



Optimise

CARE

COVID-19 Attitudes, Resilience and Epidemiology

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SUMMARY

The CARE survey was administered to 1,035 adult participants from the 21st to the 30th of September 2021. At the time of survey Victorians had been under strict stay-at-home restrictions since the 5th of August 2021.

Study aim:

Assess attitudes of Victorian adults towards COVID-19 vaccines and testing and explore the impact of COVID-19 on mental health and wellbeing to inform community engagement and behaviour change.

Summary of key findings:

- The test seeking propensity of participants with symptoms of COVID-19 remains low, with 19.3% of those who had at least one symptom in the last 4 weeks getting tested in the same timeframe.
 - Higher rates of testing (65.7%) were reported by participants with cough and fever.
- Most commonly, participants were choosing not to get tested because they were attributing their symptoms to another cause (e.g., pre-existing or seasonal health conditions).
 - 11.6% of participants thought testing was unnecessary as they had already been vaccinated for COVID-19.
- The majority (60.4%) of unvaccinated respondents reported that they were likely to get vaccinated.
 - However, those aged 25-49 were more likely (13.9%) to be unsure about whether they would get vaccinated.
- The unvaccinated subgroup indicated that the most effective vaccine incentives would be reduction of appointment wait times, monetary incentives and compensation for lost income.
- Encouragingly, 10.6% of parents confirmed their child was already vaccinated and a further 53.0% of the parents in the survey reported they were likely to get their child vaccinated.
- Many participants indicated that they get information about COVID-19 from reputable sources, including daily government press conferences (50.0%) and Australian Government health authorities (46.4%).
- Concerningly, clinically high levels of symptoms of anxiety and depression were reported by more than a quarter of participants.
- Increased sense of efficacy, community connectedness and hope for the future were all associated with lower levels of anxiety and depression.

INTRODUCTION

The COVID-19 Attitudes, Resilience, and Epidemiology (CARE) study was established to gain real-time understanding of how people in Australia were thinking, feeling, and behaving in relation to the COVID-19 pandemic and the associated response measures. Over the course of 2020, two nationally representative online surveys were conducted, followed by a Victorian representative online survey combined with targeted interviewer-administered surveys with participants from multicultural communities. These surveys provided insights into the challenges faced by individuals and communities due to the pandemic and aimed to guide decision-making in relation to the management of disease transmission and promotion of community resilience. The Victorian component of CARE is conducted as part of the broader Optimise study, a partnership between Burnet Institute and Doherty Institute in collaboration with University of Melbourne, Swinburne University of Technology, Monash University, La Trobe University, Murdoch Children's Research Institute, the Centre for Culture, Ethnicity and Health, and the Health Issues Centre.

Since the previous CARE surveys were conducted, effective COVID-19 vaccines have been developed. Vaccination rollout commenced in February 2021 throughout Australia and Victoria. A major challenge of the COVID-19 vaccination program is ensuring timely vaccine rollout to eligible groups while managing the ongoing risk of COVID-19. This includes ensuring that the community remains engaged in transmission-reduction practices (such as hand washing and physical distancing) and that sufficient levels of testing are maintained to enable early detection of and rapid response to outbreaks. Understanding of community attitudes and behaviours in relation to COVID-19 and the associated interventions, which now includes vaccination, remain critical to the success of response efforts. Further to this, an understanding of how mental health and wellbeing has been impacted by the significant changes to everyday life as a result of the pandemic is essential in framing these attitudes and behaviours.

In an effort to address these ongoing challenges, the CARE survey has been adapted in collaboration with the Victorian Department of Health. Over the course of 2021/2022, the survey will be administered four more times (referred to as CARE Survey 4 through CARE Survey 7), in addition to two community engagement groups with Victorian representatives from culturally and linguistically diverse backgrounds.

This report outlines the key findings from CARE Survey 5, which intends to capture public sentiment around COVID-19 vaccines, cooperation with COVID-19 transmission reduction measures, and the impacts on mental health within Victoria. The findings of this rapid report are intended to help inform the Victorian Department of Health in policy decisions relating to COVID-19 testing, vaccinations, and other public health measures.

Design Summary

- The total sample size of the survey was 1,035 adults aged 18 years or greater
 - 757 (73.1%) were respondents from the July survey, and 278 (26.9%) were new respondents
- The survey was carried out online from Tuesday the 21st to Thursday the 30th of September, 2021
- Sampling of the population was proportional to the demographics of the Victorian adult population to ensure that the respondents were representative
 - Sampling quotas were based on age, gender and location (state and metropolitan or regional)
- Results have also been weighted¹ by age, gender, income and location

The study was approved by the University of Melbourne Human Research Ethics Committee (2056694).

¹ Weights are fractional numbers used as balancing measures used to correct differences between the survey participants and the general population.

Survey Context

Clinical guidance

The Australian Technical Advisory Group on Immunisation (ATAGI) provide clinical guidance to the Federal Minister for Health on the medical administration of vaccines available in Australia. The advice that ATAGI provide is continually updated in response to emerging evidence and current COVID-19 transmission in Australia.

At the time of survey, the clinical guidance provided by the ATAGI indicated that vaccination for COVID-19 was recommended for all people aged ≥ 12 years. The preferred COVID-19 vaccine for adults aged under 60 were mRNA vaccines such as Comirnaty (Pfizer) or Spikevax (Moderna), while AstraZeneca was recommended for those aged 18 to 60 “when the benefits outweigh risks”, i.e., in areas with outbreaks. ATAGI recommended any COVID-19 vaccine, including AstraZeneca, for those aged 60 years or older due to the increased risk of severe outcomes in this population. The difference in recommendation by age was in relation to the higher risk and observed severity of blood clots (thrombosis and thrombocytopenia syndrome) related to the use of AstraZeneca in younger age groups. Additionally, at the time of the survey, the ATAGI recommended that pregnant people and adolescents aged 12-17 get vaccinated for COVID-19 on a two dose schedule with Comirnaty or Spikevax.

Eligibility

Each state government outlines eligibility criteria for vaccination based on the ATAGI recommendations, priority groups and vaccine supply. In Victoria at the time of the survey, everyone aged over 12 was eligible for vaccination against COVID-19. Those aged over 60 years was eligible to receive the AstraZeneca vaccine, and those aged 18 to 59 may choose to have AstraZeneca after discussion with a healthcare provider. In some instances, those aged 18 to 59 with bookings for AstraZeneca vaccines at state-run clinics were also offered Comirnaty (Pfizer) vaccines where available. Anyone aged 12 years or older eligible to receive the Comirnaty (Pfizer) or Spikevax (Moderna) vaccines.

Restrictions

Another important consideration in framing the results is that at the time of survey, Victorians had been under strict stay-at-home restrictions since the 5th of August 2021 due to local transmission of the Delta variant of SARS-CoV-2². These restrictions included a 10km radius to limit travel, and permission to leave the home for only one of five permitted reasons (shopping for food and supplies, authorised work and education, care and caregiving, exercise, and getting tested or vaccinated for COVID-19). At the time of survey, there were anti-lockdown and anti-vaccination protests occurring primarily within Melbourne CBD.

The Victorian Roadmap for delivering the national plan, outlining the easing of restrictions that will gradually occur as vaccination targets are met, was released on the 19th of September 2021. As of the 29th of September 2021, restrictions were eased slightly in both metro Melbourne and regional Victoria as the state met the 80% first dose vaccination target. The outlined in the Roadmap, many of these eased restrictions only applied to fully vaccinated individuals.

² Further details on restrictions at the time of survey can be found at: <https://www.abc.net.au/news/2021-08-05/victoria-covid-19-lockdown-restrictions-tightened-/100352444>

Methodology

Survey

This survey was conducted using an online interview administered to members of the YouGov Plc Australian panel of 71,000+ individuals who have agreed to take part in surveys. The YouGov approach is to send emails to panellists selected at random from their base sample. The e-mail invites them to take part in a survey and provides a generic survey link. Once a panel member clicks on the link they are sent to the survey that they are most required for, according to the sample definition and quotas. The sample definition could be “adult population” or a subset such as “adult females”. Invitations to surveys do not expire, and respondents can be directed to any available survey. The responding sample is weighted according to the profile of the sample definition to ensure a representative reporting sample. The profile is normally derived from census data or, if not available from the census, from industry accepted data.

Importantly, the study sampling strategy did not allow for surveying individuals without internet access, low literacy or limited English language skills, or communication or cognitive difficulties. It is acknowledged that people who register to do YouGov surveys may be different from the general population in ways that we cannot identify, and this may influence the findings.

Analysis

Summary statistics and bar plots were produced to illustrate how participants responded. All values presented are weighted counts and percentages. This means that certain participants' responses have been more or less influential to account for under-represented or over-represented groups, respectively. Weighting has been used to account for slight differences between survey respondents and the general population.

Participant Characteristics

Of the 1,035 participants surveyed, approximately 51.8% identified as female and 47.6% were male. 0.5% were trans or gender diverse. 1.1% of respondents identified as Aboriginal or Torres Strait Islander. Participants were approximately evenly distributed in age, with:

- 12.2% aged <24 years
- 19.2% aged 25-34 years
- 26% aged 35-49 years
- 22.7% aged 50-64 years and
- 19.9% aged 65 years or older

Overall vaccination rates among the participants indicate that 74.3% had already received at least one dose of a COVID-19 vaccine, which included 22.9% participants who had received 1 dose and 51.4% who received both.

The majority of participants were located in metropolitan Melbourne (75.7%), with 8% living in regional areas and 16.3% living in rural locations. 50.8% of participants were parents, with 3.5% currently expecting a baby. Among participants, 41.9% were working full time, 26.7% were working part time, and 31.4% were not working at the time of surveying. Household income is broken down in the following table:

	Weighted N	Weighted %
<\$50K	218	21.1%
\$50K - \$99K	267	25.8%
\$100K - \$149K	201	19.4%
\$150K+	200	19.3%
Prefer not to say	149	14.4%

Broken down by education, 8.3% of participants completed primary school or some secondary school, 15.2% completed secondary school, 27.5% completed a certificate or diploma, 27.6% completed a bachelor’s degree and 20.9% completed further graduate studies. A slight majority of participants owned their own home (27.3% owned outright and 30.9% owned with a mortgage), with 25.8% renting and 14.6% in other living situations.

Participants were asked about their self-reported health, including both physical and mental health status. These results are included in the next table:

	Physical Health		Mental Health	
	Weighted N	Weighted %	Weighted N	Weighted %
Excellent	115	11.1%	134	12.9%
Very good	311	30.0%	237	22.9%
Good	364	35.2%	303	29.3%
Fair	182	17.6%	239	23.1%
Poor	50	4.8%	114	11.0%
Don’t know	13	1.2%	7	0.6%
I prefer not to answer	1	0.1%	2	0.2%

Just under a quarter (24.1%) of the respondents reported speaking a language other than English at home. Further to this, 26.0% of participants were born outside of Australia, with their year of arrival in Australia being broken down in the following table:

Year of arrival	Weighted N	Weighted %
1945-1964	27	10.0%
1965-1984	45	16.8%
1985-2004	70	26.1%
2005-2021	127	47.2%

The following sections provide detailed findings from key questions included in the survey, including COVID-19 testing experience, COVID-19 vaccination, and mental health and wellbeing.

GETTING TESTED FOR COVID-19

Testing rates

Of the 1,035 participants in the survey, 179 (17.2%) reported getting a test for COVID-19 in the previous four weeks. Within this subgroup of tested participants, 86 (48.1%) reported that they had no symptoms in the previous four weeks, while 93 (51.9%) did experience symptoms.

A large majority (81.7%) of participants did not seek testing in the previous four weeks. Of these participants, 460 (54.4%) reported no symptoms in that timeframe while 386 (45.6%) had at least one symptom of COVID-19.

Drivers to seeking a test

Respondents were asked about how likely they were to seek a test if they had COVID-19 symptoms such as cough, fever or runny nose. In this hypothetical scenario, the majority of participants (83.0%) reported that they were likely to get tested:

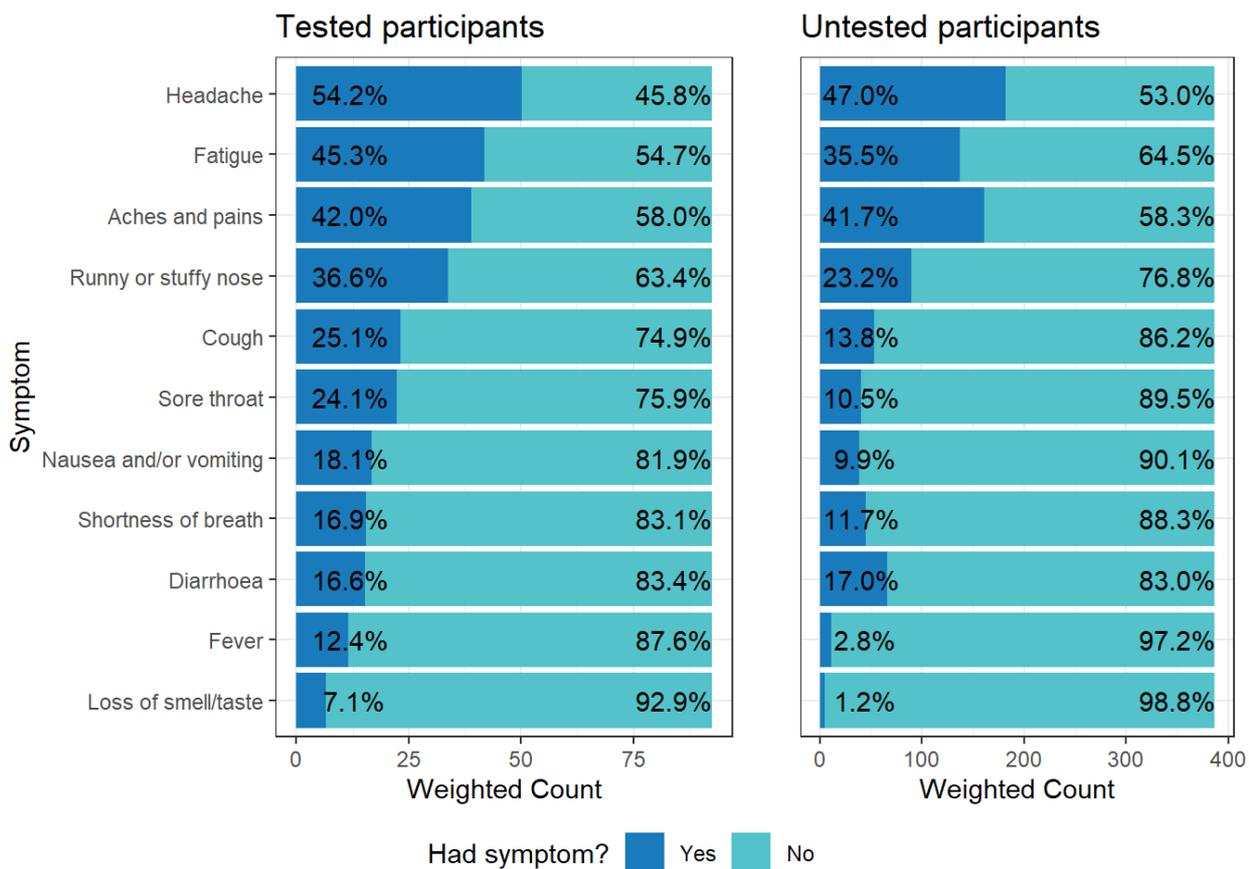
Testing propensity	Weighted N	Weighted %
Very likely	617	59.6%
Somewhat likely	242	23.4%
Unlikely	112	10.9%
Don't know/Not sure	56	5.4%
Prefer not to answer	8	0.7%

However, of the 482 individuals who experienced at least one symptom in the previous four weeks, just 93 (19.3%) got tested for COVID-19. To better understand the discrepancy between perceived and reported behaviours among symptomatic respondents, we compared the symptoms experienced by those who were tested compared to those who were not. This comparison excludes participants who did not report experiencing any symptoms.

The median number of symptoms experienced by those who were tested was similar between the tested and untested subgroups. However, the tested subgroup more frequently reported experiencing key COVID-19 symptoms, including cough, fever, shortness of breath, sore throat, runny or stuffy nose, and loss of smell or taste:

	Untested Subgroup	Tested Subgroup
Symptoms experienced, weighted median (interquartile range [IQR])	2 (1 - 3)	2 (1 - 4)
Key symptoms experienced, weighted median (IQR)	0 (0 - 1)	1 (0 - 2)

A comparison of the symptoms experienced by these two groups is included below. In total, 84 (8.1%) participants reported two or more key COVID-19 symptoms in the previous four weeks. Of these, 31.9% got tested, with 8/18 (46.9%) of the unvaccinated group getting tested and 18/66 (27.8%) of the vaccinated group getting tested. Only nine (0.9%) participants experienced both fever and cough in the previous four weeks, and 65.7% of this group got a test for COVID-19.



Do vaccinated individuals believe they still need to be tested?

As more Victorians are vaccinated, it is important to understand how this may impact their propensity to get tested when experiencing symptoms. Of the 386 participants who experienced symptoms in the previous four weeks and did not get tested, the following reasons were provided:

	Weighted N	Weighted %
Other	127	32.9%
Thought symptoms were not related to COVID (e.g. allergies, common cold)	125	32.3%
I have been vaccinated for COVID-19 so I don't think a test is necessary	45	11.6%
Symptoms were only mild	34	8.8%
Chose to stay home (self-isolate) instead	27	7.0%
Worried about being infected at testing centre	4	1.1%
Did not think you were eligible for COVID testing	7	1.9%
Time constraints (e.g. work/care responsibilities)	4	1.0%
No private transport to get to testing centre	3	0.8%
Fear of swab procedure/discomfort	3	0.9%
Waiting time for test too long	3	0.7%
Testing centre too far away	1	0.3%
Did not want to isolate/quarantine after testing	2	0.4%
Did not know where to go to have the test	1	0.3%

Note: weighted numbers have been rounded to the nearest integer and may not correspond exactly to the weighted percentages

Qualitative analysis of open text responses from participants who chose "Other" indicated that the decision to get tested was often made in consideration with their personal health status. Many of these participants indicated that their symptoms could be attributed to pre-existing health conditions (e.g., arthritis, chronic pain) or other current conditions (e.g., hay fever, food poisoning). A complete qualitative thematic breakdown of the responses by vaccination status can be found in Appendix 1.

Among the symptomatic untested subgroup, 11.6% indicated that they thought testing was unnecessary due to being vaccinated, compared to just 4.6% in the July survey. This may be partial because vaccination rates were much higher (22.9% of participants received at least one COVID-19 vaccine dose and 51.4% received two doses) compared to July (23.0% of participants received at least one COVID-19 vaccine dose and 17.3% received two).

Examination of the open text responses showed that being vaccinated was considered by some respondents in making the decision on whether or not to get tested. Examples of such reasons for not getting are provided below:

"I have been double vaccinated 2 dose in July"

"I know this is a chronic cough and also I have been isolating and are fully vaccinated"

"I've had one AZ vaccine and my symptoms are due to my monthly periods where I get the same symptoms each month"

Comparing the vaccinated and unvaccinated subgroups, the unvaccinated group were more likely to report not getting tested because their symptoms were mild (14.8% unvaccinated vs. 7.3% vaccinated). The "Other" option was more frequently chosen by the vaccinated subgroup (26.0% unvaccinated vs. 34.7% vaccinated). Eight of these participants who chose "Other" indicated that their symptoms were a side effect of the vaccine, such as the participant who wrote "[symptoms] were side effects of getting the COVID vaccination and went away after a couple of days".

Wastewater and testing

We asked about specific situations, and whether participants were likely to seek a test in these scenarios when they (a) had symptoms and (b) had no symptoms. Of particular interest was how the detection of COVID-19 fragments in wastewater would influence the decision to get tested.

When experiencing symptoms, the vast majority of participants reported being likely to seek a test if COVID-19 was detected in wastewater from their area (58.7% said very likely and 21.3% said somewhat likely). However, these results were very similar to those reported in the situation where the participant was only experiencing symptoms of COVID-19 (59.6% said very likely and 23.4% said somewhat likely).

When asked about their propensity to seek a test when COVID-19 was detected in the area but in the absence of symptoms, the number of participants indicating that they would get tested dropped significantly (20.2% said very likely and 24.1% said somewhat likely). The full comparison is included in the table below.

	When not experiencing symptoms		When experiencing symptoms	
	Weighted N	Weighted %	Weighted N	Weighted %
Very likely	209	20.2%	607	58.7%
Somewhat likely	250	24.1%	221	21.3%
Unlikely	494	47.7%	127	12.3%
Don't know/Not sure	75	7.2%	72	7.0%
I prefer not to answer	7	0.7%	8	0.8%

Interestingly, one participant who had symptoms but did not get tested for COVID-19 indicated that wastewater testing was the reason they had decided not to seek a test:

"As our sewerage is tested & no positive fragments have been reported I believe it was just a cold"

COVID-19 VACCINATION

Vaccination status

In total, 88.9% of participants had either already been vaccinated or were likely to get vaccinated. Examining the unvaccinated participants, the majority reported that they were likely to get vaccinated (60.4%).

Vaccination rates were similar for those living within Melbourne (74.8%) and those in provincial or rural areas (72.8%). Vaccination rates were slightly lower at 65.2% for those aged 18 to 34, although this may be attributed to a shorter period of eligibility to be vaccinated for younger age groups.

Do you think you would have a COVID-19 vaccine?

	Weighted N	Weighted %
I have already been vaccinated	769	74.3%
Definitely yes	111	10.7%
Probably yes	40	3.9%
I'm not sure yet	52	5.1%
Probably not	15	1.4%
Definitely not	36	3.5%
Prefer not to say	11	1.0%

Compared to the total sample taken in the survey, a higher proportion of those who were still unsure about vaccination (i.e., responded "*Probably yes*", "*I'm not sure yet*" or "*Probably not*") were aged 25-34 or 35-49 (60.8% of this uncertain subgroup compared to 45.3% in the overall sample). In total, 13.9% of this age bracket indicated uncertainty about vaccination. Fewer of those aged 65 or older were fell into this category, with just 5.2% indicating they were unsure about vaccination.

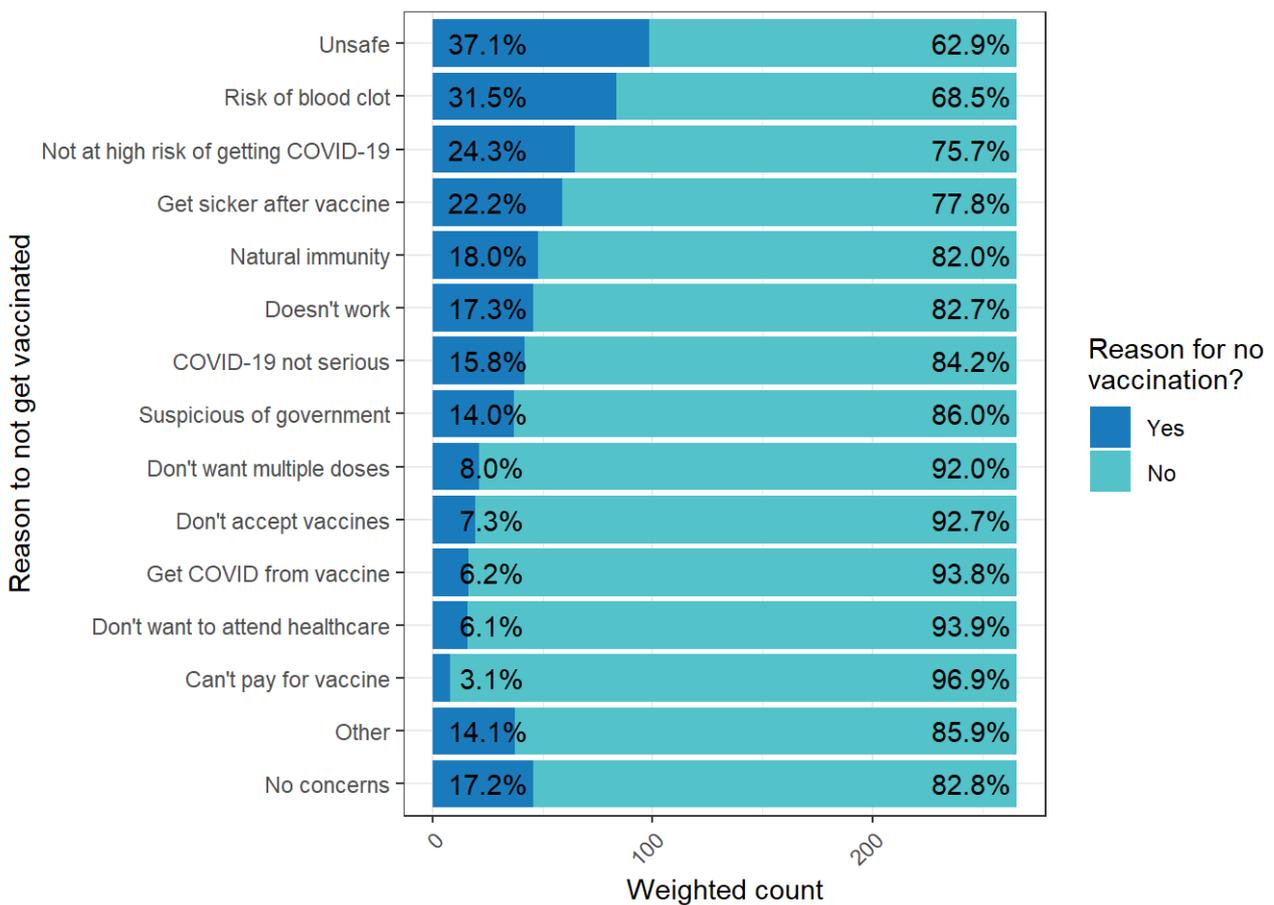
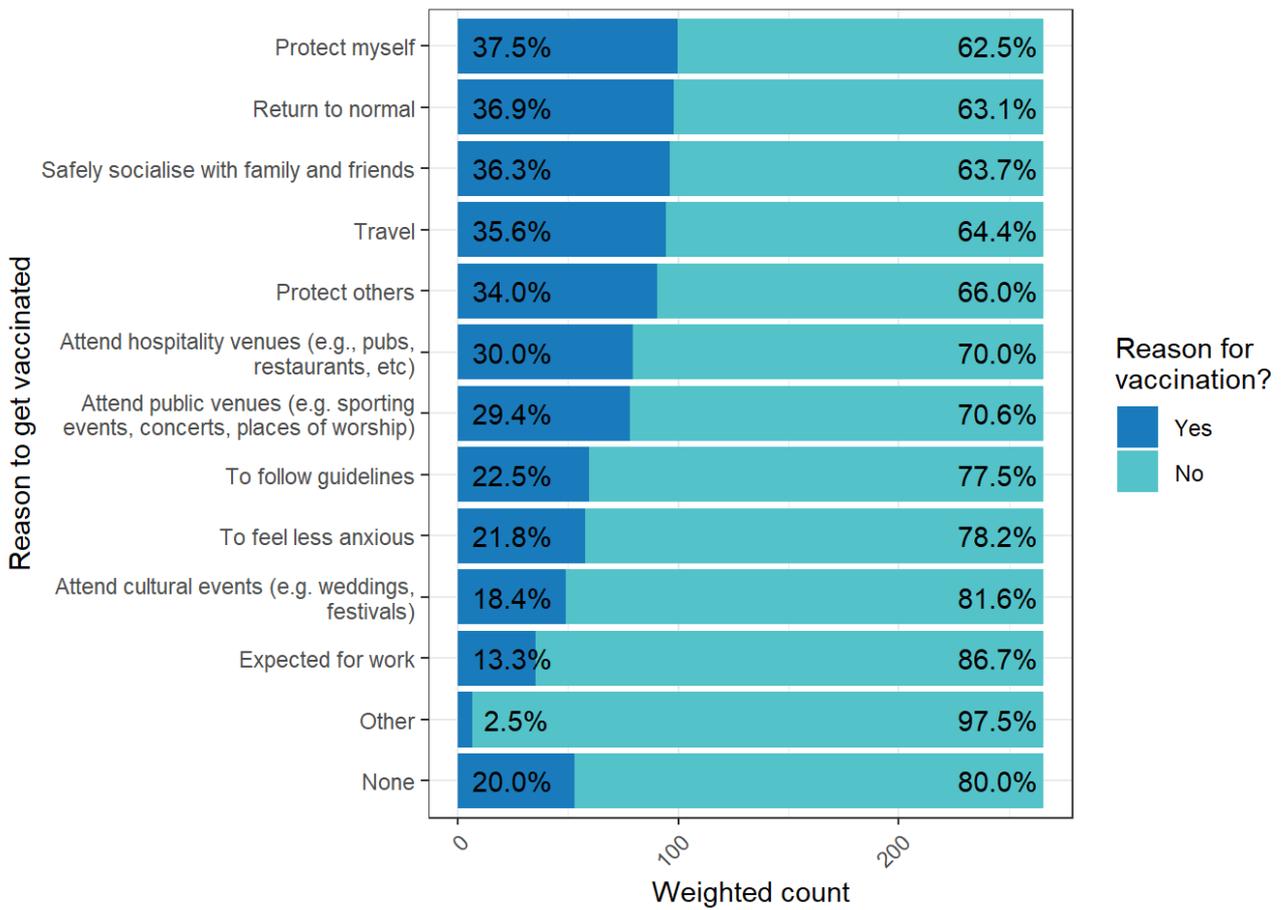
In addition to the above, those in the uncertain subgroup were also more likely to be working full time (59.3% vs. 41.9% overall) and have completed undergraduate studies at university (38.8% vs 27.6% overall). The proportion of participants who were born outside of Australia was also slightly higher (34.2% vs. 26.0% overall).

Reasons for and against vaccination

The 265 respondents in the unvaccinated subgroup were asked about the reasons for and against vaccination that they felt resonated with them. Participants were able to select all options that applied to them.

The most common reasons for getting vaccinated were "*I want to protect myself against COVID-19*" (37.5%) and "*I want life to return to normal*" (36.9%). Being able to safely visit and socialise with family and friends was also commonly reported as a motive for vaccination (36.3%). Further to this, respondents indicated that a reason they might get vaccinated was to be able to attend various venues and events, including:

- To be able to attend hospitality venues where vaccination might be required, such as pubs or restaurants (30.0%)
- To be able to attend public venues where vaccination might be required, such as sporting events, concerts, or places of worship (29.4%)
- To be able to attend cultural events where vaccination might be required, such as festivals or weddings (18.4%)



The most common reason to not get vaccinated related to safety concerns, namely "I am worried that is not safe and hasn't been tested enough for safety" (37.1%) and "I am worried that I may develop a blood clot after getting the COVID-19 vaccine" (31.5%).

A number of participants indicated that their risk of getting ill from COVID-19 was a reason to not get vaccinated. Almost a quarter (24.3%) of participants believed that they were "not currently at high risk of getting or passing on COVID-19", and 22.2% were "worried that [they] would get sicker if [they] got COVID after the vaccine".

Barriers to vaccination

Those in the unvaccinated subgroup were also asked about the specific reason they personally had not yet been vaccinated, which included options for practical barriers, such as being unable to get a booking or not being able to choose which brand of vaccine they would be able to receive.

Although many participants indicated that they were booked to receive the vaccine in coming weeks (34.5%), 17.4% indicated that they did not intend to get vaccinated at all.

	Weighted N	Weighted %
I'm booked to receive it in the coming weeks	92	34.5%
I do not intend to get the COVID-19 vaccine	46	17.4%
I believe I am currently eligible but have not yet booked an appointment	16	6.1%
I would prefer to choose which vaccine I receive, and I was unable to do so	13	4.9%
I am concerned about income loss because of taking time off to get vaccinated	13	4.7%
I have not been able to get a booking	10	3.8%
I am unable to take time off work to get vaccinated or if I get side effects	8	3.1%
I do not believe I am currently eligible for COVID-19 vaccines	7	2.5%
I do not have time to attend a vaccination appointment	4	1.7%
I can't get information about the vaccine that is easy to understand, plain and clear	4	1.7%
I do not have a vaccine centre/GP nearby	3	1.2%
I can't get information about the vaccine in my language of choice	2	0.6%
I was offered a vaccine, but I declined	2	0.6%
I am unable to get to a vaccine centre	2	0.6%
I don't know/unsure	28	10.4%
Prefer not to say	16	6.2%

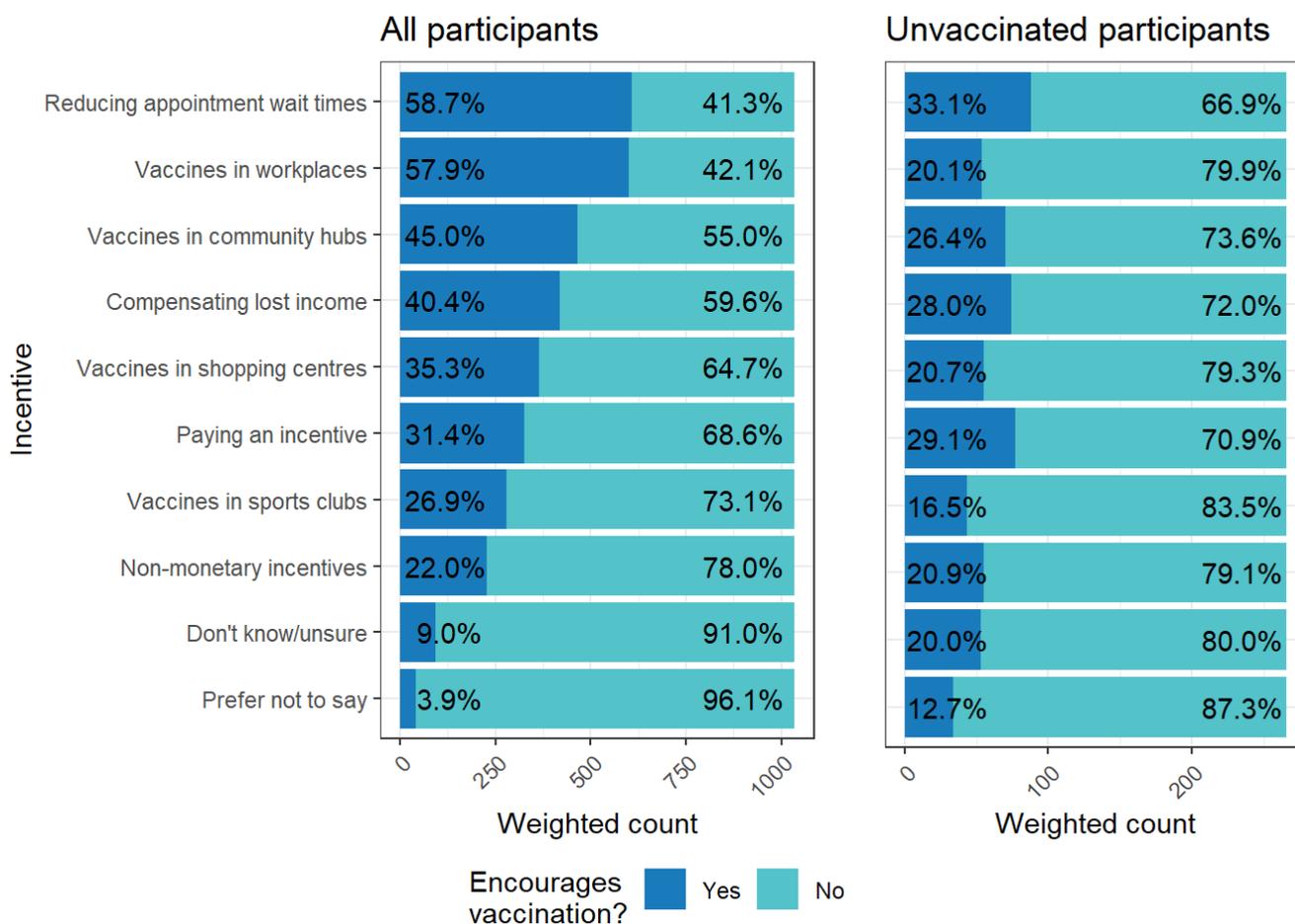
Incentives to get vaccinated

The participants were asked about the methods they thought would help encourage people to get vaccinated. Respondents were asked to select up to five choices to ensure they only selected the options they believed to be most effective.

The majority of participants indicated that increasing the ease of access to vaccination would improve uptake, with the most commonly selected responses being "ensuring people do not need to wait for weeks after booking an appointment to get vaccinated" (58.7% indicated effectiveness) and "offering vaccinations in workplaces" (58.7% indicated effectiveness).

Comparatively, fewer participants believed that incentives such as "paying people an incentive to get vaccinated" (31.4%) or "paying people small non-monetary incentives to get vaccinated, such as phone credits or retail vouchers" (22.0%) would be effective in encouraging vaccination.

However, looking specifically at the unvaccinated cohort, reduced wait times and greater access to vaccines (i.e., in workplaces or community hubs) was much less likely to be selected as a method that would encourage vaccination. Interestingly, the only methods that were selected at similar rates in the overall sample and unvaccinated subgroups were monetary (31.4% vs. 30.3%) and non-monetary incentives (22.0% vs 21.7%).



Vaccines and children

The survey had 249 respondents who had children younger than 18. These participants were asked whether they would get their children vaccinated against COVID-19. 26 (10.6%) reported that their children had already received at least one dose of a COVID-19 vaccine. Most participants whose children had not yet been vaccinated indicated that they were definitely going to get their child vaccinated (42.9%).

Would you get the a COVID-19 vaccine for your children?

	Weighted N	Weighted %
They have already been vaccinated	26	10.6%
Definitely yes	107	42.9%
Probably yes	25	10.1%
I'm not sure yet	55	22.0%
Probably not	12	2.7%
Definitely not	19	7.8%
Prefer not to say	5	1.9%

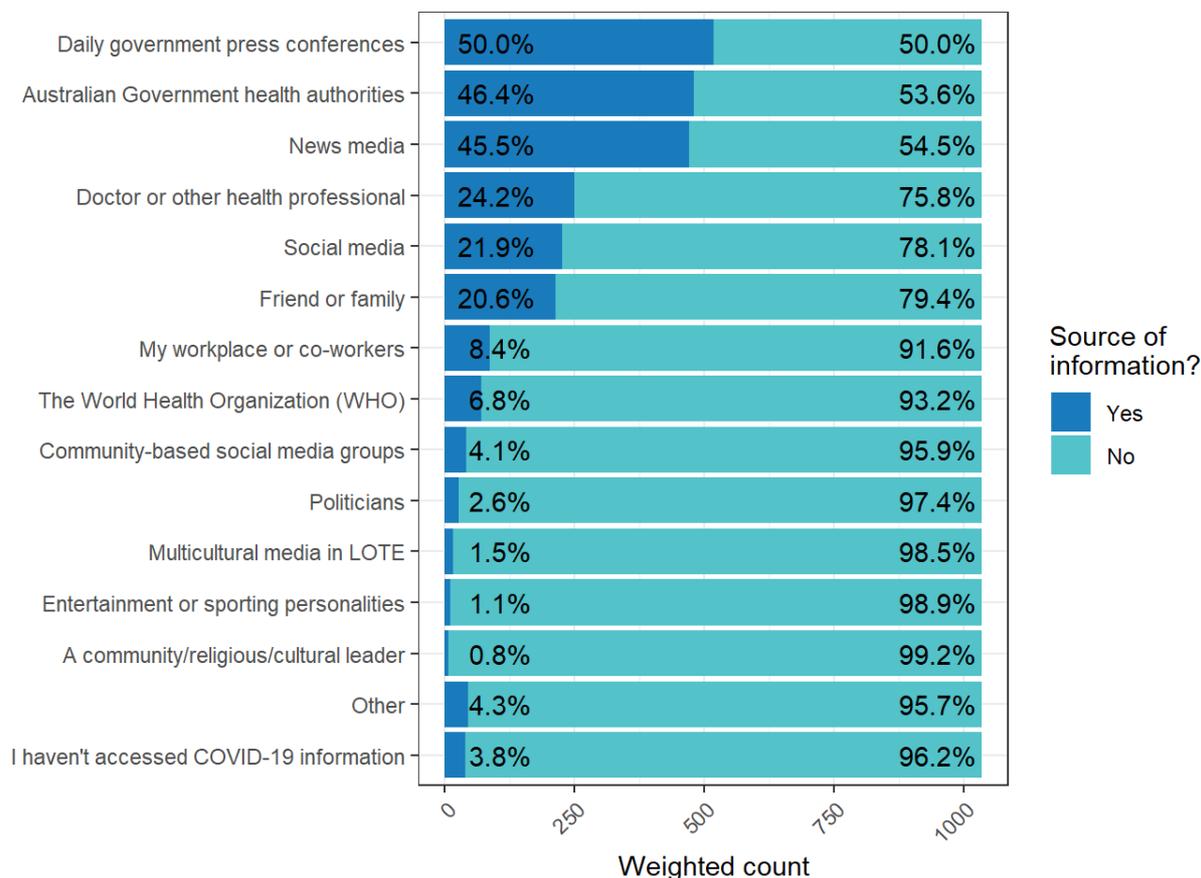
The main reasons for and against vaccination reported by parents of unvaccinated children were broadly similar to those reported by unvaccinated participants. More parents reported that they had no concerns in getting their child vaccinated (31%) compared to the 17.2% of unvaccinated respondents who reported that they had no concerns about receiving their own vaccine.

Importantly, it should be noted that these are the views of parents and are not necessarily reflective of the views of children themselves. Under current Victorian Department of Health guidelines, those aged 12 to 17 may provide consent if they are deemed to be a mature minor by a senior and experienced immuniser. Alternatively, a child's parent or guardian can attend the vaccine appointment with them.

Information sources

We asked respondents about the main places that they accessed information to stay informed about COVID-19 vaccines. Participants were able to select multiple information sources. Three main sources were reported by participants, which included:

- Daily government press conferences or media releases (50.0%)
- Australian Government health authorities (46.4%)
- News media, including online, television, radio and print (45.5%)



RESILIENCE & MENTAL HEALTH

A key factor in understanding Victorians at the time of survey is exploration of the social and emotional impact of COVID-19 and the associated public health measures. Reports have highlighted concerns about the stress and uncertainty of the pandemic may impact mental health and wellbeing³. Feelings of anxiety or depression may be heightened due to the stress of the pandemic.

In a short to medium timeframe, there are five elements which are considered essential to support people and communities confronted with large-scale disaster and loss, as was experienced by many Victorians throughout the COVID-19 pandemic. These elements, which also underpin Psychological First Aid⁴, promote a sense of safety; calm; a sense of self- and community efficacy; connectedness; and hope.

In addition to exploration of these factors, the following section examines some key interactions between the five elements and aspects of mental health.

Emotional impact of COVID-19

The Hospital Anxiety and Depression Scale (HADS)⁵ tool was used to assess the mental health of survey respondents, where the maximum possible score for anxiety or depression was 21. As defined in clinical practice, scores of 7 or less are considered to be in the normal range, scores between 8 and 10 indicate elevated levels of anxiety or depression symptoms, and a score of 11 or more indicates a high level of anxiety symptoms which may require professional mental health support.

High levels of symptoms of anxiety and depression were reported by 25.9% and 26.9% of the survey respondents respectively. The weighted median anxiety score was 7 (IQR: 4 - 11) and the weighted median depression score was 8 (IQR: 5 - 11). Full classifications of participants are outlined in the table below.

	Anxiety Score		Depression Score	
	Weighted N	Weighted %	Weighted N	Weighted %
Normal	557	53.8%	464	44.8%
Elevated	210	20.3%	292	28.3%
High	268	25.9%	278	26.9%

There was no difference in the proportion of respondents reporting high levels of symptoms of anxiety when compared to the previous survey in July (24.1% vs. 25.9%, p-value: 0.38). However, there was a significantly higher proportion reporting high levels of symptoms of depression when compared to the July results (19.6% vs. 26.9%, p-value: <0.001).

Questions in the HADS tool can be used to address specific aspects related to the five elements of mid to long term disaster recovery. As an indication of calm, we found that 63.4% could definitely or usually sit at ease and feel relaxed. This was quite similar to the responses seen in the July survey (64.1%).

³ WHO (World Health Organization). Substantial investment needed to avert mental health crisis. <https://www.who.int/news/item/14-05-2020-substantial-investment-needed-to-avert-mental-health-crisis>. Published May 14, 2020. Accessed 25 October, 2021.

⁴ Australian Red Cross. Psychological First Aid: An Australian guide to supporting people affected by disaster. <https://www.psychology.org.au/getmedia/c1846704-2fa3-41ae-bf53-7a7451af6246/Red-cross-psychological-first-aid-disasters.pdf>. Published 2013. Accessed October 25, 2021.

⁵ Zigmond AS & Snaith RP. The Hospital Anxiety and Depression Scale. *Acta Psychiatr Scand* 1983; 67:361–370.

Self- and community efficacy

Respondents were asked about how confident they were they and Victoria could manage until the disruptions due to COVID-19 were over. Each question was scored 1-10, where, 1 was “not confident at all” and 10 was “extremely confident”.

In total, 770 (74.4%) respondents were confident that they could manage (6 to 10 points), and 203 (19.7%) were extremely confident. Comparatively, 523 (50.5%) participants were confident that Victoria could manage until the disruptions caused by COVID-19 were over, with 99 (9.6%) being extremely confident.

Higher levels of self-efficacy (i.e., higher self-confidence in being able to manage) was significantly correlated with lower anxiety and depression symptoms. Higher community efficacy was also significantly correlated with lower levels of anxiety and depression symptoms, although these associations were not as strong.

Community connectedness and social supports

Respondents were asked about how many people they had to rely on and how many people relied on them for either practical or emotional support during the pandemic. Among survey respondents, 70.2% had 2 or more people they could rely on for assistance during the pandemic, although 11.8% reported that they had no-one they could rely on. Being able to rely on a larger number of people for assistance or support during the pandemic was significantly associated with lower levels of both anxiety and depression symptoms.

How many people can you rely on?

	Weighted N	Weighted %
More than 5 people	173	16.7%
2 - 5 people	554	53.5%
One person	187	18%
No-one	122	11.8%

How many people rely on you?

	Weighted N	Weighted %
More than 5 people	137	13.2%
2 - 5 people	570	55%
One person	209	20.2%
No-one	120	11.6%

Connectedness scores were based on the Social and Solidarity Index,⁶ consisting of six 5-point questions, giving each participants a score out of 30. The weighted mean connectedness score was 20.81 (standard deviation of 4.66). Higher levels of community connectedness were associated with lower levels of anxiety and depression symptoms.

⁶ Hawdon et al, Social Solidarity and Wellbeing After Critical Incidents: three cases of mass shootings. Journal of Critical Incident Analysis, Fall 2012, 1-25.

Hope for the future

To understand hope for the future among the survey respondents, they were asked about how optimistic or pessimistic they were about:

- Their own future
- The future of Australia
- The future of the world

While 491 (47.4%) reported optimism about their own future, hope was lower when participants were asked to consider the future of Australia (39.9%) and the future of the world (33%). The individual responses are captured in the table below. Higher feelings of hope (for one's future, Australia's and the world's) were all significantly associated with lower levels of depression and anxiety symptoms.

	Hope for own future		Hope for Australia's future		Hope for world's future	
	<i>Weighted N</i>	<i>Weighted %</i>	<i>Weighted N</i>	<i>Weighted %</i>	<i>Weighted N</i>	<i>Weighted %</i>
Very optimistic	139	13.4%	71	6.9%	63	6.1%
Somewhat optimistic	352	34%	333	32.2%	279	26.9%
Neither pessimistic or optimistic	315	30.4%	262	25.3%	278	26.9%
Somewhat pessimistic	164	15.9%	263	25.4%	295	28.5%
Very pessimistic	65	6.3%	105	10.2%	120	11.6%

CONCLUSION

This study allowed for special insight into the attitudes of Victorians under unique circumstances, with ongoing stay-at-home restrictions, vaccination milestones and lockdown protests all occurring as the participants provided their responses. As a result, the survey has provided an understanding of the various attitudes surrounding COVID-19 testing and vaccination, in addition to key insights into the effect of these circumstances on the wellbeing of participants.

As was observed in the previous survey, testing behaviours indicated that people are assessing their health and personal situation in deciding whether to get tested for COVID-19. Although vaccine uptake in Victoria was rapid in the weeks preceding the survey, there was a minority of participants who remained unsure about getting vaccinated. This unvaccinated subgroup indicated that the most effective vaccine incentives would be reduction of appointment wait times, monetary incentives and compensation for lost income.

The mental health of Victorians is of ongoing concern, with over a quarter of survey respondents reporting clinically high levels of symptoms of anxiety and depression. Increased sense of efficacy, community connectedness and hope for the future were associated with reduced anxiety and depression symptoms. Future work will involve a qualitative analysis of the responses to the survey question "What is your biggest concern at the moment?" This will aid in understanding how the COVID-19 pandemic has influenced Victorians' mental health and overall wellbeing.

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