

Community survey of young Victorians' resilience and mental wellbeing

Full Report: part A and part B

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Part A: the report

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Report highlights

This is the first study to:

1. empirically validate a shortened version of the Connor-Davidson Resilience Scale (CD-RISC 10) in a sample of young Victorians
2. bridge the gap between subjective wellbeing (SWB) and resilience research by clarifying the link between SWB scores – measured using the Personal Wellbeing Index (PWI) – and resilience scores – measured using the CD-RISC 10
3. clarify the relationship between SWB and the three negative affective traits of loneliness, stress and anxiety, and suggest evidenced-based guidelines for interpreting these affects.

Key findings

- While the overall sample mean for SWB was within the normal range for Australian adults, analyses reveal differences in personal wellbeing and resilience among different subgroups.
 - Young people with **above-average** wellbeing:
 - are from higher-income households
 - live with a partner and children / partner and parents
 - participate in sport/recreation
 - have high access to social support when in need.
 - Young people with **below-average** wellbeing:
 - have limited access to social support when in need
 - are from lower-income households
 - are looking for work and aged 22–25 years
 - live alone.
- Loneliness has been identified as a major threat to personal wellbeing and appears to have a more detrimental association with wellbeing at lower levels of intensity than stress or anxiety does.
- High-school students have higher personal wellbeing than university and TAFE students, but lower resilience scores.

Glossary

Subjective wellbeing (SWB). The scientific term for mood happiness and the construct measured by the Personal Wellbeing Index (PWI). SWB reflects a person's level of happiness or satisfaction with their life and is synonymous with 'personal wellbeing'.

Personal wellbeing or wellbeing. Synonymous with *subjective wellbeing*.

the Personal Wellbeing Index (PWI). The measure of SWB. The PWI comprises seven domains rated on an 11-point, end-defined, 'Not at all satisfied' to 'Completely satisfied' scale. The seven domains are averaged to form a single composite variable, standardised onto a 0 to 100-point scale.

Subjective Wellbeing Homeostasis Theory or SWB Homeostasis Theory. This theory proposes that SWB is actively maintained and defended around a 'set-point', in much the same way as body temperature.

Subjective wellbeing homeostasis. The process that keeps a person's SWB around their biologically determined 'set-point'.

Resilience. A dynamic process leading to positive adaptation in the face of significant adversity.

post-hoc test. Test of the significance of difference between two or more group mean scores. Post-hoc tests are presented throughout Part B of this report and discussed where relevant in Part A.

Significant or significance testing. A statistical exploration of how likely a result is to occur by chance alone. A difference between two mean scores that is significant ($p < 0.05$) is likely to reflect a true difference between the means and is unlikely to have occurred by chance. Significance level is represented by the 'p' value, with smaller numbers indicating greater statistical significance. Throughout this report, the minimum significance criteria employed is $p < 0.05$ – in other words, if there was no actual difference between groups, the chance of obtaining the values observed is less than 5 per cent.

Mean or mean score (M). The combined average scores for a group of respondents on a particular variable.

Standard deviation (SD). A standard deviation is the measure of the spread of scores around a mean value. Lower standard deviations indicate a lower dispersion of scores around the mean, and vice versa.

Young Victorians or young adults. In the context of this research, people between the ages of 16 and 25 years.

Executive summary

Mental wellbeing and resilience are important and underdeveloped areas of research in Victoria's youth population.

With this in mind, the Victorian Health Promotion Foundation (VicHealth) asked quality of life and subjective wellbeing experts to provide a baseline measure of the prevalence of resilience among young Victorians aged 16 to 25 and to report on their levels of mental wellbeing (expressed here as 'subjective wellbeing'). A further aim was to investigate whether the 10-item Connor-Davidson Resilience Scale (Campbell-Sills & Stein, 2007), a common measure of resilience, is a suitable measure of this construct.

Collectively, these data have the potential to inform government policy and service delivery. For example, interventions can be targeted at young people who are identified as being at high risk of experiencing low wellbeing or depression, maximising their effectiveness. Moreover, evidence gathered from this research may lead to a greater understanding of the concept of resilience and create capacity to measure resilience within this important and under-researched group of young Victorians.

Subjective wellbeing

Subjective wellbeing (SWB) can be defined as "a normally positive state of mind that involves the whole life experience" (Cummins, 2010). Also referred to as 'personal wellbeing' or 'happiness', **SWB concerns how people feel and think about their lives and personal circumstances.**

The instrument used to measure SWB in this research is the Personal Wellbeing Index – Adult (PWI-A; IWG, 2013). The PWI adopts a 'domain-based' approach to measuring SWB, by asking respondents to indicate their level of satisfaction with seven important life domains, and is recommended by both the World Health Organization (WHO) and the Organisation for Economic Co-operation and Development (OECD) for this purpose. Scores on these seven domains are averaged to form a single composite personal wellbeing score that is standardised and projected onto a 0 to 100-point scale.

Using this scale, the following guidelines for interpreting *individual* SWB scores measured using the PWI are offered:

1. 70+ points = 'Normal': A person is likely to be experiencing a normal level of wellbeing
2. 51–69 points = 'Challenged': Personal wellbeing is likely to be challenged or compromised
3. <50 points = 'High risk': Very low personal wellbeing; strong likelihood of depression.

Resilience

Resilience generally refers to the ability to 'bounce back' after adversity. Though the research has primarily focused on resilience in terms of protective factors, it involves more than simply having access to resources. Arguably more important than the availability of factors that promote resilience is the capacity of an individual to make use of these resources at critical moments and in the most effective manner.

The current study

This report presents the findings from a community survey of wellbeing and resilience in 1000 young Victorians aged between 16 and 25 years (M [mean] = 20.75 years, SD [standard deviation] = 2.63 years).

Results summary

Psychometric evaluation

The 10 items of the CD-RISC 10 demonstrated adequate inter-item reliability and factored as intended, with a single factor structure explaining over half the variance.

Two shortened versions of the Connor-Davidson Resilience Scale were compared, and though the 10-item (CD-RISC 10) and 2-item (CD- 2) scales correlated highly with one another, inter-item reliability for the CD- 2 was low.

In the current sample, there was a moderate link (correlation) between PWI and CD-RISC 10 scores.

- The CD-RISC 10 is a reliable scale and appears to be a valid measure of the underlying resilience variable.
- The CD-RISC 10 and PWI share a moderate, positive correlation, suggesting that although resilience and subjective wellbeing are related to each other, they are two distinct and separate constructs.
- The CD-RISC 10 appears to be a suitable measure of resilience and the data support its use in future research studies that seek to better understand this construct among young people.

Overall subjective wellbeing and resilience

Average SWB for the Victorian youth sample was 76.16 points ($SD = 12.39$), which is within the Australian adult normal range for subjective wellbeing of between 73.9 and 76.7 points.

Average scores on the two interpersonal domains of 'Relationships' and 'Community Connection' were below the normal ranges for these domains, while all other means were within or above their respective normal ranges.

The proportion of Victorian youths who scored 70 points or more on the PWI is no different from the corresponding proportion of Australian adults; the proportion who score equal to or below 50 is also no different from the mainstream.

In the current sample, there was a moderate link (correlation) between PWI and CD-RISC 10 scores.

- Average subjective wellbeing for young Victorians is within the expected normal range for Australian adults.
- Lower scores on the interpersonal domains of 'Relationships' and 'Community Connection' suggest possible areas of vulnerability for young Victorians.
- Average resilience measured using the CD-RISC 10 is 75.42 points ($SD = 13.58$).

Gender, wellbeing and resilience

Male and female Victorian youths reported similar scores for subjective wellbeing. However, male respondents reported higher scores on the CD-RISC 10 than females. Specifically, they reported significantly higher scores on every individual item of the CD-RISC 10 except for “I am able to adapt to change”. Though the difference is statistically significant, it would be premature to suggest that efforts be directed towards improving the resilience of females based on these findings alone.

- There was no statistically significant difference in the average subjective wellbeing scores of male and female respondents.
- However, females were over 50 per cent more likely than males to score in the high-risk range for low personal wellbeing.
- There was a statistically significant difference in average resilience scores between male ($M = 77.58, SD = 12.93$) and female ($M = 73.56, SD = 13.86$) respondents.

Age, wellbeing and resilience

Young Victorians aged 22 to 25 years reported lower average personal wellbeing than younger Victorians sampled, with significantly lower scores in the domains of Standard of Living, Health, Community Connection and Future Security.

Young Victorians in the 22 to 25-year-old age group reported higher average resilience scores than people in the 16 to 17-year-old age group. This finding offers some important preliminary insight into the degree of correspondence between resilience and wellbeing data.

- Victorian youths aged 22 to 25 years reported significantly lower average subjective wellbeing scores than young people aged 16 to 17 years and those aged 18 to 21 years.
- Victorian youths aged 22 to 25 years reported significantly higher average resilience than young people aged 16 to 17 years.

Education/employment status, wellbeing and resilience

There were no statistically significant differences in average subjective wellbeing scores for Victorian youths based on whether or not they were students. However, there was a significant difference for resilience, with non-students reporting significantly higher scores on the CD-RISC 10 than students.

Among students only, those studying at high school have, on average, significantly higher subjective wellbeing than those studying at TAFE, while those studying at university have significantly higher average resilience than people attending high school.

Young Victorians involved in paid work reported higher wellbeing and higher resilience than young Victorians not involved in paid work, while people in full-time work reported higher resilience than people employed on either a part-time or casual basis.

- Victorian students ($M = 74.36, SD = 13.19$) recorded significantly lower average resilience scores than people not currently studying ($M = 76.98, SD = 14.01$). However, students and non-students did not differ significantly in terms of their average levels of SWB.
- Victorian youths studying in high school reported significantly higher average personal

wellbeing ($M = 78.25$, $SD = 11.69$) than people attending TAFE ($M = 73.73$, $SD = 13.19$), but have lower average resilience ($M = 71.60$, $SD = 14.50$) than people attending university ($M = 76.04$, $SD = 11.97$).

Household composition, wellbeing and resilience

There were significant differences in average wellbeing and resilience scores according to young people's household composition, with those who live with their parents reporting average SWB above the normal range.

On the other hand, young people who live with their children, live alone or live with other adults (e.g., in shared accommodation), report average SWB below the normal range.

People who live with their children only report significantly lower average resilience than people who live with their partner and children.

- Young Victorians who live with their parents have above-average levels of personal wellbeing.
- Young Victorians who live with only their children have lower wellbeing ($M = 59.40$, $SD = 22.09$) and resilience ($M = 63.12$, $SD = 20.80$) than all other groups.

Household income, wellbeing and resilience

Both wellbeing and resilience scores tended to increase with increasing levels of income up to an annual household income of \$250,000 to \$500,000.

The lowest reported average personal wellbeing belonged to the group who reported an annual household income of between \$15,000 and \$30,000 per year.

- Personal wellbeing and resilience generally increase with increasing levels of annual household income.
- These findings are consistent with adult data collected as part of the Australian Unity Wellbeing Index which support the notion that money can be used as a flexible resource that acts as a buffer to life's challenges and supports wellbeing during times of threat.

Social support, wellbeing and resilience

Average personal wellbeing and resilience were significantly higher among young Victorians who responded "Yes, definitely" to the question "Can you get help from friends, family or neighbours when needed?"

Average SWB for young people who responded "Sometimes", "Rarely" or "Not at all" was well below the normal range, placing them at a higher risk of depression. This is a very concerning finding given that approximately one in four respondents reported feeling this way about the availability of social support.

- Like money, social support is regarded as an important external resource that can act as a buffer to protect personal wellbeing and support resilience in times of challenge.
- Supportive friends, family and peers may increase a person's capacity to adapt to and confront

the challenges that threaten their personal wellbeing, with people low on social resources at greater risk of depression.

- Given the prevalence of young people who feel that they lack someone they can reach out to when in need, education and intervention programs that target and support the socially isolated should be a priority.

Introduction

Compared to data on adults, there is a paucity of published data describing levels of self-reported wellbeing among Australian youths. There is even less data available on levels of resilience among this important population subgroup. The latter may be attributed in part to the general lack of consensus in the scientific literature on the definition and measurement of ‘resilience’.

One of the major aims of this research is to present data that describe levels of subjective wellbeing (SWB) among Victoria’s adolescent and young adult population, and to explore the 10-item Connor-Davidson Resilience Scale (CD-RISC 10; Campbell-Sills & Stein, 2007) as an appropriate and validated measure of resilience. A further aim of this research is to explore levels of resilience among Victoria’s young adult population and consider demographic factors associated with higher or lower resilience within this subgroup.

This introduction will begin by describing the concept of SWB as a quality of life indicator in the context of SWB Homeostasis Theory, the underlying theoretical paradigm that is the basis for the interpretation of SWB data. We will then offer a description of resilience and highlight issues pertaining to the way this construct is measured and understood in the literature.

This report will then describe the current research methodology, major findings and interpretations.

Objective versus subjective quality of life

Quality of life (QOL) is a broad and inclusive construct comprising both objective and subjective dimensions. Objective QOL refers to concrete, identifiable aspects of life and society, such as average income, physical health, education and employment status. These objective indicators have traditionally been at the centre of decision-making and policy, as governments try to enhance the QOL of their citizens by improving such metrics.

More recently, however, researchers have become increasingly interested in the subjective dimension of life quality. **Subjective quality of life concerns how people perceive various aspects of their lives, such as satisfaction with health, relationships and standard of living.** In light of empirical findings which have determined that objective and subjective dimensions of QOL share a complex relationship and are often poorly correlated (e.g., Cummins, 2000a; 2000b), measuring and understanding subjective wellbeing has proven to be a useful endeavour, because such data offer important insights into how people feel and think about themselves and their lives, independent of their objective life circumstances.

Subjective wellbeing

An alternative to traditional indicators of national performance and progress, such as income, high-school completion and GDP, is the measure known as subjective wellbeing (SWB). **Often referred to more generally as ‘happiness’, SWB can be defined scientifically as a normally positive state of mind that involves the whole life experience (Cummins, 2010).**

In the context of the present investigation, SWB is recognised as having ‘trait’-like properties and is best conceptualised as a stable, enduring positive mood that reflects how people feel about

themselves at the most global, abstract level. In contrast, ‘state’ happiness or wellbeing is a short-term, transient emotional response, usually directed at something good or pleasant.

The authors believe that SWB is best explained and understood by SWB Homeostasis Theory.

Subjective Wellbeing Homeostasis Theory

One of the most interesting findings in the literature is that SWB is not free to vary over the entire range of values offered by a particular measurement instrument. A commonly held view is that SWB is maintained around a ‘set-point’ and is remarkably stable across time (Cummins, 1995; Headey & Wearing, 1989, 1992; Eid & Diener, 2004; Schimmack, Diener, & Oishi, 2002).

One theory that offers a comprehensive description of SWB, including stability and change in this construct, is SWB Homeostasis Theory (Cummins, 2010). According to this theory, **each person has a biologically determined level of SWB that is actively maintained and controlled within a narrow, positive range of values around a ‘set-point’**. According to recent empirical evidence by Cummins, Li, Wooden and Stokes (2014), **individual SWB set-points normally range between 70 and 90 points** on a standard 0 to 100-point scale. Moreover, the distribution of set-points within this range is normal, thus yielding **a theoretical population mean score of 80 points**. This estimation is reasonably corroborated by data obtained from the Australian Unity Wellbeing Index – an extant project that has tracked the SWB of the Australian population since 2001. Over the 31 surveys conducted to date, **the mean population SWB from each survey has varied within a very narrow 3.0 percentage point range, from 73.9 to 76.7 points** (Cummins et al., 2013), demonstrating remarkable stability over more than a decade. **The discrepancy between this range and the mean set-point of 80 points is proposed to represent the degree of challenge within the population samples employed.**

According to Homeostasis Theory, the purpose of homeostasis is to defend the affective core of SWB, which is proposed to be a stable, genetically endowed, positive mood (Blore, Stokes, Mellor, Firth, & Cummins, 2011; Davern, Cummins, & Stokes, 2007; Tonym & Cummins, 2011). When nothing is happening to affect an individual’s mood, their responses to subjective wellbeing questionnaires will reflect their ordinary set-point. However, when challenges are encountered, SWB may fall below its set level. When this occurs, psychological homeostatic forces are engaged to restore SWB to its normal range. **When a challenge is chronic and persistent, ordinary homeostatic processes may fail, and a person may become vulnerable to depression** (Cummins, 2010).

Measuring subjective wellbeing: the Personal Wellbeing Index

SWB is typically measured by asking people to rate their level of satisfaction with their life in general. A common and simple way to evaluate SWB is to approximate it using a single item that assesses General Life Satisfaction (GLS): “How satisfied are you with your life as a whole?” (0 = Not at all satisfied; 10 = Completely satisfied).

A more robust estimate is afforded through the Personal Wellbeing Index (PWI) (IWG, 2013). The PWI generates a composite variable, calculated by averaging life satisfaction scores on seven important life domains: Standard of Living, Health, Achieving in Life, Relationships, Safety, Community Connection, Future Security (see Appendix A). Each domain contributes unique variance to the single-item measure of GLS. Scores on the seven domains are combined, averaged and converted into a single, composite, percentage of scale maximum score (%SM) which has a range of

0 to 100 points. The PWI exhibits strong psychometric properties in Australia and overseas. It has been translated into at least 20 languages and is currently used by hundreds of researchers in over 50 countries worldwide.

Interpretation of subjective wellbeing data

Several diagnostic approximations regarding the personal wellbeing of people and groups can be made based on the findings (Cummins et al., 2014) that set-points exist between the levels of 70 and 90 points and have a normal operating range (set-point range) of around 18 to 20 points. For example, it can be deduced that:

1. SWB scores at or above 70 points reflect a normally functioning homeostatic system.
2. SWB scores equal to or below 50 points (i.e., 70–20 points) represent homeostatic failure.
3. SWB scores between 51 and 69 points cannot be unequivocally interpreted. Any score within this range may represent the homeostatic failure of a high set-point or homeostatic normality of a low set-point.

Resilience

Resilience can be defined in various ways, but a common thread running through the scientific literature involves coping in the face of adversity. Various definitions of this emerging concept have been offered in recent years, usually proposing that resilience is either a process or an outcome.

Definitions of resilience range from being broad and outcome-focused, like the standard dictionary definition of “an ability to recover from or adjust easily to misfortune or change” (Merriam-Webster, 2012), to the more concentrated and process-oriented “a dynamic process leading to positive adaptation in the face of significant adversity” (Luthar, Cicchetti & Becker, 2000). The latter definition is further distinguished from the former in that it proposes “adaptation” rather than recovery. This definition is therefore preferred, as it acknowledges that recovery is characterised by a transition to a new state of functioning, rather than a return to the pre-trauma state. In the context of SWB Homeostasis Theory, **resilience refers to the process by which the set-point for wellbeing is recovered following a departure from its usual resting state.**

Measuring resilience: the 10-item Connor-Davidson Resilience Scale (CD-RISC 10)

One concern with measuring resilience is that, by most definitions, resilience can only be demonstrated in the face of adversity, making the ethical exploration of it problematic. Instead, measures usually approximate actual resilience by capturing ‘perceived resilience’, or by having participants rate their level of agreement with statements that typically describe resilient people.

In a review of resilience measurement scales, Windle, Bennett and Noyes (2011) acknowledged the Connor-Davidson Resilience Scale (Connor & Davidson, 2003) as one of the top-rated resilience tools, due to its strong psychometric properties. Since it has been evaluated as among the highest-quality scales, and is the only one of the recommended scales that is targeted to a young adult audience, it was selected for investigation in the present study.

The 10-item CD-RISC 10 is a brief form of the original scale, which has greater conceptual clarity and less redundancy in items (Campbell-Sills & Stein, 2007). Items load onto a single factor that represents resilience, and endorsement of the item statements reflects a general ability to bounce back from challenges encountered in life. The scale has strong psychometric properties and has been validated in both general population and clinical samples (Connor & Davidson, 2003). Importantly, the Connor-Davidson Resilience Scale has been shown to be capable of capturing changes following interventions designed to increase resilience (Davidson et al., 2005). In the present study, respondents rated how true each item is for them on a 0–10 scale. The items can be seen as part of the full questionnaire in Appendix A.

Methodology

Participants

Participants in this study were 1000 young Victorians aged between 16 and 25 years. Sample characteristics are presented in Table 1.

Table 1: Participant demographics

Variable		N	%
Gender	<i>Male</i>	466	46.6
	<i>Female</i>	534	53.4
Age	<i>16</i>	54	5.4
	<i>17</i>	100	10.0
	<i>18</i>	78	7.8
	<i>19</i>	103	10.3
	<i>20</i>	124	12.4
	<i>21</i>	104	10.4
	<i>22</i>	133	13.3
	<i>23</i>	118	11.8
	<i>24</i>	110	11.0
	<i>25</i>	73	7.3
Marital status	<i>Married</i>	31	3.1
	<i>Living with a partner</i>	144	14.5
	<i>Widowed</i>	2	0.2
	<i>Separated</i>	9	0.9
	<i>Never married</i>	807	81.3
Household composition	<i>Lives alone</i>	33	3.3
	<i>Lives with parents</i>	500	50.4
	<i>Lives with other adults</i>	159	15.9
	<i>Lives with partner</i>	93	9.3

Variable	N	%
<i>Lives with partner and children</i>	25	2.5
<i>Lives with parents and children</i>	57	5.7
<i>Lives with parents and other adults</i>	54	5.4
<i>Other combination</i>	76	7.6
Student status		
<i>High school</i>	167	17.2
<i>University</i>	320	32.9
<i>TAFE</i>	83	8.5
<i>Other</i>	22	2.3
<i>Not a student</i>	405	41.6
Work status		
<i>Full time</i>	240	24.1
<i>Part time</i>	205	20.6
<i>Casual</i>	303	30.4
<i>Not in paid work</i>	249	25.0
Household income		
<i><\$15,000</i>	49	6.9
<i>\$15,000 – \$30,000</i>	93	13.1
<i>\$31,000 – \$60,000</i>	149	21.0
<i>\$61,000 – \$100,000</i>	154	21.8
<i>\$101,000 – \$150,000</i>	141	19.9
<i>\$151,000 – \$250,000</i>	88	12.4
<i>\$251,000 – \$500,000</i>	26	3.7
<i>>\$500,000</i>	8	1.1
Social groups		
<i>Sport or physical recreation group</i>	342	34.3
<i>Religious, youth or other spiritual group</i>	61	6.1
<i>Special interest or hobby group</i>	85	8.5
<i>Ethnic/multicultural club</i>	4	0.4
<i>Social club or group through school/university</i>	84	8.4
<i>Online group or community</i>	39	3.9
<i>No active involvement in social groups</i>	553	55.5
Indigenous descent		
<i>Yes</i>	22	2.3
<i>No</i>	974	97.8
Wellbeing category based on overall PWI score		
<i>High risk (0–50)</i>	41	4.3
<i>Challenged (51–69)</i>	195	20.4
<i>Normal (70+)</i>	718	75.3

Procedure

Ethics approval for this research was granted by the Cairnmillar Institute School of Psychology Counselling and Psychotherapy Human Research Ethics Committee (approval code 2015/8740), which is accountable to the National Health and Medical Research Institute (NHMRC).

Participants were recruited through iView, a leading market and social research data collection agency in Australia. Telephone lists of Victorian youths aged between 16 and 25 were purchased from external sources to provide an inventory of viable participants. These participants were recruited to the phone list because they had previously been contacted by random selection for other Australian studies and had agreed to be contacted for future studies. Data were collected between 6 May 2015 and 20 May 2015.

Once collected, a secondary, de-identified Statistical Package for the Social Science (SPSS ; version 22.0) data set was sent to the lead researchers for cleaning and analysis.

Data cleaning and preparation

Aggregate total scores for the PWI and CD-RISC 10 were calculated. Twenty-two scores were deleted due to suggestion of acquiescent responding to the PWI (the tendency of some respondents to say 'yes' regardless of the question), as recommended by the PWI user manual (IWG, 2013).

Subsequently, univariate (i.e., appearing only once) outliers were identified as being three standard deviations beyond the mean, and were recoded to values that lay within the acceptable range. This process resulted in the recoding of 19 scores on the PWI, and nine scores for the CD-RISC 10. The recoding procedure is recommended by Tabachnik and Fidell (2015) when there are few outliers and is preferable to deletion, as the scores remain in the data set but are not so extreme that they may limit subsequent analyses. Three multivariate outliers were detected using the criterion of having a Mahalanobis distance with two degrees of freedom of 13.816. These cases were removed since "they may distort the results in any direction" (Tabachnik & Fidell, 2015, p. 111).

Data analytic strategy and presentation of the results

Standardisation. All PWI data have been converted to a percentage of scale maximum (%SM) score which transforms the 0–10 scale response data into a standardised 0–100 percentage point scale. Throughout this report, the magnitude of differences presented between different groups of young people will be expressed in terms of percentage points converted in this way.

We recommend the calculation of the %SM statistic for all data, to facilitate more meaningful comparisons, in particular, between variables or items measured on different response scales. The PWI user manual (IWG 2013) offers the following formula for calculating the %SM statistic:

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

X = the score or mean to be converted

k^{\min} = the minimum score possible on the scale

k^{\max} = the maximum score possible on the scale

Response set. To ensure the integrity of the data, all responses were examined for response set. This occurs when a respondent consistently scores at the scale maximum (10) or minimum (0) for all seven PWI domains, often due to 'acquiescence' (a tendency to respond in the affirmative) or misunderstanding. Regardless of the cause, these data are considered unreliable and were removed before the main analyses, as advised in the user manual (Cummins & Lau, 2005).

Altogether, 19 response sets (1.9 per cent) were evident, and all recorded the maximum score of 100 for the PWI. Twelve of the participants who recorded scores of 100 were male (63.16 per cent), while 11 (57.89 per cent) were aged between 22 and 25 years.

Significance testing. All data were analysed at the significance level of $p < 0.05$, unless otherwise stated. To control for familywise error rate that frequently occurs when conducting multiple group comparisons, the Bonferroni test of significance of group differences was used. The Bonferroni method is a conservative test that allows multiple comparisons while maintaining the overall confidence coefficient. It is also valid when comparing groups of unequal sizes, of which there are many presented throughout this report.

For analysis of variance (ANOVA), where the homogeneity of variance assumption was violated, Dunnett's T3 Post-Hoc Test was used. In the case of t-tests, the SPSS option for significance when equality of variance cannot be assumed was employed.

Comparative adult data set

This report includes comparisons to normative ranges, which were generated based on a series of studies conducted as part of the Australian Unity Wellbeing Index (AUWI), a project that has gathered data on the subjective wellbeing of over 60,000 Australians. Since 2001, 31 national surveys have been conducted on the Australian adult population, with each survey involving a new and geographically representative sample of at least 1000 Australians aged 18 years and over. The AUWI is the largest and most nationally representative data set involving the PWI available and will subsequently form the basis of comparative analyses. These data were cleaned in the same manner as the current data. Normative ranges were calculated by taking the mean and standard deviation of the average score for each survey. The normative ranges represent two standard deviations either side of the mean score. More information about this project, and access to all data, is available online via www.acqol.com.au.

Psychometric evaluation of key variables

Before the major analyses were undertaken, the psychometric performance of key variables of interest and their inter-relationships were explored. Table 2 shows the means, standard deviations, correlations and inter-item reliability scores for composite and key single-item scale variables.

Table 2: Means, standard deviations and correlations between variables and inter-item reliability

Variable	α	Mean	SD	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.
1. GLS		75.03	15.90	–									
2. PWI	0.82	76.16	12.39	0.73	–								
3. CD-RISC 10	0.90	75.42	13.58	0.50	0.54	–							
4. CD-2	0.62	77.52	16.49	0.39	0.43	0.83	–						
5. Lonely		31.53	25.55	–0.43	–0.45	–0.38	–0.29	–					
6. Stressed		53.70	25.48	–0.39	–0.42	–0.37	–0.28	0.45	–				
7. Anxious		43.73	27.69	–0.45	–0.47	–0.48	–0.39	0.48	0.71	–			
8. Support – friends		81.16	19.65	0.38	0.43	0.38	0.31	–0.28	–0.27	–0.31	–		
9. Support – family		84.16	21.74	0.39	0.41	0.32	0.21	–0.29	–0.24	–0.31	0.49	–	
10. Support – neighbours		41.13	32.70	0.28	0.32	0.19	0.15	–0.20	–0.25	–0.22	0.29	0.30	–

Note: All correlations significant at $p < 0.01$

Note: GLS = Global Life Satisfaction; PWI = Personal Wellbeing Index; CD-RISC 10 = Connor-Davidson Resilience Scale -item short form; CD 2 = Connor-Davidson Resilience Scale (2 item short form)

Inter-item reliability scores are not included for single-item measures

As expected, there was a strong, positive relationship between the single-item measure of Global Life Satisfaction and the PWI, demonstrating convergent validity between these two measures.

A moderate, positive relationship was also found between the two major outcome variables of the PWI and CD-RISC 10, while the CD-RISC 10 and CD-2 share a strong, positive relationship.

Cronbach's alpha for the PWI and CD-RISC 10 were both high, demonstrating adequate inter-item reliability between the domains of the PWI and CD-RISC 10. However, Cronbach's alpha for the CD-2 ($\alpha = 0.62$) was below the critical value for acceptability ($\alpha = 0.70$). Thus, the CD-2 does not appear suitable as a brief measure of resilience.

To further explore the validity of the CD-RISC 10, a factor analysis was performed. The assumptions for factor analysis were met, with all items correlating above 0.3.

The Kaiser-Meyer-Olkin measure of sampling adequacy was high (0.919) and Bartlett's test of sphericity was statistically significant (< 0.05). The factor loadings are shown in Figure 1. These values come from Table B.25.

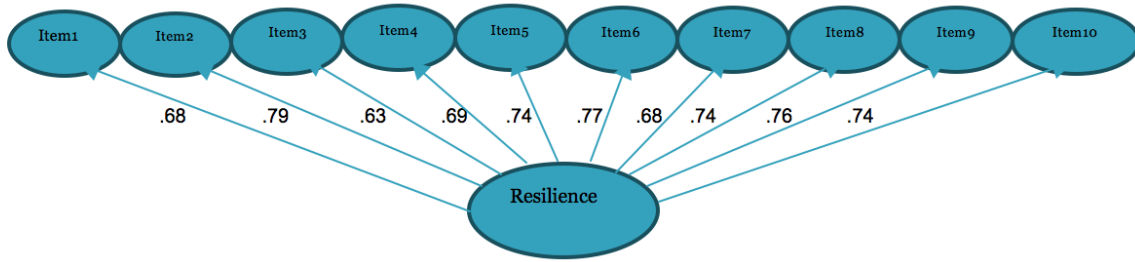


Figure 1: Principal components factor analysis of the CD-RISC 10

As expected, a single-factor solution emerged with an eigenvalue greater than 1.0, explaining 52.19 per cent of variance.

All items loaded above 0.6, with the highest loading belonging to Item 2, “I can deal with whatever comes”.

Further exploration of the CD-RISC 10 items is presented below. Figure 2 presents mean CD-RISC 10 item scores ranked from highest to lowest. These findings come from Table B.23.

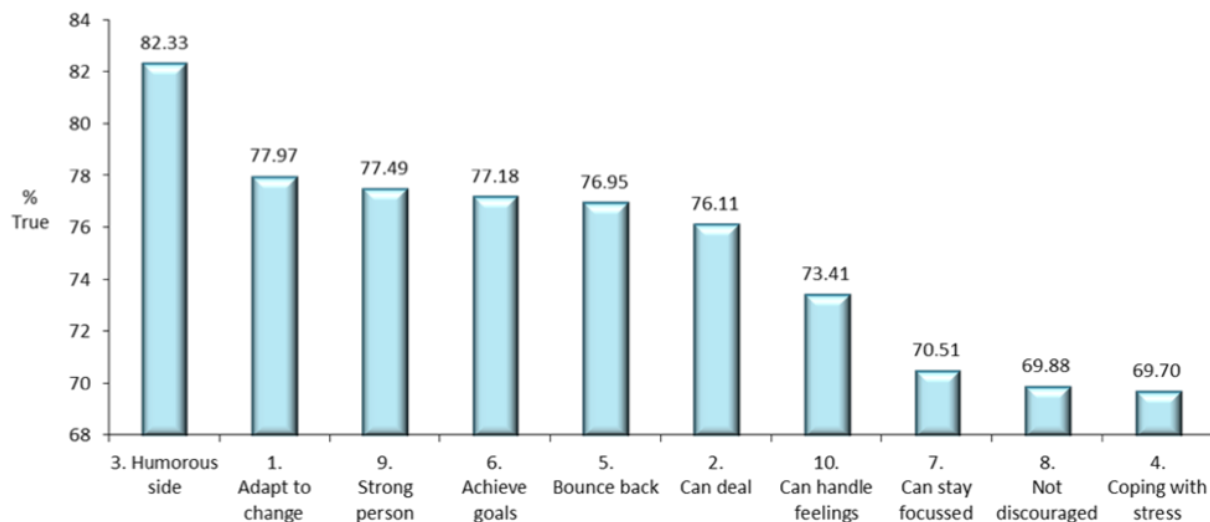


Figure 2: Average ratings for CD-RISC 10 items ranked from highest to lowest

As shown, the highest average score for the CD-RISC 10 was Item 3, “I see the humorous side of things”; followed by Item 1, “I am able to adapt to change”; and Item 9, “I think of myself as a strong person”. These items potentially lend support to the idea that humour may serve an adaptive function.

The lowest average scores were for Item 4, “Coping with stress can strengthen me”; Item 8, “I am not easily discouraged by failure”; and Item 7, “I can stay focused under pressure”.

To gain a better understanding of the degree of correspondence between PWI and CD-RISC 10 scores, the CD-RISC 10 composite variable was recoded into a number of different categories: 0–50, 51–55, 56–60, 61–65, 66–70, 71–75, 76–80, 81–85, 86–90 and 91+. Presenting the CD-RISC 10 scores in this way better demonstrates what level of resilience is coincident with average personal wellbeing falling below the normal range, and therefore places people at risk of low wellbeing and depression.

Figure 3 presents average PWI scores (on the vertical axis) for each corresponding CD-RISC 10 score range (on the horizontal axis). The yellow bar represents the Australian adult normal range for the PWI. These findings come from Table B.27.

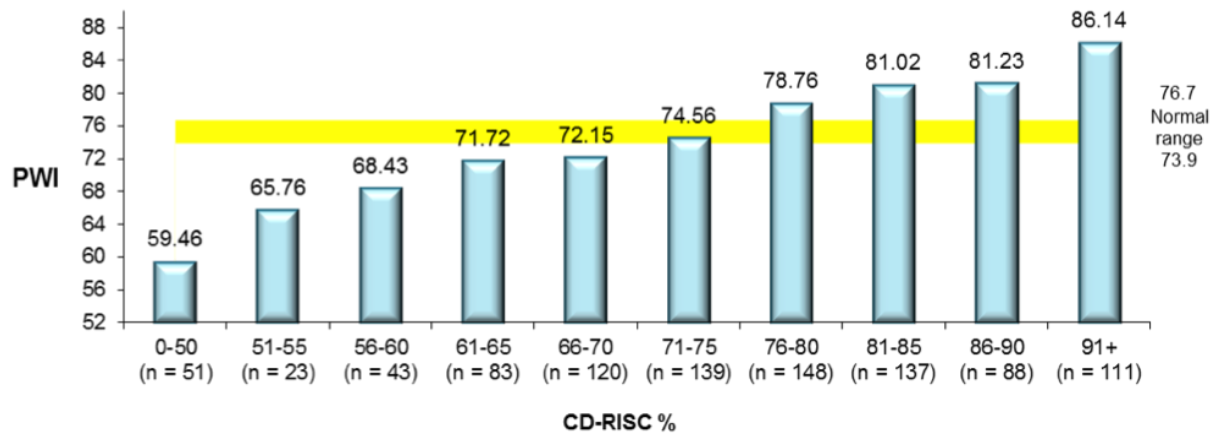


Figure 3: Average PWI scores for each CD-RISC 10 category

Group mean SWB is within the normal range at a CD-RISC 10 score of 71–75. As CD-RISC 10 scores increase beyond this level, so too do average PWI scores.

Interestingly, average SWB is below the normal range, with corresponding CD-RISC 10 scores of between 61 and 70. At a CD-RISC 10 score of 56–60, average SWB falls below 70 points and continues to fall as CD-RISC 10 scores also decrease further, suggesting that people in these groups are at higher risk of low wellbeing and depression.

Summary

The 10-item CD-RISC 10 appears to be a reliable and valid indicator of resilience, revealing strong inter-item reliability and displaying convergent validity. Scores on this measure appear to reflect the conceptual understanding of resilience, and correlate as expected with other variables.

Overall results

Figure 4 shows average subjective wellbeing (represented by 'PWI') and domain happiness scores for the cleaned sample of 954 young Victorians against the comparative sample of Australian adults (surveyed as part of the Australian Unity Wellbeing Index over the years 2001–2014). More information is provided in Table B.1.

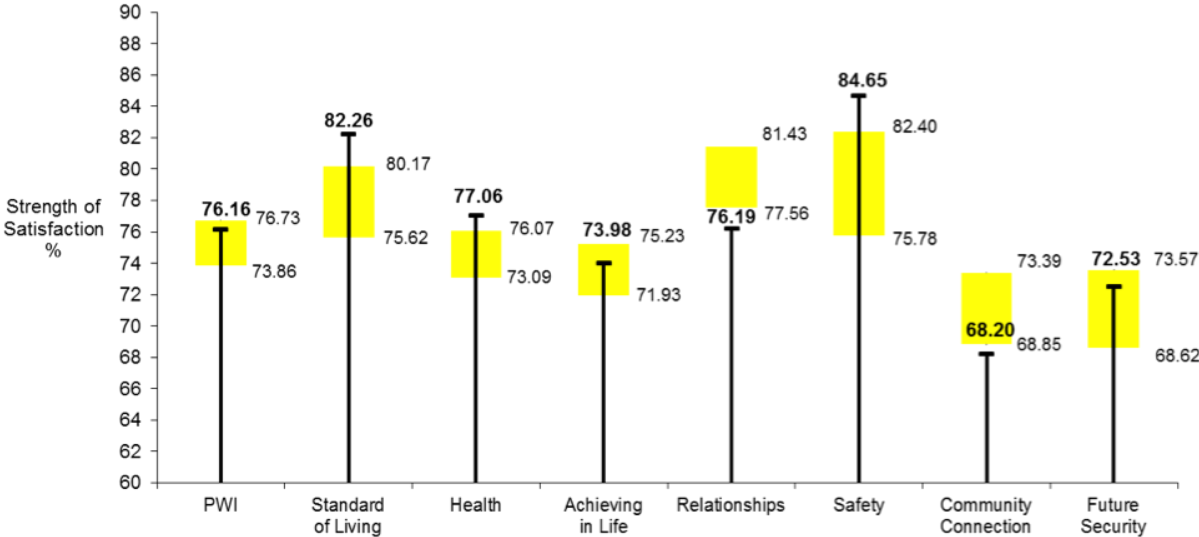


Figure 4: Comparison between youth and mainstream SWB data

Average SWB among Victorian youths is within the normal range for the general population of Australia.

Examination of average domain scores reveals that **all domains, with the exception of ‘Relationship’ and ‘Community Connection’, are within or above the normal range.** Most notable are higher than normal scores on ‘Safety’, ‘Standard of Living’ and ‘Health’.

The two lower than normal means for the interpersonal domains of ‘Relationships’ and ‘Community Connection’ highlight potential areas of vulnerability among Victoria’s young adult population.

Collectively, the findings suggest that Victorian young adults comprise a population subgroup that is, on average, experiencing a normal level of wellbeing but with a domain profile that is slightly, though predictably, different from that of Australia’s mainstream adult population.

Figure 5 shows average scores for the other key variables explored, including the CD-RISC 10, the single-item measures of satisfaction with support from friends, family and neighbours, and general feelings of loneliness, stress and anxiety. All means are expressed in terms of standardised scores as a percentage of the scale maximum. More information is provided in Table B.24.

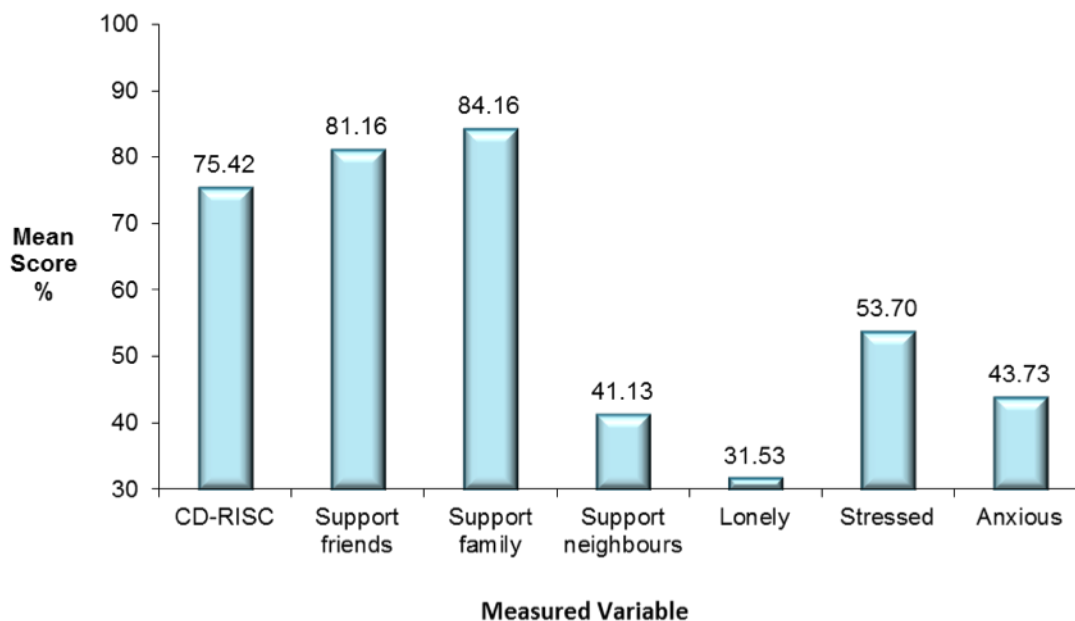


Figure 5: Average scores for key variables of interest

Interestingly, the average score for the CD-RISC 10 (75.42 points) approximates the average score for the PWI (76.15 points), suggesting a high degree of correspondence between these two measures.

Average satisfaction with support from ‘family’ and ‘friends’ was relatively high, with 84.16 per cent and 81.16 per cent satisfaction respectively. These results are encouraging, given that mutually supportive relationships are key external resources that protect personal wellbeing, especially in times of challenge (Cummins, 2010).

By contrast, satisfaction with support from ‘neighbours’ was very low. This score likely reflects contemporary societal relationship trends, where neighbours are considered as geographically proximal others. Given the changing nature of relationships – due largely to the increased accessibility of the internet and connection via digital means – geographic proximity seems no longer to be a core predictor of relational support, and this would be especially so for adolescents.

Regarding the measures of negative affect, ‘Stress’ appears to be more commonly experienced than being ‘Anxious’ or ‘Lonely’. However, it is evident that the experience of all three affects is not uncommon among this sample group. This is not surprising, given the many challenges that young people face in everyday life, including pressures to succeed at school and at university, responsibilities to friends and family, and the need for employment that supports an adequate standard of living.

The relationship between negative affect and SWB is discussed in greater detail below, under ‘Negative affectivity in Victorian youths’.

Figure 6 displays the proportion of Victorian youths categorised into the normal, challenged or high-risk group, based on their overall PWI score. More information is provided in Table B.3.

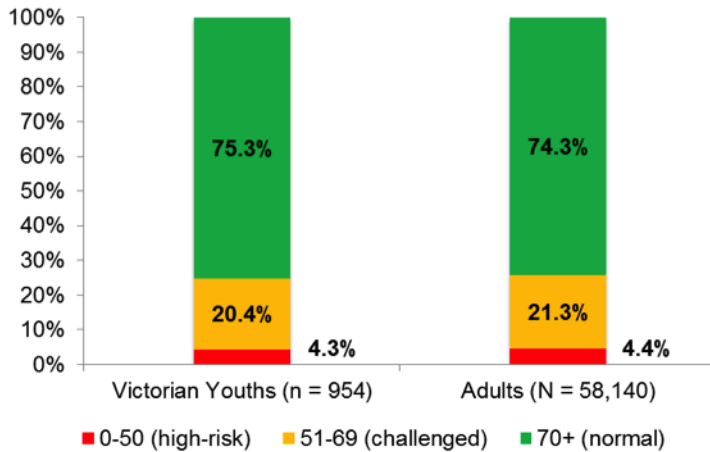


Figure 6: Distribution of Victorian youths in each PWI group compared to adult normative data

About three-quarters of Victorian youths scored in the normal range for subjective wellbeing. This approximates the proportion of Australian adults who normally score within this range.

4.3 per cent of respondents have very low subjective wellbeing and scored in the ‘high-risk’ range.

These young people are either depressed or at very high risk of depression and are in critical need of supportive services.

Finally, 20.4 per cent of Victorian youths scored between 51 and 69 points. These young people may be experiencing a lower than normal level of SWB, either due to having a low set-point or due to some life challenge(s) that compromises their level of perceived wellbeing.

Collectively, these results suggest that the distribution of PWI scores for the Victorian youth population is no different from that of the general Australian adult population.

Gender, subjective wellbeing, and resilience

Figure 7 presents average SWB and resilience scores for male and female respondents. Throughout the report, the blue bars represent SWB and the purple bars represent resilience. The shaded yellow area represents the normal range for SWB for the Australian adult population. More information is provided in Tables B.4 and B.6.

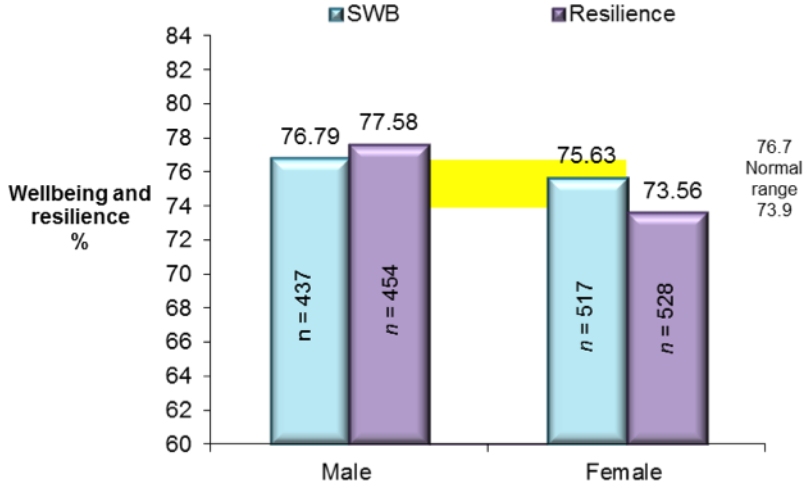


Figure 7: Average SWB and resilience of male and female respondents

Average SWB does not differ significantly between males and females. While the average for females is within the normal range for Australian adults, the average for males is slightly above.

The average resilience score, however, is about four points higher for males than for females. This difference is statistically significant ($p < 0.001$).

Figure 8 below displays the proportion of males and females categorised into the normal, challenged or high-risk group, based on their overall PWI score. More information is provided in Table B.5.

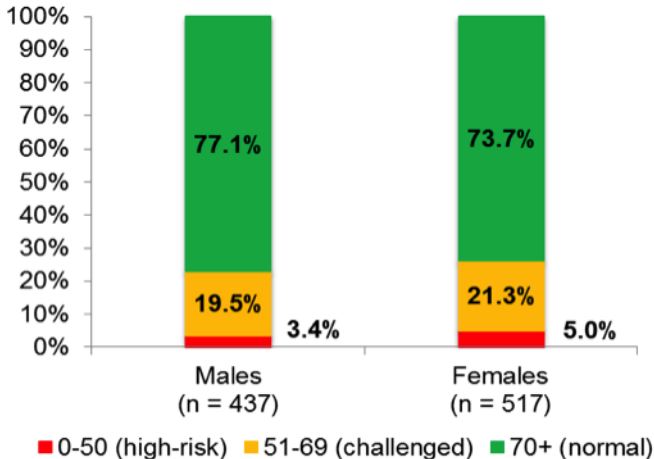


Figure 8: Distribution of males and females in each PWI group

77.1 per cent of males score in the normal range for SWB, compared to 73.7 per cent of females.

Females are approximately 50 per cent more likely than males to be at 'high risk' for depression. In Australia's adult population, the proportion of males and females who score ≤ 50 on the PWI is comparative (4.5 per cent and 4.3 per cent respectively).

These findings suggest greater vulnerability among young Victorian females than males, and may have implications for service delivery.

Age, subjective wellbeing, and resilience

Figure 9 presents average SWB and resilience scores for Victorian youths, split into three age groups (16–17, 18–21 and 22–25), compared to the normal range for SWB. More information is provided in Tables B.7 and B.9.

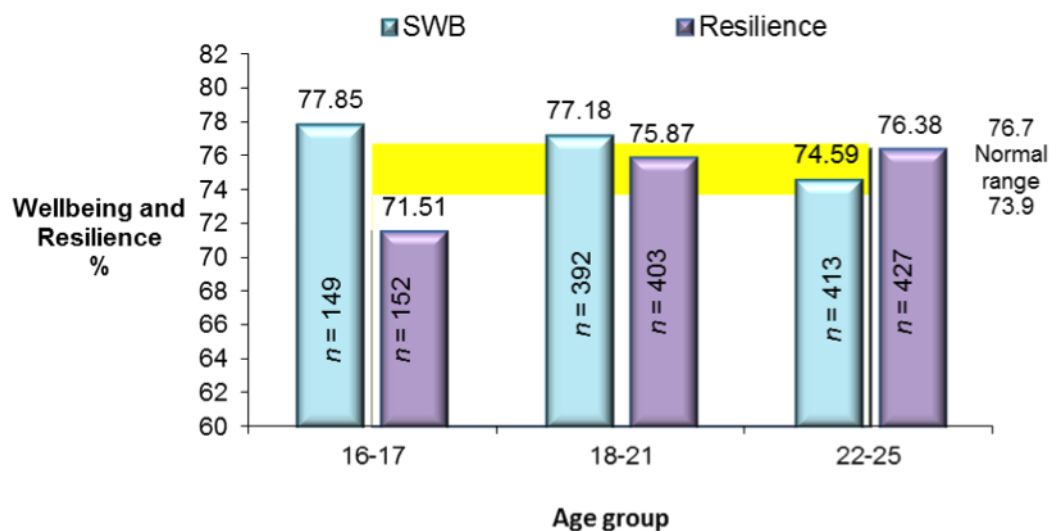


Figure 9: Average SWB and resilience of Victorian youth in each age group

Average personal wellbeing among young Victorians aged 16 and 17 years is significantly higher than the average for young people aged 22 to 25 years ($p < 0.01$), while average personal wellbeing for 18 to 21-year-olds is significantly higher than for 22 to 25-year-olds ($p < 0.05$).

All three average scores, however, are within the normal range for Australian adults.

Interestingly, **while increasing age is associated with decreasing scores for subjective wellbeing, the reverse appears to hold for resilience** (see Table B.9). The average resilience score for the 22 to 25 age group is significantly higher ($p < 0.01$) than for those aged 16 to 17.

These findings highlight the complex relationship between SWB and resilience scores and support the belief that resilience should not be used as a proxy for personal wellbeing, nor vice versa.

To provide further insight into the age-related differences in subjective wellbeing, their domain profiles are shown in Figure 10. More information is provided in Table B.7.

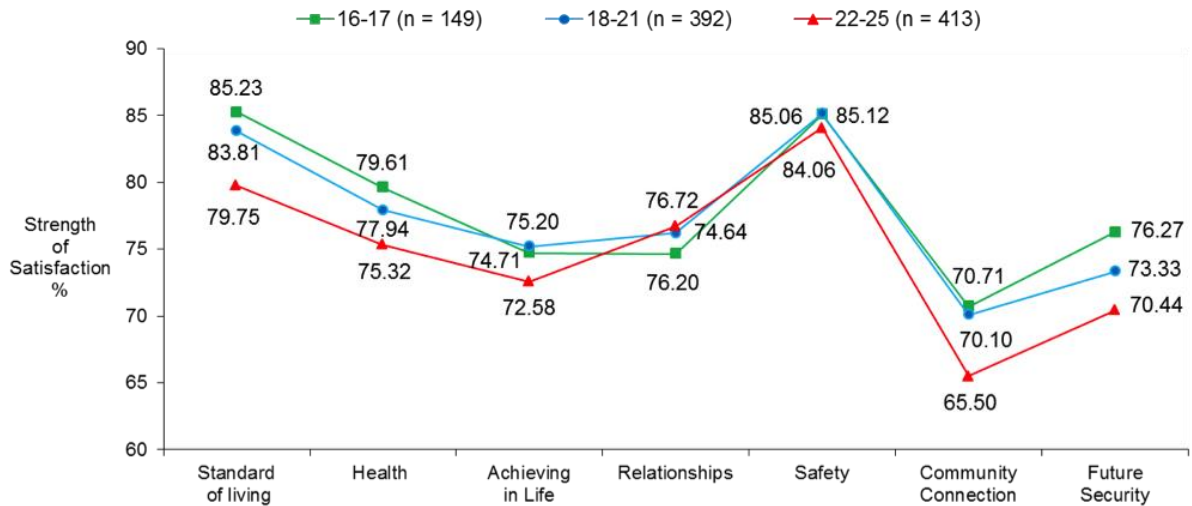


Figure 10: Domain scores by age groups

Victorians aged 16 to 17 years and 18 to 21 years score significantly higher than Victorians aged 22 to 25 years on the domains of ‘Standard of Living’ and ‘Community Connection’.

Victorians aged 16 to 17 score significantly higher than Victorians aged 22 to 25 years on the domains of ‘Health’ and ‘Future Security’.

Collectively, the results for age suggest that **22 to 25-year-olds appear to be more vulnerable to experiencing lower wellbeing, despite revealing higher resilience scores.**

Figure 11 displays the proportion of young Victorians in each age group categorised into the normal, challenged or high-risk group, based on their overall PWI score. More information is provided in Table B.8.

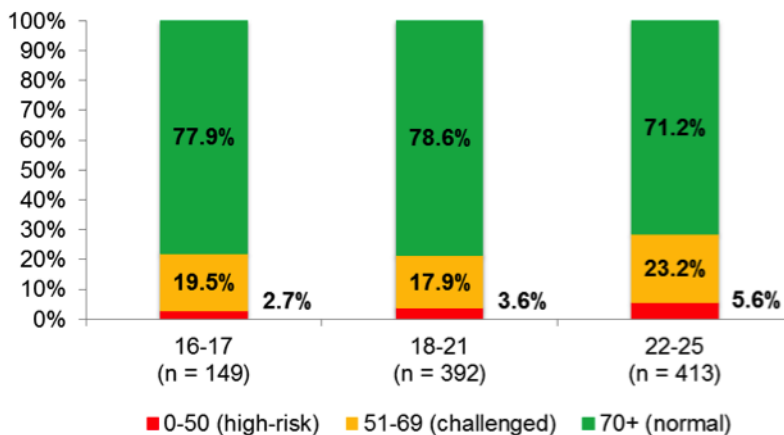


Figure 11: PWI distribution for young people in each age group

Young people aged 22 to 25 years are over two times more likely than young people aged 16 to 17 years to score in the high-risk range on the PWI, which represents those most likely to be depressed.

These findings corroborate the earlier suggestion that 22 to 25-year-olds may be more vulnerable to experiencing lower wellbeing than younger Victorians, and highlight the need for targeted wellbeing interventions or programs in early adolescence that foster resilience, in addition to education and support for making the transition to employment.

Marital status, subjective wellbeing, and resilience

Figure 12 presents average SWB and resilience scores for Victorian youths, categorised according to their current marital status, compared to the normal range for SWB. More information is provided in Table B.10.

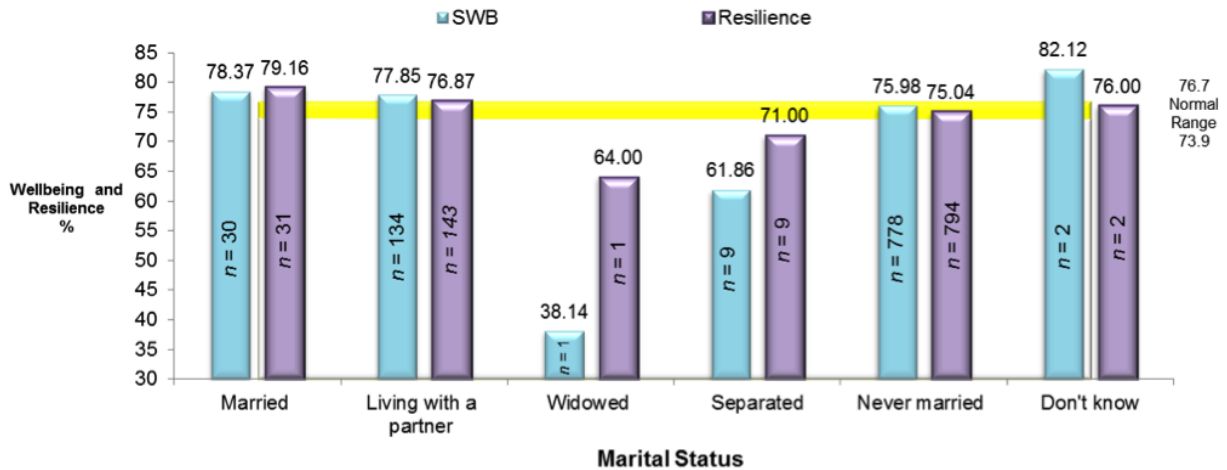


Figure 12: Average SWB and Resilience of Victorian youths according to marital status

Average personal wellbeing for the 81.6 per cent of young Victorians who report having never been married is within the normal range; while **average personal wellbeing for people living with their partner, and for young people who are married, is above the normal range**. These latter findings attest to the power of relationships in supporting personal wellbeing in young adulthood.

There were no differences in average resilience scores as a function of marital status.

Household composition, subjective wellbeing, and resilience

Figure 13 presents average PWI scores for Victorian youths, categorised according to who else lives in their household, compared to the normal range for SWB. More information is provided in Table B.11.

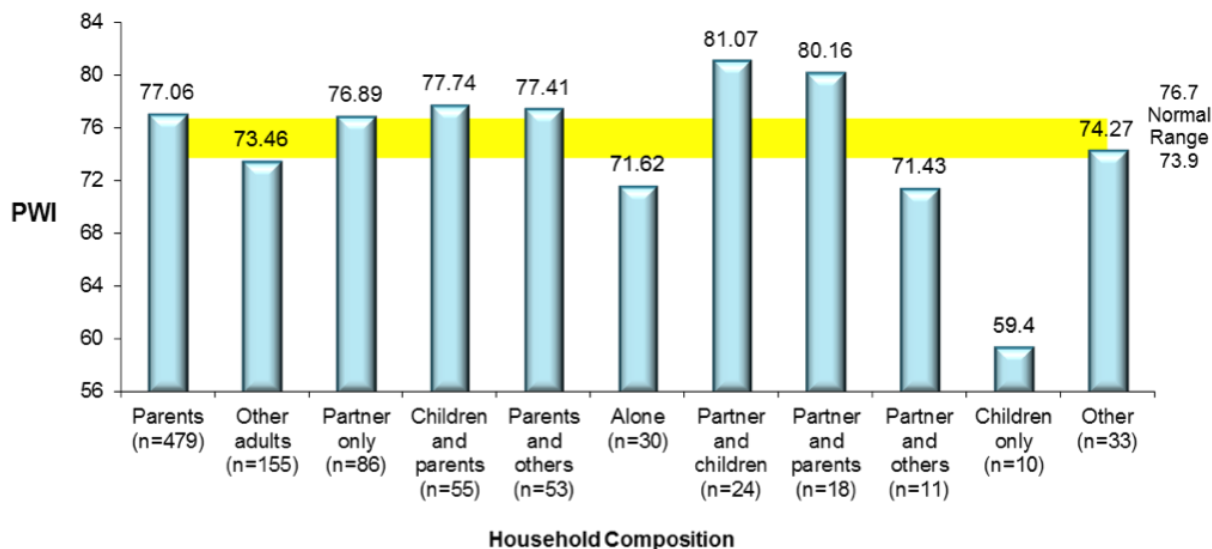


Figure 13: Average SWB of Victorian youth according to their household composition

The majority of young Victorians (50.2 per cent) indicated that they live with their parents only. Their average SWB is slightly above the normal range for Australian adults.

Young people who live with their parents as well as others (e.g., their children, partner or other adults) also report average SWB above the normal range, as do people who live with their partner only.

People who live alone, live with their children only, live with other adults, and live with their partner and other adults, all have average personal wellbeing below the normal range.

Collectively, these findings attest to the important role that a young person’s parents play in supporting psychological wellbeing, for example, through the provision of financial resources. These data also highlight the difficult circumstances that single parents and people living alone face, which significantly compromise their wellbeing.

Analysis of scores on the CD-RISC 10 revealed that those who lived with children only maintained a relatively high level of resilience ($M = 63.12, SD = 20.80$), which was only significantly lower than resilience scores for those living with partner and children ($M = 81.84, SD = 15.13$). These findings can be seen in Table B.11.

Education status and subjective wellbeing

Figure 14 presents average SWB and resilience scores for Victorian youths, categorised by student status, compared to the normal range for SWB. More information is provided in Table B.12.

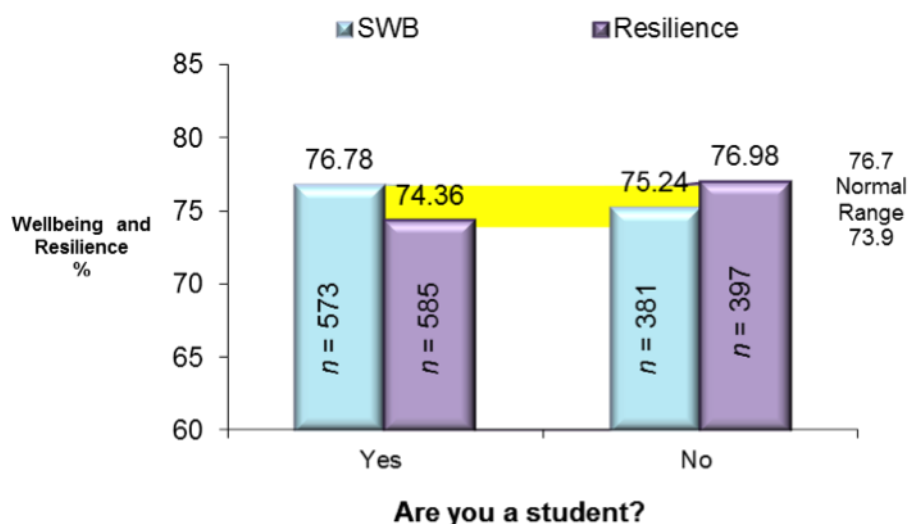


Figure 14: Average SWB and resilience of students and non-students

About 60 per cent of participants identified as being a student. Their average personal wellbeing is slightly above the normal range for Australian adults, while the average for people who do not study is within the normal range.

Among young Victorians who study, there were no differences in wellbeing between those who study full time versus part time. However, and perhaps interestingly, resilience was significantly higher for non-students compared to students.

Figure 15 presents average SWB and resilience scores for Victorian youths who identify as studying at each of the following types of institution, compared to the normal range for SWB. More information is provided in Table B.13.

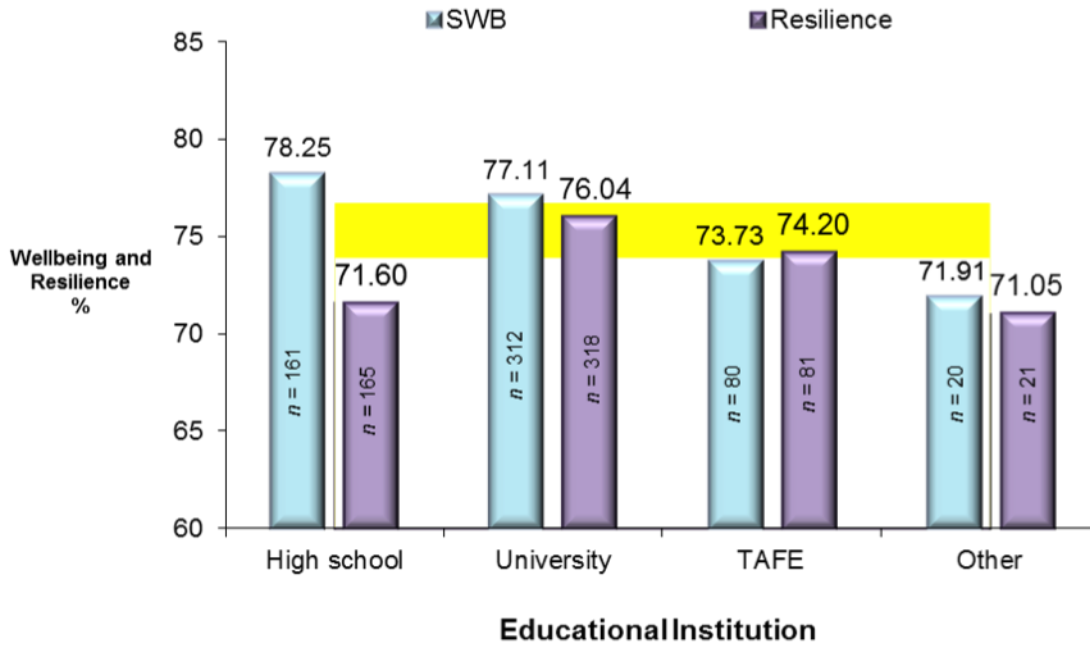


Figure 15: Average SWB and resilience of students studying at various types of institution

Average personal wellbeing among high-school students is above the normal range and statistically significantly higher than the average for young people who attend TAFE. This is an interesting result in light of the finding that high-school students have the lowest average resilience score.

Average personal wellbeing among university students is also above the normal range, while the average for TAFE students is slightly below.

Finally, average personal wellbeing for young Victorians who report being students but do not undertake their studies at one of the listed locations is below the normal range.

Resilience is highest for university students, significantly higher than for students still at high school.

Work status and subjective wellbeing

Figure 16 presents average SWB and resilience scores for Victorian youths who indicated that they are employed and either working full time, part time or on a casual basis, compared to the normal range for SWB. More information is provided in Table B.16.

Is the nature of your paid work ...?

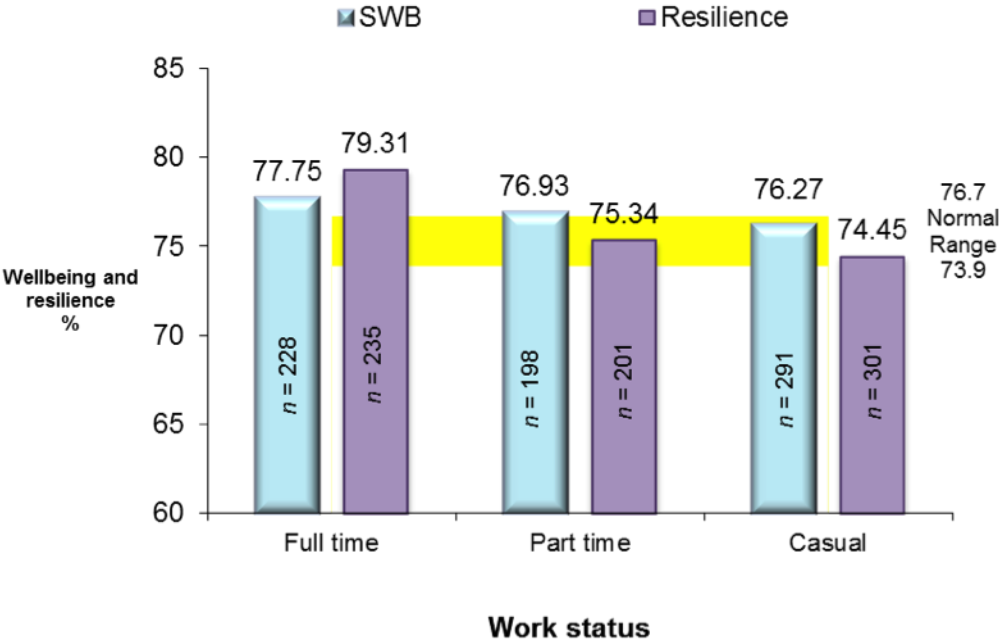


Figure 16: Average SWB and resilience among young Victorians according to work status

Average SWB among young Victorians who work full time and part time is above the normal range for Australian adults, while the average for young people in casual employment is within the normal range. There were no statistically significant differences in personal wellbeing scores as a function of work status.

However, Victorian youths engaged in full-time work reported significantly higher resilience scores than those in both part-time and casual employment. However, these results do not necessarily suggest that full-time employment is better for young people’s wellbeing and resilience than part-time or casual employment.

Figure 17 presents average SWB scores for Victorian youths in each age group who indicated that they are looking for work, compared to the normal range. More information is provided in Table B.19.

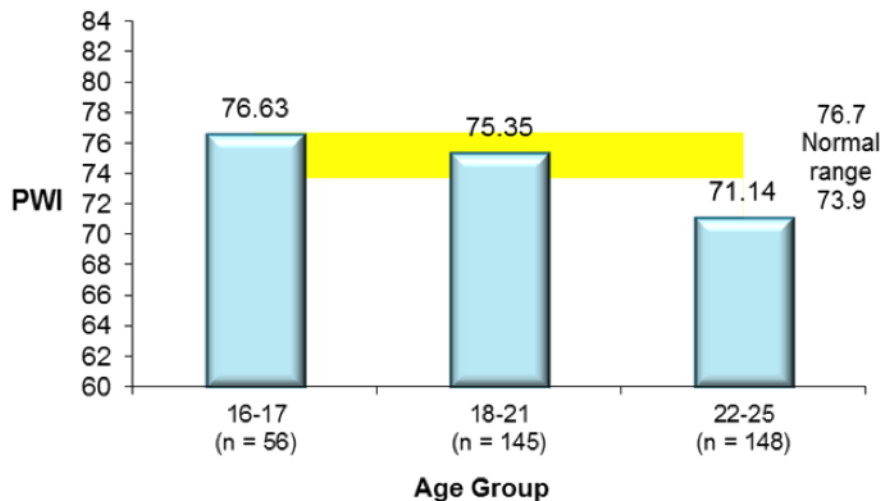


Figure 17: Average SWB among young Victorians in each age group who are looking for work

Average personal wellbeing among young Victorians aged 16 to 17 years and 18 to 21 years who are looking for work is within the normal range. It is likely that many of these young people are supported financially by their families while they seek work. Indeed, 77.6 per cent of young people aged 16 to 21 who are looking for work report living with at least one parent, with only 2.5 per cent living alone and 12.4 per cent living with ‘other adults’ (e.g., in shared accommodation).

On the other hand, average personal wellbeing among 22 to 25-year-old job seekers is below the normal range and significantly lower than 16 to 17 and 18 to 21-year-olds. This finding indicates considerable vulnerability among older youths who are seeking employment. Interestingly, only 43.2 per cent of young people in this group live with at least one parent, while 4.7 per cent live alone and 26.4 per cent with ‘other adults’.

Collectively, vulnerability associated with looking for work appears more closely linked to the level of support available to young people, for example, from their parents and families, while job hunting. Moreover, access to support appears to be greater among 16 to 21-year-olds, who are likely to be more dependent upon their families.

Income status and subjective wellbeing

Figure 18 presents average SWB and resilience scores for Victorian youths according to combined level of household income, compared to the normal range for SWB. More information is provided in Table B.17.

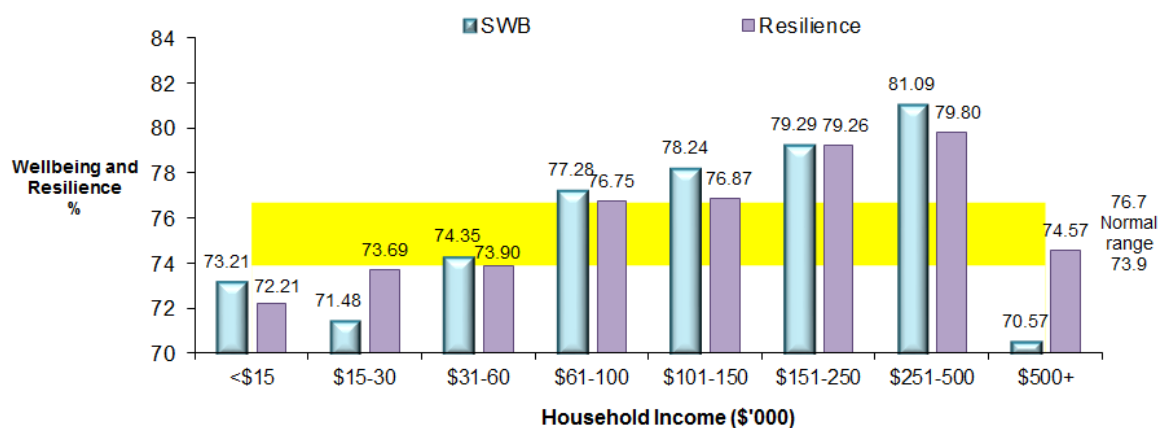


Figure 18: Average SWB and resilience among young Victorians by household income category compared to adult normal range

Average SWB is within the normal range for all household income categories between \$31,000 and \$60,000 and between \$151,000 and \$500,000. Although there is a general trend for average SWB to increase coincident with increasing income for each group between \$31,000 and \$500,000, these differences are not statistically significant.

Not surprisingly, **average SWB is below the normal range for the two lowest income categories.** These findings are consistent with adult data collected as part of the Australian Unity Wellbeing Index and highlight vulnerability among young Victorians who live in low-income households. The finding, however, that average SWB among people in the \$500,000+ household income category is below the normal range is unexpected, although this result should be interpreted with caution due to the very small sample size.

The collective findings highlight additional challenges that young people in low-income households face, and support the need for targeted interventions that assist young adults from low-income or low-socioeconomic households and backgrounds.

Perceived social support among Victorian youths

Figure 19 presents average SWB and resilience scores for Victorian youths according to their perception that they can get help from family, friends or neighbours when in need, compared to the normal range for SWB. More information is provided in Table B.18.

Can you get help from friends, family or neighbours when needed?

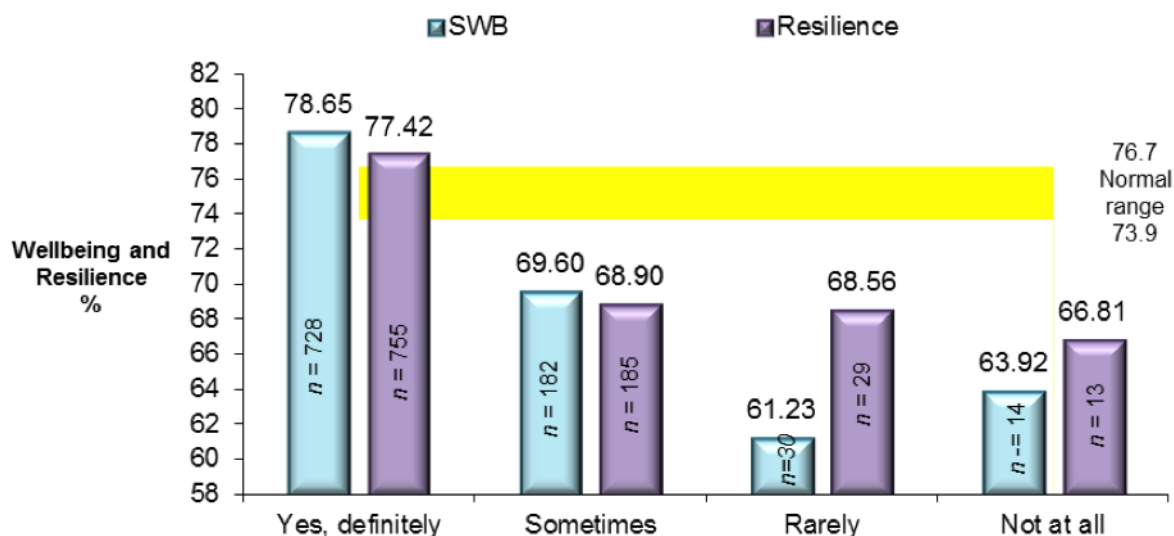


Figure 19: Average SWB and resilience and perceived social support

76.3 per cent of young Victorians responded “Yes, definitely” to the question “Can you get help from friends, family or neighbours when needed?” Average SWB for this group is above the adult normal range, highlighting an association between perceptions of access to social support and above-average personal wellbeing.

Average SWB for all other groups is below the normal range and highlights vulnerability among young people who feel that they would have limited access to social support in a time of need. This finding is very concerning, given that approximately one in four respondents feel this way.

The average resilience score for those who responded “Yes, definitely” is also significantly higher than for all other groups.

Participants were also asked whether they belonged to any social clubs, groups or organisations. Almost half of participants (44.5 per cent) reported that they belonged to at least one such group, with most (34.3 per cent) associating with a sport or physical recreation group.

Belonging to a sport or physical activity group was associated with higher average wellbeing scores ($M = 79.15$, $SD = 74.55$) and higher average resilience ($M = 77.83$, $SD = 74.14$) than those who did not belong to one (PWI: $M = 74.55$, $SD = 12.90$; CD-RISC 10: $M = 74.14$, $SD = 14.23$).

Negative affectivity in Victorian youths

Respondents were asked three questions regarding how lonely, stressed and anxious they generally feel, using an 11-point, end-defined scale ranging from 0 (Not at all) to 10 (Extremely). These scores have been standardised onto a 0 to 100-point scale. In order to gain a better understanding of the degree of correspondence between PWI scores and negative affectivity, scores on each of the three single-item negative affect variables were recoded into different percentage point categories: 0–10, 11–20, 21–30, 31–40, 41–50, 51–60, 61–70, 71–80, 81–90 and 91+. Presenting negative affect scores in this way affords greater insight into what levels of loneliness, stress and anxiety are coincident with average personal wellbeing falling below the normal range.

Figure 20 presents average SWB scores (represented on the vertical axis) for each corresponding loneliness category score (represented on the horizontal axis). The yellow bar represents the Australian adult normal range for the PWI based on average scores for grouped data. More information is provided in Table B.31.

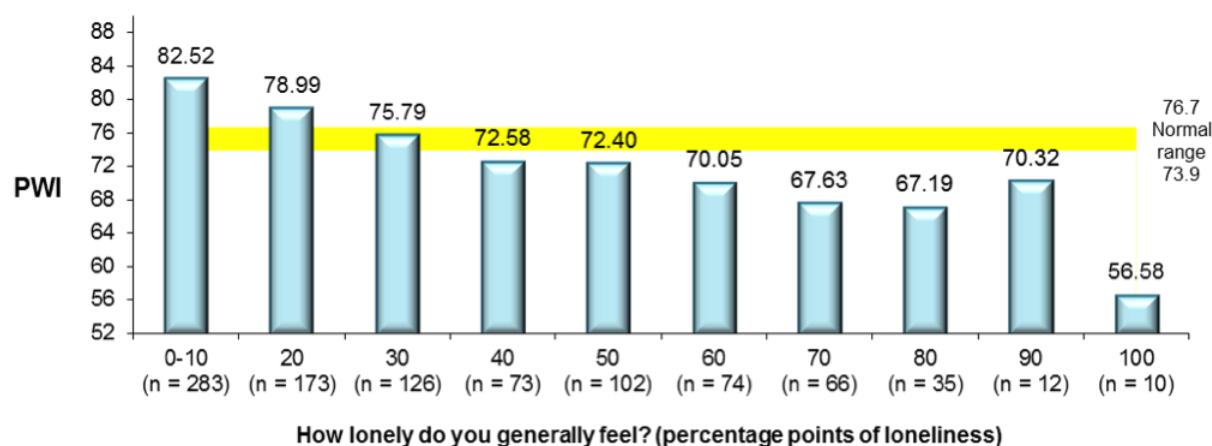


Figure 20: The relationship between SWB and general feelings of loneliness

For people who report loneliness scores between 0 and 30 points, their average SWB is above or within the normal range, though it decreases from a very high 82.52 points in the 0–10 point loneliness group to 75.79 points in the 30-point loneliness group. Approximately two-thirds of all respondents (61 per cent) score in these lower ranges for feelings of loneliness.

As the intensity of felt loneliness increases to 40 points, average SWB falls below the normal range, where it continues to decrease coincident with increasing feelings of loneliness.

These findings suggest a strong association between loneliness and SWB, with groups of people who score 40 points and higher on loneliness at greater risk of low wellbeing and depression. This result is concerning, given that 39 per cent of all respondents score within this range, and has implications for education and service delivery.

Figure 21 presents average SWB scores (represented on the vertical axis) for each corresponding stress category score (represented on the horizontal axis). The yellow bar represents the Australian adult normal range for the PWI. More information is provided in Table B.31.

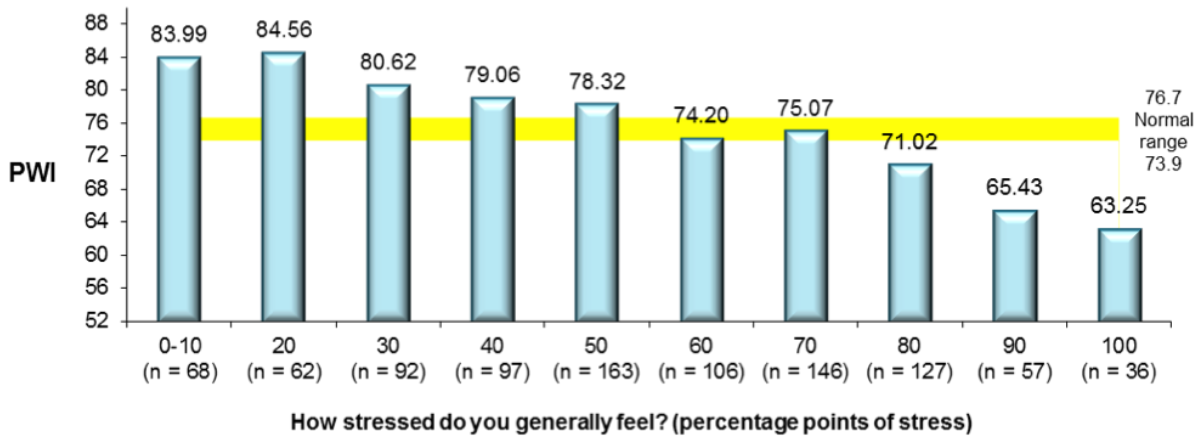


Figure 21: The relationship between SWB and general feelings of stress

At stress scores of between 0 and 70 points, average SWB is above or within the normal range. This is a very interesting finding and suggests that, on average, even at the level of 70 points, stress is not associated with below-average wellbeing.

Young people who report low levels of stress relative to their peers (e.g., between 0 and 30 points) have an average SWB above 80 points. Average SWB above 80 points is suggestive of a low challenge or risk group, with a lower than normal proportion of people likely to be experiencing a level of SWB below their normal set-point range.

Once feelings of stress reach a level of 80 points, however, SWB falls sharply below the normal range. 71 to 80 per cent appears to be the threshold and the level at which feelings of stress are associated detrimentally with personal wellbeing. Almost one-quarter of Victorian youths (23 per cent) experience general feelings of stress at the level of 80 points or above, placing them at a higher risk of low wellbeing and depression.

Figure 22 presents average SWB scores (represented on the vertical axis) for each corresponding anxiety category score (represented on the horizontal axis). The yellow bar represents the Australian adult normal range for the PWI. More information is provided in Table B.31.

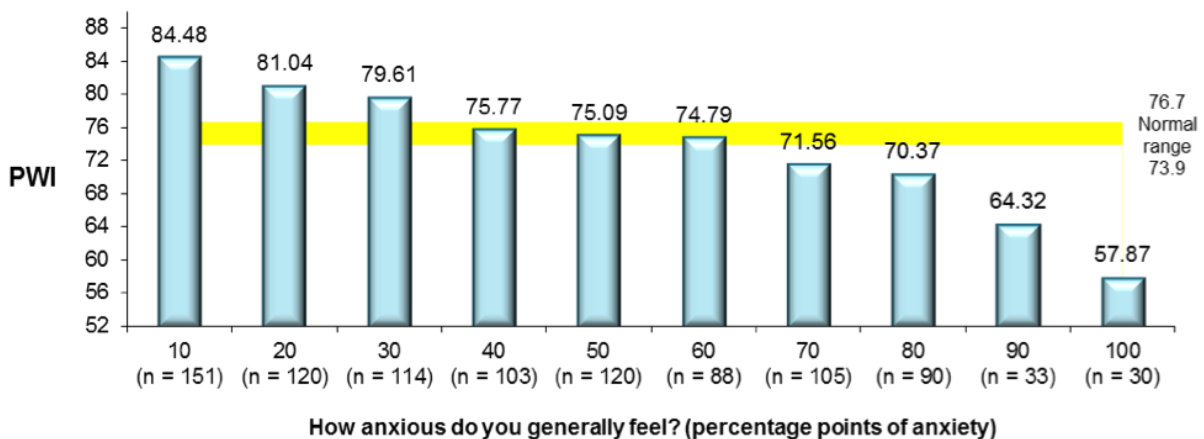


Figure 22: The relationship between SWB and general feelings of anxiety

At anxiety scores of between 0 and 60 points, average SWB is above or within the normal range, despite decreasing from a high of 84.48 points in the 0–10 point anxiety group, to 74.79 in the 60-point anxiety group.

Once general feelings of anxiety reach 70 points, average SWB falls below the normal range, placing the 27 per cent of all young people who score between 70 and 100 points at a higher risk of low wellbeing and depression.

Based on data presented in Figures 20–22, the authors propose the following guidelines for interpreting negative affect scores measured as single items, informed by their relationship to SWB. The categories for negative affect have been proposed using the following criteria:

- ‘Normal’ = SWB average score within or above normal range of 73.9 to 76.7 points
- ‘At risk’ = SWB average score below normal range and above 70 points
- ‘High risk’ = SWB average score below 70 points

Table 3: Suggested guidelines for interpreting single-item measures of ‘lonely’, ‘stressed’ and ‘anxious’ based on their influence on personal wellbeing

Affect	Affect categorisation		
	Normal	At risk	High risk
Lonely	0–30 points (0–3)	40–60 points (4–6)	70–100 points (7–10)
Stressed	0–70 points (0–7)	80 points (8)	90–100 points (9–10)
Anxious	0–60 points (0–6)	70–80 points (7–8)	90–100 points (9–10)

Note: Scores in parentheses represent unstandardised 0–10 scale responses

Collectively, and somewhat surprisingly, **the data suggest that general feelings of loneliness may be more detrimental to personal wellbeing than general feelings of either stress or anxiety**, with feelings of loneliness associated with SWB scores below the normal range at much lower levels of intensity.

High and low wellbeing/resilience groups

Figure 23 presents average SWB and resilience scores for Victorian youths with higher than normal group average wellbeing, compared to the normal range for SWB. More information is provided in Table B.21.

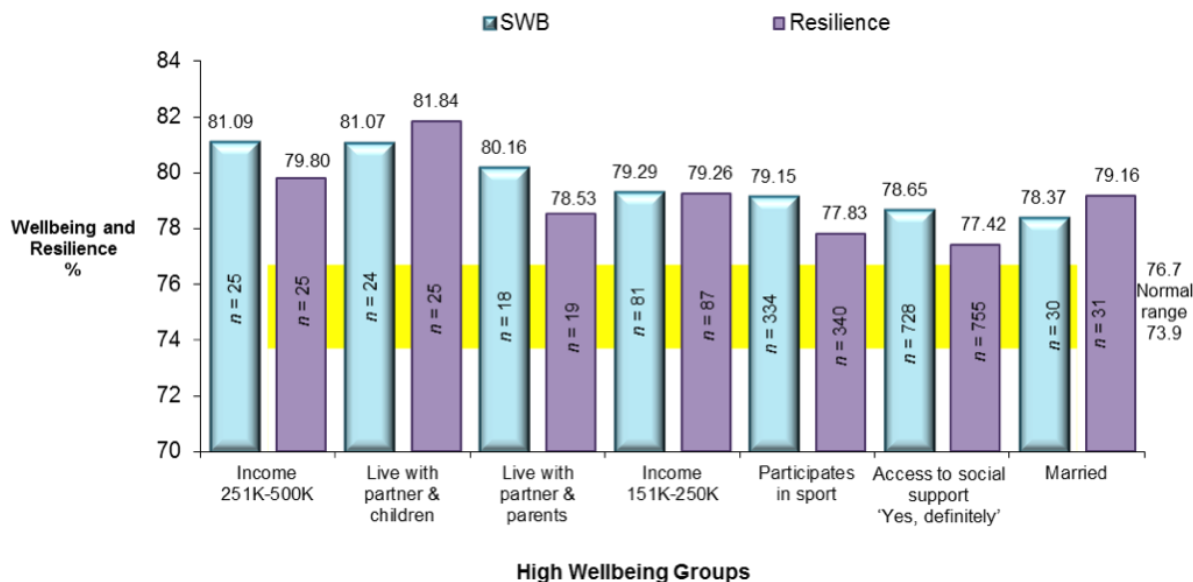


Figure 23: Groups with higher than normal SWB and corresponding resilience scores

Collectively, these results highlight financial and interpersonal-related factors as being associated with above-average wellbeing and resilience. For example, young people who live in higher-income households and have access to at least one other source of income, young people who participate in sport and other social activities, married young people, and young people who report always having someone to turn to when needed, all report wellbeing scores above the normal range, and also exhibit high resilience.

These findings are consistent with data obtained from the Australian Unity Wellbeing Index, which suggest that money and relationships are two important buffers to personal wellbeing that support adaptation to life stressors during times of challenge.

Figure 24 presents average SWB and resilience scores for Victorian youths with lower than normal group average wellbeing, compared to the normal range for SWB. More information is provided in Table B.21.

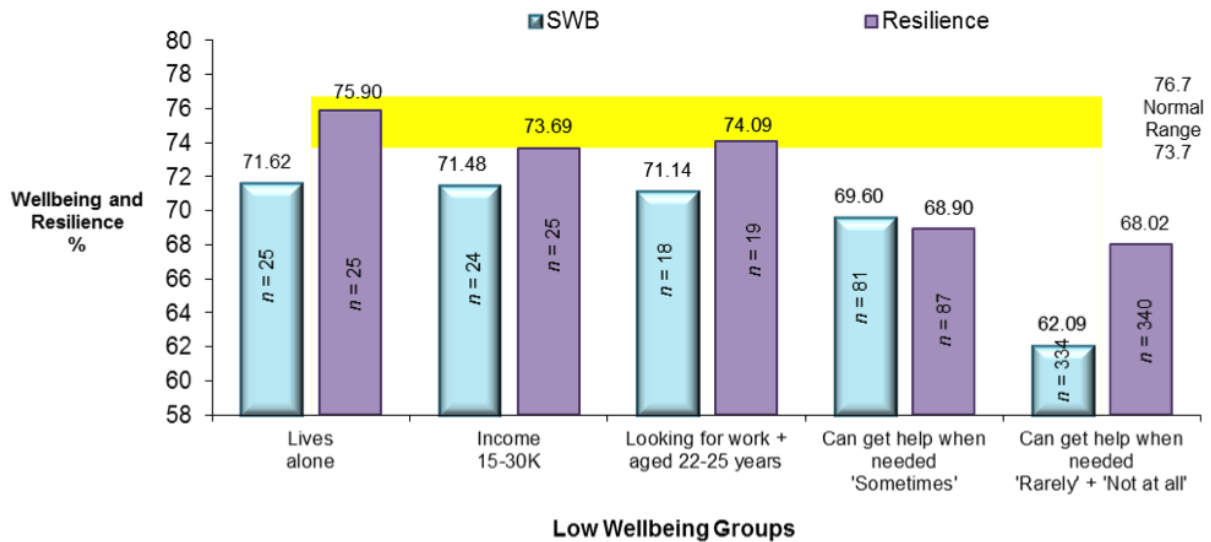


Figure 24: Groups with lower than normal SWB and corresponding resilience scores

These results corroborate the previous assertion that interpersonal and financial-related factors are associated with wellbeing and resilience. It is evident from Figure 24 that, on average, groups of people low on social support (e.g., people who cannot always access help when needed, people who live alone) and groups on low incomes or seeking employment have lower than normal wellbeing.

General discussion, research implications and limitations

Study aims

- The major aim of this research was to provide VicHealth with a baseline measure of the prevalence of resilience and mental wellbeing among young Victorians, and to describe their levels of mental wellbeing.
- A further aim of this research was to investigate the utility of a common measure of resilience, the 10-item Connor-Davidson Resilience Scale.

Overall results for subjective wellbeing

Average personal wellbeing for young Victorians is within the normal range for Australian adults

- This result suggests that the present sample of young Victorians can be considered a ‘normal’ sample, experiencing levels of personal wellbeing comparable to those of Australia’s mainstream adult population.
- Similar to Australian adults, approximately three-quarters (75.3 per cent) of young Victorians scored in the normal range (70+ points).
- 20.4 per cent and 4.3 per cent of young people respectively scored in the ‘challenged’ and ‘high-risk’ ranges for personal wellbeing, suggesting that approximately one in four young people are likely to be more vulnerable to depression.

Average scores on the interpersonal PWI domains of ‘Relationships’ and ‘Community Connection’ were below the normative adult ranges.

- Lower scores on the two interpersonal domains of ‘Relationships’ and ‘Community Connection’ highlight areas of potential vulnerability among Victoria’s young adult population and may have implications for education and service delivery.
- The lower scores reported on these domains are particularly noteworthy, since it has been reported that social and family relationships may be especially important for adolescents as they are heavily reliant on key adults in their lives, including parents and teachers, throughout their development (Bronfenbrenner, 2005).
- Targeted interventions may be most effective if they can engage young people in a supportive and socially oriented environment in which they can build positive and mutually beneficial relationships at both personal and community levels. By connecting to others in this way, young people can build important supportive resources that can be accessed during times of personal challenge and crisis.

Victorian youths scored above the normal range on the PWI domains of ‘Safety’, ‘Standard of Living’ and ‘Health’.

- The finding that young people scored higher on ‘Safety’ is encouraging, given that young people, like adults, have a fundamental need to feel safe and secure.

- A higher than normal average for ‘Standard of Living’ is not surprising, given that respondents are primarily young adults, with a majority still living at home with their parents and likely to be able to access their financial and other supportive resources.
- A majority of young people sampled are unlikely to be experiencing the adverse objective health conditions that may befall an older adult population, and this is evidenced by a higher than normal average score on the ‘Health’ domain.

Psychometric assessment of CD-RISC 10

First psychometric assessment of CD-RISC 10 in young Victorian sample

- Inter-item reliability assessment and factor analysis revealed that the CD-RISC 10 is a reliable instrument and appears to offer a valid representation of the underlying resilience construct.
- This study is the first to clarify the relationship between SWB scores measured using the PWI and resilience scores measured using the 10-item CD-RISC 10. Specifically, it was determined that these two variables share a moderate, positive relationship, and group mean SWB is within the normal range at a CD-RISC 10 score of 71 to 75.
- This study has also established that the CD-RISC 10 threshold at which average SWB falls below the normal range is between 61 and 70 points. This finding leads to a better understanding of the level at which resilience scores are associated with increased risk of low wellbeing and depression among young people.

Demographic and other subgroup analyses

Social support and connection are paramount to feelings of personal wellbeing

- The findings from this study highlight social support, for example, from family and friends, as important to the wellbeing of young Victorians, with young people who feel that they can “Yes, definitely” access support from another person when in need reporting above-average personal wellbeing.
- In contrast, approximately one-quarter of young people report having limited access to social support in a time of need and these people may be at greater risk of experiencing lower than normal wellbeing and depression during a time of crisis. As a group, on average, they appear to have compromised wellbeing.
- Living with one’s parents was also identified as a factor associated with normal or above-average feelings of personal wellbeing; so too is being a part of a sporting or recreational group.

SWB, stress, anxiety and loneliness: loneliness may be the biggest threat to personal wellbeing

- This is the first study to clarify the relationship between SWB scores and single-item measures of general feelings of stress, anxiety and loneliness. This is also the first study to propose evidence-based guidelines for interpreting single-item measures of ‘Lonely’, ‘Stressed’ and ‘Anxious’ based on their association with personal wellbeing.
- While much research has been devoted to the negative and harmful effects of stress on personal wellbeing, general feelings of loneliness were found to have a stronger negative influence on personal wellbeing at lower levels than either stress or anxiety.

- Approximately 1 in 8 young Victorians report a very high intensity of loneliness (a score of 70 or above), which is associated with an average wellbeing well below the normal range
- Though Victorian youths report feeling generally high levels of stress, wellbeing only falls below the normal range for those reporting a very high intensity of stress (over 80 points). This finding suggests that although it is common for Victorian youths to feel stressed, the effect on their wellbeing is not substantial until it reaches very high levels (e.g., 80 points and higher). This finding is testament to the resilience of the sample, such that they can tolerate stress until it extends beyond a threshold level of 8 out of 10.
- Similarly, feelings of anxiety appear to be tolerable until an intensity level of 70 points, when subjective wellbeing scores fall below the normal range. Thus, although stress and anxiety can generally be endured until they reach maximum levels, loneliness appears to be predictive of vulnerability at lower levels.
- The implication of these findings is that loneliness appears to have a more hidden, more detrimental effect on the SWB of young people, and that future education and intervention initiatives should focus on reducing social isolation and loneliness.

Study limitations and future research opportunities

This study offers a cross-sectional ‘snapshot’ of wellbeing and resilience in a Victorian sample of 1000 young people, and explores the utility of the CD-RISC 10 in this context. Although the findings supported the reliability and validity of this measure of resilience in a single study, a subsequent longitudinal study could confirm test-retest reliability and further demonstrate discriminant validity with other wellbeing-related measures.

In addition, the current sample is representative of a ‘normal’ population, such that a relatively small proportion of young people are considered to be experiencing chronic challenge to their ordinary level of personal wellbeing, for example, as a result of one or more life challenges. Given that resilience is considered to be a process that is activated in response to challenge or adversity, further exploration of the CD-RISC 10 should be undertaken with clinical or challenged samples, to determine its capacity for influence or change in critical times.

It is important to note also that the Australian adult normative range for SWB of between 73.9 and 76.7 points has been calculated using data for adults aged between 18 and 80+ years. Thus, these comparative data may not represent a true indication of the normative range for SWB among young Victorians. However, given that this is the first study of its kind in Victoria, and that no normative data exist for people aged 16 to 25 years, the Australian adult normative range employed is the most reliable comparative data available and sufficient for this purpose. However, we do recommend that future research should seek to obtain normative SWB data for young Victorians.

Conclusions

Victorian youths have a level of subjective wellbeing that generally reflects the normative range for the Australian adult population. Their wellbeing is also positively and moderately correlated with resilience. Despite the generally high scores on wellbeing, not all subgroups who scored above average on wellbeing expressed high corresponding resilience. For example, young Victorians attending high school reported higher subjective wellbeing than other student groups, but their

overall resilience was relatively lower. This report highlights the importance of other factors related to resilience and personal wellbeing, such as interpersonal (e.g., supportive relationships) and economic (e.g., income), and provides baseline data that will serve to guide the interpretation of data collected in future studies.

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Appendix A: Survey questionnaire

Community survey of young Victorians' resilience and mental wellbeing

Interview questionnaire and PLS

"Hello, my name is I'm calling from iView on behalf of VicHealth. We are doing a survey on how people feel about their lives in general that will only take about **10** minutes to complete. This research has been approved by the Cairnmillar Institute Human Research Ethics Committee."

Can I confirm please that you live in the state of Victoria and are between the ages of 16 and 25 years?

*Instructions: If the person who answers **meets the criteria for inclusion**, then continue. If they do not live in Victoria and/or are not aged between 16 and 25 years, thank the person for their time and inform them that you cannot continue with the interview.*

"The community survey of young Victorians' resilience and mental wellbeing involves asking you questions about how satisfied you are with different aspects of your life and about how you cope with things that happen in your life. Would you like to share your views by being involved in this survey?"

"Thank you"

"I'd like to inform you that you do not have to answer any question you do not feel comfortable answering, and that you're welcome to withdraw at any time during this survey. If you do withdraw, your answers will not be included in the analysed results. There are no anticipated risks to you for being involved in this survey, but just in case you feel you need to speak to someone, the number for Lifeline is 131114."

"The information you provide will be used to publish an overall survey result. At the end of the survey I will give you the contact details of the Principal Researcher should you wish to receive further information regarding this project."

We may at any time during this interview be listened to by my supervisor for quality control purposes.

Do you understand these procedures?

Do you have any questions before we proceed?"

"Are you happy to proceed?"

"Thank you. Now I will ask some questions about yourself."

Q0. *Interviewer – record the sex of the respondent*

Male Female

"I am going to ask how satisfied you feel, on a scale of zero to 10."

"Zero means you feel **not at all satisfied**. 10 means you feel **completely satisfied**. And the middle of the scale is 5."

"Would you like me to go over this again for you?"

“In that case I will start by asking how satisfied you are with life. So, -----”

(Group – Personal Wellbeing)

(Subgroup – Personal Abstract)

Q1. Thinking about your own life and personal circumstances, how satisfied are you with your life as a whole?

0 1 2 3 4 5 6 7 8 9 10

Don't know Don't understand

(Subgroup – Personal Domains)

“Turning now to various areas of your life, -----”

How satisfied are you ...?

Q2. With your standard of living?

0 1 2 3 4 5 6 7 8 9 10

Don't know Don't understand

Q3. With your health?

0 1 2 3 4 5 6 7 8 9 10

Don't know Don't understand

Q4. With what you are currently achieving in life?

0 1 2 3 4 5 6 7 8 9 10

Don't know Don't understand

Q5. With your personal relationships?

0 1 2 3 4 5 6 7 8 9 10

Don't know Don't understand

Q6. With how safe you feel?
0 1 2 3 4 5 6 7 8 9 10
 Don't know Don't understand

Q7. With feeling part of your community?
0 1 2 3 4 5 6 7 8 9 10
 Don't know Don't understand

Q8. With your future security?
0 1 2 3 4 5 6 7 8 9 10
 Don't know Don't understand

“The following questions are about different feelings that we might all experience at one time or another. I will ask you how often you generally experience each feeling.

“Zero means **not at all**. 10 means **extremely**. And the middle of the scale is 5.”

“Would you like me to go over this again for you?”

“In that case ...”

Q9. How lonely do you generally feel?
0 1 2 3 4 5 6 7 8 9 10
Not at all Extremely

Q10. How stressed do you generally feel?
0 1 2 3 4 5 6 7 8 9 10
Not at all Extremely

Q11. How anxious do you generally feel?
0 1 2 3 4 5 6 7 8 9 10
Not at all Extremely

Ok, thank you. Now a few questions about social support.

Q11. Can you get help from friends, family or neighbours when needed?

- Yes, definitely Sometimes Rarely Not at all
 Don't understand Declined to answer

If response to Q11 is 'Not at all', skip to Q14.

Q12. Can you get help from friends, family or neighbours when needed?

- Yes, definitely Sometimes Rarely Not at all
 Don't understand Declined to answer

If response to Q12 is 'Not at all', skip to Q14.

Q13. How satisfied are you with the support that you receive from ...

- a) Your friends
- b) Your family
- c) Your neighbours

0 = not at all satisfied, 10 = completely satisfied

Q14. Are you currently involved in any organised social, sporting or recreational groups?

If 'yes', prompt for which ones. More than one response is allowed.

1. Sport or physical recreation group
2. Religious, youth or other spiritual group or organisation
3. Special interest or hobby group
4. Ethnic or multicultural club
5. Social club or group through school/university/TAFE
6. Online group or community
7. No active involvement in social groups

“Now we are going to ask you some questions about how you cope with things that happen in your life.”

“For these items, you rate the extent to which each item is true for you. So, 0 means it is ‘not true at all’ and 10 means it is ‘extremely true’.”

Q15. I am able to adapt to change

0	1	2	3	4	5	6	7	8	9	10
Not at all true								Extremely true		

Q16. I can deal with whatever comes

0	1	2	3	4	5	6	7	8	9	10
Not at all true								Extremely true		

Q17. I see the humorous side of things

0	1	2	3	4	5	6	7	8	9	10
Not at all true								Extremely true		

Q18. Coping with stress can strengthen me

0	1	2	3	4	5	6	7	8	9	10
Not at all true								Extremely true		

Q19. I tend to bounce back after illness or hardship

0	1	2	3	4	5	6	7	8	9	10
Not at all true								Extremely true		

Q20. I can achieve my goals despite obstacles

0	1	2	3	4	5	6	7	8	9	10
Not at all true								Extremely true		

Q21. I can stay focused under pressure

Q26. Which of the following best describes your current marital status? Are you ...

READ OUT

1. Married
2. Living with a partner
3. Widowed
4. Divorced
5. Separated, or
6. Never married
7. (Don't know)
8. (Refused)

Q27. I am going to ask who lives in your household. Please indicate from the list I will read who lives with you.

[MR, code 1, 6 exclusive]

1. No one, you live by yourself
2. You live with your partner
3. With one or more children
4. With one or both of your parents
5. With one or more adults who are neither your partner nor your parent
6. Declined to answer

Q28. Are you a student?

If yes, GO TO Q28b. If no, GO TO Q29.

Q28b. Are you currently studying at ...

- High school University TAFE Other

If 'high school', GO TO Q28c. If 'university', 'TAFE' or 'other', go to Q28d.

Q28c. What year level are you currently in at school? *Interviewer type in year level.*

Q28d. Do you study...

- Full time Part time

Q29. Are you involved in paid work in a full time, part time, or casual capacity? YES/NO
 Full time Part time

If yes, GO TO Q29b. If no, GO TO Q29c.

Q29b. Is the nature of your paid work ...
 Full time Part time Casual

Q29c. Are you looking for work?
 Yes No Declined to answer

Q30. I will now give you a number of categories for household income. Can you please give me an idea of your household's total annual income before tax? Let me first ask – is your total household income less than \$100,000?

YES

NO

Is it less than \$15,000

Is it between:

Is it between:

\$101,000 – \$150,000

\$15,000 – \$30,000

\$151,000 – \$250,000

\$31,000 – \$60,000

\$251,000 – \$500,000

\$61,000 – \$100,000

More than \$500,000

Declined to answer

Q31. Are you of Aboriginal or Torres Strait Islander descent?

Yes No Declined to answer

The researcher that you can contact for any queries or to receive a summary report of the research findings is Dr Adrian Tomyon on 9650 0411.

Thank you for helping us with this survey. Standard iView privacy/close

RECORD POSTCODE

RECORD DATE TIME INTERVIEW DURATION

****End of telephone survey****

****NO MORE QUESTIONS***

Community survey of young Victorians' resilience and mental wellbeing

Part B: appended tables

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A. Participant demographics and sample sizes

Table A.1 Age × gender

Age	Male	Female	Total
16	32	22	54
17	55	45	100
18	40	38	78
19	63	40	103
20	49	75	124
21	47	57	104
22	46	87	133
23	46	72	118
24	44	66	110
25	42	31	73
Total	464	533	997

Table A.2 Marital status × gender

Marital status	Male	Female	Total
<i>Married</i>	6	25	31
<i>Living with a partner</i>	34	110	144
<i>Widowed</i>	2	0	2
<i>Divorced</i>	0	0	0
<i>Separated</i>	1	8	9
<i>Never married</i>	419	388	807
Total	462	531	993

Table A.3 Household composition × gender

Who lives in your household?	Male	Female	Total
<i>Lives alone</i>	16	17	33
<i>Lives with parents</i>	259	241	500
<i>Lives with other adults</i>	75	84	159
<i>Lives with partner only</i>	23	70	93
<i>Lives with parents and children</i>	29	28	57
<i>Lives with parents and other adults</i>	33	21	54
<i>Lives with partner and children</i>	3	22	25
<i>Lives with partner and parents</i>	4	15	19
<i>Lives with partner and other adults</i>	5	8	13
<i>Lives with children only</i>	3	8	11
<i>Other combination</i>	14	19	33
Total	464	533	997

Table A.4 Education status × gender

Are you a student?	Male	Female	Total
<i>'Yes'</i>			
<i>High School</i>	90	77	167
<i>University</i>	133	187	320
<i>TAFE</i>	38	45	83
<i>Other</i>	9	13	22
Subtotal 'Yes'	270	322	592
<i>'No'</i>	194	211	405
Total	450	523	973

Table A.5 Full-time vs. part-time education × gender

Do you study ...?	Male	Female	Total
<i>Full time</i>	147	202	349
<i>Part time</i>	33	43	77
Total	180	245	425

Table A.6 Workforce participation × gender

Are you involved in paid work?	Male	Female	Total
<i>Yes</i>	336	412	748
<i>No</i>	128	121	249
Total	464	533	997

Table A.7 Work status × gender

Is the nature of your paid work ...?	Male	Female	Total
<i>Full time</i>	117	123	240
<i>Part time</i>	85	120	205
<i>Casual</i>	134	169	303
Total	336	412	748

Table A.8 Income × gender

Household income	Male	Female	Total
< \$15,000	19	30	49
\$15,000 – \$30,000	36	57	93
\$31,000 – \$60,000	70	79	149
\$61,000 – \$100,000	62	92	154
\$101,000 – \$150,000	69	72	141
\$151,000 – \$250,000	55	33	88
\$251,000 – \$500,000	17	9	26
\$500,000+	5	3	8
Total	333	375	708

Table A.9 Work status × age

Are you involved in paid work?			
Age	Yes	No	Total
16	30	24	54
17	55	45	100
18	59	19	78
19	79	24	103
20	103	21	124
21	74	30	104
22	111	22	133
23	87	31	118
24	88	22	110
25	62	11	73
Total	748	249	997

Table A.10 Looking for work × age

Are you looking for work?			
Age	Yes	No	Total
16	28	26	54
17	28	72	100
18	32	46	78
19	38	65	103
20	40	84	124
21	40	64	104
22	49	84	133
23	48	70	118
24	30	79	109
25	26	47	73
Total	359	637	996

Table A.11 Access to help from others × gender

Can you get help from friends, family or neighbours when needed?	Male	Female	Total
<i>Yes, definitely</i>	355	408	763
<i>Sometimes</i>	87	102	189
<i>Rarely</i>	16	14	30
<i>Not at all</i>	5	9	14
Total	463	533	996

Table A.12 Group activity involvement

Current involvement in groups			
Group or activity	Yes	No	Total
<i>Sport or physical recreation group</i>	342	655	997
<i>Religious, youth or other spiritual group or organisation</i>	61	936	997
<i>Special interest or hobby group</i>	85	912	997
<i>Ethnic or multicultural club</i>	4	993	997
<i>Social club or group through school/university/TAFE</i>	84	913	997
<i>Online group or community</i>	39	958	997
<i>No active involvement in social groups</i>	553	444	997

Table A.13 Indigenous vs. non-Indigenous descent × gender

Are you of Indigenous descent?	Male	Female	Total
<i>Yes</i>	9	13	22
<i>No</i>	454	520	974
Total	463	533	996

B. Analyses involving PWI, CD-RISC 10 and other major variables

Table B.1 PWI and domain satisfaction scores

	Mean	SD	N
PWI	76.16	12.39	954
1. <i>Standard of living</i>	82.26	16.17	996
2. <i>Health</i>	77.06	19.18	996
3. <i>Achieving in life</i>	73.98	19.07	995
4. <i>Relationships</i>	76.19	21.36	994
5. <i>Safety</i>	84.65	16.78	996
6. <i>Community connection</i>	68.20	22.30	987
7. <i>Future security</i>	72.53	19.18	986

Table B.2 Comparison between Victorian youth and mainstream adult

	Victorian youths		AU Survey 1–31	AU Survey 1–31
N =	954		58,140	5,239
	M1	SD1	Adult normal range	18–25 normal range
PWI	76.16	12.39	73.86 – 76.73	71.77 – 78.86
1. <i>Standard of living</i>	82.26	16.17	75.62 – 80.17	75.83 – 83.60
2. <i>Health</i>	77.06	19.18	73.09 – 76.07	74.64 – 83.90
3. <i>Achieving in life</i>	73.98	19.07	71.93 – 75.23	69.67 – 77.15
4. <i>Relationships</i>	76.19	21.36	77.56 – 81.43	72.36 – 79.74
5. <i>Safety</i>	84.65	16.78	75.78 – 82.40	75.08 – 86.14
6. <i>Community connection</i>	68.20	22.30	68.85 – 73.39	61.67 – 71.86
7. <i>Future security</i>	72.53	19.18	68.62 – 73.57	66.88 – 75.53

Table B.3 Distribution of Victorian youth in each PWI group compared to mainstream

PWI range	Victorian youth		AU Survey 1–31		AU Survey 1–31	
	N	%	Adults	%	18–25 years	%
0–50 (<i>high risk</i>)	41	4.3	2,561	4.4	195	3.7
51–69 (<i>challenged</i>)	195	20.4	12,389	21.3	1,156	22.1
70+ (<i>normal</i>)	718	75.3	43,190	74.3	3,888	74.2
Total	954	100.0	58,140	100.0	5,239	100.0

Table B.4 Gender × PWI and domain happiness scores

	Male			Female			Difference (M1 – M2)	p =
	M1	SD1	N	M2	SD2	N		
PWI	76.79	12.24	437	75.63	12.50	517	1.16	0.149
<i>1. Standard of living</i>	82.01	16.57	463	82.48	15.82	533	–0.47	0.649
<i>2. Health</i>	79.72	17.85	464	74.74	19.99	532	4.98	<0.001
<i>3. Achieving in life</i>	74.24	19.31	462	73.75	18.87	533	0.49	0.686
<i>4. Relationships</i>	74.68	22.52	462	77.50	20.23	532	–2.82	0.038
<i>5. Safety</i>	86.76	15.86	463	82.81	17.35	533	3.95	<0.001
<i>6. Community connection</i>	68.78	23.15	458	67.69	21.54	529	1.09	0.447
<i>7. Future security</i>	73.47	19.08	458	71.70	19.25	528	1.77	0.149

Note: Statistically significant p values in bold

Table B.5 Distribution of male and female respondents according to PWI group

	Male		Female		Difference (N1 – N2)
	N1	%	N2	%	%
<i>PWI range</i>					
<i>0–50 (high risk)</i>	15	3.4	26	5.0	–1.6
<i>51–69 (challenged)</i>	85	19.5	110	21.3	–1.8
<i>70+ (normal)</i>	337	77.1	381	73.7	3.4
Total	437	100.0	517	100.0	

Table B.6 Gender × CD-RISC 10

	Male			Female			Difference (M1 – M2)	p =
	M1	SD1	N	M2	SD2	N		
CD-RISC 10 <i>composite</i>	77.58	12.93	454	73.56	13.86	528	4.03	<0.001
1. <i>Adapt to change</i>	78.81	19.24	463	77.24	18.96	533	1.57	0.196
2. <i>Can deal</i>	77.84	18.30	464	74.61	18.51	532	3.24	0.006
3. <i>Humorous side</i>	84.08	18.63	463	80.81	17.33	532	3.27	0.004
4. <i>Coping with stress</i>	71.50	21.22	461	68.14	21.78	533	3.35	0.014
5. <i>Bounce back</i>	79.91	19.18	461	74.37	20.04	531	5.54	<0.001
6. <i>Achieve goals</i>	78.60	18.45	463	75.95	17.47	533	2.65	0.020
7. <i>Can stay focused</i>	72.59	21.81	463	68.71	21.58	533	3.89	0.005
8. <i>Not discouraged</i>	72.68	20.99	463	67.44	22.46	532	5.23	<0.001
9. <i>Strong person</i>	79.52	18.04	462	75.73	18.52	532	3.79	0.001
10. <i>Can handle feelings</i>	77.21	20.29	463	70.09	21.41	532	7.12	<0.001

Note: Statistically significant p values in bold

Table B.7 Age × PWI and domain happiness scores

	16–17		18–21		22–25		Total		
<i>N</i> =	149		392		413				
	Mean	SD	Mean	SD	Mean	SD	Mean	SD	p =
<i>PWI</i>	77.85	11.97	77.18	11.74	74.59	12.98	76.16	12.39	0.002
	> 22–25, <i>p</i> = 0.017		> 22–25, <i>p</i> = 0.009						
1. <i>Standard of living</i>	85.23	12.67	83.81	15.94	79.75	17.12	82.26	16.17	<0.001
	> 22–25, <i>p</i> = <0.001		> 22–25, <i>p</i> = 0.001						
2. <i>Health</i>	79.61	16.44	77.94	18.91	75.32	20.18	77.06	19.18	0.028
	> 22–25, <i>p</i> = 0.028								
3. <i>Achieving in life</i>	74.71	18.18	75.20	17.76	72.58	20.46	73.98	19.07	0.121
4. <i>Relationships</i>	74.64	19.87	76.20	20.64	76.72	22.52	76.19	21.36	0.585
5. <i>Safety</i>	85.06	18.37	85.12	16.11	84.06	16.83	84.65	16.78	0.618
6. <i>Community</i>	70.71	20.71	70.10	20.67	65.50	24.01	68.20	22.30	0.004
	> 22–25, <i>p</i> = 0.032		> 22–25, <i>p</i> = 0.009						
7. <i>Future security</i>	76.27	16.50	73.33	18.24	70.44	20.65	72.53	19.18	0.003
	> 22–25, <i>p</i> = 0.002								

Note: Statistically significant *p* values in bold

Table B.8 Age × PWI group

	Age group						
	16–17		18–21		22–25		Total
PWI range	N	%	N	%	N	%	N
<i>0–50 (high risk)</i>	4	2.7	14	3.6	23	5.6	41
<i>51–69 (challenged)</i>	29	19.5	70	17.9	96	23.2	195
<i>70+ (normal)</i>	116	77.9	308	78.6	294	71.2	718
Total	149		392		413		954

Table B.9 Age × CD-RISC 10

Age group	CD-RISC 10		
	Mean	SD	N
16–17	71.51	14.20	152
18–21	75.87	13.38	403
22–25	76.38	13.33	427
Total	75.42	13.58	982
ANOVA and post-hocs	$F(2, 979) = 7.690, p < 0.001$ $18-21 > 16-17, p = 0.002$ $22-25 > 16-17, p = <0.001$		

Table B.10 Marital status × PWI and CD-RISC 10

Marital status	PWI			CD-RISC 10		
	Mean	SD	N	Mean	SD	N
<i>Married</i>	78.37	12.92	30	79.16	12.36	31
<i>Living with a partner</i>	77.85	10.98	134	76.87	13.31	143
<i>Widowed</i>	38.14	–	1	64.00	–	1
<i>Separated</i>	61.86	17.53	9	71.00	12.78	9
<i>Never married</i>	75.98	12.38	778	75.04	13.67	794
<i>Declined to answer</i>	–	–	–	89.00	15.56	2
<i>Don't know</i>	82.14	3.03	2	76.00	4.24	2
Total	76.16	12.39	954	75.42	13.58	982
ANOVA	$F(5, 948) = 5.209, p < 0.001$			$F(6,975) = 1.383, p > 0.05$		

Table B.11 Household composition × PWI and CD-RISC 10

Household composition: Lives with ...	PWI			CD-RISC 10		
	Mean	SD	N	Mean	SD	N
<i>Parents</i>	77.06	12.25	479	74.54	14.01	493
<i>Other adults</i>	73.46	12.36	155	77.19	12.27	156
<i>Partner only</i>	76.89	11.58	86	76.34	12.35	92
<i>Children and parents</i>	77.74	12.52	55	74.65	13.88	57
<i>Parents and others</i>	77.41	10.43	53	75.78	11.78	54
<i>Alone</i>	71.62	10.96	30	75.90	13.81	31
<i>Partner and children</i>	81.07	10.99	24	81.84	15.13	25
<i>Partner and parents</i>	80.16	11.86	18	78.53	11.23	19
<i>Partner and others</i>	71.43	10.56	11	79.23	16.04	13
<i>Children only</i>	59.40	22.09	10	63.12	20.80	10
<i>Other</i>	74.27	12.42	33	73.31	11.96	32
Total	76.16	12.39	954	75.42	13.58	982
ANOVA and post-hocs	$F(10, 943) = 4.346, p < 0.001$ <i>Parents > Children only, $p = <0.001$</i> <i>Partner only > Children only, $p = 0.001$</i> <i>Partner and children > Children only, $p = <0.001$</i> <i>Other adults > Children only, $p = 0.023$</i> <i>Children and parents > Children only, $p = 0.001$</i> <i>Parents and others > Children only, $p = 0.001$</i> <i>Partner and parents > Children only, $p = 0.001$</i> <i>Other > Children only, $p = 0.041$</i>			$F(10,971) = 2.225, p < 0.05$ <i>Partner and children > Children only, $p = 0.012$</i>		

Table B.12 Education status × PWI and CD-RISC 10

	PWI			CD-RISC 10		
	Mean	SD	N	Mean	SD	N
Are you a student?						
<i>Yes</i>	76.78	11.81	573	74.36	13.19	585
<i>No</i>	75.24	13.18	381	76.98	14.01	397
Total	76.16	12.39	954	75.42	13.58	982
t-test	$t(952) = 1.879, p > 0.05$			$t(980) = -2.984, p < 0.001$		

Table B.13 Type of education × PWI and CD-RISC 10

	PWI			CD-RISC 10		
	Mean	SD	N	Mean	SD	N
Are you currently studying at ...?						
<i>High school</i>	78.25	11.69	161	71.60	14.50	165
<i>University</i>	77.11	11.10	312	76.04	11.97	318
<i>TAFE</i>	73.73	13.19	80	74.20	13.68	81
<i>Other</i>	71.91	15.01	20	71.05	14.71	21
Total	76.78	11.81	573	74.36	13.19	585
ANOVA and post-hocs	$F(3,569) = 3.875, p < 0.01$ <i>High school > TAFE, p = 0.030</i>			$F(3,581) = 4.656, p < 0.01$ <i>University > High school, p = 0.002</i>		

Table B.14 Full-time vs. part-time education x PWI and CD-RISC 10

	PWI			CD-RISC 10		
	Mean	SD	N	Mean	SD	N
Education status						
<i>Full time</i>	76.23	11.39	337	75.55	12.36	345
<i>Part time</i>	76.06	13.70	75	74.91	13.16	75
Total	76.20	11.83	412	75.44	12.49	420
t-test	$t(98) = 0.097, p > 0.05$			$t(418) = 0.405, p > 0.05$		

Table B.15 Work status × PWI and CD-RISC 10

	PWI			CD-RISC 10		
	Mean	SD	N	Mean	SD	N
Are you involved in paid work?						
<i>Yes</i>	76.92	11.45	717	76.24	12.91	737
<i>No</i>	73.86	14.68	237	72.93	15.19	245
Total	76.16	12.39	954	75.42	13.58	982
t-test	$t(335) = 2.927, p < 0.01$			$t(368) = 3.068, p < 0.01$		

Table B.16 Type of work x PWI and CD-RISC 10

	PWI			CD-RISC 10		
	Mean	SD	N	Mean	SD	N
Work status						
<i>Full time</i>	77.75	10.65	228	79.31	12.74	235
<i>Part time</i>	76.93	11.12	198	75.34	11.87	201
<i>Casual</i>	76.27	12.23	291	74.45	13.31	301
Total	76.92	11.45	717	76.24	12.91	737
ANOVA and post-hocs	$F(2, 714) = 1.070, p > 0.05$			$F(2, 734) = 10.263, p < 0.001$ <i>Full time > Part time, p = 0.004</i> <i>Full time > Casual, p = <0.001</i>		

Table B.17 Income × PWI and CD-RISC 10

Income	PWI			CD-RISC 10		
	Mean	SD	N	Mean	SD	N
< \$15,000	73.21	11.52	48	72.21	11.94	48
\$15,000 – \$30,000	71.48	14.25	89	73.69	15.39	93
\$31,000 – \$60,000	74.35	13.10	143	73.90	14.19	147
\$61,000 – \$100,000	77.28	12.05	149	76.75	13.64	151
\$101,000 – \$150,000	78.24	9.97	135	76.87	12.24	141
\$151,000 – \$250,000	79.29	9.81	81	79.26	11.46	87
\$251,000 – \$500,000	81.09	11.77	25	79.80	11.42	25
\$500,000+	70.57	26.19	6	74.57	21.49	8
Total	76.12	12.35	676	75.85	13.52	700
ANOVA and post-hocs	$F(7,668) = 5.069, p < 0.001$ $\$61-100K > \$15-30K, p = 0.011$ $\$101-150K > \$15-30K, p = 0.001$ $\$151-250K > \$15-30K, p = 0.001$ $\$251-500K > \$15-30K, p = 0.014$			$F(7,692) = 2.635, p < 0.05$		

Table B.18 Social support × PWI and CD-RISC 10

Can get help	PWI			CD-RISC 10		
	Mean	SD	N	Mean	SD	N
Yes, definitely	78.65	10.68	728	77.42	12.40	755
Sometimes	69.60	12.83	182	68.90	14.55	185
Rarely	61.23	17.32	30	68.56	17.23	29
Not at all	63.92	17.08	14	66.81	19.25	13
Total	76.16	12.39	954	75.42	13.58	982
ANOVA and post-hocs	$F(3, 950) = 53.496, p < 0.001$ $Yes > Sometimes, p = <0.001$ $Yes > Rarely, p = 0.001$ $Yes > Not at all, p = 0.001$ $Sometimes > Rarely, p = 0.001$			$F(3,978) = 25.702, p < 0.001$ $Yes > Sometimes, p = <0.001$ $Yes > Rarely, p = 0.002$ $Yes > Not at all, p = 0.023$		

Table B.19 Work Status × age group × PWI and CD-RISC 10

Looking for work: 'Yes'	PWI			CD-RISC 10		
	Mean	SD	N	Mean	SD	N
16–17	76.63	11.62	56	69.94	15.26	56
18–21	75.35	12.10	145	74.82	12.92	147
22–25	71.14	14.50	148	74.09	13.80	149
Total	73.77	13.27	349	73.74	13.75	352
ANOVA	$F(2,346) = 5.361, p < 0.01$ 16–17 > 22–25, $p = 0.024$ 18–21 > 22–25, $p = 0.019$			$F(2,349) = 2.666, p > 0.05$		

Table B.20 Support groups and wellbeing/resilience

Group	PWI			CD-RISC 10		
	Mean	SD	N	Mean	SD	N
<i>Sport or physical recreation</i>	79.15	10.78	334	77.83	11.93	340
<i>No</i>	74.55	12.90	620	74.14	14.23	642
t-test	$t(791) = 5.846, p < 0.001$			$t(802) = 4.310, p < 0.001$		
<i>Religious, youth, or other spiritual group/organisation</i>	79.36	9.88	58	77.07	10.73	60
<i>No</i>	75.95	12.51	896	75.31	13.74	922
t-test	$t(952) = 2.032, p < 0.05$			$t(72) = 1.206, p > 0.05$		
<i>Special interest or hobby group</i>	76.96	11.43	82	75.08	13.17	84
<i>No</i>	76.09	12.48	872	75.45	13.63	898
t-test	$t(952) = 0.613, p > 0.05$			$t(980) = -0.239, p > 0.05$		
<i>Ethnic or multicultural club</i>	78.93	3.17	4	63.50	11.59	4
<i>No</i>	76.15	12.42	950	75.47	13.57	978
t-test	$t(952) = 0.447, p > 0.05$			$t(980) = -1.760, p > 0.05$		
<i>Social club or group</i>	78.66	10.11	82	77.33	11.31	84
<i>No</i>	75.93	12.56	872	75.24	13.77	898
t-test	$t(952) = 1.911, p > 0.05$			$t(107) = 1.588, p > 0.05$		
<i>Online group or community</i>	76.49	12.48	38	76.68	11.78	39
<i>No</i>	76.15	12.40	916	75.36	13.65	943
t-test	$t(952) = 0.168, p > 0.05$			$t(980) = 0.593, p > 0.05$		

Table B.21 Key demographic risk subgroups × PWI and CD-RISC 10

		PWI	CD-RISC 10
At-risk subgroups			
<i>Can get help when needed: 'Rarely' + 'Not at all'</i>	Mean	62.09	68.02
	SD	17.09	17.66
	N	44	42
<i>Can get help when needed: 'Sometimes'</i>	Mean	69.60	68.90
	SD	12.83	14.55
	N	182	185
<i>Looking for work: 'Yes' and aged 22–25 years</i>	Mean	71.14	74.09
	SD	14.50	13.80
	N	148	149
<i>Lives alone</i>	Mean	71.62	75.90
	SD	10.96	13.81
	N	30	31
Resilient subgroups			
<i>Income \$251,000 – \$500,000</i>	Mean	81.09	79.80
	SD	11.77	11.42
	N	25	25
<i>Lives with partner and children</i>	Mean	81.07	81.84
	SD	10.99	15.13
	N	24	25
<i>Lives with partner and parents</i>	Mean	80.16	78.53
	SD	11.86	11.23
	N	18	19
<i>Income \$151,000 – \$250,000</i>	Mean	79.29	79.26
	SD	9.81	11.46
	N	81	87
<i>Participates in sport or physical recreation</i>	Mean	79.15	77.83
	SD	10.78	11.93
	N	334	340
<i>Access to social support: 'Yes, definitely'</i>	Mean	78.65	77.42
	SD	10.68	12.40
	N	728	755
<i>Married</i>	Mean	78.37	79.16
	SD	12.92	12.36
	N	30	31

Table B.22 Means, standard deviations and correlations between variables (PWI)

Variable	Mean	SD	1.	2.	3.	4.	5.	6.	7.	8.	9.
1. GLS	75.03	15.90	–								
2. PWI composite	76.16	12.39	0.73	–							
3. Standard of living	82.26	16.17	0.56	0.64	–						
4. Health	77.06	19.18	0.53	0.69	0.46	–					
5. Achieving in life	73.98	19.07	0.67	0.71	0.41	0.45	–				
6. Relationships	76.19	21.36	0.51	0.68	0.34	0.34	0.46	–			
7. Safety	84.65	16.78	0.38	0.62	0.38	0.33	0.32	0.35	–		
8. Community connection	68.20	22.30	0.41	0.69	0.36	0.39	0.36	0.37	0.37	–	
9. Future security	72.53	19.18	0.53	0.73	0.39	0.42	0.51	0.38	0.40	0.48	–

Table B.23 Means, standard deviations and correlations between variables (CD-RISC 10)

Variable	Mean	SD	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.
1. Adapt to change	77.97	19.10	–									
2. Can deal	76.11	18.48	0.65	–								
3. Humorous side	82.33	18.01	0.43	0.46	–							
4. Coping with stress	69.70	21.57	0.42	0.47	0.37	–						
5. Bounce back	76.95	19.83	0.45	0.53	0.43	0.48	–					
6. Achieve goals	77.18	17.97	0.43	0.55	0.39	0.43	0.58	–				
7. Can stay focused	70.51	21.76	0.39	0.44	0.29	0.43	0.41	0.54	–			
8. Not discouraged	69.88	21.93	0.40	0.50	0.40	0.40	0.45	0.55	0.53	–		
9. Strong person	77.49	18.39	0.40	0.53	0.41	0.41	0.50	0.60	0.48	0.53	–	
10. Can handle feelings	73.41	21.18	0.39	0.55	0.41	0.45	0.49	0.47	0.45	0.54	0.60	–

Note: **bold** = CD-2 item

Table B.24 Means, standard deviations and correlations between all composite and scale variables

Variable	Mean	SD	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.
1. <i>GLS</i>	75.03	15.90	–									
2. <i>PWI</i>	76.16	12.39	0.73	–								
3. <i>CD-RISC 10</i>	75.42	13.58	0.50	0.54	–							
4. <i>CD-2</i>	77.52	16.49	0.39	0.43	0.83	–						
5. <i>Lonely</i>	31.53	25.55	–0.43	–0.45	–0.38	–0.29	–					
6. <i>Stressed</i>	53.70	25.48	–0.39	–0.42	–0.37	–0.28	0.45	–				
7. <i>Anxious</i>	43.73	27.69	–0.45	–0.47	–0.48	–0.39	0.48	0.71	–			
8. <i>Support friends</i>	81.16	19.65	0.38	0.43	0.38	0.31	–0.28	–0.27	–0.31	–		
9. <i>Support family</i>	84.16	21.74	0.39	0.41	0.32	0.21	–0.29	–0.24	–0.31	0.49	–	
10. <i>Support neighbours</i>	41.13	32.70	0.28	0.32	0.19	0.15	–0.20	–0.25	–0.22	0.29	0.30	–

GLS = Global Life Satisfaction item; PWI = Personal Wellbeing Index; CD-RISC 10 = Connor-Davidson Resilience Scale (10-item short form); CD - 2 = Connor-Davidson Resilience Scale (2-item short form)

Table B.25 Exploratory factor analysis (CD-RISC 10 and CD-2)

Domain	Factor loadings	
	CD-RISC 10	CD-2
1. <i>Adapt to change</i>	0.79	0.85
2. <i>Can deal</i>	0.77	
3. <i>Humorous side</i>	0.76	
4. <i>Coping with stress</i>	0.74	
5. <i>Bounce back</i>	0.74	0.85
6. <i>Achieve goals</i>	0.73	
7. <i>Can stay focused</i>	0.68	
8. <i>Not discouraged</i>	0.68	
9. <i>Strong person</i>	0.67	
10. <i>Can handle feelings</i>	0.63	
KMO =	0.919	0.500
Sig.	0.000	0.000
Variance explained	52.19%	72.27%

Table B.26 Means and standard deviations for CD-RISC 10 items for people who score high on stress (7+) and normal (PWI > 70) and low (PWI < 70) SWB

Variable	PWI > 70 & Stress = 70+		PWI < 70 & Stress = 70+		Difference M1 – M2
	M1	SD1	M2	SD2	
<i>CD-RISC 10 composite</i>	74.36	11.44	64.03	14.72	10.33
1. <i>Adapt to change</i>	77.30	17.49	69.93	22.42	7.37
2. <i>Can deal</i>	75.86	16.06	64.38	23.67	11.48
3. <i>Humorous side</i>	81.08	17.79	70.56	21.86	10.52
4. <i>Coping with stress</i>	68.06	20.65	59.02	24.53	9.04
5. <i>Bounce back</i>	75.23	18.04	64.69	23.28	10.54
<u>6. <i>Achieve goals</i></u>	78.65	15.97	65.21	21.97	<u>13.44</u>
<u>7. <i>Can stay focused</i></u>	69.95	21.15	56.94	24.81	<u>13.01</u>
8. <i>Not discouraged</i>	67.30	21.01	56.74	26.89	10.56
9. <i>Strong person</i>	77.56	16.14	65.00	21.90	12.56
<u>10. <i>Can handle feelings</i></u>	72.70	19.07	56.99	25.40	<u>15.71</u>

Note: **bold** = highest mean scores; underline = greatest differences between groups.

Table B.27 Means and standard deviations for PWI for corresponding CD-RISC 10 scores

CD-RISC 10 Range	PWI		
	M1	SD1	N
0–50	59.46	14.49	51
51–55	65.76	10.38	23
56–60	68.43	10.42	43
61–65	71.72	10.55	83
66–70	72.15	10.86	120
71–75	74.56	10.39	139
76–80	78.76	9.23	148
81–85	81.02	8.91	137
86–90	81.23	10.58	88
91+	86.14	10.46	111
Total	76.28	12.25	943

Table B.28 Predicting GLS using the seven domains of the PWI

N = 972			
Domain	B	SE	sr ²
1. Standard	0.24*	0.02	0.04
2. Health	0.12*	0.02	0.01
3. Achieving	0.30*	0.02	0.08
4. Relationships	0.12*	0.02	0.02
5. Safety	0.01	0.02	0.00
6. Community	0.01	0.02	0.00
7. Future	0.10*	0.02	0.01

$F(7, 971) = 221.512, p < 0.001$

R² = 0.62
Unique variance = 0.16
Shared variance = 0.46

*p < 0.001

Table B.29 Predicting PWI using the CD-RISC 10 (Stressed > 70)

N = 220

Domain	B	SE	sr²
1. <i>Adapt to change</i>	-0.31	0.39	0.00
2. <i>Can deal</i>	0.58	0.44	0.00
3. <i>Humorous side</i>	0.70*	0.33	0.01
4. <i>Coping with stress</i>	0.05	0.30	0.00
5. <i>Bounce back</i>	-0.16	0.36	0.00
6. <i>Achieve goals</i>	1.76**	0.44	0.03
7. <i>Can stay focused</i>	0.51	0.31	0.01
8. <i>Not discouraged</i>	-0.26	0.31	0.00
9. <i>Strong person</i>	0.10	0.39	0.00
10. <i>Can handle feelings</i>	1.49**	0.31	0.04

$F(10, 351) = 16.582, p < 0.001$

$R^2 = 0.32$
Unique variance = 0.09
Shared variance = 0.23

* $p < 0.05$, ** $p < 0.001$

Table B.30 Mean scores and standard deviations for negative affects

	Lonely			Stressed			Anxious		
	M	SD	N	M	SD	N	M	SD	N
<i>Overall</i>	31.53	25.55	997	53.70	25.48	997	43.73	27.69	997
Gender									
<i>Male</i>	30.26	26.21	464	47.39	26.73	464	37.37	26.80	464
<i>Female</i>	32.65	24.93	533	59.19	22.99	533	49.27	27.28	533
Age									
<i>16–17</i>	32.08	24.46	154	50.91	24.61	154	45.26	26.28	154
<i>18–21</i>	31.56	25.33	409	52.47	26.02	409	41.61	27.44	409
<i>21–25</i>	31.31	26.18	434	55.85	25.14	434	45.18	28.34	434
Marital status									
<i>Married</i>	19.35	17.50	31	48.06	20.72	31	35.16	18.95	31
<i>Living with partner</i>	23.96	25.07	144	57.29	25.40	144	43.40	30.02	144
<i>Widowed</i>	100.0	0.00	2	100.0	0.00	2	40.00	42.43	2
<i>Separated</i>	34.44	19.44	9	71.11	19.00	9	66.67	28.72	9
<i>Never married</i>	33.18	25.38	807	52.91	25.54	807	43.85	27.39	807
<i>Declined to answer</i>	40.00	56.57	2	55.00	35.36	2	45.00	63.64	2
<i>Don't know</i>	10.00	0.00	2	75.00	7.07	2	50.00	0.00	2
Household composition									
<i>Parents</i>	31.56	25.78	500	51.62	25.75	500	42.64	27.23	500
<i>Other adults</i>	38.05	26.11	159	57.86	23.93	159	48.30	27.17	159
<i>Partner only</i>	22.69	21.88	93	55.38	24.16	93	42.80	28.79	93
<i>Children and parents</i>	30.53	25.31	57	54.21	24.34	57	42.98	25.21	57
<i>Parents and others</i>	29.07	21.04	54	47.41	24.89	54	38.33	26.55	54
<i>Alone</i>	49.09	23.37	33	64.55	24.51	33	55.45	28.84	33
<i>Partner and children</i>	16.40	20.59	25	47.20	24.07	25	33.20	25.77	25
<i>Partner and parents</i>	21.58	21.67	19	56.84	27.09	19	37.37	28.45	19
<i>Partner and others</i>	29.23	31.21	13	62.31	33.20	13	52.31	33.20	13
<i>Children only</i>	43.64	28.73	11	70.91	28.79	11	63.64	36.95	11
<i>Other</i>	26.97	22.98	33	53.03	25.43	33	40.91	27.77	33
Student									
<i>Yes</i>	33.29	25.33	592	55.63	24.86	592	45.37	26.79	592
<i>No</i>	28.96	25.69	405	50.89	26.13	405	41.33	28.82	405
<i>University</i>	30.96	23.93	167	50.84	24.31	167	44.67	25.74	167
<i>TAFE</i>	33.19	25.14	320	58.13	24.00	320	45.63	26.94	320
<i>Other</i>	38.31	26.77	83	56.14	26.03	83	46.02	27.76	83
<i>No</i>	33.64	31.40	22	53.64	32.30	22	44.55	30.51	22

	Lonely			Stressed			Anxious		
	M	SD	N	M	SD	N	M	SD	N
Work status									
<i>Paid work – yes</i>	30.84	25.21	748	52.94	25.40	748	42.59	27.39	748
<i>Paid work – no</i>	33.61	26.50	249	55.98	25.62	249	47.15	28.35	249
<i>Full time</i>	25.54	23.28	240	50.71	25.46	240	38.58	26.76	240
<i>Part time</i>	32.93	25.33	205	53.41	25.63	205	43.85	26.63	205
<i>Casual</i>	33.63	26.00	303	54.39	25.15	303	44.92	28.13	303
<i>Looking for work – yes</i>	36.43	26.55	359	56.91	25.12	359	46.27	27.68	359
<i>Looking for work – no</i>	28.79	24.58	637	51.84	25.49	637	42.31	27.64	637
Income									
<i>< \$15,000</i>	44.29	25.25	49	62.24	23.74	49	53.06	28.95	49
<i>\$15,000 – \$30,000</i>	36.56	24.91	93	60.54	25.04	93	53.33	27.79	93
<i>\$31,000 – \$60,000</i>	32.15	25.62	149	55.17	25.27	149	44.56	27.91	149
<i>\$61,000 – \$100,000</i>	31.3	24.49	154	49.35	25.12	154	38.96	25.93	154
<i>\$101,000 – \$150,000</i>	27.23	21.75	141	51.63	25.98	141	40.99	26.17	141
<i>\$151,000 – \$250,000</i>	26.02	23.76	88	52.27	25.09	88	40.57	27.26	88
<i>\$251,000 – \$500,000</i>	32.31	29.71	26	50.38	23.91	26	39.62	29.05	26
<i>\$500,000+</i>	37.5	38.08	8	50.00	43.42	8	30.00	33.81	8

Table B.31 Means and standard deviations for PWI for corresponding negative affect category

Mean PWI scores for each negative affect category									
Range	Lonely			Stressed			Anxious		
	M	SD	N	M	SD	N	M	SD	N
<i>0–10</i>	82.52	10.52	283	83.99	13.27	68	84.48	11.04	151
<i>11–20</i>	78.99	10.04	173	84.56	8.60	62	81.04	9.43	120
<i>21–30</i>	75.79	11.03	126	80.62	10.17	92	79.61	9.93	114
<i>31–40</i>	72.58	11.05	73	79.06	9.56	97	75.77	10.05	103
<i>41–50</i>	72.40	10.48	102	78.32	11.22	163	75.09	11.22	120
<i>51–60</i>	70.05	10.54	74	74.20	9.32	106	74.79	10.34	88
<i>61–70</i>	67.63	12.54	66	75.07	10.73	146	71.56	9.96	105
<i>71–80</i>	67.19	15.41	35	71.02	10.98	127	70.37	12.21	90
<i>81–90</i>	70.32	17.69	12	65.43	13.44	57	64.32	13.30	33
<i>91–100</i>	56.58	18.20	10	63.25	18.43	36	57.87	16.21	30

Table B.32 Means and standard deviations for CD-Risk for corresponding negative affect category

Range	Mean CD-Risk scores for each negative affect category								
	Lonely			Stressed			Anxious		
	M	SD	N	M	SD	N	M	SD	N
<i>0–10</i>	82.80	11.47	306	84.93	13.40	82	85.33	11.72	170
<i>11–20</i>	76.32	11.35	174	83.03	9.69	62	80.97	9.49	119
<i>21–30</i>	73.35	11.93	125	79.85	12.16	95	78.10	9.76	117
<i>31–40</i>	72.81	11.43	72	77.55	11.39	99	74.09	11.68	104
<i>41–50</i>	70.54	13.39	104	77.05	12.08	166	73.59	12.56	123
<i>51–60</i>	65.57	13.11	74	72.57	11.61	106	71.53	11.89	90
<i>61–70</i>	68.05	13.45	68	72.16	12.46	147	70.26	12.97	105
<i>71–80</i>	70.89	15.55	36	70.46	12.04	128	69.84	12.37	89
<i>81–90</i>	66.68	23.52	12	69.85	16.29	59	67.74	13.67	35
<i>91–100</i>	78.55	10.21	11	64.57	19.25	38	54.00	16.89	30