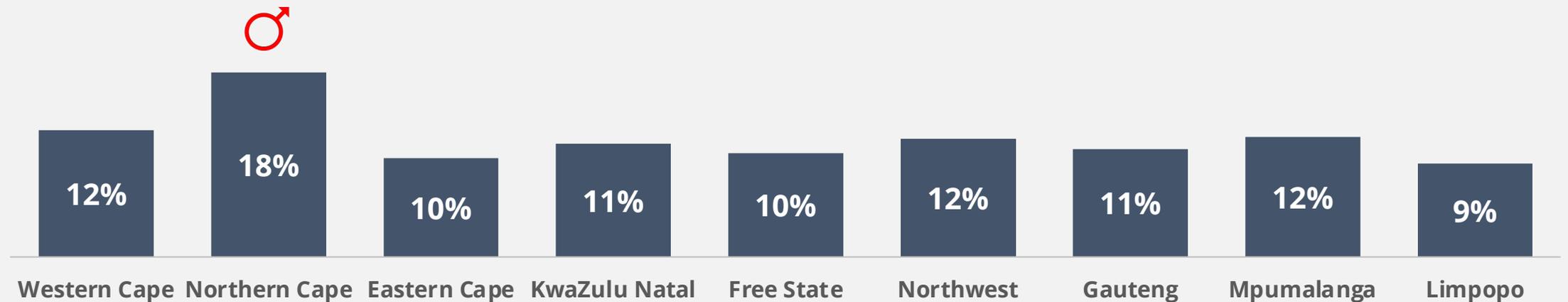
Facilitation of time and convenience



By province

Men in the Northern Cape reported being most influenced by this nudge.

Program or incentive most likely to influence getting first or next vaccine dose



Statistically significant gender difference; this gender is more likely to find this nudge influential

Statistically significant age difference; younger or older respondents are more likely to find this nudge influential

Nudge four – vaccine “passport”



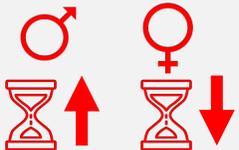
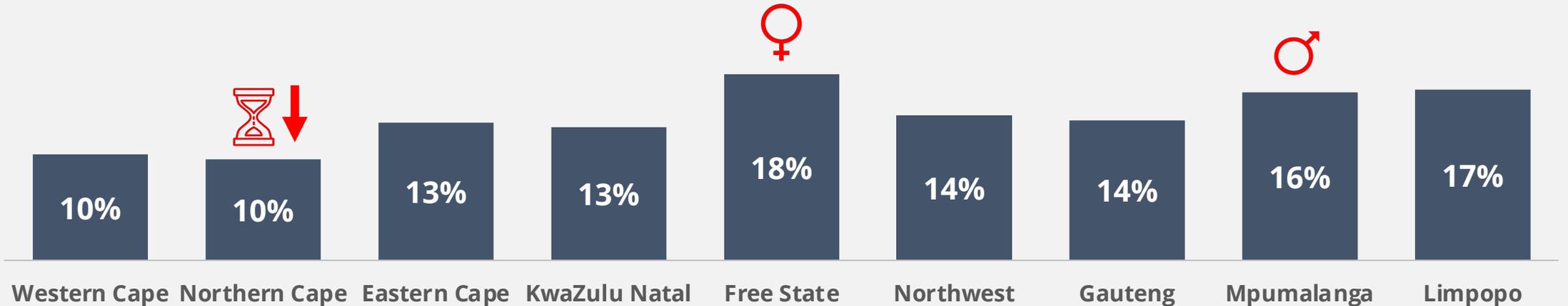
"Shoves" and mandates



By province

Women in the Free State were most likely to be influenced by this nudge, followed by men in Mpumalanga. Older respondents in the Northern Cape were also more likely to be influenced by this nudge.

Program or incentive most likely to influence getting first or next vaccine dose



Statistically significant gender difference; this gender is more likely to find this nudge influential

Statistically significant age difference; younger or older respondents are more likely to find this nudge influential

Nudge five – time and convenience



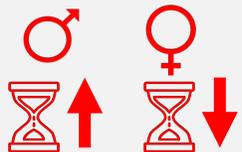
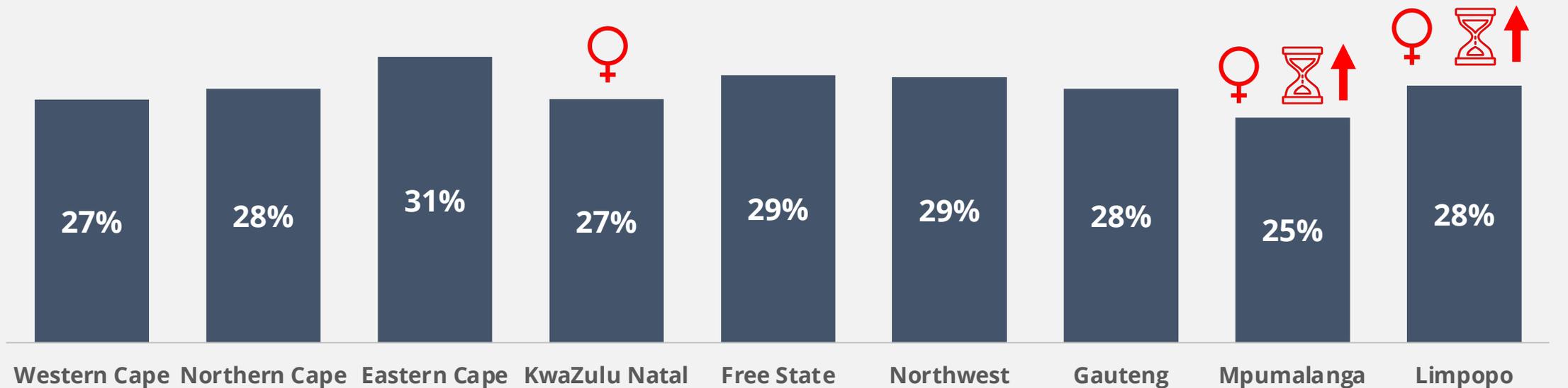
Facilitation of time and convenience



By province

Overall, respondents in the Eastern Cape were most influenced by this nudge. However, younger women in Mpumalanga and Limpopo were also more likely to be influenced by this nudge, along with female respondents in KwaZulu Natal.

Program or incentive most likely to influence getting first or next vaccine dose



Statistically significant gender difference; this gender is more likely to find this nudge influential

Statistically significant age difference; younger or older respondents are more likely to find this nudge influential

Nudge six – employer mandated



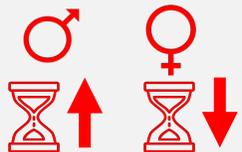
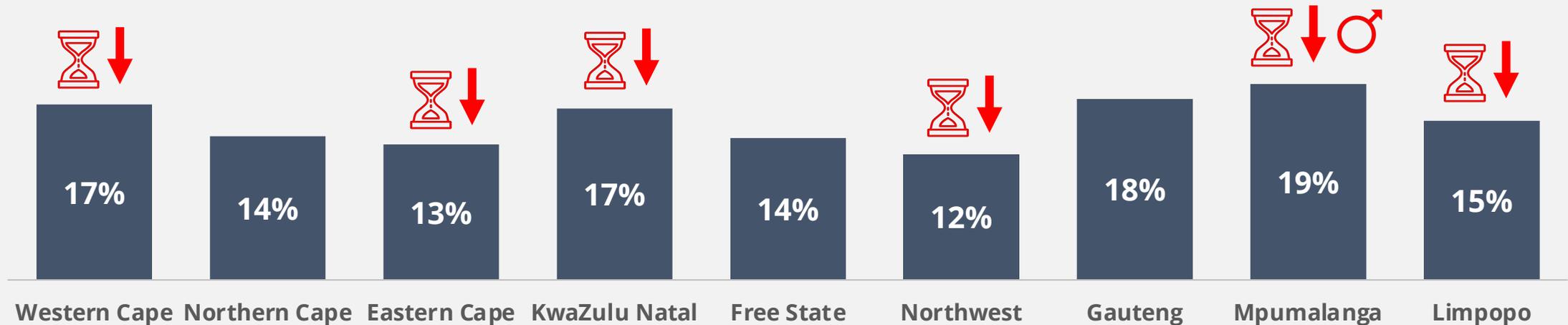
"Shoves" and mandates



By province

Younger respondents in the Western Cape, Eastern Cape, KwaZulu Natal, Northwest, Mpumalanga and Limpopo were most likely to be influenced by this nudge. Younger men, in particular, were influenced by this nudge in Mpumalanga.

Program or incentive most likely to influence getting first or next vaccine dose



Statistically significant gender difference; this gender is more likely to find this nudge influential

Statistically significant age difference; younger or older respondents are more likely to find this nudge influential

Total unduplicated reach and frequency (TURF) analysis

Total unduplicated reach and frequency analysis

- TURF is an analysis used to evaluate unduplicated reach – typically used in traditional market research settings to assess how consumers may adopt a product/service.
- To do this, the methodology takes multiple response questions about nudges and simplifies them to unduplicated responses, evaluating different combinations to find the optimal.
 - For this, we use just the “top box” looking at the respondents that answered a nudge would influence them “very much”.

Key Terms

- **Individual reach:** similar to what is shown on previous slides, the total duplicated responses (meaning one respondent is counted for each of the six nudges if they say it will influence them).
- **Unduplicated reach:** shows optimal exposure by counting each individual respondent only once across all six nudges (e.g., mobile clinics would influence 60% of the market on its own, if you add a vaccine passport to this, an additional 11% would be influenced).
- **Optimal combinations:** typically, the output from this analysis is to select the combination of nudges that would lead to the highest overall unduplicated reach.
- **Hits:** the average number of nudges that people say will influence them

Individual reach of each nudge across the total population

When all responses to a nudge were considered (Is it realistic? Would you support it? Would it be influential?), Nudges one, four and five had the highest individual reach, with each one about to reach about 60% of the total population on its own.

Differences by province

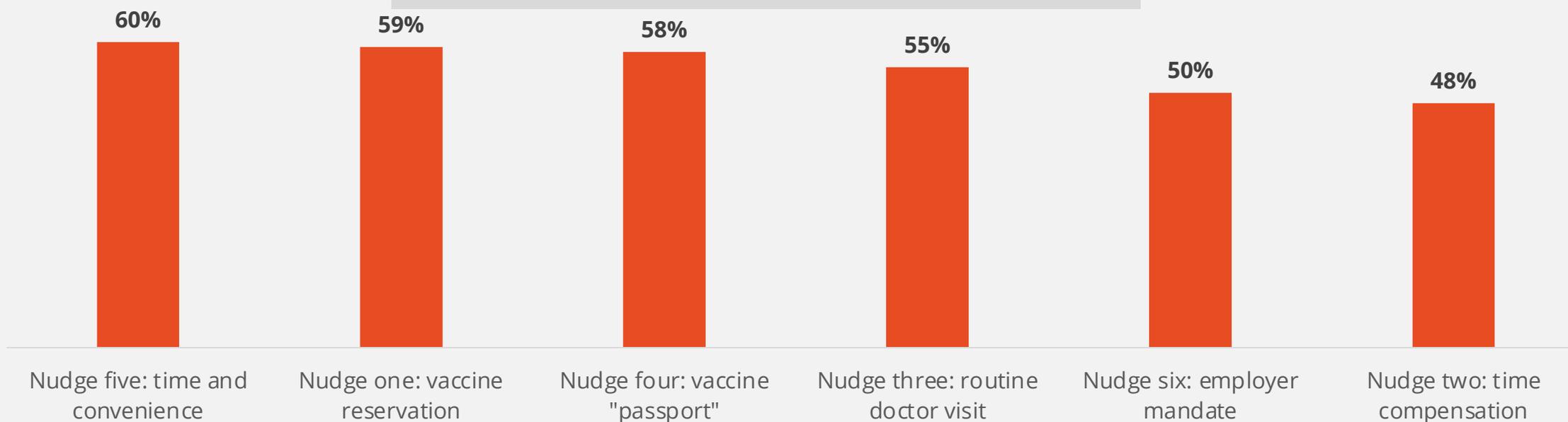
In FS, KZN LP, MP, NC, NW, Nudge four has greater reach

Differences by vaccine segment

- For Vaccine sceptics, Nudge six and Nudge one have the greatest reach
- For COVID-19 cynics, Nudge six and Nudge three are highest.

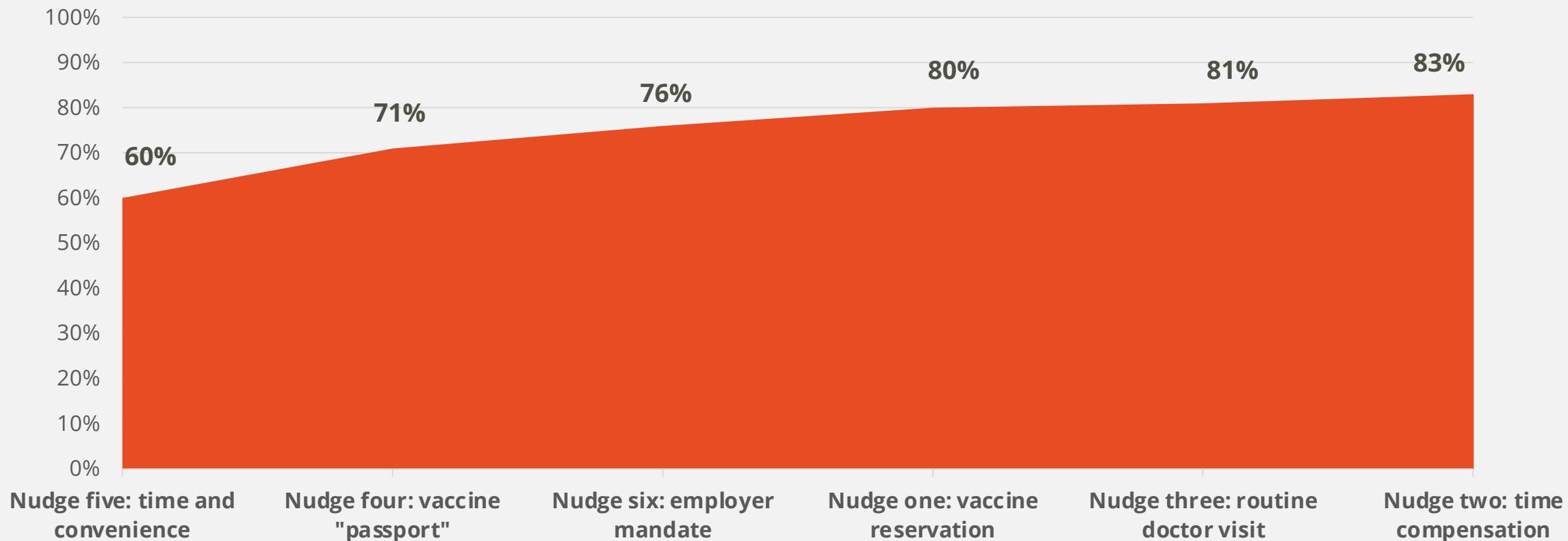
Differences by employment

- For those working part-time, employer req has greatest reach



Total unduplicated reach optimized for highest reach

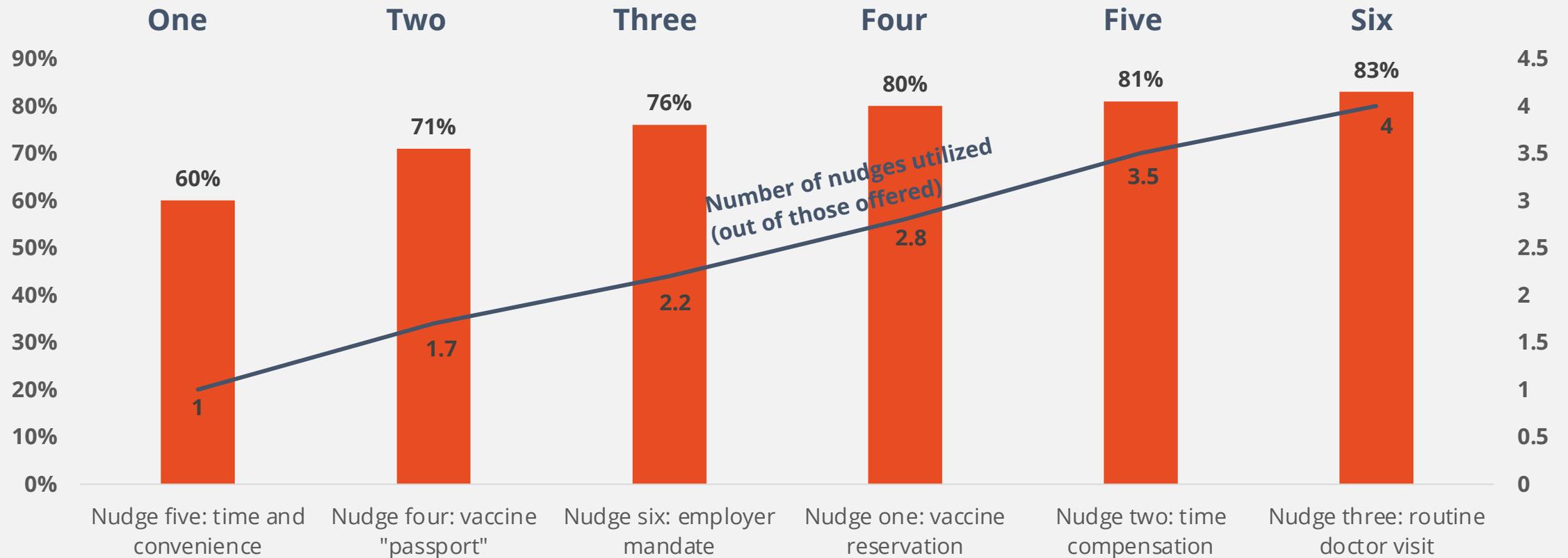
When duplication is taken into account by counting each individual respondent only once across all six nudges, we see an incremental increase as one more nudge is added to the prior. For example, Nudge five would influence 60% of the total sample population on its own, and if you add a vaccine passport, an additional 11% would be influenced. All six nudges combined can reach roughly 83% of the sample population.



Unduplicated reach with hits

The number of nudges for optimal reach is 3-4. After this point, there is limited marginal utility with each added nudge.

Number of nudges offered



Vaccination challenges by province, amongst unvaccinated

Province	Vaccination segments of unvaccinated respondents			Vaccination challenge index score Average cumulative score across confidence, convenience or complacency barriers to getting vaccinated Higher scores = larger challenge in that province		
	COVID-19 cynics (low confidence)	Vaccine sceptics (high complacency)	vaccine pragmatists (low convenience)	Confidence challenges (4 pt max score)	Convenience challenges (3 pt max score)	Complacency challenges (3 pt max score)
Western Cape	▲ 15%	6%	▼ 4%	1.26	0.23	0.57
Northern Cape	2%	▲ 4%	▼ 1%	1.18	0.18	0.79
Eastern Cape	7%	6%	8%	1.09	0.36	0.60
KwaZulu Natal	20%	22%	21%	1.16	0.38	0.66
Free State	3%	4%	5%	0.98	0.55	0.62
Northwest	6%	4%	6%	1.27	0.43	0.48
Gauteng	36%	40%	35%	1.21	0.35	0.59
Mpumalanga	7%	9%	9%	1.14	0.49	0.56
Limpopo	▼ 4%	7%	▲ 11%	1.04	0.40	0.69
Total unvaccinated sample	16%	38%	46%	1.17	0.37	0.61



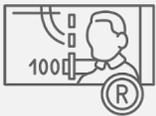
Putting this data into action

Recommendations for categories of behavioural incentives or nudges



Behavioural nudges

Financial incentives (rewards, vouchers, time compensation)



Financial incentives were one of the least influential types of nudges and would gain the least amount of incremental reach.

- **Works for:** Amongst the vaccination segments, these would work best for vaccine pragmatists (those open to getting the vaccine, about 40% of the unvaccinated population), those employed part-time (voucher only) and would work best in KZN among all the provinces.
- **Doesn't work for:** This type of nudge would work least effectively for COVID-19 cynics (those who don't want the vaccine), older people and those who work full-time (voucher only).

Facilitating convenience (convenience, time saving)



This type of facilitating nudge was moderate to strong overall, with messages of the physical proximity of a vaccine site, like a mobile unit or near home or work, being the most influential.

- **Works for:** These nudges would work best for vaccine pragmatists (~40% of unvaccinated), especially the messaging about sites near home or work.
- **Doesn't work for:** This would be less influential with COVID-19 cynics as well as those who work full-time, especially incentives like free transport or fast delivery.

"Shoves" and mandates (employer requirements, vaccine passports)



This category of nudge was the most effective overall, and when paired with the mobile vaccine site nudge, the two mandate nudge messages tested helped achieve the greatest incremental reach.

- **Works for:** Shoves or mandates would work particularly well with vaccine sceptics (on the fence) to help move them past complacency. They would also work well with a younger population and would work best in FS among all the provinces.
- **Doesn't work for:** This would not convince COVID-19 cynics to get vaccinated and would be less effective with an older population.

Recommendations across vaccination segments for implementing vaccination campaigns

	COVID-19 cynics	Vaccine sceptics	Vaccine pragmatists
Targeting widely used and trusted information sources	This group has moderate to low levels of trust in information sources overall, and they have the most distrust in newspapers, magazines and social media of any segment. They prefer healthcare providers and national or local political leaders as sources for COVID-19 information.	This group has more trust overall than the cynics but less than the pragmatists. They have slightly higher use of social media than the others, more trust in their workplace as a source of information than the other groups, and place their highest trust in healthcare providers.	This group has broadly high trust overall, particularly in healthcare providers. They also are more likely than the other groups to use and trust mass media like television, newspapers and radio. They also use and trust their place of employment as a source.
Leveraging existing motivation to vaccinate	<ul style="list-style-type: none"> • Need to fundamentally shift their perspectives on the seriousness of COVID-19 • Undercut rumours as a source of information • Messages should relay the direct impact of not getting the vaccine, e.g., inability to return to work, 	<ul style="list-style-type: none"> • Provide examples from testimonials or personal stories that show the vaccine is safe, didn't suffer from severe side effects etc. • Use healthcare providers to emphasise the safety of the vaccine • This group is the most likely to respond to mandates to nudge complacency and take action, like event passports and employer requirements 	<ul style="list-style-type: none"> • They are already receptive to the message, so continue to emphasise information about the safety and efficacy of the vaccine • Offer information channels on access, with a focus on convenience • Offer financial incentives like rewards or vouchers • This segment is likely driven by seeing vaccination as a social norm and finding it easy to access
How to overcome barriers	<ul style="list-style-type: none"> • Provide information on vaccine development, safety, efficacy • Provide case studies on people like them who ultimately decided to get the vaccine • Promote employer mandates for vaccines 	<ul style="list-style-type: none"> • Provide clear messages on the safety of the vaccine • Provide information on vaccine development, safety, efficacy • Encourage more mandates at events and places of employment 	<ul style="list-style-type: none"> • Messages should emphasise convenience, low time commitment and free cost of vaccination • More information on access points • Provide clear messages on the safety of the vaccine
Other considerations	<ul style="list-style-type: none"> • Needs a lot of work and support to target larger and very strategic messaging, considering the low perceived risk of COVID-19 • Focus on personal benefit in messaging • Make them and their unique concerns feel heard 	<ul style="list-style-type: none"> • Leverage their concern for their community and family to emphasise that they are also personally at risk 	<ul style="list-style-type: none"> • Strategy should focus on getting vaccines directly to people • Highlight the cost-benefit of vaccines

Recommendations across age and gender for implementing vaccination campaigns

Targeting widely used and trusted information sources

- Top sources of trusted information are TV, HCP, radio
- Younger people are more likely to find celebrities or influencers less trustworthy than other groups
- Older respondents are less likely to source information about COVID-19 from social media
- There is not a substantial gender gap in information sources or trust

Leveraging influential nudges

- Older respondents are more open to being influenced by nudges than younger people
- The nudges on “time and convenience” and “employer mandate” are the most influential across all age groups
- Age plays a role in the potential influence of nudges.
- Older respondents are more likely to be influenced by nudges on “vaccine reservations” and “routine check-ups” than younger respondents
- Younger respondents are more likely than older to be nudged by “employer mandate” and “time compensation”, given that they are more likely to be active in the workforce

Recommendations across employment status for implementing vaccination campaigns

Leveraging influential nudges

- Overall, there is little variance amongst employment status in terms of finding nudges realistic and potential to be influenced
- Those working full-time are less likely to be influenced by “employer mandate” and “time compensation” than those working part-time or informally.
- Part-time workers are slightly more receptive to a nudge on a “vaccine passport”.
- Those working in an informal capacity are slightly more receptive to a nudge on “vaccine passport”.
- When looking at the most influential nudges, full-time and part-time workers had comparable responses, while those not working are most likely to be influenced by “time and convenience”.

Recommendations across provinces for implementing vaccination campaigns

Leveraging influential nudges

Western Cape	<ul style="list-style-type: none"> • Top 3 nudges are “time and convenience”, “vaccine reservation”, and “employer mandate”. • Younger people are more likely to be influenced by a nudge on “employer mandate” than older people.
Northern Cape	<ul style="list-style-type: none"> • Top 3 nudges are “time and convenience”, “routine check-up”, and “employer mandate”. • Men are more likely to be influenced by a nudge on a “routine check-up” than women. • Younger people are more likely to be influenced by a nudge on “vaccine passport” than older people.
Eastern Cape	<ul style="list-style-type: none"> • Top 3 nudges are “time and convenience”, “time compensation”, and “vaccine passport”. • Older people are more likely to be influenced by a nudge on “vaccine reservation” than younger people. • Younger people are more likely to be influenced by a nudge on “employer mandate” than older people.
KwaZulu Natal	<ul style="list-style-type: none"> • Top 3 nudges are “time and convenience”, “employer mandate”, and “vaccine passport”. • Older people are more likely to be influenced by a nudge on “vaccine reservation” than younger people. • Younger people are more likely to be influenced by a nudge on “time compensation” than older people. • Women are more likely to be influenced by a nudge on “time and convenience” than men. • Younger people are more likely to be influenced by a nudge on “employer mandate” than older people.
Free State	<ul style="list-style-type: none"> • Top 3 nudges are “time and convenience”, “vaccine reservation, and “vaccine passport”. • Women are more likely to be influenced by a nudge on a “vaccine passport” than men.
Northwest	<ul style="list-style-type: none"> • Top 3 nudges are “time and convenience”, “vaccine reservation”, and “vaccine passport”. • Women are more likely to be influenced by a nudge on “vaccine reservation” than men. • Younger people are more likely to be influenced by a nudge on “time compensation” than older people. • Younger people are more likely to be influenced by a nudge on “employer mandate” than older people.
Gauteng	<ul style="list-style-type: none"> • Top 3 nudges are “time and convenience”, “employer mandate”, and “vaccine reservation”.
Mpumalanga	<ul style="list-style-type: none"> • Top 3 nudges are “time and convenience”, “employer mandate”, and “vaccine passport”. • Men are more likely to be influenced by a nudge on a “vaccine passport” than women. • Women are more likely to be influenced by a nudge on “time and convenience” than men. • Younger people are more likely to be influenced by a nudge on “time and convenience” than older people.
Limpopo	<ul style="list-style-type: none"> • Top 3 nudges are “time and convenience”, “vaccine passport”, and “vaccine reservation”. • Women are more likely to be influenced by a nudge on “time and convenience” than men. • Younger people are more likely to be influenced by a nudge on “time and convenience” than older people. • Younger people are more likely to be influenced by a nudge on “employer mandate” than older people.

Recommended nudges by priority NDOH subgroups for COVID-19 Vaccines

While Nudges 4, 5 and 6 in combination will reach the largest proportion of the population, the following tested nudges can be effective for these specific sub-groups

	Unvaccinated segments			Age and gender			Working status		Province								
	COVID-19 cynics	Vaccine sceptics	Vaccine pragmatists	Aged 18 to 34	Males aged 18 to 49	Aged 50+	Full-time	Part-time	WC	NC	EC	KZN	FS	NW	GP	MP	LP
Nudge 1: vaccine reservation			✓	✓		✓			✓				✓	✓			
Nudge 2: time compensation				✓	✓						✓						
Nudge 3: routine doctor visit						✓				✓							
Nudge 4: vaccine passport	✓		✓					✓		✓		✓	✓	✓		✓	✓
Nudge 5: Time and convenience	✓			✓													
Nudge 6: employer mandate	✓	✓	✓		✓			✓				✓			✓	✓	



APPENDIX – KEY TAKEAWAYS & RECOMMENDATIONS TO NDOH

Key takeaways – strategic approach

This study validates the core of the Demand Acceleration Strategy, which focuses on **convenience** and bringing vaccines to the people. Hence, there is no need to fundamentally shift the strategy.

- Facilitating convenience is a nudge in itself, and is the most effective method of increasing vaccine uptake.

Continue to target '**vaccine pragmatists**' first (49% of the unvaccinated population), followed by **vaccine sceptics**.

- Vaccine pragmatists are open to getting vaccinated. But they struggle with the cost or convenience constraints
- They do still have some concerns about the safety and efficacy of the vaccine.

Vaccine cynics are not an efficient audience group to target.

Key takeaways – prioritised tactics

The biggest gains can be made by addressing structural barriers to improve convenience and creating a strong enabling environment for people to get vaccinated.

Financial nudges work when linked to convenience and reduce the financial barrier to getting vaccinated (eg compensating someone for their travel costs and time off work). However, **rewards** (either as vouchers or prizes) don't appear to be a motivating factor across the unvaccinated segments.

Mandating behaviours or increasing the costs of the wrong behaviour (e.g., vaccine passports/mandates) are very effective and likely the only way to move cynics and some skeptics. However:

- There are policy implications to these recommendations and may be a political minefield.
- It will likely take too long to pass through policy now that the National State of Disaster has lifted.
- Vaccine cynics are not the priority audience we wish to target.

Empowering and Equipping HCP/W/Vs as trusted messengers to boost vaccine confidence is critical. Messages and toolkits should address issues of safety, specifically the length of time of protection, potential side effects of the vaccine and safety with underlying health conditions or new variants.

Key takeaways – prioritised tactics

How to address structural barriers and create a strong enabling environment for people to get vaccinated.

Structural/systemic barriers –

I want to, but I can't

Increase ease/convenience

- Offered near house/work
- Vaccine reservation system
- Build into routine doctor's visit
- (Messaging to ensure awareness)

Ability to take time off work

- Offered at convenient/flexible hours
- Time compensation (although in the study this was just to get the vaccine, not to manage the side effects - particularly for low income/part-time employees)

Social barriers (norms) –

nobody around me is/my community expects/discourages

Leverage the right messengers/ community structures

- Use television, radio and healthcare professionals.
- Focus information on safety, specifically the length of time of protection, potential side effects of the vaccine and safety with underlying health conditions or new variants.

Mindset barriers –

I don't want to think about COVID-19 anymore, I want to move on

- **Broaden messaging to include overall wellness aspects.**
- **Offer vaccines and other preventative behaviours as part of overall wellness/integrated health services**