Australian Unity Wellbeing Index (AUWI) – Report 37.0 November 2020

Subjective wellbeing during COVID-19

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EXECUTIVE SUMMARY

Since the turn of the millennium, the Australian Centre on Quality of Life (Deakin University), in partnership with Australian Unity, has been monitoring the Subjective Wellbeing (SWB[i]) of Australians from 18 to 90+ years of age. This has resulted in 37 national surveys and reports (http://www.acqol.com.au/publications). In addition to charting the natural history of SWB, the key determinants of SWB have also been measured.

The 2020 annual cross-sectional survey is conducted using a gender and state-level nationally representative sample of 2,000 Australians, between 17 April and 19 May 2020. During this period Australia was experiencing the first wave of the COVID-19 pandemic nationally, with social distancing measures in place across the country. This report examines SWB, mental health, social connectedness, prosociality, and the personal experiences of Australians adults during this period.

Subjective wellbeing in Australia (2002-2020)

Despite challenging times both in Australia and globally, 2020 SWB trends were consistent with previous surveys, falling within the average national range. It was notable that scores on Global Life Satisfaction (GLS), the Personal Wellbeing Index (PWI), and on six of the SWB domains – standard of living, personal health, relationships, safety, community connectedness and future security – were somewhat higher than in 2019, but again fell within Australian normative ranges. Scores on standard of living and personal safety were elevated, reaching their highest levels (and above their normative ranges), since the survey commenced.

Similar trends were observed for national wellbeing (NWB[ii]) in 2020. Scores on Global National Wellbeing (GNW), the National Wellbeing Index (NWI), and the five NWB domains – natural environment, social conditions, government, business, and national security in Australia – were somewhat higher than in 2019. National security rose to its' highest level since 2002, while scores on the NWI, social conditions and government were all above their normative ranges. Economic condition in Australia was the only NWB domain that remain unchanged from previous years.

[i] SWB was measured using two indexes standardised to reflect the average level of satisfaction on a scale of 0-100 points. One is the single-item, Global Life Satisfaction (GLS), which asks "How satisfied are you with your life as a whole? The second is the Personal Wellbeing Index (PWI), which reflects the average level of satisfaction across seven life domains – standard of living, health, achieving in life, relationships, safety, community connectedness, and future security (International Wellbeing Group [IWG], 2013).
[ii] NWB was measured across two indexes: 1) a single item (GNW) which asks "How satisfied are you with life in Australia?"; and, 2) the national wellbeing index (NWI) which reflects the average level of satisfaction across six national wellbeing domains – economic situation, natural environment, social conditions, government, business and national security in Australia.

Subjective wellbeing during COVID-19: An overview

There is emerging research both in Australia and internationally to suggest that the COVID-19 crisis and its associated social distancing measures to control infection rates may be having negative impacts on our communities – impacts that are being felt most strongly among those who are vulnerable due to factors such as financial hardship, increased strain on families (i.e., working from home and home schooling), and/or mental health difficulties (Ashraf, 2020; Biddle, Edwards, Gray, & Sollis, 2020; Mann, Krueger, & Vohs, 2020; Prime, Wade, & Browne, 2020; Rajkumar, 2020; Tull et al., 2020). This section aims to examine the associations between such stressors and wellbeing during the COVID-19 crisis in Australia.

The results of the latest 2020 survey indicate that SWB remained relatively stable by gender, age, marital status, income (pre-COVID-19 crisis), household composition, work status, state of residence and geographical remoteness. However, some differences in SWB were observed among Australian adults who reported being more impacted by the COVID-19 crisis.

Income loss:

- Subjective wellbeing was lower among adults who reported a loss of income due to COVID-19.
- In contrast, participants who reported income loss also reported having more quality time with their family.

Mental health:

- Levels of stress and anxiety were higher during COVID-19 compared to similarly measured variables in 2013.
- Level of worry about COVID-19 was higher than worry about the swine flu pandemic, in 2009.
- Elevated stress, but not anxiety, was associated with lower SWB.
- Participants who reported income loss and have high stress tended to have lower SWB than participants who reported income loss without stress, or stress without income loss.

Prosociality, defined as participants' felt need for behaving in a way that benefits other people, was associated with participants' SWB.

- Notably, participants' felt need to help others outside the family was highest amongst those who reported elevated levels of overall SWB and community connectedness.
- In contrast, participants' felt need to buy essential household goods was associated with lower satisfaction with standard of living and personal safety.

Perception of control was measured as a level of i) control over life in general, ii) difficulties in home life and iii) the extent that life will be different after COVID-19.

- Perception of control over life in general was moderately and positively associated with SWB.
- Level of difficulty in home life was weakly and negatively associated with SWB.
- The extent that life will be different after COVID-19 was not associated with SWB.

Social connectedness was also lower in 2020 compared to 2019; yet loneliness levels did not change over this period.

Socio-demographics and subjective wellbeing in Australian adults during COVID-19

Low income households and the unemployed

- Adults in the lowest income group (earning less than $15000 per annum) were most worried about COVID-19 and had poorer mental health.
- Low income was related to home life being more difficult and greater felt need to purchase household essential goods.
- Unemployed adults reported the greatest felt need to purchase household essential goods. Likely due to significant constraints on personal resources, they were also least likely to help others outside their family.

Households with children and working adults

- Elevated stress levels were reported by households with children relative to partner only households. This is likely linked to the added pressures on parents caring for children and supporting home schooling while maintaining home duties and/or workload.
- Consistent with this observation, high levels of home life difficulties and low levels of work life balance were reported among adults in fulltime home duties.
- Single or dual parent families with children reported lower PWI scores - below Australian normative range - when they concurrently reported (any) income loss. This relationship was independent of the number of dependent children in the household.
- In contrast, households with children also reported positive experiences during COVID-19.
    - Single and dual parent households reported having more quality time with their family and living more simply.
    - Dual parent households with children reported the highest levels of gratitude for the things they have.
    - Participants in fulltime household duties were also most likely to report the greatest felt need to help others outside the family.

Middle to older age Australians and retirees

- Adults aged 56 years and over had the highest levels of worry about COVID-19.
- Levels of worry about COVID-19 were also high in fulltime retired or widowed participants.
- Adults aged 66 years and over reported the lowest levels of generalised stress.
- Adults aged 66 years and over and fulltime retirees reported high levels of social connectedness and perceived control over their lives.
- Yet older Australians aged 66 years and over typically reported the fewest positives during COVID-19. The exception was quality time spent with family, which was high in adults aged 76 year and over.

Young adults and fulltime students

- Young adults (under 35 years), who are also more likely to be studying fulltime, had the highest levels of stress. A likely explanation for this is that participants in this age range may be particularly affected by income loss due to unemployment resulting from closure of retail and/or hospitality businesses.
- Compared to older adults, this age group also reported the lowest levels of perceived control over their lives. Young adults who were also fulltime students reported high levels of difficulties in their home life.

- However, young adults were able to express more gratitude for the things that they have, while fulltime students reported high levels of work life balance.
- Young adults who lived with their parents also reported more quality time with their family.

Where people live

Two key observations were made in relation to geographical remoteness:

- Australians living in metropolitan areas experienced lower SWB if they reported income loss, compared to counterparts living in regional or remote areas.
- However, metropolitan participants reported living more simply during COVID-19 relative to regional participants.

1 INTRODUCTION

The Australian Unity Wellbeing Index (AUWI) is a barometer of Australians' subjective wellbeing (SWB). It measures SWB using two indices: the Personal Wellbeing Index (PWI) and the National Wellbeing Index (NWI;(International Wellbeing Group, 2013)). The PWI determines the average level of satisfaction across seven aspects of personal life – standard of living, health, achieving in life, personal relationships, safety, community connectedness, and future security. The NWI determines the average satisfaction score across six aspects of national life – the economy, the environment, social conditions, governance, business, and national security.

Thirty-seven cross-sectional surveys of the Australian adult population have been conducted from April 2001 to April 2020. The same core index questions, forming the PWI and the NWI were asked within each survey. In addition, both surveys ask two general questions. One concerns 'Satisfaction with Life as a Whole' - called Global Life Satisfaction (GLS). This abstract, personal measure of wellbeing has a long history within the survey literature and its measurement allows a direct comparison with such data. The second is the Global National Wellbeing (GNW), intended as an analogous 'national' item. It concerns 'Satisfaction with Life in Australia'.

The standardised questionnaire format, including participant demographic variables, permits comparisons with previous surveys and tracking across surveys to identify emerging trends in representative samples of Australians. As such, presentation of the first part of this annual report follows a similar format, examining mean levels of PWI and SWB over time and across different demographic factors.

Additionally, each survey includes a small number of additional items that change from one survey to the next. These explore specific issues of interest, either personal or national. These questions allow further exploration and understanding of theoretical frameworks supporting the wellbeing construct.

The 2020 report focussed on understanding wellbeing in Australian adults during the COVID-19 crisis. In this survey, we examined people's self-reported experiences during the first wave of social distancing measures in Australia (late March to mid May 2020[i]). Specifically, we examined negative experiences such as financial stress, social isolation, and poorer mental health. We were also interested in people's unexpected positive experiences, including prosocial behaviours and family time. Finally, we thematically summarised findings from the voices of Australians about how they think their life will be different after COVID-19.

The aims of this report are captured by the research questions below:

PART 1: OVERVIEW OF SURVEY 37 SWB RESULTS

- Summary data on the trends in SWB across 35[ii] national surveys and on the associations of SWB in the 2020 survey with socio-demographic factors.

[i] Federal government policy for social distancing measures was released on 22 March 2020 with a staged plan for easing restrictions released on 8 May 2020. Timeline for implementation and easing of restrictions varied by state and consequently specific dates are not provided this report.
[ii] Issues with data fidelity from surveys 1 and 2 and unavailability of their raw data for validity checks resulted in their exclusion from presentation in this report.

PART 2: QUESTIONS RELATED TO COVID-19

Topic 1: Wellbeing in families with children and among those who have experienced income loss	
RQ1	What is the association between income loss during COVID-19 and PWI scores?
RQ2	Are PWI scores associated with the *amount* of income lost due to COVID-19?
RQ3	Are PWI scores associated with the number of children in living in Australian households?
Topic 2: Mental health	
RQ4	Do people's stress and anxiety levels differ relative to demographics? What about levels of worry specifically related to COVID-19?
RQ5	Is there a difference between worry levels related to COVID-19 and Swine Flu in 2009?
RQ6	Is mental health associated with PWI scores during COVID-19?
Topic 3: Social connectedness	
RQ7	Have social connectedness and loneliness changed from 2019 to 2020?
Topic 4: Prosociality	
RQ8	Does the felt need to buy extra essential household goods vary by demographics?
RQ9	Does the felt need to help other people outside the family vary by demographics?
RQ10	How do PWI scores and scores on SWB domains relate to people's felt need to buy extra essential household goods and to help other people outside the family?
Topic 5: Positive experiences during COVID-19	
RQ11	Which demographic groups experience more work life balance and quality time with family during COVID-19?
RQ12	Which demographic groups report living more simply, express more gratitude for the things they have and/or express greater empathy for others during COVID-19?
RQ13	How does income loss relate to people's positive experiences during COVID-19?

Topic 4: Perception of the impact of COVID-19 on life	
RQ14	What is the association of difficulties in home life due to COVID-19 with demographics?
RQ15	How does people's perception of control over their lives relate to demographics?
RQ16	How does people's thoughts that life will be different after COVID-19 relate to demographics?
RQ17	How does the perception of difficulties in home life due to COVID-19 and control over life relate to PWI scores?
RQ18	How will life be different after COVID-19? (Qualitative analysis)

2 METHODS

2.1 Participants

Data for the 37th Australian Unity Wellbeing Index survey was from a state-level nationally representative sample of 2,000 Australians aged 18 or over and fluent in English ($\chi^2(13) = 2.598$, $p = .999$; see Appendix Table 1). Data collection was carried out by I-view, a social research data collection agency in Australia, using a sample of Random Digit Dialling numbers (RDD) from Australia. In 2020, the sample was collected by contacting mobile numbers using RDDs, which consist of random digits attached to valid mobile prefixes.

Interviews were held between 27 April and 19 May 2020 with just over half of the interviews (52.8%) completed in the first 8 days of data collection (Figure 2.1). It is notable that this was a time when COVID-19 case numbers were declining during the first wave of community transmission. Social distancing measures in Australia were implemented from late March to mid May 2020[i].

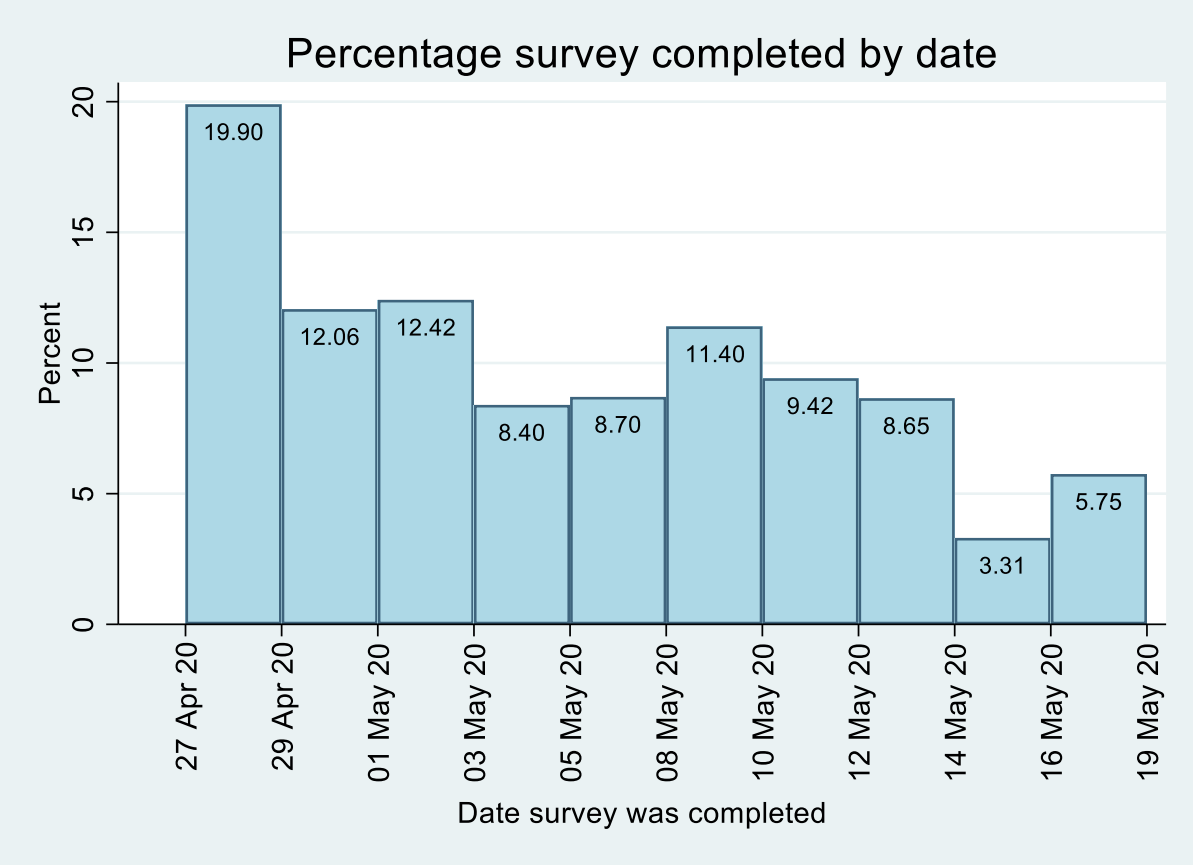

Figure 2.1 Percentage of interviews completed over time

[i] Federal government policy for social distancing measures was released on 22 March 2020 with a staged plan for easing restrictions released on 8 May 2020. Timeline for implementation and easing of restrictions varied by state and consequently specific dates are not provided this report.

The response rate for Survey 37 was compared to the previous two years, along with the average interview length in minutes (Table 2.1). An expanded question set resulted in longer interviews for survey 37. Response rates were similar to previous surveys.

Table 2.1 Response rate and interview length

	2018 – S35	2019 – S36	2020 – S37
Response rate	39%	36%	35%
Interview length (minutes)	10.0	10.5	14.1

2.2 Data preparation

Aggregate total scores for the PWI and the NWI were calculated as described in the Personal Wellbeing Index Manual (International Wellbeing Group, 2013). A total of 46 participants answered consistently across all domains of the PWI and the NWI. These responses are often due to a response bias (in particular, a tendency to respond in an affirmative manner) or misunderstanding. These data are considered unreliable and were excluded from the main analyses.

2.3 Measures

2.3.1 Personal Wellbeing Index

SWB was measured using the Personal Wellbeing Index (PWI; International Wellbeing Group (2013)). The PWI score represents the mean of the seven domains of wellbeing, and was measured by asking participants how satisfied they are with their standard of living, health, achieving in life, personal relationships, safety, community connectedness, and future security. The responses are recorded on an end-defined scale from 0 (not satisfied at all) to 10 (completely satisfied). The PWI and NWI scores are calculated only for those participants who responded to all domains. The percentage not responding to all domains was minimal for the PWI (*N*=52; 2.6%) and the NWI (*N*=114; 5.8%).

2.3.2 Gender

Unlike previous surveys where the interviewer coded participant gender implicitly (Survey 1-36), participants were explicitly asked to describe their gender in the current survey. Interviewers coded gender into four categories: 1) Male (including transgender male); 2) Female (including transgender female); 3) Self-described (examples include non-binary, gender-fluid, agender); and, 4) Prefer not to say.

2.3.3 Age

During the interview, participants were asked to report their age. Age has been recorded in all 37 surveys. For the purpose of comparing SWB mean levels between age groups, age was grouped into six categories (18-25, 26-35, 46-55, 56-65, 66-75, and 76+ years of age).

2.3.4 Household income

This year, participants were asked to report their household income before COVID-19: *"Thinking about your household's income **before the COVID-19 virus**, can you please give me an idea of your **household's total annual income before tax at that time**",* and were presented with a range of income categories.

Over the years, the number of response categories assessed has been refined as household income has increased. Income measures in the first five surveys were not consistent with more recent assessment methods and were thus excluded from the aggregated measure in this report. Surveys 6 to 8 included four categories: <$15,000, $15,000-$30,000, $31,000-$60,000, $61,000-$100,000 (*N* = 4 categories). From Survey 9 to 16, an additional category was included $100,000-$150,000 (*N* = 5 categories), and from Survey 17 to 37, three new categories were included: $151,000-$250,000, $251,000-$500,000, >$500,000 (*N* = 8 categories).

2.3.5 Household composition

Household composition was measured in 28 of the 37 surveys (75%): (Surveys 9-28; 30-37). Participants were asked about their household composition: *"Please indicate from the list I will read who lives with you"*, and were given a list of five response options (alone, with partner, with children, with parents, or with other adults). Participants could select multiple options. In this report, the household composition was structured into five categories: alone, with partner only, with partner and children, with children only, with parents, and with others.

2.3.6 Marital status

Participants were asked: *"Which of the following categories best describes your relationship status?"*, and were asked to select one of six response options (never married, de facto/living together, married, separated, divorced, or widowed). This measure was used in 29 of the 37 surveys (Surveys: 3, 7, 9-29; 31-37).

2.3.7 Work status

Work status was measured separately for fulltime and parttime roles. From the following question: *"Please tell me which of the following fulltime occupational categories best applies to you at the present time. Are you engaged in----?"*, participants were asked to select one of the five fulltime work response options (fulltime paid employment, fulltime retirement, fulltime volunteer, fulltime home or family duties, fulltime study, or none of the above).

From the following question: *"Please tell me whether any of the following parttime occupational categories applies to you"*, participants were asked to select the parttime work options that applied to them: semi-retired, parttime paid employment, casual employment, parttime

volunteer, parttime study, or unemployed. For the purpose of this report, only those who responded to a single parttime or casual category were included.

Both fulltime and parttime work status measures were used consistently from Surveys 9 to 37. Descriptive statistics were presented for both fulltime and parttime work status categories.

2.3.8 Participant location by geographical remoteness

Participant location was coded into a 3-category variable by merging Australian Bureau of Statistics (ABS) derived remoteness structure variable (Australian Bureau of Statistics, 2016). Postcodes assigned by the ABS were: 1) Major Cities were coded "Metropolitan"; 2) Inner Regional and Outer Regional were coded "Regional"; and, 3) Remote and Very Remote were coded "Remote" for the purpose of analysis.

2.3.9 Additional survey items

Income loss

Participants were asked if they had lost income since the COVID-19 virus, coded in three categories: 1) No; 2) Yes; or, 3) Declined to answer.

Participants who respond "yes" to a loss of income since COVID-19 were asked to estimate the percentage of lost weekly income. Due to the non-normal distribution of income loss percentages (see Appendix Figure 1) this was recategorized into 5 categories of income loss: 1) 0%; 2) 1-25%; 3) 26-50%; 4) 51-75%; and, 5) 76-100%.

Primary caregiving

Participants were also asked: *"How many children under 18 years old who live in your house are you **currently** primary caregiver for?"*. This was transformed into a three-category variable: 1) 1 child; 2) 2 children; and, 3) 3 or more children.

Mental health

Participants were asked to rate from zero (Not at all) to 10 (Extremely):

1) "How anxious do you feel?"
2) "How stressed do you feel?"
3) "How worried are you about the COVID-19 virus in Australia?"

Social connectedness

Participants were asked to rate from zero (Not at all) to 10 (Extremely):

1) "How lonely do you feel?"
2) "How connected do you feel to others?"

Prosociality

Participants were asked to rate from zero (Not at all) to 10 (Extremely):

1) "How strongly do you feel the need to buy extra essential household goods?"
2) "How strongly do you feel the need to help other people outside your own family?"

Positive experiences during COVID-19

Participants were asked whether the COVID-19 crisis in their area was associated with any positive changes in five areas each rated from zero (Not at all) to 10 (Extremely). These were:

1) More work life balance
2) More quality time with the family
3) Living more simply
4) More gratitude for the things you have
5) Greater empathy for others

An index of positive consequences was constructed by obtaining the mean of all five variables; internal consistency was acceptable ($\alpha = 0.76$). Exploratory factor analysis revealed a single factor solution with minimum eigenvalue of 1 (Kaiser-Meyer-Olkin measure of sampling adequacy = 0.75). However, this was not used in this report in favour of individual items that provide clearer differentiation across the demographic subgroups.

Perception of the impact of COVID-19 on life

Participants were asked to rate from zero (Not at all) to 10 (Extremely):

1) "How much has COVID-19 made home life difficult?"
2) "How much control do you feel you have over your life right now?"
3) "Do you think life will be different after the COVID-19 crisis?"

A subsample of 500 participants who responded with 1 or greater on item 3 were also asked an open question:

4) "What do you think will be different?"

2.4 Standardisation and presentation of results

All personal and national wellbeing data have been converted to a percentage of scale maximum (%SM) score, which standardises any scale to a 0-100 percentage point scale. Thus, throughout the report the level of wellbeing will be referred to in terms of percentage points.

The PWI user manual (International Wellbeing Group, 2013) provides the following formula for calculating the %SM statistic:

$$\frac{X - k^{\min}}{k^{\max} - k^{\min}} \times 100$$

X = the score or mean to be converted,
kmin = the minimum score possible on the scale,
kmax = the maximum score possible on the scale.

Reference is also made to *normative ranges*, which represent the normal range of *survey mean* scores over a period of 18 years (from 2002 to 2020). These normative ranges have been calculated for PWI, NWI, and each of their domains, by combining data across all surveys to date, with the exception of Surveys 1 and 2, due to the unreliability of the data in these two surveys. These ranges are depicted by the yellow lines in the figures below and the normative ranges for all SWB measures are shown in the Appendix (Table 2). Normative ranges were also calculated using aggregated individual data (Appendix Table 3) to reflect fluctuations in *individual* scores recorded from 2002-2020.

The process of calculating the normative ranges is twofold. First, the mean (M) and standard deviation (SD) of all the past survey means are calculated. Then the lower and upper bound of the normative ranges are derived as: lower bound = 2SDs – M; upper bound = 2SDs + M. Thus, normative ranges represent a range in which the majority of the survey means lie.

Normal ranges have also been calculated separately for each demographic category: income, gender, age, household composition, marital status and employment status. The lower and upper bound of the normative ranges are reported in the Appendix (Table 4), together with the number of participants in each demographic category for which these ranges have been calculated.

2.5 Data Analysis

All analyses were conducted using Stata IC version 16 (StataCorp, 2019).

2.5.1 Part 1: Summary of results from Survey 37

In the first part of the report, Analysis of Variance (ANOVA) was conducted to compare mean SWB levels between groups for each demographic measure (gender, age, marital status, household composition, household income, fulltime and parttime work status). Covariates were not included. Bonferroni corrected post-hoc analyses were conducted for ANOVAs that were found to be statistically significant.

2.5.2 Part 2: COVID-19 related questions

Unless otherwise indicated, univariate ANOVA was used to compare category means for demographic variables.

Wellbeing in families with children and among those who have experienced income loss

Restricted maximum likelihood mixed regression analysis was used to model scores on the PWI by fitting income loss and percentage income loss in separate models, together with covariates of gender, age, household composition, income, marital status and fulltime work status. Interactions of income loss variables and covariates that remained significant were included in the final model.

Similarly, restricted maximum likelihood mixed regression analysis was used to model socres on the PWI for households with children under 18 years, adjusted for income loss, household composition, income, marital status and fulltime work status.

Mental health

Levels of stress and anxiety were compared with similar questions asked in Survey 30 (2013) while worry about COVID-19 was compared with a similar question from Survey 21 (2009) related to Swine flu.

Analysis of variance (ANOVA) was used to model PWI against each mental health variable separately, as a main effect and moderated by income loss. Main effects and their interactions were retained if they were statistically significant and all were combined in a single adjusted model together with covariates of gender, age, household composition, income, marital status and fulltime work status.

Social connectedness

Social connectedness and loneliness were compared with the same question asked in Survey 36 (2019); in addition, loneliness was also compared with Survey 30 (2013).

Only social connectedness showed a statistical difference in mean scores between surveys before and during COVID-19 and so was examined further with demographic variables using univariate ANOVA. Final adjusted models were fitted for social connectedness with survey timepoint, gender, age, household composition, income, marital status, and fulltime work status together with interaction terms that were significant in univariate analysis.

Prosociality

Both prosociality variables were examined by demographic variables using ANOVA.

Due to the non-normal distribution of responses (refer to Appendix, Figure 2), the strength of feeling a need to buy household essential goods was fitted with a robust estimator gamma family log-linked function general linear model for scores on the PWI. This was then adjusted for income loss, fulltime work status, household income, household composition and anxiety.

The strength of feeling a need to help other people outside the family was fitted using a robust estimator general linear model for scores on the PWI unadjusted (refer to Appendix, Figure 3 for distribution of responses), and then adjusted for gender, fulltime work status and anxiety.

The same process and corresponding model were applied to both variables by simultaneously fitting all seven PWI domains.

Positive experiences during COVID-19

Individual items as well as the composite measure of positive consequences was examined by each demographic variable using univariate ANOVA. Demographic variables that showed a statistically significant relationship were retained in the final adjusted models using restricted maximum likelihood linear mixed models.

Perception of the impact of COVID-19 on life

Using linear mixed models, scores on the PWI were fitted together with level of difficulties in home life, general control over life, the extent that life will be different and income loss. Statistically significant main effects and interactions were retained for final modelling which was also adjusted for the covariates of gender, age group, income, household composition, marital status and fulltime work status.

Responses about what participants thought would be different after COVID-19 from a sample of 500 participants were exported into Nvivo 12 and thematically analysed. A narrative synthesis is provided of summarised themes, as well as the presentation of a mix of quantitative and qualitative findings.

3 RESULTS

3.1 Part 1 - Summary of Survey 37 results: Association between subjective wellbeing and socio-demographic factors

Part 1 of this report examines the average mean SWB scores across surveys, as well as associations with key socio-demographic factors.

3.1.1 Demographics

Descriptive statistics for the sample are presented in Table 3.1.

After removal of cases (as noted in section 2.2), a total of 1,965 participants were included in the analyses on Survey 37. The average age was 47.51 years (SD_{S36} =17.6), ranging between 18 to 94 years of age. This sample is similar in age to the prior Survey 36 (M_{S36}=46.3, SD_{S36} =17.6) and 3.2 years younger than in past surveys overall ($M_{S3\text{-}36}$ = 50.7, $SD_{S3\text{-}35}$ = 17.4). This younger age is likely explained by the change in recruitment method which was implemented in 2018 (Survey 35) which sampled participants only from mobile numbers. Recruitment from Surveys 3-34 were predominantly from land line phone numbers with approximately 20% contacted via mobile numbers.

Between Survey 36 and 37, there was no difference in the distribution of gender, household composition or household income. However, there were more participants in fulltime employment, and fewer participants in fulltime home duties or who were unemployed in Survey 37 relative to Survey 36 ($X^2(5) = 22.22$, $p < .001$). Additionally, participants were more likely to be married and less likely to be in de facto or separated but not divorced ($X^2(5) = 12.19$, $p = .032$).

Compared to all previous surveys (Survey 3 to 36), participants in Survey 37 were more likely to be in fulltime employment or in fulltime study, and less likely to be fulltime retired, home duties or unemployed ($X^2(5) = 188.57$, $p < .001$). Additionally, they were more likely to have never been married or in de facto relationships, and less likely to be married or widowed ($X^2(5) = 153.56$, $p < .001$). Participants in Survey 37 were also more likely to live with parents or others, and less likely to live alone, or with a partner ($X^2(5) = 151.27$, $p < .001$). These characteristics are reflective of a somewhat younger cohort.

Table 3.1 Descriptive statistics of participant demographic composition

	Aggregated Surveys 3-36		Survey 36		Survey 37	
	N	%	N	%	N	%
Gender						
male	31,618	49.36	1,006	51.1	968	49.26
female	32,442	50.64	964	48.9	992	50.48
self-described	-	-	-	-	5	0.25
Age Groups						
18-25	5,460	8.68	276	14.3	263	13.63
26-35	7,599	12.08	377	19.5	332	17.2
36-45	11,280	17.93	312	16.1	309	16.01
46-55	12,649	20.1	321	16.6	339	17.56
56-65	12,147	19.31	331	17.1	305	15.8
66-75	8,709	13.84	228	11.8	287	14.87
76+	5,076	8.07	90	4.7	95	4.92
Marital Status						
married	30,992	57.71	909	46.5	949	48.87
de facto	4,165	7.76	286	14.6	239	12.31
never married	8,425	15.69	438	22.4	441	22.71
separated but not divorced	1,676	3.12	99	5.1	68	3.5
divorced	4,287	7.98	144	7.4	150	7.72
widowed	4,160	7.75	80	4.1	95	4.89
Household Composition						
alone	8,743	18.44	316	17.5	287	16.03
partner	16,316	34.41	589	32.7	549	30.67
children	3,273	6.9	132	7.4	126	7.04
partner and children	14,256	30.06	464	25.7	516	28.83
parents	2,798	5.9	129	7.2	130	7.26
others	2,033	4.29	172	9.5	182	10.17
Household Income						
<$15k	4,453	9.54	78	4.6	55	3.35
$15k-$30k	8,697	18.63	214	12.6	170	10.35
$31k-$60k	11,849	25.38	263	15.5	269	16.38
$61k-$100k	10,209	21.87	357	21.1	384	23.39
$101k-$150k	7,387	15.82	348	20.6	319	19.43
$151k-$250k	3,091	6.62	312	18.4	331	20.16
$250k-$500k	807	1.73	102	6.0	101	6.15
>$500k	198	0.42	19	1.1	13	0.79
Fulltime Work (FT) Status						
FT employed	20,506	49.13	947	59.6	993	62.89
FT retired	13,069	31.31	310	19.5	346	21.91
FT volunteer	299	0.72	20	1.3	11	0.7
FT home duties	3,484	8.35	113	7.1	71	4.5
FT study	2,210	5.29	142	8.9	130	8.23
Unemployed	2,174	5.21	58	3.6	28	1.77
Parttime Work Status						
Semi-retired	1,376	7.48	30	4.6	26	4.07
Parttime work	6,381	34.7	207	31.9	228	35.68
Casual work	2,480	13.49	169	26.1	191	29.89
Parttime volunteer	6,665	36.25	173	26.7	134	20.97
Parttime study	1,485	8.08	69	10.6	60	9.39

3.1.2 Personal and national wellbeing

This section shows the mean scores for the measures of SWB over time: Global Life Satisfaction (GLS), Global National Wellbeing (GNW), Personal Wellbeing Index (PWI), National Wellbeing Index (NWI) and satisfaction with the domains for each of the wellbeing indexes.

Questions asked:

Thinking about your own life and personal circumstances…

1. *How satisfied are you with your life as a whole? (Global Life Satisfaction)*
2. *How satisfied are you with life in Australia? (Global National Wellbeing)*
3. *How satisfied are you with… [each Personal and National Wellbeing domain]?*

Table 3.2 shows the response frequency (N) for each of the personal and national SWB measures, the average level (M) and its variation around the mean (SD).

Table 3.2 Summary statistics for GLS, PWI, PWI domains, GNW, NWI and NWI domains.

	Aggregated Surveys 3-36			Survey 36			Survey 37		
	N	*M*	*SD*	*N*	*M*	*SD*	*N*	*M*	*SD*
Personal Subjective Wellbeing									
Global Life Satisfaction (GLS)	63,963	77.49	16.95	1,967	75.17	17.04	1,963	76.34	16.18
Personal Wellbeing Index (PWI)	61,771	75.39	12.54	1,918	74.36	13.84	1,927	76.45	12.52
Standard of living	64,006	78.13	16.85	1,969	77.52	17.52	1,962	81.17	15.43
Health	63,998	74.46	19.57	1,968	73.19	19.98	1,965	75.60	18.50
Achieving in life	63,606	73.44	18.55	1,963	72.03	19.79	1,960	72.43	18.77
Personal relationships	63,669	79.36	21.27	1,953	76.95	22.36	1,959	78.90	20.41
Personal safety	63,823	79.58	17.59	1,963	81.65	17.60	1,963	84.38	15.54
Community connectedness	63,624	71.20	19.73	1,964	69.57	20.94	1,957	70.55	19.99
Future security	63,056	71.22	19.76	1,955	69.23	20.74	1,948	71.92	19.48
National Subjective Wellbeing									
Global National Wellbeing (GNW)	63,777	83.06	17.21	1,967	80.55	18.33	1,964	84.70	15.56
National Wellbeing Index (NWI)	58,766	61.60	14.63	1,856	60.64	15.50	1,854	64.98	14.13
Economic situation	62,897	64.36	19.38	1,933	62.50	19.57	1,938	62.38	18.55
State of natural environment	63,432	60.93	18.84	1,958	59.00	21.35	1,952	62.65	19.74
State of social conditions	63,045	62.88	18.11	1,952	61.92	17.95	1,943	66.24	17.91
Government	63,314	52.79	24.65	1,944	48.47	25.27	1,947	62.45	22.47
Business	61,583	61.65	17.86	1,935	61.34	18.01	1,919	63.84	16.71
National security	62,459	66.83	19.42	1,932	70.69	19.04	1,927	72.36	18.61

Personal wellbeing

Scores were similar for Survey 37 (S37) compared to Survey 36 (S36) on SWB domains of achieving in life and community connectedness. Scores on GLS, the PWI and all other SWB domains rose from 2019:

- GLS: S37 = 76.34; S36 = 75.17; t(3928) = 2.21; p = .027
- PWI: S37 = 76.45; S36 = 76.36; t(3802) = 4.91; p < .001
- Standard of living: S37 = 81.17; S36 = 77.52; t(3929) = 6.93; p < .001
- Personal health: S37 = 75.60; S36 = 73.19; t(3909) = 3.93; p < .001
- Interpersonal relationships: S37 = 78.90; S36 = 76.95; t(3876) = 2.84; p = .005
- Personal safety: S37 = 84.38; S36 = 81.65; t(3864) = 5.14; p < .001
- Future security: S37 = 71.92; S36 = 69.23; t(3901) = 4.18; p < .001

Scores were higher for S37 compared to past surveys (S3-36) on interpersonal relationships, community connectedness and future security. Scores were higher overall on the PWI and the three SWB domains:

- PWI: S37 = 76.45; S3-36 = 75.39; t(63696) = 3.66; p < .001
- Standard of living: S37 = 81.17; S3-36 = 78.13; t(2107) = 8.57; p < .001
- Personal health: S37 = 75.6; S3-36 = 74.46; t(2101) = 2.69; p = .007
- Personal safety: GLS: S37 = 84.38; S3-36 = 79.58; t(2120) = 13.43; p < .003

However, scores for GLS and achieving in life were lower compared to previous surveys:

- GLS: S37 = 76.34; S3-36 = 77.49; t(65924) = 2.96; p = .003
- Levels of achieving: S37 = 72.43; S3-36 = 73.44; t(65564) = 2.38; p = .017

Importantly, effect sizes were small across all comparisons (Cohen's d < .5) suggesting that changes between surveys were relatively small.

Summary

GLS, overall and domain PWI scores were within their normative range, except for standard of living and personal safety, which had average scores above their normative ranges (0.52 and 1.26 points, respectively).

In contrast to trends over the past four surveys, scores on GLS and the PWI increased in 2020 during the COVID-19 restrictions (Figure 3.1 - Figure 3.9). Exceptions were in domains of achieving in life and community connectedness, which were similar to 2019, and personal safety, which reached its highest level since the commencement of the index. In 2020, scores on standard of living, personal health and personal safety were also statistically higher than in previous surveys, whereas GLS and levels of achieving were lower.

Tabulated references to normative scores are provided in the Appendices (Table 2).

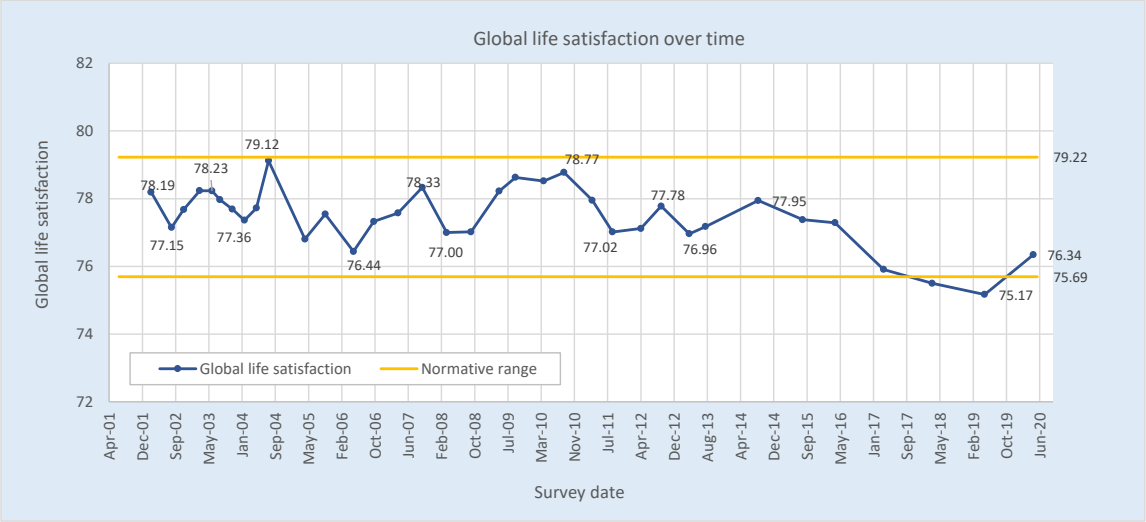

Figure 3.1 Global life satisfaction over time

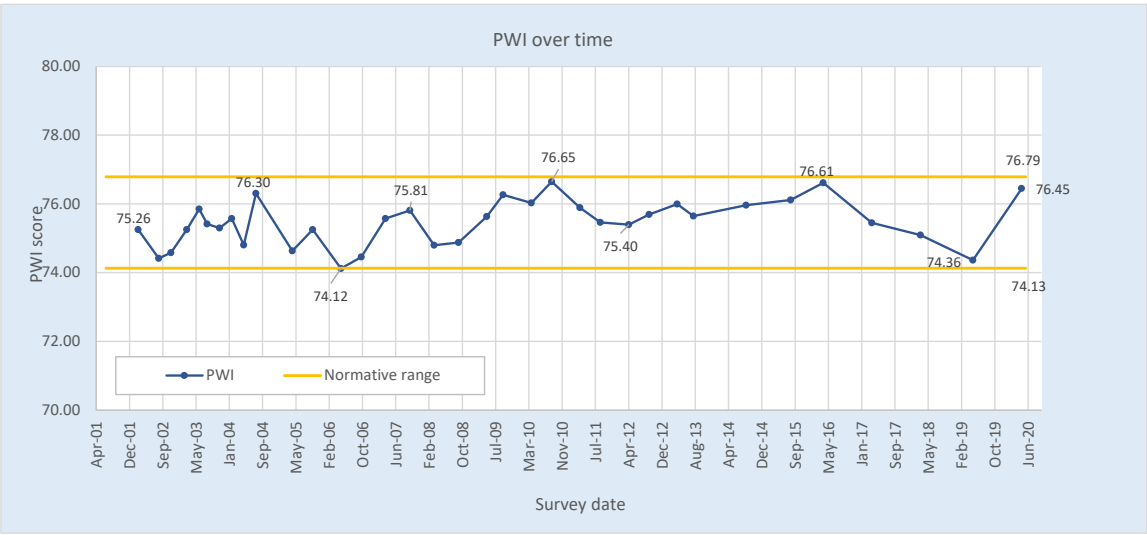

Figure 3.2 PWI over time

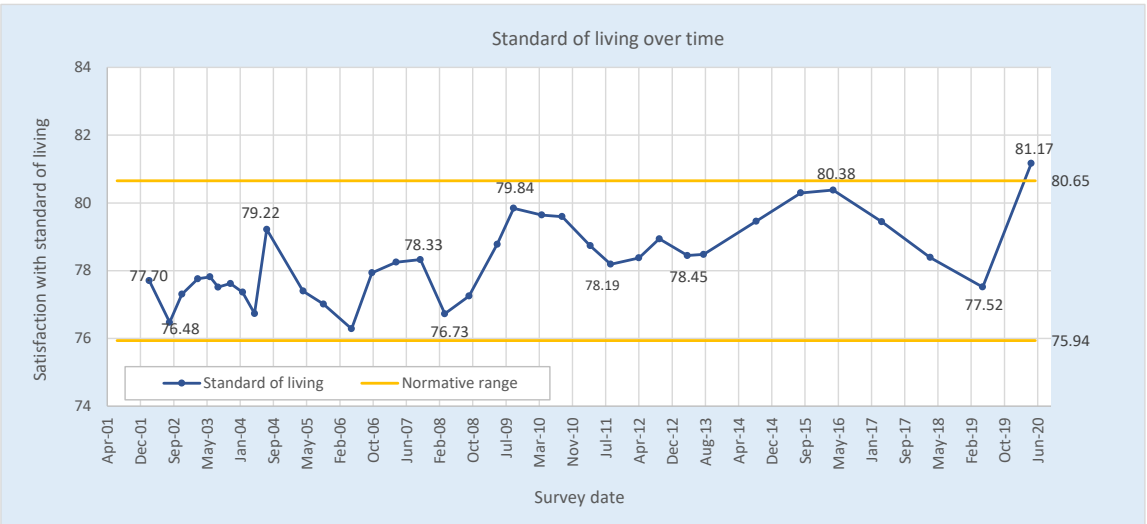

Figure 3.3 Standard of living over time

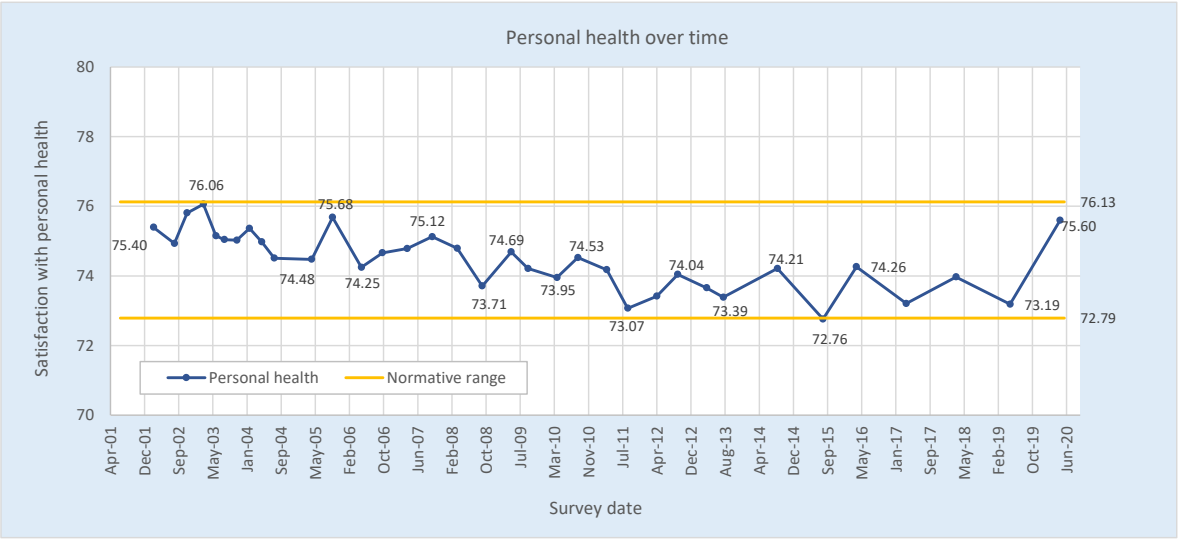

Figure 3.4 Personal health over time

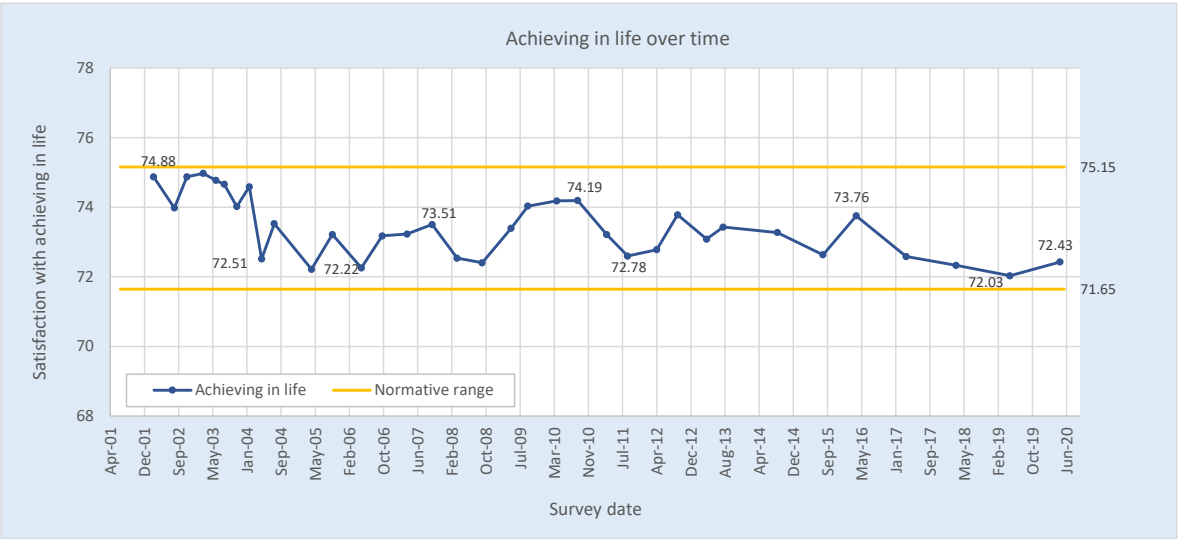

Figure 3.5 Achieving in life over time

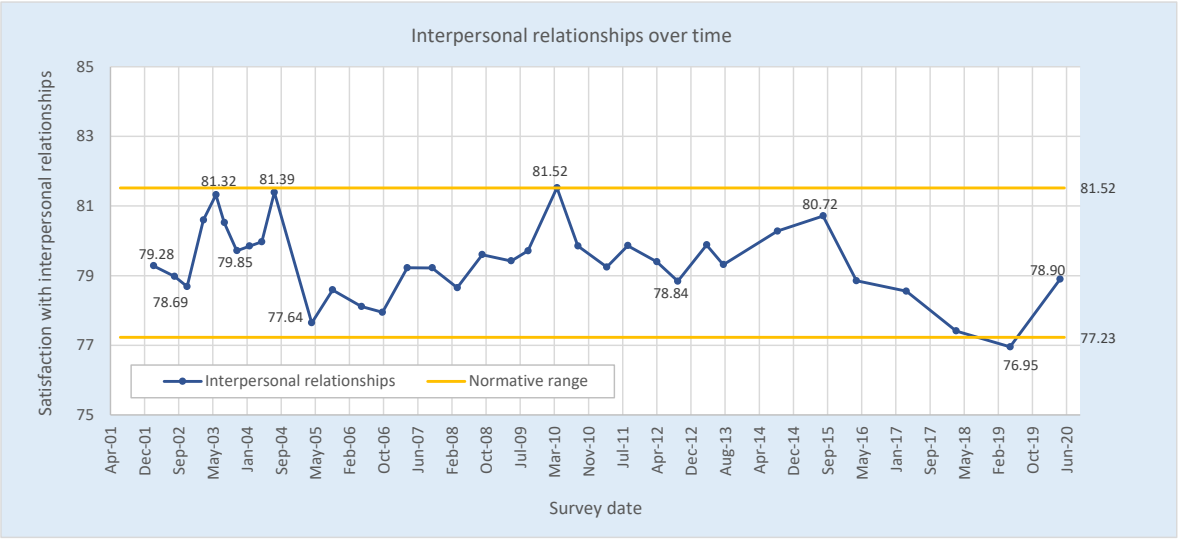

Figure 3.6 Interpersonal relationships over time

Figure 3.7 Personal safety over time

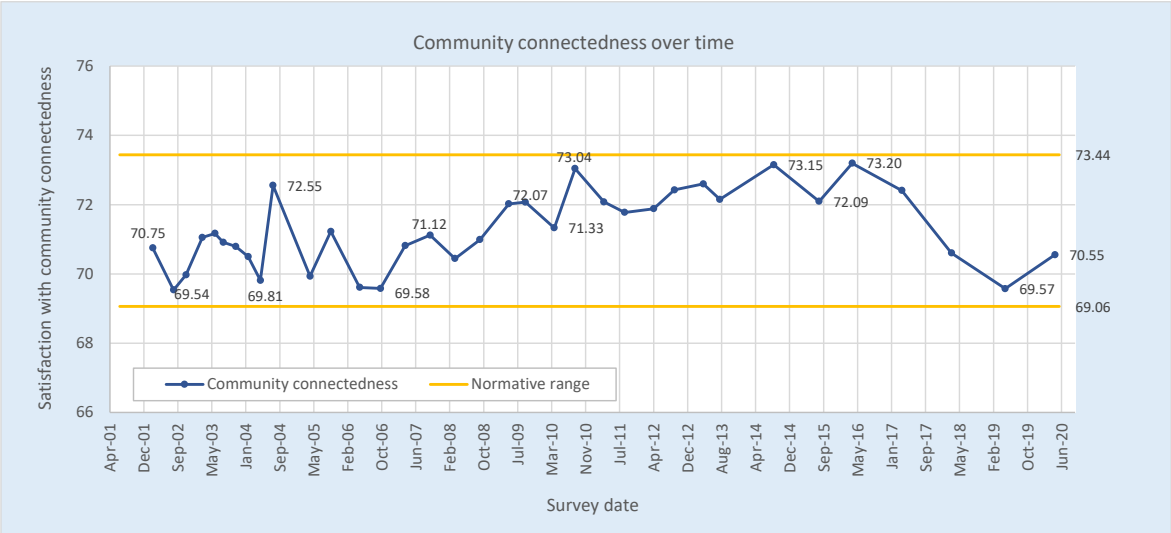

Figure 3.8 Community connectedness over time

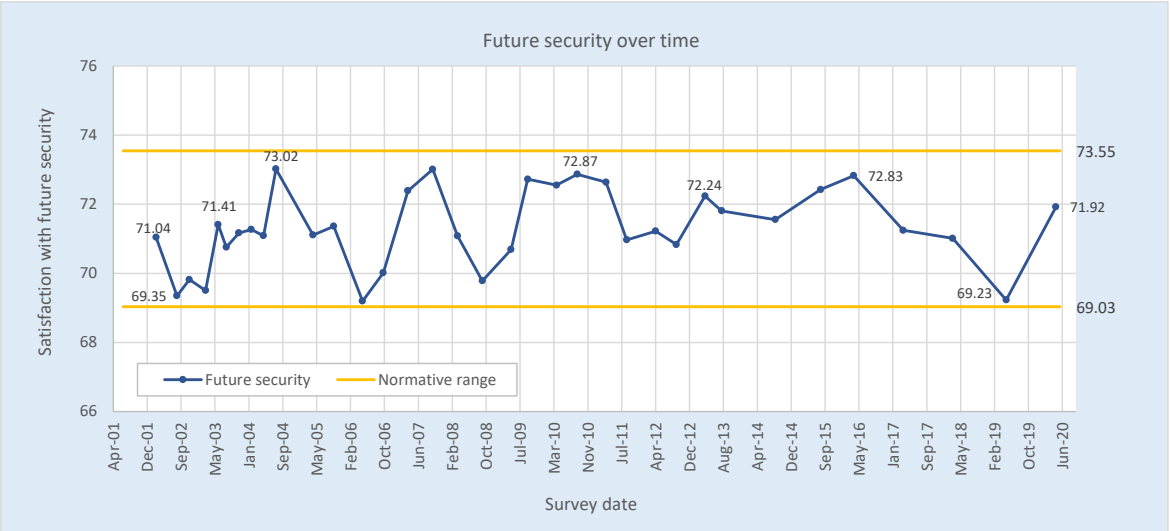

Figure 3.9 Future security over time

National wellbeing

National wellbeing rose between S36 and S37 on GNW, the NWI and all indices of national wellbeing domains, except for economic situation which remained stable:

- GNW: S37 = 84.70; S36 = 80.55; t(3830) = 7.65; $p < .001$
- NWI: S37 = 64.98; S36 = 60.64; t(3677) = 8.91; $p < .001$
- Natural environment: S37 = 62.65; S36 = 59.0; t(3886) = 5.55; $p < .001$
- Social conditions: S37 = 66.24; S36 = 61.92; t(3893) = 7.51; $p < .001$
- Government: S37 = 62.45; S36 = 48.47; t(3835) = 18.24; $p < .001$
- Business: S37 = 63.84; S36 = 61.34; t(3852) = 4.46; $p < .001$
- National security: S37 = 72.36; S36 = 70.69; t(3857) = 2.74; $p = .006$

Compared to previous surveys (S3-36), scores for S37 were all higher on GNW, the NWI and all national wellbeing domains:

- GNW: S37 = 84.70; S36 = 80.55; t(3830) = 7.65; $p < .001$
- NWI: S37 = 64.98; S36 = 60.64; t(3677) = 8.91; $p < .001$
- Natural environment: S37 = 62.65; S36 = 59.0; t(3886) = 5.55; $p < .001$
- Social conditions: S37 = 66.24; S36 = 61.92; t(3893) = 7.51; $p < .001$
- Government: S37 = 62.45; S36 = 48.47; t(3835) = 18.24; $p < .001$
- Business: S37 = 63.84; S36 = 61.34; t(3852) = 4.46; $p < .001$
- National security: S37 = 72.36; S36 = 70.69; t(3857) = 2.74; $p = .006$

Effects sizes were all in the small range (Cohen's $d < .5$).

The NWI and domains of social conditions and government rose to their highest levels since the commencement of the survey, and above normative averages. Increasing trends in domains of business and national security were also maintained in 2020, compared to the prior four years (Figures 3.10 to 3.17).

Figure 3.10 Global national wellbeing over time

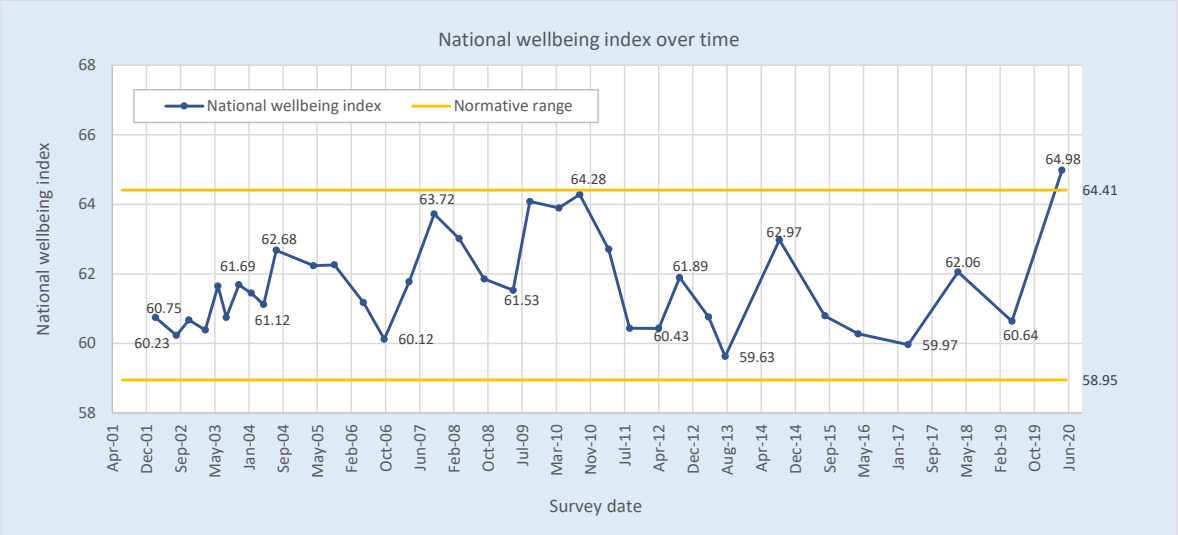

Figure 3.11 National wellbeing index over time

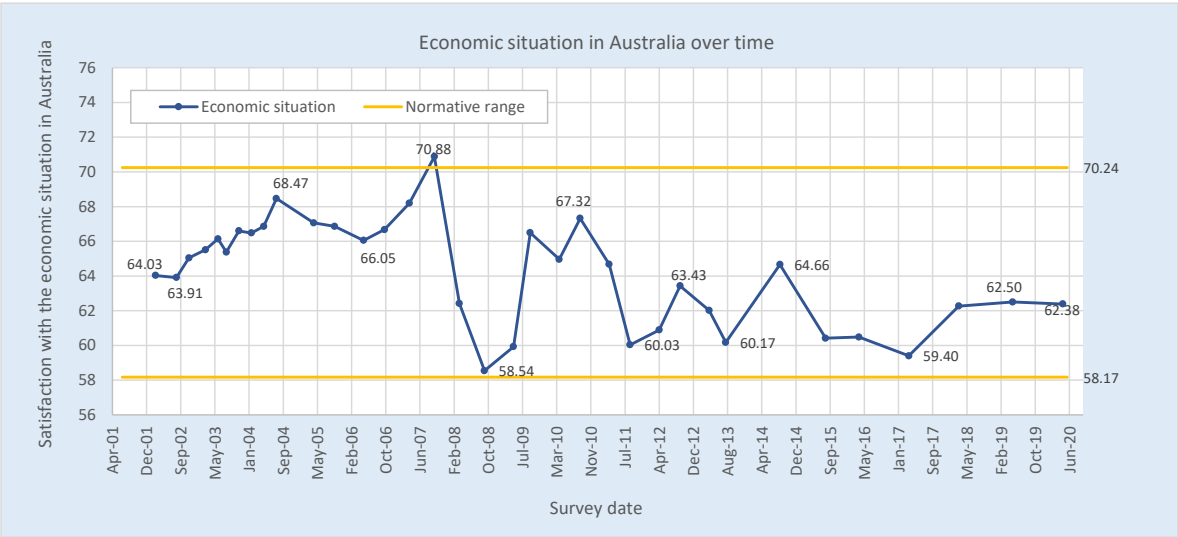

Figure 3.12 Economic situation in Australia over time

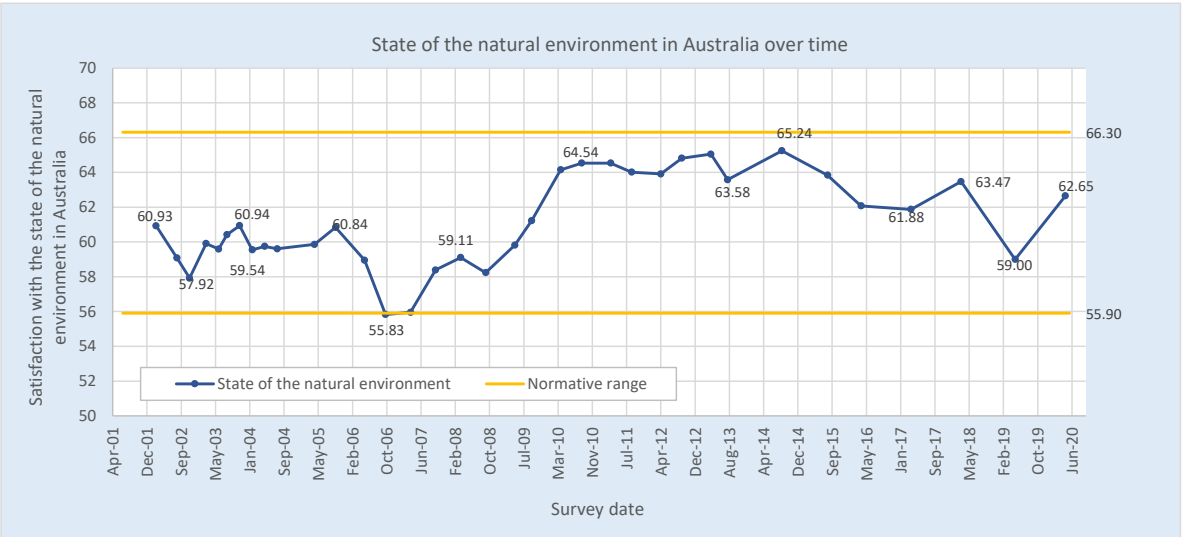

Figure 3.13 State of the natural environment over time

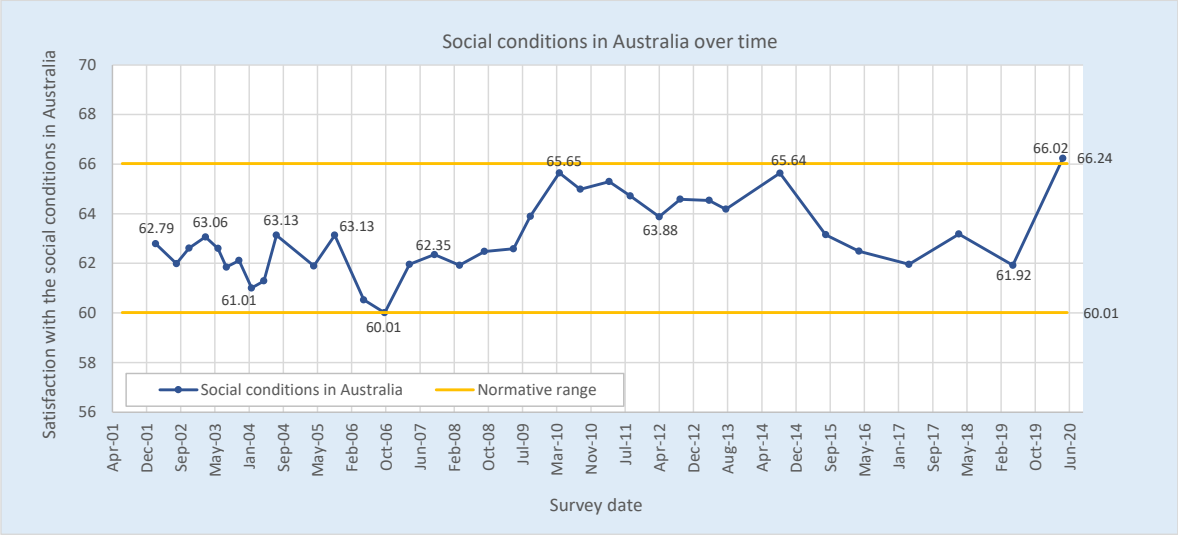

Figure 3.14 Social conditions in Australia over time

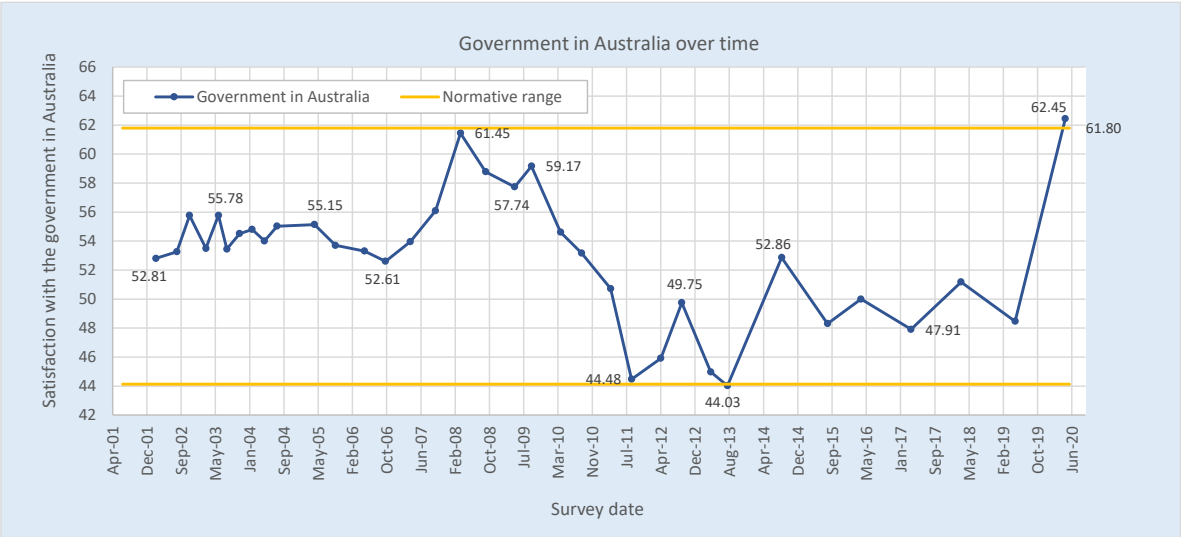

Figure 3.15 Government in Australia over time

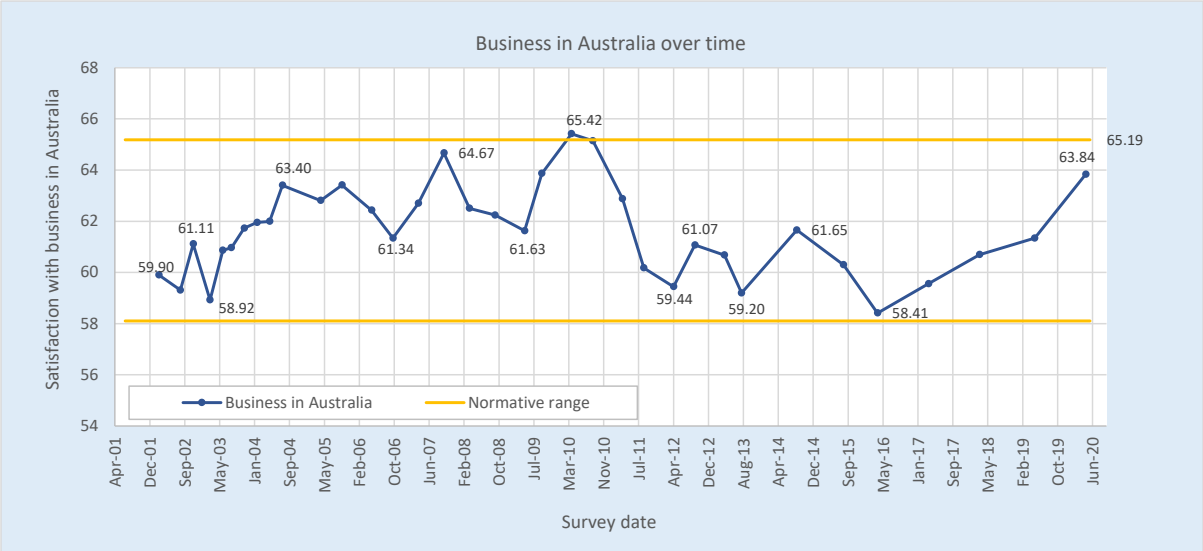

Figure 3.16 Business in Australia over time

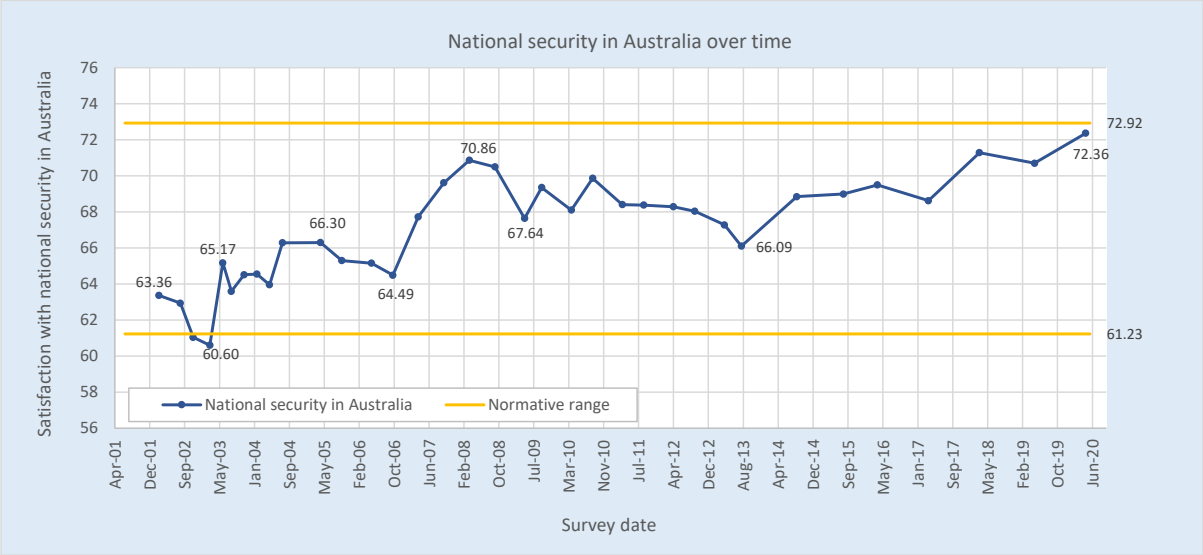

Figure 3.17 National security in Australia over time

3.1.3 Subjective wellbeing by demographics in Survey 37

This section summarises results from Analysis of Variance (ANOVA), in which PWI scores were examined by demographic measures in Survey 37. This included: gender, age, marital status, household composition, household income, fulltime and parttime work status.

Figures 3.18 to 3.24 show the mean PWI scores by demographic group (blue bars), the PWI Australian normative range (yellow lines), and the PWI normative range for each demographic sub-group (red lines). Unless otherwise described statistically significant mean differences between comparison groups are identified by a red asterisk.

Tabulated references to demographic group normative scores are provided in Appendices Table 4 and descriptive statistics are provided in Appendices Tables 7 to 15.

Subjective wellbeing by gender

Overall, the proportion of males and females and their relative PWI scores were consistent with previous surveys (Figure 3.18). Males and females both reported PWI scores that were within sub-group normative ranges. Males reported PWI scores that were within the Australian overall normative range, but females reported PWI scores slightly above the Australian overall normative range (0.22 points). Four participants self-described their gender. This group could not be compared meaningfully due to small sample size.

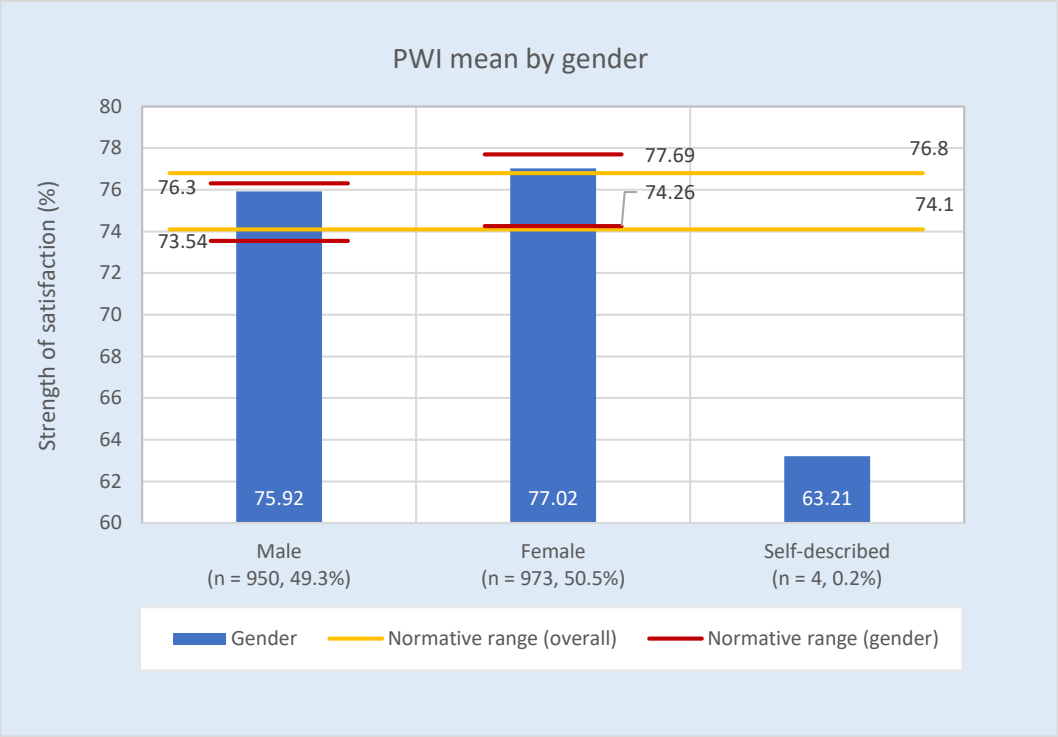

Figure 3.18 PWI mean scores by gender for Survey 37

Subjective wellbeing by age

PWI scores were within the Australian overall and sub-group normative range for all age groups (Figure 3.19). Older age groups (> 66 years) reported higher PWI. Scores on the PWI were similar between the young and middle adult age groups. Effects sizes were small.

Scores were similar to Survey 36 for all age groups except for those aged 46-55 years (Cohen's *d* = 0.304) and 66-75 years (Cohen's *d* = 0.314), who reported slightly higher PWI scores in 2020.

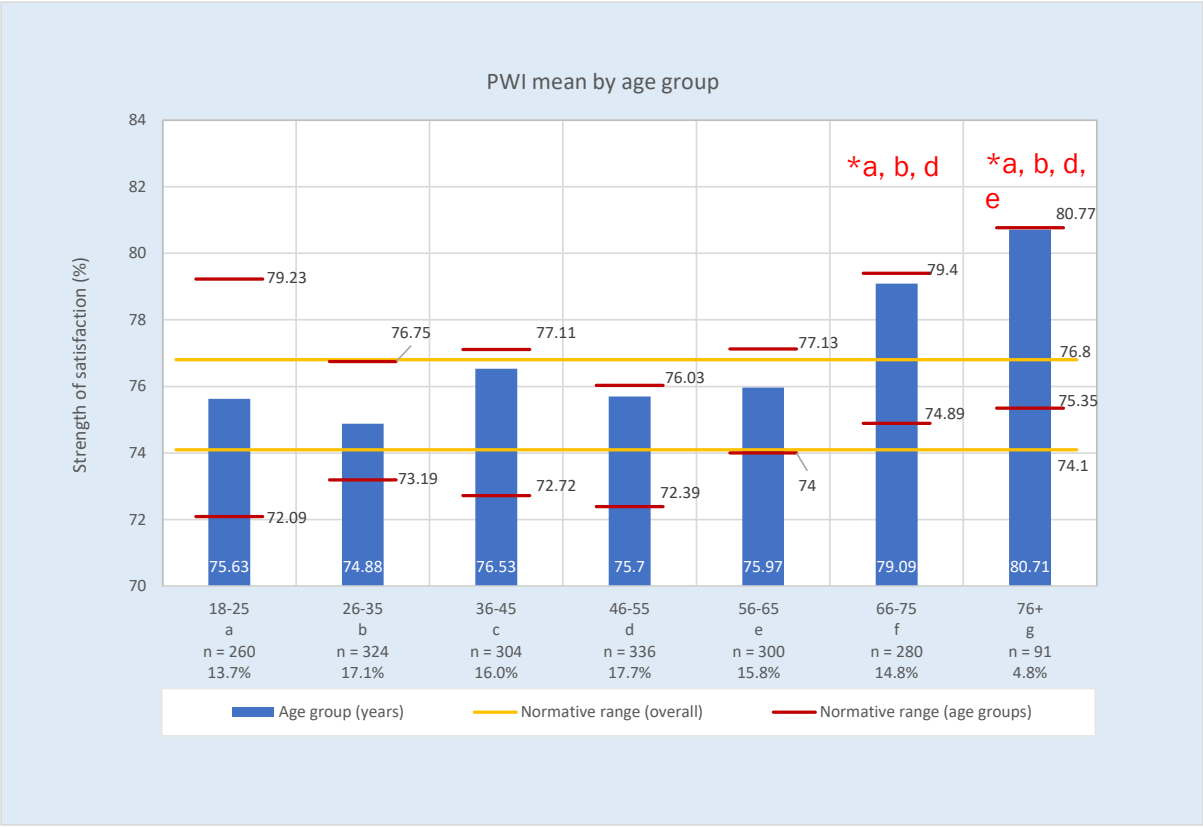

Figure 3.19 PWI mean scores by age for Survey 37

Subjective wellbeing by pre-COVID-19 household income

PWI scores were within the sub-group normative range across all pre-COVID-19 household income groups (Figure 3.20). People with income between the $15k - $30k (Cohen's *d* = 0.287) and $31k - $60k (Cohen's *d* = 0.265) range reported slightly higher PWI scores compared to Survey 36. PWI scores among the lowest two income groups were below the Australian overall normative range, while people with an income over $101k reported PWI scores above the overall normative range. Effect sizes were small to moderate in range (Cohen's *d* = 0.262 – 0.700) but were larger in magnitude when income discrepancies were greater.

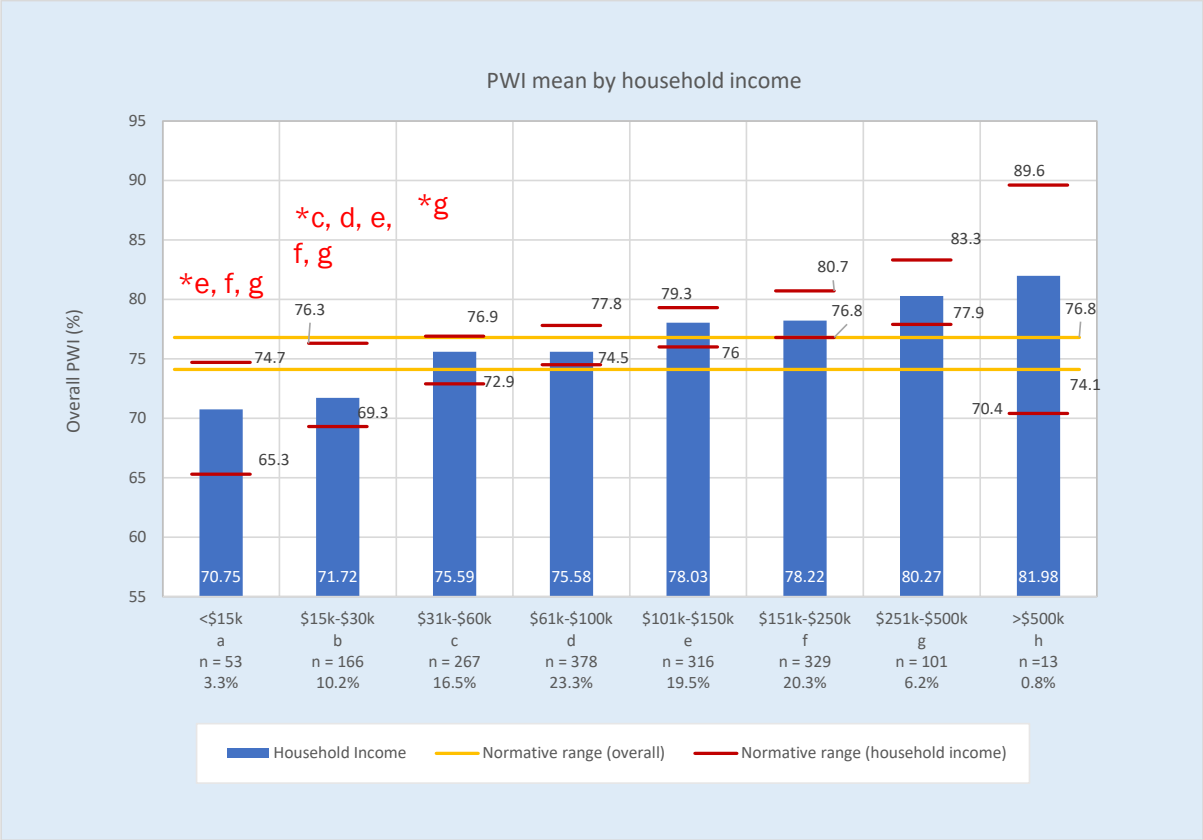

Figure 3.20 PWI mean scores by pre-COVID-19 household income for Survey 37

Subjective wellbeing by household composition

Scores on PWI by household composition fell within their respective sub-group normative ranges, with the exception of participants who lived with a partner only, where the average score was 0.18 points above the group normative range (Figure 3.21). Effect sizes were small for group comparisons that included participants living with a partner and children compared to partnered only, children only or living with others households (Cohen's *d* = 0.210 – 0.316). For participants living with their partner only, effect sizes were moderate compared to all other household composition categories except partner and children households (Cohen's *d* = 0.465 – 0.521).

Compared to survey 36, PWI scores for participants living with a partner only, partner and children, others, or parents, were similar. PWI scores were higher for participants living alone (Cohen's *d* = 0.335) or with children only (Cohen's *d* = 0.328).

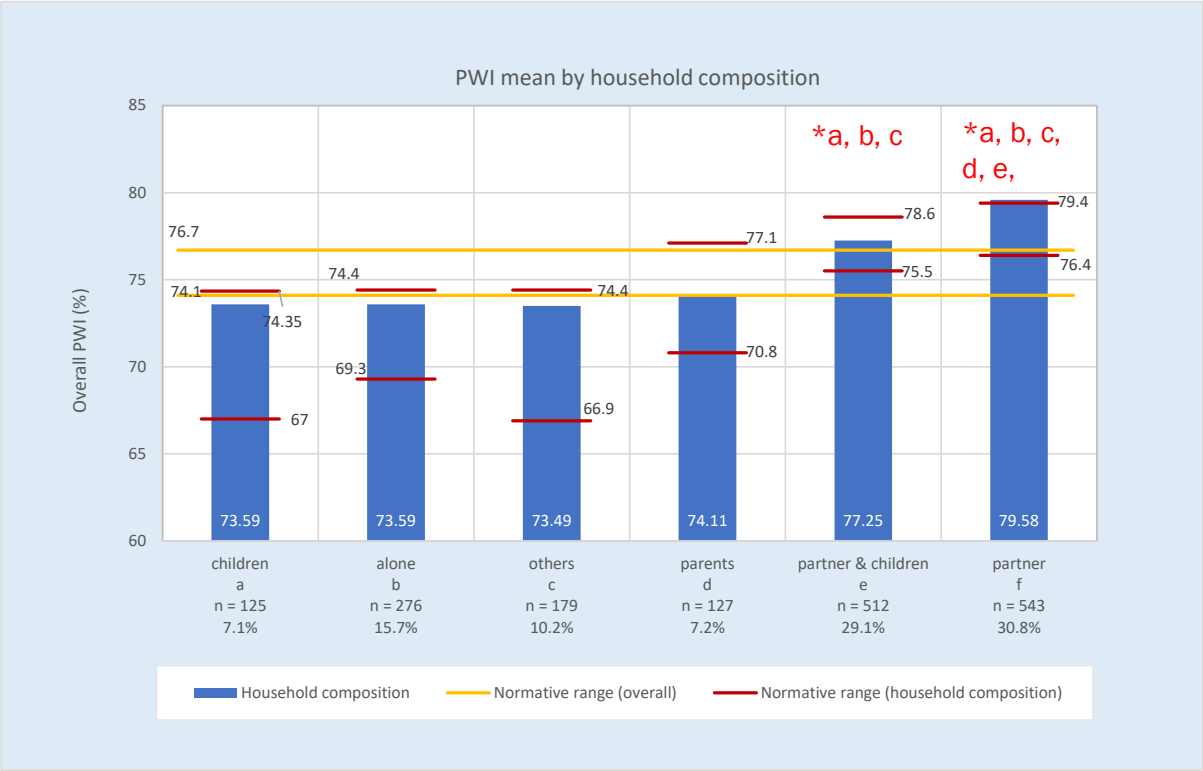

Figure 3.21 PWI mean scores by household composition for Survey 37

Subjective wellbeing by marital status

Except for widowed participants, PWI scores aggregated by marital status fell within the middle to upper end of their sub-group normative ranges (Figure 3.22). Participants who were partnered reported the highest PWI scores, whereas participants who were separated or divorced reported the lowest PWI scores. Effect sizes were in the small to moderate range. Trends were similar to Survey 36.

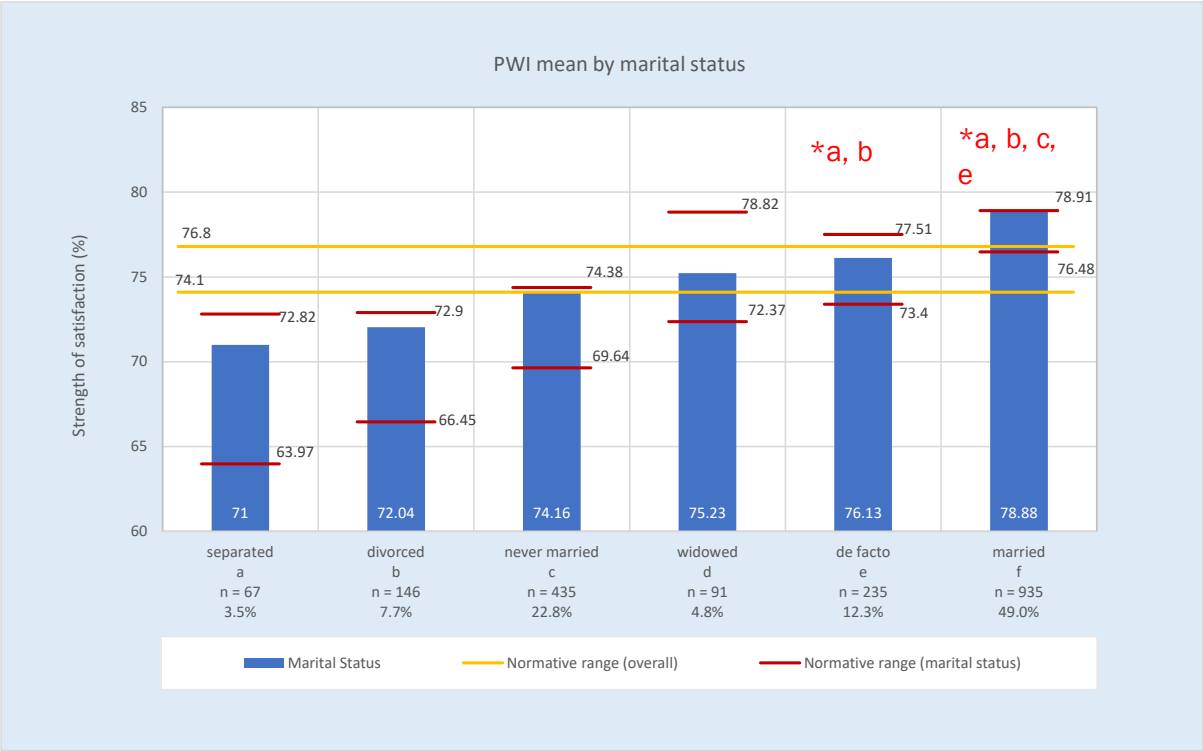

Figure 3.22 PWI mean scores by marital status for Survey 37

Subjective wellbeing by work status

Fulltime work status

All fulltime employment status groups reported PWI score averages that fell within their sub-group normative ranges. Notably, fulltime employed and retired participants had PWI score averages above their group normative ranges (Figure 3.23). PWI scores for fulltime retirees were statistically higher than for the fulltime employed (Cohen's d = 0.256), volunteers (d = 1.064) and unemployed (d = 0.932) categories. Additionally, PWI scores for the unemployed category were lower compared with the fulltime employed (d = 0.748), home duties (d = 0.534), and student (d = 0.676) categories.

Results were otherwise similar to survey 36, except for higher PWI scores among fulltime retirees (Cohen's d = 0.413) and unemployed (Cohen's d = 0.447) participants.

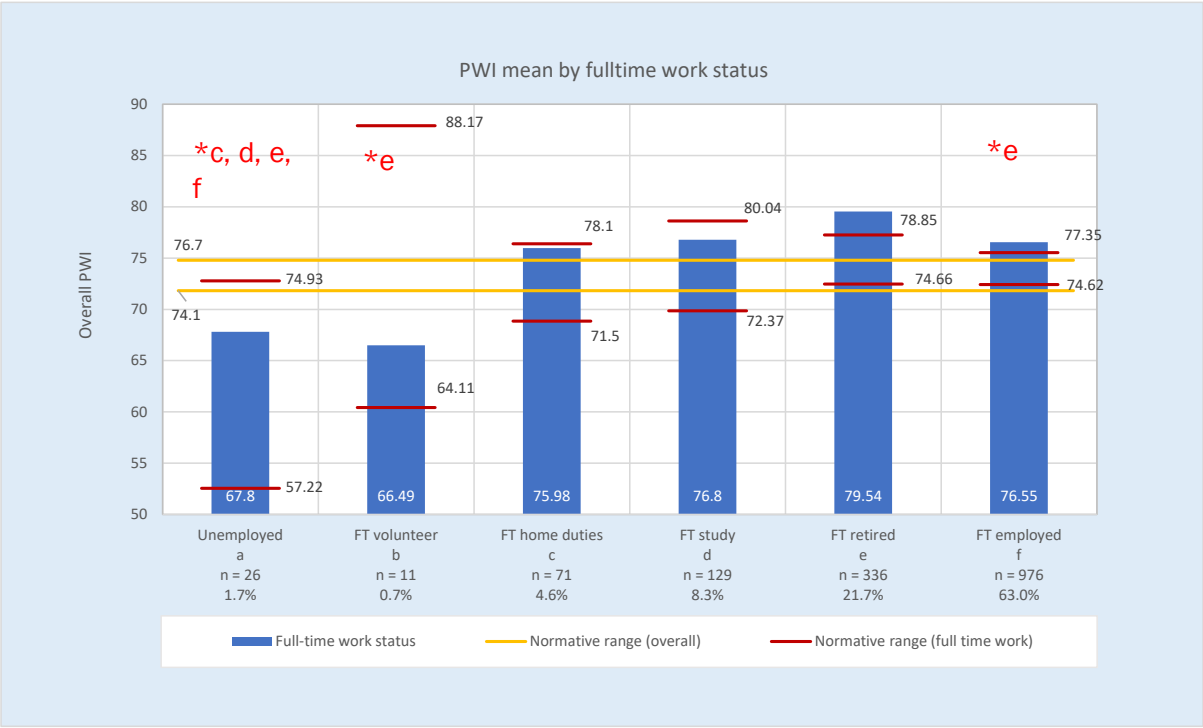

Figure 3.23 PWI mean scores by fulltime work status for Survey 37

Parttime work status

All parttime employment status groups reported PWI score averages that fell within their sub-group normative ranges (Figure 3.24). Both semi-retired and parttime volunteers reported PWI averages that fell above the Australian normative PWI range. Statistically higher PWI scores were observed for parttime volunteers compared with casual workers (Cohen's *d* = 0.324).

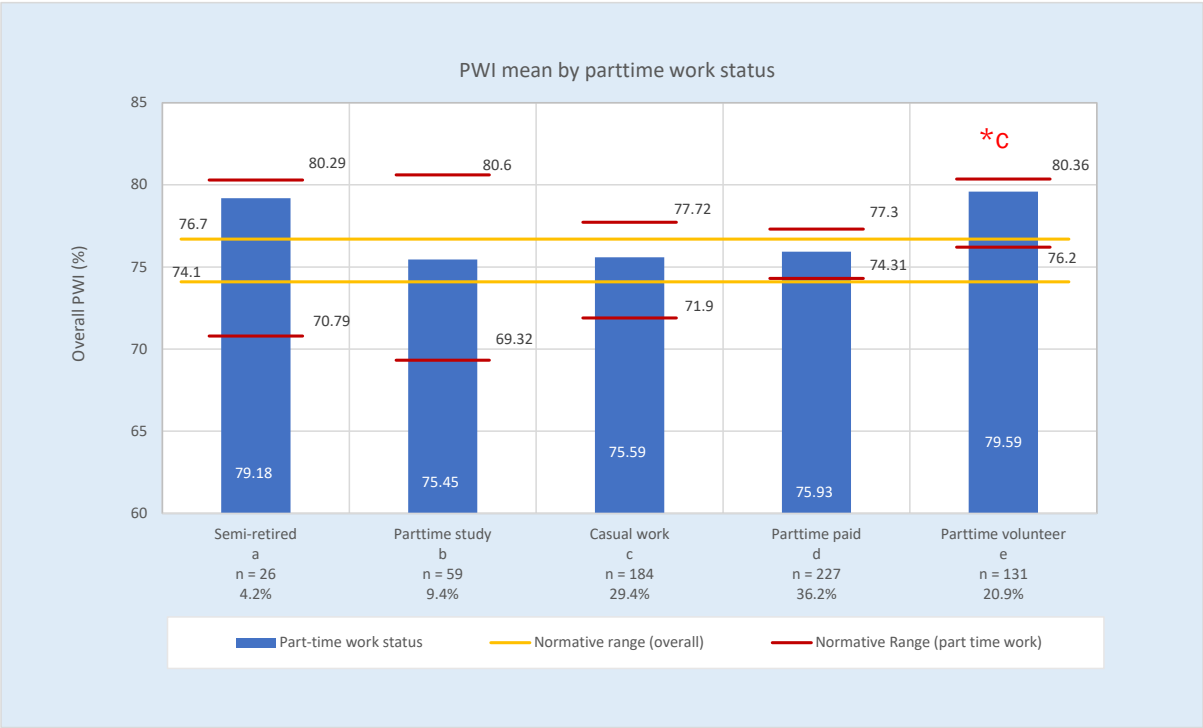

Figure 3.24 PWI mean scores by parttime work status for Survey 37

Subjective wellbeing by state of residence and geographical remoteness

PWI scores were within their sub-group and Australian average normative ranges across all states except for Western Australia, where participants reported PWI scores 0.24 points above the sub-group normative range (Figure 3.25). Participants living in New South Wales, South Australia and the Australian Capital Territory reported PWI scores at the upper end of their group normative ranges, respectively. PWI scores were otherwise similar between states.

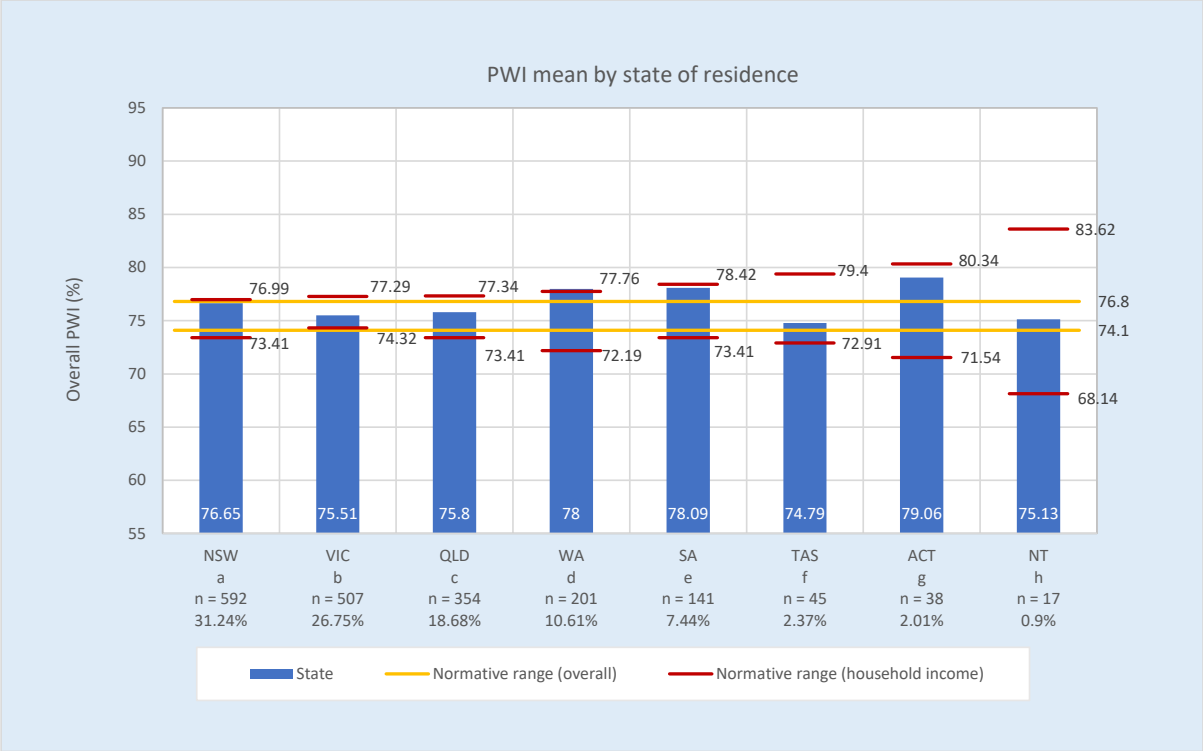

Figure 3.25 PWI mean scores by state of residence for Survey 37

When examined by geographical remoteness, PWI scores fell in the mid to upper range of their group normative ranges (Figure 3.26). PWI scores were higher relative to increasing geographical remoteness albeit the differences between groups were not statistically significant.

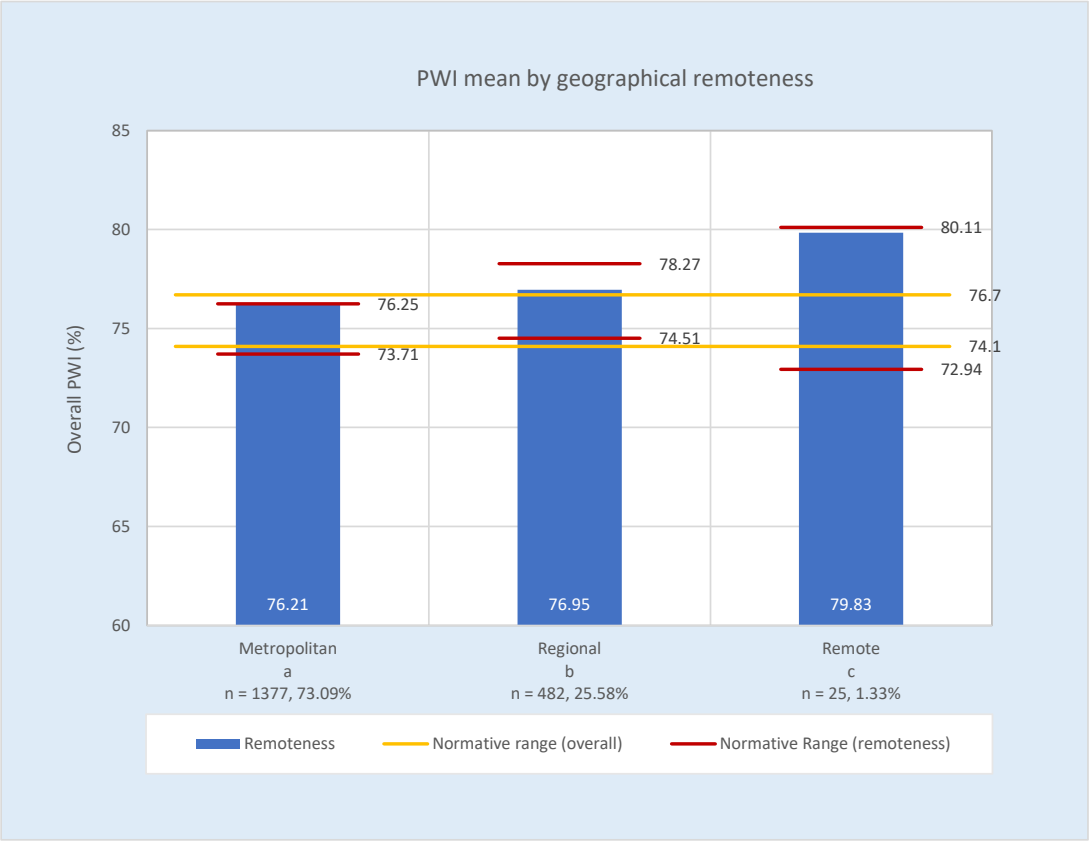

Figure 3.26 PWI mean scores by geographical remoteness for Survey 37

3.1.4 Life events

In this section we asked:

1. *Has anything happened to you recently causing you to feel happier or sadder than normal?*
2. *On a scale from zero (Very weak) to 10 (Very strong), how strong do you feel this influence?*

Of the 1,965 participants who responded, 58.3% of the sample experienced a significant life event recently (%Sad = 30.08%, %Happy = 14.50% and %Both = 13.74%). The mean strength of these events was rated 79.3 out of 100 (M_{Sad} = 71.5, M_{Happy} =95.5). The perceived influence of happy events was significantly stronger than the perceived influence of sad events ($t(874) = 4.03$, $p < .001$, Cohen's $d = 0.291$)

3.2 Part 2: Subjective wellbeing during COVID-19

3.2.1 Subjective wellbeing in families with children and among those who have experienced income loss

There is emerging research both in Australia and internationally to suggest that the COVID-19 crisis and the associated social distancing measures to control infection rates may be having negative impacts on our communities – impacts that are being felt most strongly among those who are vulnerable due to factors such as financial hardship, increased strain on families (i.e., working from home and home schooling), and/or mental health difficulties (Ashraf, 2020; Biddle et al., 2020; Mann et al., 2020; Prime et al., 2020; Rajkumar, 2020). This section aims to concurrently examine the associations between such stressors and wellbeing during the COVID-19 crisis in Australia.

Unless otherwise indicated, statistically significant mean differences between comparison groups in graphs are identified by an asterisk.

Income loss

Approximately one third of survey participants reported income loss due to COVID-19. These participants reported lower average PWI scores (Figure 3.27); albeit effect size was small (Cohen's *d* = 0.167, 95%CI [.073, .260]).

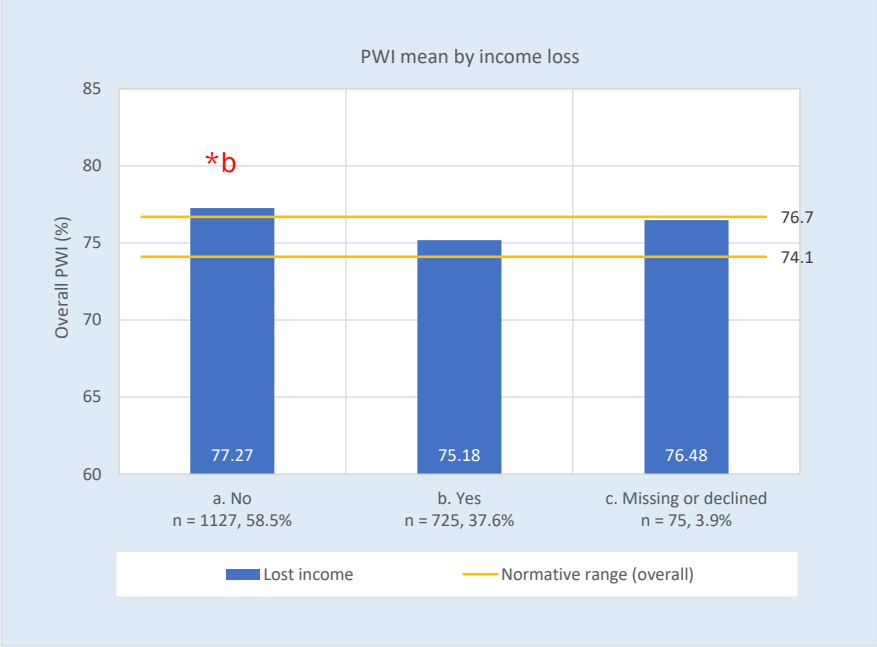

Figure 3.27 PWI mean scores by any reported income loss

Percentage of income loss

PWI scores by percentage of income loss due to COVID-19 were also assessed. Compared to participants with no reported income loss, PWI scores were lower among participants who reported losing 76-100% of their income (Figure 3.28), both before and after adjustment for gender, age, household composition, income, marital status and fulltime work status. Scores also fell below the normative range for the PWI in Australia.

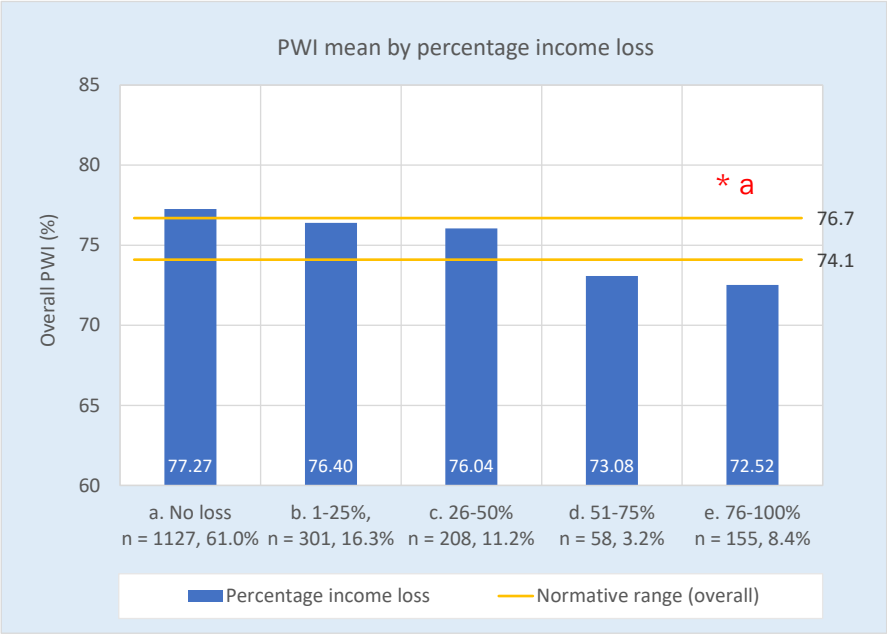

Figure 3.28 PWI mean scores by percentage income lost due to COVID-19.

Income loss and household composition

PWI scores were also lower among adults living in households with children where income loss due to COVID-19 was reported ($X^2[5] = 18.78$, $p = .002$, Figure 3.29; Cohen's $d < 0.5$). Single and dual parent households with income loss reported PWI scores up to 9.8 and 5.3 points lower than participants in the same household category without income loss, respectively. For partner and children households with income loss, PWI fell below the Australian overall and sub-group normative ranges.

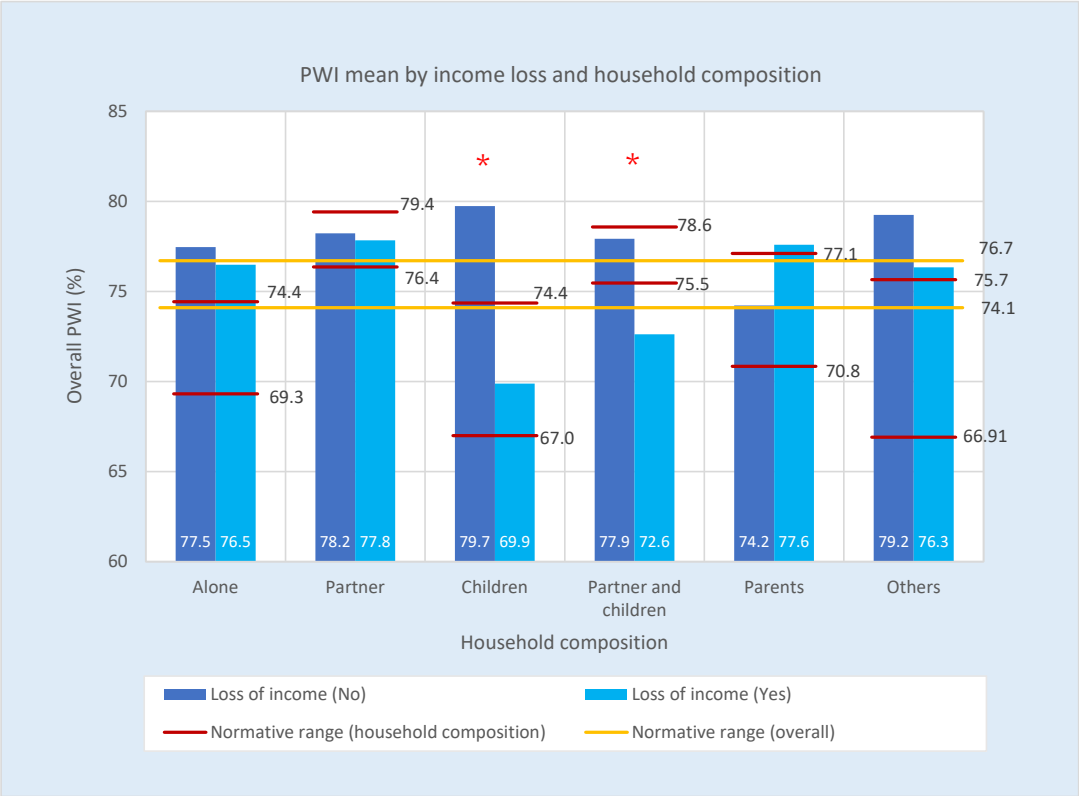

Figure 3.29 PWI mean scores by income loss and household composition.

Geographical remoteness and income loss

PWI scores were not associated with income loss among participants who lived in regional or remote areas (Figure 3.30). By comparison, participants who lived in metropolitan areas reported an average PWI score 3.54 points lower ($Z = 4.23$, $p < .001$) if they reported income loss due to COVID-19 ($X^2[2] = 6.02$, $p = .049$; Cohen's d = 0.253, 95%CI [0.143, 0.62]). Results were similar when unadjusted and adjusted for household composition, marital status, gender, age group, fulltime work status and household income.

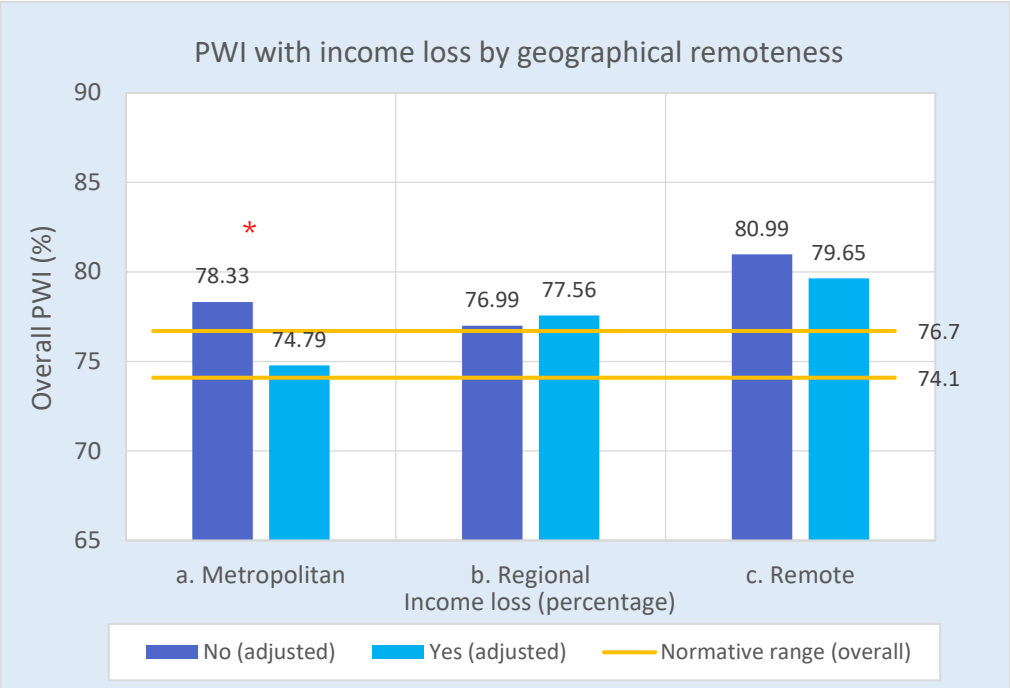

Figure 3.30 PWI mean scores by income loss and geographical remoteness.

Number of children under 18 years of age in care

Partner only and partner and children households had similar PWI scores regardless of the number of children under 18 years of age in care (Figure 3.31). The exception was single child households which reported an average PWI score just below normative range for Australian adults (Cohen's *d* = 0.243, 95%CI [0.047, 0.439]). However, this finding was no longer statistically significant after adjustment for covariates including income, income loss, marital status, household composition and fulltime work status ($X^2[3] = 7.40$, $p = .060$, refer to Appendix Table 22).

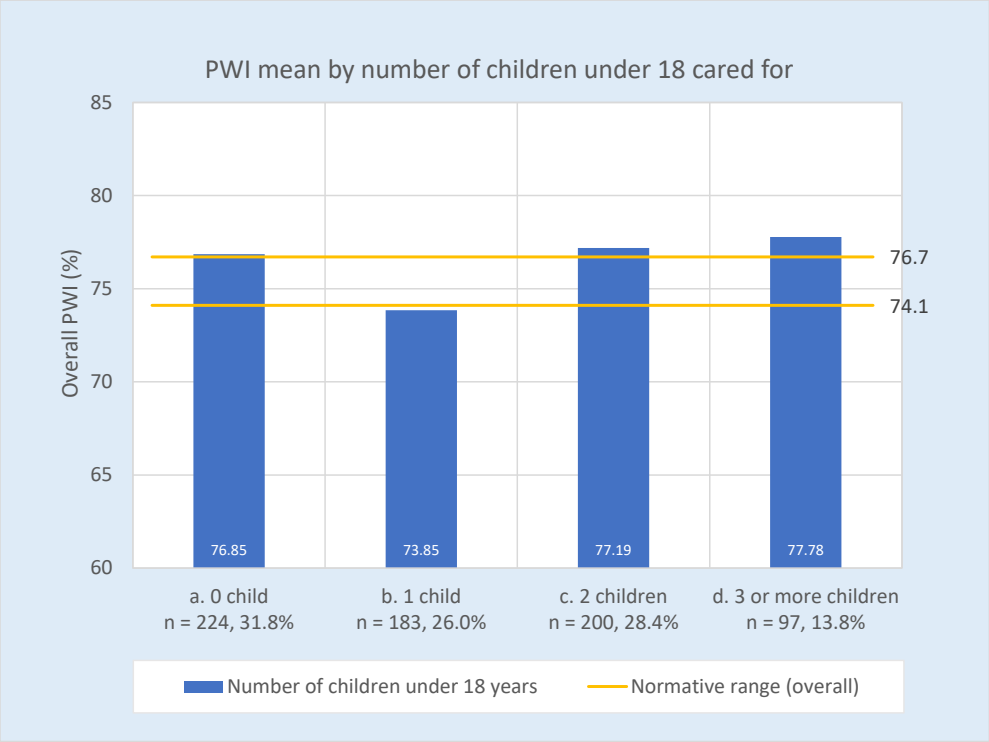

Figure 3.31 PWI mean scores of parents by number of children cared for under 18 years.

3.2.2 Mental health during COVID-19

Anxiety, stress and worry about COVID-19

Feelings of stress and anxiety were elevated among Australian adults in this survey compared to a prior survey in 2013 (Table 3.3).

On a scale of 0-100 (i.e., low to high), participant scores were on average 9.0 points higher for stress and 13.9 points higher for anxiety in 2020, suggestive of moderate symptoms, compared to the 2013 survey.

Table 3.3 Descriptive statistics for mental health variables (Frequencies, Percentage of sample with valid responses, Means, Standard Deviations and Statistical analysis)

		Descriptive statistics				T-test & effect size
	Survey	*N*	%	*M*	*SD*	
How stressed do you feel	37 (2020)	1,962	99.85	44.24	27.21	$T(3914) = 10.67^{***}$
	30 (2013)	1,966	99.54	35.21	25.82	Cohen's *d* = 0.341, 95%CI [0.278, 0.404]
How anxious do you feel	37 (2020)	1,962	99.85	44.80	26.17	$T(3922) = 16.77^{***}$
	30 (2013)	1,962	99.34	30.88	25.84	Cohen's *d* = 0.535, 95%CI [0.472, 0.599]
How worried about COVID-19	37 (2020)	1,964	99.95	50.05	26.27	$T(3917) = 18.02^{***}$
How worried about Swine Flu	21 (2009)	1,974	99.65	34.38	28.28	Cohen's *d* = 0.574, 95%CI [0.510, 0.638]

Note. *** $p < .001$

In this study, 1,844 (93.8%) participants reported some worry because of COVID-19 (i.e. scores of 10 percentage points or more). When we compared perceived worry related to COVID-19 to levels of worry about Swine Flu, as assessed in our 2009 survey, results indicated a higher degree of worry associated with COVID-19 among Australian adults.

Mental health and demographics

Gender

Females in general reported higher levels of stress, anxiety and worry about COVID-19 (Figure 3.32), albeit effect sizes were small (Cohen's *d* ranged between 0.237 and 0.308).

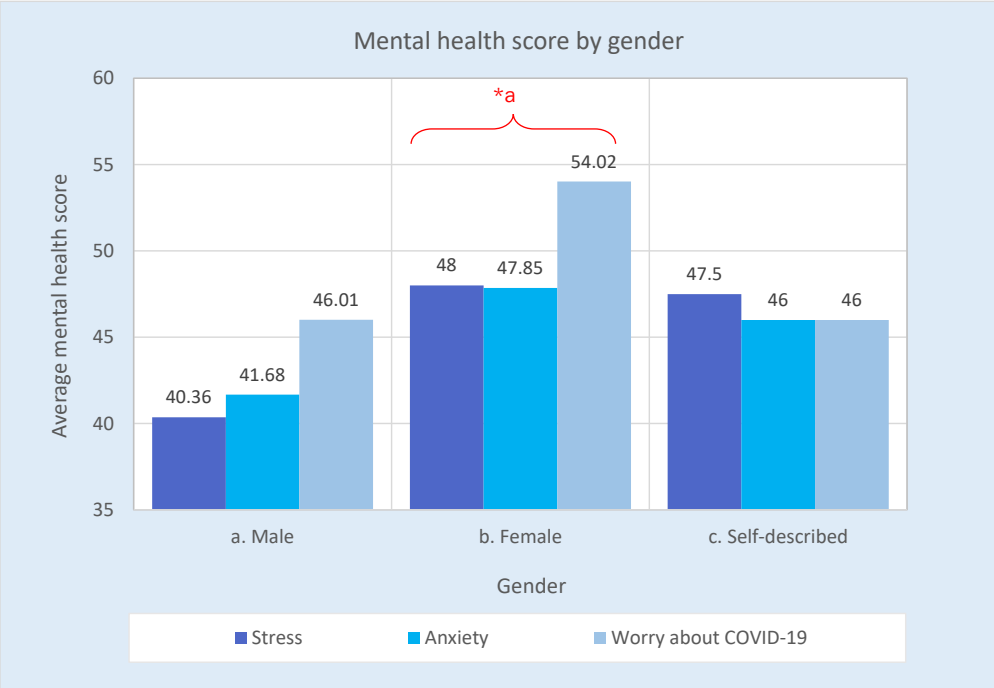

Figure 3.32 Mental health average scores by gender.

Age

Stress scores were highest in the 26-35 year age group, stable across the 26-45 to 56-65 year age group, and lowest in older adulthood from age 65-75 years and over ($F(5, 1570) = 4.74$, $p < .001$). Effect sizes were small (Cohen's $d = 0.268 – 0.493$).

Anxiety levels did not vary by age group. In contrast, levels of worry about COVID-19 in Australia were lowest in young adulthood and highest in mid to late adulthood ($F(6, 1922) = 5.13$, $p < .001$). Effect sizes were small (Cohen's $d = 0.304 – 0.363$).

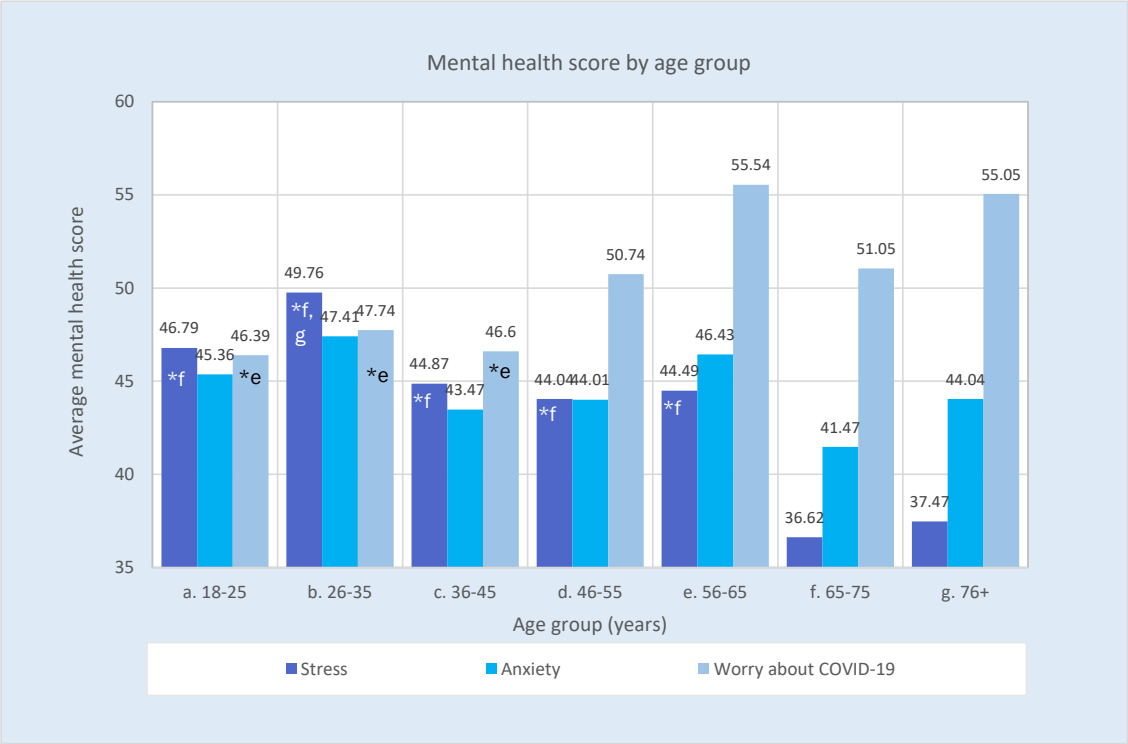

Figure 3.33 Mental health score by age group.

Household composition

Levels of anxiety and worry about COVID-19 were similar by household composition (Figure 3.34). Notably, however, stress levels were 5.12 points higher in partnered households with children compared to partner only households without children ($F(5, 1782) = 2.88$, $p = .014$; Cohen's $d = 0.189$, 95%CI [0.069, 0.310]).

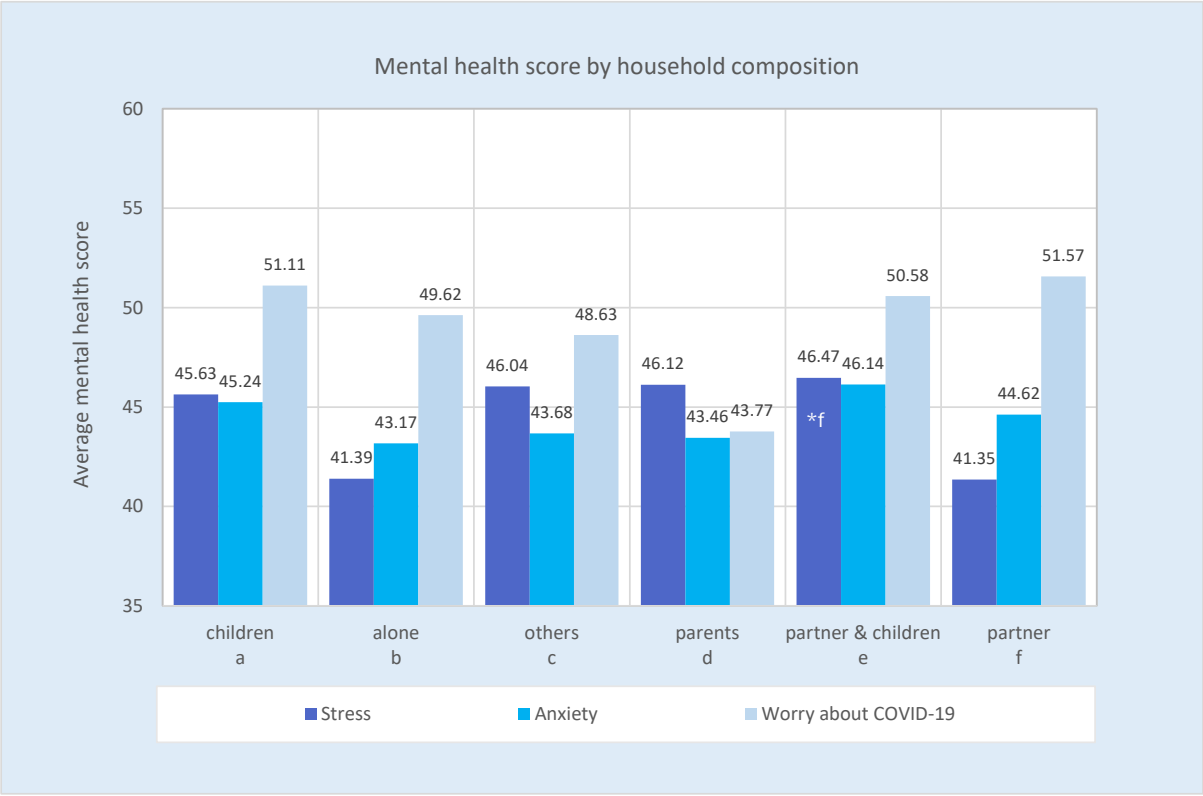

Figure 3.34 Mental health average scores by household composition.

Marital status

Stress and anxiety levels were similar by marital status (Figure 3.35). However, widowed participants reported the highest level of worry about COVID-19 in Australia, followed by divorced and married participants. These levels were statistically significant when compared to participants who were never married, who also had the lowest level of worry ($F(5, 1935) = 6.54$, $p < .001$). Effect sizes were small for divorced (Cohen's $d = 0.323$) and widowed participants (Cohen's $d = 0.449$) and moderate for married participants (Cohen's $d = 0.880$). Additionally, compared with de facto participants, widowed participants reported higher levels of worry (Cohen's $d = 0.323$).

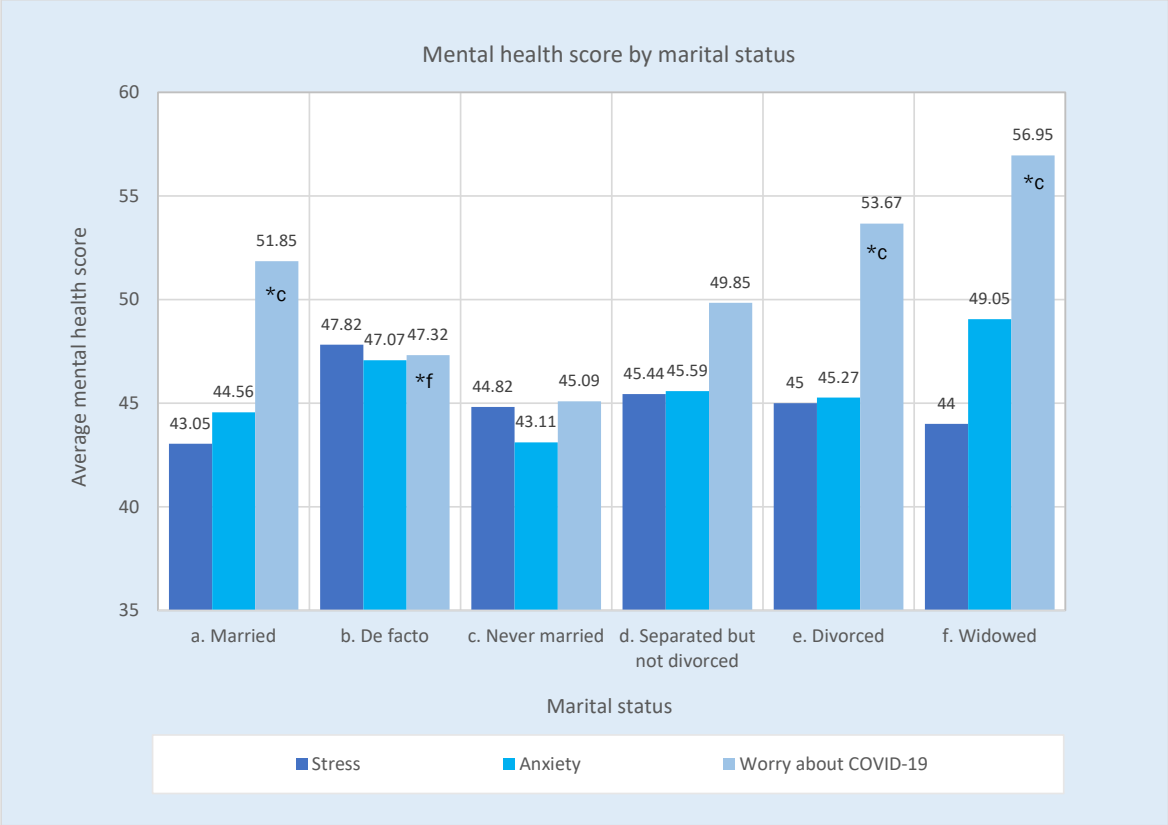

Figure 3.35 Mental health score by marital status.

Income

Stress levels were similar across income groups (Figure 3.36). However, anxiety ($F(8, 575.68) = 2.19$, $p = .026$) and worry about COVID-19 ($F(7, 1634) = 2.97$, $p = .004$) differed by income group. Specifically, levels of anxiety and worry were highest among the lowest income group (< $15k per annum). Anxiety was higher for participants earning less than $15k per annum compared with those earning $61k-$100k per annum (Cohen's $d = 0.472$). Worry about COVID-19 was higher for participants earning less than $15k per annum compared with income groups ranging between $15k-$30k to $101k-$150k per annum (Cohen's $d = 0.497$-0.566).

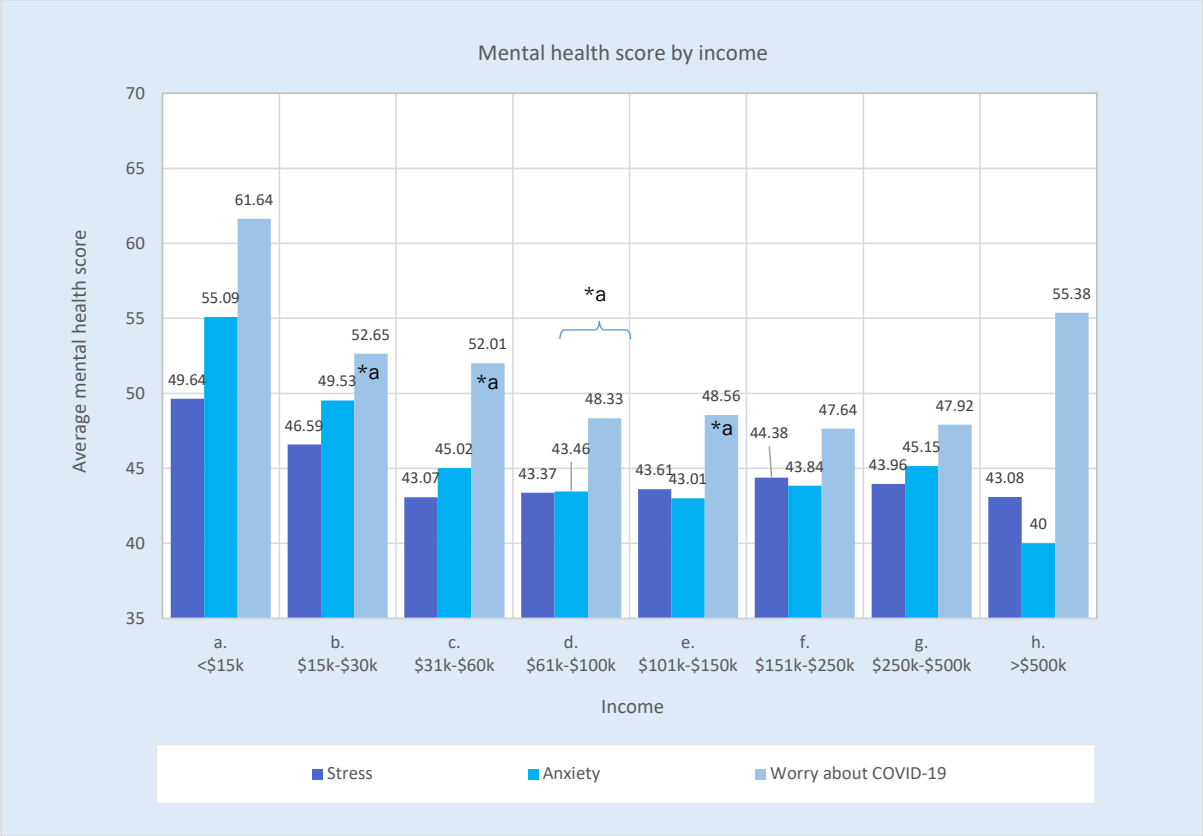

Figure 3.36 Mental health score by income.

Work status

Stress was associated with fulltime work status (F(8, 575.68) = 2.19, *p* = .026; Figure 3.37) and appeared highest among fulltime students, followed by volunteers and those in fulltime home duties. However, group differences were only statistically significant for fulltime students and fulltime employed participants who had elevated scores compared to full time retirees. Effect sizes were small (Cohen's *d* = 0.424 and 0.229 respectively). Anxiety and worry about COVID-19 were not associated with fulltime work status.

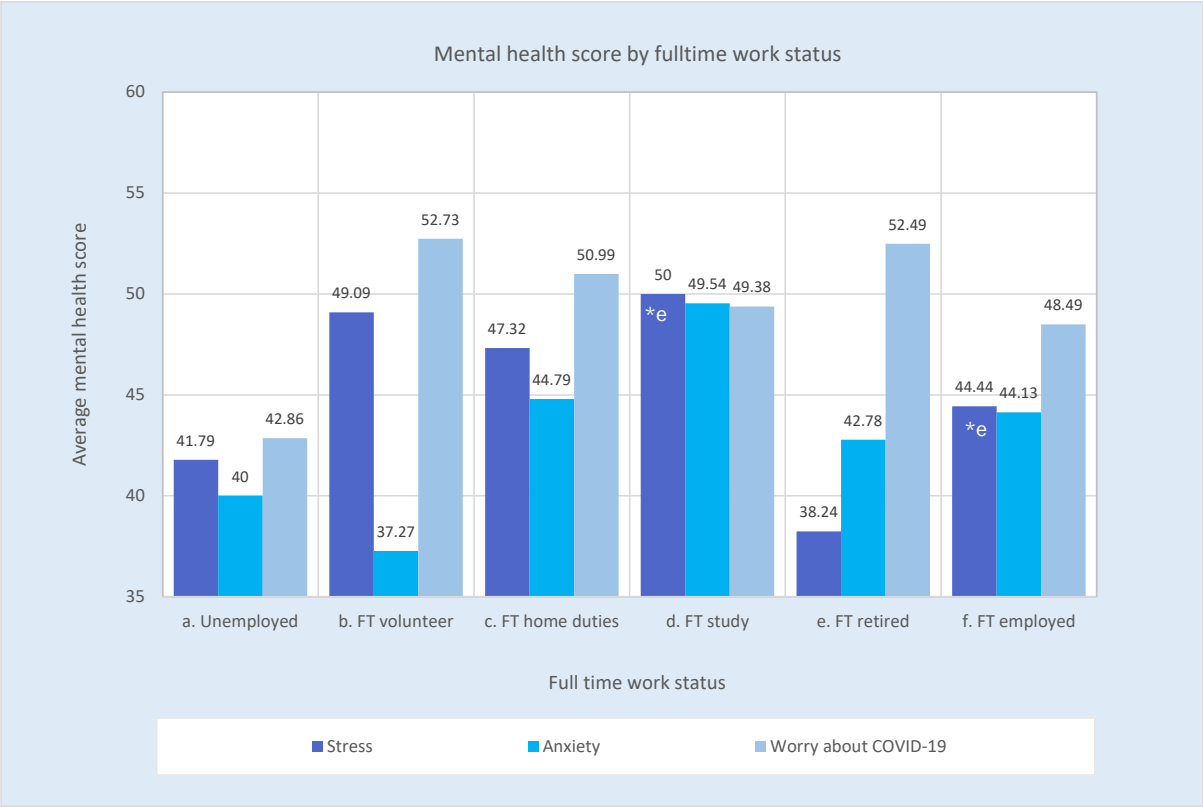

Figure 3.37 Mental health score by fulltime work status.

Geographical remoteness

Geographical remoteness was associated with stress (F(2, 1913) = 4.02, *p* = .018) and anxiety (F(2, 1913) = 3.13, *p* = .044) in this sample, however group differences were not significant after Bonferroni correction for multiple comparisons. Levels of worry about COVID-19 did not differ as a function of geographical remoteness.

Associations between mental health and SWB

In models examining subjective wellbeing and the mental health variables of stress, anxiety and worry about COVID-19, only stress was related to PWI scores ($F(1,1124) = 59.42$, $p < .001$). Specifically, lower levels of stress were associated with higher PWI scores (Cohen's $d = 0.460$), both before and after adjustment for the covariates of age, household composition, income, marital status and fulltime work status.

Notably, this relationship between stress and subjective wellbeing was also associated with participants' experience of income loss due to COVID-19 ($F(2,1124) = 5.58$, $p = .018$, Figure 3.38). Namely, participants who had income loss but experienced lower stress reported higher subjective wellbeing. In contrast, participants who had income loss coupled with higher stress reported lower subjective wellbeing (Cohen's $d = 0.139$).

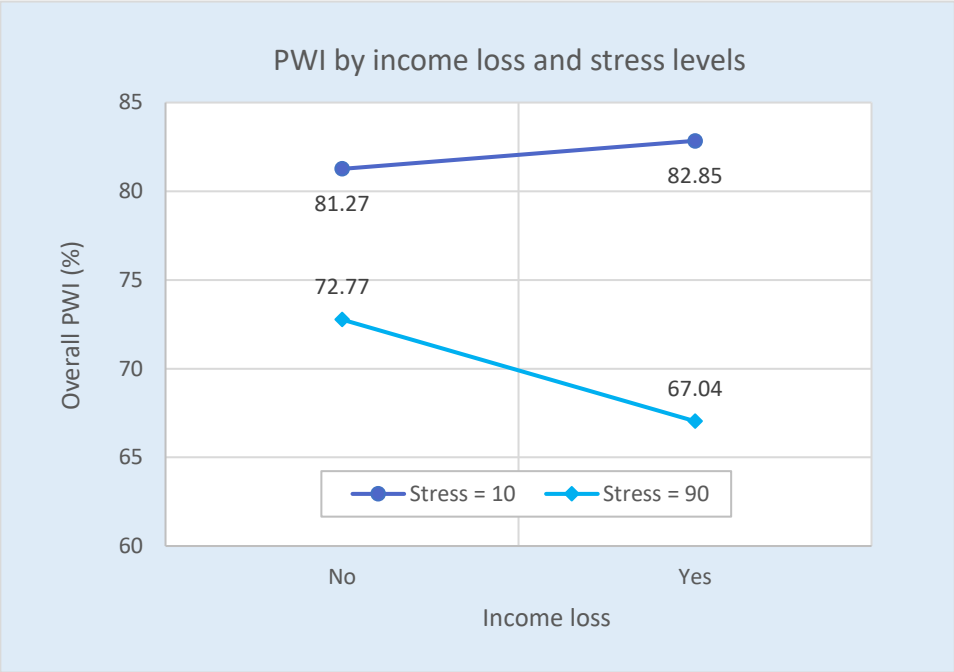

Figure 3.38 Relationship between PWI and income loss at low and high stress levels.

3.2.3 Social connectedness during COVID-19

Participants generally reported low levels of loneliness and moderately high levels of connectedness to other people in the 2020 survey (Table 3.4). Notably, however, levels of social connectedness were lower than reported in the previous survey in 2019. Levels of loneliness were similar across time in 2019 and 2020, but higher than 2013 (Figure 3.39).

Table 3.4 Descriptive statistics for connectedness to others and loneliness variables (Frequencies, Percentage of sample with valid responses, means, standard deviations and Statistical analysis).

		Descriptive statistics				Statistical analysis and effect size
	Survey	*N*	%	*M*	*SD*	
How connected to you feel to other people?	37 (2020)	1,961	99.80	63.47	23.28	$T(3726) = 16.60^{***}$
	36 (2019)	1,966	99.80	74.59	18.45	Cohen's $d = 0.530$, 95%CI [0.466, 0.593]
How lonely do you feel?	37 (2020)	1,964	99.95	32.67	28.89	$F(2, 5879) = 3.24^{***}$
	36 (2019)	1,966	99.80	33.04	28.70	$\eta^2 = .078$, 95%CI [.012, .025]
	30 (2013)	1,967	99.59	24.79	27.30	

Note. *** $p < .001$

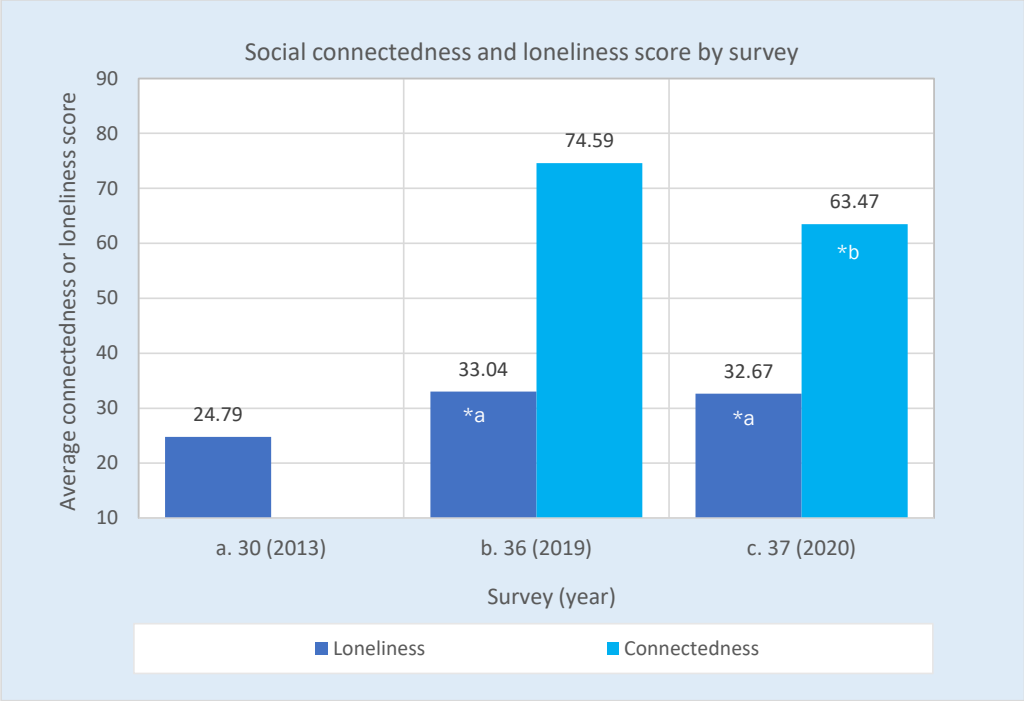

Figure 3.39 Relationship between social connectedness and loneliness with survey.

Social connectedness and demographics

In a fully adjusted model examining social connectedness (controlling for gender, age, household composition, income and marital status), only gender, age and fulltime work status were uniquely associated with social connectedness. Connectedness to other people was 2.03 points higher among females (*M* = 70.11) compared to males (*M* = 68.08; F(1,2408) = 5.34, *p* = .021, Cohen's d = 0.111, 95%CI [0.048, 0.173]).

Consistent with Survey 36, social connectedness was higher in participants aged older than 56 years (F(6,2408) = 4.87, *p* < .001, Figure 3.40). Difference scores were between 3.15 and 13.83 points higher compared to younger age groups; effect sizes were small (Cohen's *d* = 0.066 - 0.387).

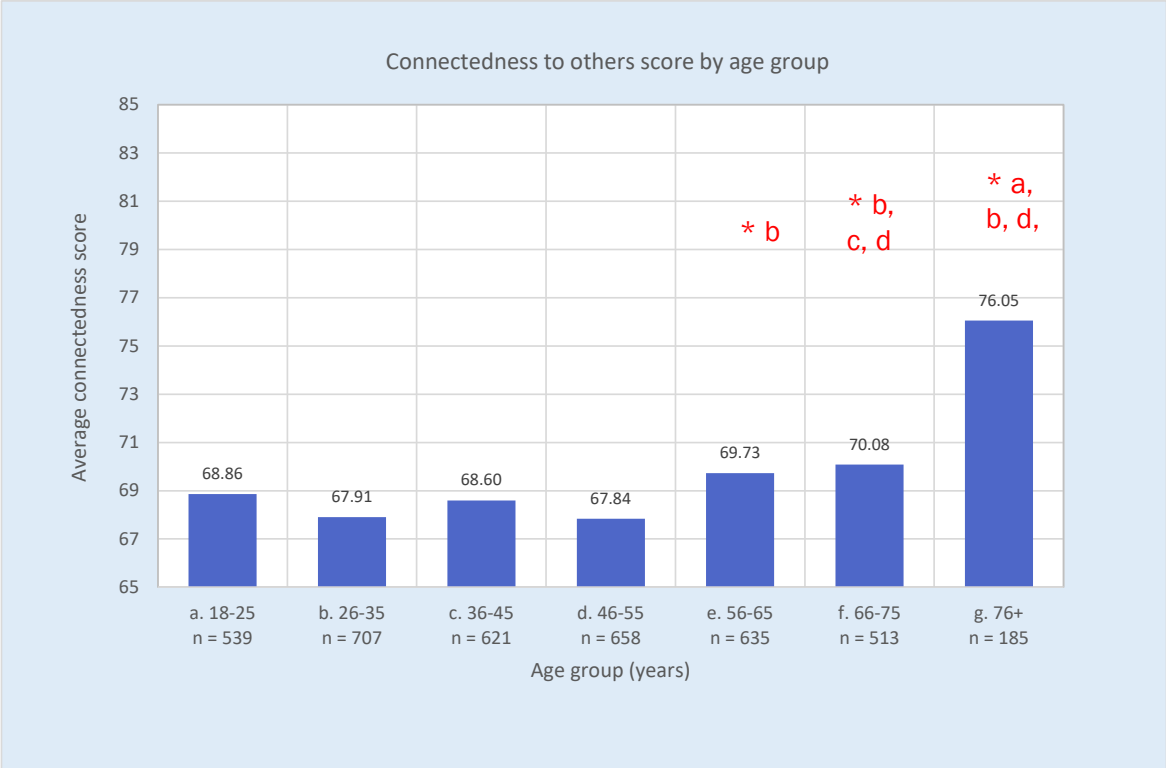

Figure 3.40 Relationship between connectedness variables and age group.

While the lower levels of social connectedness between 2019 and 2020 was similar in magnitude across the examined demographic variables, including gender, household composition, age group, marital status, income, and geographical remoteness, this was not the case for fulltime work status. Participants who were engaged in fulltime employment, study, volunteering or retirement reported a decrease in connectedness over this period. Those in fulltime home duties or unemployed reported stable levels of connectedness between surveys (Figure 3.41). Notably, fulltime volunteers had a 28.74 percentage point drop between surveys compared to the unemployed group (Diff(delta) = 34.39, *SE* = 10.90, *p* = .024)).

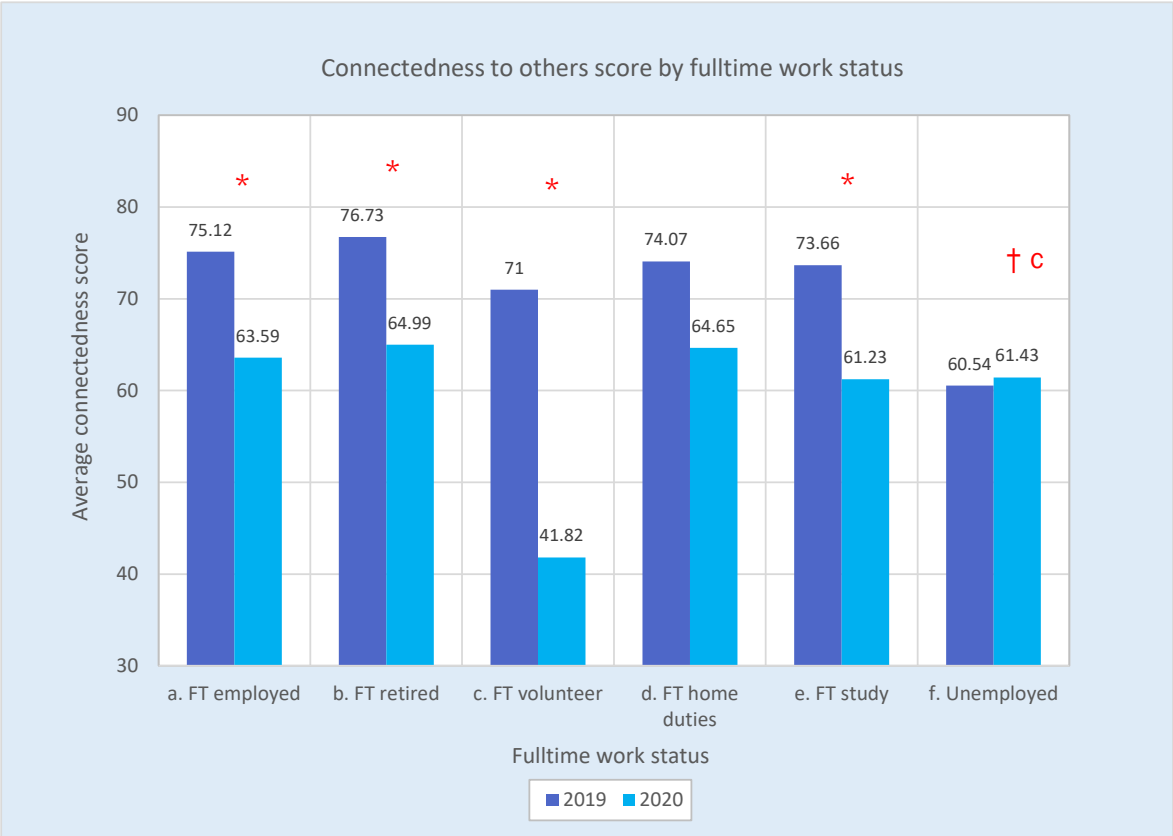

*Figure 3.41 Relationship between connectedness variables and fulltime work status. * indicates significant difference within the same fulltime work status between surveys. † indicates significant slope differences between different fulltime work status across surveys.*

3.2.4 Prosociality and COVID-19

Prosociality is defined as a person behaving in a way that benefits other people or society. In this study we examined aspects of this via two constructs: 1) a participant's felt need to buy extra household essential goods; and, 2) a participant's felt need to help others outside the family.

A total of 1,342 (68.3%) participants reported a felt need to buy extra household essential goods, while 1,913 (97.4%) participants reported a felt need to help others outside the family. Overall, the mean strength of participant's felt need to buy household essential goods was low, while the strength of participant's felt need to help others outside the family was moderately high (Table 3.5).

Table 3.5 Descriptive statistics for prosociality variables (Frequencies, Percentage of sample with valid responses, Means, and Standard Deviations).

	Descriptive statistics			
	N	%	*M*	*SD*
Buying household essential goods	1,961	99.80	24.51	25.28
Helping others outside your family	1,956	99.50	66.19	22.96

By demographics

Gender

The felt need to buy household goods was similar across genders (Figure 3.42), although females reported a higher felt need to help others outside their family ($F(2, 1953) = 8.58$, $p < .001$, Cohen's $d = 0.165$).

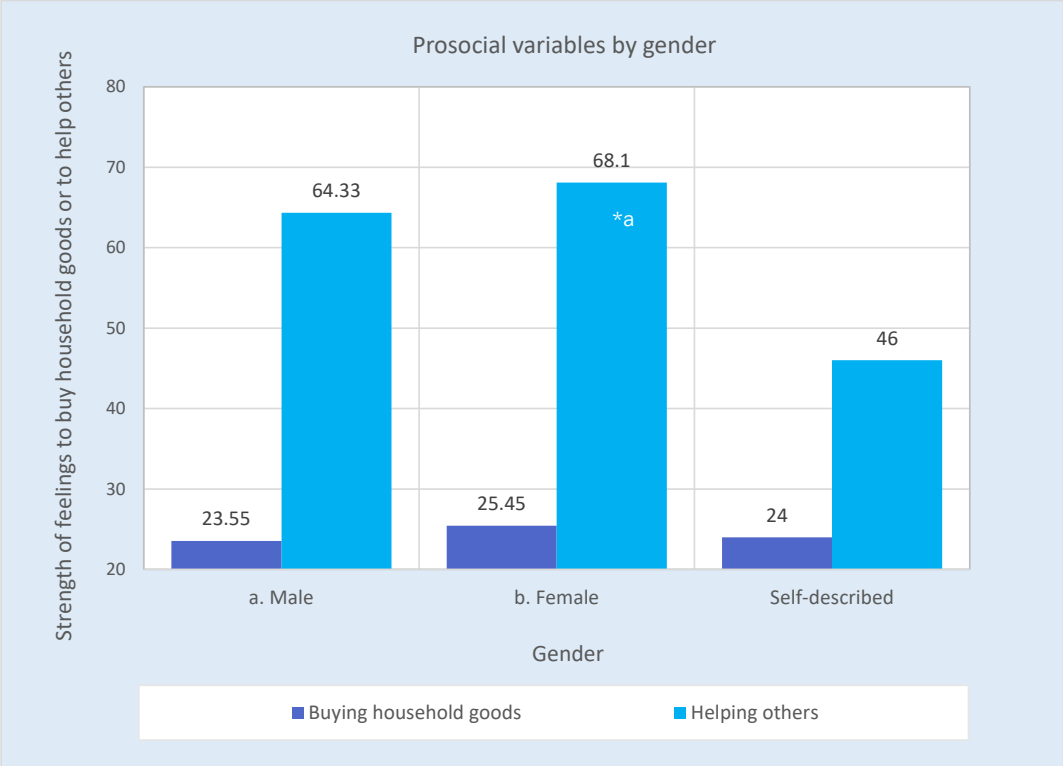

Figure 3.42 Relationship of prosocial variables and gender.

Income

The felt need to help others was similar by income category, but the need to buy household goods was associated with income category ($F(8, 376.26) = 8.10$, $p < .001$, Figure 3.43). Specifically, the need to buy household goods was highest in the lowest two income groups (< $30k per annum). Effect sizes ranged from small (Cohen's $d = 0.241 – 0.397$) for comparisons between the low and moderate income groups, to moderate and large (Cohen's $d = 0.512 – 1.092$) for comparisons between the low and high income groups.

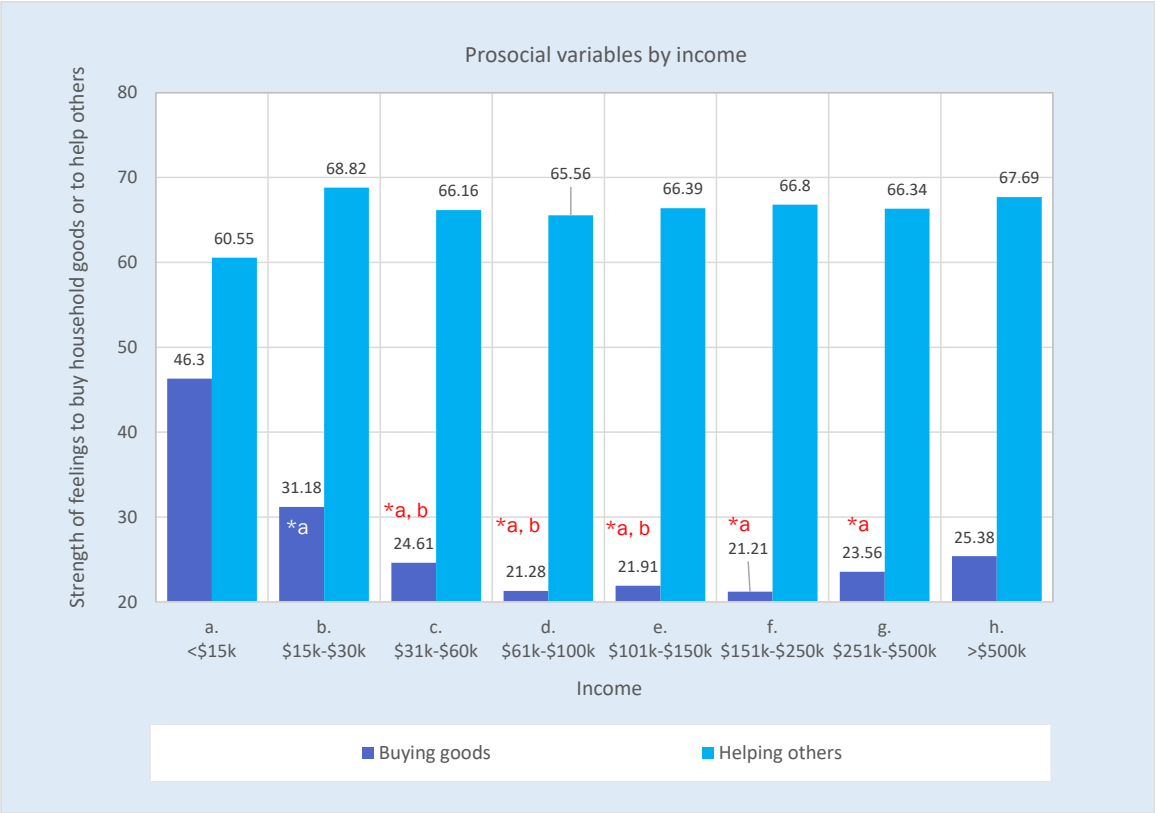

Figure 3.43 Relationship of prosocial variables and household income.

Fulltime work status

The felt need to buy essential household goods was higher among fulltime students and unemployed participants compared with fulltime employed and retired participants ($F(6, 158.95) = 4.77$, $p < .001$, Figure 3.44). Effect sizes were small for fulltime students compared to fulltime employed and retired participants (Cohen's $d = 0.452$ and 0.376 respectively). The effect size was medium for unemployed compared to fulltime employed participants (Cohen's $d = 0.642$).

The felt need to help others outside one's family was also associated with fulltime work status ($F(6, 247.01) = 4.81$ $p < .001$). Highest scores were reported by those in fulltime home duties, compared to lower scores reported by fulltime retired and unemployed participants (Cohen's $d = 0.393$ and 0.891 respectively). Unemployed participants also reported lower felt need to help others outside the family compared to fulltime employed participants (Cohen's $d = 0.671$).

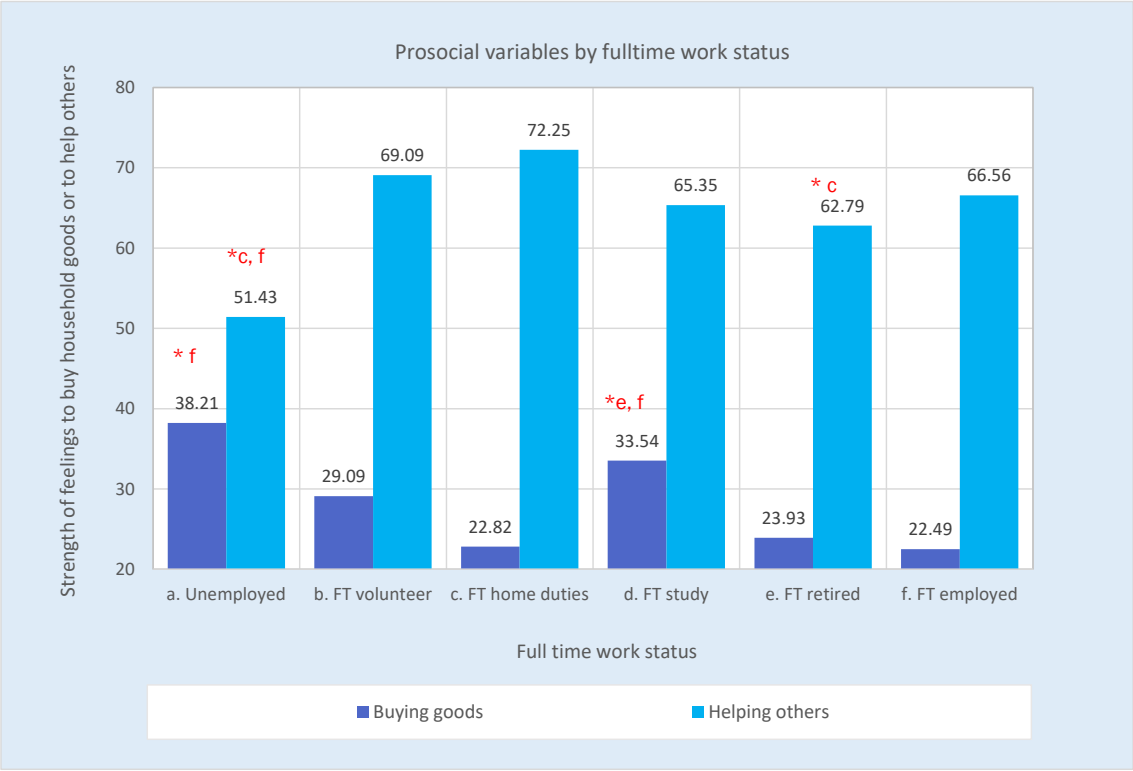

Figure 3.44 Relationship of prosocial variables and fulltime work status.

Other demographic variables

Regarding other demographics, marital status, household composition, age and geographical remoteness were not associated with a felt need to buy essential household goods or to help others outside one's family.

Association between prosociality and PWI

General linear models fitted with a gamma distribution function indicated that PWI scores were negatively associated with a felt need to buy essential household goods (*B* = -0.011, *SE* = 0.002, $p < .001$, $R^2 = .01$, AIC = 8.38, BIC = -13747.31) prior to covariate adjustment. However, this association was no longer statistically significant after adjustment (Table 3.6).

Table 3.6 General linear model for buying household goods with overall PWI score. $R^2 = .111$, AIC = 8.122, BIC = -7626.78.

Variable	*B*	95% CI		*p*-value
		LL	*UL*	
PWI	-0.005	-0.012	0.001	.099
Loss of income				
Yes	0.098	-0.041	0.236	.167
Household composition				
Partner	-0.079	-0.306	0.149	.498
Children	0.207	-0.070	0.483	.143
Partner and children	0.009	-0.219	0.238	.936
Parents	-0.027	-0.321	0.267	.857
Others	0.016	-0.261	0.294	.908
Income				
$15k-$30k	-0.337	-0.649	-0.026	.034
$31k-$60k	-0.465	-0.794	-0.137	.006
$61k-$100k	-0.490	-0.806	-0.174	.002
$101k-$150k	-0.344	-0.680	-0.008	.045
$151k-$250k	-0.414	-0.746	-0.082	.014
$250k-$500k	-0.353	-0.764	0.057	.091
>$500k	-0.324	-1.125	0.477	.428
Fulltime work status				
FT retired	0.145	-0.076	0.366	.197
FT volunteer	0.127	-0.476	0.731	.679
FT home duties	-0.078	-0.428	0.273	.665
FT study	0.263	0.013	0.512	.039
Unemployed	0.253	-0.522	1.028	.522
Anxiety	0.015	0.012	0.018	.000

Note. Reference groups are: Income loss = No; Household composition = Alone; Income = less than $15,000; and Employment = Fulltime employed

When examined by individual domains of SWB, the felt need to buy household goods was lower when satisfaction with standard of living or personal safety were higher, before and after adjusting for covariates (Table 3.7 and Figure 3.45).

Results indicated that participants with a satisfaction with standard of living score of 90 reported a felt need to buy household essential goods that was on average 5.12 below participants who reported a standard of living score of 60 (p = .036). A score of 90 for satisfaction with personal safety, was associated with a felt need to buy household goods score that was on average 6.23 points lower than participants who reported a personal safety score of 60 (p = .003). Effect sizes were small for standard of living and personal safety (Cohen's d = 0.127 and 0.139, respectively).

Results also indicated that participants who reported higher levels of anxiety were also more likely to report higher levels of felt need to buy essential household goods. Compared to standard of living and personal safety, the relationship for anxiety was stronger (Cohen's d = 0.509).

Table 3.7 General linear model for buying household goods with individual unadjusted (R^2 = .039, AIC = 8.350, BIC = -13700.11) and adjusted (R^2 = .127, AIC = 8.109, BIC = -7582.59) SWB domains.

Variable	Unadjusted model				Adjusted model			
	B	95% CI		*p*-value	*B*	95% CI		*p*-value
		LL	*UL*			*LL*	*UL*	
Standard of living	**-0.009**	**-0.014**	**-0.005**	**.000**	**-0.007**	**-0.013**	**-0.001**	**.029**
Personal health	0.001	-0.002	0.005	.492	0.003	-0.002	0.008	.202
Achieving in life	0.004	0.000	0.008	.051	0.004	-0.002	0.010	.172
Interpersonal relationships	0.002	-0.001	0.005	.201	0.002	-0.003	0.007	.449
Personal safety	**-0.011**	**-0.015**	**-0.008**	**.000**	**-0.008**	**-0.014**	**-0.003**	**.002**
Community connectedness	0.002	-0.001	0.006	.119	0.001	-0.003	0.005	.679
Future security	-0.003	-0.007	0.001	.103	-0.003	-0.008	0.003	.359
Loss of income								
Yes		-			0.079	-0.060	0.219	.266
Household composition								
Partner		-			-0.114	-0.354	0.127	.354
Children		-			0.150	-0.132	0.432	.297
Partner and children		-			-0.058	-0.298	0.182	.637
Parents		-			-0.020	-0.318	0.277	.894
Others		-			-0.032	-0.313	0.248	.821
Income								
$15k-$30k		-			-0.359	-0.680	-0.039	.028
$31k-$60k		-			-0.453	-0.791	-0.115	.009
$61k-$100k		-			-0.504	-0.827	-0.181	.002
$101k-$150k		-			-0.348	-0.692	-0.004	.048
$151k-$250k		-			-0.374	-0.720	-0.027	.035
$250k-$500k		-			-0.350	-0.772	0.072	.104
>$500k		-			-0.402	-1.172	0.368	.306
Fulltime work status								
FT retired		-			0.178	-0.055	0.410	.134
FT volunteer		-			0.169	-0.479	0.816	.609
FT home duties		-			-0.008	-0.377	0.361	.966
FT study		-			0.266	0.008	0.523	.043
Unemployed		-			0.161	-0.592	0.913	.676
Anxiety					0.015	0.011	0.018	.000

Note. Reference groups are: Income loss = No; Household composition = Alone; Income = less than $15,000; and Employment = Fulltime employed

Figure 3.45 Relationship between the need to buy essential household goods and satisfaction with standard of living and personal safety.

Higher PWI scores were associated with a greater felt need to help others outside one's family in the unadjusted (B = 0.115, SE = 0.047, p = .015, R^2 = 0.004, AIC = 9.101, BIC = 989904.9) and adjusted models (Table 3.8). The effect size was small (Cohen's d = 0.201). Higher levels of anxiety were also associated with a greater felt need to help others outside one's family with a similar effect size (Cohen's d = 0.312).

Results indicated that participants with a PWI score of 90 reported a felt need to help others score that was on average 6.46 points higher than participants who reported a PWI score of 60 (p < .001). A satisfaction with community connectedness score of 90 was associated with a felt need to help others that was on average 5.78 points higher than participants who reported a community connectedness score of 60 (p < .001).

It is likely that the association between PWI scores and the felt need to help others is largely explained by community connectedness, which was positively associated with the need to help others in both the unadjusted and adjusted models (Cohen's d = 0.268; Table 3.9 and Figure 3.46).

Table 3.8 General linear models for helping others with overall PWI score adjusted for covariates. R^2 = .055, AIC = 9.052, BIC = 719200.7.

Variable	*B*	95% CI		*p*-value
		LL	*UL*	
PWI	**0.215**	**0.107**	**0.324**	**< .001**
Loss of income				
Yes	-0.598	-2.981	1.785	.623
Gender				
Female	2.797	0.429	5.166	.021
Fulltime work status				
FT retired	-4.537	-7.642	-1.431	.004
FT volunteer	6.059	-2.895	15.013	.185
FT home duties	4.935	-0.085	9.954	.054
FT study	-2.529	-6.129	1.071	.169
Unemployed	-11.756	-22.099	-1.413	.026
Anxiety	0.150	0.101	0.198	< .001

Note. Reference groups are: Income loss = No; Gender = Female; and Employment = Fulltime employed

Table 3.9 General linear model for results for helping others with individual unadjusted (R^2 = .022, AIC = 9.089, BIC = 972125.3) and adjusted (R^2 = .0 AIC = 9.039, BIC = 704615.1) SWB domains.

Variable	*B*	95% CI		*p*-value	*B*	95% CI		*p*-value
		LL	*UL*			*LL*	*UL*	
Standard of living	0.004	-0.090	0.098	0.935	0.036	-0.073	0.144	.518
Personal health	-0.030	-0.101	0.040	0.400	-0.039	-0.117	0.039	.328
Achieving in life	0.031	-0.050	0.112	0.453	0.063	-0.029	0.155	.182
Interpersonal relationships	-0.003	-0.068	0.062	0.921	-0.025	-0.098	0.049	.509
Personal safety	-0.060	-0.139	0.019	0.134	-0.058	-0.143	0.028	.187
Community connectedness	**0.183**	**0.119**	**0.248**	**0.000**	**0.193**	**0.120**	**0.266**	**< .001**
Future security	-0.035	-0.110	0.039	0.350	0.009	-0.079	0.098	.839
Loss of income								
Yes		-			-0.158	-2.551	2.236	.897
Gender								
Female		-			2.662	0.315	5.009	.026
Fulltime work status								
FT retired		-			-5.145	-8.300	-1.990	.001
FT volunteer		-			3.941	-5.280	13.163	.402
FT home duties		-			4.616	-0.468	9.700	.075
FT study		-			-2.191	-5.806	1.424	.235
Unemployed		-			-10.806	-20.814	-0.799	.034
Anxiety		-			0.140	0.091	0.189	< .001

Note. Reference groups are: Income loss = No; Gender = Female; and Employment = Fulltime employed

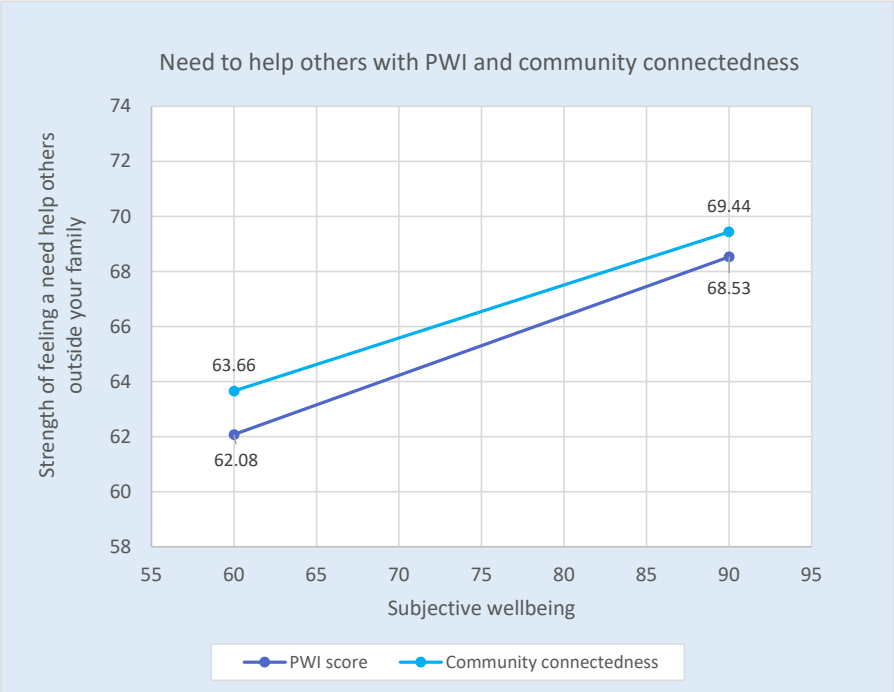

Figure 3.46 Relationship between the felt need to help others with PWI and satisfaction with community connectedness.

3.2.5 Positive experiences during COVID-19

This section of the report examines a range of positive experiences that Australian adults reported during the first phase of social restrictions between March and May 2020.

Results indicated that 1,549 (78.83%) of the sample reported more work life balance during the COVID-19 restrictions, with 1,709 (86.97%) reporting more quality time with family and 1,796 (91.40%) living life more simply. It was notable that 1,894 (96.39%) participants also reported having greater empathy for others and 1,886 (95.98%) reported more gratitude for the things they have in life. Average and standard deviation scores for these items are presented in Table 3.10.

Table 3.10 Summary statistics for positive consequences due to COVID-19 variables.

	Descriptive statistics			
	N	%	*M*	*SD*
More work life balance	1,879	95.62	48.03	31.22
More quality time with your family	1,950	99.24	56.53	32.30
Living more simply	1,960	99.75	61.99	28.29
More gratitude for the things you have	1,957	99.59	73.86	24.59
Greater empathy for others	1,953	99.39	72.29	23.35
Index of positive consequences	1,951	99.29	62.74	20.05

Positive experiences and subjective wellbeing

Work life balance

Linear mixed models for work life balance were fitted with overall PWI scores, age, household composition, fulltime work status, and geographical remoteness. Work life balance was only associated with fulltime-work status in the final models ($X^2(5) = 26.08$, $p < .001$; Figure 3.47). The fulltime employed (Cohen's $d = 0.360$) and fulltime students (Cohen's $d = 0.300$) reported greater work life balance compared to fulltime retired participants. Additionally, fulltime employed participants reported greater work life balance compared to participants in fulltime home duties (Cohen's $d = 0.440$).

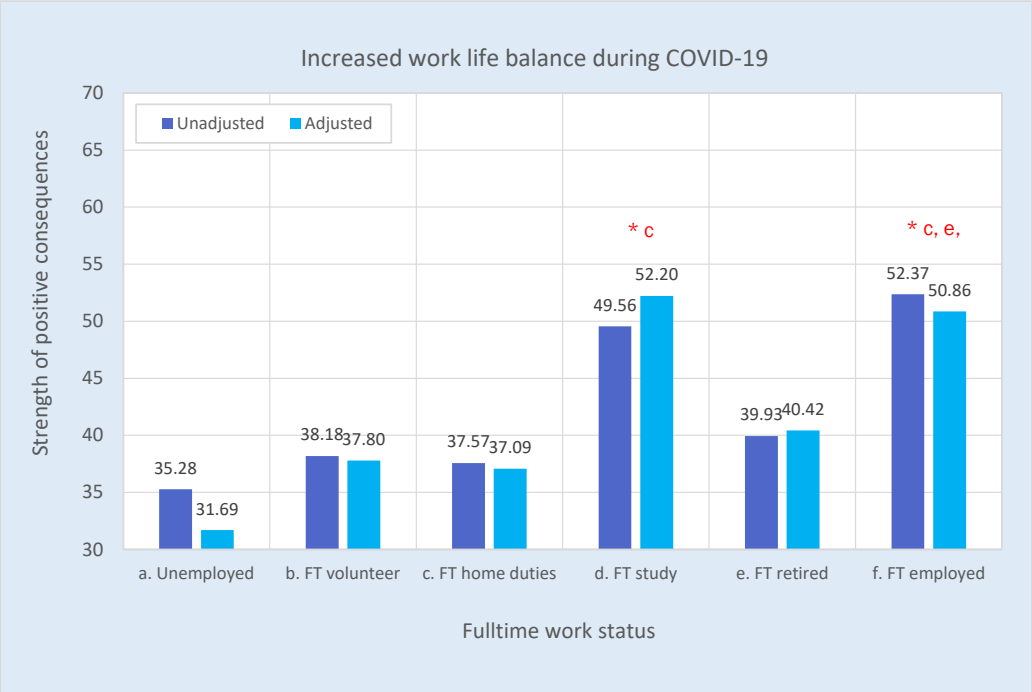

Figure 3.47 Adjusted and unadjusted means for increased work life balance due to COVID-19 by fulltime work status.

Quality time with family

Quality time with family was associated with age ($X^2(6) = 16.06$, $p = .013$) and household composition ($X^2(5) = 101.85$, $p < .001$), after adjusting for PWI scores, age, household composition, marital status, fulltime work status and geographical remoteness. Lowest levels of quality time with the family were observed in the 66-75 year age category, and this was significantly lower compared to the 76+ age category (Cohen's $d = 0.357$).

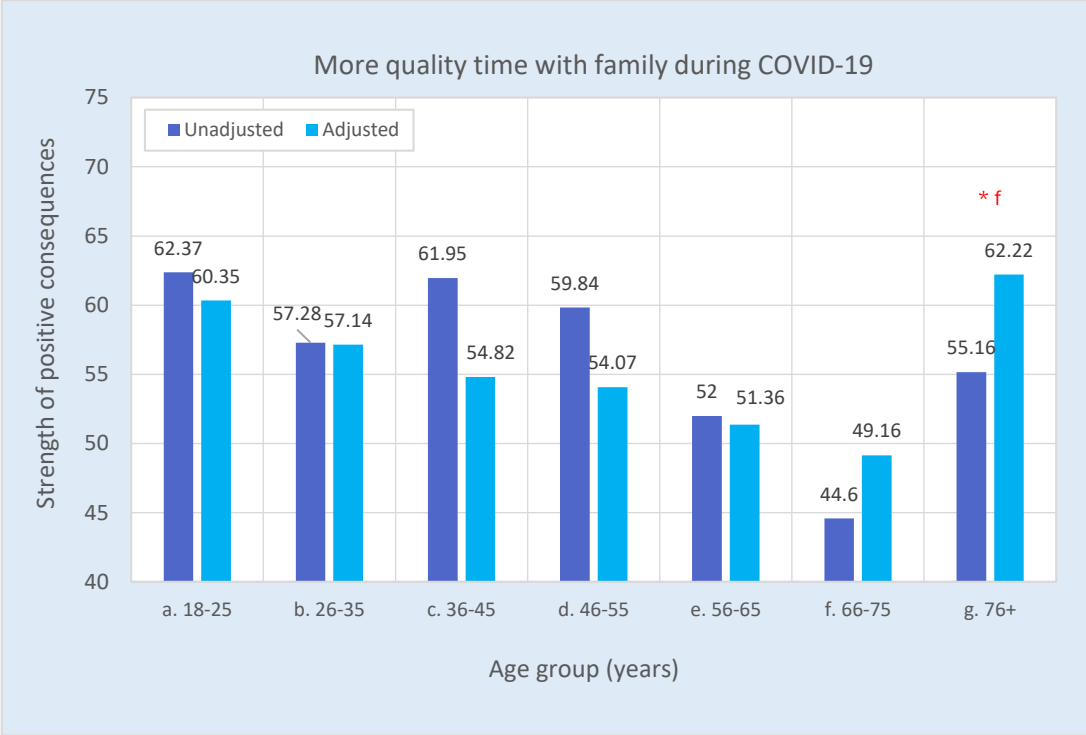

Figure 3.48 Adjusted and unadjusted means for more quality time with family due to COVID-19 by age group.

Participants who lived alone, with their partner or with others reported less quality time with family compared to participants who lived with children, or those who lived with their parents (Figure 3.49). Effect sizes were small to moderate for participants who lived only with a partner (Cohen's *d* ranged from 0.277 to 0.649), moderate for participants who lived with others (Cohen's *d* = 0.650 and 0.717), and moderate to large for participants who lived alone (Cohen's *d* ranged from 0.620 to 0.988).

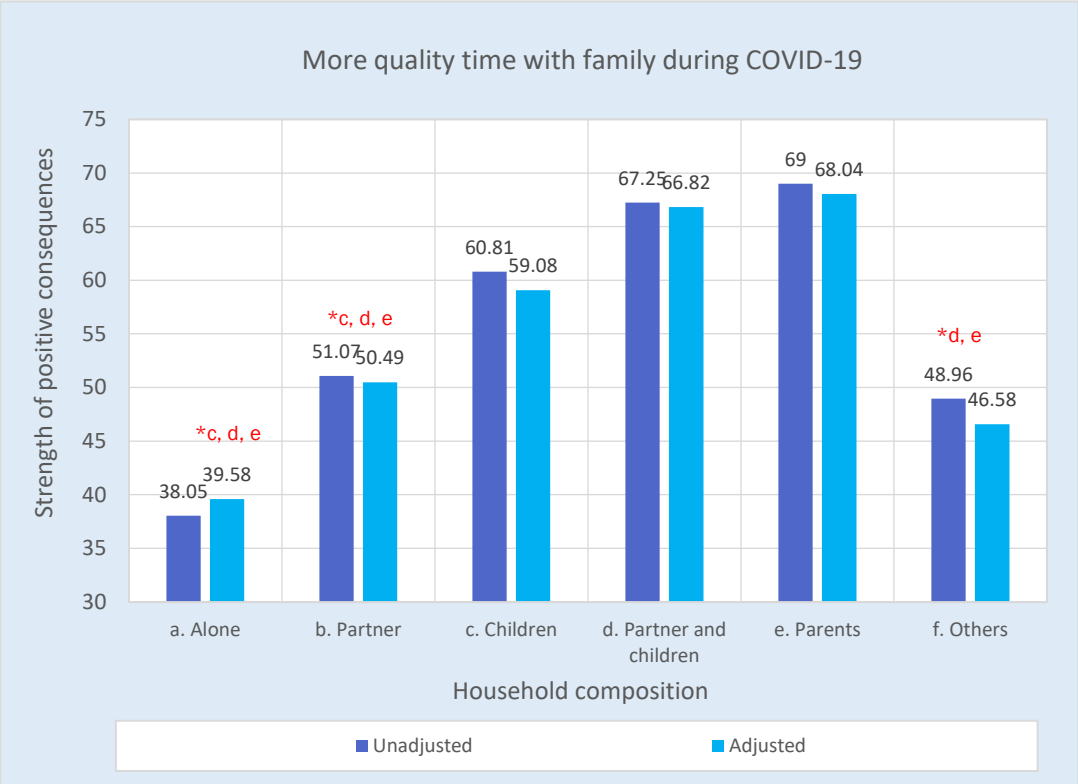

Figure 3.49 Adjusted and unadjusted means for more quality time with family due to COVID-19 by household composition.

Living more simply

Living more simply was associated with gender ($X^2(1) = 7.08$, $p = 008$), household composition ($X^2(5) = 30.13$, $p < .001$) and geographical remoteness ($X^2(2) = 10.49$, $p = .005$).

Females were more likely to report experiencing living more simply compared to males (Figure 3.50), however effect sizes were negligible (Cohen's $d = .096$). Similarly, households with children reported living more simply compared to participants who lived alone or only with their partner; effect sizes here were small (Cohen's d ranged from 0.326 to 0.395; Figure 3.52). Finally, participants who lived in metropolitan areas reported living more simply compared to their regional counterparts (Cohen's $d = 0.207$; Figure 3.53).

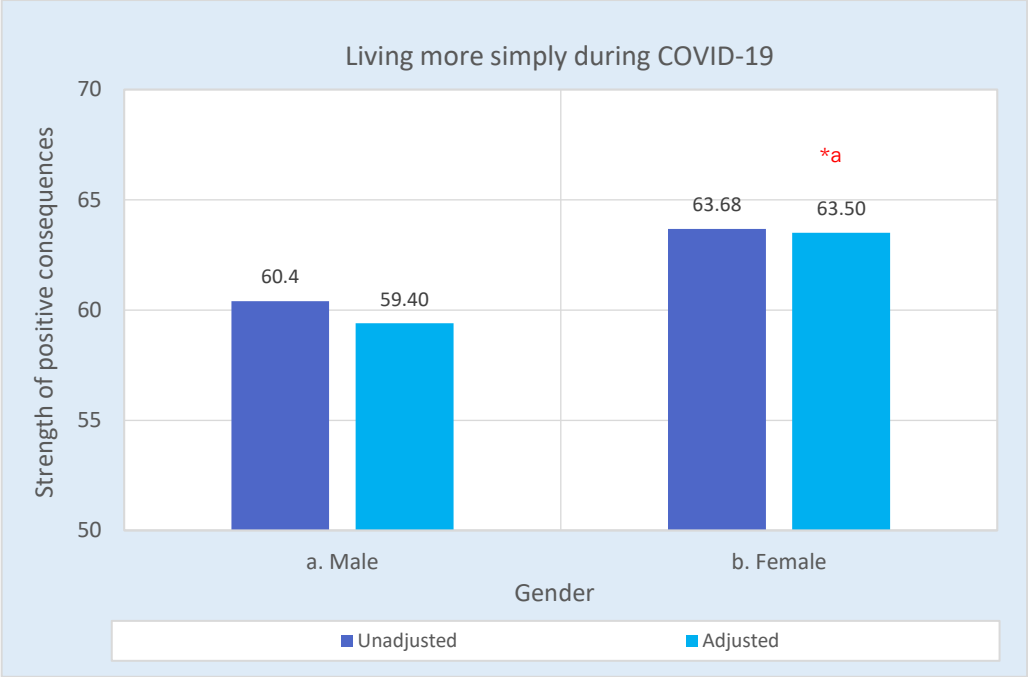

Figure 3.50 Adjusted and unadjusted means for living more simply due to COVID-19 by gender.

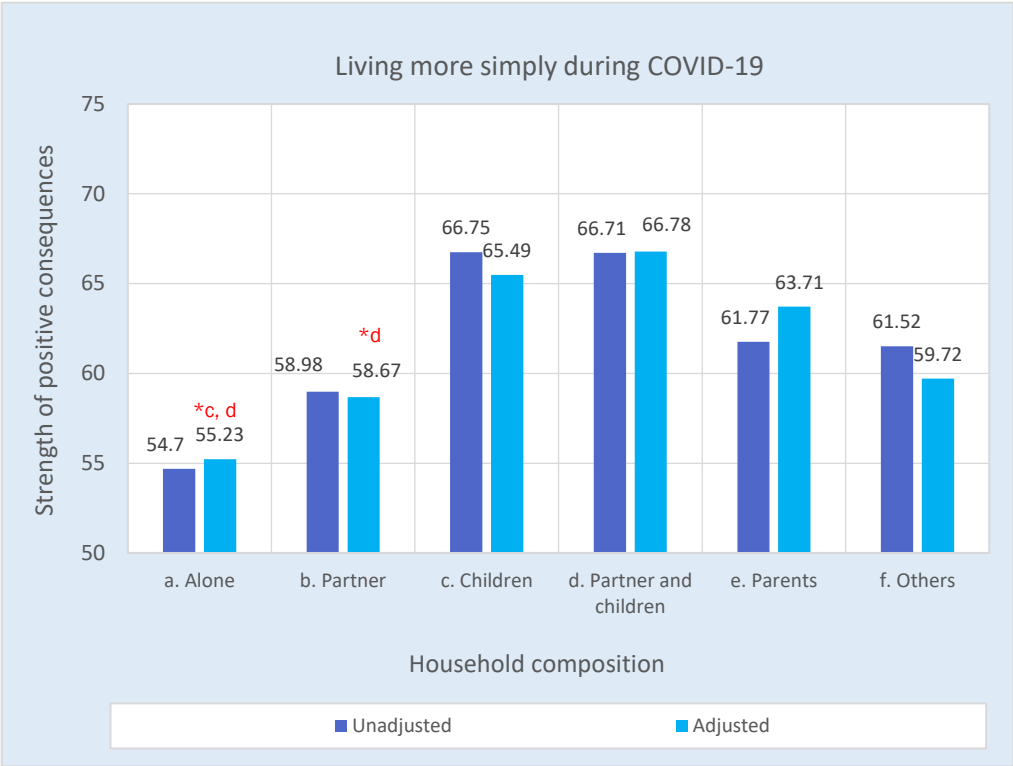

Figure 3.51 Adjusted and unadjusted means for living more simply due to COVID-19 by household composition.

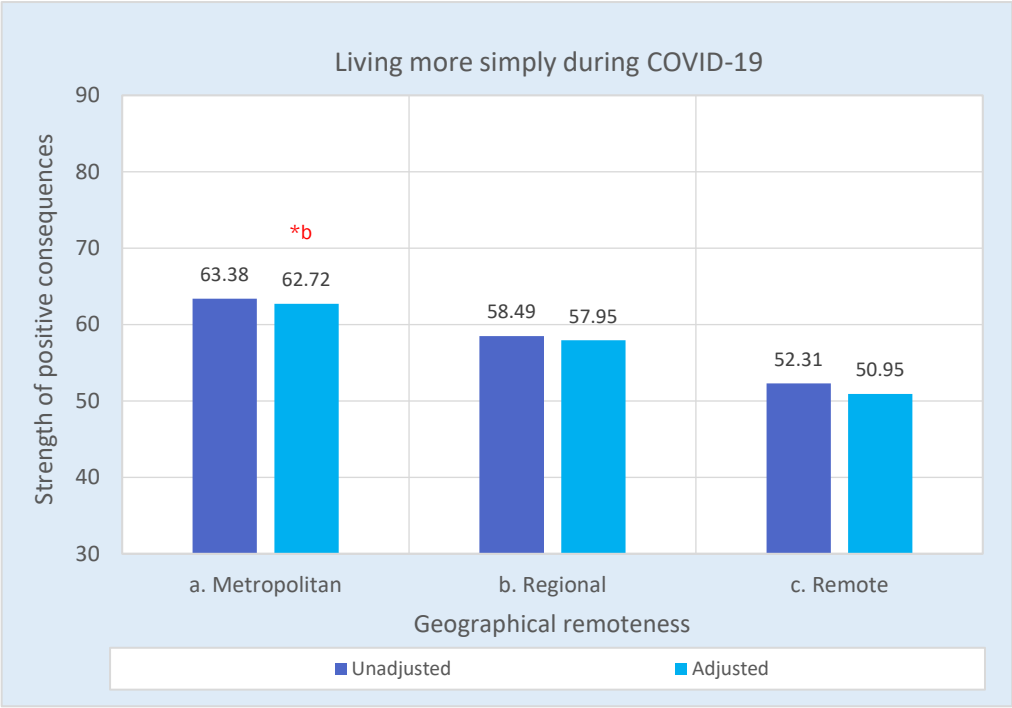

Figure 3.52 Adjusted and unadjusted means for living more simply due to COVID-19 by geographical remoteness.

More gratitude for the things you have

Gender, age group and household composition were associated with participants' experience of gratitude for the things they have, after adjustment for PWI scores. Females reported higher levels of gratitude compared to males (Cohen's *d* = 0.326; Figure 3.53). Gratitude levels were generally similar across young and middle adulthood (up to 65 years), with lower scores observed in the 66-75 year age group (Figure 3.54). Mean differences were statistically significant for participants aged 66-75 years compared to participants aged 18-25 and 26-35 years (Cohen's *d* = 0.301 and 0.193 respectively). Moreover, partnered households with children reported greater gratitude levels compared to participants who lived alone (Cohen's *d* = 0.267; Figure 3.55).

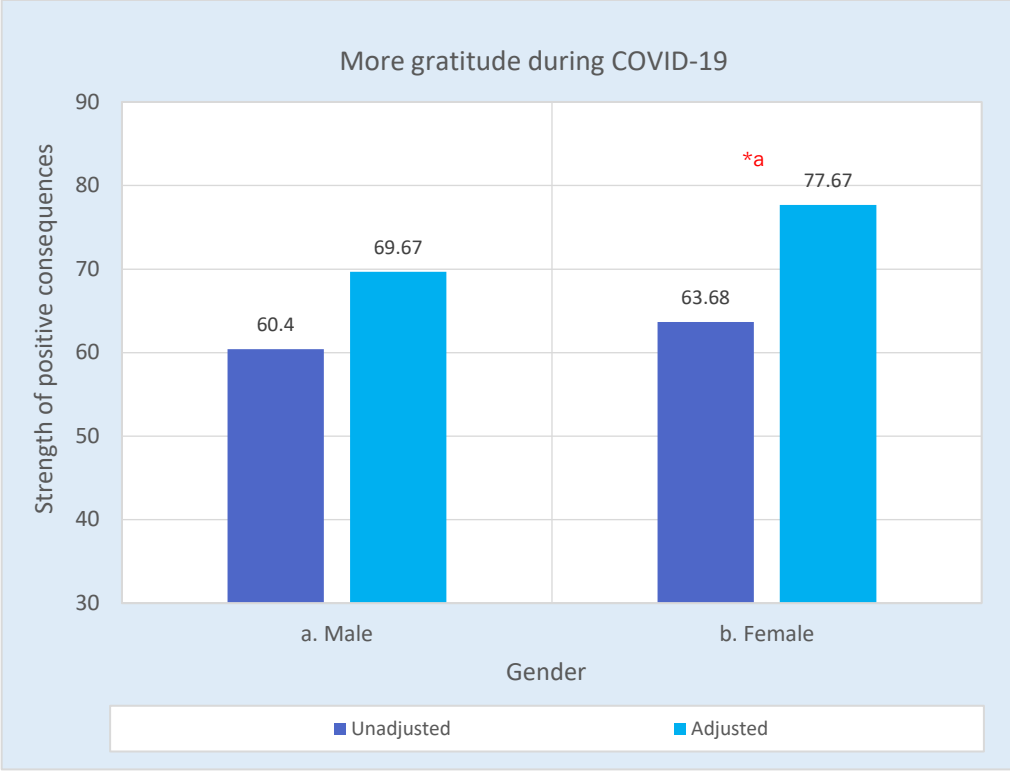

Figure 3.53 Adjusted and unadjusted means for more gratitude due to COVID-19 by gender.

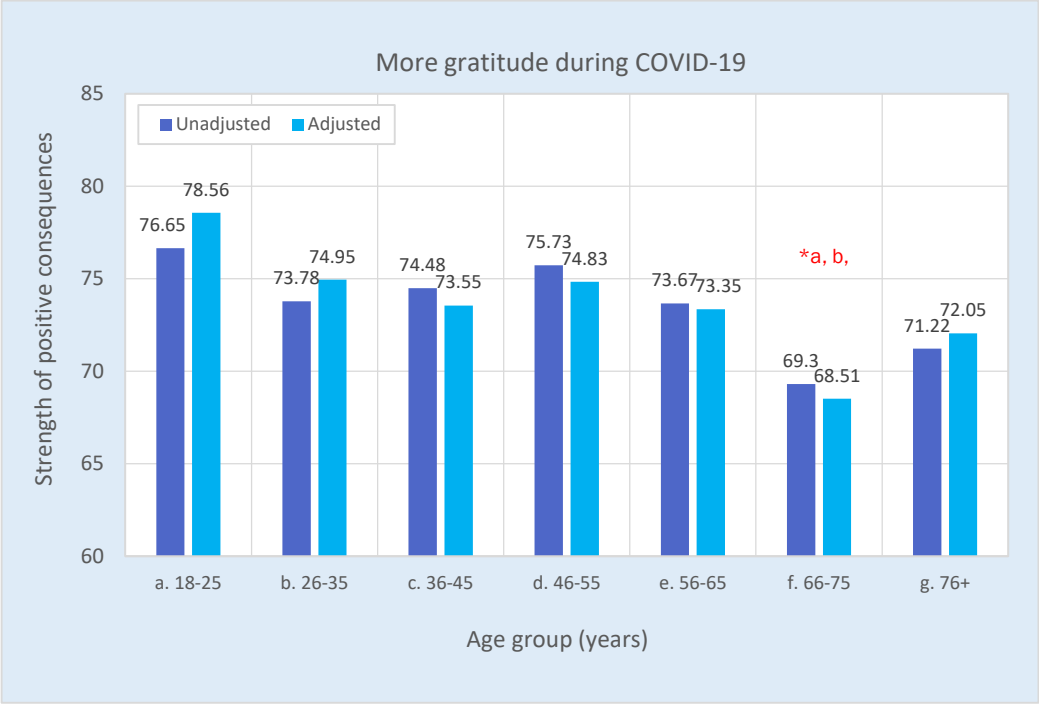

Figure 3.54 Adjusted and unadjusted means for more gratitude due to COVID-19 by age group.

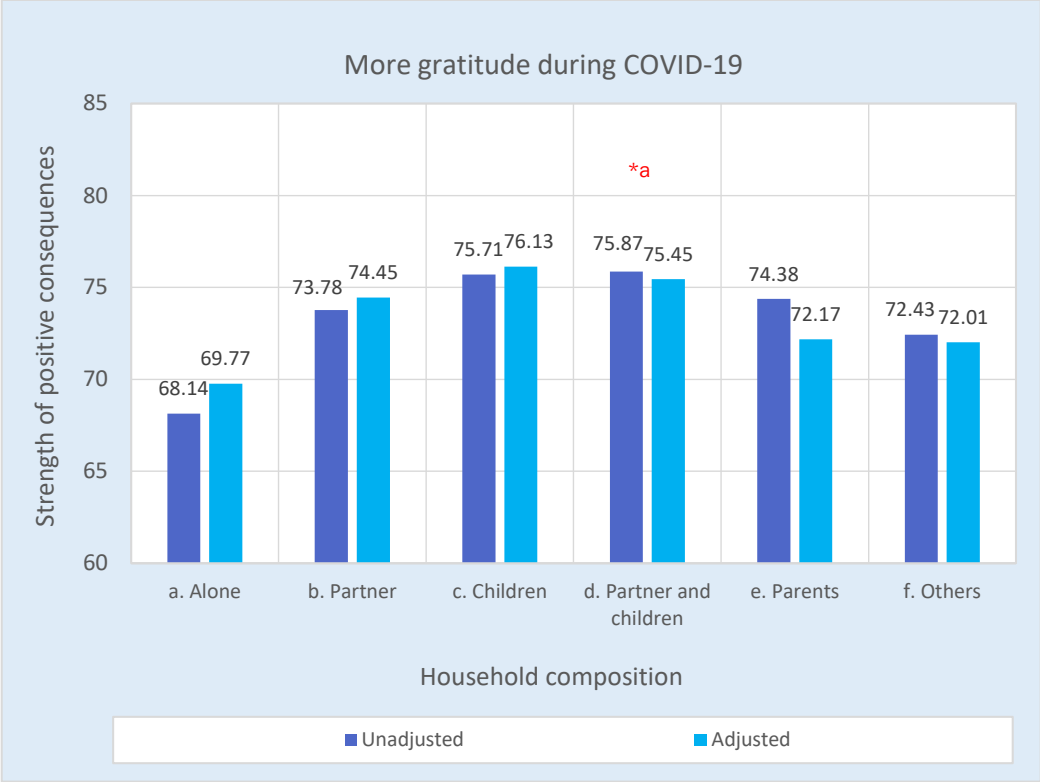

Figure 3.55 Adjusted and unadjusted means for more gratitude due to COVID-19 by household composition.

Greater empathy for others

Empathy for others was only associated with gender, after adjustment for PWI scores and fulltime work status (Figure 3.56). Females reported somewhat higher levels of empathy compared to males (Cohen's *d* = 0.378).

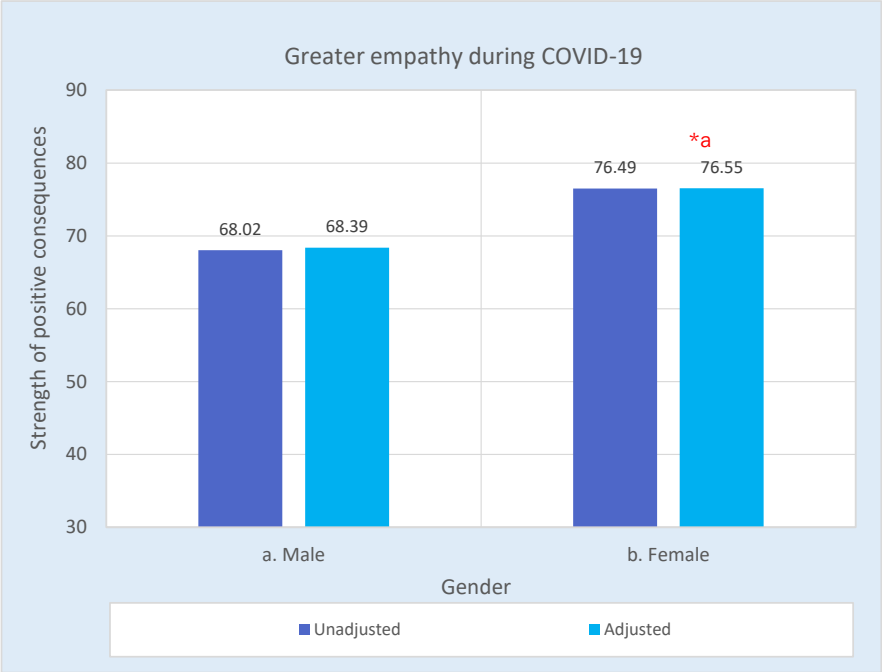

Figure 3.56 Adjusted and unadjusted means for greater empathy due to COVID-19 by gender.

Associations between income loss and positive experiences during COVID-19

Of the five positive experiences examined, quality time with family ($X^2(4) = 28.96$, $p < .001$) and living more simply ($X^2(4) = 14.01$, $p = .007$) were associated with income loss.

Specifically, there was a pattern of higher income loss and more quality time with family (Figure 3.57). Mean group differences were statistically significant for the 76-100% income loss category with the 0% (Cohen's $d = 0.439$) and 1-25% (Cohen's $d = .401$) income loss categories.

Living more simply also trended higher with increasing percentage of income loss, however, group differences were not significant after Bonferroni corrections (Figure 3.58).

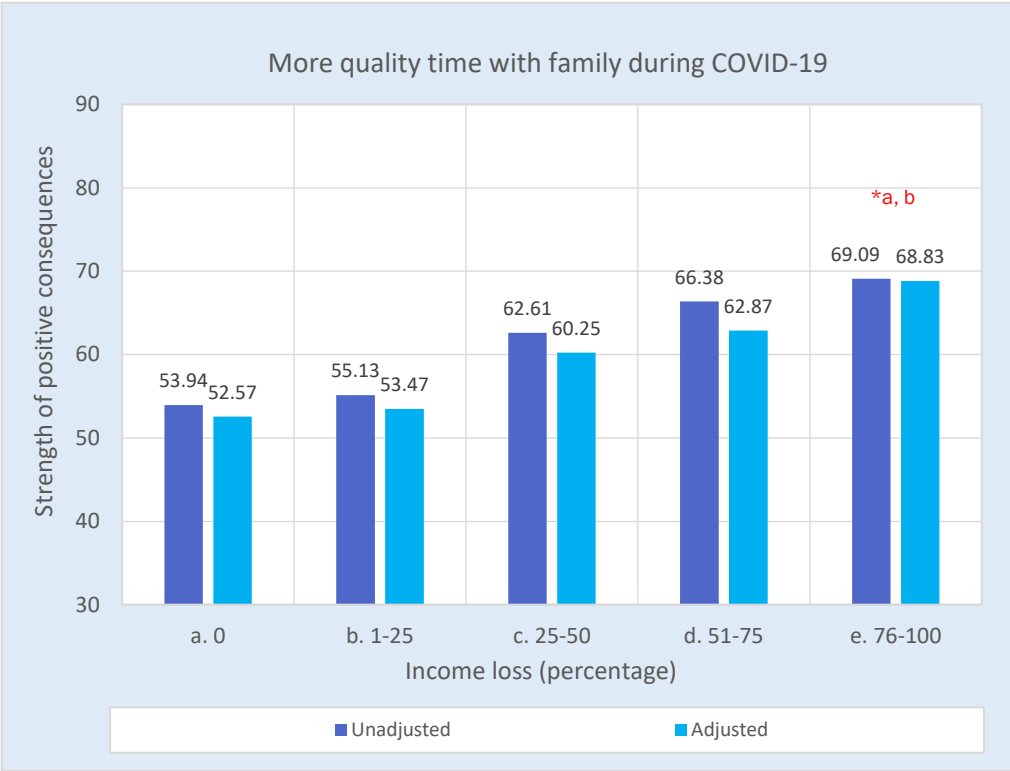

Figure 3.57 Adjusted and unadjusted means for more quality time with family due to COVID-19 by income loss.

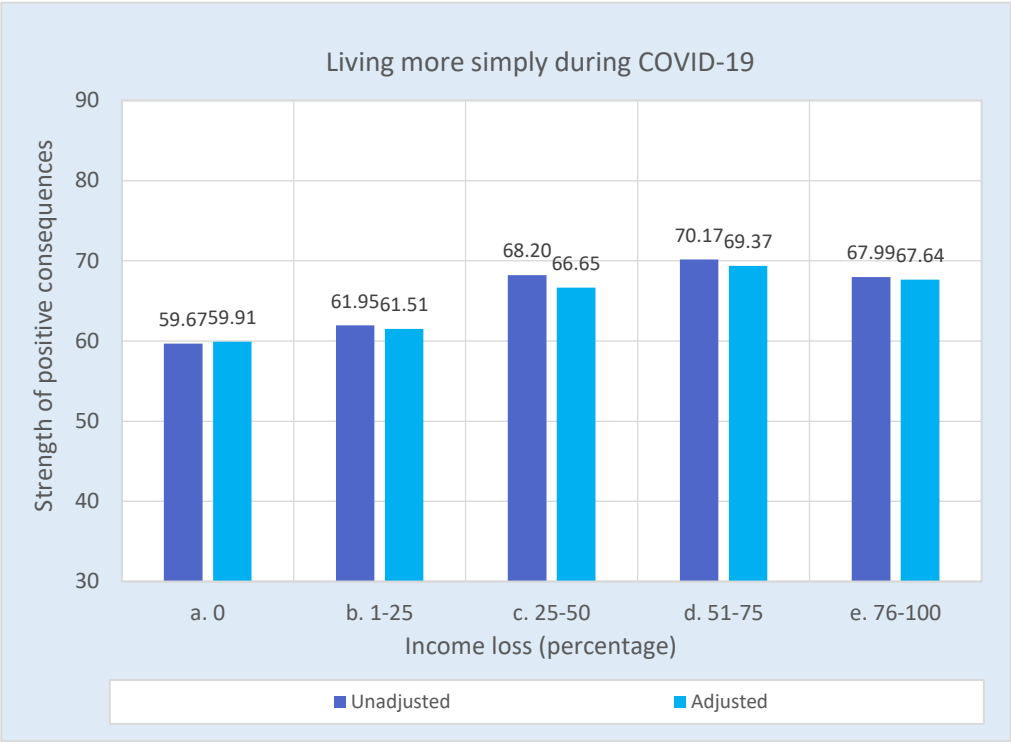

Figure 3.58 Adjusted and unadjusted means for living more simply due to COVID-19 by income loss.

3.2.6 Perception of the impact of COVID-19 on life

Overall, 1,692 (86.11%) participants reported that their home life was more difficult, 1,933 (98.37%) participants reported that they had some control over their lives right now, and 1,922 (97.81%) participants reported that life was going to be different after COVID-19. Mean scores on the perceived impact of COVID-19 on life were in the low to moderate range, whereas participants reported moderate to high levels of control over their lives, and felt strongly that life will be different after the COVID-19 pandemic (Table 3.11).

Table 3.11 Summary statistics for perception of the impact of COVID-19 on life variables.

	Descriptive statistics			
	N	%	*M*	*SD*
How much has COVID-19 made home life difficult?	1,962	99.85	43.81	29.63
How much control do you feel you have over your life right now?	1,961	99.80	69.02	22.17
Do you think life will be different after the COVID-19 crisis?	1,958	99.64	75.38	22.93

Impact of COVID-19 and demographics

Gender

Perceived control over life and how different life will be after COVID-19 were similar for males and females (Figure 3.59), but compared to males, females were more likely to report difficulties in home life due to COVID-19 ($F(2, 1959) = 6.74$, $p < .001$; Contrast = 4.89 points, Cohen's d = 0.165).

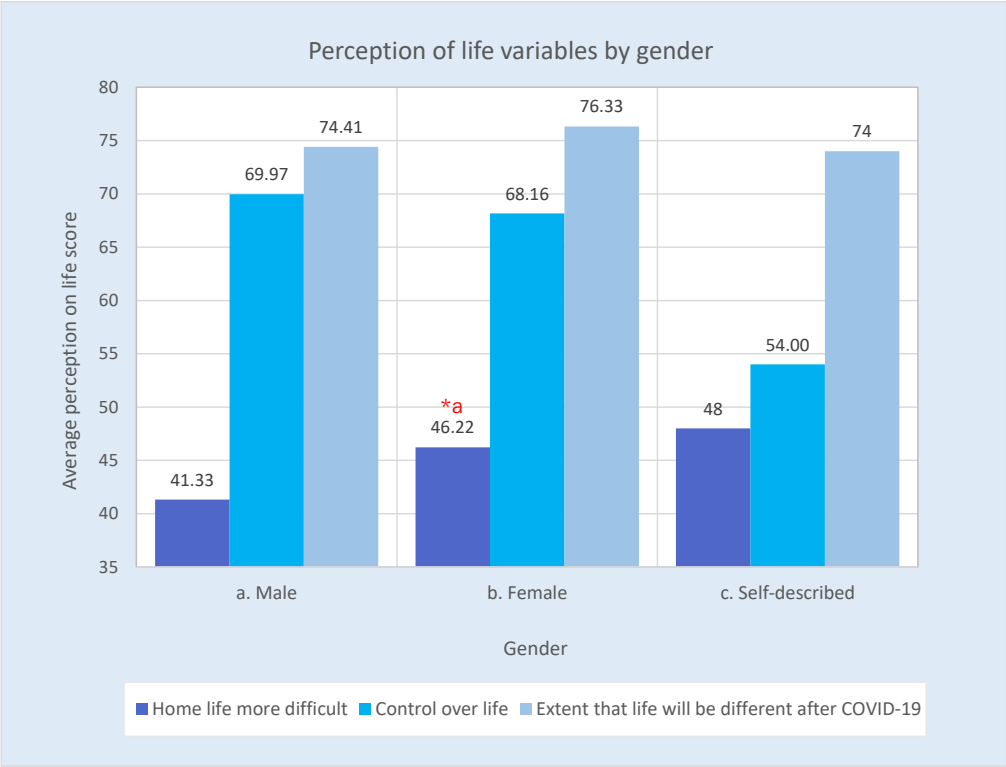

Figure 3.59 Perception on life variables by gender.

Age

There were no differences by age in participant's perception that home life is more difficult or that life will be different after COVID-19 (Figure 3.60). Perception of control over life was similar in young and middle adulthood and higher in older adulthood (over 66 years, $F(6, 1920) = 9.58$, $p < .001$). The effect sizes were in the small to medium range (Cohen's $d = 0.346$ to 0.683).

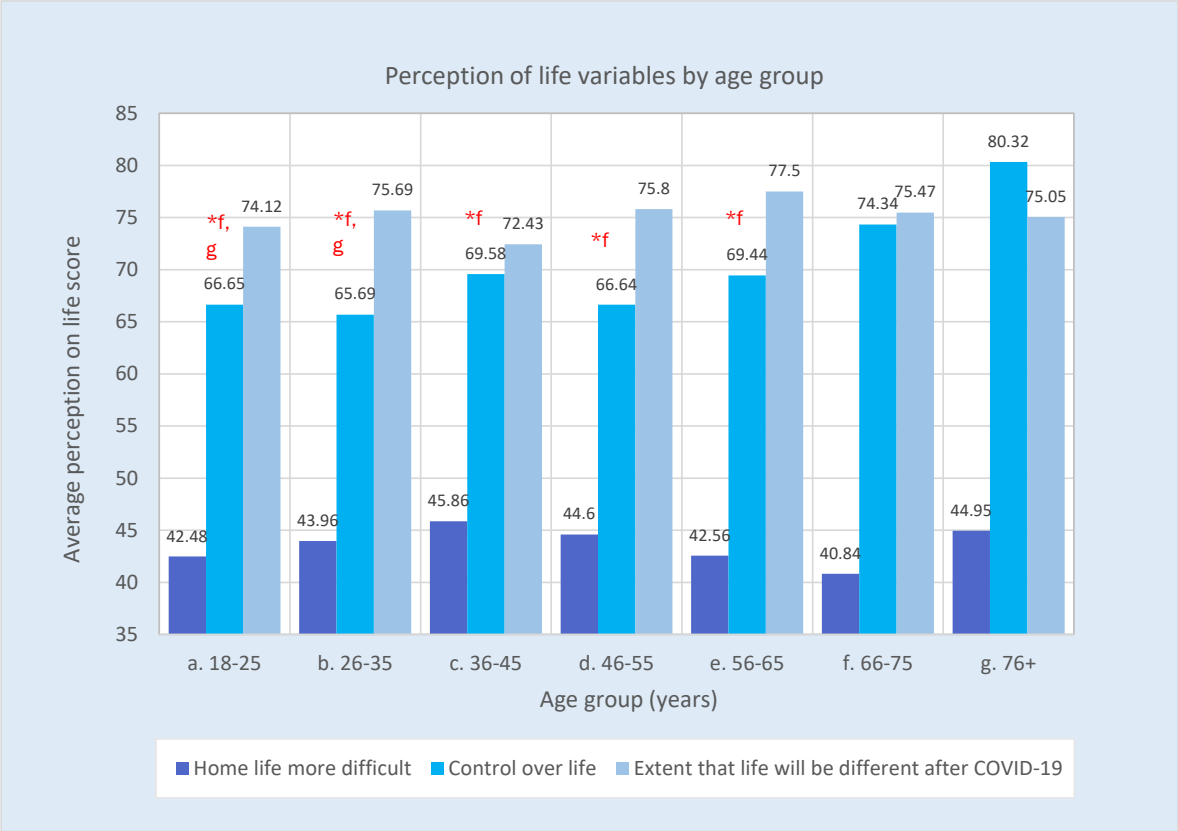

Figure 3.60 Perception on life variables by age group.

Income

Highest levels of difficulties in home life due to COVID-19 were reported by those with very low to low incomes (<$15000 per annum). This pattern reversed as income increased ($F(7, 1632) = 5.21$, $p < .001$, Figure 3.61). The contrast was most evident between the lowest and highest income groups; effect sizes were small to moderate (Cohen's $d = 0.211$ to 0.787). Perceptions of control over life and the extent to which life will be different after COVID-19 were similar across income categories.

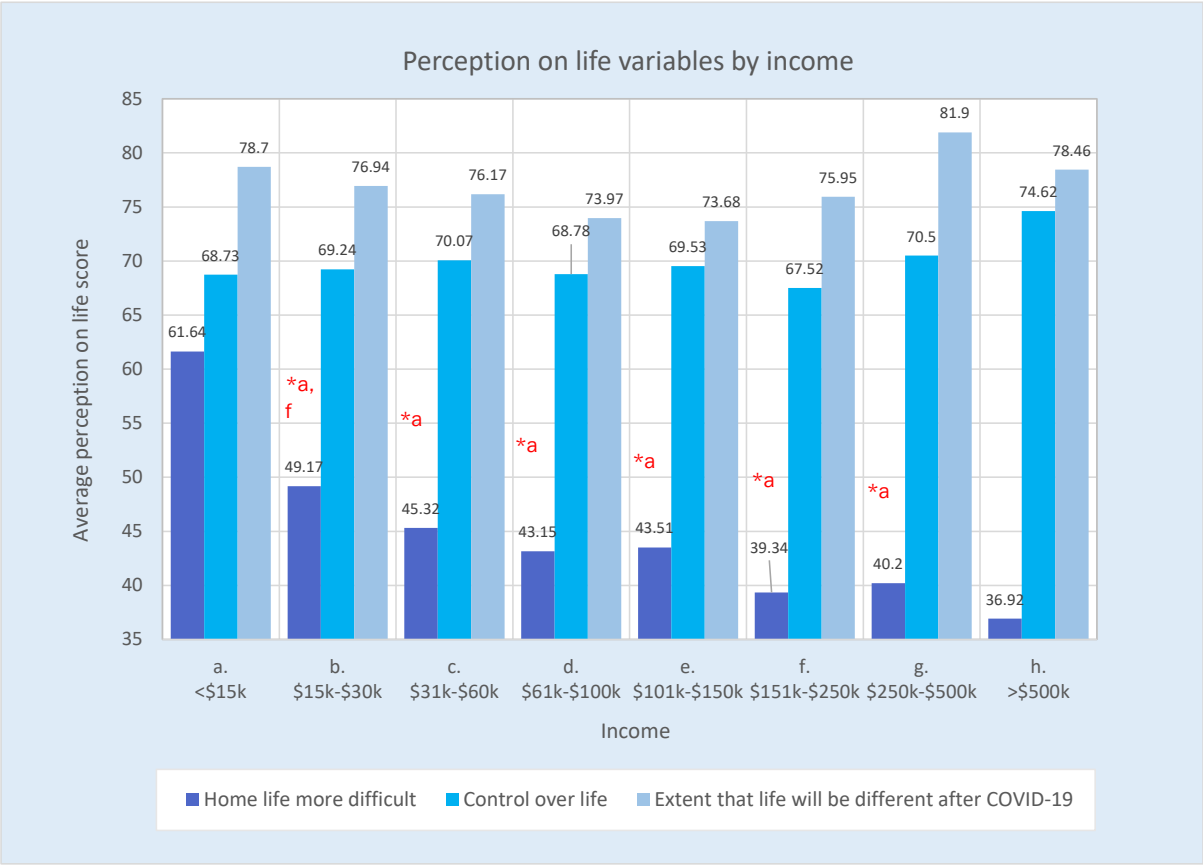

Figure 3.61 Perception on life variables by income.

Household composition

Level of difficulty in home life was similar across household income categories. One exception was adults living with a partner and children who reported increased difficulty in the home compared with participants living with parents or a partner only ($F(5, 1781) = 5.81$, $p < .001$, Figure 3.62). Effect sizes were small (Cohen's $d = 0.248$ to 0.392).

Levels of reported control over life were also similar relative to household composition, except for adults living with a partner and children who reported lower levels of perceived control over life relative to partnered households ($F(5, 1781) = 3.59$, $p < .003$, Contrast = 4.42, Cohen's $d = 0.209$).

The perception that life will be different after COVID-19 was not associated with household composition.

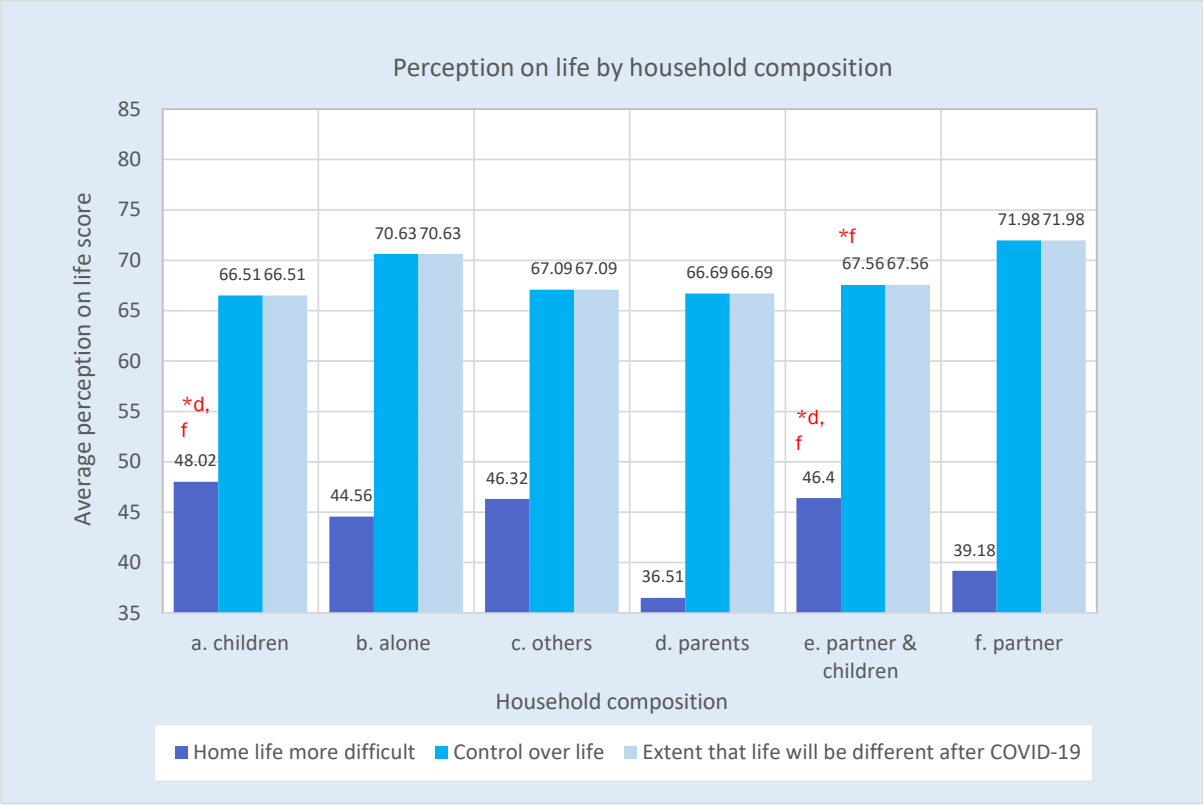

Figure 3.62 Perception on life variables by household composition.

Work status

Levels of difficulty in home life were highest among participants engaged in fulltime volunteering, home duties or study (Figure 3.63); however, only fulltime students had significantly higher scores relative to fulltime retirees ($F(5, 1572) = 3.26$, $p = .006$; Contrast = 9.05 points, Cohen's $d = 0.316$).

Fulltime retired participants reported the highest perceived levels of control over life while those who were unemployed reported lowest levels ($F(6, 210.55) = 5.078$, $p < .001$). Group mean differences were statistically significant between fulltime retirees and the fulltime employed, students, and unemployed participants (Cohen's $d = 0.292$ to 0.636).

The perception that life will be different after COVID-19 was not associated with fulltime work status categories.

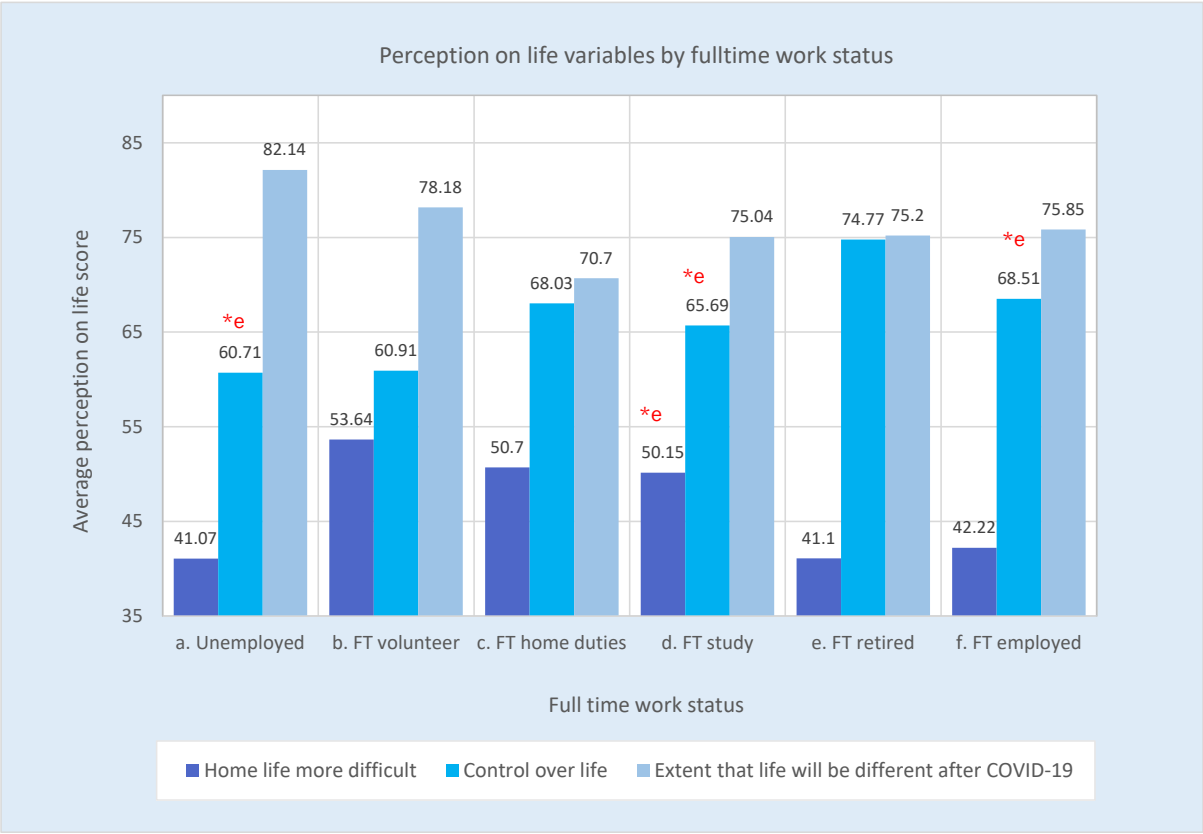

Figure 3.63 Perception on life variables by fulltime work status.

Marital status

Levels of difficulty in home life, reported control over life and the perception that life will be different after COVID-19 were not associated with marital status.

Subjective wellbeing and the perceived impact of COVID-19 on life

The associations of SWB with income loss, levels of difficulty in home life, levels of reported control over life and the perception that life will be different after COVID-19 were examined using linear mixed models. In unadjusted models, only levels of difficulty in home life and levels of reported control over life were significantly associated with PWI scores.

Levels of difficulty in home life and levels of reported control over life remained significantly associated with PWI scores in final models adjusted for income loss, gender, age group, household composition, income, marital status and fulltime work status (Table 3.12). Participants who reported higher levels of control over life reported higher PWI scores, while participants who reported higher levels of difficulty in home life reported lower PWI scores (Figure 3.64). Effects size were larger for levels of control over life (Cohen's *d* = 0.762) relative to difficulty in home life (Cohen's *d* = 0.145).

Table 3.12 Adjusted model for PWI with life control variables, income loss and demographic covariates.

Variable	*B*	*SE*	95% CI *LL*	95% CI *UL*	*p*-value	Contrast
Loss of income						
Yes	-4.058	2.091	-8.161	0.045	.053	F(1,1126) = 3.77
Home life more difficult	-0.028	0.011	-0.050	-0.007	.009	F(1,1126) = 6.79**
Control over life	0.240	0.019	0.203	0.277	< .001	F(1,1126) = 315.28***
Control over life x income loss	0.053	0.029	-0.004	0.110	.068	F(1,1126) = 3.35
Gender						F(1,1126) = 21.64***
Female	2.925	0.629	1.691	4.159	< .001	
Age						F(1,1124) = 1.21
26-35	-1.263	1.346	-3.905	1.378	0.348	
36-45	-1.052	1.496	-3.987	1.883	0.482	
46-55	-1.497	1.522	-4.484	1.489	0.326	
56-65	-1.694	1.578	-4.790	1.402	0.283	
66-75	0.017	1.833	-3.579	3.612	0.993	
76+	2.621	2.251	-1.795	7.037	0.245	
Household composition						F(1,1124) = 0.81
Partner	1.553	1.559	0.319	-1.506	4.612	
Children	1.279	1.423	0.369	-1.513	4.070	
Partner and children	0.175	1.625	0.914	-3.012	3.363	
Parents	-1.186	1.683	0.481	-4.488	2.116	
Others	0.843	1.352	0.533	-1.810	3.495	
Income						F(1,1124) = 5.24***
$15k-$30k	0.689	2.025	0.734	-3.285	4.662	
$31k-$60k	4.305	2.003	0.032	0.374	8.236	
$61k-$100k	4.763	1.982	0.016	0.875	8.651	
$101k-$150k	6.914	2.033	0.001	2.926	10.903	
$151k-$250k	7.484	2.065	0.000	3.433	11.535	
$250k-$500k	8.788	2.263	0.000	4.349	13.228	
>$500k	9.680	3.744	0.010	2.333	17.027	
Marital status						F(1,1124) = 0.24
de facto	-1.864	1.010	0.065	-3.845	0.117	
never married	-2.251	1.611	0.163	-5.413	0.910	
separated but not divorced	-3.452	2.025	0.089	-7.426	0.522	
divorced	-3.374	1.716	0.050	-6.742	-0.007	
widowed	-2.494	2.012	0.215	-6.441	1.453	
Fulltime work status						F(1,1124) = 2.23*
FT retired	1.063	1.213	0.381	-1.317	3.442	
FT volunteer	-5.246	3.531	0.138	-12.174	1.683	
FT home duties	0.321	1.604	0.841	-2.825	3.468	
FT study	3.053	1.566	0.051	-0.020	6.125	
Unemployed	-1.318	2.894	0.649	-6.996	4.361	

Note. Reference groups are: Income loss = No; Gender = Male; Age = 18-25 years; Household composition = Alone; Income = less than $15,000; Marital status = married; and Employment = Fulltime employed

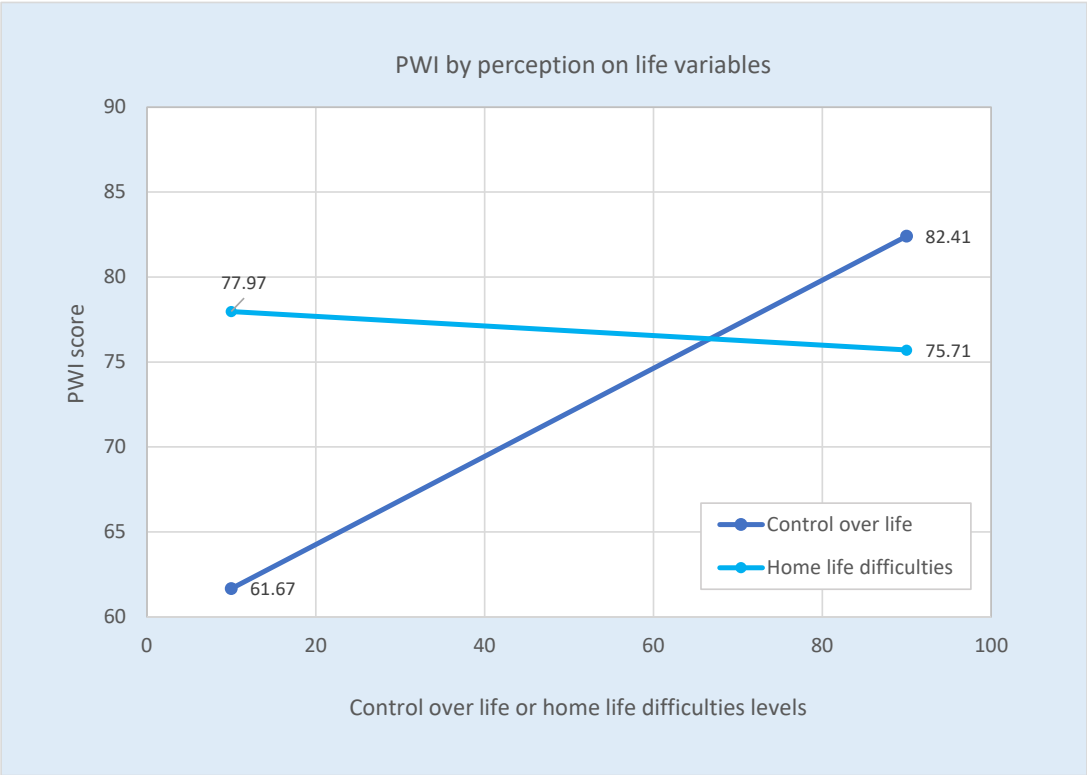

Figure 3.64 Relationship between control over life and home life difficulties with PWI.

Qualitative analysis: How will life be different after COVID-19?

In the final part of the 2020 survey we asked 500 participants in the sample about how they expected life to change after the COVID-19 pandemic. Their responses were open ended and were recorded *ad verbatim*. Participants were the first 500 people who indicated that they expected there would be a change in life after COVID-19.

These text responses were analysed and grouped by common themes. The most commonly used 1,000 words identified in these text responses were summarised into a word cloud using cluster analysis (Figure 3.65). The word cloud suggests that participants most commonly reported expected changes in the areas of work and home life.

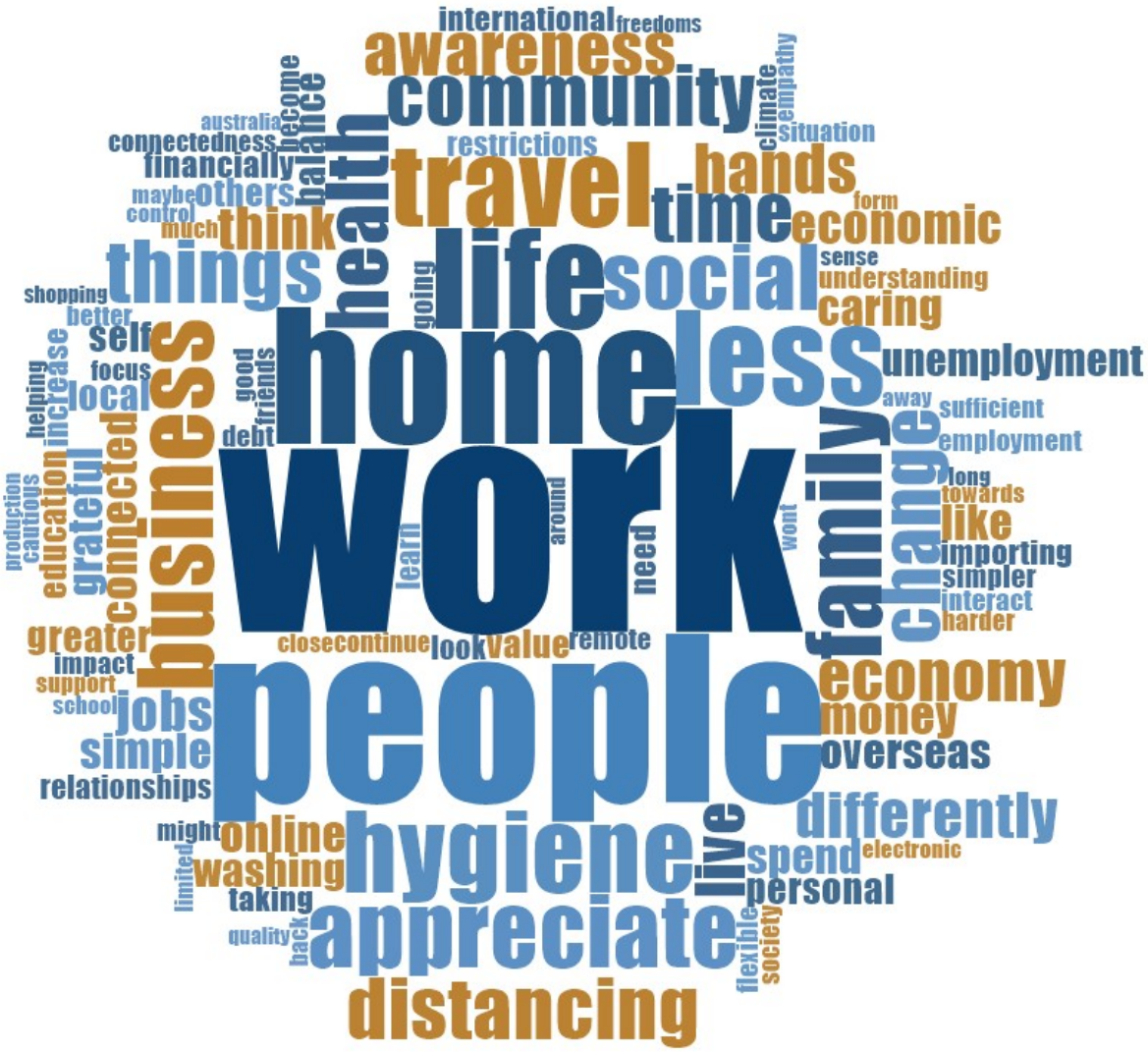

Figure 3.65 Derived word cloud of thematic analysis of how life will be different after COVID-19.

The number of times a major theme was referenced in text is presented in Figure 3.66. Key themes were related to lifestyle, values, or mindset changes, followed by economic changes and changes to how work is conducted ("*remotely*"), and how jobs are performed ("*working from home*"). Participants also described possible changes to social connections with others, including ongoing social distancing, and an increased awareness of public health issues. Several participants speculated about a reduction in globalisation and a return to nationalism and self-sustainability. A selection of anonymised participant statements that reflect the major themes in Figure 3.66 are presented in the following section.

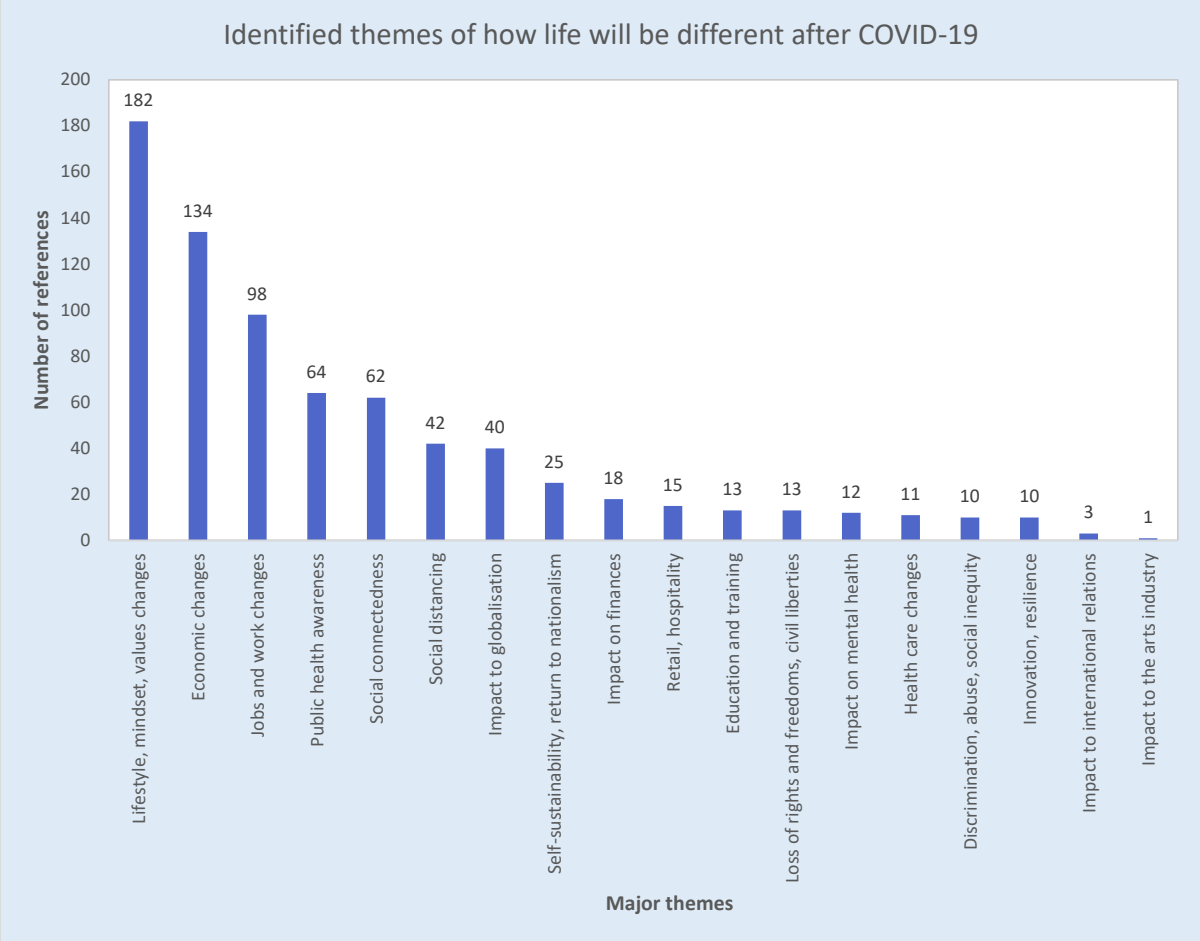

Figure 3.66 Primary identified themes of how life will be different after COVID-19.

Sentiments were often mixed, as stated by the following participant:

> *"Economically there going to be significant changes. Small business operators will feel positive and negative effects - it will open up opportunities for people to re-evaluate things and change their business plans. Some people will be forced to recognise opportunities they previously did not know existed. It will be really tough for some people as well, they will have to be resilient in ways they may not have been before."*

Negative sentiments were expressed in regard to the potential ***economic impacts*** of COVID-19 on Australia, however, ***positives*** were also identified in relation to how people may ***change their lifestyles for the better*** (Figures 3.67– 3.69).

On ***public health awareness***, most identified that there would be increased vigilance around hand hygiene due to the nature of how diseases like COVID-19 spread.

"…as a community a lot more conscious of hygiene and I would hope there would be more sanitiser stations around. And more ways to cross the road without pressing buttons and redesign of public spaces so that you're not touching doors or doing things to spread germs."

"I think we'll continue to be more careful, we'll be a more careful society, in terms of health, washing hands, and our behaviour for contagious illness like flu…"

In relation to ***ongoing social isolation and social distancing*** practices, participants identified that this is something likely to persist.

"…People will be more cautious, like in public places like in close proximity to other people, hand washing and keeping away from people coughing won't go away for a while…"

There was mixed sentiment in relation to whether people would be more or less ***socially connected*** to each other.

"… community will be stronger and more connected and I think people will feel more in tune with the natural environment…"

"The way we connect to people will be different. I think people will be more hesitant to connect to others, to be close to them…"

Some participants also anticipated that after COVID-19 people would feel enthusiastic about seeing others and being social again.

"I think people will be more eager to go to live events and catch up with friends, people will use the excuse 'I'm busy' a lot less, cause they're so keen to do things and see people."

Negative sentiments were expressed regarding the ***economic impacts of COVID-19***.

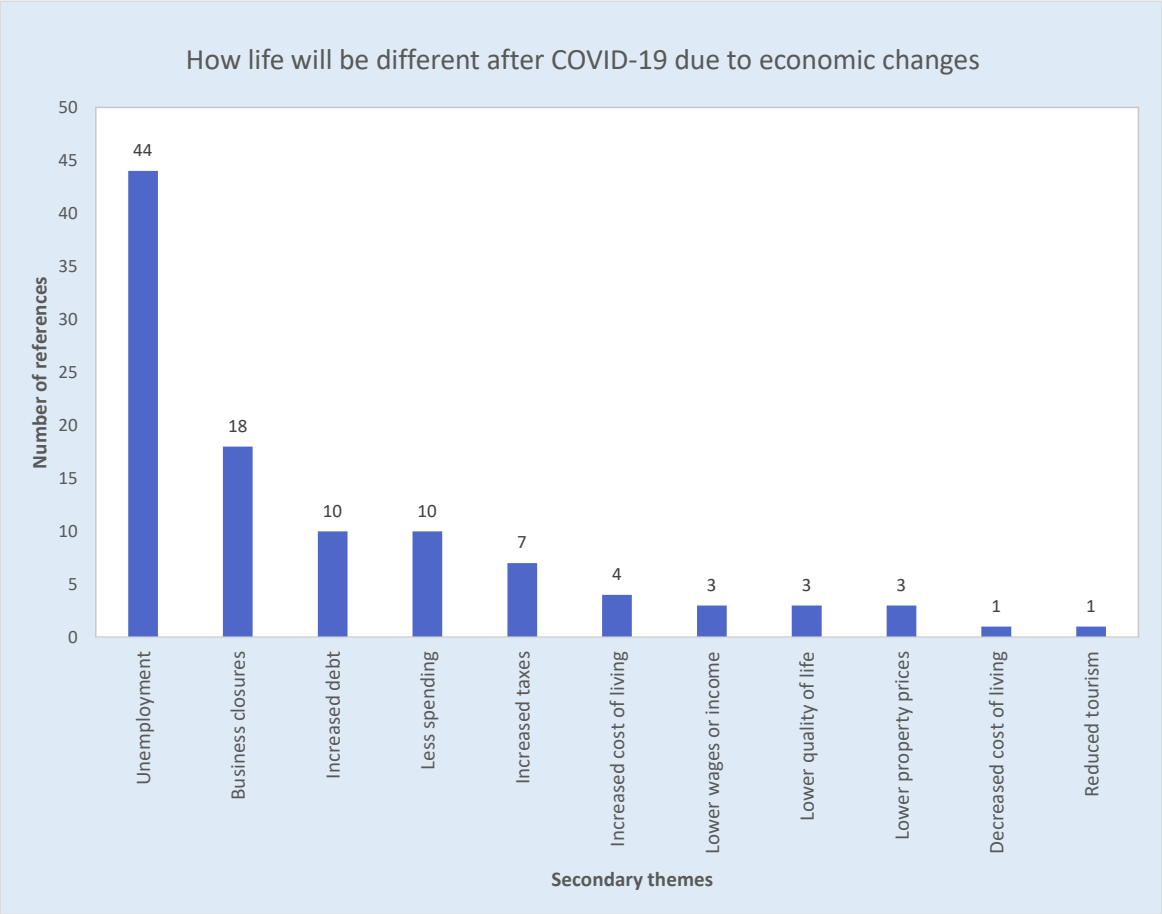

Figure 3.67 Themes identified of how life will be different after COVID-19 due to economic changes.

Unemployment was the greatest concern for those who identified negative economic outcomes due to COVID-19, with businesses being forced to close and decreased spending.

> *"...the economic situation will be different, I think probably after resolving [the virus] more unemployment will occur so it will have a huge impact on the economy not just Australia specifically but in many countries in world there will be an impact and it will take a long time to go back to normal."*

Government debt was also a concern, with some participants expressing concern that taxes may increase.

> *"There's going to be a lot of debt to pay back, so maybe taxes will go up. People may be less well off because they are paying more tax, so they will have less disposable income."*

In contrast, ***positive sentiment*** was expressed regarding ***changes to lifestyle, mindset, and/or values***.

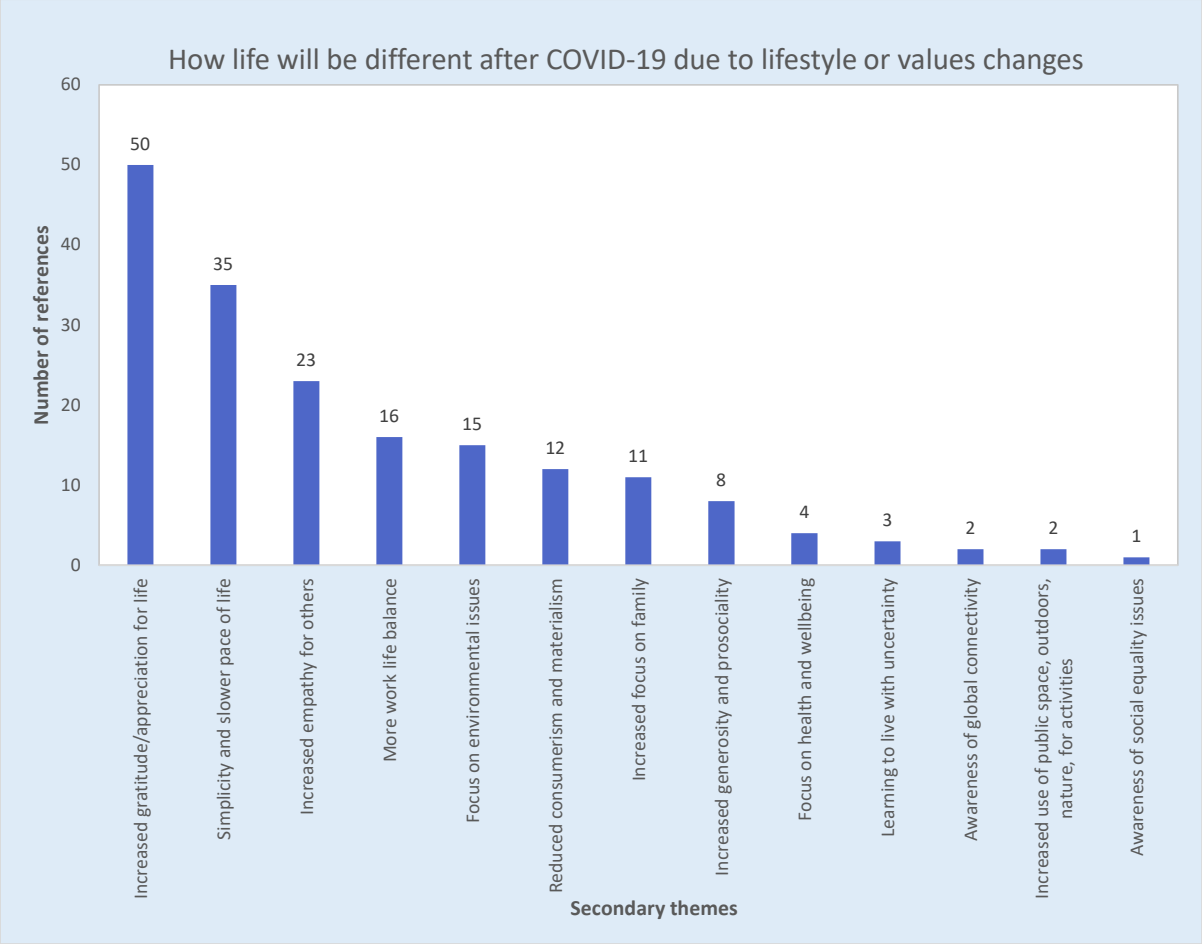

Figure 3.68 Themes identified of how life will be different after COVID-19 due to lifestyle or mindset changes.

Many participants expressed a sense of ***gratitude*** *and* ***empathy*** *for others*:

> *"I think people may be a bit more empathetic with others, a stronger sense of community. Resetting of priorities. Gratitude. Less about consumerism and more basic human values."*

> *People … will enjoy the simpler things in life, life will be more simplistic, family will be of the greatest importance, some of them have had more time with their family... People will more grateful with what they have and family and friends are more important rather than material things.*

as well as a return to the past when ***life was simpler***:

> *"…More appreciation for life, grateful to have a life compared to all the people who have died. You don't realise how lucky you are compared to the rest of the world…hopefully less materialistic, you can still look nice without going to hairdressers and other cosmetic sort of things."*

> *"I hope everybody continues caring for one another. Continue to know their neighbours, feel connected to them, and not have this constant 'on-the-go' barrier. Maybe it's about getting back to the old values of living your life, doing some of the simple things at home together. To me that's what I have really loved seeing in families. Cooking together, sitting down to play games together." –*

In the area of ***jobs and work*** (Figure 3.69), participants stated that there would likely be more opportunities to work from home, and a shift towards remote working or use of technology to support this modality of work.

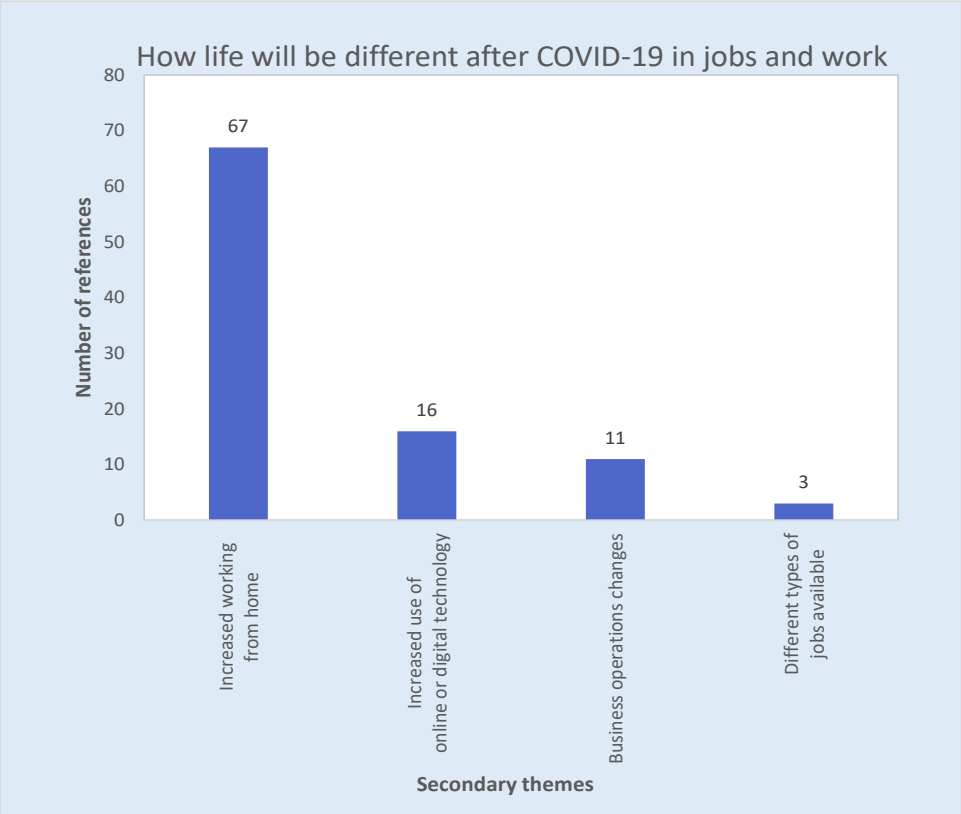

Figure 3.69 Themes identified of how life will be different after COVID-19 in jobs and work

Examples provided from participants in relation to ***jobs and work*** are included as follows:

"I think the work situation will definitely be different, I know I will no longer have an office to work from, will have to be way more sufficient in working from home"

"… In terms of work from home side of things it might become norm to work from home because we have gotten used to this system and … it might be the common thing going forward and it's probably proven through the COVID 19 process that a worry is decreasing productivity and it didn't happen... the benefits, we get the same amount of work done and with the commute hours reduced. There are a lot of positive things that came out of working from home."

"Businesses will change how they do things because it is possible to have people work from home."

4 CONCLUSIONS

4.1 Subjective wellbeing in Australia (2002-2020)

The 2020 Australian Unity Wellbeing Index survey of 2,000 Australians was conducted between 27 April and 19 May 2020 towards the end of the first wave of the COVID-19 social distancing measures. Despite being a challenging time for people in Australia, subjective wellbeing (SWB) remained relatively consistent with previous surveys, falling within the average national range. Compared to 2019, somewhat higher scores on Global Life Satisfaction (GLS), the Personal Wellbeing Index (PWI), and on six of the PWI domains – standard of living, personal health, relationships, safety, community connectedness and future security – were observed. On two domains of the PWI - standard of living and personal safety – scores fell above their normative ranges, reaching their highest levels since the survey commenced.

A similar pattern was also observed on indicators of national wellbeing. Notably, scores on the Global National Wellbeing (GNW), the National Wellbeing Index (NWI), and the five NWB domains – natural environment, social conditions, government, business, and national security in Australia – were somewhat higher than in 2019, albeit most fell within their average national ranges. National security rose to its' highest level since 2002, while scores on the NWI, social conditions and government were above their normative ranges. Economic condition in Australia remained unchanged from previous years.

4.2 Subjective wellbeing during COVID-19: An overview

Whilst the results of the 2020 survey suggest that SWB remained relatively stable in the community overall, some important differences were observed among sub-groups of Australian adults during COVID-19, both in SWB and on other indicators of health and wellbeing, such as income loss, mental health, social connectedness, and perceived self-control.

In regard to vulnerable groups in the community, SWB was lower among participants who experienced significant income loss due to COVID-19. Likewise, demographic sub-groups at risk of elevated stress and/or anxiety included low income households, young adults (under 35 years old), participants in full-time home duties, as well as households with children under 18 years of age, particularly those affected by concurrent income loss due to COVID-19. Subjective wellbeing was also lower in participants who reported elevated life stress and those who perceived home life to be more difficult due to COVID-19. Finally, it is notable that older Australians (aged 56 years and older), fulltime retirees and widows reported feeling the most worried about COVID-19.

When looking across time, both stress and anxiety levels were higher in the 2020 survey compared to pre-pandemic data collected in 2013. Levels of worry about COVID-19 were also higher than worry about the swine flu pandemic in 2009. Likewise, social connectedness was lower in 2020 compared with the previous survey in 2019, while loneliness levels remained stable.

Consistent with other recent emerging literature (e.g., Prime et al., 2020; Tull et al., 2020), some adults in the community also reported positive experiences related to COVID-19 social distancing restrictions, including greater work-life balance, more quality time with family, living more simply, having greater empathy for others and/or, more gratitude for the things one has in life. Among specific sub-groups, results indicated that participants who experienced income loss due to COVID-19 by contrast reported having more quality time with their families and living more simply. Households with children and participants living with their parents also reported more quality family time together. Levels of gratitude were also high in young adults and dual parent households with children, while fulltime employed adults and students reported greater work-life

balance. Older adults tended to report the lowest stress levels, as well as the highest levels of social connectedness and control over their lives.

In summary, SWB remained relatively stable among Australian adults in 2020 compared to prior surveys, with small increases in SWB observed on some domains. Despite this trend at the community level, a number of sub-groups appear to be at greater risk of poorer mental health and wellbeing during COVID-19. Specifically, this includes low income households and the unemployed, households with children and working adults, middle to older age Australians and retirees, and young adults and fulltime students. Finally, it is notable that despite the significant challenges experienced due to COVID-19, some positive experiences were also reported in relation to the social distancing measures employed nationally. Assessment of adults in future surveys will further inform understanding of SWB across different phases of the COVID-19 pandemic and within the context of the related public health strategies employed in Australia.

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