

Positive outcomes associated with the COVID-19 pandemic in Australia

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Funding information

This study was not specifically funded, but in-kind support was provided by authors with research fellowships

Handling Editor: Jenni Judd

Abstract

Issue addressed: To investigate whether Australians have experienced any positive effects during the COVID-19 pandemic.

Methods: National online longitudinal survey. As part of a June 2020 survey, participants ($n = 1370$) were asked 'In your life, have you experienced any positive effects from the COVID-19 pandemic' (yes/no) and also completed the World Health Organisation-Five well-being index. Differences were explored by demographic variables. Free-text responses were thematically coded.

Results: Nine hundred sixty participants (70%) reported experiencing at least one positive effect during the COVID-19 pandemic. Living with others ($P = .045$) and employment situation ($P < .001$) at baseline (April) were associated with experiencing positive effects. Individuals working for pay from home were more likely to experience positive effects compared to those who were not working for pay (aOR = 0.45, 95% CI: 0.32, 0.63, $P < .001$) or who were working for pay outside the home (aOR = 0.40, 95% CI: 0.28, 0.58, $P < .001$). 54.2% of participants reported a sufficient level of well-being, 23.2% low well-being and a further 22.6% very low well-being. Of those experiencing positive effects, 945/960 (98%) provided an explanation. The three most common themes were 'Family time' (33%), 'Work flexibility' (29%) and 'Calmer life' (19%).

Conclusions: A large proportion of participants reported positive effects resulting from changes to daily life due to the COVID-19 pandemic in Australia.

So what: The needs of people living alone, and of those having to work outside the home or who are unemployed, should be considered by health policymakers and employers in future pandemic preparedness efforts.

KEYWORDS

community, connection, COVID-19, crisis, mental health, positives, resilience, working from home

1 | INTRODUCTION

A substantial human toll has resulted from the COVID-19 global pandemic, with over 2.5 million lives lost^{1,2} and trillions cost to the global economy.³ Nevertheless, the detrimental effects of the pandemic have differed considerably between countries, with different government responses and public health orders implemented. In 2020, Australia has fared favourably in comparison to many other developed nations after closing international borders, intensive COVID-19 testing and contact tracing, in addition to other methods of slowing the spread of the virus.^{4,5} Early in the course of the pandemic, Australia ceased all inbound travel except for exceptional circumstances and to allow citizens and permanent residents home.⁶ At this time, citizens and permanent residents were also prohibited from leaving the country.^{7,8}

This is not the first pandemic or large-scale crisis to disrupt daily life that humans have experienced. It is however the first at this scale that has occurred during a time of global connectivity via the internet, telecommunications and air travel.⁹ Throughout our history, humans have endured famines, plagues, world wars, climate change, nuclear catastrophes and other near misses of existential threat.¹⁰ In fact, there is widespread perception that the rate of natural disasters is only increasing.¹¹ Exploring how humans may find positive effects amongst these demanding circumstances and how collective resilience enables this may help us mitigate the negative consequences of COVID-19 and future global crises.

Previous research has demonstrated that people can react positively to large scale crises by developing resilience, particularly as a community. This positive reaction to disaster has been observed amongst other populations under duress in times of crises, such as Londoners during The Blitz,¹² New Zealanders in the immediate aftermath of the Canterbury Earthquakes,¹³ and Chileans in the aftermath of the 2010 earthquake and tsunami^{14,15} which include reports of community cohesion, a positive outlook and demonstrable traits of resilience. In addition, Australians have faced numerous environmental disasters in recent years, including catastrophic bushfires. Research suggests that resilience and community cohesion have the ability to attenuate the detrimental psychological effects of these crises.¹⁶⁻¹⁸ Furthermore, research found that characteristics of community resilience, including tight bonds and a sense of kinship, were helpful in addressing the Ebola virus in Liberia.¹⁹

Nevertheless, it is important to identify groups and populations which may suffer to a greater extent, and not experience any collateral positive effects arising from a disaster including a pandemic. This may be due to already present socioeconomic disparities which may be exacerbated from the detrimental effects of lockdowns and other pandemic related side effects.²⁰

The salutogenic theory of health promotion can be used as a guide to understand the impact that marginalised groups in our society may face, not just from a medical model but a social one.²¹ Salutogenesis, a health promotion approach which determines health to be a dynamic factor in a continuum on an axis between total ill

health (dis-ease) and total health (ease) is a useful framework for contemplating how people may adapt and recover during a crisis and how best to facilitate this with the work of public health professionals and government.²² The origins of the salutogenic approach dictate that it is important to focus on people's resources and capabilities to move towards ease (good health) on the continuum rather than focussing on risks, ill health and disease.²³ Thinking in this manner is useful in the health promotion context as it necessitates a problem-solving mentality and lateral thinking to navigate problems and find the path towards good health. The salutogenic approach has been used in recent health promotion research including considering the well-being of homeless people²⁴ and has been applied to the COVID-19 pandemic with regard to mental health.²⁵ Therefore, we use this framework when thinking of those groups whom have experienced positive effects and when suggesting approaches to meet the needs of those who have not.²⁶

In this paper, we present our investigation into whether participants had experienced any positive effects during the pandemic and what those positive effects were and explored whether there were any sociodemographic factors associated with a more or less positive experience during this period.

2 | METHODS

2.1 | Study design and setting

The Sydney Health Literacy Lab (SHeLL) has been conducting a national longitudinal survey in Australia since April 2020. The original sample was recruited via an online market research panel, Dynata, and using paid advertising on social media ($n = 4326$). Participants were aged 18 years and over, could read and understand English and were currently residing in Australia. Participants recruited through social media ($n = 2006$) were then followed-up monthly from April to July. Participants recruited via social media were given the opportunity to enter a prize draw for the chance to win one of ten AUD\$20 gift cards upon completion of each survey. More details on recruitment and survey results are provided elsewhere.²⁷ In the June survey (June 5-12), participants were asked the following question, 'In your life, have you experienced any positive effects from the COVID-19 pandemic' (yes/no). Those participants responding 'yes' were asked to provide a free-text response: 'Please describe what these positive experiences have been'. Participants also completed the WHO-Five well-being index (WHO-5); a five-item questionnaire that measures current mental well-being over the previous 2 weeks.²⁸ We used the STROBE cross-sectional checklist to structure this manuscript.²⁹

2.2 | Quantitative analysis

Quantitative data were analysed using Stata/IC v16.1 (StataCorp, College Station TX, USA). Descriptive statistics were generated for

demographic characteristics of the analysed sample. Logistic regression was applied to determine whether age (categorised into 10-year groups until 70+), gender (male, female, other/prefer not to say), highest level of educational attainment (high school or less, trade certificate, university education), household structure (live alone, or live with 1-2, 3-4, or 5 or more others) or employment situation in April (not working for pay, working for pay from home, working for pay outside the home, or other working for pay situation) were associated with self-reported positive experiences during the COVID-19 pandemic. Multivariable linear regression was also applied to determine whether the aforementioned variables were associated with participants' WHO-5 score (scored 0-100), with scores of ≤ 28 representing very low well-being, ≤ 50 low well-being, > 50 high well-being.

2.3 | Content analysis

Free-text responses were analysed using content analysis,³⁰ a widely used analysis method which combines qualitative and quantitative methods to analyse text data, allowing the content and frequency of categories to be reported. One member of the research team (SC) first read through all the free-text responses ($n = 945$) and developed the initial coding framework. Members of the research team (RD, SC, BN) also reviewed the free-text responses and discussed the coding framework. A random selection (randomised in Microsoft Excel) of 200 responses (~20%) were double coded independently by two members of the research team (SC and RD). Level of agreement was tested using Cohen's kappa³¹ and indicated substantial agreement ($\kappa = 0.83$). Any discrepancies were discussed between SC and RD until consensus was reached. SC then coded the remaining 745 responses. The frequency of each code and main themes were then reported.

3 | RESULTS

3.1 | Descriptive statistics

Demographic characteristics of the sample overall and by their response to the question "In your life, have you experienced any positive effects from the COVID-19 pandemic" are provided in Table 1. Of the 1370 individuals in the sample, 960 (70.1%) indicated that they had experienced at least one positive during the COVID-19 pandemic. Overall, 54.2% ($n = 743$) of participants reported a sufficient level of well-being ($> 50/100$), while 23.2% ($n = 318$) showed low well-being ($\leq 50/100$) and a further 22.6% ($n = 309$) showed very low well-being ($\leq 28/100$).

An independent samples *t* test indicated that those who reported experiencing any positive effects from the COVID-19 pandemic also had higher well-being scores than those who did not report positive effects (mean difference [MD]: 7.25, 95% CI: 4.59, 9.91; $t(1369) = 5.35$, $P < .001$; Cohen's $d = 0.31$).

3.2 | Factors associated with a positive effect of the COVID-19 pandemic

Adjusted odds ratios from logistic regression are displayed in Table 2. There was an overall effect of gender ($P = .001$), where those identifying as female were more likely than males (aOR = 1.62, 95% CI: 1.25, 2.09, $P < .001$) to report experiencing a positive effect of the pandemic. Individuals who lived in households with a greater number of people were more likely to experience positive effects ($P = .045$). Compared to those living alone, individuals who reported living with three to four others (aOR = 1.65, 95% CI: 1.11, 2.45, $P = .012$) or five or more other people (aOR = 2.08, 95% CI: 1.03, 4.20, $P = .043$) had greater odds of reporting a positive effect. Employment situation during the baseline survey (April) was also associated with the experience of positive effects ($P < .001$); individuals who were not working for pay (aOR = 0.45, 95% CI: 0.32, 0.63, $P < .001$) or who were working for pay outside of the home (aOR = 0.40, 95% CI: 0.28, 0.58, $P < .001$) were less likely to experience positive effects in comparison to those who were working for pay from home. Age and education did not appear to be associated with reporting positive effects of the COVID-19 pandemic when controlling for other model factors including household numbers and employment.

A multivariable linear regression on the WHO-5 well-being index, displayed in Table 3, found that participants who were older (50-60, 60-70 and 70+ years) had higher well-being than participants in the 18- to 30-year group (all $P < .001$). Males had slightly higher well-being than females (MD = 3.06, 95% CI: 0.44, 5.67, $P = .022$) and participants with certificate I-IV education (MD = -5.14, 95% CI: -9.14, -1.13, $P = .012$), but not those with high school certificate or less (MD = 0.72, 95% CI: -2.92, 4.36, $P = .70$), had lower well-being than those who were university educated. Participants who lived alone were found to have lower well-being compared to those who lived with 1-2 (MD = 4.05, 95% CI: 0.59, 7.50, $P = .022$) or 3-4 others (MD = 7.14, 95% CI: 3.17, 11.11, $P < .001$). Employment situation was not associated with well-being ($P = .33$).

3.3 | Content analysis results

Of the 960 participants reporting a positive experience, 945 (98%) provided a written response detailing their positive experiences. Eighteen themes (plus an 'other' category) captured these responses (Table 4).

The three most commonly reported positive effects identified were as follows:

1. 'Family Time' (33%), with participants describing positive effects of being able to have more time with their immediate family and a feeling of greater appreciation for their family members and improvements in their family relationships. Responses to this theme included: "...allowed my family to get closer together..." and "Appreciate close family contact via internet and the company the family I live with provide".

Variable	Overall N = 1370 (%)	Experienced any positive effects from the COVID-19 pandemic	
		No, n = 410 (%)	Yes, n = 960 (%)
<i>Age group</i>			
18-29 years	348 (25.4)	100 (24.4)	248 (25.8)
30-39 years	234 (17.1)	68 (16.6)	166 (17.3)
40-49 years	217 (15.8)	50 (12.2)	167 (17.4)
50-59 years	243 (17.7)	61 (14.9)	182 (19.0)
60-69 years	245 (17.9)	97 (23.7)	148 (15.4)
70 years and over	83 (6.1)	34 (8.3)	49 (5.1)
<i>Gender</i>			
Male	434 (31.7)	158 (38.5)	276 (28.7)
Female	911 (66.5)	246 (60.0)	665 (69.3)
Other/prefer not to say	25 (1.8)	6 (1.5)	19 (2.0)
<i>Education</i>			
High school or less	198 (14.5)	64 (15.6)	134 (14.0)
Certificate I-IV	140 (10.2)	46 (11.2)	94 (9.8)
University	1032 (75.3)	300 (73.2)	732 (76.3)
<i>Household structure</i>			
Living alone	213 (15.5)	80 (19.5)	133 (13.9)
1-2 others	732 (53.4)	229 (55.9)	503 (52.4)
3-4 others	368 (26.9)	88 (21.5)	280 (29.2)
5 or more others	57 (4.2)	13 (3.2)	44 (4.6)
<i>Employment situation at beginning of pandemic</i>			
Working from home	373 (27.2)	68 (16.5)	305 (31.8)
Working outside the home	315 (23.0)	107 (26.0)	208 (21.7)
Not working for pay ^b	631 (46.1)	218 (53.0)	414 (43.1)
Others ^b	51 (3.7)	18 (4.4)	33 (3.4)
WHO-5 Well-being index, mean (SD) [0-100] ^a	51.43 (23.21)	46.34 (24.25)	53.58 (22.42)

^aA value of 0 represents the worst imaginable well-being, to 100 representing the best imaginable well-being. Scores of ≤ 28 represent very low well-being, ≤ 50 low well-being, and > 50 sufficient well-being. The population norm score reported for a UK sample of 1304 adults aged over 18 years in the European Quality of Life Surveys 2016 = 63.⁴⁶

^bNot working for pay included students and retirees. Other did not have a free text response and may have included hybrid working from home and outside the home or scholarships.

TABLE 1 Demographic characteristics of the analysis sample (N = 1370). Data are presented as n (%) unless otherwise indicated

- 'Work Flexibility' (29%) with participants discussing an appreciation of increased work flexibility with no commute involved, feeling more productive when they do work and a feeling of being more autonomous and in control of their day. Quotes such as "No commute time. Usually takes me an hour door to door. It's been great reclaiming 2 hours per day. It's a shame my boss wants us to go back to the office now..." and "Working from home, avoiding commuting and the stresses that can pose in your life, has been a definite positive during COVID-19 isolation and I sincerely hope to strike a balance between office attendance and telecommuting post-COVID. We've definitely shown it's do-able." Highlighted the connection between working from home and a feeling of empowerment over one's time.
 - 'Calmer Life' (19%) with participants highlighting the stillness of the world around them and showing an appreciation for a less frantic daily life. Quotes to this effect included: "calm shopping centres, no traffic noises, less trucks, less people parking on street, less places to rush, less crowds" and "Everything has been quieter and calmer. Little traffic on roads, shops not as busy. As an introvert, no pressure to join in outings to clubs etc".
- Other major themes in which over 10% of participants identified positive effects included the following:
- taking up a new hobby/increase in leisure activity/time outdoors;
 - financial benefit/saving money; and
 - improved self-care/exercise/home cooking.

TABLE 2 Results from multivariable logistic regression on the experience of positive effects from the COVID-19 pandemic

Variable	Adjusted OR	95% CI	P value
<i>Age group</i>			.14
18-29 years	Reference		
30-39 years	0.83	0.56, 1.23	
40-49 years	1.13	0.75, 1.72	
50-59 years	1.13	0.76, 1.66	
60-69 years	0.68	0.47, 1.00	
70 years and over	0.73	0.43, 1.25	
<i>Gender</i>			<.001
Male	Reference		
Female	1.62	1.25, 2.09	
Other/prefer not to say	1.90	0.73, 4.96	
<i>Education</i>			.99
High school or less	1.01	0.70, 1.44	
Certificate I-IV	0.98	0.66, 1.45	
University	Reference		
<i>Household structure</i>			.045
Living alone	Reference		
1-2 others	1.27	0.92, 1.77	
3-4 others	1.65	1.11, 2.45	
5 or more others	2.08	1.03, 4.20	
<i>Employment situation at beginning of pandemic</i>			<.001
Working from home	Reference		
Working outside the home	0.40	0.28, 0.58	
Not working for pay	0.45	0.32, 0.63	
Other	0.40	0.21, 0.76	

Note: Data are presented as adjusted odds ratios (95% confidence intervals).

Themes were often interconnected, with many participants identifying positive effects that covered several themes. Quotes such as this demonstrate connections between the top themes: "I am able to work from home full time—that's 2 hours a day that I'm not wasting commuting. I am loving this. I was able to cycle a lot more when the streets were empty. This was an incredibly positive experience for me. As a woman who is a relatively slow cyclist I am terrified of sharing the road with selfish and angry drivers in huge cars. Therefore it was absolutely freeing and empowering to be able to cycle anywhere and any time and not fear for my life. I have been able to spend more time with my child and be more involved in her education. I have not felt the obligation to catch up with people and my time has been my own. This has been the calmest most productive time of my life by far."

TABLE 3 Results from multivariable linear regression on WHO-5 well-being index

	Mean difference	95% CI	P value
<i>Age group</i>			<.001
18-29 years	Reference		
30-39 years	-0.23	-4.12, 3.67	
40-49 years	2.11	-1.86, 6.09	
50-59 years	8.14	4.34, 11.94	
60-69 years	14.47	10.51, 18.42	
70 years and over	17.69	12.00, 23.38	
<i>Gender</i>			.019
Male	Reference		
Female	-3.06	-5.67, -0.44	
Other / prefer not to say	-9.60	-18.75, -0.44	
<i>Education</i>			.03
High school or less	0.72	-2.93, 4.36	
Certificate I-IV	-5.14	-9.14, -1.13	
University	Reference		
<i>Household structure</i>			.006
Living alone	Reference		
1-2 others	4.05	0.59, 7.50	
3-4 others	7.14	3.17, 11.11	
5 or more others	3.69	-3.00, 10.39	
<i>Employment situation at beginning of pandemic</i>			.33
Working from home	Reference		
Working outside the home	-0.86	-3.99, 2.28	
Not working for pay	-0.04	-3.46, 3.38	
Other	5.28	-1.32, 11.87	

Note: Data are presented as marginal mean differences (95% confidence intervals) compared to the indicated reference group.

4 | DISCUSSION

These findings illustrate that a large proportion of the Australians included in our survey found some positive experiences to take away from the first four months of the COVID-19 pandemic. Of note, a large percentage of participants in this survey found it positive having the opportunity to spend more time with family, appreciated being able to work from home or have more flexibility in their working arrangements, and many described enjoying a less busy lifestyle. However, not all groups were equally likely to experience these positive effects. Those who were unemployed during our April survey or whom were working for pay outside of the home were less likely to experience positive effects. Those who lived alone were also less likely to experience positives. These groups may need more support

TABLE 4 Themes identified in free-text responses to question 'In your life, have you experienced any positive effects from the COVID-19 pandemic' with example response

Theme	N responses (%)	Example free-text response
Family time	310 (33)	"A slowdown in life. More time to be together as a family" "Time spent connecting with the family more while working and schooling from home"
Work flexibility	274 (29)	"Have gotten into a regular exercise regime—started a six week challenge with a fitness app and have had more time to workout due to less commute time" "Having to work from home has allowed greater contact with family and pets"
Calmer life	181 (19)	"A less busy and stressed life, less running around, more time with my daughter"
New hobbies and increased leisure time	111 (12)	"I have been exercising more regularly and have had more leisure time, which I have used for activities like reading. I have also enjoyed feeling the world be a bit quieter (eg less traffic)"
Financial benefit	92 (10)	"Having saved some extra money due to not spending on both standard expenses and miscellaneous items"
Improved self-care	91 (10)	"Being surprisingly much more active as it's easier to exercise now without having to make time to travel to and from the gym (even if there is less equipment to use). A bit of excitement coming from having a different lifestyle that everyone else is experiencing as well. It felt like an interesting break from the same day-to-day experiences of before"
Mental health improvement	86 (9)	"Having time to focus on my mental health, making new friends online via animal crossing" "Increased my mental health therapy and have had positive impacts from that"
Greater connection with others	75 (8)	"Built stronger connections with friends. Made an effort to slow down and concentrate on what matters. I walk so much more and have seen so much of my suburb and its surrounds. I think we've rediscovered a sense of community again too ... it started with the bushfires and has been strengthened by covid"
Online resources and events	69 (7)	"Catching up, via zoom every week with relatives in NZ that I normally only speak to on birthdays and Christmas"
Friend time	56 (6)	"Big increase in connecting with friends and family overseas via Zoom. Most family is in the UK and I have friends all over the world. I've spent more time in my garden growing food and getting to know the wildlife. I've walked more in the neighbourhood and discovered a lovely local bushwalk"
Gained perspective	47 (5)	"Family time, refreshed perspective on life and priorities, no commuting, no seasonal colds due to social distancing, exercise, enjoying cleaner environment W/less pollution"
More work or income	24 (3)	"More work, husband's business more busy, more family time"
Jobkeeper/jobseeker payments/early pension release ^a	30 (3)	"My fortnightly income from my cleaning job has been boosted by a factor of 10 thanks to JobKeeper (tripled once you add in loss of Newstart). As an introvert it's been a joy not being torn in 100 different directions by social obligations"
Perceived environmental benefits	24 (3)	"Having space to slow down. Less people around. Social distancing. Clean air, no smog. The clearness of the night sky"
Less illness/increased hygiene	23 (2)	"General greater community awareness of stricter hygiene practices, and recognition of front-line workers within the health sector as well as commercial and municipal workers"
General appreciation	16 (2)	"It has made me pause to appreciate things more. It has also made me reflect on the incredibly important nature of the work that I do"
Telehealth	14 (1)	"Better able to manage chronic illness as now everyone is OK with working from home! And, my access to everything has improved—services online, telehealth, lessons, etc All online!:"
Services at home/online services	6 (1)	"...Move to online provision of some services has been fantastic for rural communities better able to access medical services but also things like drama classes remotely opened up opportunities for those in rural areas..."
Other/cannot code	55 (6)	"Better organisation of business" "Cheaper fuel"

^aThe Australian government enacted financial policies including 'Jobkeeper'⁴⁷ and 'jobseeker'⁴⁸ to support people unemployed during the COVID-19 pandemic and also allowed early access to superannuation⁴⁹ (pension) money for individuals whom met certain criteria.

for future pandemic restrictions. Our findings were also corroborated by a study in Scotland which analysed the social patterning of self-reported positive changes experienced during the national lockdown. This study found that positive changes included the following:

more time with family, more physical activity and better quality of sleep and that these positives were associated with being female, of younger age, married or living with their partner, employed, and in better health.³²

It is notable that the predominant theme that was found in the participants' comments was being able to spend more time with family. Although we acknowledge that many people may have been separated from their families during this time, this sample reported that the lockdown period provided many families a chance to be together and prioritise those relationships. This finding is in keeping with previous research into crises demonstrating that family and community connection is able to attenuate the detrimental impacts of disaster and promote resilience amongst community members.^{17,33} Furthermore, other research conducted during the pandemic has found a similar effect on increased connection and bonding for families.³⁴ It also indicates a need for greater support for those living alone or away from close family members.

Working from home and workplace flexibility were highly prevalent in the responses from this sample. The pandemic gave many people who traditionally worked regular hours in an office environment a chance to experience a greater amount of freedom, flexibility and autonomy over their work lives. People have been able to save time and money from not commuting, which they have been able to use in other ways. Many people reported feeling more productive and happier with working from home and hoped that it would continue post-pandemic. Previous research has shown that people who have a shorter or no commute tend to be happier than those with a longer commute.³⁵ The pandemic facilitated more people being able to experience a no-commute lifestyle and the benefits this can bring. These changes could be retained after the pandemic response.

Other positive effects included enjoying a quieter and less busy life. This theme often tied in directly to increased work flexibility and seeing family more. The initial stages of the pandemic in Australia included stay at home orders which varied across states. These periods of time acted as enforced 'downtime' for many people whom did not have to leave home to work.³⁴

It may seem counterintuitive that a wide range of positive effects were found by surveyed participants during the pandemic, with a large proportion of participants in this study attesting to the ability to spend more time with family and friends, feeling a greater connection to community and enjoying more flexible working practices. However, when considering human adaptation to past crises,^{36,37} these results are not surprising. Throughout human evolution, people survived and thrived in small groups which were intimate and deeply social.³⁸ Cooperation and reciprocity were key elements to the function of the group. Crises such as the pandemic seem to foster community connection and therefore help to attenuate the negative effects of the event.³⁹

Our survey revealed that people living in single person households were significantly less likely to experience positive effects from the changes to life in the early stages of the pandemic. This finding is important and adds weight to the use of 'social bubbles' (designated social and physical interaction between members of different households) to maintain psychological well-being for people living alone during the pandemic.^{40,41}

Although a large proportion of participants in this survey found positive effects, it is important to consider that it is possible to

experience positive effects in a crisis but not necessarily find the overall experience a positive one. Furthermore, many of the reported positive effects were time-specific and may not have remained as restrictions changed over the course of the pandemic when people returned to the office to work or when they became busy in other areas of their lives again. Furthermore, this research did not include participants from Melbourne following the implementation of the second Victorian lockdown, as this survey was completed in July 2020 before Melbourne re-entered strict restrictions.

We are also aware of research which has highlighted potential negatives arising from 'time with family' in lockdown situations. There have been reports of increases in domestic violence⁴² and parents' struggles to home-school their children.⁴³

Within the context of a global pandemic, both a medical approach, with a focus on pathogenesis, and a salutogenic approach are required to work synergistically to best promote good health and positive outcomes for those enduring the crisis.⁴⁴ This must take place through the adoption of multiple strategies and interventions, both medically and socially. Within the remit of health promotion, it is important to consider that there is more to be done than delivering messaging about good hygiene and delivering health education. The health promotion profession should consider the salutogenic model when considering how it is best placed to help those disproportionately affected by the pandemic, whom in our study included those living alone and those whom had to work away from home for pay (eg, those in manual labour jobs). Health promoters are placed well to act as champions for community engagement activities to foster social cohesion and promote 'social bubbles'. Furthermore, they can use these engagement opportunities to deliver tailored health promotion messages taking into account the health literacy of the communities which they work with.⁴⁵

4.1 | Strengths and limitations

This study is novel in its use of both content analysis and quantitative analysis to determine if any positive outcomes are to be found in the experiences of a large sample of Australians during the COVID-19 pandemic. The study is limited by its sample which is not nationally representative nor culturally and linguistically diverse. We are currently conducting a parallel study specifically focused on culturally and linguistically diverse communities in Australia in their first languages to address this limitation.

5 | CONCLUSION

We are lucky to live in a country that has handled the COVID-19 pandemic well overall, not forgetting the extra challenges faced by Victorians and those already experiencing socioeconomic disadvantage or loneliness. By identifying positive experiences that helped people cope with COVID-19 restrictions, we can target future pandemic responses in ways that promote community resilience. It is

important to provide extra support to groups that couldn't access the benefits of changes to daily life, such as community groups to increase social engagement and help to create social 'bubbles'. We should also consider whether we should keep some changes post-pandemic, including flexible working and a greater emphasis on local community engagement to promote social connections. Learning from what was positive, or salutogenic for some groups during the pandemic, is a way to improve the health of those who did not benefit or experience positive side effects of a global upheaval in the machinations of neoliberal society.

ACKNOWLEDGEMENT

We would like to acknowledge and thank the Australian public who participated in this survey.

CONFLICT OF INTERESTS

The authors declare that they have no competing interests.

AUTHOR CONTRIBUTIONS

All authors were involved in the conception and design of the study, developing the methods and coordinating the running of the study. SC developed the initial coding framework and all authors contributed to the framework. SC, RD and EC contributed to the analysis. SC drafted the manuscript and RD, BN, EC, CB, KM, JA and TC reviewed and edited the manuscript. All authors have read and agreed to the published version of the manuscript.

ETHICAL APPROVAL

This study was approved by The University of Sydney Human Research Ethics Committee (2020/212). All participants in the study provided informed consent before completing the online survey.

DATA AVAILABILITY STATEMENT

Data may be accessed upon reasonable request from the authorship team.

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How to cite this article: Cornell S, Nickel B, Cvejic E, et al. Positive outcomes associated with the COVID-19 pandemic in Australia. *Health Promot J Austral*. 2022;33:311–319. <https://doi.org/10.1002/hpja.494>