Australians' subjective wellbeing in 2022: Climate change, mental distress, mood and social connection.



Australian Unity Wellbeing Index (AUWI) - Survey 39 Report

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EXECUTIVE SUMMARY

The Australian Centre on Quality of Life at Deakin University, in partnership with Australian Unity, has been monitoring the Subjective Wellbeing (SWB¹) of Australians aged 18 to 90+ years for the past 21 years. This monitoring has been achieved through 39 national surveys and collected data on over 70,000 Australians. The results recorded in a series of reports which are available for download from: http://www.acqol.com.au/publications. In addition to charting the natural history of personal and national wellbeing, each year we examine how it varies by demographic groups and special interest areas. In the latest 2022 survey, data collection was conducted between 23 May and 27 June 2022 and the special interest areas included mental distress, social connectedness, climate change and mood.

Several events in the lead up to data collection were notable locally and globally. The federal election took place on 21 May 2022, with the Labor Party achieving a majority government for the first time since 2013, and several inner-city seats swinging towards the Greens and 'Teal' independents (ABC, 2022; Australian Electoral Comission, 2022) – most of whom ran strong election campaigns on the need for climate action.

In 2022, we also experienced the third year of the COVID-19 pandemic and one in which cases soared. In Australia, most social isolation restrictions had been wound back, but the death rate was much lower than in 2020 and 2021 (Macali, 2020), as most eligible Australians had received COVID-19 vaccinations. Nonetheless, Australia's health system was in distress (Ore & Rose, 2022).

Cost-of-living pressures also began to quickly rise in early 2022. Globally, tensions escalated in February 2022 when Russia launched an invasion into Ukraine. The war displaced millions of people and killed thousands (Psaropoulos, 2022). It also had a major impact on commodities and supply chains (Tsiaplias & Wang, 2023), with oil prices surging.

Locally, catastrophic floods swept through New South Wales and Queensland in February 2022. This impacted tens of thousands of people (Australian Red Cross, 2022) and had a devasting impact on nature and agriculture, which led to increases in the cost of fresh fruit and vegetables (Kelly, 2022). In addition, rising inflation and the corresponding rate hikes by the Reserve Bank (RBA, 2022) compounded cost-of-living pressures. These came at a time when Australia's wealth and income inequality had already been rising (Richardson & Grudnoff, 2023).

Together, these tumultuous local and global events of early 2022 saw Australians face a polycrisis of cost-of-living pressures, climate change pressures and global uncertainty amidst an ongoing health pandemic and war. The following report outlines how Australians were faring against this backdrop in 2022 and compares this to previous years, with a particular focus on the two previous pandemic years.

Australians' subjective wellbeing in 2022

In 2022, Australians' subjective wellbeing showed a pattern of decline across all measures, at both the personal¹ and national² level. This marks the first time in over a decade that such a consistent decline has been observed. After all, subjective wellbeing is typically a very stable

¹ Personal Subjective Wellbeing was measured using two methods, both of which measure satisfaction on a 0 to 10 choice scale. The first is a single item (GLS: Global Life Satisfaction): 'How satisfied are you with your life as a whole?' The second is the Personal Wellbeing Index (PWI), which averages the 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).

² National Subjective Wellbeing was measured using two methods, both of which measure satisfaction on a 0 to 10 choice scale. The first is a single item (GNW: Global National Wellbeing): 'How satisfied are you with life in Australia? The second is the National Wellbeing Index (NWI), which averages the level of satisfaction across six national domains - economic situation, state of natural environment, state of social conditions, government, business, and national security.

measure. For example, the Personal Wellbeing Index (PWI) normative range is narrow, ranging from just 74.2 to 76.8 percentage points (pp).

The two global questions about overall satisfaction with: 1) life as a whole, and 2) life in Australia, fell to their lowest scores on record and were below the normative range. Of the seven Personal Wellbeing Index (PWI) domains, three domains (Health, Community Connectedness, and Achieving in Life) hit all-time lows.

Although the National Wellbeing Index (NWI) remained within the middle of the normal range, it continued to decline from its all-time high in 2020.

Personal wellbeing by socio-demographic groups

Over the past 21 years, our surveys consistently show that the wellbeing of certain sociodemographic groups lies below the normal population levels, including Australians who are: on low household income (i.e., <\$30,000); unemployed; divorced; separated or never married; living alone, with children only or with other non-family members.

In 2022, more socio-demographic groups reported scores below the normal range than usual, including Australians who were: below 56 years of age; on a household income of less than \$60,000; widowed; living with parents; semi-retired; in full-time home duties, part-time or casual employment; full-time or part-time students; living in Queensland, Australian Capital Territory, South Australia and Western Australia. When we compared these groups' wellbeing in 2022 to the two previous pandemic years, the following groups had notably lower scores in 2022 compared to 2020: people who lived alone, who were unemployed, on a household income of less than \$30,000, were semi-retired, separated but not divorced or recently experienced a sad event.

It was also notable that when we compared 2022 data with data collected over the past 21 years, all-time lows were also recorded for young adults (i.e., 18-25 years), people living on a low household income (i.e., <\$30,000), and those who were unemployed, semi-retired or living in Queensland.

Mental distress and personal wellbeing

Average levels of mental distress (i.e., feelings of depression, anxiety, and stress) continued to rise in 2022 compared to other pandemic years, with anxiety and stress levels being notably higher (5pp) than in 2021.

In 2022, relative to other age groups, young adults (i.e., 18-25 years) reported the highest levels of mental distress on all three measures. People with high anxiety, stress, or depression levels (i.e., in the top 25th percentile) in 2022 all had notably lower subjective wellbeing compared to the other respondents (i.e., 7.2pp, 8.9pp and 10.3pp lower, respectively).

Climate change attitudes and personal wellbeing

Relative to other age groups, young adults (18-25 years) were the most worried about climate change and felt most strongly that it will impact them personally. For example, young adults were 13pp more worried about climate change compared to over 76-year-olds and felt over 10pp stronger that climate change would affect them personally, compared to over 56-year-olds. Conversely, young adults felt most optimistic that climate change can be kept under control.

PWI levels did not differ by climate change beliefs and attitude questions. However, those who were most worried about climate change (i.e., in the top 25th percentile) had 6pp lower NWI levels compared to other respondents.

Key takeaways

The local and global events of early 2022 saw Australians face a 'polycrisis'. Unlike 2020, where Australians' subjective wellbeing remained remarkably resilient in the face of many challenges, we saw a consistent fall across subjective wellbeing metrics in 2022. Although this fall remained just

within the normal range at the population level, it was worrying for certain groups who recorded alltime lows, such as 18-25-year-olds and low-income households.

These findings underscore the pressing need for concerted efforts to focus on policies that can improve Australians' wellbeing. In addition to groups that are commonly identified as priority groups due to well established disadvantage (e.g., low-income households and those who are unemployed), our report identified new groups whose wellbeing should be monitored, such as semi-retired people and both full-time or part-time students. Immediate attention should be directed to priority groups and young adults who are clearly struggling on multiple fronts, but we should also be monitoring these new groups to see whether they will bounce back in 2023.

Findings underscore the need for not only *measuring what matters* through subjective wellbeing and other non-economic indicators, alongside traditional economic measures. But in addition to tracking wellbeing, we must build in whole-of government accountability for wellbeing (e.g. like Wales and our Nordic friends) so that people and the planet can thrive.

The polycrisis shows no sign of decline. It will remain to be seen in the upcoming 2023 survey whether Australians' subjective wellbeing will further decline or bounce back.

1 INTRODUCTION

The Australian Unity Wellbeing Index (AUWI) is a barometer of Australians' subjective wellbeing (SWB). It measures both SWB using the Personal Wellbeing Index (International Wellbeing Group, 2013), and the National Wellbeing Index (NWI: Cummins et al., 2003). The PWI determines the average level of satisfaction across seven domains of personal life – standard of living, health, achieving in life, personal relationships, safety, community connectedness, and future security. The NWI determines the average satisfaction across six domains of national life – the economy, the natural environment, social conditions, government, business, and national security.

Thirty-nine cross-sectional surveys of the Australian adult population have been conducted between April 2001 and June 2022 (Cummins et al., 2021). The same core questions, forming the PWI and the NWI, were asked in each survey. In addition, two items ask about 'Satisfaction with Life as a Whole' (Global Life Satisfaction: GLS) and 'Satisfaction with Life in Australia' (Global National Wellbeing: GNW).

Results from each of these scales are reported in a standardised form of 'percentage points' (pp) in which the results from the 0-10 response scales are converted into a 0-100 format. This pp format allows a simple comparison between different measures and across time. Each survey also 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. Such questions allow further exploration and understanding of theoretical frameworks supporting the wellbeing construct. Our 2022, our survey asked additional questions about mental distress, social connection, climate change and mood.

The report also has a focus on comparison to other COVID-19 years, given that it was the third year of the COVID-19 pandemic.

1.1.1.1 PART 1: OVERVIEW OF SURVEY 39 SUBJECTIVE WELLBEING RESULTS

- Summary data on SWB (i.e. PWI and NWI) across 37³ national surveys is presented to examine changes overtime in the cross-sectional samples.
- The PWI results are then broken down by the following key socio-demographic factors, gender, age, household income, marital status, household composition, full time and part time occupation, state, remoteness and life events. These are presented by the COVID-19 pandemic years (i.e. 2020, 2021 and 2022). To examine differences across these years.
- Notably, for the first time we also report NWI results by these same socio-demographic factors and by the COVID-19 pandemic years.

³ 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.

1.1.1.2 PART 2: QUESTIONS

Table 1-1 Part 2 research questions

Topic 1:	Climate change attitudes and the Personal Wellbeing Index in 2022
RQ1	How did people think about climate change in 2022 relative to their age and household income?
RQ2	Were climate change beliefs and attitudes related to Wellbeing in 2022?
Topic 2:	Mental distress and the Personal Wellbeing Index across the pandemic
RQ3	Did mental distress change across age groups and income in 2022?
RQ4	Was mental distress related to the Personal Wellbeing Index in 2022
RQ5	Was mental distress related to the Personal Wellbeing Index across the pandemic?
Topic 3	Social connectedness and the Personal Wellbeing Index across the pandemic
RQ6	Did social connectedness change across age groups and income in 2022?
RQ7	Was social connectedness related to the Personal Wellbeing Index in 2022?
RQ8	Was social connectedness related to the Personal Wellbeing Index across the pandemic?
Topic 4	Homeostatically Protected Mood
RQ9	Has the level of Homeostatically Protected Mood changed during the pandemic compared to before the pandemic?
RQ10	Which demographic factors are associated with decrease in HPMood levels during the pandemic compared to before?
RQ11	Are people with pathological or challenged levels of HPMood at a greater risk of experiencing higher levels of depression, anxiety and stress?

2 METHODS

2.1 Participants

Data for the 39th Australian Unity Wellbeing Index Survey was from a geographically representative national sample, based on population distribution. The sample comprised 2,000 Australians aged 18 or over and fluent in English, who accepted an invitation to respond to the survey. Data collection was carried out by L-view, a social research data collection agency. Most participants were contacted via randomly generated mobile numbers (84%), obtained by attaching randomly generated digits to valid mobile prefixes. To achieve a geographically representative sample, remaining participants were contacted via geographically targeted mobile

lists. Participant matching within states and territories also took place at the area level (e.g. metro vs other) according to the latest Australian Bureau of Statistics population distributions. Phone recruitment took place between 23 May and 27 June 2022, until a sample of 2000 participants had been recruited.

Table 2-2 Geographic representation of sample across Australia split by Target and Actual distribution.

rabio E E deegr	Target		,		Actual	, ,			
Location	Male	Female	TOTAL	Dist%	Male	Female	Other	TOTAL	Dist%
Sydney	205	205	410	21%	198	183	5	386	19%
Other NSW	117	117	234	12%	115	88	2	205	10%
Melbourne	189	189	378	19%	219	206	8	433	22%
Other VIC	63	63	126	6%	79	67	0	146	7%
Brisbane	95	95	190	10%	92	99	1	192	10%
Other QLD	104	104	208	10%	109	82	2	193	10%
Adelaide	58	58	116	6%	51	53	2	106	5%
Other SA	17	17	34	2%	14	16	0	30	2%
Perth	80	80	160	8%	85	57	3	145	7%
Other WA	23	23	46	2%	26	20	3	49	2%
Hobart	10	10	20	1%	16	7	0	23	1%
Other TAS	13	13	26	1%	10	15	0	25	1%
ACT	17	17	34	2%	24	17	0	41	2%
NT	9	9	18	1%	4	12	0	16	1%
Refused	0	0	0	0%	5	3	2	10	1%
TOTAL	1000	1000	2000		1047	925	28	2000	

2.2 Data preparation

Average levels of satisfaction with the PWI and the NWI were calculated as described in the Personal Wellbeing Index Manual (International Wellbeing Group, 2013). Data cleaning revealed that 28 participants answered consistently 0 or 100 across all domains of the PWI or the NWI. Their responses were removed from the sample prior to statistical analysis. Such responses are likely due to misunderstanding or false reporting. Additionally, PWI and NWI scores are calculated only for those participants who responded to all domains. The proportion of participants excluded from the main analyses due to missing domain responses was 2.3% (*N*=45) for the PWI and 8.8% (*N*=174) for the NWI.

2.3 Measures

Demographic items asked in this and past surveys were: gender, age, marital status, household composition, occupation (full time, part-time and seeking work), and household income. Geographic region and the Index of Relative Socio-Economic Disadvantage were calculated based on the postcodes. A new demographic item that was added in this survey was about the number of children per household. Each of these measures are described in more detail below.

2.3.1 Standard survey questions

2.3.1.1 Personal and National Wellbeing Indices

Subjective Wellbeing was measured using the Personal Wellbeing Index (PWI; International Wellbeing Group, 2013). The PWI score represents the mean of the seven domains of satisfaction with: standard of living, health, achieving in life, personal relationships, safety, community connectedness, and future security.

Similarly, the NWI score represents the mean of the six national domains of satisfaction with: economic situation, state of natural environment, state of social conditions, government, business, and national security.

The responses for both PWI and NWI are recorded on a unipolar, numerical scale, ranging from 0 (no satisfaction at all) and 10 (completely satisfied).

2.3.1.2 Gender

Participants were asked "How would you describe your gender?". Respondents were given a choice of four categories: 1) Male; 2) Female; 3) Non-binary/Gender diverse; and, 4) Other. For the purpose of this report, researchers coded the last two categories as 'other'.

2.3.1.3 Age

Participants were asked "Can you tell me your age?" as an open-ended question and, as with previous surveys, responses were grouped into six categories (18-25, 26-35, 46-55, 56-65, 66-75, and 76+ years of age).

2.3.1.4 Marital status

Participants were asked: "Which of the following categories best describes your relationship status?", with six response options (never married, de facto/living together, married, separated, divorced, or widowed).

2.3.1.5 Household composition

Participants were asked to indicate who lives with them in their household and were given a list of five response options (you live by yourself, you live with your partner, with one or more children, with one or both of your parents, or with one or more adults who are neither your partner nor parent). Participants could select multiple options for all except the first. For the purpose of this report, the household composition was structured into five categories: alone, with partner only, with partner and children, with children only, with parents only, and with others only.

2.3.1.6 Number of children

Participants were asked "How many children under 18 years old living in your house are you currently primary caregiver for?" and were given an open-ended response option.

2.3.1.7 Occupation

Occupation was measured using three questions, assessing full time and part time occupations independently, as well as a separate question about work seeking behaviour.

Full time occupations were assessed by asking: "Please tell me which of the following full time occupational categories best applies to you at the present time. Are you engaged in——?". The response options were: full time paid employment, full time retirement, full time volunteer, full time home or family duties, full time study, or none of these.

Part time occupations were assessed by asking: "Please tell me whether any of the following part time occupational categories applies to you", The response options were: semi-retirement, part time paid employment, casual employment, part time volunteer, part time study, unemployed or none of these. For the purpose of this report, only those who responded to a single part time or casual category were included.

Finally, all participants were asked: "Are you currently looking for paid work?" and were given the response options of yes, no or declined to answer.

2.3.1.8 Household income

Household income was examined using two questions. First, participants were asked a standard question: "Thinking now about your household's total income over the past year_"what was your total household income before tax?". Participants were presented with a range of income categories: <\$15,000, \$15,000-\$30,000, \$31,000-\$60,000, \$61,000-\$100,000, \$150,000, \$151,000-\$250,000, \$251,000-\$500,000, >\$500,000.

Given the small number of people in response options at either end of the scale, <\$15,000 was collapsed with the \$15,000-\$30,000 category, while >\$500,000 was collapsed with the \$251-\$500,000 category.

2.3.1.9 Remoteness

Postcode was recorded for each participant and their geographic location was coded into a 5-category variable by merging the Australian Bureau of Statistics (ABS) derived geographic region structure variable (Australian Bureau of Statistics, 2018) with the participants' postcodes. Geographic regions assigned by the ABS are: 1) Major Cities, 2) Inner Regional, 3) Outer Regional, 4) Remote and 5) Very Remote. Given the small sample representation from the latter two areas, these were grouped into a combined category named 'Remote', thereby creating 4 geographic categories.

2.3.1.10 Socio-economic indexes for areas (SEIFA)

The SEIFA score was calculated based on each participant's postcode using the Australian Statistical Geography Standard (ASGS) data, collected as part of the 2016 Census of Population and Housing (Australian Bureau of Statistics, 2016). This is referred to the Index of Relative Socio-economic Advantage and Disadvantage (IRSAD). The SEIFA-IRSAD has a national mean 1000 (SD 100); where higher scores represent less disadvantage.

2.3.1.11 Follow up for longitudinal study

At the end of each survey, participants were asked if they wanted to join a longitudinal follow-up online survey, which is also conducted annually. The question was worded: "We are going to carry out another survey like this in about 12 months. But this time it will be by email. Would you be willing to help us again if we email a copy to you at that time?" and participants were asked to respond either yes or no.

2.3.1.12 Life events

The influence of recent life events was examined with two branching questions. Participants were first asked: "Has anything happened to you recently causing you to feel happier or sadder than normal?". Participants were provided four response options: No; Yes, happier; Yes, sadder; Yes, happier and sadder. Those who responded 'yes, happier' or 'yes, sadder' were asked to rate: "On a scale from zero (Very weak) to 10 (Very strong), how strongly do you feel this influence on you now?".

2.3.2 Additional survey items

2.3.2.1 Homeostatically Protected Mood

Participants were asked to respond to three questions about how they feel and rate them on a scale from zero (Not at all) to 10 (Extremely). The questions were: "How content do you generally feel?", "How happy do you generally feel?", "How alert do you generally feel?".

2.3.2.2 Mental Distress

Participants were asked to respond to three questions about how they feel and rate them on a scale from zero (Not at all) to 10 (Extremely). The questions were: "How anxious do you feel?", "How stressed do you feel?", "How depressed do you feel?".

2.3.2.3 Social Connectedness

Participants were asked to respond to one question about how connected they feel to others and rate it on a scale from zero (Not at all) to 10 (Extremely). The question was: "How connected do you generally feel to others?". This was asked in the past three years (2019 -2021), with slight changes in wording over the years. For example, in 2020 and 2021 we asked, "How connected do you feel to others?" and in 2019 we asked, "On a scale from 0 (Not at all) to 10 (Completely), how connected do you feel to other people?".

2.3.2.4 Climate change feelings and attitudes

Participants were asked to respond to three questions about their feelings towards climate change and rate them on a scale from zero (Not at all) to 10 (Extremely). The questions were: "How worried do you feel about climate change?", "How strongly do you believe that climate change will affect you personally?" and "How strongly do you believe that climate change can be kept under control?".

2.3.2.5 Climate responsibility and action

Participants were asked to indicate which groups they thought were responsible for reducing the impact of climate change and were asked to indicate 'yes' or 'no' for each of the three entities: a) individuals and communities; b) businesses; and c) governments.

Participants were then asked to respond to one question about the action they were taking towards climate change and rate it on a scale from zero (None at all) to 10 (A great deal). The question was: "How much action are YOU currently taking to help reduce climate change".

2.4 Standardisation and presentation of results

2.4.1 Percentage point and standardised differences

All results from measurement scales have been converted to a percentage of scale maximum (%SM) score, which standardises any scale to a 0-100 percentage points. Thus, throughout the report wellbeing levels will be referred to in terms of percentage points (pp).

In Part 1 of the Results, in addition to pp differences between demographics groups, we also report standardised percentage point (std pp) differences⁴ for the PWI and NWI in the Appendices. We flag notable differences of 0.30 Standard Deviations (SD) pp or greater by a star (*). This threshold is often used at the population level for meaningful differences. For the PWI and NWI, this difference is about 4 raw pp, which will be indicated in the charts below as "Difference >4pp".

In Part 2 of the Results, we also report pp differences for the PWI and its domains. Similar to Part 1, we flag notable differences as those that are 0.30 SD pp or greater by a star (*).

2.4.2 Normative ranges

Normative ranges indicate the range within which a score is considered normative for the population under study. These ranges have been calculated for the GLS, GNW, PWI and NWI measures, as well as the PWI and NWI domains. This was done by combining all surveys to date, with the exception of Surveys 1 and 2 from 2001, due to a lack of confidence in data across these two surveys. The normative ranges are depicted by the yellow areas on figures. This area shows that 95% of average scores fall within the normative range overtime. The table with normative ranges for all SWB measures is shown in the Appendix section 4.1.

2.5 Data Analyses

Analyses were conducted using Stata SE version 16.1 (StataCorp, 2019), R (R Core Team, 2022) and R studio (RStudio Team, 2020). Subgroups that made up less than 2% of the analytic

 $^{^4}$ Standardised scores were calculated by converting PWI scores to have a mean of 0 and a standard deviation of 1. Differences in standardised scores have consistent interpretation across disciplines, with \ge 0.20, \ge 0.50 and \ge 0.80 standard deviations (SD) interpreted as small, medium and large differences respectively Cohen, J. (1992). A power primer. *Psychological bulletin*, 112(1), 155. .

sample were excluded from subgroup analyses as they were deemed too small for meaningful comparisons. The exception to this rule was income, where the two lowest and highest income categories that were <2% of the sample were merged with other categories instead of excluded.

2.5.1 Part 1 analyses

First, we examine the 2022 Survey response rates and sample characteristics in relation to population norms. This allows us to consider the generalisability of the results to the Australian population.

Second, we present average scores for the PWI, NWI and their respective domains in 2022, relative to normative ranges and over time. This is done visually, with each graph showing the latest 2022 average score (blue triangle), as well as the highest (green circle) and lowest average scores (red circle), over time.

Third, we examined whether average PWI and NWI scores differed in 2022, compared to the other COVID-19 pandemic years of 2021 (Khor et al., 2021), and to 2020 (Khor et al., 2020). Of particular interest, was whether PWI or NWI scores varied within the following demographic categories: gender, age, marital status, household composition, gross household income, full time and part time occupation, geographic location (state and remoteness), and life events.

Average PWI and NWI scores for 2022 were examined for each of these demographics in relation to:

- 1) the overall PWI or NWI normative range;
- 2) differences between demographic groups; and,
- 3) differences within demographic groups compared to the two previous years (i.e. 2021 and 2020, the first and second year of the COVID-19 pandemic respectively).

We flag notable differences of 4 pp (i.e. a meaningful change in average PWI and NWI scores) or greater.

2.5.2 Part 2 analyses

Part 2 examines the additional 2022 Survey questions. We focus on describing PWI by the four additional areas of interest. These include items that measure mood (i.e. contentment, happiness and alertness) (3 items), feelings of mental distress (i.e. stress, depression and anxiety) (3 items), feelings of social connectedness (1 item) and feelings and attitudes relating to climate change (5 items). We also consider NWI by the climate change questions given it includes a specific question on the state of the natural environment.

For all continuous outcome variables, rated on a 0–11-point scale, we created two groups to ease interpretation. This included those equal or above the 75th percentile (i.e. "high levels") on each measure, compared to the rest of the sample (i.e. "other").

For each of the four areas, we examined:

- 1) Basic descriptive statistics for 2022, including Mean and SD for all continuous outcome measures and frequency and proportion of for all binary outcomes.
- 2) Differences in response distributions across the age and household income groups.

- 3) Relationships with PWI and NWI (where it was of interest) scores in 2022
- 4) Relationships with PWI over the three pandemic years (2020 2022) for each of the binary outcome measures if data were available from previous surveys during these years.

As in part 1, we flag notable differences of 0.3 SD pp or greater (i.e. a meaningful change) in the variable of interest.

3 RESULTS

3.1 Part 1 - Summary of 2022 Survey results: response rates, sample characteristics and PWI scores by demographic factors

3.1.1 Response rates

After removal of a small number of cases (as described in section 2.2), a total of 1,972 (98.6%) participants were included in the 2022 Survey analytic sample. The response rate in 2022 was 18%, this represents the number of participants who agreed to take part in response to the invitational phone call. It is notable that the response rate has decreased substantially compared to the last two years, which were 35% and 30% (see Table 3-1). Declining response rate has been reported in other studies in Australia and globally (Rothbaum & Bee, 2022; Watson et al., 2022).

The 2022 interview length was 12.5 minutes in length, which was similar 2021, but slightly shorter than 2020.

Table 3-1 Recruitment and interview data

	2020	2021	2022
Agreed to take part in response to invitation call, %	35	30	18
Interview length, minutes	14.1	12.4	12.5
Agreed to be followed up longitudinally, %	72.7	69.5	67.7

3.1.2 Sample characteristics

A summary of the sample characteristics for the 2022 Survey are presented in Table 3-2. The average participant was 47 years of age (SD: 18; Range: 18 to 95 years), with slightly more males (52%) than females in the sample. Participants were most commonly married (46%), or never marries (25%). Households mainly comprised a partner (31%) or partner and children (27%), and most were from major cities (71%). Very few participants were unemployed (2.4%). Detailed frequencies and proportions are presented in the Appendix section 4.2 for 2020, 2021, 2022 and the aggregated 2002-2019 sample, and where available, details on Australian population norms for each of the sample characteristics.

Table 3-2 Summary of sample characteristics for 2022

Table 3-2 Summary of sample characteristics for 2022 Sample characteristics	Proportion (%) (N=1972)
Gender	
Male	52.4
Female	46.1
Other	1.5
State	
TAS	2.4
VIC	28.3
NSW	28.6
ACT	2.0
QLD	21.8
NT	0.9
WA	9.4
SA	6.6
Age Group	
18 - 25	15.4
26 - 35	17.4
36 - 45	16.0
46 - 55	16.6
56 - 65	16.6
66 - 75	12.5
76+	5.5
Household Income	0.0
≤<\$30,000	14.0
\$31,000 - \$60,000	14.5
\$61,000 - \$100,000	19.3
\$101,000 - \$150,000	20.4
\$151,000 - \$250,000	20.4
>≥\$251,000	11.4
Marital status	
Married	45.7
De facto/living together	14.3
Never married	25.4
Separated	3.2
Divorced	7.6
Widowed	3.8
Household Composition	
Alone	17.7
Partner	30.8
Children	6.0
Partner and children	27.3
Parents	8.1
Others	10.2
Full-time occupation	
Employed	62.9
Retired	21.0
Volunteer	1.0
Home duties	4.7
Study	8.0
otaay	0.0

Unemployed	2.4				
Part time occupation					
Semi-retired	5.0				
Employed	30.7				
Casual work	25.6				
Volunteer	25.6				
Study	13.2				

^a N's varied slightly across sample characteristics in 2022 and are listed in Appendix Table 4.2.

3.1.2.1 Sample characteristics in 2022 vs. previous years

Sample characteristics in 2022 were similar to 2020 and 2021 (see Appendix 4.2). They were also largely comparable to the aggregated survey data over the years (i.e. 2002-2019). One notable change is that there is an increased proportion of males in this sample compared to previous years. Another notable change is that the age of participants taking part in surveys has decreased over the last five years, with more young adults (<35) being included compared to before. This may reflect a sampling methodology change to from landline to mobile phones in 2018. For example, since 2018, the samples have on average become 10 years younger than before

In addition, the proportion of people identifying as being in a defacto relationship has increased, while those identifying as married has decreased, which may reflect a change in this trend in society. Household incomes have also risen over the last 21 years, with recent surveys showing more participants in the top income groups, and fewer earning \$30K or less. However, it is important to note that household incomes have not kept up with inflation over this period, particularly in 2022. Thus, real wages have actually been cut if one considers cost of living pressures (Hannam, 2022).

3.1.2.2 Survey data compared to population norms

When we compared the 2022 sample to population norms, the sample is relatively reflective of the Australian population at large (see Appendix 4.2). However, there were some notable differences. Compared to population norms, our sample contained slightly more males (53% vs. 49%), fewer people who reported they were unemployed (i.e. 2.1% vs. 2.9%) and lived in less disadvantaged neighbourhoods (i.e. SEIFA 1017 (SD 73) vs. 1000 (SD 100) respectively). Our sample also had more people who were in a defacto relationship (14% vs. 8%), slightly less people who were married (46% vs. 49%) and fewer people living with their parents (8% vs. 14%) compared to population norms. In addition, our sample also contained more people with a fulltime employment status (55% vs. 36%) and less people who were not in the labour force (25% vs. 37%), compared to population norms. We were unable to compare household income groups and the full time or part time occupation status to population norms due to measurement differences.

3.1.3 Personal and national wellbeing over time

This section shows the mean scores for subjective wellbeing (SWB) over time: Global Life Satisfaction (GLS), Personal Wellbeing Index (PWI) and each of its domains. Similarly, it shows the mean scores for the measures of national wellbeing (NWB) over time: Global National Wellbeing (GNW), National Wellbeing Index (NWI) and each of its domain. 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]?

Figures 3-1 to 3-17 show the patterns over time for each SWB measure.

3.1.3.1 Subjective Wellbeing

Average SWB scores on graphs are presented on a scale between 60 and 90 percentage points, with normative ranges represented by a yellow band.

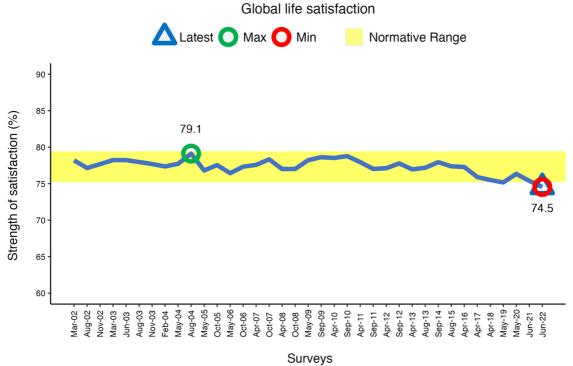


Figure 3-1 Global life satisfaction over time

 Average GLS scores fell below the normative range in 2022 and reached its lowest point in 21 years. The GLS scores have been at the lower end of the normative range since 2017.

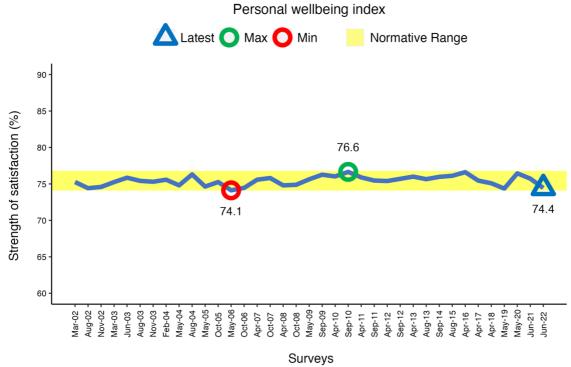


Figure 3-2 PWI over time

 Average PWI scores were towards the bottom of the normative range in 2022 and continued to decline since a relatively high score in 2020.

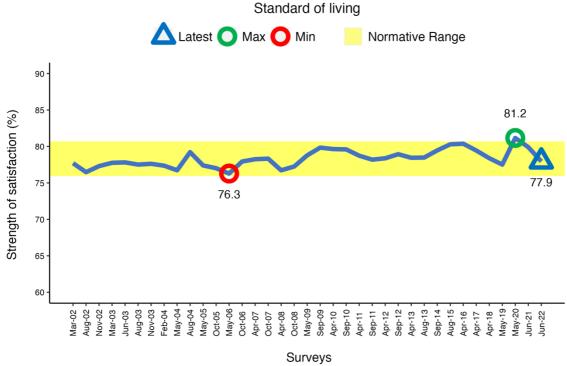


Figure 3-3 Standard of living over time

 Average satisfaction with standard of living was within the normative range in 2022 but continued to decline from its highest level on record in 2020.

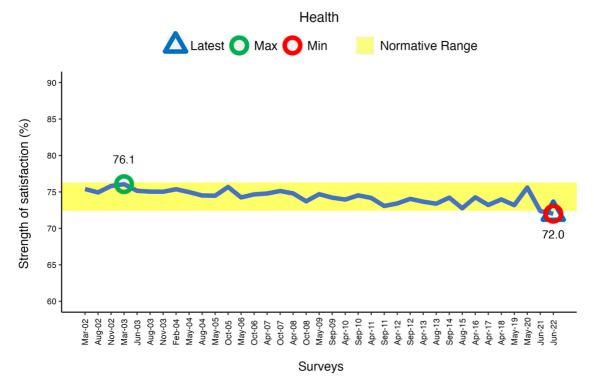


Figure 3-4 Personal health over time

 Average satisfaction with health fell below the normative range in 2022 for the second year in a row. This is the lowest average level of satisfaction with health ever recorded, dropping from relatively high levels recorded in 2020.

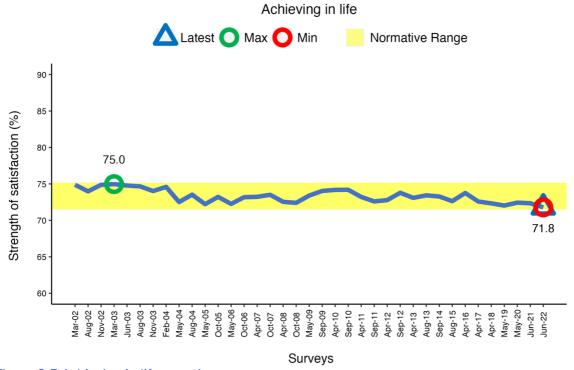


Figure 3-5 Achieving in life over time

 Average satisfaction with achieving in life fell to the lowest levels ever recorded in 2022, although it remained just within the normative range.

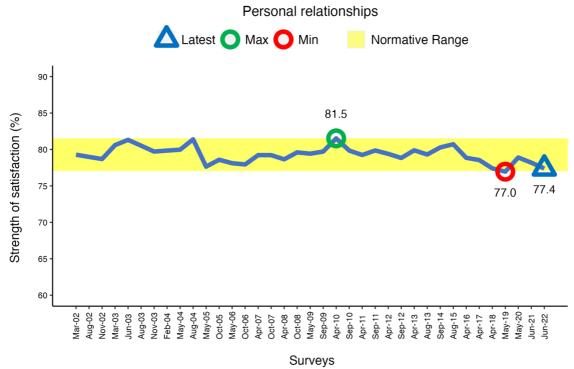


Figure 3-6 Personal relationships over time

 Average satisfaction with personal relationships fell towards the bottom of the normative range in 2022. This continued the 2021 decline from mid-range levels in 2020, and was close to the lowest level on record in 2019.

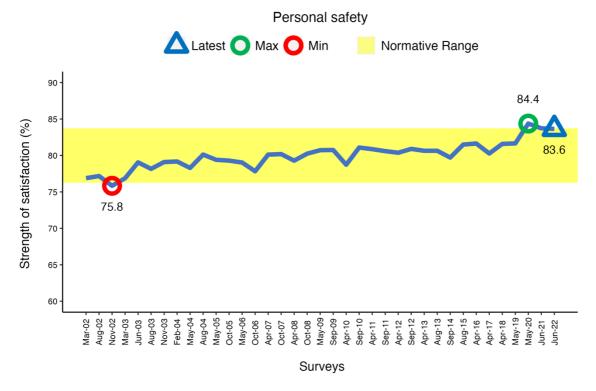


Figure 3-7 Personal safety over time

• Average satisfaction with personal safety was at the top of the normative range in 2022, remaining high after a rising pattern seen over the past 21 years.

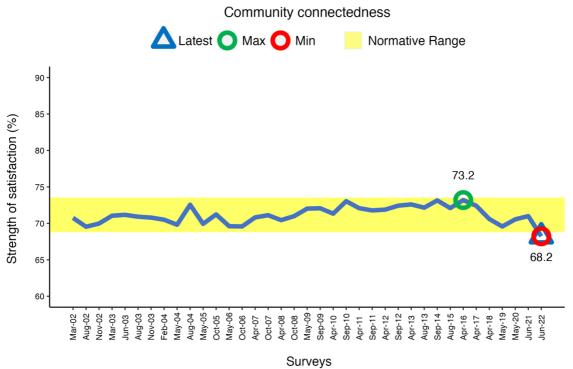


Figure 3-8 Community connectedness over time

 Average satisfaction with community connectedness in 2022 dropped from the middle of the normative range in 2021 to below the normative range, reaching its lowest point in 21 years.

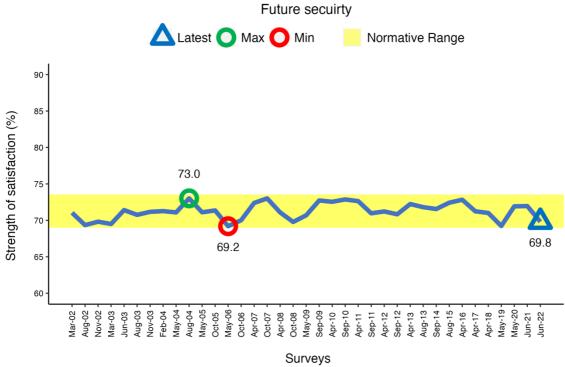


Figure 3-9 Future security over time

• Average satisfaction with future security was within the normative range but fell slightly in 2022 compared to the first two years of the pandemic.

3.1.3.2 National Wellbeing

The national wellbeing shows greater variability compared to subjective wellbeing, which can be seen from the wider normative ranges. For consistency, we have used the narrowest possible scale (30-100) for all NWB variables.

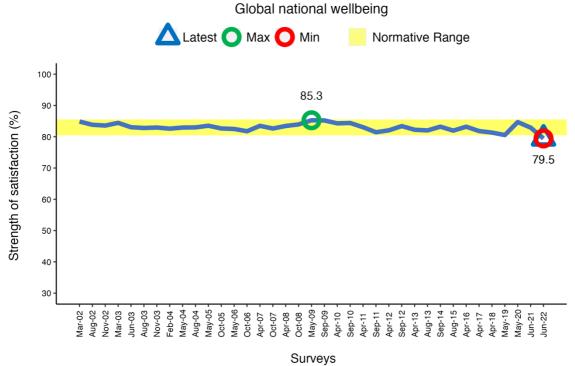


Figure 3-10 Global national wellbeing over time

Average GNW score fell below the normative range in 2022 to its lowest point in 21 years. Scores on GNW rose during the pandemic from their previously lowest point in 2019 but have now dropped again to an even lower level than in 2019.

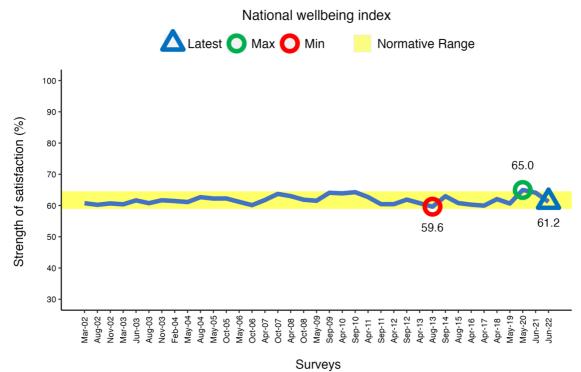


Figure 3-11 National wellbeing index over time

Average NWI scores were towards the middle of the normative range in 2022, which
represents a continued fall since reaching the highest score on record in 2020.

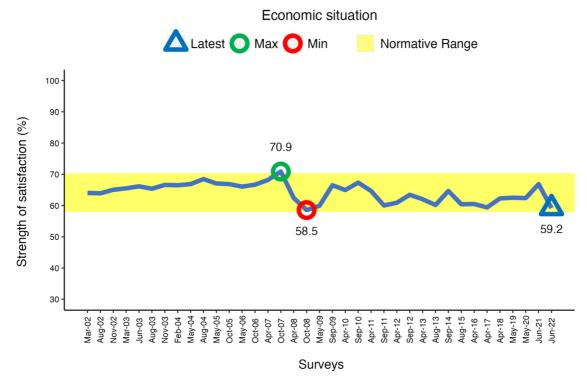


Figure 3-12 Economic situation in Australia over time

• Satisfaction with the economic situation in Australia was towards the bottom end of the normative range in 2022. Scores on this domain have been rising since 2017 but then showed a sharp drop in 2021, which continued in 2022.

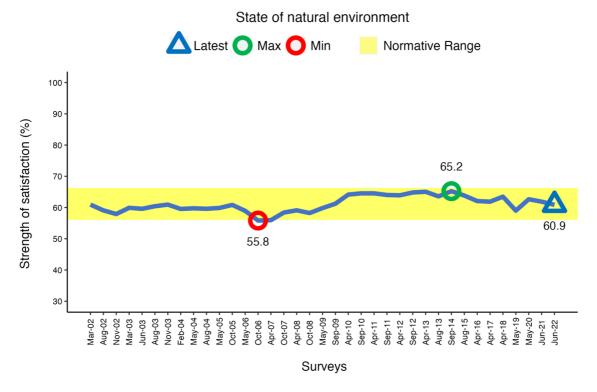


Figure 3-13 State of the natural environment over time

• Average satisfaction with the state of natural environment in Australia was around the middle of the normative range in 2022, with levels similar to recent years.

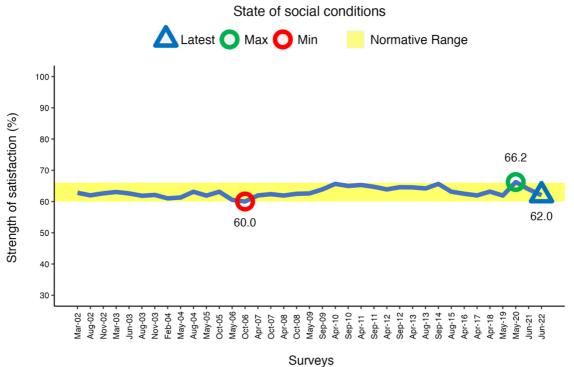


Figure 3-14 Social conditions in Australia over time

Average satisfaction with the state of social conditions in Australia was within the middle
of the normative range, which was lower than the highest score on record in 2020, but
was similar to pre-pandemic years.

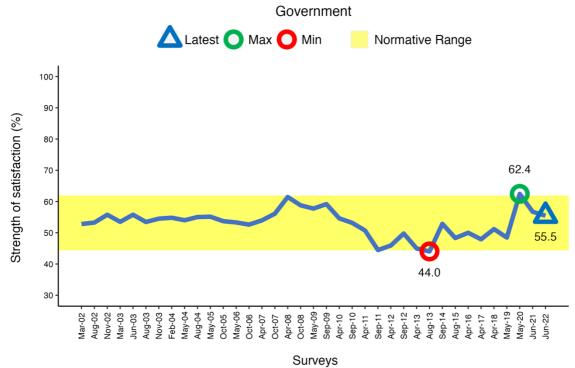


Figure 3-15 Government in Australia over time

 Average satisfaction with the government in Australia was within the upper-middle of the normative range, which was lower than the highest score on record in 2020, but still higher than pre-pandemic times.

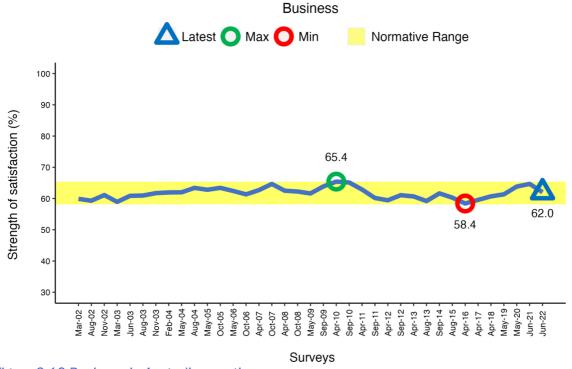


Figure 3-16 Business in Australia over time

 Average satisfaction with business in Australia was in the middle of the normative range in 2022. This represents a small from the higher levels seen in 2020 and 2021, breaking the rising pattern from 2015 to 2021.

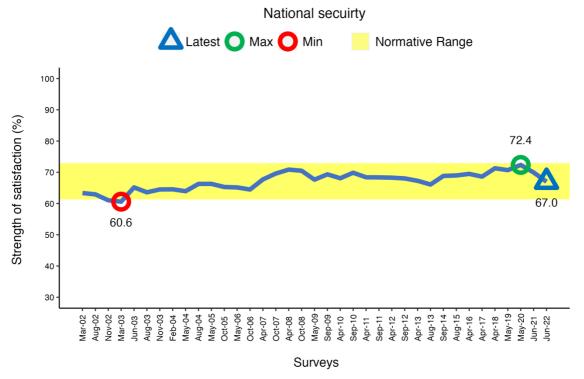


Figure 3-17 National security in Australia over time

• Average satisfaction with national security in Australia was towards the middle of the normative range in 2022, which began to drop after the highest level on record in 2020.

3.1.4 2022 average PWI scores for demographic groups

This section shows average PWI scores by demographic groups in 2022 and across time (2020, 2021 and 2022). The PWI scores are presented on a scale from 60 to 90 percentage points (pp), except for the household income and full-time occupation groups which are presented on a 50-90 pp scale. The normative range for PWI lies within 74.1 – 76.8pp and is shown by the yellow bar on the figures below (refer to Appendix Table 4.1).

3.1.4.1 PWI and age

Participants were fairly evenly distributed across age groups, with the exception of those aged over 76 years, who comprised less than 6% of the sample (similar to population norms) (see Appendix Table 4.2). It is notable that in 2022, people younger than 55 years had average PWI scores below the normative range, while those aged 66+ had scores slightly above the normative range.

Across age groups, those aged 66 years and older, had notably higher PWI scores compared to all younger ages. That is, the average PWI score was at least 4pp lower for those in the 18-25, 26-35 and 36-45- and 46-44-year-old age groups, compared to those aged 66+ years.

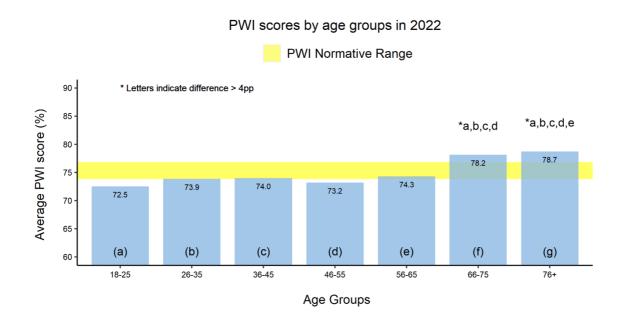


Figure 3-18 PWI scores for each age group in 2022

There were no notable differences in PWI scores of each age groups across the three pandemic years. Thus, the figure comparing PWI scores for each age group over time was omitted from this report and can be found in Appendix Figure 4-1. However, it is notable that this is the lowest average PWI score for those aged 18-25 years of age that we have ever recorded over 21 years (Figure 3-19). It is also the first time since 2006 that all adults who were 55 years or younger, reported PWI below normative range (see previous reports).

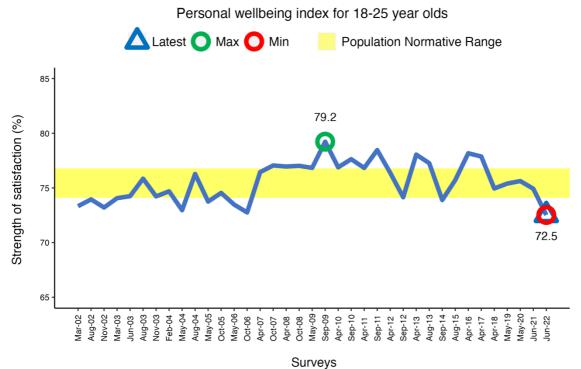


Figure 3-19 Subjective Wellbeing of young adults (18-25) over time

3.1.4.2 PWI and gross household income

In 2022, the most common household income brackets were \$101-150k (20%) and \$151K-250K (20%), while the least common were >\$251k (11%) and <\$30K (14%) (see Table 3-2). Average PWI scores for those with the lowest household incomes (<\$60k) were below the normative range, while for those with over \$150k, they were above the normative range (see figure 3-19).

Across income groups, average PWI scores increased as income rose. with close to a 14pp difference between those in the lowest and highest income brackets. Average PWI scores were notably higher at all household income levels compared to those with the household income below \$30k, who reported the lowest PWI score in 21 years (see past reports). Average PWI scores were also notably higher for those with an income above \$150k, compared to those below \$60k, while those with a household income higher than \$250k reported higher PWI levels than those with income below \$150k.

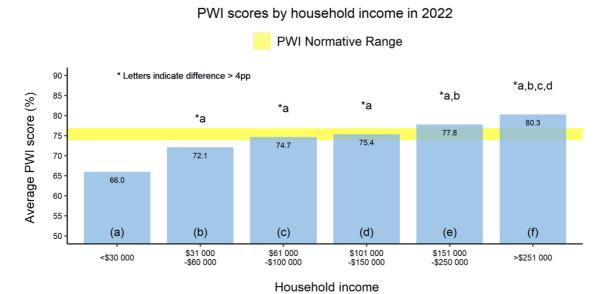


Figure 3-20 PWI scores for gross household income in 2022

Across 2020-2022, the distribution of participants across income brackets was similar. For this period, average PWI scores were also similar for those with household incomes greater than \$60k. However, those with households incomes of less than \$30k, had notably lower PWI scores in 2022 (4-5pp) compared to 2020 and 2021.

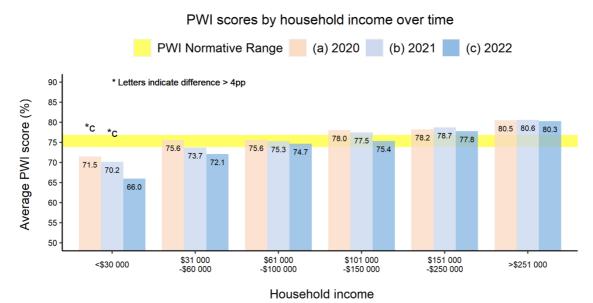


Figure 3-21 PWI scores by gross household income over time

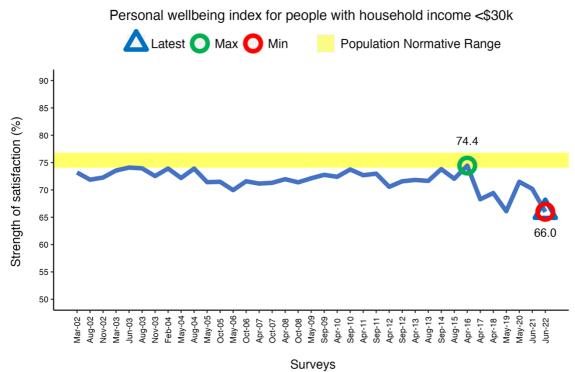


Figure 3-22 Subjective Wellbeing of people with household income <\$30k over time

3.1.4.3 PWI and gender

Males and females were roughly equally distributed in 2022. A small number of participants self-identified as other than male or female in 2020 and 2021 and 2022. However, these groups were too small (0.2%, 0.7% and 1.5%) for subgroup analyses so were not included when looking at differences in PWI scores by gender.

PWI scores were similar for males and females in 2020, 2021 and 2022 (see Appendix Table 4.12).

3.1.4.4 PWI and marital status

In 2022, the majority of participants were married (46%), with a small number of participants separated but not divorced (3%) or widowed (4%) (full details in Appendix Table 4.2). On average, PWI scores were above or at the top of the normative range for those who were married or in a defacto relationship respectively; while for all other marital status groups average PWI scores fell below the normative range, with those who were separated but not divorced reporting the PWI levels 8.4pp below the normative range. On average, those who were married had notably higher PWI scores (4-12pp) compared to those who were not in a relationship.

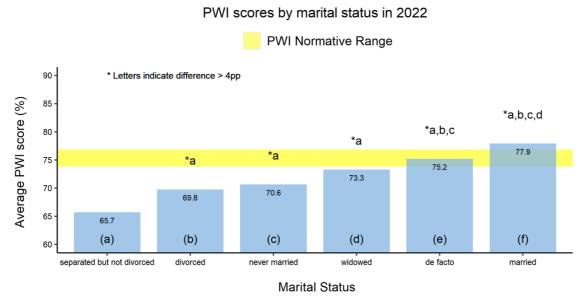


Figure 3-23 PWI scores for marital status in 2022

Across 2020-2022, the distribution of marital status was comparable. Similarly, PWI scores within each marital status group were relatively similar over time. A notable difference was seen for those who were separated but not divorced in 2022, who on average had scores 5pp lower than those in 2020.

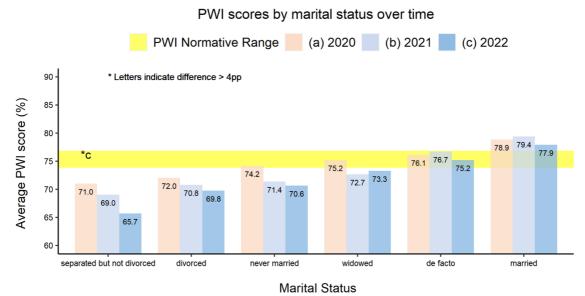


Figure 3-24 PWI scores for each marital status over time

3.1.4.5 PWI and household composition

In 2022, households most commonly comprised a partner only (31%) or a partner and children (27%), while the least common household composition was with children only (6%). Average PWI scores were above the normative range for household's comprising a partner and children or a partner only. These household compositions also had average PWI scores that were notably higher (5-8pp) compared to those who lived alone or with children only. In fact, all household compositions except those comprising a partner and children or a partner only, PWI scores fell below the normative range.

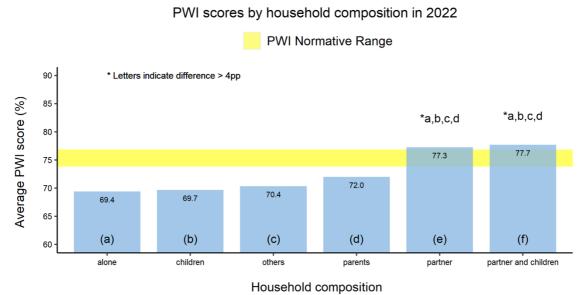


Figure 3-25 PWI scores by household composition in 2022

Across 2020-2022, the distribution of household composition was relatively consistent, as were average PWI scores within each type of household. Those in households comprising of one person living alone had a 4pp lower PWI score in 2022 compared to 2020.

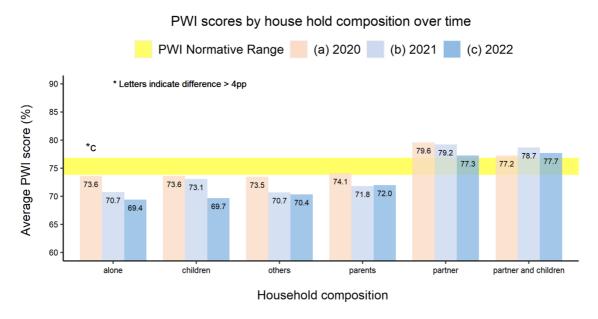


Figure 3-26 PWI scores for each household composition over time

3.1.4.6 PWI and full time occupation

The majority (78%) of participants identified as having a full time occupation, most commonly employment (51%). Only a small number were unemployed (2%) and less than 1% were in full time volunteering. However, the latter was too small for subgroup analyses thus it was not presented in the figure below.

Those who were unemployed had the PWI scores that were well below the normative range, lowest in 21 years and lower than all other groups (15-21pp) (see Figure 3-25). Those in full time home duties or study had average PWI scores at the bottom of the normative range, while those in full time employment or retired had average scores just above the normative range. PWI scores for those in full time home duties were also notably lower compared to those in full time retirement and employment. Additionally, PWI scores for those in full time study were notably lower compared to those in full time retirement.

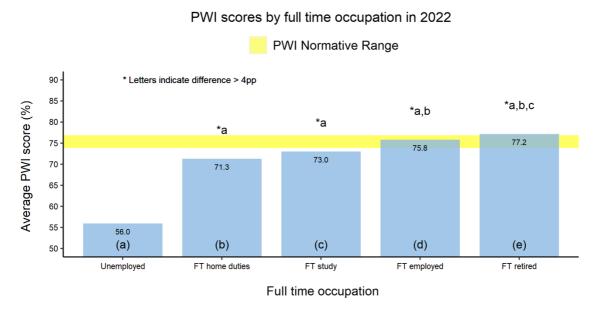


Figure 3-27 PWI scores for full time occupation in 2022

Across 2020-2022, the distribution of full time occupations was relatively consistent, as were average PWI scores within each category. For the unemployed group, PWI decreased in 2021 and 2022 by (11- 12pp) from higher levels seen in 2020. The unemployed people also reported the lowest PWI on record over 21 years (Figure 3-29).

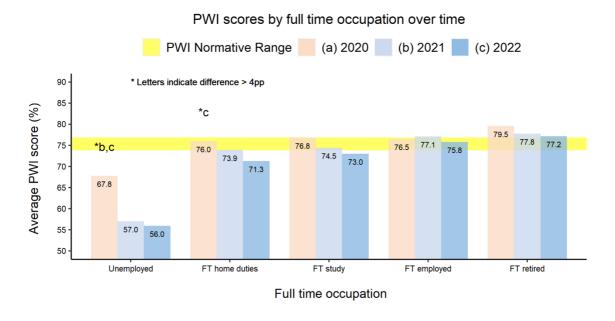


Figure 3-28 PWI scores for each full time occupation over time



Figure 3-29 Subjective Wellbeing of unemployed people over time

3.1.4.7 PWI and part time occupation

One-third of participants identified as having a part time occupation and this was most commonly paid part time (30%), casual work (26%) or volunteer (26%), with just a small number of semi-retired participants (5%) (see Appendix Table 4.2).

In 2022, those who were semi-retired or working casually had average PWI scores just below the normative range, while those who were studying or volunteering part time had average scores just above the normative range (Figure 3-27). These groups also had notably higher PWI scores of 5-6pp compared to those who were semi retired. Part time volunteers had notably higher PWI scores compared to those doing casual work.

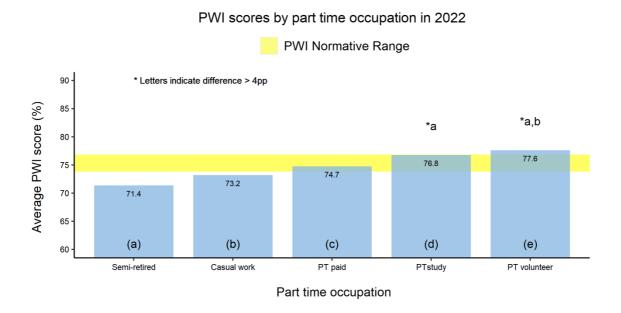


Figure 3-30 PWI scores for part time occupations in 2022

Across 2020-2022, the distribution of part time occupations was similar, as were average PWI scores within each part time occupation group with the exception of those who were semi-retired, whose average PWI score was about 8pp lower in 2022 compared to 2020 and 2021. The Semi-retired group also reported their lowest PWI score on record (Figure 3-32).

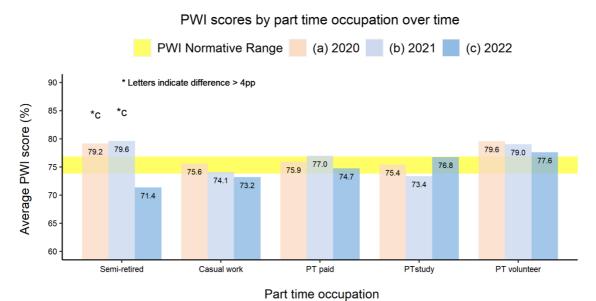


Figure 3-31 PWI scores for part time occupations in 2022

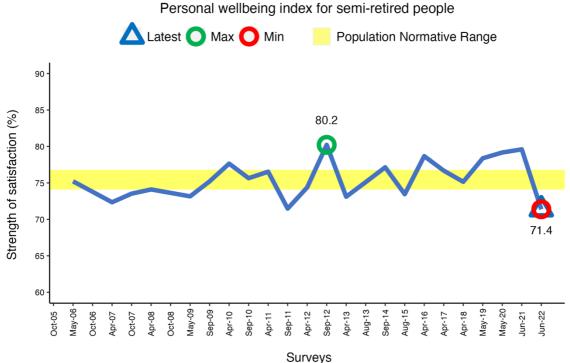


Figure 3-32 Subjective Wellbeing of semi-retired people over time

3.1.4.8 PWI across states

Participants were most commonly from New South Wales (29%) or Victoria (28%), with the smallest number from the Northern Territory (<1%) and the Australian Capital Territory (2%) (see Appendix Table 4.2). Given the small number of participants from the Northern Territory, this group was excluded from subgroup analyses.

All states had PWI scores within the normative range in 2022, and there weren't any notable differences observed between groups, hence no figure is presented in the main report (see Appendix Figure 4-2).

Across 2020-2022, PWI scores were notably different for Queensland, ACT and South Australia. People who lived in South Australia in 2022 had notably lower PWI scores compared to 2020 and 2021. People who lived in Queensland in 2022 had notably lower PWI scores compared to 2021 and lowest ever PWI reported (Figure 3-34). People who lived in the Australian Capital Territory in 2022 had notably lower PWI scores compared to 2020.

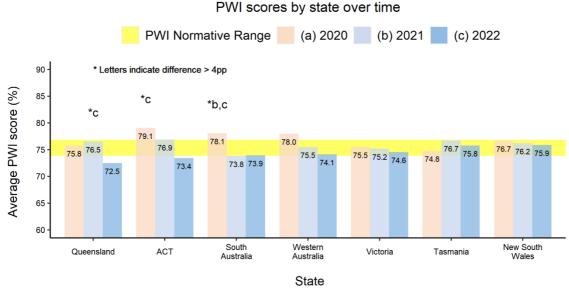


Figure 3-33 PWI scores by states over time

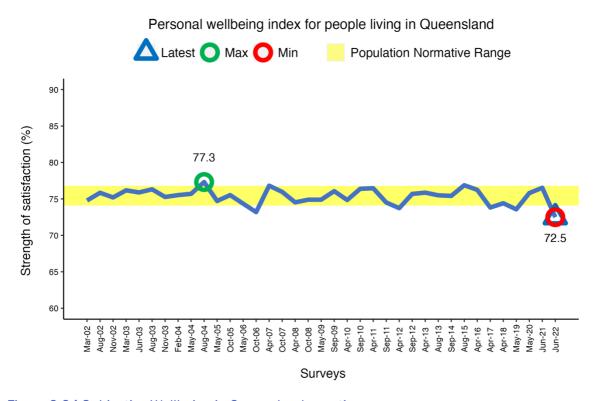


Figure 3-34 Subjective Wellbeing in Queensland over time

3.1.4.9 PWI and remoteness

The majority of the participants came from major cities (71%), with 20% and 8% from inner and outer regional areas respectively (see Appendix Table 4.2). Less than 2% came from remote areas and this group was deemed insufficient in size for subgroup comparisons. All PWI scores were within the normative range for these group and there were no notable differences within each geographic region across 2030-2021. (see Appendix Figures 4.3-4.4).

3.1.4.10 PWI and life events

Sad life events were experienced by 22% of participants, while 16% experienced both sad and happy events, and 21% experienced a happy event (see Appendix Table 4.2). Those experiencing a sad event only or both happy and sad, had average PWI scores below the normative range.

Those experiencing a happy event or no event had PWI scores just above the normative range. All groups had notably higher PWI scores compared to those experiencing a sad event, while those who experienced a happy event or no significant event at all, had notably higher scores compared to those who recently experienced both happy and sad events.

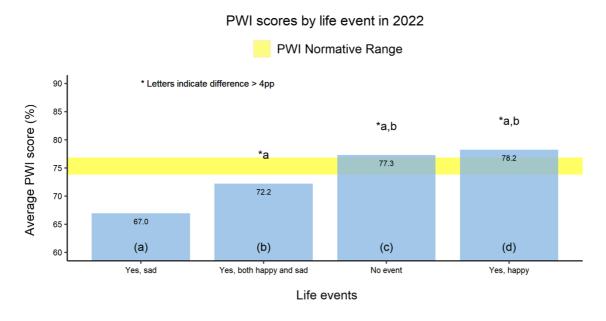


Figure 3-35 PWI scores for life events in 2022

Across 2020-2022, the distribution of life events was relatively similar, although sad events were more common in 2021 (26%) and 2020 (30%), compared to 2022 (22%). Within each life events group, average PWI scores were similar over the past three years, with one exception. Those who had experienced a sad event in 2022 had the average PWI score that was 6pp lower compared 2020. This was the lowest PWI ever reported for this group (*Figure 3-37*).

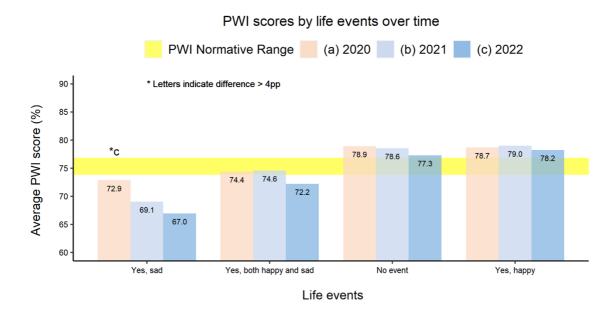


Figure 3-36 PWI scores for life events over time

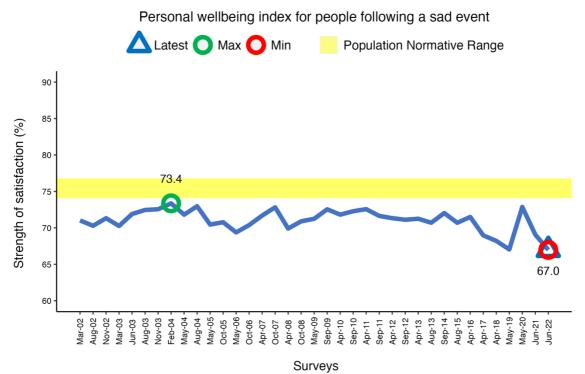


Figure 3-37 Subjective Wellbeing of people who experienced a recent sad event since over time

3.1.5 2021 NWI scores for each demographic group

The section below shows average NWI scores by demographic groups in 2022 and across time (2020, 2021 and 2022). This exploratory analysis was undertaken for the first time this year to better understand how NWI changes across socio-demographic groups. The NWI scores are presented on a scale from 50 to 75 percentage points. The normative range for NWI lies between 59.0 to 64.5pp and is shown in the yellow bar on the figures below.

3.1.5.1 NWI and age

In 2022, all age groups had average NWI scores within the normative range. The average NWI was similar across all age groups, with no meaningful differences between groups. Therefore, this figure is not shown and can be found in the Appendix Figure 4-5.

Across the pandemic, some meaningful notable differences in NWI were observed within age groups. In 2020 people aged 18-25, 36-45, 66-75 and 76+ had average NWI scores above the normative range. In 2020 these age groups also had notably higher average NWI scores compared to 2022 (4-6pp). Those people aged 18-25 and 36-45 also had notably higher NWI scores in 2021 compared to 2022.

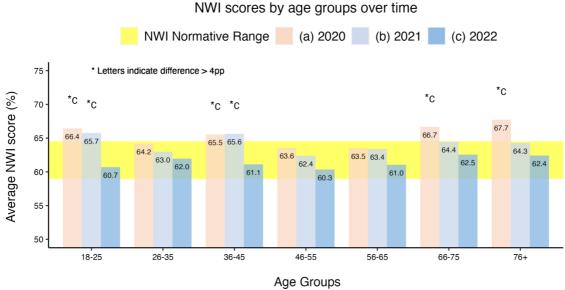


Figure 3-38 NWI scores for each age group over time

3.1.5.2 PWI and gross household income

Average NWI scores for those with the lowest household incomes (<\$60k) were below the normative range, while those with over \$150k were above the normative range. Across income groups, average NWI scores increased as income increased, with an 8pp difference between those in the lowest and highest income brackets. People with household income higher than \$100k had higher NWI than those in the lowest income bracket (i.e. \$30k). Similarly, those with an income above \$250k reported higher NWI means than those below \$100k.

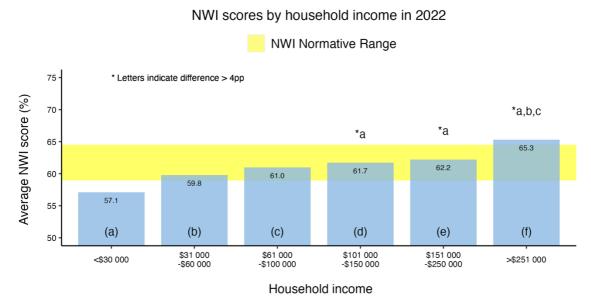


Figure 3-39 NWI scores for gross household income in 2022

Those with income of less than \$30k and \$101k - \$150k, had notably lower NWI scores in 2022 (4-7pp) compared to those in 2020. Additionally, those with a household income of less than \$60k had lower NWI scores in 2022 compared to those in 2020.

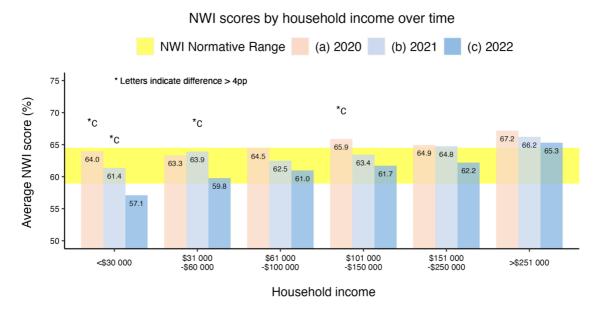


Figure 3-40 NWI scores by gross household income over time

3.1.5.3 NWI and gender

NWI scores were similar for males and females in 2020, 2021 and 2022 (see Appendix Table 4-21)

A small number of participants self-identified as other than male or female in 2020 and 2021 and 2022. However, these groups were too small (0.2%, 0.7% and 1.5%) for subgroup analyses so were not included when looking at differences in NWI scores by gender.

3.1.5.4 PWI and marital status

On average, NWI scores in 2022 were below the normative range for those who were separated but not divorced. Those who were separated but not divorced had an average NWI score that was 5.5pp lower than those who were married.

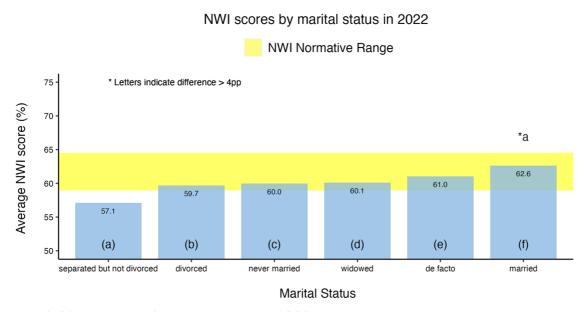


Figure 3-41 NWI scores for marital status in 2022

Notable differences were seen for those who never married, widowed and married in 2022, who had notably lower average NWI scores compared to 2020. Additionally, there was a notable difference for those who were separated but not divorced in 2022, who on average had scores 6pp lower than in 2021.

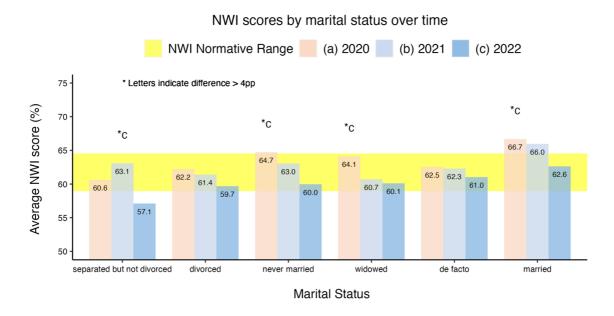


Figure 3-42 NWI scores for each marital status over time

3.1.5.5 NWI and household composition

Average NWI scores were similar across all household types with no notable differences in 2022, therefore this figure has been omitted and can be found in the Appendix Figure 4.6.

Across 2020-2022, the average NWI scores were comparable across each household type. However, those in households comprising of others and partners only had a 4-5pp lower NWI score in 2022 compared to 2020.

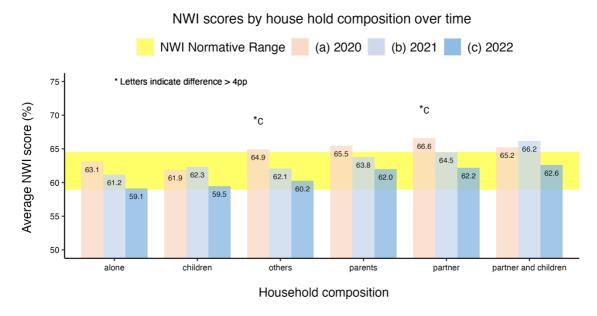


Figure 3-43 NWI scores for each household composition over time

3.1.5.6 NWI and full time occupation

Those who were unemployed had average NWI scores well below the normative range and 6pp lower than those who were in full time retirement, study, and employment in 2022.

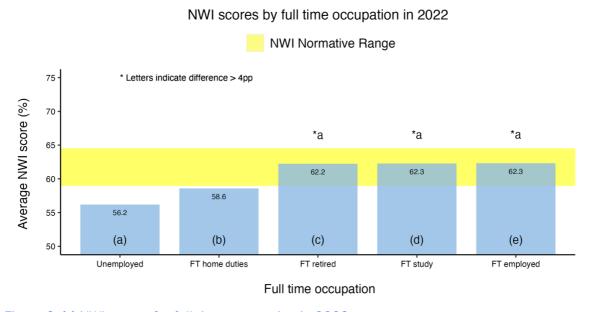


Figure 3-44 NWI scores for full time occupation in 2022

Those who were in full time home duties and full time studies had notably lower average NWI scores in 2022 compared to 2020.

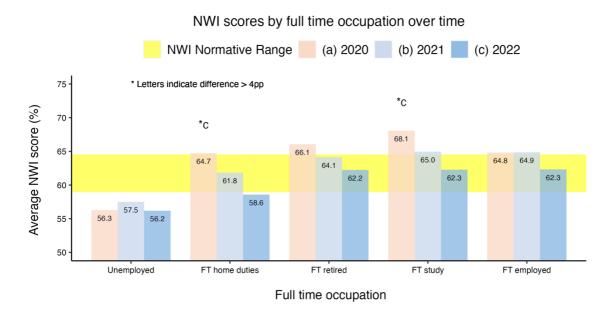


Figure 3-45 NWI scores for each full time occupation over time

3.1.5.7 NWI and part time occupation

In 2022, the average NWI scores were similar across all part time occupations with no notable differences between groups. Therefore, this figure has been omitted and can be found in the Appendix Figure 4.7.

In 2022 those who were semi-retired and in casual work had average NWI scores that were notably lower compared to 2020 (4-7pp). Additionally, those in part time casual work had 5pp lower average NWI scores in 2022 compared to 2021.

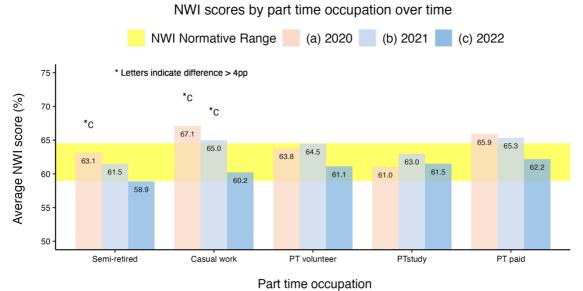


Figure 3-46 NWI scores for part time occupations over time

3.1.5.8 NWI across states

All states had NWI scores within the normative range in 2022, the Australian Capital Territory had a 4pp higher average NWI score compared to Tasmania, South Australia and Queensland.

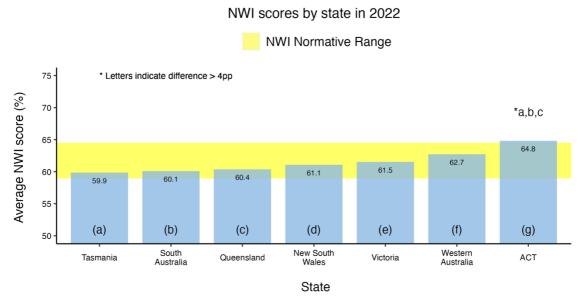


Figure 3-47 NWI scores by states

People who lived in South Australia, Queensland; and Western Australia had notably lower average NWI scores (5-7pp) in 2022 compared to 2020. People who lived in Tasmania in 2021 had a 5-10pp higher average NWI score compared to 2020 and 2022. Whilst average NWI score for Tasmanians fell in 2022, people who lived in Tasmania in 2022 still had a 5pp higher average NWI score compared to 2020.

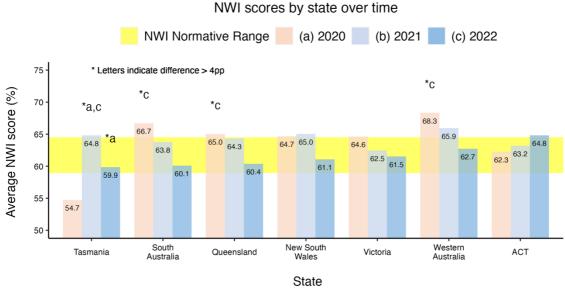


Figure 3-48 NWI scores by states over time

3.1.5.9 NWI and remoteness

All NWI scores were similar across those who lived in major cities, Inner Regional and Outer Regional. Those living in Outer Regional areas had an average NWI score slightly below the normative range but there were no notable differences between groups, so this figure has been omitted (see Appendix Figure 4.8).

Across the pandemic, those people living in Inner Regional areas had 4-5pp higher average NWI scores in both 2020 and 2021 compared to 2022.

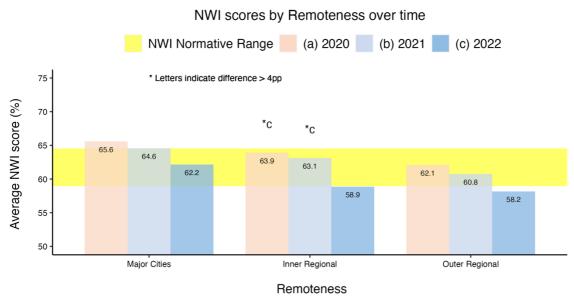


Figure 3-49 NWI scores by remoteness over time

3.1.5.10 NWI and life events

Those who had experienced a sad event and both a happy and sad event had average NWI scores below the normative range. While those who experienced no event or a happy event had average NWI scores notably higher than those who experienced a sad event and both a happy and sad event.

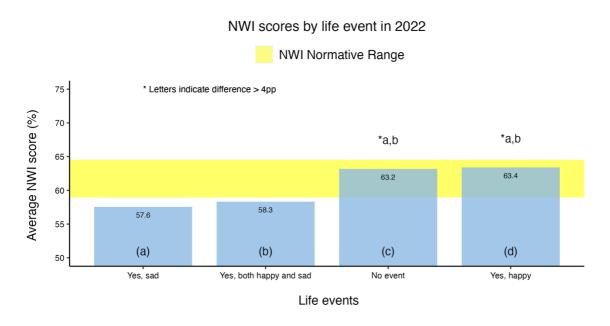


Figure 3-50 NWI scores for life events in 2022

In 2020, those who had experienced a sad event and both a happy and sad event had average NWI scores that were 5pp higher compared to 2022. Similarly, in 2021, those who had experienced both a happy and sad event had average NWI scores that were 4pp higher compared to 2022.

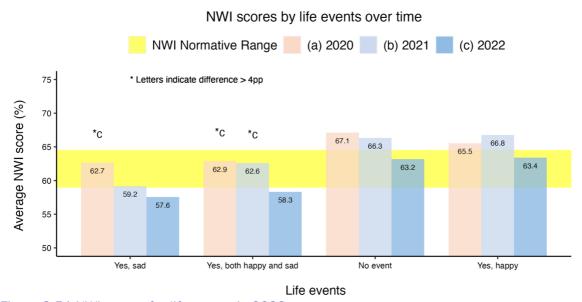


Figure 3-51 NWI scores for life events in 2022

3.2 Part 2: Climate change, mental distress, social connectedness and Homeostatically Protected Mood and personal wellbeing over the pandemic

This section summarises the findings relating to questions specific to the 2022 survey. These questions examined how Australians felt about climate change and other life areas including mental distress, social connectedness, and Homeostatically Protected Mood (HPMood). Part 2 of this report explores how these measures are related to Wellbeing, both in 2022 and across the pandemic. It also examines them by two key demographics that we know have a big impact on wellbeing: age and household income.

To understand the topics explored in Part 2 of this report, key summary statistics (i.e. M & SD) relating to each question are detailed below, along with an investigation of the Part 2 research questions pertaining to these topics. For the full outline of the questions asked for each topic, refer to section **Error! Reference source not found.**

Similar to Part 1 of this repot, we flag notable differences of 0.30 SD pp or greater by a star (*). This threshold is often used at the population level for meaningful differences. For the climate worry and for climate impact, a meaningful difference (i.e. 0.3 SD) between demographics groups equates to 9 raw pp, for climate control it is 8 raw pp and for climate action it is 7 raw pp.

3.2.1 Topic 1: Climate change attitudes and Wellbeing in 2022

The five questions asked in 2022 pertaining to climate change explore: a) how worried Australians feel about such change, b) how strongly they believe they will be *impacted personally* by climate change, c) whether climate change can be kept *under control*, d) how much they're *doing to help reduce* climate change, and e) who they believe is *responsible* for climate action. Refer to <u>section 2.3.2</u> of this report for details on the exact wording and scale used to ask these questions. All of these questions, with the exception of the last one around responsibility, are reported in percentage points (pp) from 0 (not at all) to 100 (extremely/a great deal).

As described in Table 3.2-1 below, respondents' average levels of worry about climate change, and how strongly they believed climate change will impact them personally, were similar at 64.0pp and 63.2pp. Their average belief that climate change can be controlled was somewhat lower at 53.1 pp and on average they rated their own efforts in reducing climate change at 57.0pp.

Table 3.2-1 Mean and Standard Deviation (SD) for S39 climate change questions measured on a 0 – 100 scale

С	limate Change questions	Mean (SD)
	low worried do you feel about climate hange	64.0 (30.0)
	low strongly do you believe that climate hange will affect you personally	63.2 (30.5)

How strongly do you believe that climate change can be kept under control	53.1 (27.2)
How much action are YOU currently taking to help reduce climate change	57.0 (23.4)

When asked to indicate who is responsible for reducing the impact of climate change, most people (73%) indicated that it is a collective responsibility, including individuals, communities, businesses and government. Only 6.5% of people responded that it's no one's responsibility to help reduce climate change, while <2.5% people thought that either of the groups alone were responsible.

Table 3.2-2 Percentage of Australian's who think different groups (individuals and communities, businesses, or Government) were responsible for reducing the impact of climate change

Climate Responsible Groups	Percentage (%)
No one	6.5
Individuals and communities only	2.2
Business only	1.1
Government only	2.4
Individuals, communities and business	2.0
Individuals, communities and government	1.0
Business and government	11.5
All (Individuals, community, business and government)	73.2

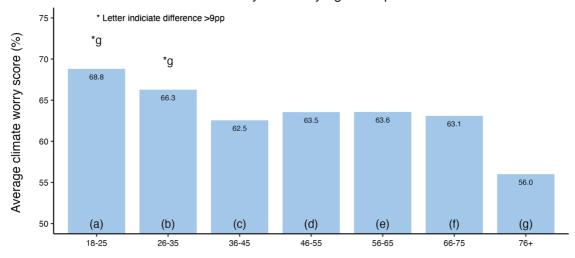
RQ 1: How did people think about climate change in 2022 relative to their age and household income?

This section examines climate change attitudes by two key demographics: age and household income.

3.2.1.1.1.1 Climate worry

Question: How worried do you feel about climate change? 0 (Not at all) to 100 (Extremely).

Climate worry scores by Age Groups in 2022



* Notable differences for climate worry are greater than 9pp or 0.30 SD pp; Figure 3-52 Climate worry by age groups in 2022

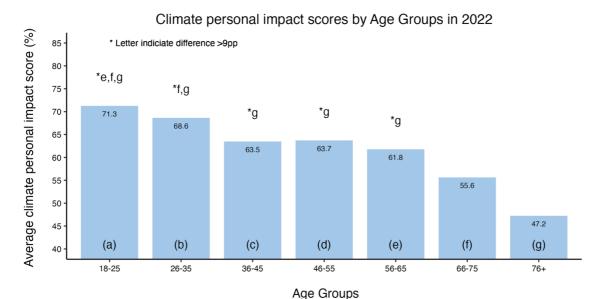
The two youngest age groups (18-35) years were most worried about climate change (M=68.8pp). These levels were notably higher compared to people who were older than 75 years (M=56.0pp).

Age Groups

Climate worry was not meaningfully different by household income (see Appendix Figure 5-1).

3.2.1.1.2 Climate personal impact

Question: How strongly do you believe that climate change will affect you personally? 0 (Not at all) to 100 (Extremely)



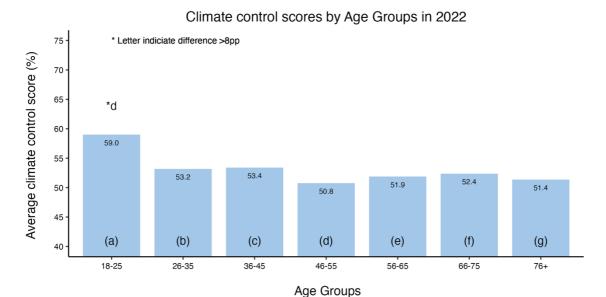
* Notable differences for climate personal impact are greater than 9pp or 0.30 SD pp. Figure 3-53 Climate personal impact by age groups in 2022

On average, younger people were more likely to believe that climate change will have an impact on them personally compared to older people. Those aged 18-25 years of age thought it would have the biggest impact on them (71.3 pp) followed by those aged 26-35 (68.6pp), while those aged 76+ thought it would have the smallest impact on them (47.2pp).

People's belief in a personal impact of climate change was not meaningfully different across household income groups (see Appendix Figure 5-2 for details).

3.2.1.1.1.3 Climate control

Question: How strongly do you believe that climate change can be kept under control? 0 (Not at all) to 100 (Extremely)



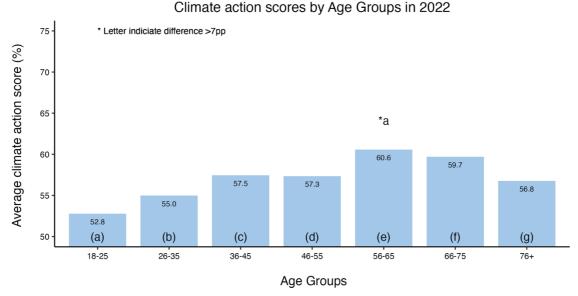
* Notable differences for climate control are greater than 8pp or 0.30 SD pp. Figure 3-54 Personal climate control by age groups in 2022

The youngest group felt the strongest that the climate change can be kept under control (M=59.0pp), specifically compared to the 46-55 age group (M=50.8pp).

There was no meaningful difference on climate control ratings by household income (see Appendix Figure 5-3 for details).

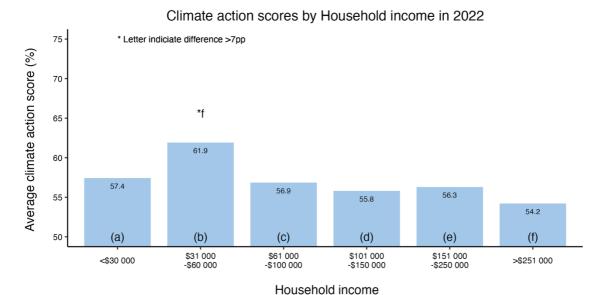
3.2.1.1.4 Climate personal action

Question: How much action are YOU currently taking to help reduce climate change (On a scale from 0 (None at all) to 10 (A great deal)?



* Notable differences for climate action are 7pp or 0.30 SD pp. Figure 3-55 Climate action by age groups in 2022

People who were younger felt their action to reduce climate change was less than older people. There was a meaningful difference between the youngest group (52.8pp) and those aged 55-65 years (60.6 pp) who felt like they were taking the most action.



* Notable differences for climate action are 7pp or 0.30 SD pp Figure 3-56 Climate action scores by household income in 2022

People living on a household income between \$31-60k felt that they were taking more action to help reduce climate change (M=61.9pp) compared to those on a household income greater than \$250k (M=54.2pp).

3.2.1.1.5 Climate responsibility

Question: Do you think the following groups are responsible for reducing the impact of climate change? <u>Please indicate 'yes' or 'no' to the following options</u>.

- Individuals and communities
- Businesses
- Governments

Table 3.3 and 3.4 below shows the distribution of responses to this question across age and household income groups. Dark red to indicate the lowest proportions and dark green to indicate the highest proportion of responses.

Table 3-3. Groups responsible for reducing the impact of climate change by age in 2022

	Age groups (years)						
Group/s responsible	18-25	26-35	36-45	46-55	56-65	66-75	76+
Business only	0.3%	0.3%	1.0%	1.6%	1.9%	0.8%	2.8%
Individuals/communities only	0.7%	0.6%	1.0%	1.6%	4.4%	3.8%	6.6%
Individuals/communities and business	1.4%	2.4%	1.6%	1.6%	2.2%	1.3%	6.6%
Government only	2.7%	2.4%	2.9%	2.2%	1.3%	2.5%	2.8%
None	3.1%	5.1%	3.9%	6.9%	6.0%	11.7%	13.2%
Business and government	14.6%	13.3%	13.4%	8.2%	9.4%	10.0%	12.3%
All groups	76.2%	75.0%	74.6%	76.7%	74.2%	69.6%	53.8%

The responsibility of climate action is rated differently relative to age groups. For example, older people were more likely to report that either no one is responsible for reducing climate change or that only business or individuals/communities are responsible for climate change action. On the other hand, younger people were more likely to report that all groups are responsible for climate change.

Table 3-4. Groups responsible for reducing the impact of climate change by gross household income in 2022

	Gross household income					
Group/s responsible	<\$30K	\$31K	\$61K	\$101K	\$151K	>\$251K
Group, a responsible		-\$60K	-\$100K	-\$150K	-\$250K	>φ251K
Business only	2.6%	0.4%	0.9%	1.5%	0.0%	1.6%
Individuals/communities only	5.5%	4.1%	1.2%	1.5%	1.5%	1.1%
Individuals/communities and business	3.4%	4.1%	2.5%	1.2%	1.2%	1.1%
Government only	3.4%	2.5%	2.2%	1.8%	2.0%	2.6%
None	8.9%	4.1%	6.8%	5.3%	5.3%	4.7%
Business and government	14.9%	11.5%	11.8%	12.3%	10.8%	9.5%
All groups	59.1%	72.4%	74.0%	75.7%	78.4%	78.4%

Similarly, the responsibility of climate action is rated differently relative to household income groups. For example, people living on <\$30k were more likely to report that only specific groups are responsible for reducing climate change action, while those with higher household incomes were more likely to report that all groups are responsible for climate change.

RQ2: Were climate change beliefs and attitudes related to Wellbeing in 2022?

3.2.1.1.1.6 Personal Wellbeing by climate change attitudes and action

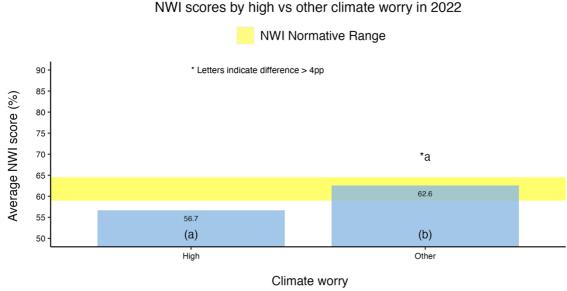
Our analyses show that Personal Wellbeing Index (PWI) did not change relative to level of worry about climate change, belief of personal impact, belief that climate change can be kept under control, the level of personal action people are taking, nor the groups people believed were responsible for reducing climate change (see Appendix Table 5-6 and 5-7 and Figures 5-4 to 5-7).

The weak relationship between climate change questions and PWI is consistent with prior survey results. In 2010, The Australian Unity Wellbeing Index <u>survey</u> asked participants whether they believed that the climate was warming, cooling or not changing. The PWI scores were similar and within the normative range for all three groups.

3.2.1.1.1.7 National Wellbeing by climate change attitudes and action

When comparing the National Wellbeing Index (NWI) by climate change attitudes (i.e. worry, belief in personal impact and sense of control over it) rated as high (i.e. top 25th percentile) vs other, we found that those people who had high climate worry scores had notably lower (6pp) NWI compared to the rest of the respondents (Figure 3-52).

However, for all other climate change attitude scores, there was no meaningful difference in NWI between people who reported high vs other climate change attitudes. That is, regardless of people's belief of personal impact of climate change, their belief that climate change can be kept under control, and the level of personal action they are taking, they all reported similar levels of NWI (see Appendix Table 5-8 and Appendix Figures 5-8 to 5-10 for details).



* Notable differences for NWI are 4pp or 0.30 SD pp

Figure 3-57 NWI scores by high (top 25th percentile) climate worry in 2022

3.2.1.1.8 Satisfaction with natural environment by climate change attitudes and action

We examined people's satisfaction about the state of the natural environment (one of the 6 NWI domains) relative to their attitudes and actions about climate change. We found that satisfaction with the state of natural environment was not related to the sense of control about the climate change or how much action people were taking to slow down the climate change. However, we found that people who reported high climate worry about climate change had notably lower (17pp) satisfaction about the state of the natural environment, compared to the rest of the respondents. In fact, their satisfaction with natural environment was 10pp below the normative range for that domain. See Appendix Table 5-7 for more details.

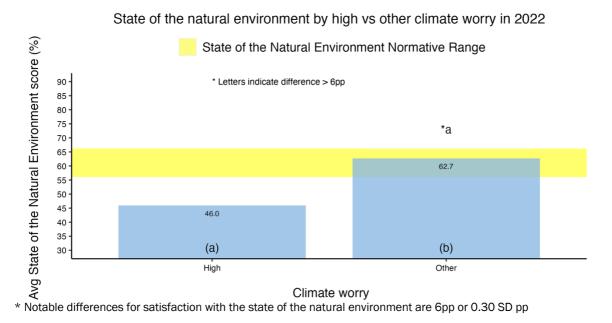
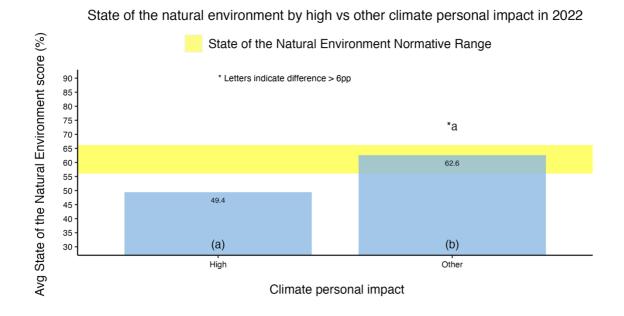


Figure 3-58 State of the natural environment scores by high (top 25th percentile) climate worry in 2022

Similarly, people who had high belief that climate change would affect them personally, had notably lower (13pp) satisfaction about the state of the natural environment, compared to the rest of the respondents, and 7pp lower satisfaction below the normative range.



^{*} Notable differences for satisfaction with the state of the natural environment are 6pp or 0.30 SD pp Figure 3-59 State of the natural environment scores by high (top 25th percentile) climate personal impact in 2022

Topic 2: Mental distress and the Personal Wellbeing Index across the pandemic

Mental distress is a term used in this report to refer to questions pertaining to feelings of anxiety, stress and depression.

Average levels of mental distress have increased across all three measures during the pandemic. With on average feelings of anxiety increasing by 3pp and stress increasing by 7pp from 2020 to 2022. Feelings of depression data were not collected in 2020, but average levels of have increased by 4pp on average since 2021.

The constructs will be ordered as Anxiety, Stress and Depression for this part of the report.

Table 3-5 Mean and Standard Deviation (SD) of mental distress levels across the pandemic years

	M	lental distress (range 0-10	0)
	Anxiety	Stress	Depression
Pandemic years	Mean (SD)	Mean (SD)	Mean (SD)
2020	44.8 (26.2)	44.2 (27.2)	NA
2021	42.8 (28.1)	46.4 (27.4)	30.1 (27.9)
2022	48.2 (25.8)	51.3 (24.5)	33.8 (25.8)

3.2.1.1.1.9 Mental distress by age groups and household income

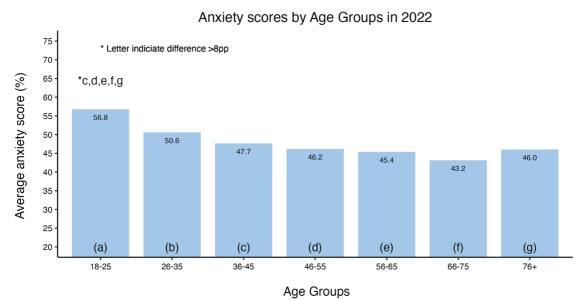
RQ3: Did mental distress change across age groups and income in 2022?

Throughout this section of the report we flag notable differences of 0.30 SD pp or greater by a star (*). This threshold is often used at the population level for meaningful differences. For the anxiety and depression, this difference is 8 raw pp, for stress, this difference is 7 raw pp.

3.2.1.1.1.9.1 Anxiety

In 2022, the youngest age group, those aged 18 – 25 years old, had notably higher scores (9-14pp) of anxiety compared to those aged 36 years and above.

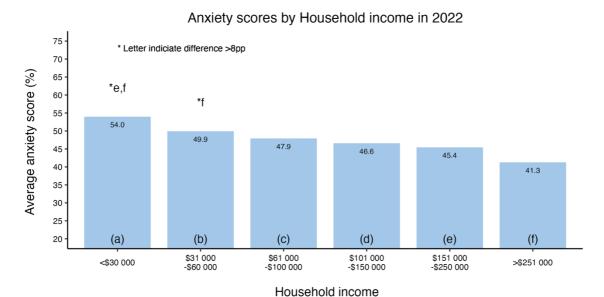
Question: "How anxious do you generally feel? O (Not at all) to 100 (Extremely)



* Notable differences for anxiety are 8pp or 0.30 SD pp

Figure 3-60 Anxiety scores by age groups in 2022

In 2022, people whose household income was below \$30K had notably higher levels of anxiety (9-13pp) compared to those with a household income greater than \$151K. Similarly, people with household income of \$31K-\$60K had notably higher levels of anxiety (9pp) compared to those with a household income greater than \$251K.



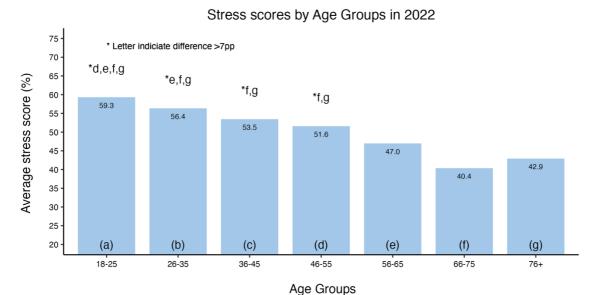
* Notable differences for anxiety are 8pp or 0.30 SD pp

Figure 3-61 Anxiety scores by household income in 2022

3.2.1.1.1.9.2 Stress

Question: "How stressed do you generally feel? O (Not at all) to 100 (Extremely)

In 2022, younger people had notably higher stress scores compared to older people. Those aged 18-25 had the highest levels of stress, notably higher (8-19pp) than those aged 46 years of age and above.



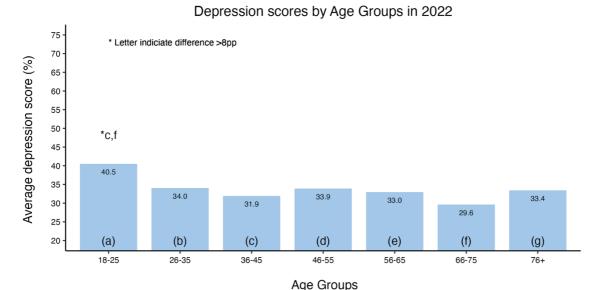
* Notable differences for stress are 7pp or 0.30 SD pp Figure 3-62 Stress scores by age groups in 2022

There were no notable differences in stress scores between different household income groups in 2022 (see Appendix Table 5-11 and Figure 5-11 for details).

3.2.1.1.1.9.3 Depression

Question: "How depressed do you generally feel? O (Not at all) to 100 (Extremely)

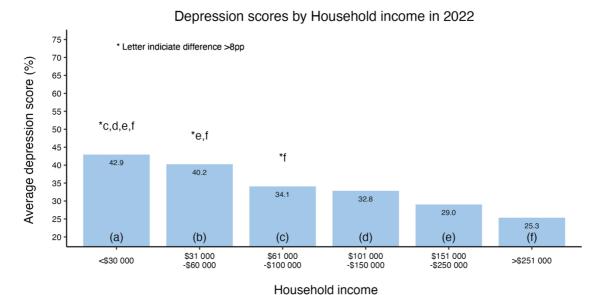
Depression levels were highest amongst the youngest adults (18-25 years) at a mean depression level of 40.5pp. Their depression levels were meaningfully higher than those aged 36-45 and 66-75 years.



 $\ensuremath{^{\star}}$ Notable differences for depression are 8pp or 0.30 SD pp

Figure 3-63 Depression scores by age groups in 2022

Feelings of depression were highest in those with the lowest household incomes and decreased as household income rose. Feelings of depression were notably higher in the lowest income group (<\$30k) compared to almost all other income groups (>60k). Those with a household income of \$31-60k had notably higher feelings of depression compared to those with incomes of >\$150k, while those on incomes of \$61-100k had notably higher feelings of depressions compared to those on >\$250k.



* Notable differences for stress are 7pp or 0.30 SD pp

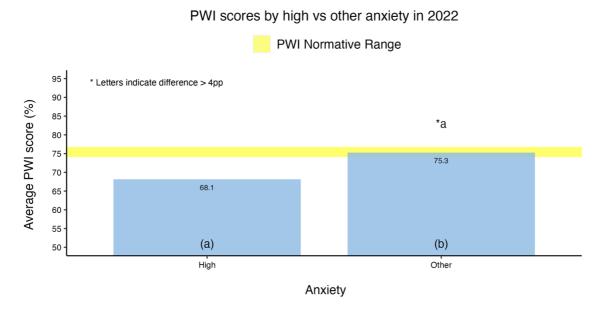
Figure 3-64 Depression scores by household income in 2022

3.2.1.1.10 Personal Wellbeing by mental distress

RQ4: Was mental distress related to the Personal Wellbeing Index in 2022?

3.2.1.1.1.10.1 Anxiety

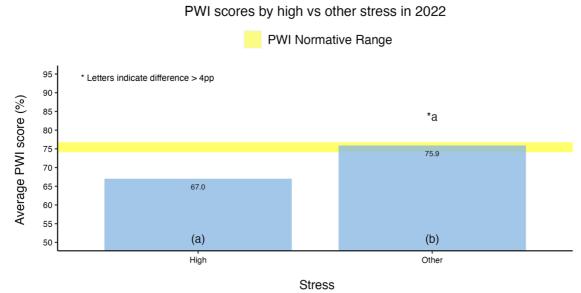
In 2022, those people who had high levels of anxiety had notably lower (7pp) PWI scores compared to the other respondents.



* Notable differences for PWI are 4pp or 0.30 SD pp Figure 3-65 PWI scores by high (top 25th percentile) anxiety in 2022

3.2.1.1.1.10.2 Stress

In 2022, those people who had high levels of stress had notably lower (9pp) PWI scores compared to the other respondents.

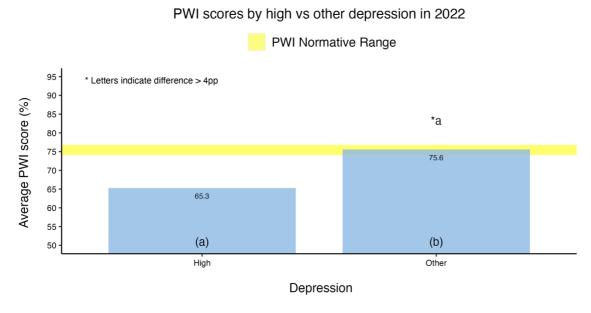


^{*} Notable differences for PWI are 4pp or 0.30 SD pp

Figure 3-66 PWI scores by high (top 25th percentile) stress in 2022

3.2.1.1.1.10.3 Depression

In 2022, those people who had high levels of depression had notably lower (10pp) PWI scores compared to the other respondents.



^{*} Notable differences for PWI are 4pp or 0.30 SD pp

Figure 3-67 PWI scores by high (top 25th percentile) depression in 2022

RQ5: Was mental distress related to the Personal Wellbeing Index across the pandemic?

Across the three pandemic years, PWI scores for those people with high levels of anxiety were notably higher in 2020 compared to both 2021 and 2022 (Figure 3-63). There were no notably differences in stress and depression across the pandemic years (see Appendix Table 5-14 and 5-15 and Figures 5-12 and 5-13 for details).

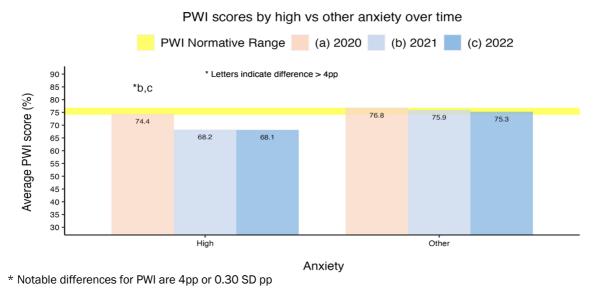


Figure 3-68 PWI scores by high (top 25th percentile) anxiety over three pandemic years

3.2.2 Topic 3: Social Connectedness and the Personal Wellbeing Index across the pandemic

The social connectedness item asked how connected participants felt to others. This was measured at each year during the pandemic. Levels of social connectedness have increased since 2020 and were almost identical in 2021 and 2022.

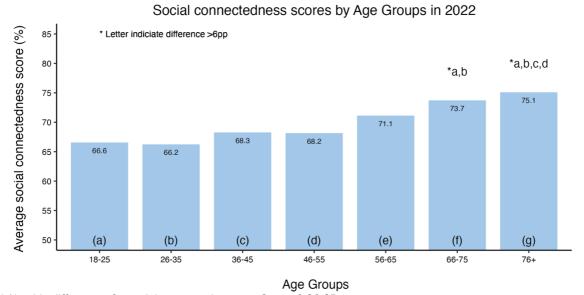
Table 3-6 Mean and Standard Deviation (SD) of Social connectedness across the pandemic

	Social Connectedness (range 0-100)			
Pandemic years	Mean (SD)			
2020	63.5 (23.3)			
2021	69.2 (21.7)			
2022	69.1 (19.7)			

3.2.2.1.1.1 Social connectedness by age groups and household income

RQ6: Did social connectedness change across age groups and income in 2022?

For the social connectedness, a meaningful difference (i.e. 0.3 SD) equates to 6 raw pp.



 \star Notable differences for social connectedness are 6pp or 0.30 SD pp

Figure 3-69 Social connectedness scores by age groups in 2022

The oldest age groups (66-75) and (76+) were most strongly connected in 2022 compared to the youngest age groups (18-35) and (18-55), respectively.

No meaningful differences were found for social connectedness by household income (see Appendix Table 5-16 and Figure 5-14 for details).

3.2.2.1.1.2 Personal Wellbeing by social connectedness

RQ7: Was social connectedness related to the Personal Wellbeing Index in 2022?

In 2022, people with high social connectedness scores (≥75th percentile) had notably higher (11pp) PWI compared to others. Those with high social connectedness scored well above the PWI normative range, while all others scored below the normative range.

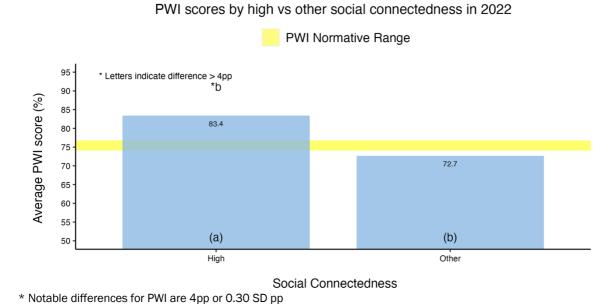


Figure 3-70 PWI scores by high (top 25th percentile) social connectedness in 2022

RQ8: Was social connectedness related to the Personal Wellbeing Index across the pandemic?

PWI scores were similar for high vs. other social connectedness levels across the three pandemic years (see Appendix Table 5-17 and Figure 5-15 for details).

3.2.3 Topic 4: Homeostatically Protected Mood

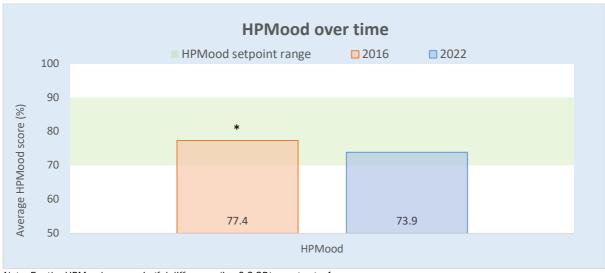
This chapter concerns the basic psychological elements underpinning Subjective Wellbeing (SWB). According to the theory of SWB homeostasis (Cummins, 2010), SWB levels are maintained by a homeostatic mechanism within a narrow range around a genetically determined setpoint (Capic et al., 2018; Cummins et al., 2014). This setpoint provides each person with a constant background level of affective positivity and alertness, named Homeostatically Protected Mood (HPMood). The HPMood setpoint level was best measured by asking people how content, happy and alert they generally feel (Bittar, 2009; Davern et al., 2007; Tomyn, 2008). Individual HPMood setpoints in a population were estimated to range between 70 and 90 percentage points (pp), with an average setpoint level at 80 pp (Capic et al., 2018; Cummins et al., 2014).

This section of the report examines the population levels of HPMood in 2022 (during pandemic) and 2016 (pre-pandemic) and the levels of PWI at normal and low levels of HPMood.

3.2.3.1.1.1 Homeostatically Protected Mood in 2022 (during pandemic) and 2016 (pre-pandemic)

RQ9: Did Homeostatically Protected Mood change during the pandemic relative to before?

HPMood levels in 2022 were notably lower compared to pre-pandemic time (i.e 2016) (Figure 3-71).



Note: For the HPMood, a meaningful difference (i.e. 0.3 SD) equates to 4 raw pp.

Figure 3-71 Homeostatically Protected Mood (HPMood) levels in 2016 (pre-pandemic) and 2022 (pandemic)

3.2.3.1.1.2 Homeostatically Protected Mood by age and household income

RQ10: Which demographic factors are associated with the change in HPMood levels during the pandemic compared to before?

The HPMood levels were notably lower in 2022 compared to 2016 for young adults (18-25 years) and those on a household income of <\$60,000 (Figures 3.72-3.73). For young adults (18-25 years of age) and people living on low income (i.e <\$30,000), HPMood in 2022 was below the HPMood setpoint range.

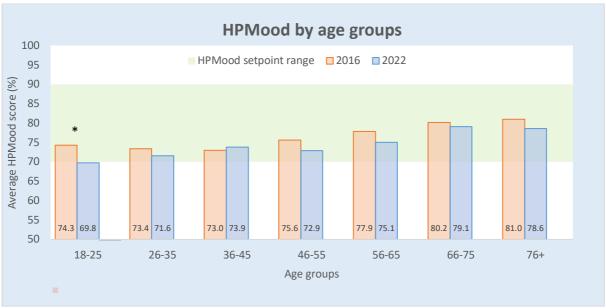


Figure 3-72 Homeostatically Protected Mood (HPMood) by age groups in 2016 (pre-pandemic) and 2022 (pandemic)

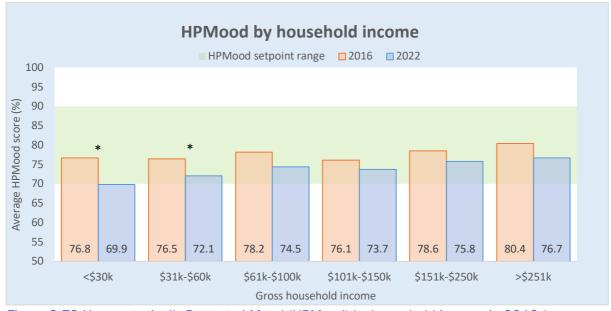


Figure 3-73 Homeostatically Protected Mood (HPMood) by household income in 2016 (prepandemic) and 2022 (pandemic)

3.2.3.1.1.3 Homeostatically Protected Mood and Personal Wellbeing Index

RQ11: What is the relationship between HPMood and Personal Wellbeing Index?

The PWI was notably different at each year between people with normal and low HPMood levels, with low HPMood groups reporting PWI levels 11pp below the normal range. The PWI did not change during pandemic compared to before at each level of HPMood (Figure 3.74).

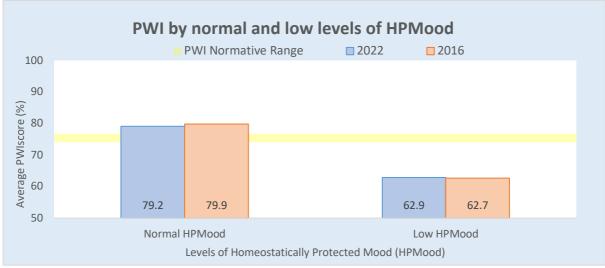


Figure 3-74 Personal Wellbeing Index by normal and low Homeostatically Protected Mood (HPMood) levels in 2016 (pre-pandemic) and 2022 (pandemic)

4 CONCLUSION

Subjective wellbeing in 2022

The 2022 Australian Unity Wellbeing Index survey of 2,000 Australians was conducted between 23 May and 27 June 2022. It is notable that data collection took place just after the federal election which occurred on 21 May 2022. The 2022 federal election saw the Labor Party achieve a majority government for the first time since 2013. In addition to the election, 2022 also marked the third year of the COVID-19 pandemic. The start of 2022 was also a time when significant local & international events unfolded, including the catastrophic floods in New South Wales and Queensland, Russia launching an invasion into Ukraine and rising global inflation, which meant corresponding rise in interest-rates and cost of living. This context is important for considering Australian's subjective wellbeing in 2022.

Perhaps unsurprisingly, the tumultuous start to 2022 saw Australians' subjective wellbeing trending downward. Global Life Satisfaction and Global National Wellbeing reached all-time lows in 21 years. However, Australians' personal wellbeing remained resilient. The Personal Wellbeing Index remained within the normative range, despite falling since 2020. All PWI domains remained in their normative ranges, except for satisfaction with health and community connectedness, which both fell below. This may reflect people's concern for their health as life as normal started to resume in 2022, while COVID-19 persisted. Additionally, people's low satisfaction with community connectedness and lower subjective wellbeing in 2022 may be impacted by the increasingly volatile global socio-political environment.

Similarly, satisfaction with the National Wellbeing Index (NWI) continued to decline since the highest levels recorded in 2020 but did remain within the normative range. This pattern was consistent across all NWI domains. The decline on NWI scores in 2021 and 2022 may reflect emerging concerns about the national management of the pandemic, as cases soared in early 2022 and we learned to live with COVID-19. Equally, it could also reflect Australian's concern with the national climate crisis which is causing extreme weather events year on year during Australian summers.

How subjective wellbeing fared across demographic groups and life areas as we learn to live with the pandemic and climate change.

We examined Australian's subjective wellbeing across different demographic groups both in 2022 and across the three pandemic years (2020-2022).

One key theme that emerged was that young people are struggling in Australia, both with mental distress and climate concerns, which may very well be interconnected. In 2022 we saw the lowest PWI scores for the youngest age group (i.e. 18-25) in 21 years. It was also the first time since 2006 that all adults under 56 years of age reported PWI below normative range. This same pattern of younger adults struggling in Australia is also reflected in their concerns on climate change and their mental distress measures. Young people (18-35) were notably more worried about climate change and believed that they would be more personally affected by climate change. However, in good news, this group

were also the most hopeful, they felt most optimistic that climate change can be kept under control compared to other age groups.

The data from 2022 shows that those people who were most worried about climate change and those who believed that climate change will impact them personally, reported lower levels of satisfaction with the natural environment. Similarly, people who were most worried about climate change had notably lower scores of National Wellbeing compared to the rest of the respondents.

Young adults in Australia are also struggling with their mental health. Feelings of anxiety and depression were highest amongst the youngest age group (i.e. 18-25) while stress levels were highest amongst the younger and middle age groups (i.e. 18-55). It is possible that the increasing local and global stressors, like climate disaster, global sociopolitical tensions, and increased cost of living in the beginning of 2022 really hit this group hard.

These results are consistent with 2020-21 data from the Australian Bureau of Statistics recently published showing that there have been increases in the prevalence of mental illness among younger Australian adults (Australian Bureau of Statistics, 2022).

Conversely the 2022 data showed that social connectedness in 2022 increased with age and was notably higher in adults over 66 years of age compared to adults under 36 years of age. We know that social connectedness is very important for subjective wellbeing. It raises the question about how we can increase the sense of community connectedness among younger Australian adults.

Another key theme that emerged is that those Australians with lower income are struggling more in 2022 compared to the beginning of the pandemic. Perhaps this is because of the rising cost of living and the mental distress that precipitates from financial stress. The 2022 data showed that PWI scores for people with household income of under \$30K hit an all-time low, which was also notably lower compared to 2020 and 2021. The 2022 data showed that feelings of anxiety and depression were highest among people in this income group and gradually decreased with as household income got higher.

Other key patterns that emerged were that those people who we observed were doing unusually well in 2020 (those who were separated, living alone, unemployed and semiretired) were all back to their pre-pandemic lower levels of PWI. Particularly those who were unemployed. The PWI scores for those people who were unemployed in 2022 was at its lowest level reported in 21 years, which was markedly lower compared to 2020.

Consistent with the decline on subjective wellbeing and the increase in mental distress, the average Homeostatically Protected Mood (HPMood) was also notably lower in 2022 compared to 2016, dropping below the HPMood setpoint range for young adults (18-25 years of age) and people living on low household income (i.e. <\$30,000). These low levels of HPMood were associated with PWI levels that were more than 10 percentage points below the PWI normative range.

Future directions

A lot has changed since May-June 2022, interest rates and cost of living have continued to rise, the new Labor government in Australia is well underway in enacting policy, and global socio-political tensions remain high. It will remain to be seen in the upcoming 2023 survey whether Australians' subjective wellbeing will bounce back.

REFERENCES

- ABC, A. B. C. (2022). Senate Results. Retrieved 19/04/2023 from https://www.abc.net.au/news/elections/federal/2022/results/senate
- Australian Bureau of Statistics. (2016). 2033.0. 55.001. Census of population and housing: Socio-Economic Indexes for Areas (SEIFA), Australia, 2016.
- Australian Bureau of Statistics. (2018). 1270.0. 55.005—Australian statistical geography standard (ASGS): Volume 5—Remoteness structure, July 2016. In: Australian Bureau of Statistics Canberra, Australia.
- Australian Bureau of Statistics. (2022). *National Study of Mental Health and Wellbeing*. https://www.abs.gov.au/statistics/health/mental-health/national-study-mental-health-and-wellbeing/latest-release.
- Australian Electoral Comission. (2022). *House of Representatives final results*. Retrieved 19/04/2023 from https://results.aec.gov.au/27966/Website/HouseDefault-27966.htm
- Australian Red Cross. (2022). *Queensland and New South Wales Floods Report*. chrome-extension://efaidnbmnnnibpcajpcglclefindmkaj/https://www.redcross.org.au/globalassets/cms/stories/floods-report-2022/floodreport_2022.pdf
- Bittar, R. (2009). Subjective well-being maintenance: Investigating depression as suppressed homeostatically protected mood [Doctoral thesis, Deakin University]. http://www.acqol.com.au/uploads/theses/thesis-bittar-r.pdf
- Capic, T., Li, N., & Cummins, R. A. (2018). Confirmation of Subjective Wellbeing Set-points: Foundational for Subjective Social Indicators. Social Indicators Research, 137(1), 1-28. 10.1007/s11205-017-1585-5
- Cohen, J. (1992). A power primer. Psychological bulletin, 112(1), 155.
- Cummins, R. A., Eckersley, R., Pallant, J., Van Vugt, J., & Misajon, R. (2003). Developing a national index of subjective wellbeing: The Australian Unity Wellbeing Index. Social Indicators Research, 64, 159-190.
- Cummins, R. A., Li, N., Wooden, M., & Stokes, M. (2014). A demonstration of set-points for subjective wellbeing. *Journal of Happiness Studies*, *15*(1), 183-206. http://ezproxy.deakin.edu.au/login?url=http://search.ebscohost.com/login.aspx?direct=true&db=psyh&AN=2013-40619-001&site=ehost-live&scope=site
- Cummins, R. A., Mead, R., & The Australian Unity-Deakin University Wellbeing Research Partnership*. (2021). *The Australian Unity Wellbeing Index 20th Anniversary Commemorative Edition*. http://www.acqol.com.au/uploads/surveys/20yr-anniversary-report.pdf
- Davern, M. T., Cummins, R. A., & Stokes, M. A. (2007). Subjective Wellbeing as an Affective-Cognitive Construct. *Journal of Happiness Studies*, 8(4), 429-449. https://doi.org/10.1007/s10902-007-9066-1
- Hannam, P. (2022). Real wages to fall by 3% this year as inflation surges, says RBA. The Guardian. Retrieved 19.04.2023 from https://www.theguardian.com/australia-news/2022/may/06/real-wages-to-fall-by-3-this-year-as-inflation-surges-says-rba
- International Wellbeing Group. (2013). Personal Wellbeing Index Manual: 5th Edition. Australian Centre on Quality of Life, School of Psychology, Deakin University. http://www.acgol.com.au/instruments#measures
- Kelly, C. (2022). Rising food prices hit every supermarket aisle putting pressure on low-income families. The Guardian. Retrieved 19.04.2023 from https://www.theguardian.com/australia-news/2022/jul/10/rising-food-prices-hit-every-supermarket-aisle-putting-pressure-on-low-income-families
- Khor, S., Capic, T., Cummins, R. A., Fuller-Tyszkiewicz, M., Olsson, C. A., Hutchinson, D., & Lycett, K. (2021). Australian Unity Wellbeing Index Report 38. Subjective wellbeing in Australia during the second year of the pandemic. . S. o. P. Australian Centre on Quality of Life, Deakin University. http://www.acqol.com.au/projects#reports.

- Khor, S., Cummins, R. A., Fuller-Tyszkiewicz, M., Capic, T., Jona, C., Olsson, C. A., & Hutchinson, D. (2020). *Australian Unity Wellbeing Index: Report 37: Subjective wellbeing during COVID-*19. http://www.acqol.com.au/uploads/surveys/survey-037-report.pdf
- Ore, A., & Rose, T. (2022). 'Health system in distress': how ambulance ramping became a major problem. *The Guardian*. https://www.theguardian.com/australia-news/2022/may/07/health-system-in-distress-how-ambulance-ramping-became-a-major-problem
- Psaropoulos, J. (2022). *Timeline: Six months of Russia's war in Ukraine*. AlJazeera. Retrieved 11/10/2022 from https://www.aljazeera.com/news/2022/8/24/timeline-six-months-of-russias-war-in-ukraine
- R Core Team. (2022). R: A language and environment for statistical computing. . In R Foundation for Statistical Computing https://www.R-project.org/.
- RBA, R. B. o. A. (2022). Cash Rate Target. Reserve Bank of Australia. Retrieved 11/10/2022 from https://www.rba.gov.au/statistics/cash-rate/
- Richardson, D., & Grudnoff, M. (2023). *Inequality on Steroids: The Distribution of Economic Growth in Australia*. The Australian Institute. Retrieved 20.04.2023 from https://australiainstitute.org.au/post/inequality-on-steroids-as-bottom-90-get-just-7-of-economic-growth-since-2009/
- Rothbaum, J., & Bee, A. (2022). How Has the Pandemic Continued to Affect Survey Response? Using Administrative Data to Evaluate Nonresponse in the 2022 Current Population Survey Annual Social and Economic Supplement. United States Census Bureau. https://www.census.gov/newsroom/blogs/research-matters/2022/09/how-did-the-pandemic-affect-survey-response.html
- RStudio Team. (2020). RStudio: Integrated Development for R. In RStudio PBC. http://www.rstudio.com/.
- StataCorp. (2019). Stata Statistical Software: Release 16. In StataCorp LLC.
- Tomyn, A. J. (2008). Subjective Wellbeing as an Affective Construct: Theory Development and Construction with Adolescents. Unpublished Doctoral Thesis Deakin University, Melbourne]. http://www.deakin.edu.au/research/acqol/theses/index.php
- Tsiaplias, S., & Wang, J. (2023). The Australian Economy in 2022–23: Inflation and Higher Interest Rates in a Post-COVID-19 World. *Australian Economic Review*, 56(1), 5-19. https://doi.org/https://doi.org/10.1111/1467-8462.12498
- Watson, N., Nesa, M. K., & Summerfield, M. (2022). HILDA Project Discussion Paper Series Wave 21 data quality.