

Australian Unity Wellbeing Index Survey 8

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“The Wellbeing of Australians – Feeling Connected to Australia”

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Executive Summary

Results of the eighth survey for the Australian Unity Wellbeing Index, conducted in August 2003, show that wellbeing in Australia fell slightly from its highest levels recorded in June, but remain above the lowest levels recorded in the first survey in April 2001. The Personal Wellbeing Index, which measures people's satisfaction with their own lives, fell 0.4 percentage points to 75.4%. The National Wellbeing Index, which measures satisfaction with living conditions in Australia, fell 0.9 points to 60.8%. Neither fall is statistically significant.

The fall probably reflects the dissipation of the sense of relief and satisfaction over what seemed at the time a rapid victory over Iraq. That boost in morale had built upon previous rises in wellbeing following the September 11 and October 12 terrorist attacks. These events appear to have produced a stronger sense of community and patriotism, and a greater appreciation of life. This explanation was supported by significant increases in the June survey in the personal domains of safety and future security, and a large increase in the national domain of national security; satisfaction with the national domain of government also rose significantly.

By contrast, in this August survey, satisfaction in all seven personal domains fell to some extent. Satisfaction with government fell by 2.3 points and that with national security by 1.6 points, both significant. These falls support the explanation that the shifts in national wellbeing are being primarily driven by world events. The fall in government satisfaction negates the previous rise. The rise and fall in the government's stocks have happened before: they fell in March 2002 from their highest levels at the time of September 11; rose again in November after the Bali bombings; fell in March 2003 in the lead up to the Iraq war; and rose again in June.

The pattern suggests these event-caused boosts in support for Government are inherently short-lived and/or the benefits were lost by subsequent events. In March 2003, the event was the disclosures about the children-overboard affair; a year later, it was the commitment to a war on Iraq, opposed by a majority of Australians at the time; and most recently, it was the evidence that the government, either wittingly or unwittingly, had misled the people about the reasons for the war.

As well as the standard wellbeing index questions, each survey includes additional questions on specific issues. The eighth survey asked people how strongly they felt a sense of belonging in Australia; how strongly they felt they shared their core values with the average Australian; and which one of five qualities – our natural environment, our sense of democracy, our lifestyle, our sporting culture, or our multicultural society – made them feel most connected to Australia.

Overall, people rated their sense of belonging at 85.4% - a high score – and their sense of shared values at 71.6%, a moderate score. Both scores increased with age: belonging from 81.6% for those aged 18-25 to 91.1% for those 75 or more; shared values from 69.2% for those 18-25 to 75.5% for those 66-75. Women scored higher than men, especially for belonging (87.3% vs 83.3%). Both belonging and shared values declined with rising income, although the difference was only significant with shared values (74.5% for those on household incomes of \$15,000 or less vs 67.8% for those earning \$91-120,000).

Almost half of Australians (49.8%) chose lifestyle as the main reason they connected to Australia, with the proportion choosing the other qualities ranging from 10.8% for environment to 14.7% for multiculturalism. Those who chose the environment and multiculturalism scored significantly lower on shared values than those who chose lifestyle, sport and democracy. People who chose sport had a high personal wellbeing score at age 18-25, but a low score at 26-45. This might reflect that at the older ages they are less able to actually 'live' their choice because of family and work pressures and/or they are past their sporting prime. There was little age-related difference in wellbeing among those people who chose the other national characteristics.

The latest survey also asked people if they owned a pet and how much they cared about it. There was no difference between pet owners and non-owners in either personal or national wellbeing. People in low-income households were less likely to own a pet, but cared more about it if they did, probably because this group contains a large number of elderly people who live alone and for whom their pet is very important.

A third special subject area related to contentment and happiness. Overall, people rated their contentment at 76.8% and their happiness at 78.6%, both relatively high scores. Unlike life satisfaction, however, happiness and contentment showed no significant increase with income, varying by only 1.6 percentage points and 2.0 points respectively, compared with 4.3 points with life satisfaction. As with life satisfaction, however, women scored significantly higher than men, and the elderly higher than the young.

Other findings of the eighth survey include:

- Younger people, especially those aged 26-35, are vulnerable to the impact of low incomes (less than \$15,000), experiencing much lower wellbeing than older people.
- Satisfaction with health drops more with age in men (down 9.2 percentage points) than women (6.0 point). The drop in males is sharpest between 18-25 and 26-35 and for women between 36-45 and 46-55. In the case of women the fall is probably tied to menopause; with men, the reason is unclear, but may be linked to reduced leisure and sport and increased work and family pressures.
- The percentage of people who say they feel sad when recalling September 11 appears to have stabilised at about 50% over the past year, down from 90% immediately after the terrorist attacks. However, the intensity of that sadness has barely changed, averaging about 70%. This stability suggests the score is being influenced by what people perceive is a socially appropriate level of distress. Intensity of sadness decreases with income and increases with age.

The Australian Unity Wellbeing Index is based on quarterly telephone surveys of more than 2,000 adult Australians in all States and from metropolitan and country areas. The Index consists of two main values: the Personal Wellbeing Index (PWI), which is the average level of satisfaction with seven aspects (or domains) of people's personal lives; and the National Wellbeing Index (NWI), the average level of satisfaction with six aspects of national life. The values are expressed as a percentage of the maximum possible score, so representing varying degrees of satisfaction (not the proportion satisfied). Additional questions are asked in each survey to study the effect of specific issues and events on wellbeing.

1. Introduction

The Australian Unity Wellbeing Index is a new barometer of Australians' satisfaction with their lives and life in Australia. Unlike most official indicators of quality of life and wellbeing, it is subjective – it measures how Australians feel about life, and incorporates both personal and national perspectives. The Index shows how satisfaction with various aspects of life – both personal and national – affects overall life satisfaction.

The Wellbeing Index is an alternative measure of population wellbeing to such economic indicators as Gross Domestic Product and other objective indicators such as population health, literacy and crime statistics. The Wellbeing Index measures quality of life as experienced by the average Australian.

The Index comprises two numbers. The Personal Wellbeing Index is the average level of satisfaction across seven aspects of personal life – health, personal relationships, safety, standard of living, achievements, community connectedness, and future security. The National Wellbeing Index is the average satisfaction score across six aspects of national life – the economy, the environment, social conditions, governance, business, and national security.

A considerable body of research has demonstrated that most people are satisfied with their own life. In Western nations, the average value for population samples is about 75%, with a normal range from 70% to 80%. We thus expect the Personal Wellbeing Index to fall within this range. However, satisfaction with aspects of national life are normally lower, falling in the range 55 to 65% in Australia.

The first index survey, of 2,000 adults from all parts of Australia, was conducted in April 2001. Since then seven surveys have been conducted, with this most recent survey in August 2003. Copies of earlier reports can be obtained either from the Australian Unity website (www.australianunity.com.au) or from the Australian Centre on Quality of Life website at Deakin University (acqol.deakin.edu.au). This report concerns the most recent survey.

The same core index questions, forming the Personal and the National Wellbeing Index, are asked within each survey. In addition we ask two highly general questions. One of these is 'Satisfaction with Life as a Whole'. This abstract, personal measure of wellbeing has a very long history within the survey literature and its measurement allows a direct companion with such data. The second is intended as an analogous 'national' item. It is 'Satisfaction With Life in Australia'.

Each survey also includes demographic questions and a small number of additional items that change from one survey to the next. These explore specific issues of interest, either personal or national. Such data have several purposes. They allow validation of the Index, the creation of new population sub-groups, and permit further exploration of the wellbeing construct.

1.1. Understanding Personal Wellbeing

The major measurement instrument used in our surveys is the Personal Wellbeing Index (PWI). This comprises seven questions relating to life domains, such as 'health' and 'standard of living'. Each question is answered on a 0-10 scale of satisfaction. The scores are then combined across the seven domains to yield an overall Index score, which is adjusted to have a range of 0-100.

On a population basis the scores that we derive from this PWI are quite remarkably stable. Appendix AI presents these values, each derived from a geographically representative sample of 2,000 randomly selected adults across Australia. As can be seen, these values range from 73.2 to 75.2, a fluctuation of only 2.0%. How can such stability be achieved?

We hypothesize that personal wellbeing is not simply free to vary over the theoretical 0-100 range. Rather, it is held fairly constant for each individual in a manner analogous to blood pressure or body

temperature. This implies an active management system for personal wellbeing that has the task of maintaining wellbeing, which averages about 75%, at reasonably high level. We call this process Subjective Wellbeing Homeostasis (Cummins et al., 2002).

The proper functioning of this homeostatic system is essential to life. At normal levels of wellbeing, which for group average scores lies in the range of 70-80%, people feel good about themselves, are well motivated to conduct their lives, and have a strong sense of optimism. When this homeostatic system fails, however, these essential qualities are severely compromised, and people are at risk of depression. This can come about through such circumstances as exposure to chronic stress, chronic pain, failed personal relationships, etc.

Having said this, the homeostatic system is remarkably robust. Many people live in difficult personal circumstances which may involve low income or medical problems, and yet manage to maintain normal levels of wellbeing. This is why the Index is so stable when averaged across the population. But as with any human attribute, some homeostatic systems are more robust than others. Or, put around the other way, some people have fragile systems which are prone to failure.

Homeostatic fragility, in these terms, can be caused by two different influences. The first of these is genetic. Some people have a constitutional weakness in their ability to maintain wellbeing within the normal range. The second influence is the experience of life. Here, as has been mentioned, some experiences such as chronic stress can challenge homeostasis. Other influences, such as intimate personal relationships, can strengthen homeostasis.

In summary, personal wellbeing is under active management and most people are able to maintain normal levels of wellbeing even when challenged by negative life experiences. A minority of people, however, have weaker homeostatic systems as a result of either constitutional or experiential influences. These people are vulnerable to their environment and constitute various population sub-groups. The identification of these sub-groups is an important feature of our survey analyses.

1.2. The Survey Methodology

A geographically representative national sample of people aged 18 years or over and fluent in English, were surveyed by telephone over the period 26th of August to 23rd of September 2003. Interviewers asked to speak to the person in the house who had the most recent birthday and was at least 18 years old. A total of 20,404 calls were made. Of these, 11,397 connected with a respondent and 2,000 agreed to complete the survey. This gives an effective response rate of 17.5%. The reason for this rate is that, in order to maintain an even geographic and gender split at all times throughout the survey, each call operator recruits alternate males and females. Thus, willing respondents who were not of the required gender have had to be refused in order to maintain the overall gender balance.

From the total 2026 respondents, 25 withdrew during the telephone interview and 21 cases were removed due to incomplete or aberrant data. This leaves an effective sample size of 1980 for analysis.

All responses are made on a 0 to 10 scale. The satisfaction responses are anchored by 0 (completely dissatisfied) and 10 (completely satisfied). Initial data screening was completed before data analysis.

48.9 % of participants were male and 51.1 % of participants were female. The age composition is not actively managed but yields a break-down similar to that of the national population as determined by the Australian Bureau of Statistics in October 2001 (see Report 5.0).

1.3. Presentation of results and type of analysis

In the presentation of results to follow, the trends that are described in the Figures are all statistically significant at $p < .02$. More detailed analyses are presented as Appendices. These are arranged in

sections that correspond numerically with sections in the main report. All Appendix Tables and Figures have the designation 'A' in addition to their numerical identifier (e.g. Table A10.2).

All satisfaction values are expressed as the strength of satisfaction on a scale that ranges from 0% to 100%.

In situations where homogeneity of variance assumptions has been violated, Dunnetts T3 Post-Hoc Test has been used. In the case of t-tests we have used the SPSS option for significance when equality of variance cannot be assumed.

1.4. Internal Report Organisation

- (a) The new results from this survey are summarised in Table 2.1 on the next page.
- (b) Other Tables are presented as appendices.
- (c) Chapter 2 presents a comparative analysis with previous surveys.
- (d) Chapters 3-5 present the major groupings of independent (demographic) variables. Within each Chapter, the first section concerns the analysis of all dependent variables listed in Table 2.1. This is followed by analyses of the demographic variables in combination with the Personal Wellbeing Index and other measures.
- (e) Chapters 6-12 concern special topics for this survey and the impact of national and personal life events.
- (f) Each Chapter contains a dot-point summary.

2. A Comparison Between Survey 8 and Survey 7

2.1. Overview

Table 2.1: Means and standard deviations of the eighth survey

Question	Mean	SD	% Change from June 2003	t-test p value
PERSONAL WELLBEING INDEX	75.42	11.82	-0.43	.25
Personal domains				
1. Standard of living	77.52	16.47	-0.30	.57
2. Health	75.04	19.55	-0.11	.86
3. Achievements in life	74.66	17.23	-0.11	.84
4. Personal relationships	80.52	19.79	-0.80	.18
5. How safe you feel	78.16	17.77	-0.09	.11
6. Community connect	70.91	19.68	-0.26	.68
7. Future security	70.76	19.50	-0.65	.29
Life as a whole	77.97	16.95	-0.26	.63
Survey-specific personal Aspects				
- Neighbourhood	80.61	18.13	+1.68	.00
- Contentment	76.79	15.32		
- Happiness	78.63	14.87		
NATIONAL WELLBEING INDEX	60.75	14.54		
National domains				
1. Economic situation	65.38	17.88	-0.76	.19
2. State of the environment	60.42	18.40	+0.82	.17
3. Social conditions	61.85	18.45	-0.75	.20
4. Government	53.45	23.97	-2.33	.00
5. Business	60.96	17.59	+0.10	.87
6. National security	63.59	18.75	-1.58	.01
Life in Australia	82.81	17.07	-0.23	.66
Attachment to Australia				
- Belonging	85.36	17.66		
- Share core values	71.56	18.36		

The Major Indices

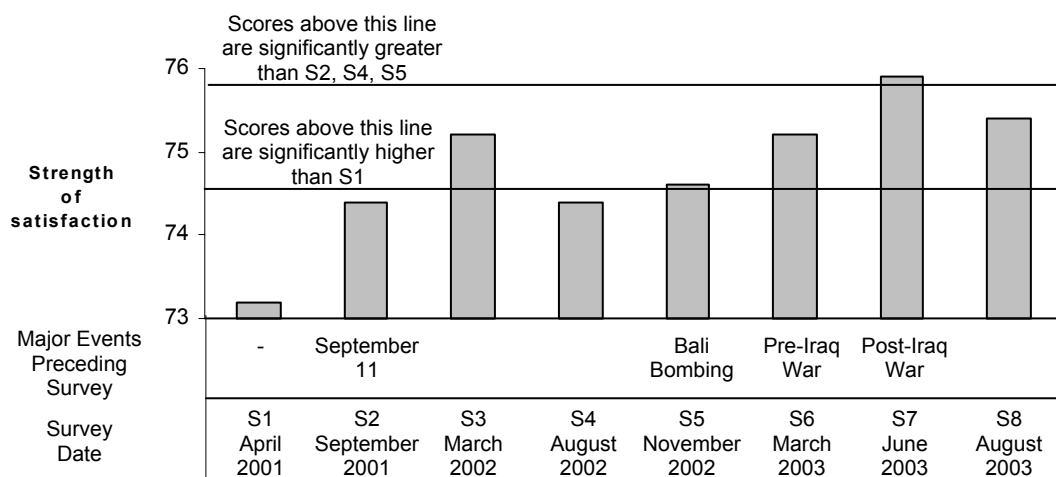


Figure 2.1: Personal Wellbeing Index

The Personal Wellbeing Index dropped below its highest level achieved in the previous survey. However, it still remains higher than Survey 1.

It is notable that the Personal Wellbeing Index is so highly stable. Over the eight surveys it has varied by just 2.7%. However significant changes have occurred, and these appear to be coherently related to the international events named in Figure 2.1. It appears that the presence of external threat causes the population wellbeing to rise. This has occurred in two waves. The first followed September 11 and reached its maximum about 6 months after the event. The second occurred immediately following the Bali Bombing and ran into the build-up in tension surrounding the Iraq war. It is notable that these waves correspond so closely with these major international events.

These general trends, and especially the overall rise in wellbeing since April 2001, are reflected by most of the personal domains. However, the domains that most clearly reflect this pattern are Relationships, Community and, during the immediate post-war period, Personal Safety. External threat causes people to become more satisfied with their connection to other people. Additionally, the post-war relief and bolstered American connection, due to the active involvement of Australian troops, likely caused satisfaction with personal safety to increase.

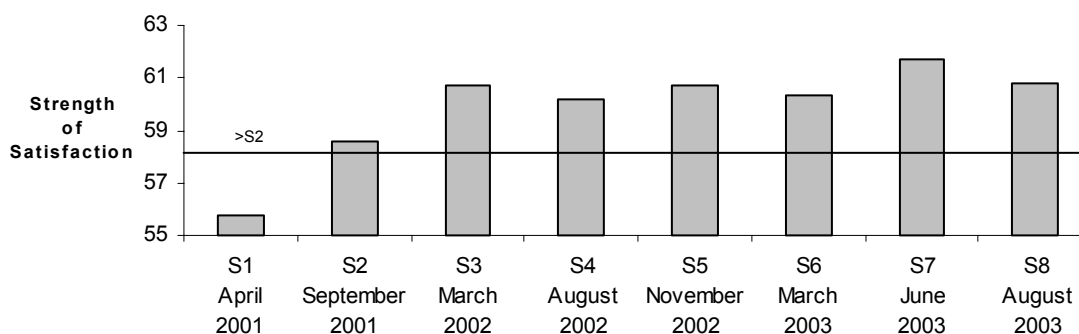


Figure 2.2: National Wellbeing Index

The National Wellbeing Index rose significantly in the third survey, and has now stabilised at this higher level. Its highest level of 61.7% was achieved at June 2003 (S7). This is 5.9% higher than its level in April 2001 (S1).

2.2. Personal Wellbeing Domains

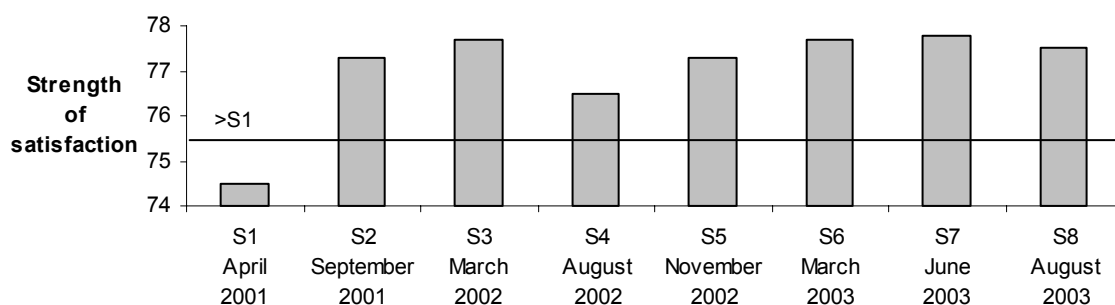


Figure 2.3: Satisfaction with **Standard of Living**

The rise in satisfaction following September 11 has been sustained. The reason for this is uncertain but it seems unlikely to reflect any objective increase in wages or purchasing power over this period. Perhaps the persistent media coverage of desperate refugees, terrible living conditions in other parts of the world, and the fact that the Australian economy has survived well the global economic downturn, have contributed to this effect. The range of scores is 3.4% between April 2001 (S1) and June 2003 (S7).

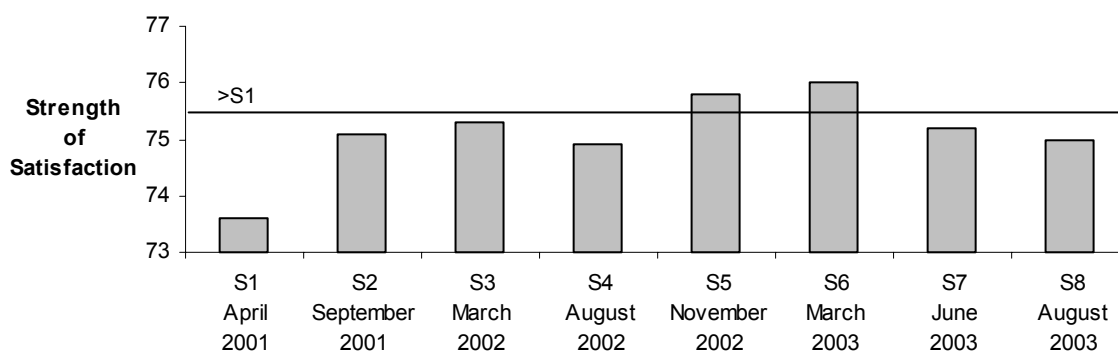


Figure 2.4: Satisfaction with **Health**

Satisfaction with health rose briefly between November 2002 (S5) and March 2003 (S6) but has since returned to its former level. The reason for this pattern of change is not clear. The range of scores is 2.4% between April 2001 (S1) and March 2003 (S6).

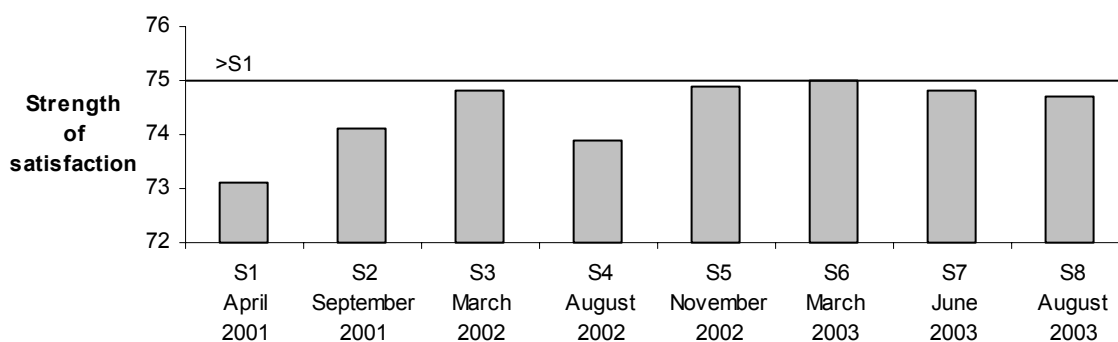


Figure 2.5: Satisfaction with **What you Achieve in Life**

Satisfaction with 'what you achieve' has barely changed over the surveys. It is marginally higher at Survey 6. The range of scores is 1.8% between April 2001 (S1) and March 2003 (S6).

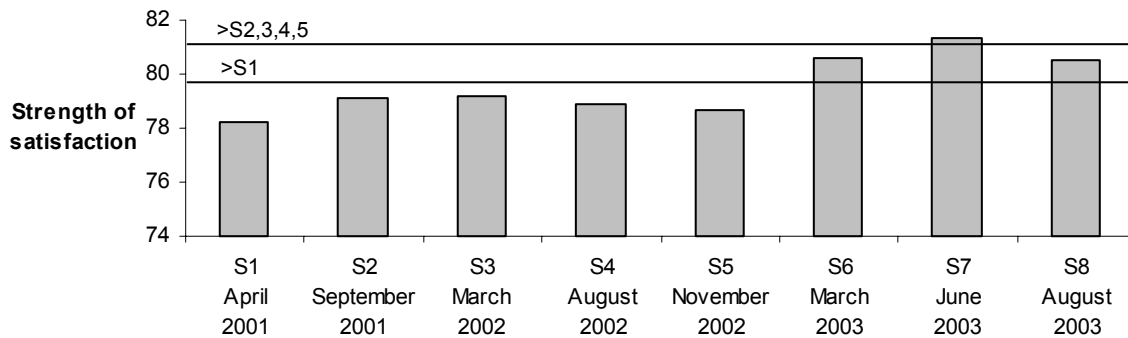


Figure 2.6: Satisfaction with **Relationships**

Satisfaction with personal relationships has decreased since the previous survey. However, it remains higher than it was over Surveys 1-5. It is notable that this pattern does not conform to that of the Personal Wellbeing Index (Figure 2.1) in that the rise is restricted to the period surrounding the Iraq war. It therefore differs from the domains Standard of Living, Safety, Community, and Future Security, all of which rose significantly in the period following September 11. Perhaps this difference is due to the qualitative difference between these events as:

- The terrorist attacks did not directly involve many Australians. There was a general sense of foreboding after the attacks. It was uncertain whether they signalled such atrocities would be committed in Australia, that the world economy would be severely damaged, and that America may retaliate in ways harmful to the world in general, and Australia in particular. In fact none of these things happened in a way that really affected Australia. No attacks happened in this country, the nation rode-out the world economic situation better than most other countries, and the war in Afghanistan was soon over, marked by clear victory and low casualties among the Australian troops. So the end result of this was a greater sense that the average, high, standard of living in Australia had been maintained. Personal safety and future security also rose with the evidence of no global, catastrophic, retaliatory action by the USA, and no evidence of terrorist attacks in Australia. And people bonded more to others in their community due both to the common perception of external threat and its gradual resolution.
- While the above responses were reactions to a past event, the rise in Satisfaction with relationships at Survey 6 was in anticipation of the looming war, to which Australian troops were clearly to be committed. At this time, both of the domains involving other people rose significantly. Perhaps the anticipation of war drew people closer to their family and friends (relationships) as well as enhancing bonding with the general community. These changes have been maintained.

The range of scores is 3.1% between April 2001 (S1) and June 2003 (S7).

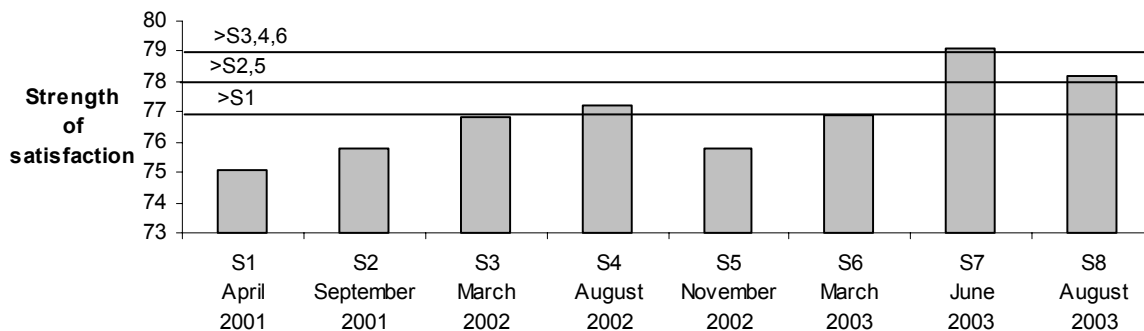


Figure 2.7: Satisfaction With **How Safe you Feel**

Satisfaction with personal safety seems to rise following the conclusion of a period of danger. Thus, it rose significantly about one year following September 11 (S4) and rose again following the Iraq war (S7). This latter rise has been sustained. A weaker but non-significant rise was also seen three months following the Bali Bombing (S6). This most recent higher level may also be linked to the positive feelings of relief and being involved in the American partnership detailed earlier. The range of scores is 4.0% between April 2001 (S1) and June 2003 (S7).

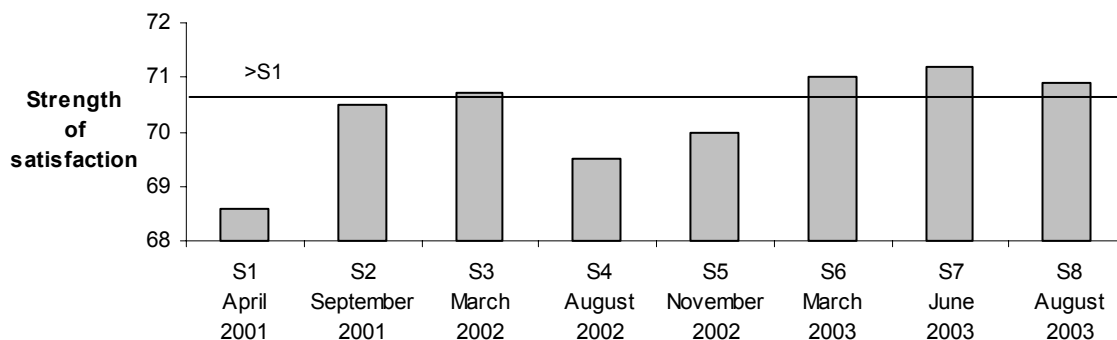


Figure 2.8: Satisfaction with **Feeling Part of Your Community**

In the six months following September 11, satisfaction with community connectedness went up from its level in April 2001. It then fell, but returned to this higher level in the lead-up to the Iraq war (S6). This higher level has been maintained. This pattern is consistent with social psychological theory. An external threat will cause a group (or population) to become more socially cohesive. This effect had dissipated nine months following S11 but has now been retained in the post-war period. The range of scores is 2.6% between April 2001 (S1) and June 2003 (S7).

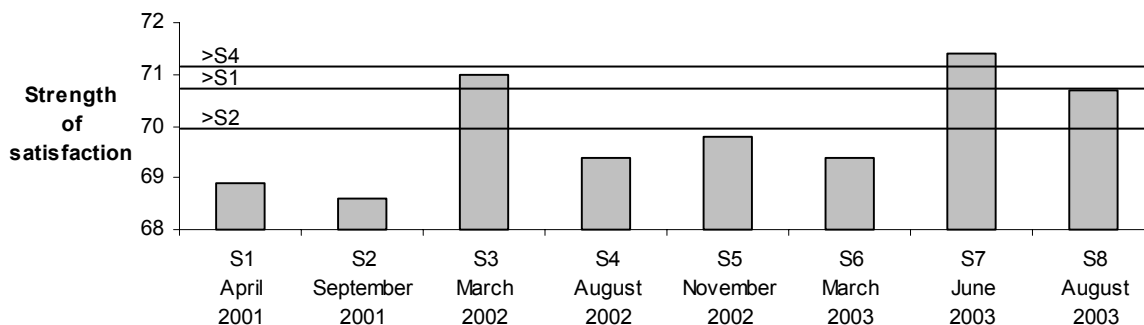


Figure 2.9: Satisfaction with **Future Security**

Satisfaction with future security dropped to its lowest level immediately following September 11, and then rose to a significantly higher level six months later (S3). It then rose to its highest level immediately following the Iraq war (S7). It has now fallen back somewhat, but remains higher than it was at Survey 1. The rise in future security at Survey 3 looks like a reaction to the absence of follow-up attacks following September 11. This positive reaction soon dissipated, however, until it was revived by the aftermath of the Iraq war. The range of scores is 2.9% between September 2001 (S2) and June 2003 (S3).

2.3. Life as a Whole

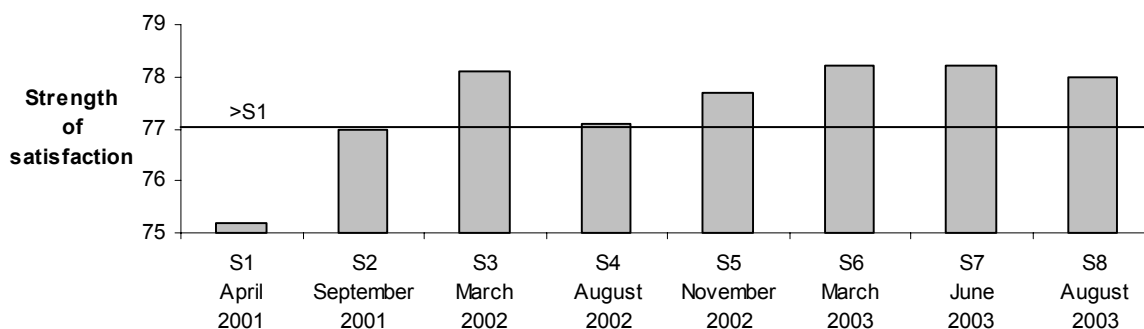


Figure 2.10: Satisfaction with **Life as a Whole**

After an initial rise following September 2001 (S3) this single global item has remained higher and steady. The range of scores is 3.1% between April 2001 (S1) and June 2003 (S7).

Summary of the Changes in Personal Wellbeing

The data from Table A2.1, summarised by Figure 2.1 to Figure 2.10, indicate that the major effect across the seven surveys has been an increased level of wellbeing since April 2001 (pre September 11). The Personal Wellbeing Index and the constituent domains have now tended to fall back from their record highest levels in the immediate post-war period.

2.4. National Wellbeing Domains

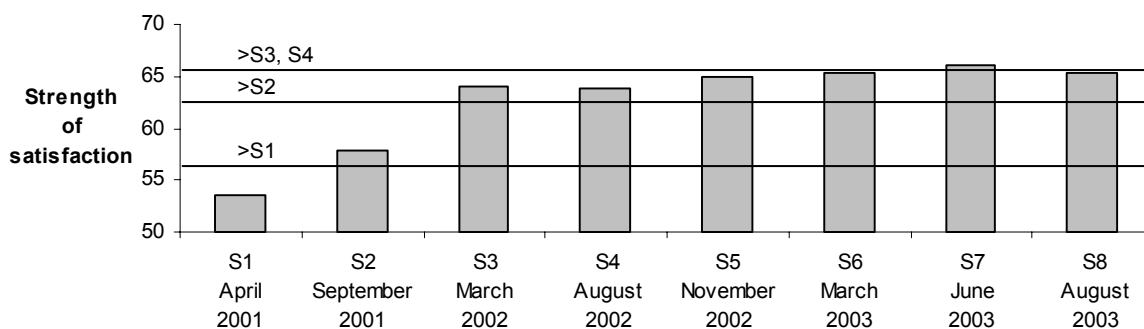


Figure 2.11: Satisfaction With the **Economic Situation in Australia**

Satisfaction with the economic situation rose significantly from its baseline (S1) both immediately following September 11 (S2) and again six months later (S3). This was followed by a period of stability over the next 12 months (S4-S6), but then it rose significantly once again (S7). It has now marginally decreased from this all time high. This is much the same pattern as displayed by both the Personal Wellbeing Index (Figure 2.1) and the National Wellbeing Index (Figure 2.2), but this national

domain is displaying greater statistical sensitivity than either of the Indexes. Whereas the Personal Index has statistically differentiated three levels of satisfaction strength, and the National Index has differentiated only two, economic situation has differentiated four levels. The range of values is 12.5%, being between April 2001 (S1) and June 2003 (S7).

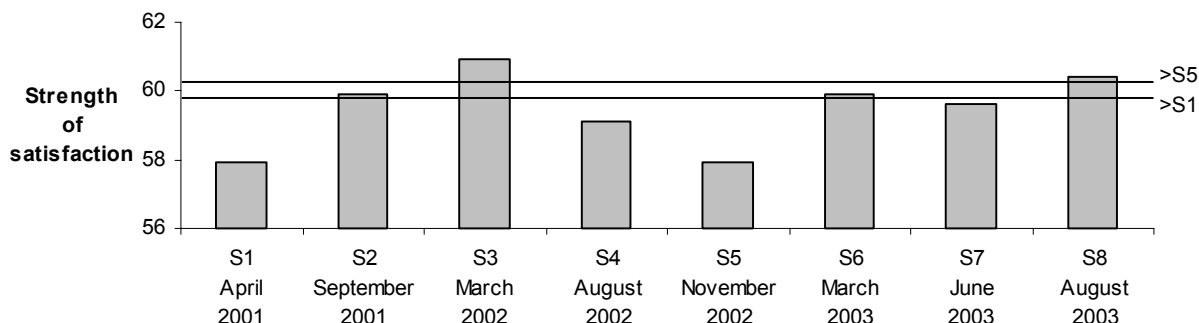


Figure 2.12: Satisfaction with the **State of the Natural Environment in Australia**

The level of satisfaction with the natural environment has risen again, to achieve its second highest level. This pattern is very similar to that of the Personal Wellbeing Index. The range is 3.0% between April 2001 and March 2002 (S3).

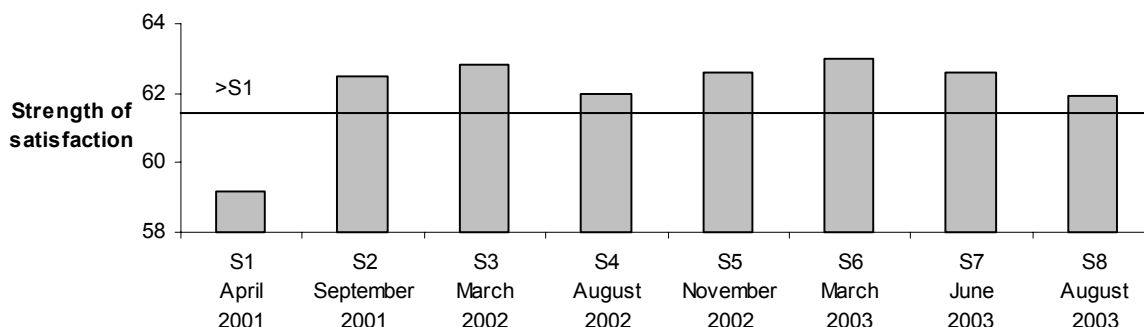


Figure 2.13: Satisfaction with the **Social Conditions in Australia**

The rise in satisfaction with social conditions evident between April 2001 (S1) and September 2001 (S2) has been maintained. The range of values is 3.8% between April 2001 (S1) and March 2003 (S6).

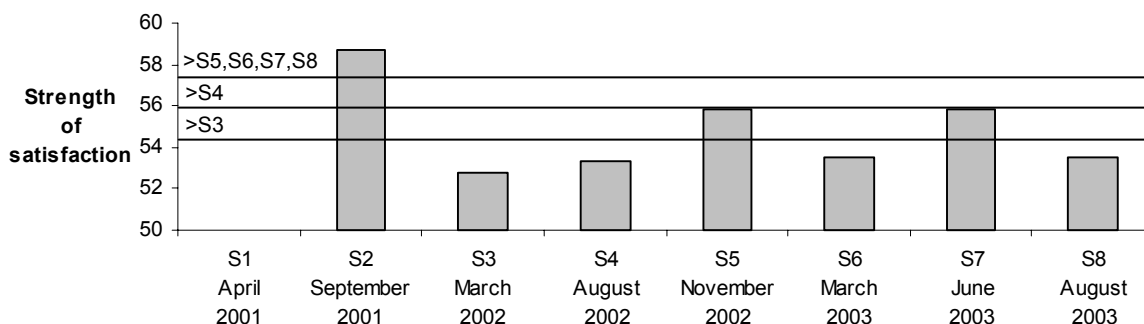


Figure 2.14: Satisfaction with **Government in Australia**

Satisfaction with Government appears to rise in times of national threat. It seems likely that the elevated satisfaction with Government in September 2001 (S2) was a direct result of the September 11

attacks. A similar, but more muted rise is evident in the Bali bombing (S5) survey, and again following the Iraq war. The most obvious explanation for the September 11 (S2) and Bali (S5) rise is that the perception of external threat causes satisfaction with Government to increase. However the pre-Iraq war situation (S6) was different. While it constituted a threat to Australia in so far as there were fears of Weapons of Mass Destruction being unleashed in Iraq and perhaps elsewhere, Australian troops were committed to fight in the front-line. This involvement divided the nation, with 23% in favour and 53% opposed to the war (Report 6.0). Perhaps because of this division, the rise in satisfaction with Government did not materialise. Moreover, the subsequent rise at S7 may represent an increased satisfaction for a quite different set of reasons, which involve relief at no deaths among the Australian troops and the bolstered American alliance. It is interesting that none of these rises are sustained over more than three months. The range of values is 5.9% between September 2001 (S2) and March 2002 (S3).

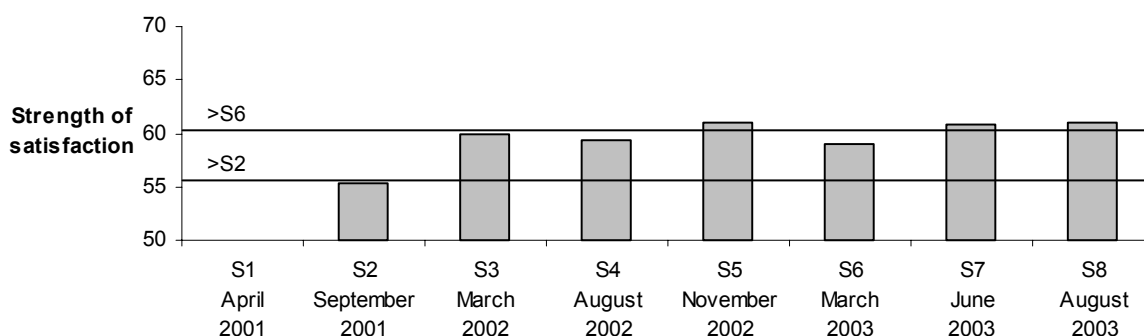


Figure 2.15: Satisfaction with **Business in Australia**

Satisfaction with Business has risen to one of its highest levels. Satisfaction with both Business and the economy may have increased following September 11 because the doomsayers were proved wrong. The attacks did not, as has been widely predicted, drive the global economy into recession. Moreover, the Australian economy has performed better than expected over the entire post-September 11 period. The range of values is 5.7% between April 2001 (S1) and November 2002 (S5).

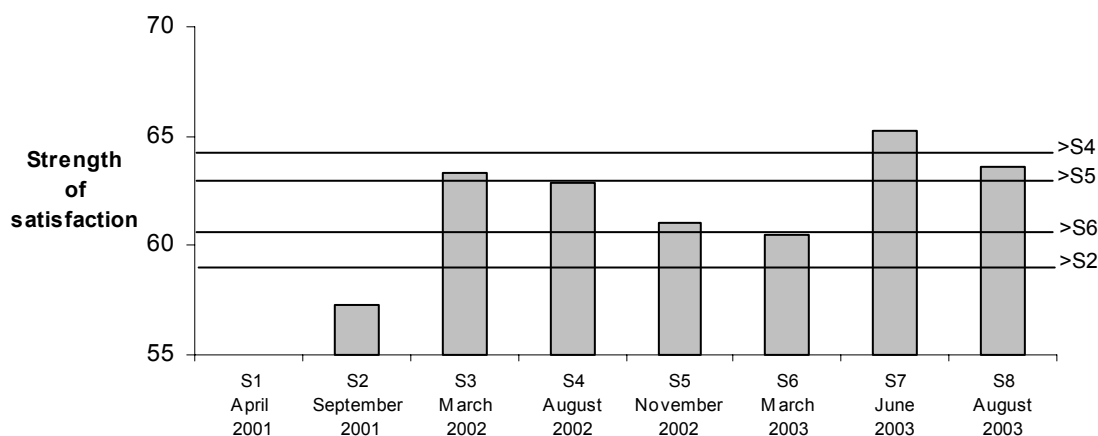


Figure 2.16: Satisfaction with **National Security**

Satisfaction with national security has fallen, but the level remains in the second highest band. The dramatic rise of 4.6% post the Iraq war (S7) seems almost certain to reflect the outcome of the Iraq war. The range of values is 7.9% between September 2001 (S2) and June 2003 (S7).

2.5. Life in Australia

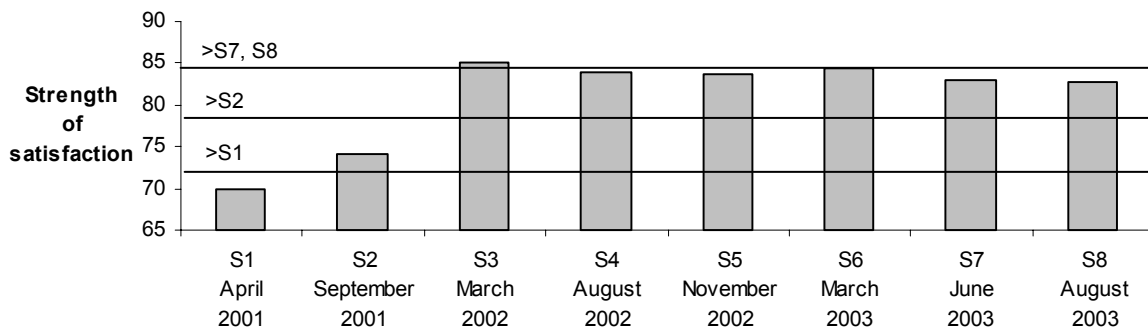


Figure 2.17: Satisfaction with **Life in Australia**

Satisfaction with this single global item rose consistently from April 2001 (S1) to March 2002 (S3) and has since remained fairly stable and high. The major change occurred between S2 and S3, when the strength of satisfaction rose by 10.9%. The range of scores is 15.2% between April 2001 (S1) and March 2002 (S3).

2.6. A Standard Score Approach to the Data

Table A2.2 presents the range of data from the 8 surveys that have been conducted. For each variable, the eight mean scores for each survey have been used as data to produce an overall mean and standard deviation. These data have been used in two ways as follows:

- (a) Appendix Figures A2.1-A2.9 indicate the extent to which the mean values from particular surveys fit within the overall distribution of the surveys as a whole. Using the survey mean scores as data, all survey scores for any variable should fit within two standard deviations of the overall mean score.

From this analysis it can be seen that the values from Survey 1 on the PWI, the domains of Standard of Living, Health, and Achievements, and also Life as a Whole, lie below the normal range created by the entire data base.

Due to the continued presence of these outlying values from Survey 1, there are two competing hypotheses concerning the overall interpretation of these data. The first is the one we have consistently adopted in our reports. This is that S1 is our normative benchmark for the Australian population, and that the subsequent changes are attributable to September 11 and other major world events. This interpretation has face value, in that the wellbeing changes appear to be roughly temporally linked to such events. It also has theoretical value in that the domain responses are consistent with social psychological theory, for example, external treat causing social cohesion (increased satisfaction with relationships and community). Nevertheless, the assumption of S1 as normative will depend, for its demonstration, on the return of the wellbeing values to this level after a period of relative calm on the national and international scene.

The second hypothesis is that, for some reason, the values at S1 are abnormal. We can find no evidence for this, having scrutinized the relevant data on several occasions. However, until the population means return to their S1 levels, this hypothesis cannot be completely discounted.

- (b) The second use for these data is to depict the normal distribution for each variable, based on two standard deviations around end variable's mean. These normal ranges are presented in Table 2.18. The following observations pertain:

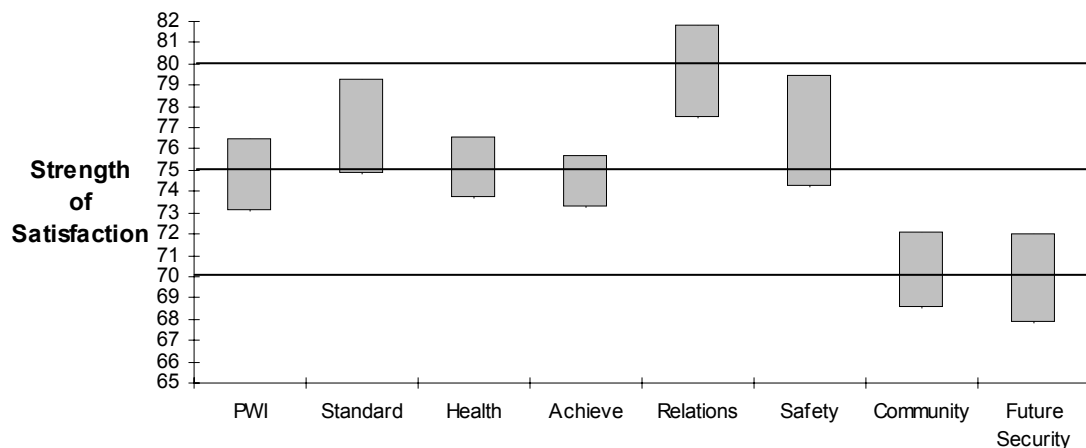


Figure 2.18: Range (2SD) of Personal Wellbeing Variables

As can be seen, the ranges show modest variation with a 14.0% difference between the top of the highest range (Relationships: 81.8) to the bottom of the lowest range (Future Security: 67.8). The ranges also differ in magnitude, from the largest (Safety: 5.3%) to the smallest (Achievements: 2.5%). These ranges (see Table A2.2) can now be used to more accurately judge whether the domain scores produced by the population sub-groups, described later in this report, lie above or below the normal range.

Of particular importance in this regard are the values for the Personal Wellbeing Index. The overall mean (74.8) is remarkably close to the predicted mean for Western populations (75.0). However, the range of 73.1 to 76.5 is just 3.4 percentage points, which is far smaller than the 70 to 80 range that has been previously estimated from the data reported from general reviews of the literature. This figure of 3.4% is the most accurate estimate of the true range of population values yet published due to the use of consistent methodology between the surveys.

It is quite remarkable to be able to predict the population mean score on subjective wellbeing with 95% confidence to within 3.4 percentage points.

Until more survey mean scores become available, and we can demonstrate the stability of these estimates, except in special circumstances we will generally continue to employ the more conservative 70-80 range as our measure of normality in relation to population sub-groups.

2.7. Discussion of the Changes in Personal and National Wellbeing

1. The general rise in personal wellbeing that became evident following September 11 has been broadly sustained. However, the values have decreased somewhat since the previous survey and may be returning to the lower levels seen prior to September 11.
2. The major rises remain in the domains that denote connection to other people and security. Thus, the personal domains of Relationships and Community Connection both remain high. We suggest this reflects the influence of external sources of threat to cause increased social cohesion.

In addition, the three domains concerned with issues of safety or security also remain high. This applies to the personal domains of Safety, Future Security, and to the national domain of National Security. This seems an appropriate response to the common belief that, following the war, Australia is a safer place.

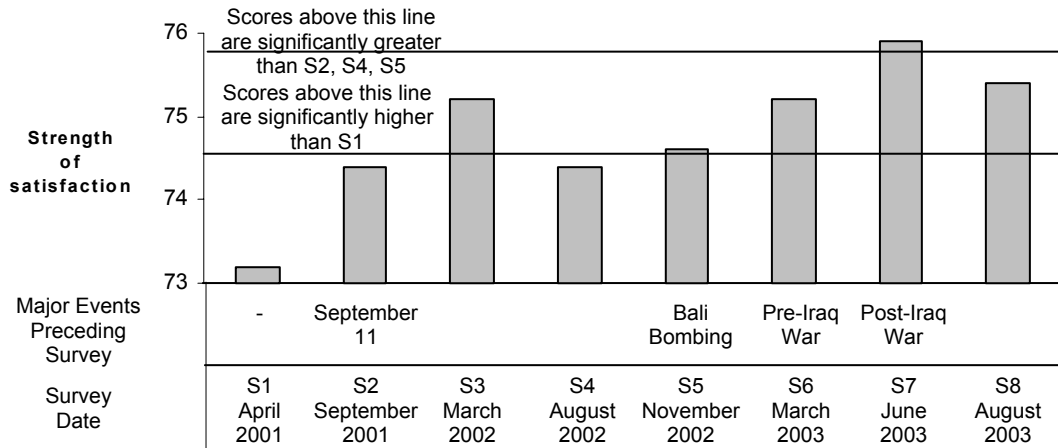
The personal domain Standard of Living also remains persistently elevated since September 11. The reason for this is not clear.

The largest fall of any domain has been in Satisfaction with Government, which decreased by 2.3 percentage points since the last survey. It is increasingly evident that Satisfaction with Government rises when the population is faced with an external crisis or threat, but that such boosts are short-lived.

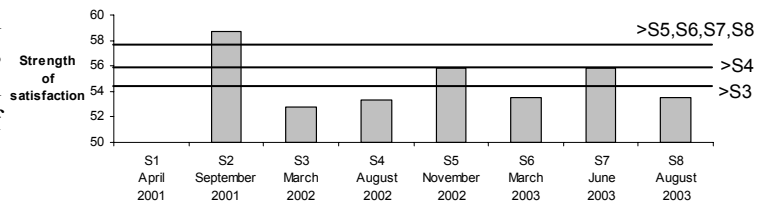
3. In more general terms, these wellbeing measures attest to the remarkable stability of the indicators over the past two years. The Personal Wellbeing Index has varied by only 2.7% and the National Wellbeing Index by 5.9%. Overall, the national indicators show more variability than the personal indicators and this has been detailed in Report 4.0, Table A7.1. The greatest variation has been shown by the abstract national indicator 'Satisfaction with Life in Australia' which has varied by 15.2% over the surveys.
4. The variations that have been recorded generally show a coherent pattern, which supports the conclusion that variation within the indicators is reflecting the influence of public events. The most obvious of these patterns is the general upward swings following September 11. While some change was evident immediately following the attacks, the peak occurred five months later in the March 2002 survey, at which time both the Personal and National Wellbeing Index were significantly higher than in the April 2001 survey. Since that time the Personal Wellbeing Index has twice again risen above its 2001 level, in the period following Bali and surrounding the Iraq war. The National Wellbeing Index has consistently remained elevated above its 2001 level.
5. The attribution of causation is a fraught process when interpreting data patterns such as these. Numerous other events have taken place which could influence these trends. Nevertheless, the data patterns do appear to bear a reasonable relationship to events that can be personalised, and do not seem to reflect happenings that have little impact on the average Australian. Thus, the major corporate collapses that occurred prior to the March 2002 (S3) survey which directly impacted on few people, failed to counteract the general rise in national wellbeing, which included increased satisfaction with business.

Dot Point Summary for A Comparison Between Survey 7 and Survey 6

1. The **Personal Wellbeing Index** has fallen since the previous survey but remains in the second highest band. It is evident that world events and their aftermath influence the personal wellbeing of Australians.



2. Satisfaction with Government has fallen 2-3 percentage points since the previous survey. It appears that satisfaction with Government appears to rise in times of national threat.



3. Household Income

We ask: "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. Please stop me when I say your household income category.

- Less than \$15,000
- \$15,000 to \$30,000
- \$31,000 to \$60,000
- \$61,000 to \$90,000
- \$91,000 to \$120,000
- More than \$120,000"

3.1. Income and Wellbeing

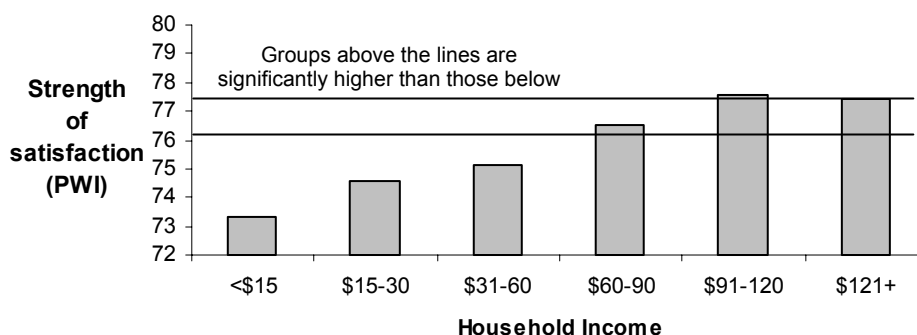


Figure 3.1: Income and the **Personal Wellbeing Index**

This general pattern, of rising PWI with income, is common to all surveys (Table A3.1: Figure 3.1). Also familiar is the jump in personal wellbeing around \$60,000. As we have argued previously, this seems to constitute a threshold income below which people under some type of challenge, such as supporting dependents or living alone, find their wellbeing compromised.

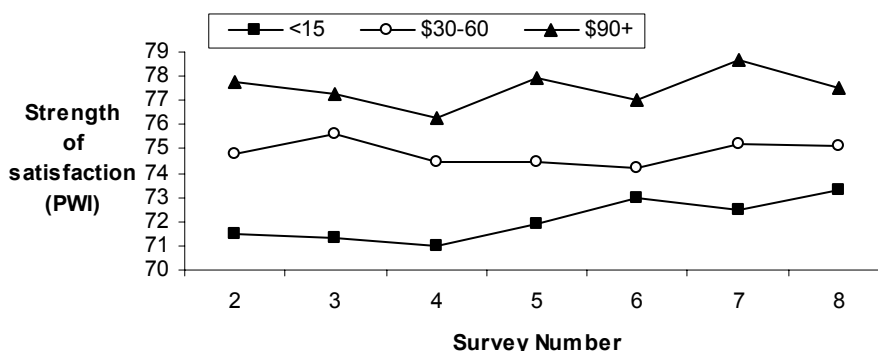


Figure 3.2: Income x Survey: **Personal Wellbeing Index**

The PWI patterns of change across surveys evidenced by the three broad income groups (Table A3.9: Figure 3.2) are generally comparable and steady. There is no income group x survey interaction (Table A3.11). No data on income are available from Survey 1. The three distributions are also quite distinct from one another as shown in Table A3.10 and in Figure 3.3 below.

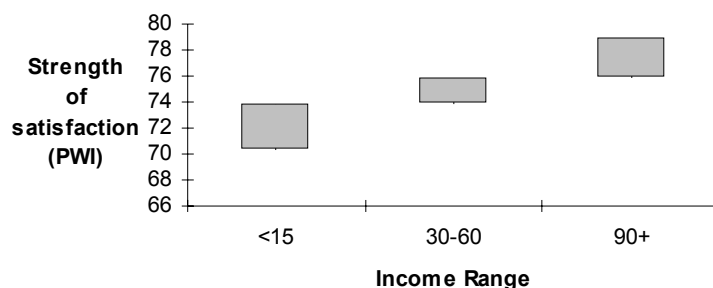


Figure 3.3: Income Range Calculated from Survey Mean Scores: Personal Wellbeing Index

The bars in Figure 3.3 indicate the PWI normal range for each income group calculated as two standard deviations around the mean (Table A3.10). These ranges are quite distinct from one another. It is notable that the \$30-\$60 range is about half that of the other two groups.

The National Wellbeing Index also shows a tendency to rise with income, and this is primarily caused by the two domains of Economic Situation and Business. It appears that higher household income induces a more rosy view of the economy in general.

It is notable that the survey-specific personal measures of Neighbourhood, Contentment, and Happiness show no significant change with household income. Indeed, the degree of stability is remarkable, with a variation of 1.97 percentage points across the six income groups for contentment, and 1.59 points for happiness.

The survey-specific national measures show a tendency to decrease with higher income. This is a similar trend to previous measures of national pride.

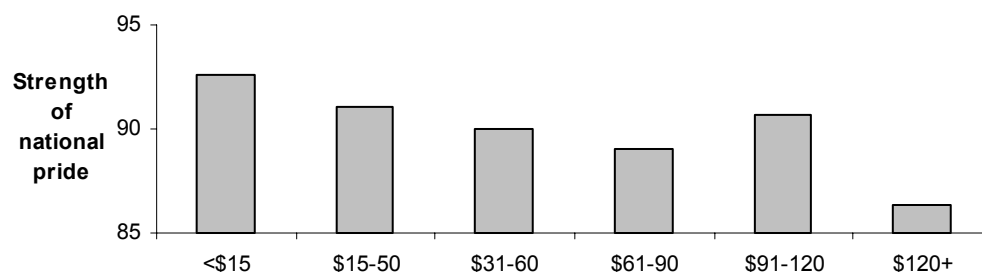


Figure 3.4: Income x National Pride [Survey 6]

The above data from Survey 6 show a significantly decreasing trend ($p=.032$) in the strength of national pride with increasing household income. This decrease is not a consequence of age (pride increases with age: Report 6.0, Table A3.3). These data are discussed further in Chapter 8 'Connection to Australia'.

3.2. Gender and Wellbeing

The gender distribution of income shows more females in the lowest income grouping, and fewer females in the highest income grouping (Table A3.3; A3.8). This is a consequence of relative longevity. More females live in single-pension households.

Males, however, appear more adversely affected by low income than females (Table A3.4). Males, but not females, with incomes of <\$15,000 have significantly lower wellbeing than males with higher household incomes. This gender difference is predominately caused by males who live alone, and who have low income. Females are less adversely affected by this situation (see Report 7.0).

3.3. Income and Age

Up to the age of 56 years, the age-groups are fairly equally spread across the income ranges (see Table A3.5 and A3.6). After this age the income distribution becomes progressively concentrated in the lower income ranges, particularly for females (Table A3.8).

In order to further investigate these differences, Table A3.7 compares the PWI scores.

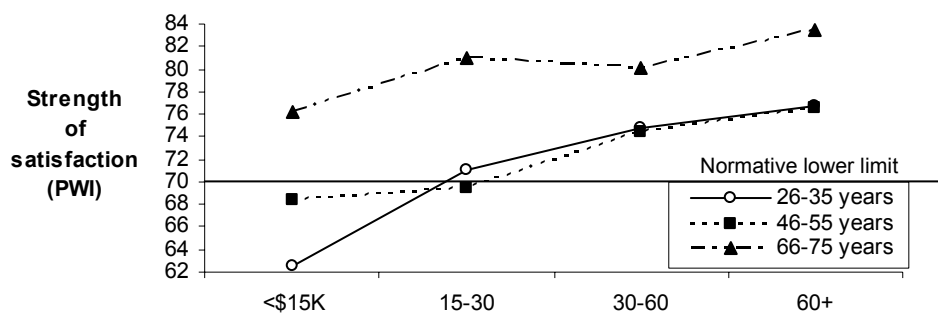


Figure 3.5: Income x Age on the **Personal Wellbeing Index**

While the PWI of people over 66 years of age seem to be little affected by household income, the wellbeing of people aged 26-55 years is more vulnerable to income Figure 3.5. This is most evident in the lowest income group where the PWI has fallen significantly below the normative lower limit of 70. It can be reasonably deduced that these people are predominantly living in situations where personal wellbeing is being severely compromised due to their financial responsibilities to dependents. The people in such household situations clearly require assistance. This result replicates previous findings.

3.4. Wellbeing Variation Within Income Groups using Combined Survey Data

The theory of subjective wellbeing homeostasis predicts that the amount of wellbeing variation within income groups will reflect two kinds of influence as:

- (a) The range of genetic 'set-point' of subjective wellbeing for each person. This should be constant across the income groups.
- (b) The degree to which the external environment impinges on each person to change their SWB levels. This influence is predicted to be greatest for the most vulnerable groups who are either people with constitutionally weak homeostatic systems (low SWB set-points and a vulnerability to depression) or people whose homeostatic systems are placed under pressure through external events that they cannot objectively control. This latter group will include people who are disabled and people who are elderly.

As a consequence, the theory predicts that the Personal Wellbeing Index will show greater variation in the lowest income groups. This is because money is a flexible resource that can be used to defend people against possible stressors. Since people on low incomes have less access to this resource, they are more vulnerable to the vagaries of their daily environment.

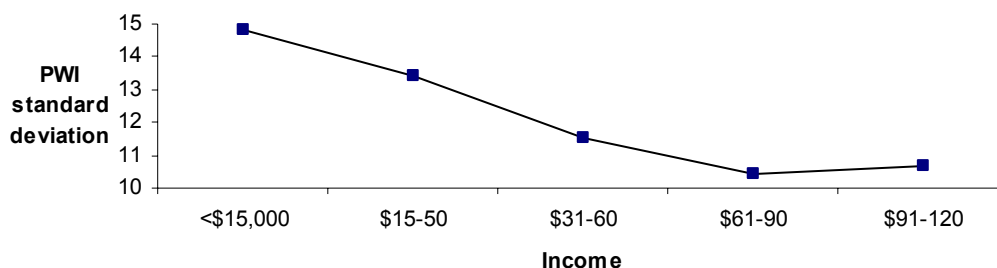


Figure 3.6: Variation in Personal Wellbeing Index Within Income Groups (S2-S8)

As shown in Table A3.11 and Figure 3.6 above, the prediction matches the data. These results have been generated from the combined data from Surveys 2-8 and each income group comprises a minimum N of 1,841. The highest standard deviation (14.8) is found within the lowest income group. This value declines with increasing income until it apparently bottoms-out at \$61,000-\$90,000 where it reaches 10.4 to 10.7.

This result is not only consistent with theory but is also consistent with our regular finding that there is a significant fall in the Personal Wellbeing Index at incomes below \$60,000 (Figure 3.1). This fall is indicative of an increasing number of people experiencing homeostatic failure, which results in their Personal Wellbeing Index falling below its set-point range.

A similar demonstration can be made using the data from Table A3.13. This includes the \$91,000-\$120,000 data that only became available for the first time in Survey 7.0. The result, using the combined data from Surveys 7 and 8, is shown below.

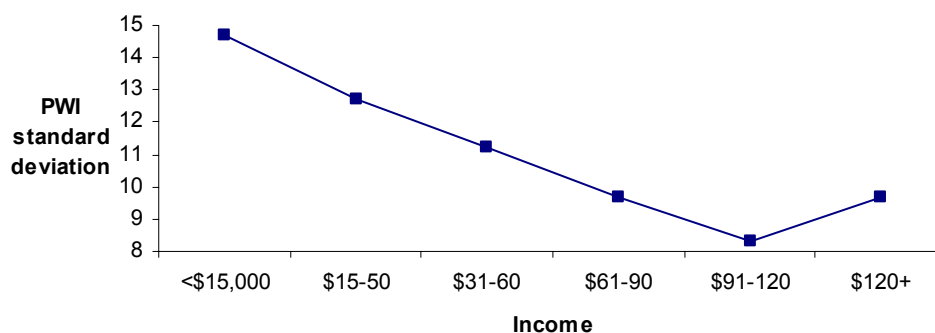


Figure 3.7: Variation in Personal Wellbeing Index Within Income Groups (S7 and S8)

Once again, there is a clear decrease in the standard deviation up to the \$61,000-\$90,000 range, after which it stabilizes. The actual magnitude of the standard deviations is larger than shown in Figure 3.6 due to the smaller N (minimum = 197). In summary, these data are consistent with prediction by homeostatic theory and reinforce \$60,000 as a threshold for the avoidance of financially-dependent homeostatic defeat.

3.5. Wellbeing Variation Across Surveys Within Income Groups

The same argument as has been mounted above should also hold across surveys. The greatest degree of variation across surveys should be shown by the lowest income groups since they are the most vulnerable to both daily fluctuations in their circumstances of living and also to the impact of major events.

Using the data from Table A3.9, the mean and standard deviation of the three income groups are as follows: <\$15,000 (72.08 ± 0.88); \$30,000-\$60,000 (74.84 ± 0.48); \$90,000+ (77.44 ± 0.76). The standard deviations are plotted below:

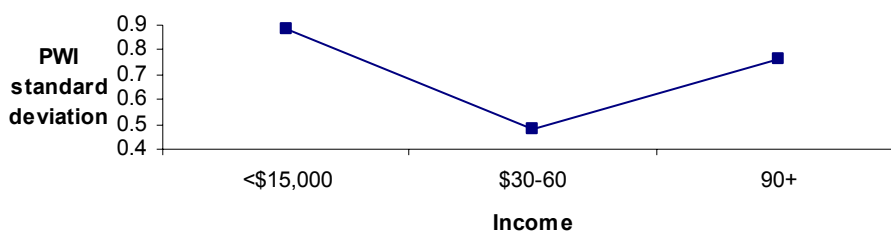


Figure 3.8: Variation in Personal Wellbeing Index Within Income Groups Across Surveys

While the fall in standard deviation magnitude from <\$15,000 to \$30,000-\$60,000 is consistent with theory, the subsequent rise in the \$90,000+ group is not. More analyses are required that include all of the available income groups before this anomaly can be evaluated.

3.6. Income and Domains

Table A3.12 provides the domain-level data from both Surveys 7 and 8. These are the only two surveys to include the income bracket \$91,000-\$120,000. The data related to personal wellbeing can be summarised as follows:

1. Income has no effect on satisfaction with ‘feeling part of your community’.
2. Satisfaction with health increases from <\$15,000 to the next income group (\$15,000-\$30,000), but shows no further change with increased income. This may be due to the dominance within this group of people on pensions and people who are elderly. A glance at Table A3.12, however, indicates an incremental advance in the mean scores as income rises. Thus, in the future when many surveys can be combined, the differences between higher income groups will become more apparent.
3. Satisfaction with ‘what you achieve in life’ is little affected by income. Only one comparison involving the \$120,000+ group was significant in one survey.
4. Satisfaction with ‘how safe you feel’ likewise showed only one difference involving the \$91,000-\$120,000 group.
5. Satisfaction with ‘your personal relationships’ shows a significant rise from the <\$15,000 level once income reaches \$60,000.
6. Satisfaction with ‘your standard of living’ increased from the lower ranges to become significant at above \$60,000. In addition, both surveys show an increment at higher levels such that \$91,000-\$120,000 > \$61,000-\$90,000.
7. Satisfaction with ‘your future security’ does not show a significant increment until \$91,000-\$120,000.

In summary, it is evident that the largest incremental increase in most of the domains occurs between <\$15,000 and \$15,000-\$30,000. However, incremental rises are apparent in many of the domains at least up to \$90,000. Even though these are not significant at this stage, more of them will become so as the N values swell through the addition of future surveys. Also for noting, future analyses should use age and gender as covariates.

The data from Table A3.12 that pertain to the indices of national wellbeing show much less sensitivity to income. With the use of a Bonferroni adjustment to $p < .01$ only Satisfaction with 'the economic situation in Australia' shows an effect. Here there is evidence that the income groups $> \$15,000$ are more satisfied than those below.

3.7. The Highest Income Categories

Table A3.13 provides data on the Personal Wellbeing Index resulting from the combination of Surveys 7 and 8. The increment from $\$91,000$ - $\$120,000$ to $\$120,000+$ is 0.28%, which is not significant ($t(483)=0.342$, NS). The full range of increments is presented below.

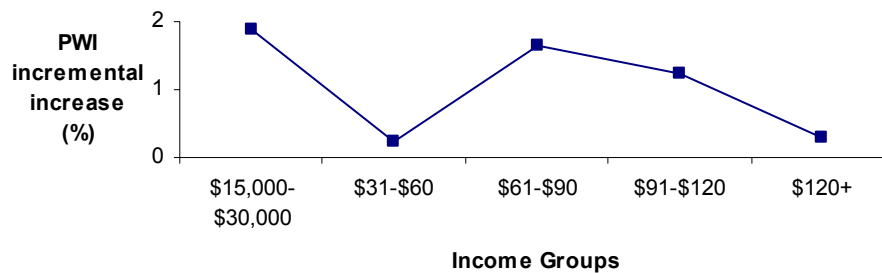


Figure 3.9: Incremental Increases in Personal Wellbeing Index Between Successive Income Groups

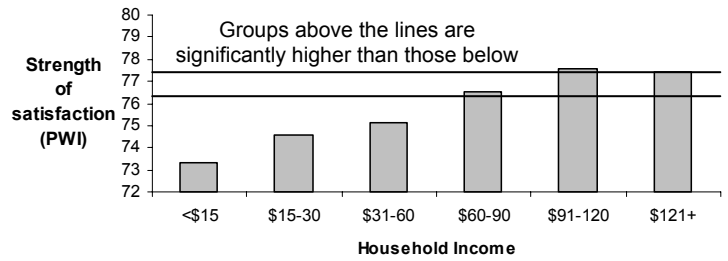
The data in Table A3.13 and Figure 3.9 have been calculated from the baseline of $< \$15,000$ to create the first increment between the Personal Wellbeing Index for this group and the next ($\$15,000$ - $\$30,000$). The next increment is calculated from the Personal Wellbeing Index for the $\$15,000$ - $\$30,000$ group to the next highest group, and so on.

While the data in Figure 3.9 show the largest increment occurring between the two lowest income groups, as expected, the pattern is clearly irregular. More accumulative data are required to stabilise these comparisons.

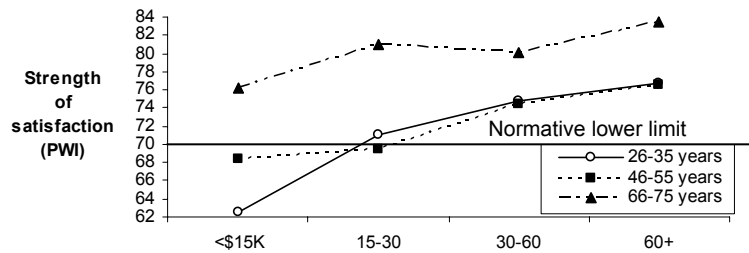
Whether the increment from $\$91,000$ - $\$120,000$ and $\$120,000+$ will ever achieve significance is moot. If wellbeing does continue to rise at these income levels it may do so through the positive effects of high income on social status.

Dot Summary Points for Household Income:

1. Personal wellbeing rises with household income. The value of \$60,000 is a threshold for the normal maintenance of wellbeing for the average person. Wellbeing increases still further at incomes of \$91,000 and more. This continued rise may reflect increasing social status.



2. The wellbeing of people aged 26-55y is vulnerable to low income. People aged 26-35y with incomes <\$15,000 are at risk of problems with mental health



4. Gender

4.1. Overall Distribution

The sample comprised 969 males (48.9%) and 1011 females (50.8%) (Table A4.1).

4.2. Gender and Wellbeing

The Index data are presented for this survey in Table A4.1 and analysed across all surveys in Table A4.2. Past surveys have generally shown higher wellbeing for females, and this trend is reflected in the current survey in relation to the survey-specific items. All three (neighbourhood, contentment, and happiness) are higher for females, as are also the two national items of belonging and sharing core values.

Personal Wellbeing Index

On average, across all surveys, females rate themselves 1.6 percentage points higher than males on the PWI (Table A4.2) and there is no gender x survey interaction ($p=.420$). It is, thus, a highly consistent difference.

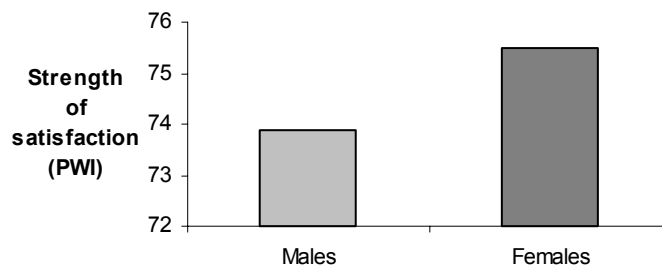


Figure 4.1: Gender and **Personal Wellbeing Index** (average across surveys)

There is also an apparent gender difference in their pattern of response to world events. Both genders have shown rises in the Personal Wellbeing Index referenced to Survey 1. Moreover, both genders have recorded an elevated score over the last two surveys (S7, S8). Their intermediate patterns, however, appear to be different. Particularly, females alone show a significant Personal Wellbeing Index rise six months following September 11. This apparent difference, however, is mainly a statistical artefact caused by the uneven numbers of each gender at Survey 3 (males = 689; females = 1,212). In fact, the extent of Personal Wellbeing Index rise was quite comparable over this period (1.8% for males and 2.0% for females).

However, a genuine gender difference occurred immediately following the Bali bombing. While male Personal Wellbeing Index rose higher during Survey 5 and Survey 6, female Personal Wellbeing Index fell, to be no longer different from Survey 1. The reason for this difference appears to lie within the domain of safety. Immediately following the bombing, satisfaction with safety fell by 0.35% among males, but by 2.32% among females. This substantial fall negated the rises in the other domains, to make the Personal Wellbeing Index no different from it was at Survey 1.

This finding highlights the possibility that other insights into these data may be gained from an examination of major shifts in domain satisfaction defined as $>2.0\%$ between adjacent surveys for either gender. These data are shown in Table 4.1

Table 4.1: Domain Changes >2.0% Between Adjacent Surveys

Domain	Surveys	Male	Female
Standard of Living	1-2	+4.18	+1.72
Achievements	1-2	+2.08	+0.12
Relationships	5-6	+2.69	-1.03
Safety	4-5	-0.35	-2.32
	6-7	+1.72	+2.68
Future Security	6-7	+1.51	+2.43

This table is interesting from a number of perspectives as follows:

1. It emphasizes the extraordinary stability of these measures. With one exception, all domain changes from one survey to the next have been less than 2.7%. Of the total 98 comparisons, only 6% have varied by >2%.
2. The outlying value of 4.18% (Standard of Living, Male, Surveys 1-2) is anomalous. There seems no obvious reason for such a marked change in this domain in response to September 11. However, female satisfaction did show a substantial 1.72% rise at the same time, which lends some degree of credibility, but no additional explanation, to the result.
3. With one exception, all of these major changes are temporally linked to the period immediately following one of the three major international events: September 11 (S1-S2), Bali (S5-S6), or the Iraq War (S6-S7). Only one change (Safety, Female, S4-S5) is located within one of the four other periods (S2-S3, S3-S4, S4-S5, S7-S8). This is further evidence that the Index changes are, indeed, a consequence of these three international events.
4. In terms of linking the specific domain changes with a logical explanation for such change, it is a mixed bag. But maybe too much can be made of this. These values are part of a wave of change that involves all of the domains to some degree. Additionally, we know nothing about the relative sensitivity of domains in particular circumstances, other than what these data can tell us. So the apparent logic of safety and security rising after the Iraq war needs to be balanced against the apparent illogicality of relationship satisfaction changing in opposite directions for males and females following the Bali bombing. More data are needed in order to explain some of these domain level changes.

4.3. Consequence of the Gender Imbalance in Surveys 1-3

One consequence of the persistently higher levels of satisfaction in females, is that the gender imbalance in Surveys 1-3 may have distorted the mean score of the Personal Wellbeing Index relative to subsequent surveys. If equal numbers of males and females are used to recalculate the overall survey mean scores, the three survey means decrease by 0.18%, 0.17% and 0.25% respectively. These differences constitute a source of systematic bias. Given that the survey means vary over a range of 2.7%, these differences represent from 6% to 9% of the total range. It is clear that gender constitutes a confounding factor in our determination of wellbeing differences between surveys. Indeed, both gender and age are important sources of confounding variance in terms of many intra-survey comparisons as well. While we cannot institute such a procedure in this report, future data analyses will include the use of age and gender as covariates wherever this is relevant.

National Wellbeing Index

At the national level, neither the National Wellbeing Index nor most of the national domains show a gender difference in Survey 8 (Table A4.1). The exception is Government, which is also rated higher by females.

4.4. Satisfaction with Safety Across Surveys

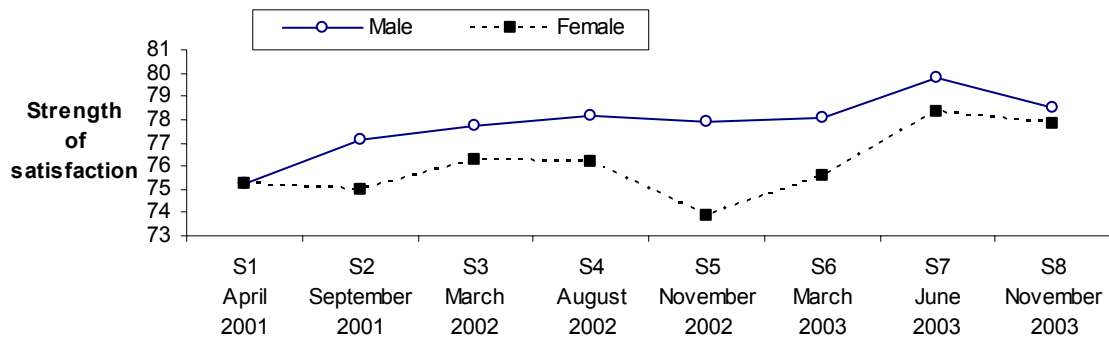


Figure 4.2: **Satisfaction with Safety** across all Surveys

The domain of safety is particularly interesting for a number of reasons as follows:

- (a) It is the only domain to be higher in males. All of the other domains are higher for females (Table A4.2).
- (b) It is the domain that is most sensitive to the events that have been impacting on population wellbeing. A total of 11 significant differences between surveys have been recorded within both genders. The next highest is Standard of Living with nine points of difference.
- (c) It is the domain that comes closest to producing a gender x survey interaction ($p=.07$, Table A4.2).
- (d) It is the only domain that fails to contribute unique variance to the prediction of satisfaction with Life as a Whole (see Psychometric document). It is possible that this phenomenon is linked to its high sensitivity.

It is possible that safety is not a 'domain' in the terms of our definition, which identifies domains as representatives of the first level of deconstruction of 'Life as a Whole'. Perhaps its heightened sensitivity is a consequence of its loose control by SWB homeostasis, and that it really should be re-classified as belonging within some alternative variable system.

Safety could be considered as a variable which it would be maladaptive to link with homeostatic control. Safety is not a long-term prospect, as are the other six domains. Satisfaction with Safety has an adaptive function that is dependent on responding to immediate circumstances. A sudden loss of safety signals the need for an immediate response. The long-term analogue of safety is Future Security and that, does indeed, behave in the manner of the other domains.

In these terms Safety is more a variable concerned with the Approach-Avoidance response than with subjective wellbeing. It is part of the system that engages the environment appropriately in order to allow the maintenance of SWB.

This may also explain why it is the only domain to be higher in males. It is not a part of subjective wellbeing, which is set higher for females, but is part of the risk-assessment system, for which satisfaction may be set higher for males. Women are more vulnerable to physical threats than men. They are more likely to be the victims of physical and sexual assault in our modern-day society and, in evolutionary terms, their role as caregiver may well incorporate a tendency to protect themselves and their offspring through avoidance. So it is more adaptive for females to retreat in the face of physical threat. Males, on the other hand, are the hunters and defenders. Their evolutionary role would be fulfilled by having a higher probability of approach behaviour in the face of threat. This probability may be controlled, in part, by having a stronger sense of personal safety and invulnerability.

It is also possible that females express less safety satisfaction because the above traditional gender roles make it more socially acceptable for them to do so.

These factors may explain why this is the only domain to (almost) show a significant gender x survey interaction. Whereas males and females are programmed to respond similarly to matters concerning the SWB homeostatic system, this may not be the case for the Approach-Avoidance system.

Females, in a care-giving role, may be more inclined to respond to threat by avoidance. Males, in a protective role, may be more inclined to respond to threat by approach behaviour. This hypothesis is somewhat consistent with our data. Figure 4.2 shows a gradual but persistent increase in safety satisfaction for males. Females, on the other hand, showed a (non-significant) drop in safety satisfaction on the occasion when the terrorist attack was closest to home (S5: Bali). The subsequent rises in safety satisfaction for both genders at Survey 7 and Survey 8 could be simply a reactive response to the relief at a successful outcome of the war, from their perspective. It is notable that the satisfaction within both genders has fallen somewhat since the previous survey (Figure 4.2).

Safety should be dropped from the Personal Wellbeing Index but retained as one of our survey variables.

4.5. Gender and Age

Table A4.4 provides the Gender x Age analysis using the entire database from all surveys. The PWI data are shown below.

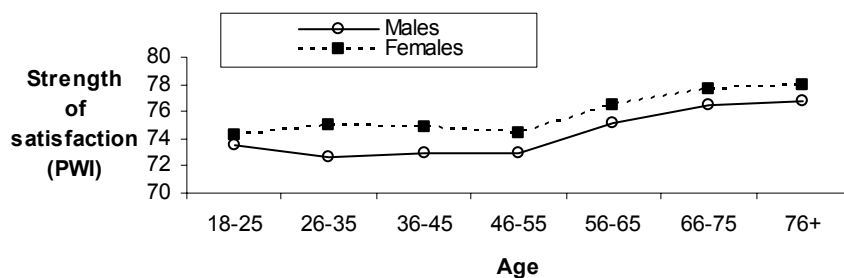


Figure 4.3: Gender x Age: Personal Wellbeing Index (all surveys)

The pattern of age-related change in the Personal Wellbeing Index is very similar between genders, and there is no interaction. However, the gender differences are significant only between 26-75 years. The male-female difference for the 18-25 group is only 0.65% ($p=.256$), and the difference for the 76+y group is also non-significant (1.28%, $p=.135$) due, in part, to the high variance within the males.

The maximum gender difference occurs within the 26-35y group (2.39%).

4.5.1. 18-25 Group

The lack of a gender difference in this youngest age group for the overall Personal Wellbeing Index is also reflected in the domains of Standard of Living, Health, Achievements, Community Connectedness, and Future Security. The other two domains, however, exhibit a gender difference as follows:

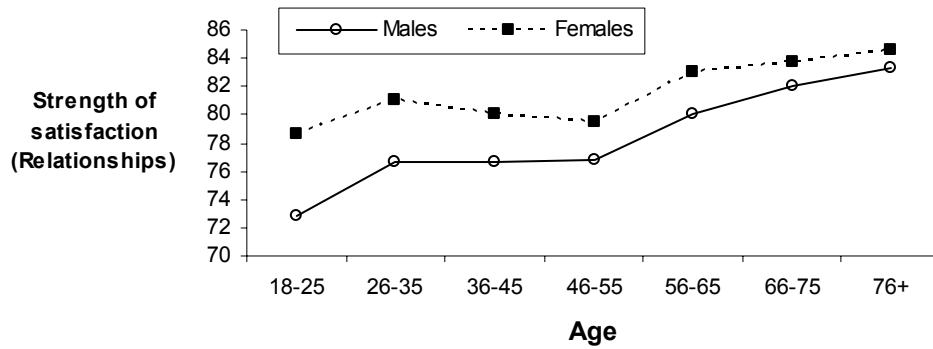


Figure 4.4: Gender x Age: Relationships (all surveys)

There is no interaction and the gender difference is significant at each age up to 66-75y. There is no gender difference within the 76+y group.

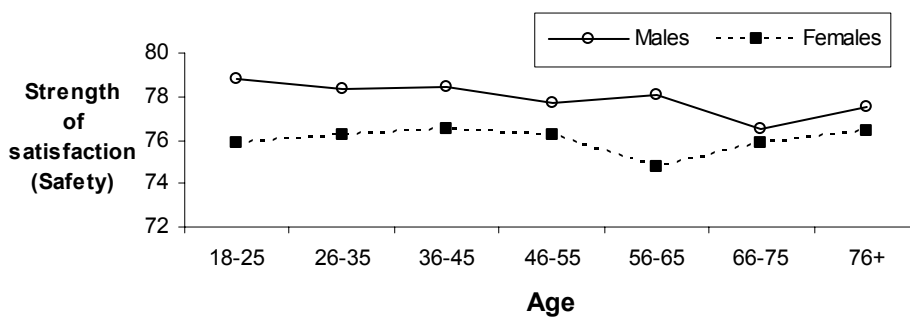


Figure 4.5: Gender x Age: Safety (all surveys)

As with Relationships, there is a convergence between the genders with increasing age, such that they do not differ beyond the 56-65y groups. The interaction is not significant.

4.6. Gender x Age Interactions

Two domains show a significant interaction using the combined data from all surveys (Table A4.4). One of these is Health, as shown in Figure 4.6 below (minimum cell size = 442).

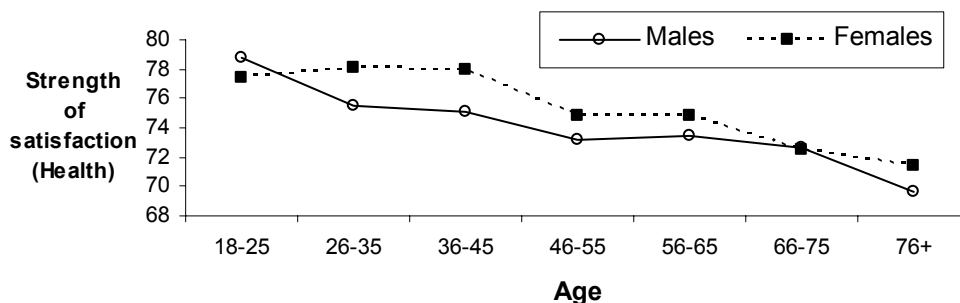


Figure 4.6: Gender x Age: Health (all surveys)

Male and female health satisfaction does not differ at 18-25 years. Thereafter the two genders show a very different pattern of change.

Male satisfaction shows an immediate drop of 3.3% between 18-25 and 26-35 years. Thereafter it shows a gradual, but not significant, decline, until falling significantly once again at 76+ years.

Female satisfaction, on the other hand, remains steady over the next two decades, until falling sharply by 3.2% between 36-45 and 46-55 years. A further significant fall of 2.3% occurs between 56-65 and 66-75 years.

The reason for the drop in female health satisfaction at 46-55 years is probably associated with the onset of menopause. The reason for the fall in male satisfaction at 26-35 years may reflect decreasing physical fitness which affects males more than females over this age-range.

The other interaction occurs for Community and is shown in Figure 4.7 below (minimum cell size = 440).

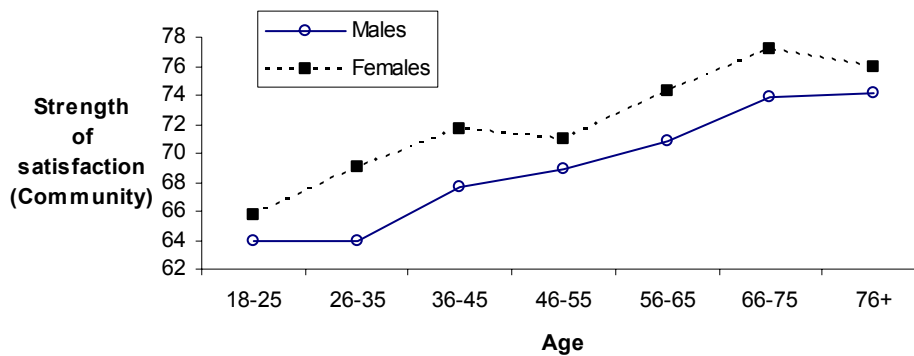
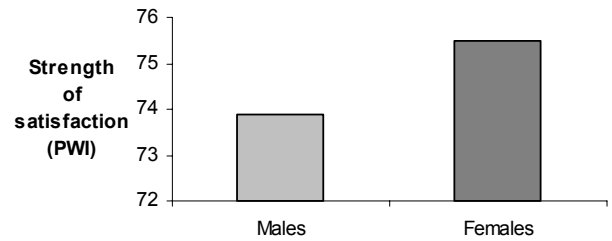


Figure 4.7: Gender x Age: Community Connection (all surveys)

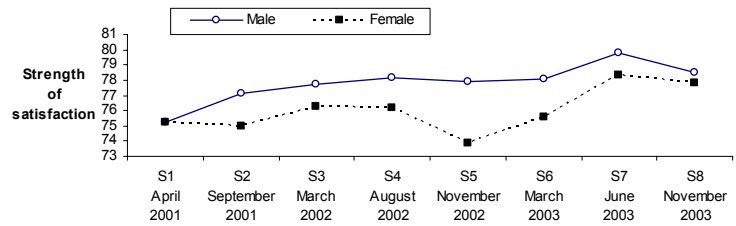
While both genders show an increasing satisfaction with Community Connection as they get older, there is no gender difference either within the 18-25y group or within the 76+y group. Moreover, whereas females show a marked 3.4% increase in satisfaction from 18-25 to 26-35, males show no change. Over the following decade, however, male satisfaction increases by 3.7%. In sociobiological terms, it is possible that the 18-35y period covers the 'breeding years' during which men are more concerned with providing for their immediate family while females are more concerned with creating mutually supportive ties with other mothers for the purpose of joint child care and protection. Thus, the initial rise in satisfaction with Community Connection is delayed in males with respect to females.

Dot Summary Points for Gender

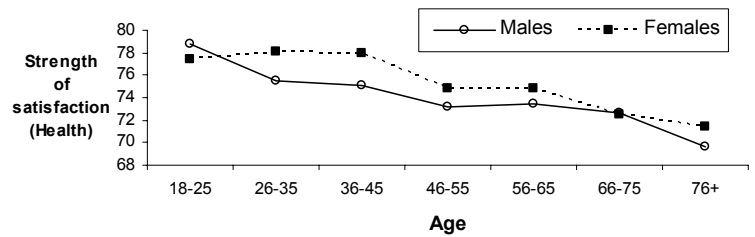
On average, females rate their personal wellbeing 1.6 percentage points higher than males.



Satisfaction with safety is higher for males and has been rising across surveys for both genders. It is the only domain to be higher for males. We question whether Safety is a wellbeing domain, or whether it should be classified as a variable associated with the Approach-Avoidance system.



Using the data from all surveys, satisfaction with health drops more with age for males (9.2%) than for females (6.0%). Moreover, the sharpest drop for males is at 26-35 years, whereas for females it is at 46-55 years. The drop for females is probably tied to menopause. The reason for the earlier drop in health satisfaction for males may reflect decreased physical fitness.



5. Age

5.1. Distribution Overall

The sample is well represented in all age groups (Table A5.1).

5.2. Age and Wellbeing

A consistent finding in our surveys is that wellbeing improves after the age of 55 years. This pattern can be seen in the **Personal Wellbeing Index** (Table A5.1). The values shown in Figure 5.1 are derived from the mean scores for each age group across all survey (Tables A5.2 and A5.3).

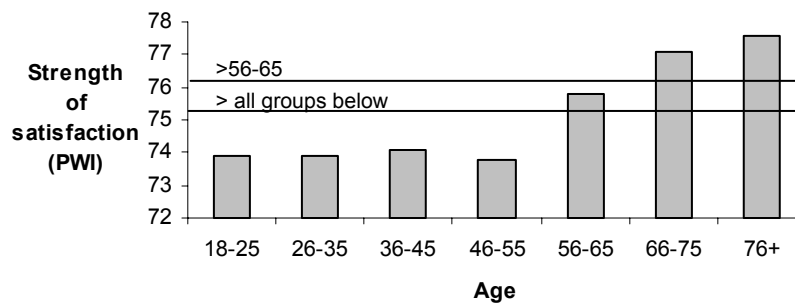


Figure 5.1: Age and the **Personal Wellbeing Index**

This general pattern holds for all personal domains in this current survey except **safety** and **health** (Table A5.1). Safety shows no significant age-related change. In terms of **health**, satisfaction shows a decrease with age. Nevertheless, given that a marked degree of medical infirmity must exist within the 76+ year group, the fact that their health satisfaction is only 9.2 percentage points lower than the youngest group is a powerful example of adaptation as a process for the maintenance of wellbeing.

The general pattern of change shown in Figure 5.1 also holds for the survey-specific personal measures of neighbourhood, contentment, and happiness, and the national measures of belonging and shared core values (Tables A5.1).

The same general pattern also applies to the National Wellbeing Index, except that significance does not appear until people are older (76+y). The national domains vary in their degree of conformity to this pattern.

5.3. Investigating the Rise in Wellbeing with Age

It has been widely reported in the literature that positive affect remains stable with age while satisfaction increases with age. This is not what has been found here, with both measures rising and both showing very similar patterns of age-related change. This concordance makes intuitive sense since the affect and satisfaction measures are highly correlated. But it leaves open the question of why wellbeing rises at ages when health is failing, employment has generally ceased, and income has diminished. Could this rise represent a protective device to maintain wellbeing in the face of age-related losses?

In order to examine these age-related rises more closely the data from all surveys have been combined within the age groups. There are two ways of doing this. One is to use the survey mean scores as data (Tables A5.2 and A5.4). The other is to combine data from individual respondents (Table A5.3). While both methods will yield approximately the same mean scores, the variances of each method will

be very different. As would be expected, there is much more variation between individuals (Table A5.3) than there is between survey mean scores (Table A5.4).

These two distributions also provide different kinds of information about the forces that cause wellbeing to change. The variation seen using survey mean scores as data reflects the influence of time. The variation seen using scores from individuals reflects variation due to age. While these sources of influence will interact, their dominant influence will be as described.

5.3.1. Combining Survey Mean Scores

Table A5.4 presents the combination of mean scores and these are depicted below.

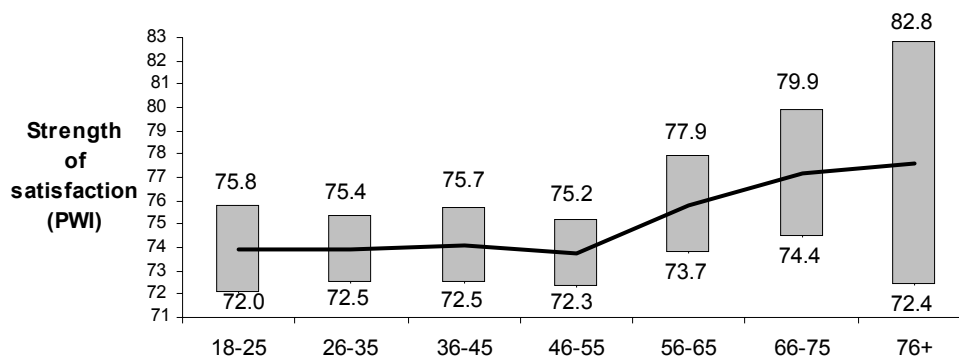


Figure 5.2: Normative Range for each age group derived from the survey mean scores

Figure 5.2 has been constructed by using the survey mean scores for each age-group as data (Table A5.4). The vertical bars denote the range created by one standard deviation on either side of the age-group mean. What is evident is that the range for the oldest (76+y) group (10.4%) is far larger than for the younger groups (3.8% for 18-25y group). Moreover, the gradual rise in this range is evident from the 56-65y (4.2%) and 66-75y groups (5.5%). Indeed, the seven group means and standard deviations correlate 0.853 ($p < .01$).

A second observation is that the increased variance is occurring from the top of the range. From Figure 5.2 it can be seen that the top of the 76+y range (82.8%) is around 7% higher than it is for the four youngest groups, while the bottom of the range (72.4%) is comparable. Thus, variance is being added to the older groups through the addition of higher survey mean scores, and this has caused the top of their range to expand.

In summary, there are no differences across the surveys for groups within the age range 18-55 years. There is then an increasing tendency for older groups to show significant variation across surveys, with such expansion occurring from the top of each range.

In order to examine these age-related group mean score changes in more detail Figure 5.3 has been prepared. The youngest group (46-55y) in this figure represents all of the younger age groups, which also show no change across the surveys (Table A5.2). The older groups, however, show marked variation across surveys, with the degree of variation being related to age.

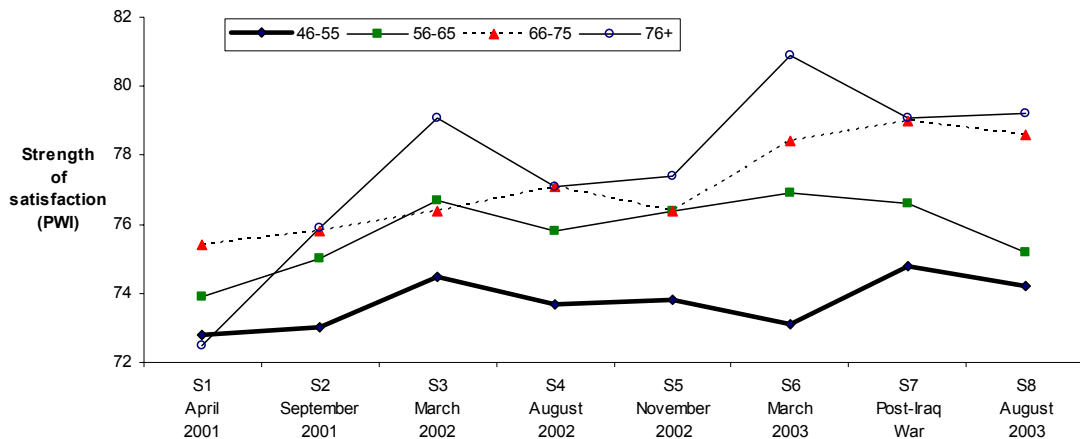


Figure 5.3: Survey Sensitivity Among the Older Groups

What seems clear is that sensitivity to the major world events increases quite systematically after 56 years of age. It is interesting that this increased sensitivity coincides with the age at which personal wellbeing rises (Figure 5.1). This introduces the possibility that the rise in personal wellbeing with age, as recorded throughout this series of surveys, is an artefact created by the world events. It is therefore possible that, under stable conditions, the age-related changes in wellbeing would be much reduced. Table A5.2 tends to confirm this hypothesis. It can be seen that within Survey 1 there were no age-related differences in Personal Wellbeing Index. Indeed, the 76+y group even had a slightly lower score (0.4%, non-significant) than the 18-25y group.

Then, following September 11, the Personal Wellbeing Index scores of the older groups showed evidence of an increase, while those of the 18-25 group remained stable. However, none of the age group differences between adjacent surveys were significant. Over the next six month period these trends continued, such that the Personal Wellbeing Index of the oldest (76y+) group became higher than it had been pre-September 11.

This trend has been maintained for the 76+y group. At Survey 8 their scores remain higher than they were at Survey 1. While none of the other age groups have shown a significant change between particular surveys when assessed by post-hocs (Table A5.2), nevertheless the second-oldest group (66-75y) has shown a significantly rising trend ($p=.006$), while the third-oldest group (56-65y) has shown a rising trend that peaked at Survey 6 (pre-Iraq war) and which is now falling ($p=.05$). Thus, there is a clear gradation of sensitivity to these world events, that begins at 56-65y and increases with age thereafter.

Our tentative conclusion is that, under stable conditions, personal wellbeing may not rise with age. Even though our surveys show a clear rise in wellbeing beyond the age of 55 years, this may be caused by a reaction to September 11 and subsequent world events. If this is so, the later-life rise in wellbeing that we have recorded is abnormal.

5.3.2. Discussion of Mean Scores Data

One explanation for the response pattern shown in Figure 5.3 is that the rise in wellbeing is due to homeostatic failure. That is, beyond 56 years of age, an increasing proportion of each age group have a compromised homeostatic system that is no longer able to maintain Personal Wellbeing Index within its set-point range for each individual. Due to such compromise, these people are going to evidence increased sensitivity to their environment in terms of Personal Wellbeing Index changes. Thus, the older groups will contain more people with homeostatic compromise. But not all people will be affected, and such groups will also contain people who are able to maintain the wellbeing as normal. So, the variance will expand in the direction dictated by the homeostatic compromise.

If this is so, why does homeostatic compromise in people who are elderly cause the Personal Wellbeing Index to increase? Perhaps the answer lies in the perception of distal threat. That there has been a disturbance in the force that will not involve them personally. That a downward comparison can be made to the population at large, which allows them to feel superior. This explanation is speculative at this stage.

An alternative line of explanation is that such changes are not pathological but adaptive. That people over the age of 55 years have learned, through long experience, ways of accommodating to major events, such that they gain more wellbeing as a consequence. The hypothetical process could be analogous to the biological process of hormesis (Renner, 2003) which describes an adaptive response to stress such that the organisms that survive emerge stronger and more resilient as a consequence of dangerous encounters. This is a difficult argument to sustain for the following reasons:

- (i) A sustained rise in SWB is likely to be harmful rather than beneficial (Cummins and Nistico, 2002). If the rise takes people above their set-point range it may make them take more risks than normal, or even to make them delusional.
- (ii) If it was a capacity that gradually developed, then there is little reason to think it would take 55 years to do so. Moreover, the onset of this age-dependent sensitivity appears to have quite a sudden emergence.
- (iii) If it was adaptive, then all older people should develop this ability, and the group mean should rise with little change in the group variance. Figure 5.2 shows this is not the case. The variance has increased due to a minority of the respondents scoring higher. This can be seen through the asymmetry of the 2SD range around the mean (Figure 5.2).
- (iv) The maximum value in Figure 5.3 (Table A5.2) is 80.92% in the 76y+ group in Survey 6. This is the period immediately prior to the Iraq war and is our highest reliable score (N=99) on record. Since this is such an outlying value, occurring in the oldest group and a time of great uncertainty about the future it seems most likely to represent an extreme, pathological response to the situation

Our conclusion is that the rise in wellbeing, that we observe in group mean scores after the age of 55 years, is likely to reflect the onset of homeostatic failure. Thus, the age-related increases in personal wellbeing that have been observed seem likely to reflect a pathological response to external threat. If this is so, under stable conditions there should be no age-related differences in personal wellbeing.

5.3.3. *Combining Data from Individuals*

The alternative method of studying these changes is through data from individuals. Table A5.3 has been constructed by averaging the total number of individuals who fall within each age-range across all surveys. The means are approximately the same as in Table A5.4, the between group differences are more statistically pronounced due to the higher N values, and the standard deviations are much higher. These are shown in Figure 5.4.

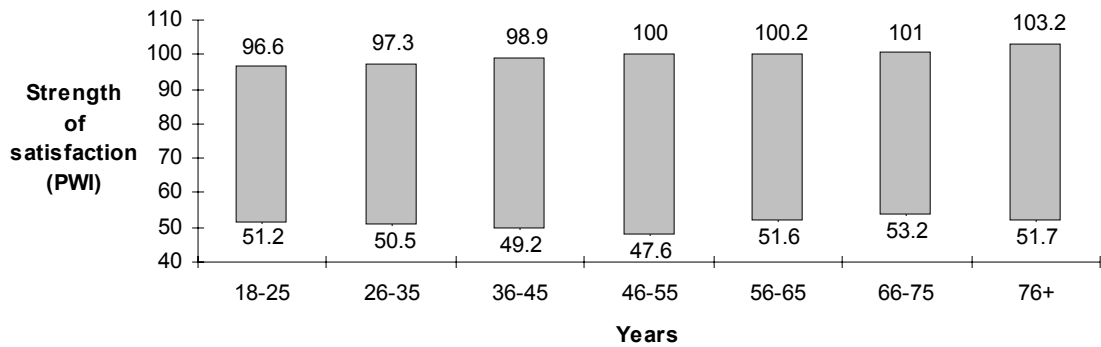


Figure 5.4: Normative Range for Each Age Group Derived from the Scores of Individuals (Personal Wellbeing Index)

There are three interesting features of these data as follows:

- (a) They are very regular in two respects. First the range of two standard deviations for the entire database ($N=15,087$) conform almost precisely with the theoretical normal range of 50-100%SM. The top of the empirical range (Table A5.3) is 99.5%SM and the bottom is 49.4%SM. Second, the differences between the ranges of the seven age groupings is just 7.0%SM (from 45.4 : 18-25y to 52.4 : 45-55y).
- (b) The base of the ranges show a dip in the 36-55y age groups. This indicates a downward extension of the Personal Wellbeing Index and indicates a higher than usual (compared with the other age groups) proportion of the sample experiencing homeostatic failure. This is probably due to the relatively high incidence of divorce and separation within this age range coupled with the responsibilities of family, mortgage and work. Following 55 years this dip disappears, and of particular interest is the lack of any downward range extension within the oldest group (76y+). This indicates that homeostatic failure, producing lower Personal Wellbeing Index scores, is no more common among the most elderly sample than among the younger age groups. This attests to rugged maintenance of homeostatic control within the most elderly group.
- (c) The top of the range shows a gradual but persistent rise. This is quite different from the analysis using mean scores which found the sudden emergence of higher scores at 56+ years (Figure 5.2). Here, the data from individuals show a gradual rise across all age groups. Beginning with the 18-25y group, the increment between adjacent age ranges is 0.7%, 1.6%, 1.1%, 0.2%, 0.8%, 2.2%. One explanation for this rise is hormesis (Renner, 2003). It is possible that, as people get older, they learn to adapt more effectively to potentially stressful situations. As one consequence, an increasing proportion of people within the older groups maintain their set-point and the gradual rise in the top of the wellbeing range reflects this process. Alternatively, the rise could be produced through progressive homeostatic failure, as previously argued in relation to the mean score data. But this explanation seems less adequate to account for the gradual accumulation of change with increasing age.

5.3.4. Discussion

A different line of explanation for all of these data is suggested from Figure 9.3, which shows a significant correlation between the Personal Wellbeing Index for each age group and the percentage of each group who recall September 11 with sadness.

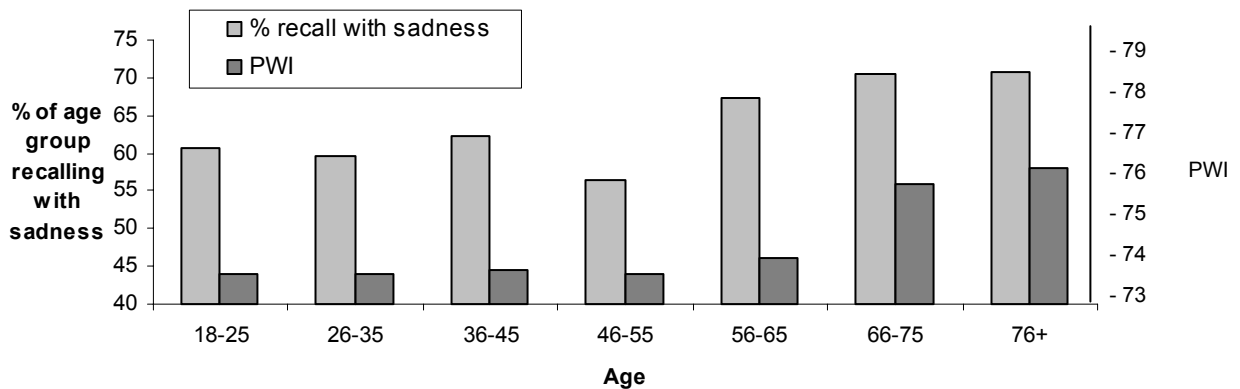


Figure 5.5: Age x Recall with Sadness (combined surveys)

Since it has been concluded (see Section 11.1) that the extent of recall sadness probably reflects social desirability responding, this raises the issue of whether social desirability responding is also responsible for the age differences in subjective wellbeing. Such differences could come about either as a cohort effect or developmentally.

Response acquiescence has been most commonly described in the context of intellectual disability, where it was first noted by Rosen, Floor and Zisfein (1974). They reported that many such people were likely to say 'yes' to any question that was not clear, concrete, and immediate. They speculated that this was part of a general tendency to avoid responses that 'normal' people might interpret as negative, resistive, or rebellious. While it is generally uncommon within general population samples (e.g. 6%, Lenski & Leggett, 1960) it is far more common within samples comprising people who have difficulty in understanding the task they are being asked to perform.

Acquiescence has generally been described in response situations that offer a binary choice (e.g. Yes/No). There are two forms. One, generally referred to as 'Yea-saying', biases the respondent to the most apparently positive option. Rates within the intellectual disability population have been estimated to be between 14% (Conroy & Bradley, 1985) and 40% (Sigelman & Budd, 1986). The other form is 'Nay-saying' first reported by Sigleman et al., (1981), which is far less common. Reports of its incidence have varied from around 4% (Sigelman et al., 1981) to 7% (Sigelman & Budd, 1986).

The reason people with an intellectual disability are more likely than is normal to engage in an acquiescent response style is a product of their difficulties in cognitive processing and their experience. They are more likely than people in the general population to have difficulty understanding a question, to experience difficulty in responding within the time allowed, to perceive a status or power differential with respect to the interviewer, and to have experienced negative interactions in relation to mildly controversial topics, such as the freedom to make their own choice. Moreover, just as is normal within the general population, when they are asked a question by a stranger, their preference is to respond in a way that is pleasing, or at least is not perceived as antagonistic. Thus, in conditions of uncertainty, their provision of a positive response is the option most likely to succeed in extricating themselves from the situation without negative consequences and without further questions being asked. This creates an acquiescent response.

The kinds of situations that exacerbate these response effects have been described by Bradburn and Sudman (1979). "The greater the problems of self-presentation [self-disclosure in relation to socially desirable answers] evoked by a question, the greater the pressure on the respondent to answer a question; or the more controversial a question, the higher the relative response effects [errors of response such as acquiescence] will be." (p. 11). It seems possible that the need to represent the self positively to strangers becomes more important as age increases and as the overt manifestations of wellbeing (e.g. youth and vigour) diminish.

A preliminary literature search has failed to find evidence that acquiescent responding increases in old age. A more extensive search is required. In the only located relevant study Kop (1993) found social desirability to correlate from .14 to .22 with measures of SWB in people 60+ years living in France. However, no data from younger people are provided for comparison.

While the acquiescence hypothesis has some appeal it does not explain the selective nature of the affected domains. For example, Figure 2.9 (Table A2.1) shows that Future Security fell slightly (non-significantly) immediately following September 11 (S2). While this seems intuitively reasonable, it does indicate that the response pattern we are observing is more than simply heightened acquiescent responding by the elderly cohort. However, this also requires more detailed analysis. It is possible that the younger groups showed a marked fall in this measure and that the acquiescent responding of the older groups counteracted this tendency for Future Security to fall, with the overall result that no change is recorded at the population level of analysis. This requires further investigation.

In summary, these data have introduced three possible kinds of explanation: One is a progressive deterioration in the capacity of the homeostatic system to achieve a steady state of subjective wellbeing. At a conceptual level such an explanation is consistent with the general age-related deterioration in all bodily and mental systems. The second is a progressive increase in people's ability to manage potentially stressful situations. The third is the gradual accumulation, within each age-range, of people responding according to the principles of social acquiescence. Further insight into the attribution of causation requires more data.

5.4. Testing Homeostasis

The theory of SWB homeostasis predicts that, on average, there is an upper ceiling for group mean scores at around 80% SM. This can be deduced from the normal range of population SWB which is now firmly established as being 70-80% SM. As one consequence of this determination it can be predicted that the within-group variance in SWB will decrease in proportion to the group's level of approximation to this ceiling. There should, thus, be an inverse relationship between the group mean and the standard deviation. These data, derived from Survey 8, are presented in relation to the age groupings in Figure 5.6 below.

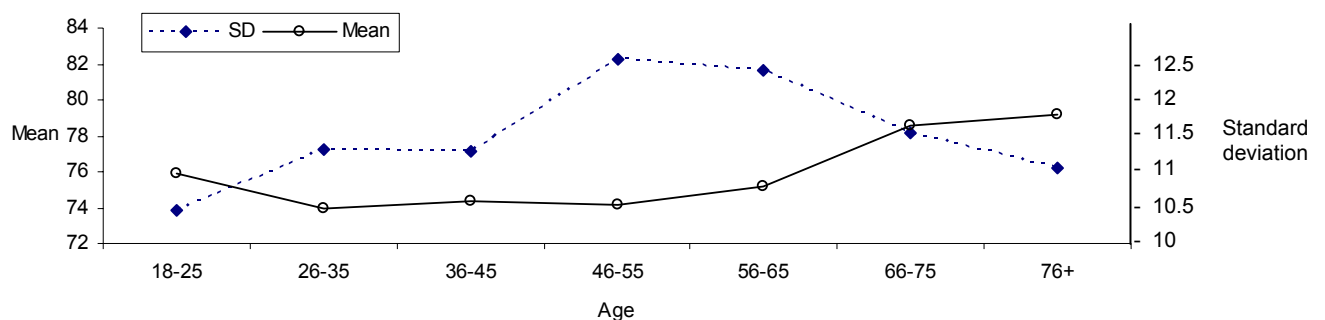


Figure 5.6: Age and the Personal Wellbeing Index. Means and Standard Deviations (Survey 8)

As can be seen, the data (Table 5.1) do not match the prediction. The maximum standard deviation (12.33) occurs in relation to one of the lowest mean scores (74.23) in the 46-55y group. Moreover, the two Personal Wellbeing Index mean values that are higher than the others (66-75y: 78.55 and 76+y: 79.20) have standard deviations that are higher than the 18-25y group mean (75.9).

The reason for this pattern is that there are two competing forces that determine the standard deviation. The homeostatic ceiling acts to reduce variance as the group mean rises. In addition, however, with increasing age there is greater heterogeneity within the age groups as progressively more people become homeostatically comprised by illness, misadventure, or other misfortune.

Homeostasis dominates the control of within-group variance over the ages 18-55. Then, as SWB rises beyond this age, the homeostatic ceiling effects offer a counteracting force which tends to reduce within-group variance. The result, seen in Figure 5.6, is a reducing standard deviation even though the SWB mean rises.

5.5. Age x Gender Across Surveys

The combined data are presented in Table A5.5 and the analysis reveals:

- (a) Neither the 18-25y nor the 36-45y groups show any gender differences in the Personal Wellbeing Index. All other age groups do show significant gender differences such that females > males.
- (b) There is no evidence of a gender x age or a gender x survey interaction (Tables A5.6, A5.7).

It is concluded that the age-related changes that have been documented are not gender dependent.

5.6. The Normative Range of the Personal Wellbeing Index for Individuals

Two standard deviations around the mean defines the boundaries of the normal distribution. At the lower margin of this distribution only 2.5% of the individuals who comprise the sample lie below this level. The combined raw data (Table A5.3) have been used to make this determination as shown below (minimum N=964).

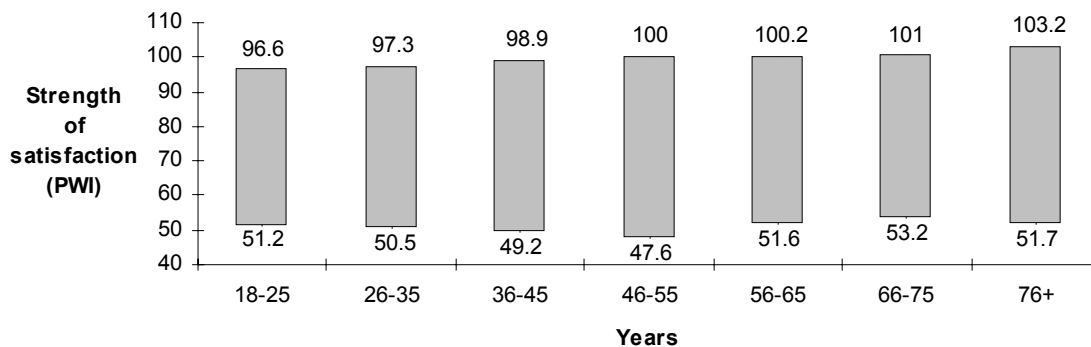


Figure 5.7: The Normal Distribution for Individuals Within Age Groups

From these data it can be seen that, as an approximation, the SWB level of individuals lies within the range 50-100. In other words, people normally maintain a positive state of subjective wellbeing, and scores below 50 can be considered to lie outside this range. These are likely to represent psychopathology in the form of depression.

5.7. The Normative Range of the Personal Wellbeing Index for Age-Group Mean Scores

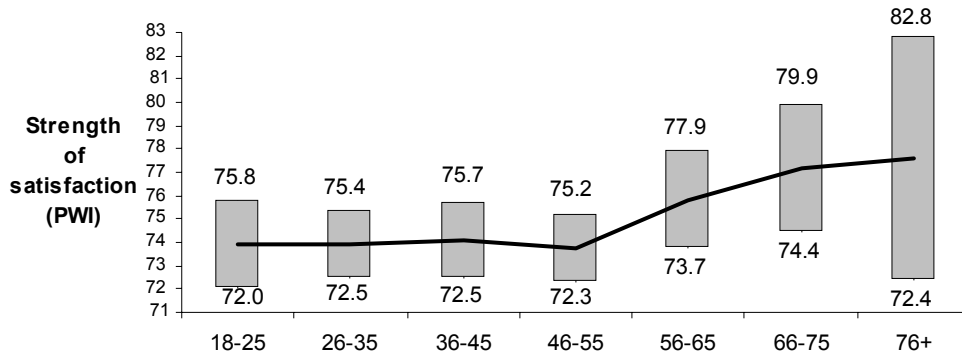
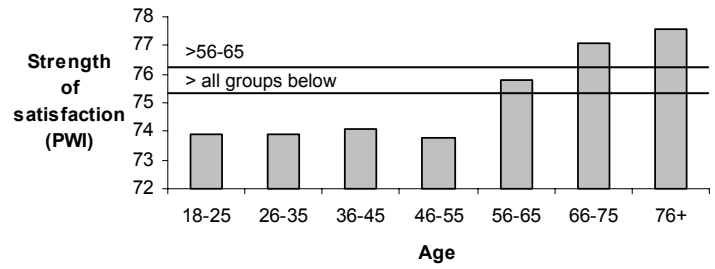


Figure 5.8: The Normal Distribution for Age Groups Mean Scores

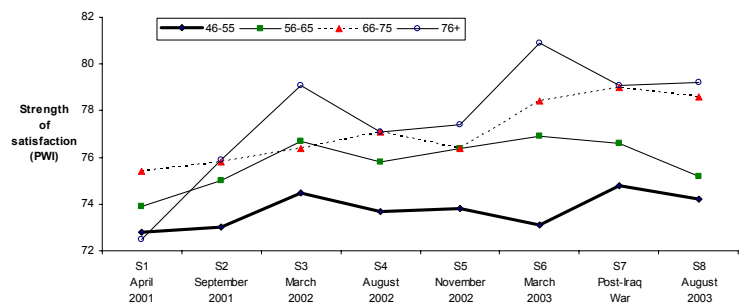
From these data, based on the use of the age-group mean scores from 8 surveys as data, it can be seen that, as an approximation, age-group mean scores lying below 72%SM may be considered pathological. Only 2.5% of the age-group means lie below this level. Group means that fall below 72%SM contain a majority of people with homeostatic failure and who are at high risk of depression.

Dot Summary Points for Age

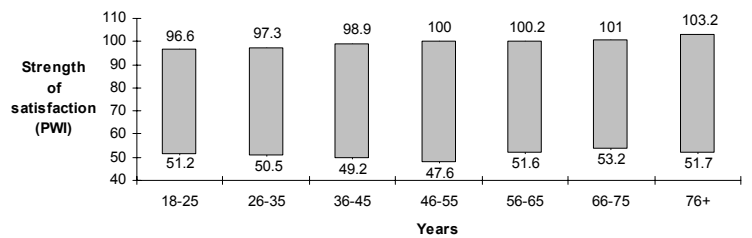
1. The average level of personal wellbeing rises with age.



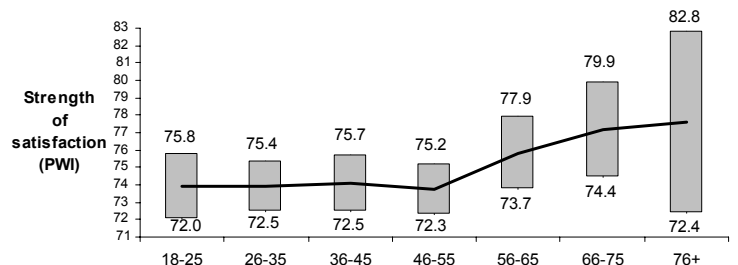
2. The increase in population wellbeing that has been recorded since September 11 has been restricted to people aged 56 and older. The explanation of this is uncertain.



3. The normative range of personal wellbeing for individuals within the different age-ranges has been calculated. People falling below these ranges are likely to be depressed.



4. The normative range for age-group mean scores has been calculated. Group means that fall below these ranges contain a majority of people at high risk of depression.



6. Connection to Australia

We asked:

“How strongly do you feel a sense of belonging in Australia?”

“How strongly do you feel you share your core values with the average Australian?”

“Which of the following makes you feel most connected to Australia?”

- Our natural environment
- Our sense of democracy
- Our life style
- Our sporting culture
- Our multicultural society

6.1. Primary Reason for Feeling Connected to Australia: Distribution

Almost half of the sample (49.8%) felt most connected to Australia due to ‘Our lifestyle’ (Table A6.1). The other respondents were fairly equally distributed between the other four options, from 10.8% for ‘our natural environment’ to 14.7% for ‘our multicultural society’. This result is free of order effects because the order of this list was randomly varied prior to each presentation.

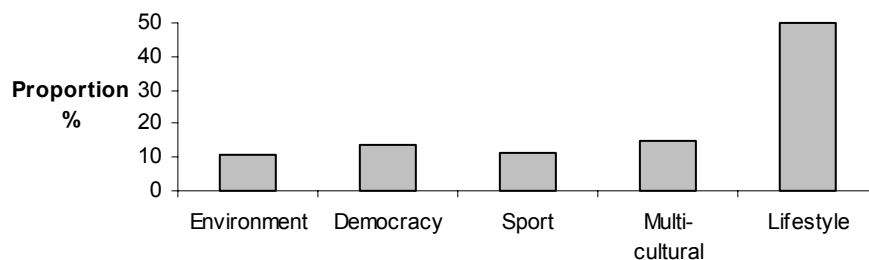


Figure 6.1: Primary Reason for Feeling Connected to Australia

6.2. Reason for Connection and Personal Wellbeing

The Personal Wellbeing Index does not differ between the five groups defined by their reason for connection.

The sense of ‘Belonging in Australia’ is high within the five Connection Groups, ranging from 80.7 to 87.4. The sense of ‘sharing core values’ is much less, ranging from 66.0 to 74.0 (Table A6.1). However, the pattern of relative strength is very similar between the five groups and is depicted for sharing core values in Figure 6.2.

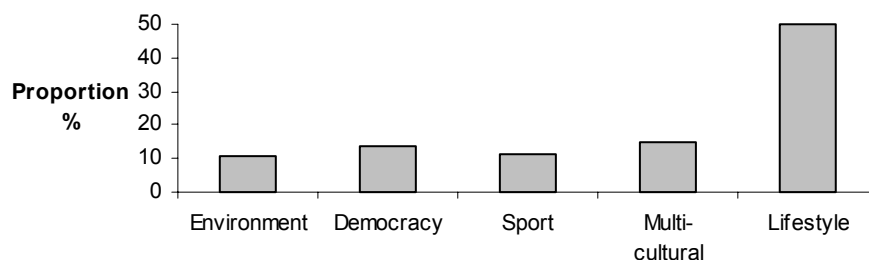


Figure 6.2: Connection Groups x Strength of Sharing Core Values

It is apparent that the Environment and the Multi-cultural groups feel a lower sense of sharing core values than do the other groups. Indeed, looking through Table A6.1 it is clear that, more generally, the connection groups of Environment and Multi-cultural fall below Democracy and Life Style whenever the wellbeing measures achieve significance.

It seems likely that the reason for this pattern is that people have selected Multi-cultural due to their minority cultural status. They probably have English as a second language, live in low income households, and are generally disadvantaged relative to the average Australian.

People who selected Environment as their primary reason for feeling connected to Australia are, presumably, highly concerned about the natural environment, which may be a constant source of worry to them due to environmental degradation and changing weather patterns. Of all the five reasons for feeling connected, Environment is one that most persistently obtains negative media coverage.

A different pattern of data is shown by the people who selected Sporting Culture as their primary source of connection. Relative to the two highest groups they are lower on: Standard of Living, Relationships (Figure 8.3), Life as a Whole, Neighbourhood, National Wellbeing Index, Economic Situation, Government, National Security, and Life in Australia (Table A6.1).

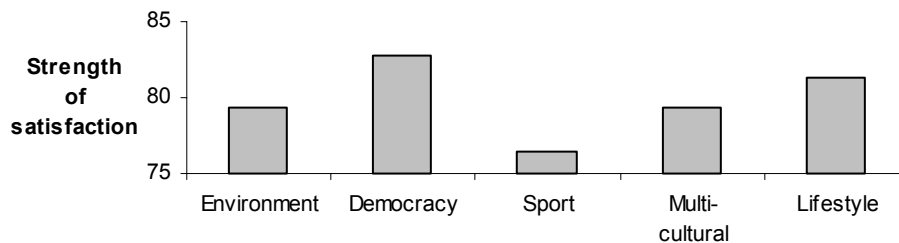


Figure 6.3: Connection x Relationships

This same pattern carries through for the other variables named above. The differences are particularly severe for Government, where people who connect through Sport are 9.8% lower than people who connect through Democracy.

6.3. Reason for Connection and Income

The maximum percentage of any income group choosing each of the five reasons for connection is given in Table A6.5 and Figure 6.4.

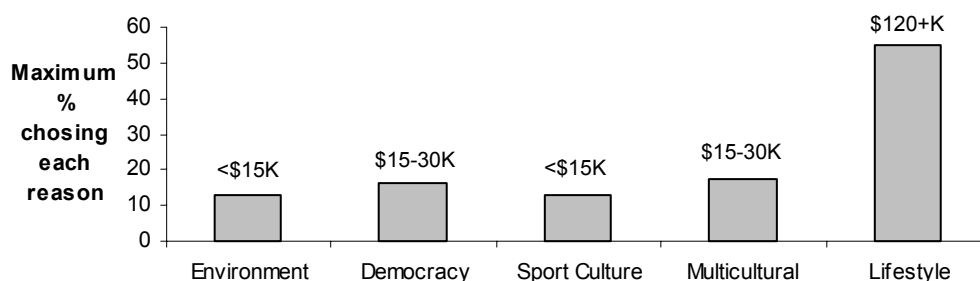


Figure 6.4: Maximum Percentage of Choice and Income Group

The interpretation of Figure 6.4 is that Environment, for example, is not a popular primary reason for feeling connected to Australia. Among the income groups the maximum choice for this option was shown by the <\$15,000 group and, even within this group, only 12.9% opted for this choice.

These data show a great deal of consistency across the income groups in their reason for feeling connected to Australia. There is also evidence of systematic variation, caused primarily by the choice of the 'Lifestyle' option by the wealthiest group. Around 10% more wealthy people than low-income people chose this option. Consequently, the other four options were more commonly chosen by the low income than the wealthy groups. Perhaps most notable, however, is the fact that Lifestyle was chosen by around 45% of the low-income people. This is about 2.5 times as many as chose any of the other options, the closest being 17.6% for Multicultural (\$15-30 group). Thus, the choice of Lifestyle clearly dominates across all income groups.

An analysis of the strength of satisfaction (PWI, NWI) and Strength of Belonging and Connection failed to find any income x connection group interaction (Table A6.5).

Both sense of belonging in Australia and feeling of sharing core values with the average Australian decrease with income (Table A6.3). The latter is shown in Figure 6.5.

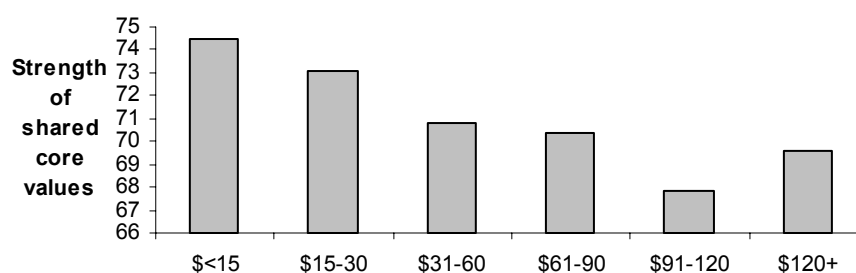


Figure 6.5: Income x Shared Core Values

Could these results be a consequence of age or gender? It is notable that the poorest ($\\$15,000$) is dominated by elderly females. In this survey, 61% of the $\\$15,000$ group are female and 63% of the $\\$120,000+$ group are males (Table A3.4). Moreover, 53.6% of the $\\$15,000$ group are aged 66+ years and 59% of the $\\$120,000+$ group are aged less than 46 years.

The income effects may also be related to age. National pride increases with age (Report 6.0: Table A3.3), as does also a sense of belonging in Australia and sharing core values with Australians (Table A5.1). Thus, it would be expected that the low income groups, which comprise a majority of elderly people, would have higher national pride and belonging. Similarly, these values are higher in females (Table A4.1).

These expectations have been confirmed. The income effects on Sense of belonging and Sharing core values disappear when gender and age are used as covariates (Belonging: $F(5,1608) = 0.48, p=789$; Share core values: $F(5,1573) = 1.46, p=.199$)

6.4. Reason for Connection and Age

The proportion of each age group that selected each reason for connection is presented in Table A6.6.

The following observations can be made:

1. Natural environment is clearly the least popular choice as measured by age group maximum. The highest it achieves is 13.3% within the 66-75y group. All other choices reached a popularity of at least 20% within one of the older age groups.
2. Each reason for connection is most popular within a different age group. This is shown below.

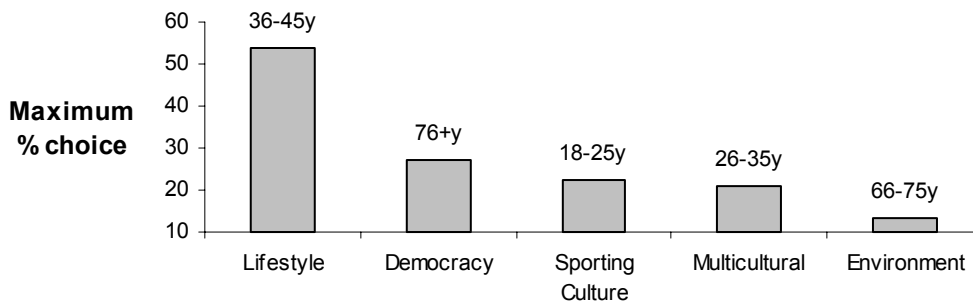


Figure 6.6: Most Popular Reason for Connection x Age

Each of these choices has face validity as:

Life style: The 36-45y group is probably dominated by middle class families with children who engage in barbeques and family oriented activities. They are also the wealthiest age group (Table A3.5).

Democracy: The 76+y group are likely the most conservative. It is notable that only 4.8% chose ‘Multiculturalism’ as a reason. This is far lower than any other age group.

Sporting Culture: The 18-25y group are most of all the groups to be actively engaged in sport.

Multiculturalism: The 26-35y group likely contains a higher proportion of young migrant families and recent university graduates with positive multicultural attitudes.

Environment: It is not obvious why this reason is dominated by the 66-75y group.

6.4.1. Personal Wellbeing

The interaction between connection group and age is significant for the Personal Wellbeing Index ($p=.045$). While three of the domains show the usual age-related pattern of a stable Personal Wellbeing Index up to 46-55y, followed by a rise, two domains are different from Lifestyle.

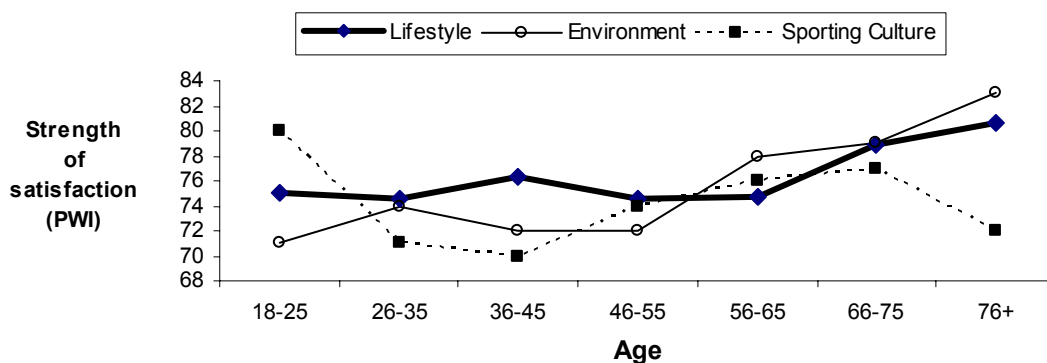


Figure 6.7: Connection Group x Age Interaction: Personal Wellbeing Index

The Environment group records one of the lowest group scores (70.7) at ages 18-25, and the highest group score (82.6) at ages 76+ years. However, the numbers in each of these groups are rather too small to be reliable (N=13 and N=16 respectively).

The Sporting Culture group shows a response pattern that is against the normal age trend. The youngest group has a score (79.5) that is substantially higher than any of the other reason-groups at this age (Table A6.6). The Personal Wellbeing Index values for this group then precipitously fall, however, over the next two decades to reach to lowest group mean within this analysis (69.7) at age

36-45. The wellbeing of this Sporting Culture group then rises over the next three decades, only to fall again to 71.7 at age 76+y.

Most of these results require replication before they can be considered reliable. Both of the extreme Environment groups have low N values (13 and 16), moreover the highest value of 82.6 is above the highest level we have found to be generally reliable for discovered groups. As far as we can determine, no group of respondents drawn from our general population samples has a reliable mean value for the PWI in excess of 82 (Extreme Values document).

In terms of the Sporting Culture, again, the value of 71.7 in the oldest group cannot be regarded as reliable due to its N of 13. This, however, does not apply to the youngest age groups. The N values are 39 (18-25y), 35(26-35y), and 42(36-45y). There are a sufficient number of people in these analysis cells for the initial high value and subsequent decrease to be considered reliable and the Personal Wellbeing Index score of 69.7 for the 36-45y group lies below the normal range.

The explanation for the high Personal Wellbeing Index at 18-25y seems pretty straightforward. These are probably people actively engaged in sport and gaining a great sense of social belonging as a consequence. Many of the people in this age group would be single. For example, Report 7.0 found that only 26% of people in this age group lived with their partner. Thus, social attachment to a peer group would be highly adaptive for their wellbeing.

Why wellbeing falls so markedly for this group over the next two decades is harder to understand. It may be that injury or a loss of fitness has deprived them of active involvement in their chosen sport, and that they miss the social connection that has weakened. It is notable that the majority (69.8%) of all people who nominated Sporting Culture are male (Table A6.7) and we know very well that males without partners are a particularly vulnerable group (Report 7.0).

The connection group x age interaction for Belonging is on the edge of significance ($p=.052$) but, again, the extreme groups suffer from small N values. The Sporting Culture group, however, shows the same trend as before, with the 18-25 group registering the highest value for Belonging for this age (87.4) and with this value decreasing over the next two decades (26-35 = 80.9; 36-45 = 81.0). The reasons for this pattern may be the same as those discussed above for the Personal Wellbeing Index.

Both the National Wellbeing Index and the sense of sharing core values, showed a non-significant interaction between connection group and age.

6.5. Reason for Connection and Gender

Table A6.7 shows that neither the Personal Wellbeing Index nor the National Wellbeing Index produce a significant interaction, but the interaction of connection group x gender is significant for both strength of belonging ($p=.003$) and sharing core values ($p=.029$).

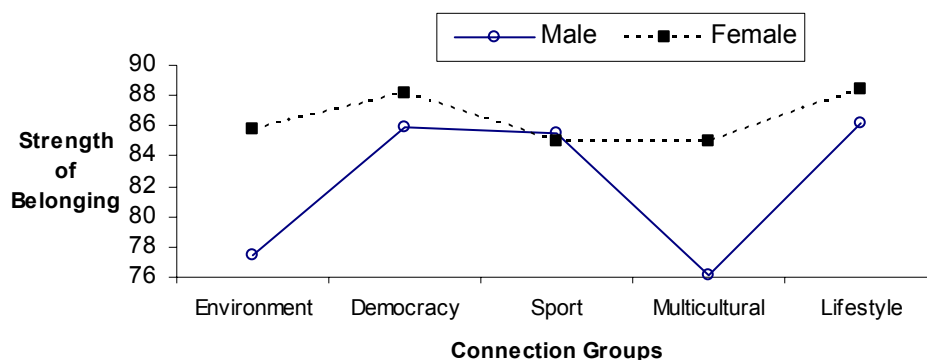


Figure 6.8: Connection Groups x Gender: Strength of Belonging

The interaction has been caused by the appearance of a significant gender difference for only two of the connection groups. For both Environment and Multicultural males have a lower sense of belonging.

Table A6.9 shows that this pattern is repeated within both the Australian and non-Australian groups.

6.6. Reason for Connection and Ethnicity

Table A6.8 and Figure 6.9 show the primary reasons for connection among the ethnic origin groups of Australian and Non-Australian..

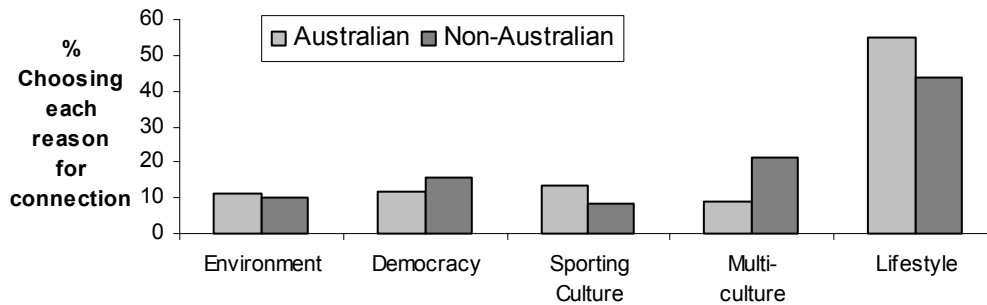


Figure 6.9: Primary Reason for Connection: Ethnic Group

Table A6.9 shows no major differences in Gender x Wellbeing interactions between males and females. The split of ‘other’ into MES and NES also produced no new insights (Tables A6.10 and A6.11).

Table A6.12 shows the Gender x Reason for connection interactions for the AUS, MES and NES groups. Only the Australian ethnic group shows an interaction with gender for both belonging and sharing core values.

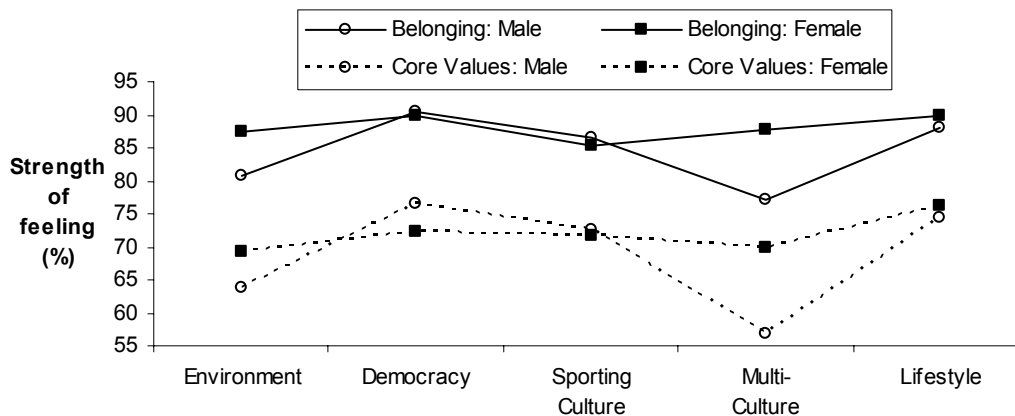


Figure 6.10: Gender x Connection to Australia.

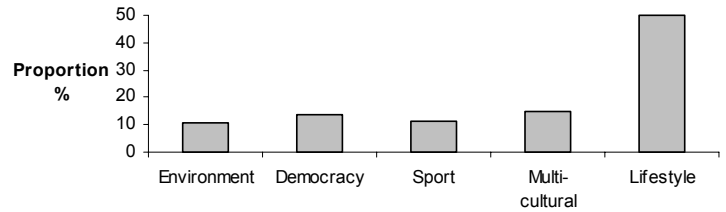
These data have identified two disaffiliated groups. Males who consider their ethnic origin to be Australian, and who feel primarily connected to Australia through either the environment or multiculturalism have a lower than normal sense of belonging and sharing the core values of Australians. While their personal wellbeing is not significantly lower in this analysis (73.7 and 72.1%) they are on the low-side and the Male-Multicultural group would probably become significantly lower with more people in the sample.

Dot Point Summary for Connection to Australia

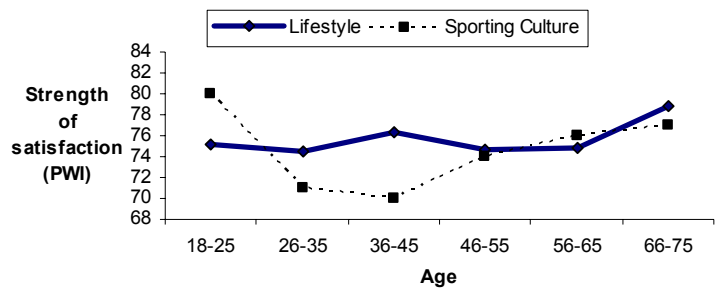
1. People were asked: “Which of the following makes you feel most connected to Australia:

- Our natural environment
- Our sense of democracy
- Our life style
- Our sporting culture
- Our multicultural society.”

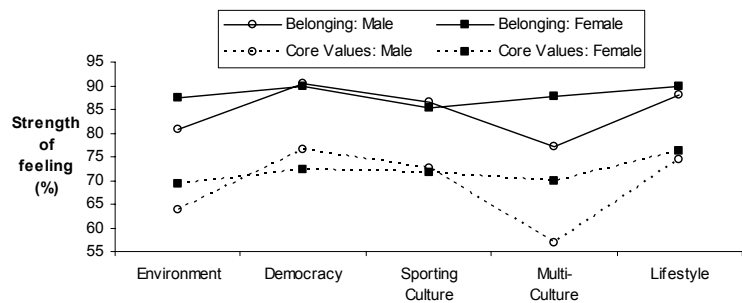
By far the most popular choice is Life Style.



2. People who feel most connected to Australia through Sporting Culture have higher than normal personal wellbeing at 18-25 years, but lower than normal wellbeing at 26-45 years.



3. Males consider their ethnic origin as Australian, and who feel most connected to Australia through multiculturalism, have a low sense of belonging in Australia and of sharing core values with Australians. Their personal wellbeing is also low. This does not apply to females.



7. Pets

We asked: “Do you have an animal as a pet?” [If ‘yes’]

“What kind of animal is your pet?” [Dog, Cat, other]

“How much do you care about your pet?”

7.1. Distribution

Over the whole sample, 60.3% of respondents have a pet (Table A7.2). Within the pet owners there are more females (64.2%) than males (56.2%) (Table A7.3).

7.2. Personal Wellbeing

The wellbeing of pet owners vs. non-owners is presented in Table A7.1. While there is no overall difference in either Index, three domain differences are apparent. Pet owners have lower satisfaction with both future and national security, and also with the state of the environment.

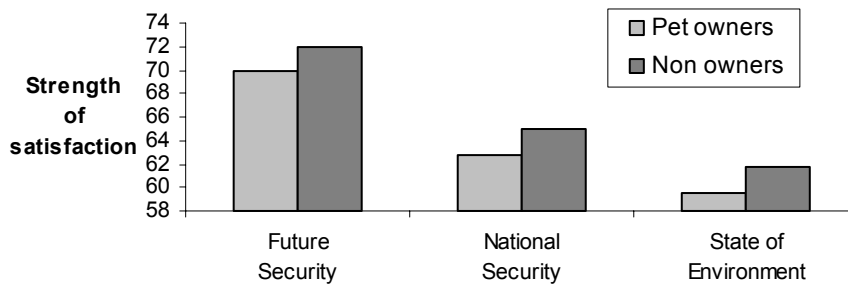


Figure 7.1: Ownership and Domains

It is possible that pet owners have a higher tendency to be anxious, hence their lower sense of future and national security. It is also notable, however, that satisfaction with safety does not differ between the two groups. Conceivably, the pet makes their owner feel safer than they would without the pet. See also 7.4.

The lower satisfaction with environment may reflect a heightened sensitivity to environmental concerns by the kind of person who is willing to live with a pet.

7.3. Income and Pets

The frequency of pet ownership (Table A7.4) tends to increase with household income as shown below.

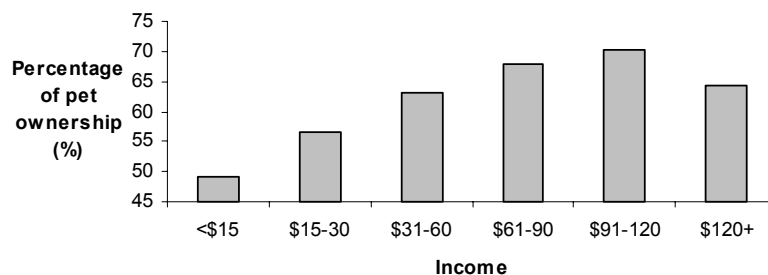


Figure 7.2: Pet Ownership x Income

There are probably many reasons for this trend. At low incomes people may be restricted in their ability to own a pet through rules imposed by the owner of their rented accommodation. They may also feel they do not have enough money to support a pet, or that a pet is too burdensome.

The upward trend in Ownership x Income may also reflect an increasing incidence of dual-income households and the presence of children. This pattern is remarkably different, however, from the income differences in the strength of caring about their pet.

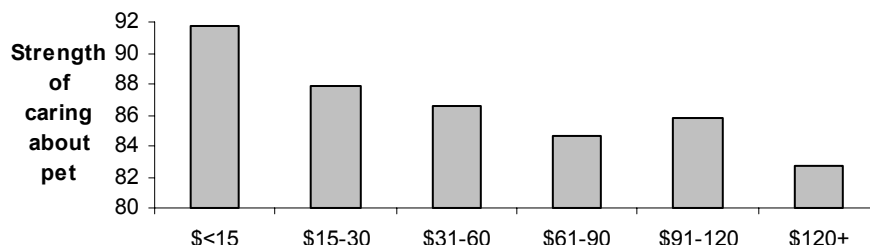


Figure 7.3: Income x Strength of Caring About Pet

It is clear from these data is that people generally feel very attached to their pets. All groups report a strength of attachment, on a 0-100 scales, greater than 82. However, the strength also varies with income, and the highest levels of attachment are found within the lowest income group (Table A7.5). This is also the most vulnerable group of people, comprising a high proportion of people who are elderly and/or live alone.

The correlation across the six income groups, between the likelihood of pet ownership (Table A7.4) and strength of caring about the pet (Table A7.5) is -0.827 ($p < 0.05$). In other words, people in low income households are less likely to own a pet, but those who do own one care more about their pet than people in high income households. Pets appear to be more important to people in low income households.

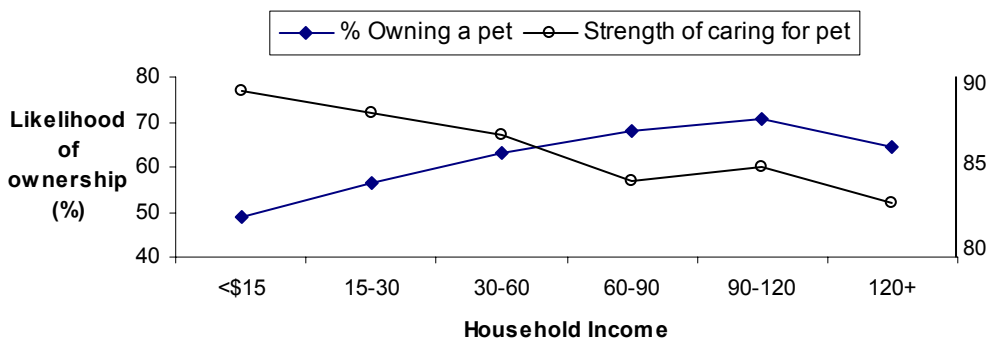


Figure 7.4: Income: Percentage Ownership vs. Strength of Caring

After adjusting for age, a significant difference remained between income and strength of attachment to pet $F(5,987) = 3.68, p = .003, \eta^2 = .02$. However, Eta squared of .02 is weak and means that income explains only 2% of the variance in attachment.

Table A7.6 shows no interaction between household income and pet ownership for any of the personal domains. In this analysis, the major interest was whether pet ownership increased satisfaction with health more in low, than in high income households. There is no evidence of such an effect.

7.4. Age and Pets: Personal Wellbeing Index Domains

Table A7.7 shows the interaction between age and pet ownership for the personal domains. The only interaction to be significant ($p=.021$) is Safety, as shown below:

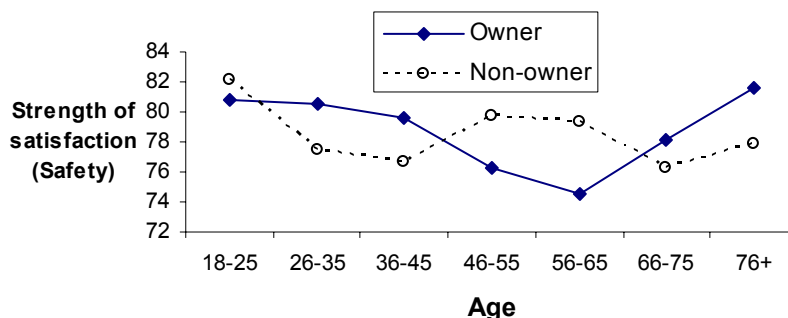


Figure 7.5: Age and Pets: Satisfaction with Safety

This weakly significant interaction is primarily caused by the 4.8% lower satisfaction with safety recorded by people aged 56-65 years. This likely indicates that the people in this age group who feel least safe maintain a pet. Clearly, however, the presence of the pet does not make them feel safer than people with no pet.

7.5. Gender and Pets: Personal Wellbeing Index Domains

Table A7.8 shows the interaction between gender and pet ownership. Significant interactions are recorded for the personal domains of Standard of Living and Relationships. These are presented below:

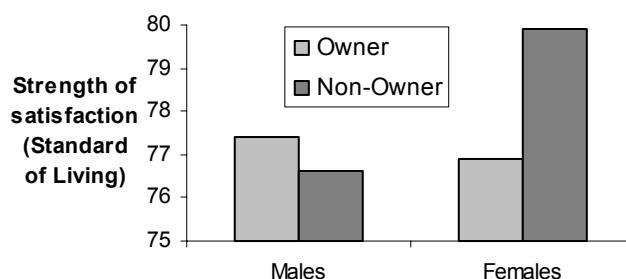


Figure 7.6: Gender and Pets: Standard of Living

Females who do not own pets have higher satisfaction with their standard of living than both female pet owners and male owners/non-owners.

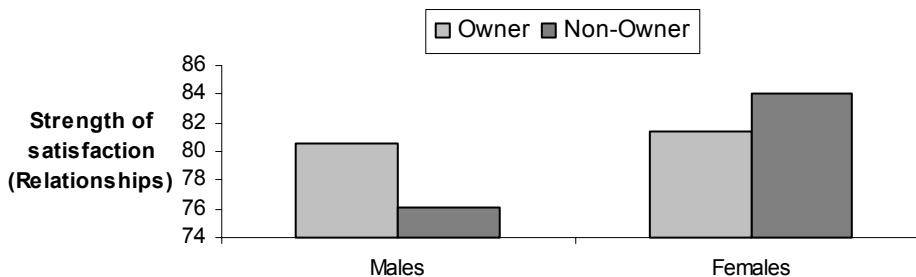


Figure 7.7: Gender and Pets: Relationships

Males who do not own pets have lower satisfaction with relationships than the other groups. Thus, either males with poor relationship skills do not own pets, or the ownership of a pet increases the chance of forming good relationships for males, but not for females.

In order to examine the domain of Relationships more closely, Tables A7.9 and A7.10 present the Income x Age x Owner/Non-Owner data for females and males respectively. These are shown Figure 7.8.

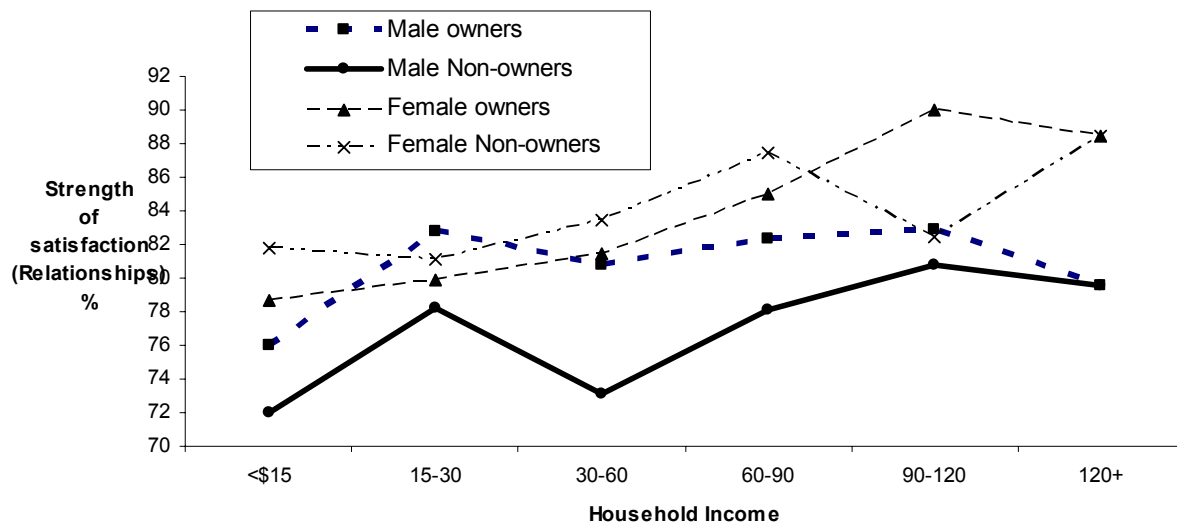


Figure 7.8: Income x Gender x Own/Not Own (Relationships)

Table A7.12 shows the Income x Pets x Gender interactions for the Personal Wellbeing Index and all domains. What can be seen is that the only domain to show a significant 3-way interaction is Relationships ($p=.028$). This shows that the odd group out are low income males who do not own pets. These people evidence low levels of satisfaction with their personal relationships. This trend is not evident in low-income males who do own pets or low income females who do not own pets. Thus, for this group alone (low income males), pet ownership is related positively to relationship satisfaction.

There are two possible explanations for this result, as has been stated. It may either be the case that low income, male, non-owners have intrinsically low satisfaction with human relationships. or it may be the case that pet ownership facilitates relationship satisfaction.

It seems unlikely that low income males have a particular personality structure that would disadvantage them in terms of making satisfactory relationships. Many in this group are elderly pensioners who either currently live with their partner or who would have had a partner earlier in their lives.

It also seems unlikely that male owners and non-owners differ in their ability to experience high satisfaction with the areas of their life. Non-owner males on high incomes have normal levels of relationship satisfaction, and low income male non-owners have normal levels of satisfaction in all areas of their lives except for relationships.

All of this leads to a hypothesis along the following lines. Males are intrinsically less skilled than females in forming supportive social relationships. This relative deficit can be masked by co-habitation with a partner or by the use of money as a facilitating resource. But in circumstances where men do not co-habit with their partner and have low income, their relative difficulty in forming close relationships is exposed. Pets, under these circumstances, constitute a facilitating device for both the initiation of human interaction (common talking point), inspire confidence in public places (they are

not alone) and allow them to feel less dependent (dissatisfied) with their relationships due to the social nature of their relationship with their pets.

Conclusion: Low Income males may benefit from having a pet.

7.6. Ethnicity

An ANOVA was run for Gender x Own/Not own x (Citizenship/Ethnicity/Place of Birth). No interactions were significant.

7.7. Gender x Age: Attachment to Pet

Table A7.11 shows a significant interaction as follows:

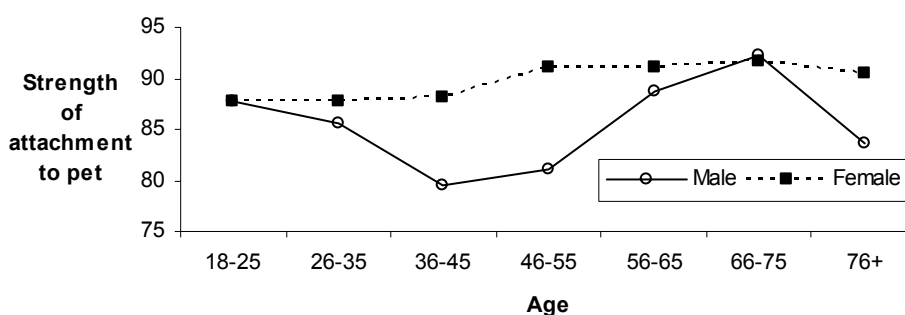


Figure 7.9: Gender x Age: Attachment to Pets

The values for the oldest groups may not be reliable since there were only 11 males and 20 females in the 76+y group. However, the remaining data seem to tell a clear story. Between the ages of 26-55 years, male (but not female) strength of attachment to their pet markedly decreases. This may be because the pet they own is in the context of a family, and that the pet relates more to the more consistent presence of the female partner and children than to the male partner.

This age-range of 36-55 years appears to harbour strong gender differences. A previous report has demonstrated such an Age x Gender difference for the Personal Wellbeing Index of people who do/do not earn money from their work.

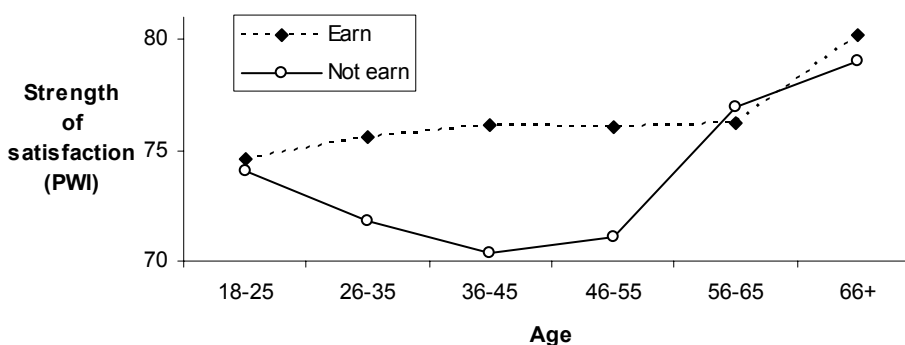


Figure 7.10: Males Earning Money x Age: **Personal Wellbeing Index**

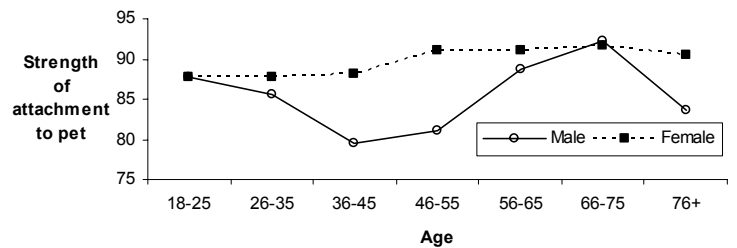
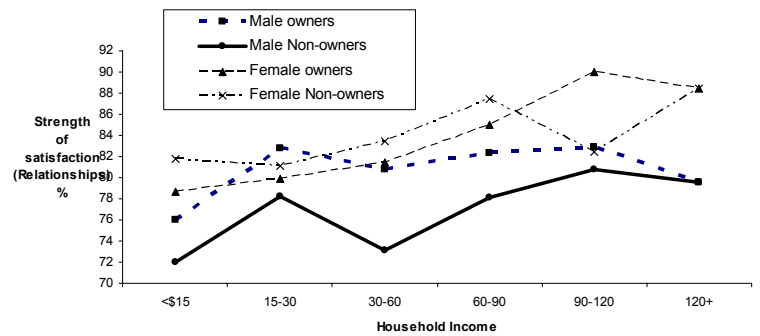
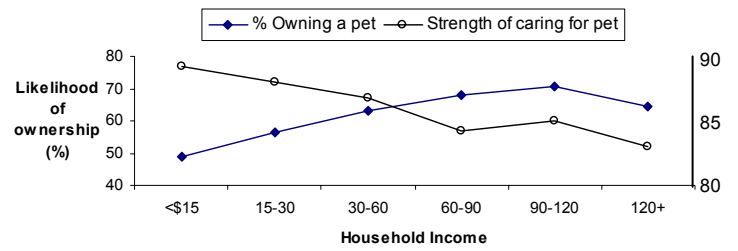
The above Figure 7.10 is copied from Report 7.0 (Figure 6.5 in that report). It shows that males (but not females – see original report) in this 36-55 age group are adversely affected by not earning money from their work. It appears that this is an especially vulnerable age for males. We have argued previously (Report 7.0) that many of these males may experience difficulty in fulfilling their

traditional social role as breadwinner and 'head of the household' with the respect accorded to such a position. Many live in households where their partner also earns money from their work. In these circumstances, females gain respect through their earning capacity in addition to their traditional role as mother and home-maker. It is possible that the low strength of pet attachment felt by 36-55y males is just a symptom of a broader malaise that affects a significant number of these people. Further data need to be collected on this group of people.

As an extension of Table A7.11, an ANOVA was run as Gender x Age x Own/Not own. The result for the Personal Wellbeing Index showed no significant interactions. It should be noted, however, that many of the cell sizes are too small to be reliable. Again, more data need to be collected.

Dot Point Summary for Pets

1. People in low income households are less likely to own a pet. However, those who are pet owners care more about their pet than owners in high income households.
2. Low income males who own a pet are more satisfied with their personal relationships than male non-owners. This does not apply to females. Low income males may find that owning a pet facilitates their formation of social relationships.
3. Between the ages of 36-55, male pet owners feel less strength of attachment to their pet. This may reflect stronger engagement with the pet by other household members, particularly children and the female partner.



8. Citizenship, Country of Birth and Ethnic Origin

We asked:

“What is your citizenship?”

“Let me ask about your ancestry: In which country were you born?”

“What is your ethnic origin?”

8.1. Distribution

Only 7.5% of the Survey 8 sample (N=149) are not Australian citizens (Table A8.1). We have no way of knowing whether these people are visitors or permanent residents. They are somewhat unlikely to be tourists, however, since the interviews were conducted by random telephone numbers and most people living in hotels or hostels would be unlikely to be contacted through this means.

In terms of country of birth, 25.2% (N=499) were born outside Australia (Table A8.1) and 45.8% (N=906) considered their ethnicity to be other than Australian.

This chapter will employ the following classifications and abbreviations:

- (a) AUS: Australia
- (b) MES: Mainly English speaking countries (New Zealand, South Africa, United Kingdom, United States of America)
- (c) NES: Non-English speaking countries, including all others.

A previous survey (#4) also split the sample along citizenship, country of birth, and ethnic lines. The data analyses reported in this Chapter use the combined data from Surveys 4 and 8 where it is possible to do so due to the use of common variables.

The breakdown of countries and national affiliations is in Table A8.2 and summarised below.

Table 10.1: Countries and National Affiliations: Summary Distribution (Survey 8)

	AUS	N	%	MES	N	%	NES	N	%
Citizenship (N = 1,973)	1783		90.4	UK	58	2.9	Europe	17	0.9
	Dual	48	2.4	NZ	27	1.4	Asia	14	0.7
				Other	9	0.5	Other	19	0.9
	Total	1831	92.8	Total	94	4.8	Total	50	2.4
Country Born (N = 1,967)	1481		75.3	UK	190	9.7	Europe	115	5.8
				NZ	42	2.1	Asia	59	3.0
				Other	17	0.9	Other	63	3.2
	Total		75.3	Total	249	12.7	Total	237	12.0
Ethnicity (N = 1,946)	959		49.3	UK	467	24.0	Europe	210	10.8
	Dual	114	5.9	NZ	31	1.6	Asia	58	3.0
				Other	15	0.8	Other	92	4.7
	Total	1,073	55.1	Total	513	26.4	Total	360	18.5

These data provide the opportunity to create some derivative statistics as follows:

Table 8.2: Derivative Groupings Based on Geographic Location

National Group	Ethnic vs Citizenship			Ethnic vs. Born			Born vs. Citizenship		
	Ethnic N	Citizen N	E/C %	Ethnic N	Born N	E/B %	Born N	Citizen N	B/C %
Australia	959	1783	x1.9		1481	64.8			x1.2
Asia	58	14	24.1		59	98.3			23.7
United Kingdom	467	58	12.4		190	x2.5			30.5
New Zealand	31	27	87.1		42	73.8			64.3
Europe	166	16	9.6		87	x1.9			18.4
East Europe	43	1	2.3		28	x1.5			3.6
India	16	2	12.5		16	100			12.5
Sri Lanka	16	9	56.3		16	100			56.3
North Africa	15	-	0.0		11	x1.4			0.0
USA	6	7	100		9				
Canada	-	-	-		-				
Pacific	1	2	100		9				
South Africa	9	2	22.2		8				
Dual Australian	114	48	42.1						
Dual Non-Australian	40	2	5.0						

The first column in Table 8.2 shows the percentage of people who remain citizens of a particular country who also regard their ethnic origin as belonging to that country. The higher the Ethnic/Citizenship value, the more the group has been willing to adopt Australian citizenship even though they acknowledge their ethnic origin as non-Australian. Only those national groups with a minimum N=15 for ethnicity are considered.

Most obvious is that, of the 1,783 Australian citizens, only 53.8% regard their ethnic origin as being Australian. This most surely exemplifies the multi-cultural nature of Australian society.

Within the other groups, the one that most tenaciously clings to their original citizenship is New Zealand, with 87% retaining the citizenship of their homeland. The closest other group is Sri Lanka where 56% retain this connection.

At the other end of the spectrum, not one person from North Africa retains their original citizenship and less than 10% of people from Europe and Eastern Europe do so. Overall, the pattern that strongly emerges, is a very strong tendency for people with non-Australian ethnic backgrounds to adopt Australian citizenship.

The second column of this Table 8.2 compares country of birth and ethnic origin. Thus, of the 1,481 people born in Australia 64.8% acknowledge this country as their ethnic origin. Or, about one third of the people born in Australia regard themselves as having a different ethnic origin. Again, this is a tribute to the success of multiculturalism.

Of those people born in Asia, 98.3% regard their ethnic origin as Asian. A quite different pattern is evident with UK born people. Here, 2.5 times as many people as were actually born in the UK regard the UK as the source of their ethnic origin. This attests to the multi-generational nature of the UK sample.

The third column of Table 8.2 shows the percentage of people who remain citizens of their country of birth. The highest is New Zealand (64.3%) and Sri Lanka (56.3%), the lowest is North Africa (0%) and Eastern Europe (3.6%).

In conclusion, while the majority of people born in other countries have adopted Australian citizenship, this is not true of the people born in New Zealand or Sri-Lanka. Moreover, 31% of people born in the UK have also retained their British citizenship.

8.2. Personal Wellbeing

Citizenship: Table A8.1 shows no difference between citizens and non-citizens in either the Personal Wellbeing Index, or in either of the two affect items. However, non-Australians are less satisfied with their Standard of Living, and more satisfied with the national domains of Environment and Social

Conditions. These differences seem consistent with new migrants who have low household income, but who appreciate the relative goodness of the natural environment and social conditions compared with their country of origin.

Country of Birth: The data on Country of Birth from Survey 8 are presented in Table A8.1, A8.3, A8.7, and the combined data in Table A8.4. When the data are separated into Australia/Other the only difference is marginally lower satisfaction in Standard of Living for the Other group (Table A8.1). However, when Other is split into NES/MES the data show a lower overall wellbeing for people born in non-English speaking countries (Table A8.4). Their level of wellbeing, however, lies well within the normal range (Figure 8.1).

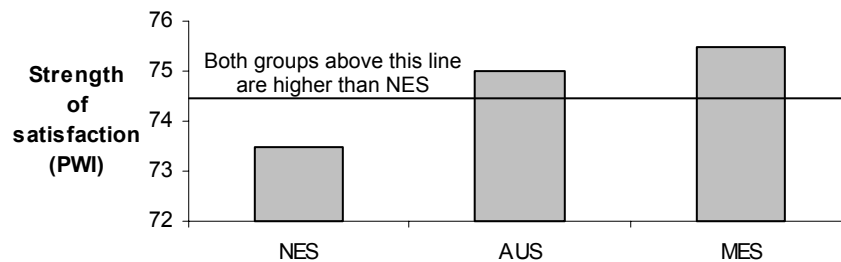


Figure 8.1: Country by Birth: Personal Wellbeing Index (combined surveys)

The above pattern is significantly repeated for only three domains as Standard of Living, Achievements, and Future Security.

Ethnicity: (ethnic origin) Tables A8.1 and A8.1a show no differences between Australians/Other on either the PWI or either of the affect items from Survey 8. The combined survey data (Table A8.18) also show no differences.

8.3. Geographic Location

Table A8.17 shows no significant effect of either Citizenship or Country of Birth on personal wellbeing or sense of belonging. Ethnicity, however, exerts a significant influence on both personal wellbeing and sense of belonging (see also Table A8.20). In terms of the low Personal Wellbeing Index score for India (67.0%) the N=16 makes interpretation marginally reliable. The other results from Table A8.17 are shown below.

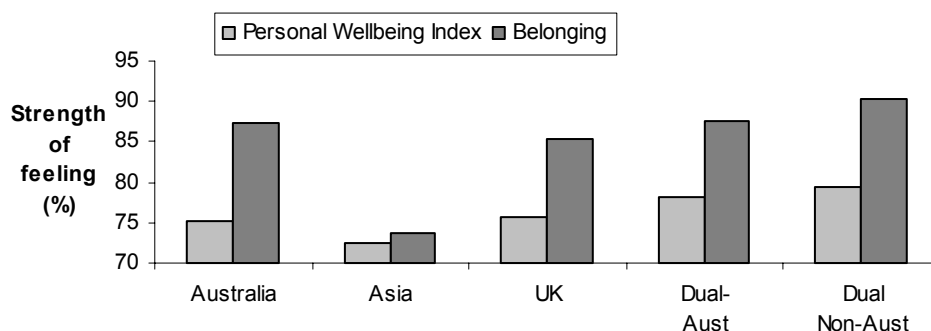


Figure 8.2: Country of Birth: Personal Wellbeing Index and Belonging

As can be seen, people born in Asia record lower levels of personal wellbeing and sense of belonging in Australia. These results need to be cautiously interpreted however. We have recently reported a response bias on relation to people in Hong Kong (Lau & Cummins) such that they naturally select lower values on scales of wellbeing. Thus, these lower values in Australia by people born in Asia require further investigation and cannot be accepted at face value.

The results that do stand out, however, are people who claim dual ethnicity. No matter whether these people claim dual Australian ethnicity (N=112) or dual non-Australian ethnicity (N=39) their scores on both personal wellbeing and sense of belonging are very high. It is not clear why dual non-Australian ethnicity would confer such an advantage.

8.4. National Wellbeing

Citizenship: Table A8.1 shows no difference in the National Wellbeing Index between Australian and Non-Australian citizens. However, the non-Australian citizens have higher satisfaction with State of the Environment and Social Conditions.

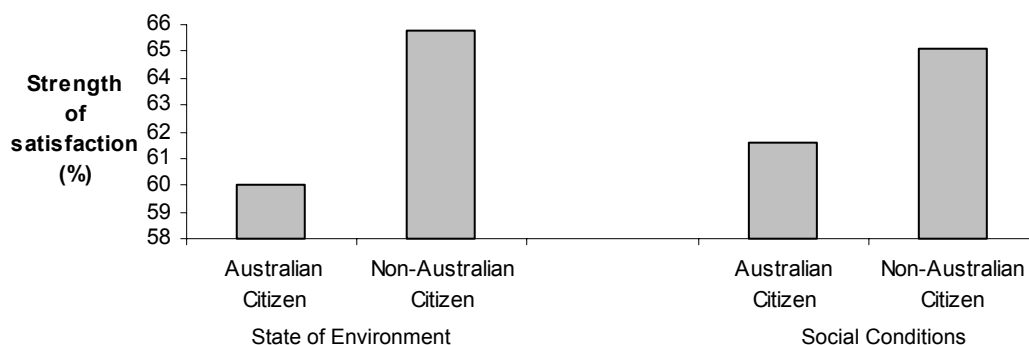


Figure 8.3: Citizenship: National Domains

Country of Birth: The data on country of birth from Survey 8 are presented in Tables A8.1, A8.1a, A8.5, and from the combined surveys in Table A8.6.

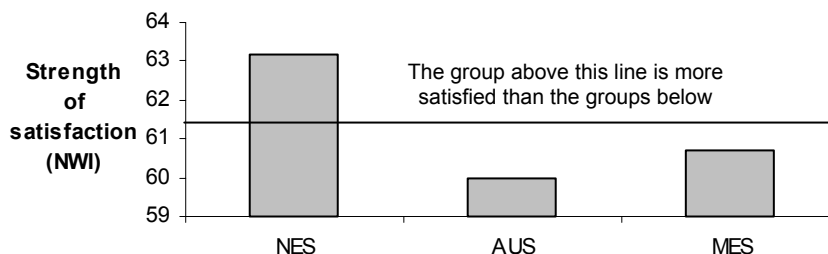


Figure 8.4: Country of Birth: National Wellbeing Index (combined samples)

The people born in non-English speaking countries have a higher level of national wellbeing. This is manifest in the National Wellbeing Index and three domains as Environment, Social Conditions, and National Security. It seems most likely that these people are making positive comparisons between Australia as a place to live and their country of birth. It is also possible that they have a more collectivist orientation than do native born Australians.

It is interesting that there is no difference between the three groups in either of the personal domains that imply satisfaction with the connection to other people (Relationships and Community Connection: Table A8.4). This is reinforced by the lack of any group difference in satisfaction with neighbourhood (Table A8.7).

Life in Australia, however, shows a pattern of advantage to people born in Australia (Table A8.1, A8.1a, Figure 10.4).

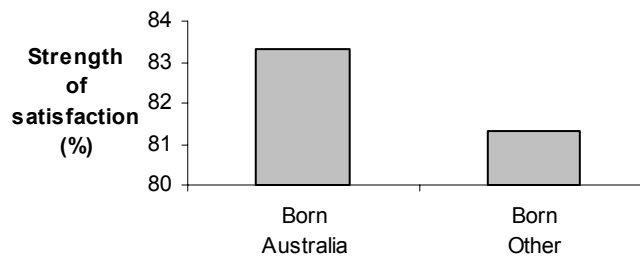


Figure 8.5: Country of Birth: Life in Australia

Ethnicity: The data from Survey 8 (Table A8.1) and the combined survey data (Table A8.19) show the same pattern as for Country of Birth except that there is no difference in Life in Australia. The three types of affiliation grouping are brought together in Figure 10.5.

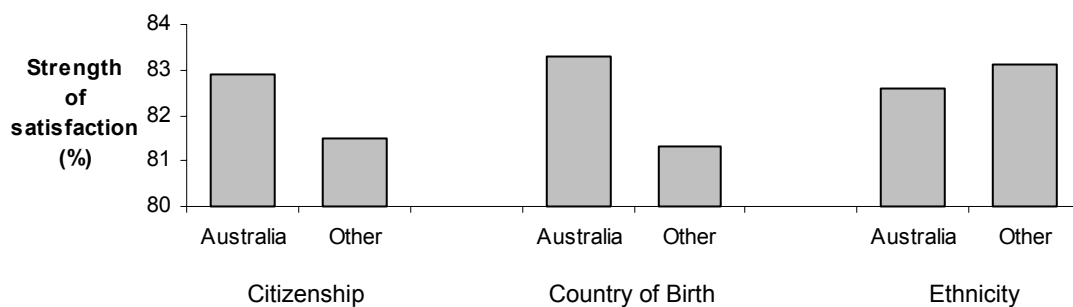


Figure 8.6: National Affiliation Groups: Life in Australia

While the citizenship and Country of Birth affiliation groups show much the same pattern, only the latter is significant (Table A8.1; $p=.03$). Moreover, the pattern changes considerably in the affiliation group of Ethnicity, where the 'Other' group has marginally (but not significantly) higher satisfaction.

Table A8.1a splits the non-Australian Ethnic group in those born or not born in Australia. t-tests compare the two born/not born in Australia groups. It is evident that there is little difference between them. The non-born in Australia group has marginally lower satisfaction with Standard of Living. They do, however, have a substantially lower satisfaction with Life in Australia (4.2% difference) and Belonging in Australia (8.7% difference).

In conclusion, the differences in the personal wellbeing of people who have different citizenship, ethnicity, and place of birth from Australia are generally trivial. All of these groupings have a normal range of subjective wellbeing. Moreover, people who have come to Australia from non-English speaking cultures tend to have higher satisfaction with aspects of national wellbeing.

8.5. Sense of Belonging in Australia

Citizenship: Non-Australian citizens feel that they share the core values of Australians equally with Australian citizens, yet they feel a much reduced level of belonging (Table A8.1).

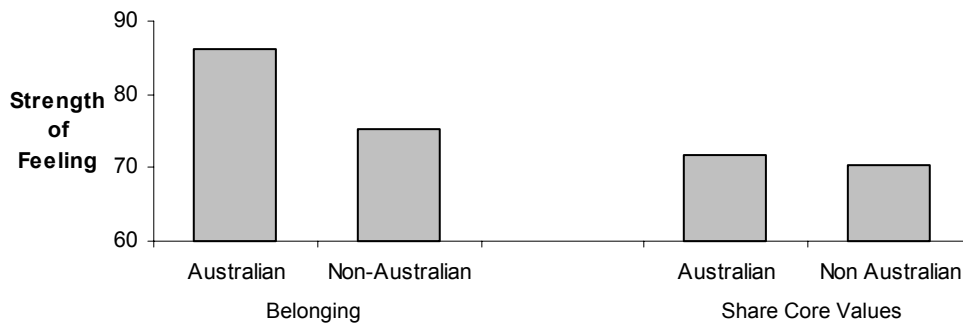


Figure 8.7: Citizenship and Attachment to Australia

It is notable that this 10.8% deficit in Belonging has not been translated into disadvantaged personal wellbeing. People must be able to rationalise their lower sense of belonging, perhaps because they are visitors or because they feel their sense of belonging will increase over time.

Country of Birth and Ethnicity: Both the Country of Birth and Ethnicity groups show a different pattern from the Citizenship group in that they also show a deficit in terms of Share Core Values. Each of the four Australian/Other comparisons in Figure 10.7 is significant.

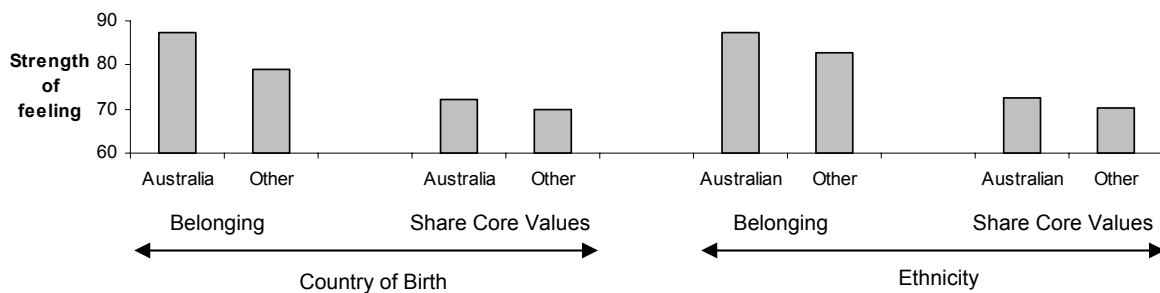


Figure 8.8: Birth and Ethnicity: Attachment to Australia

In conclusion, while non-Australians tend to feel a lower sense of belonging and sharing core values, these feelings are not powerful enough to damage their overall wellbeing.

8.6. Reasons for Connection and Wellbeing

The reasons for feeling connected to Australia for each of the Country of birth groups is given in Table A8.12 (Country of birth) and Table A8.24 (Ethnicity). The two distributions show a similar profile. The proportions of each group nominating Natural environment and Democracy were similar. The other three reasons for feeling connected differed between the groups.

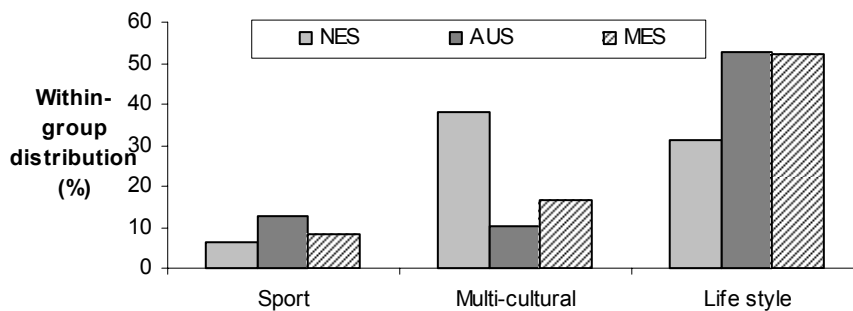


Figure 8.9: Country of Birth: Reason for Connection to Australia (Survey 8)

The sense of connection through sport is twice as popular among AUS as NES (12.5% vs. 6.1%). Clearly, however, this is a minority reason for connection for all groups.

The major group differences lie in two reasons for feeling connected. The most popular choice for people born in non-English speaking countries is multiculturalism. This attracted 38.2% of the NES group compared with 10.4% and 16.7% of the others. In contrast, both the AUS and MES groups nominated Lifestyle as their most popular choice (52%) compared with 31.3% for NES.

In terms of Country of birth, the NES clearly have a substantially lower sense of belonging (10.4% difference: Table A8.7). Their feeling of sharing core values is in the same direction but fails to reach significance ($p=.082$). An increased sample size would almost certainly allow this to reach significance.

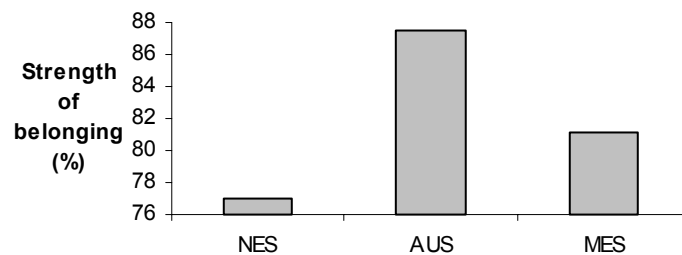


Figure 8.10: Country of Birth: Strength of Belong (Survey 8)

Table A8.16 explores whether any of the reasons for feeling most connected to Australia are linked to personal wellbeing within any of the AUS/MES/NES groups. No such relationship is apparent.

In summary, all ethnic, birth, and citizenship groups nominate Life Style as the dominant reason for their feelings of connection to Australia. While these groups differ in their preference for other reasons for connection, these differences have a very weak relationship to wellbeing.

8.7. Household Income

The distribution of income for country of birth is shown in Table A8.8 for Survey 8 and Table A8.9 for the combined survey data. The percentage below are calculated within country of birth group.

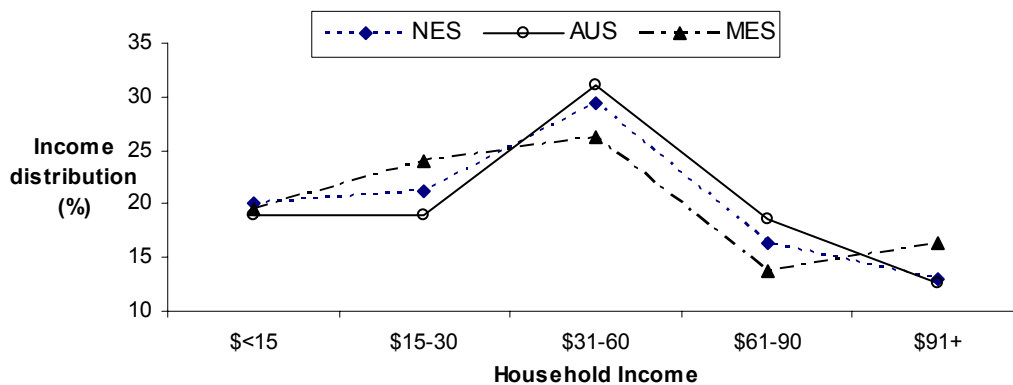


Figure 8.11: Country of Birth: Income Distribution (Combined Surveys)

There is only a marginally significant difference between these household distributions ($p=.03$), with slightly more MES in the highest income bracket. There is no evidence that NES are financially disadvantaged with respect to AUS.

Table A8.21 shows no difference in household income between the Ethnicity groupings.

8.8. Gender

The distribution of gender between the combined surveys for Country of Birth is given in Table A8.10. Approximately equal numbers of males and females are found in each country of birth group. This is also true of the Ethnicity group (Table A8.22).

Our general surveys always show a higher Personal Wellbeing Index for females. The Country of Birth x Gender differences are shown in Table A8.14 and below.

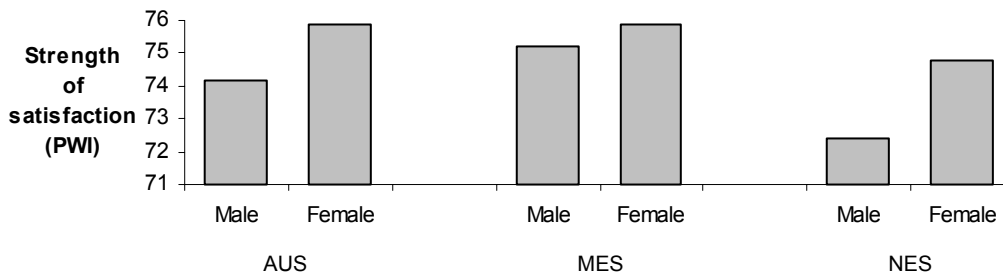


Figure 8.12: Gender x Country of Birth: Personal Wellbeing Index

As can be seen, the disadvantaged group are NES males. It is common for us to find that males under difficult circumstances are more vulnerable than females.

8.9. Age

The distribution of age between each of the country of birth groups (combined surveys) is provided in Table A8.11. The difference is significant and shown below. The percentages are calculated within each country group.

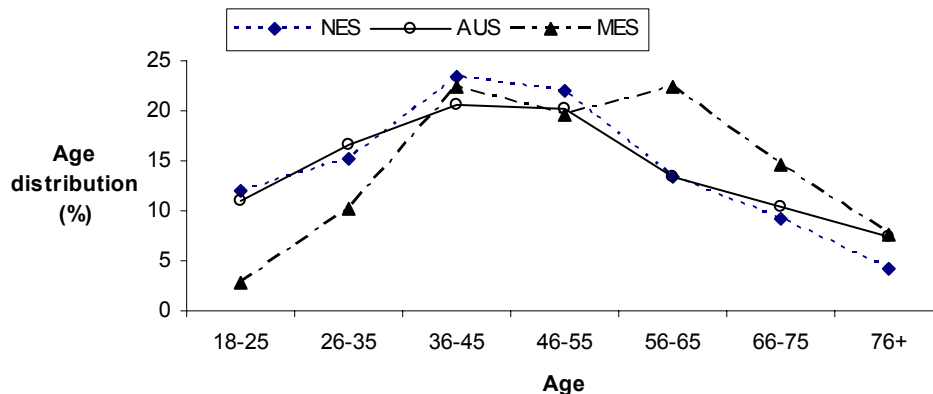


Figure 8.13: Country of Birth: Age Distribution (combined sample)

While the NES and AUS have a very similar age profile, the MES sample is considerably older. In particular this group has only 2.9% of its members in the 18-25y age range (compared with 11.1 and 12.2% in the others) and has 22.5% aged 56-65y (compared with 13.5% in the others). This older peak in the MES sample probably corresponds with the arrival of young children from a wave of post-WW2 migration to Australia from the UK. In any event it means that age must be used as a covariate for all country of birth comparisons.

The ethnicity age distribution is similar (Table A8.23).

The Personal Wellbeing Index values for Country of Birth x Age are given in Table A8.16 for Survey 8 and A8.15 for the combined survey data. The AUS group shows the Personal Wellbeing Index to be higher in the older age groups, as has been reported previously for the whole sample. A similar trend is evident within the NES and MES groups but the cell numbers are too small to yield significance.

8.10. Pets

The NES group are least likely to own a pet (Table A8.13 for Country of Birth and Table A8.25 for Ethnicity).

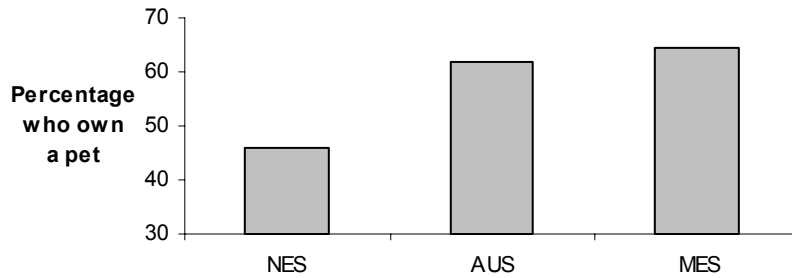
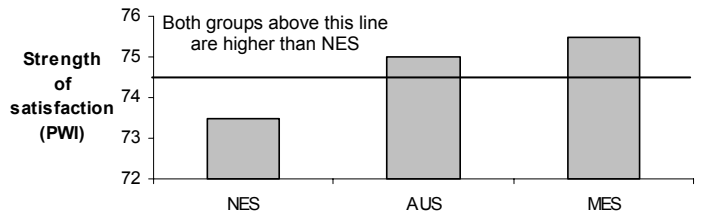


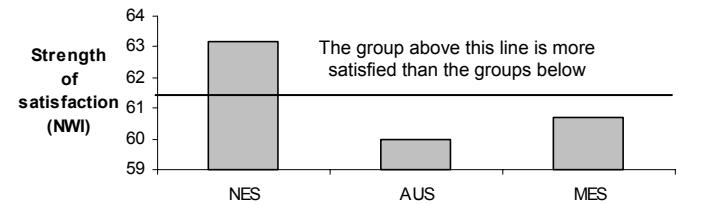
Figure 8.14: Country of Birth: Percentage who own a Pet (Survey 8)

Dot Point Summary for Citizenship, Ancestry and Ethnic Origin

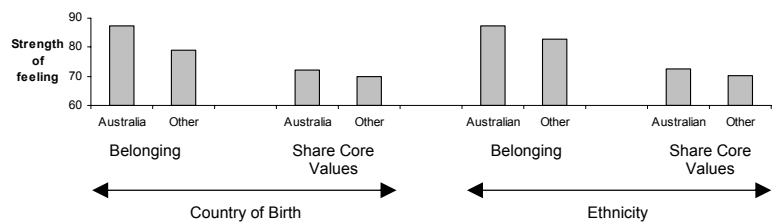
1. People from different ethnic groups show no differences in personal wellbeing. People born in non-English speaking countries have lower personal wellbeing, but have a level that lies well within the normal range.



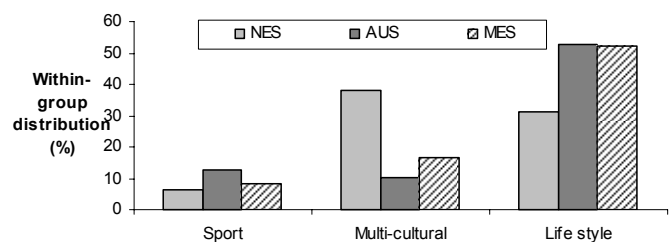
2. People from different ethnic origins and those people born in non-English speaking countries have higher national wellbeing. They are particularly more satisfied with the Environment, Social Conditions, and National Security



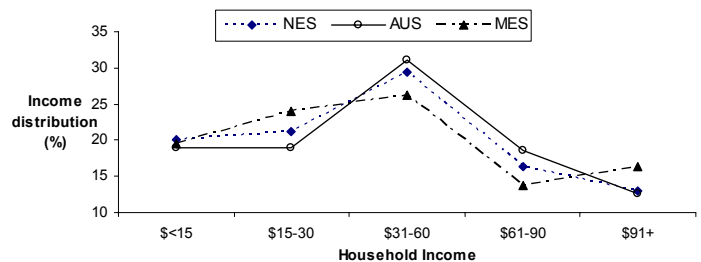
3. People born outside Australia and those who have non-Australian ethnicity feel a lower sense of belonging and lower sharing of core values than native Australians.



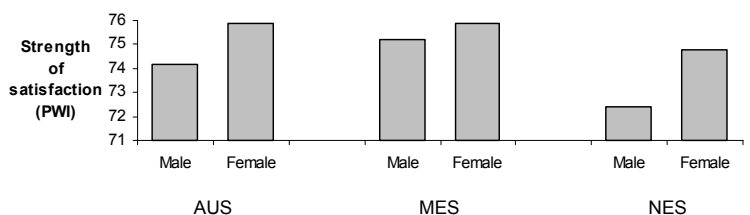
4. Most people feel connected to Australia through their life style. Fewer people born in non-English speaking countries feel connected to Australia through Sport, and more feel connected through multiculturalism.



5. There is very little difference in the household income of people from different citizenship, ethnic, and country of both groups.



6. The personal wellbeing of males (but not females) born in non-English speaking countries is lower than for other groups, but still lies within the normal range.



9. Bali Bombing and September 11 Recall Sadness

“In the terrorist’s cold calculations, producing casualties is a secondary consideration to the more important goal: that the news of the horrific event gets widely disseminated and engenders a state of fear and anxiety throughout the population. An appropriate response, therefore, requires a determined effort to help the population withstand such attacks on the people. We must defend the intangible.” Susser et al., 2002 (p. 56).

The second survey conducted over the period 19th–30th September 2001, included questions about the impact of the US terrorist attacks on Australians. People were asked “What about the September 11 terrorist attack in America? Have they made you feel unhappier or sadder than normal? (If ‘yes’) How strong would you rate this sadness?”

In October 2002, terrorists detonated two bombs in Bali night clubs killing many young Australians. In the November 2002 survey the above question was repeated, with the phrase ‘recent terrorist attacks in Bali’ replacing ‘September 11 terrorist attack in America’. This was repeated in the February and May 2003 surveys. In the August 2003 survey the question reverted to ‘September 11’.

9.1. Frequency of Sadness when Recalling Terrorist Attacks

The percentage of people reporting that they felt sad when recalling these events is shown in Table A9.1. The comparable percentages are shown in Figure 9.1 below.

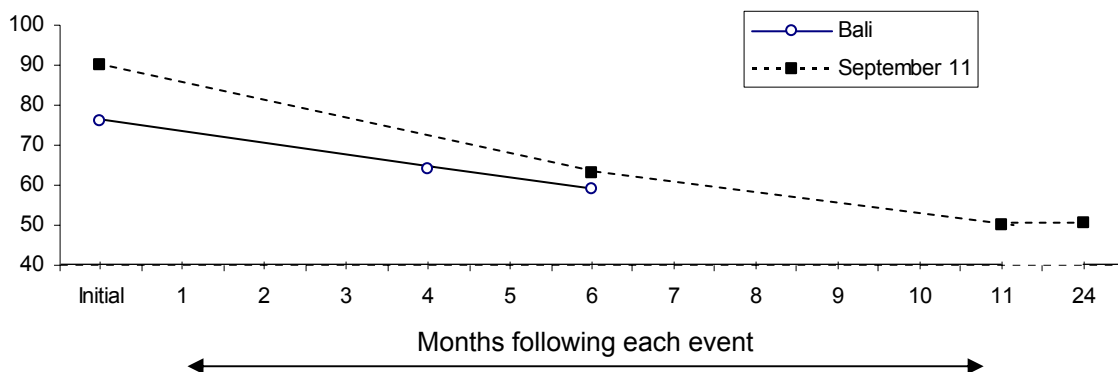


Figure 9.1: Comparable Percentages of People Feeling Sad when Recalling the Terrorist Attacks.

This Figure indicates that the initial impact of September 11 was higher than Bali (90% vs 76% of people recalled with sadness). Moreover, the rate at which this sadness dissipated following September 11 was faster as shown by the relative slopes of the lines in the first six months after each event. If the difference between the initial value and the survey following is calculated, this yields a 27% decrease for September 11 and a 12 % decrease for the Bali Bombing. Dividing this by the number of intervening months yields a monthly decrease of 4.5% for September 11 and 3.0% for Bali. This finding is consistent with a more rapid adaptation to intense experience. The trend is confirmed by the rate of decrease in the 6 to 11 month period following September 11 which is 2.6% per month, and an even slower rate of decrease (1.4%) in the 4 to 7 month period following Bali.

This indicates a process of adaptation to the attacks and may go some way to explaining the lower number of people responding that they felt sadder than normal when recalling Bali compared with the number immediately following S11. If people had adapted to such feelings of sadness, this adaptation would be expected to generalise to another, similar event.

As can also be seen from Figure 9.1, the proportion of people reporting that recalling September 11 made them feel ‘unhappier or sadder than normal’ had reduced from an initial 91% immediately following the attack to 50% about one year later. Now, two years after the event, this proportion remains at 50% and appears to have stabilised.

9.2. Gender Differences in the Number of People Recalling with Sadness

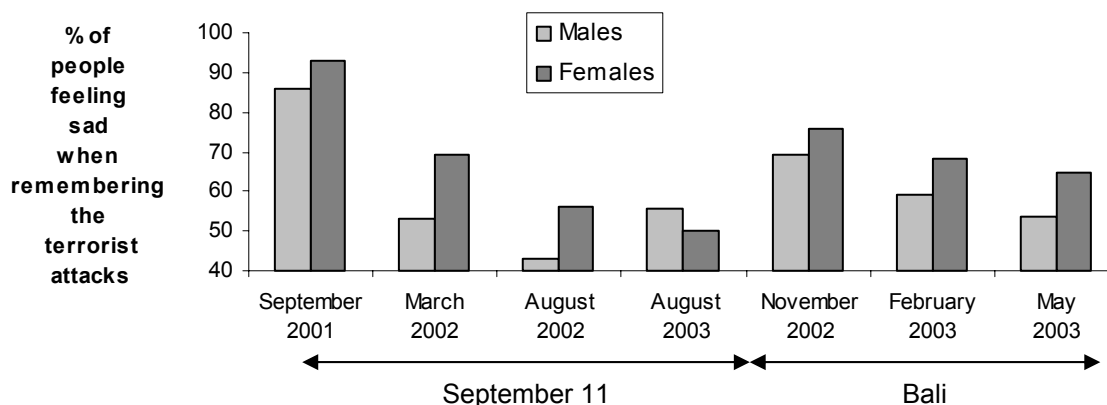


Figure 9.2: Gender differences in percentage of people feeling sad when remembering the attacks

The percentages in Figure 9.2 represent the percentage of all males or females in each survey who responded they felt sad when recalling each event (Table A9.1). It can be seen that prior to Survey 8, consistently fewer males than females respond ‘Yes’ to this question. However, in the most recent survey rather more males (55.6%) than females (50.3%) recall September 11 with sadness. The reason for this anomalous change is not known.

9.3. Age Differences in the Number of People Recalling with Sadness

The data for the combined Surveys 2-8 are presented below:

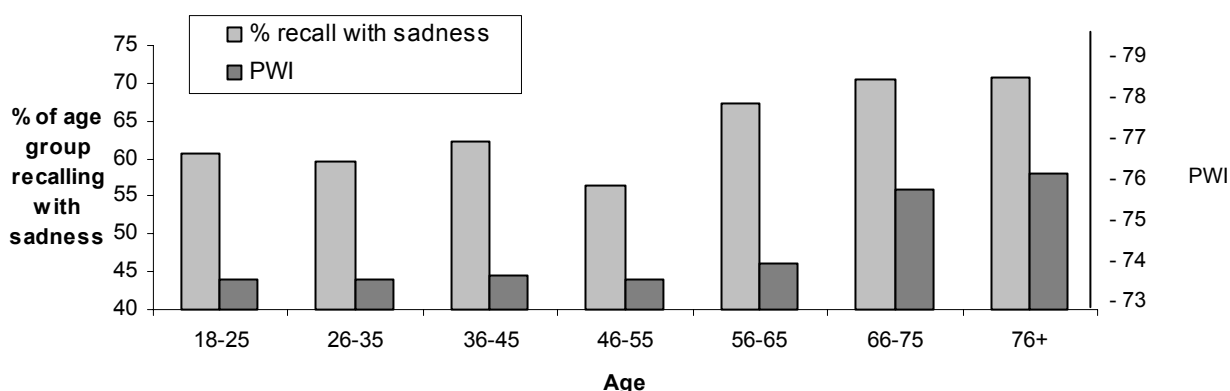


Figure 9.3: Age x Recall with Sadness (combined surveys)

The data in Figure 9.3 have come from Table A9.2 (% of each age group responding with recall sadness) and Table A5.1 (Personal Wellbeing Index for each age group). The correlation between these two variables across the seven age groups is significant ($df=5, r=.955, p<.01$). In other words, older people are more likely to say they respond to September 11 with sadness and they register higher levels of personal wellbeing. This may be indicative of an increased incidence of social acquiescent responding among older people. The possibility is further discussed in Section 5.3.

9.4. Gender x Age on the Number of People who Recall with Sadness

Table A9.2 indicates no age x gender interaction in the number of people who recall Bali with sadness.

9.5. Income and the Number of People who Recall with Sadness

The data for Figure 9.4 are from the totals across all surveys shown in Table A9.3.

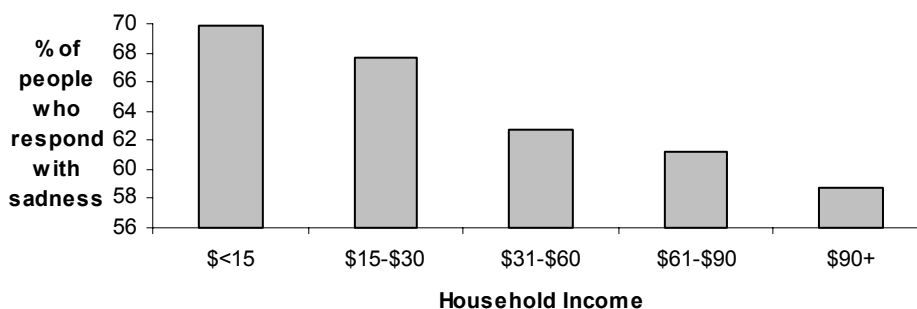


Figure 9.4: Income Effects on Recall Sadness: Distribution

The decreasing incidence with income may well be an age effect, since the low income groups contain a disproportionate number of people who are elderly.

9.6. Strength of Recall Sadness

If people respond ‘Yes’ to the sadness question they are asked “How strong would you rate this sadness?” The mean values are given in Table A9.4.

Across the seven surveys, the strength of recall sadness has varied by only 2.7% (from 69.2% to 71.9%). There is a marginally significant difference across these surveys caused by S2>S4 ($p=.028$). This indicates that, as might be expected, the fall in the number of people who feel sad when recalling September 11 is accompanied by a decrease in the intensity of the felt sadness. However, this difference of 2.7% seems a remarkably small degree of change when the number of people reporting they feel saddened when recalling S11 has fluctuated between 90% (S2) and 50% (S4 and S8). Moreover, there is no difference between S2 (September 11) and S5 (Bali) ($t(3275) = 1.035, p=.295$) despite the proportion of people feeling saddened being very different immediately following the two attacks (Table A9.1).

9.7. Income and Strength of Sadness

The data from the seven relevant surveys are presented in Table A9.7 and are shown merged across all surveys below:

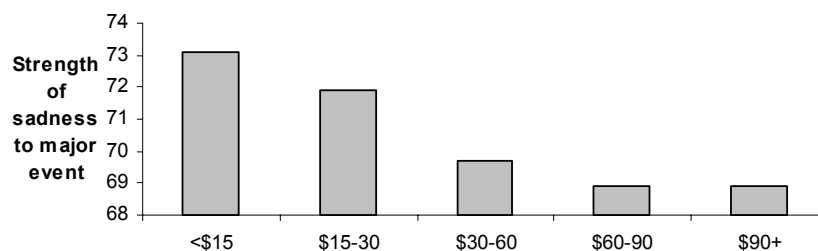


Figure 9.5: Strength of Sadness: Income Differences

What is apparent from the analysis reported in Table A9.7 is that the strength of sadness reported by people living in households earning <\$30,000 is higher than for households \$31,000 and above. In other words, people in the lowest income group are responding to these major events with a greater intensity of sadness. This effect remains significant when age and gender are used as a covariates (Table A9.7).

9.8. Age and Strength of Sadness

The combined data from the seven relevant surveys are presented in Table A9.5 and shown below.

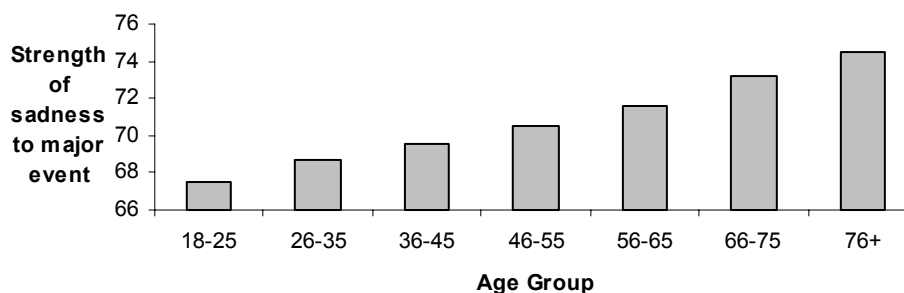


Figure 9.6: Strength of Sadness: Age

Strength of response sadness to the terrorist attacks seems to increase linearly with age. The differences between one age group and the next, starting with the youngest group, are 1.2%, 0.8%, 1.0%, 1.1%, 1.6%, 1.3%. This is a remarkable level of consistency showing that the strength of response sadness increases by approximately one percent per decade. This is not an income effect. The pattern remains significant when income and gender are used as covariates (Table A9.5).

9.9. Gender and Strength of Sadness

Table A9.6 shows that females show a higher level of response sadness than males.

9.10. Social Desirability Responding

People may respond 'Yes' to the question of recall sadness for one of two reasons. The most obvious is that people feel a deep sense of personal sadness as a consequence of both events. This has always seemed unlikely since there has been no matching downward trend in the Personal Wellbeing Index. The second reason is that people are responding in a socially desirable way to a question concerning human tragedy. In these terms their response would be expected to be little different to questions concerning sadness when recalling the Holocaust or the assassination of President Kennedy. In order to think about the factors underlying the observed change in response frequency and intensity, a number of possibilities can be considered as follows:

- (a) Consider the possibility that people have a threshold for reporting that something makes them feel sad. Then, because people will have different threshold values, they will differ in the intensity of sadness they need to experience in order to agree with the statement 'Yes, I feel sadder than normal when I recall September 11'. Some people will agree with this statement when they feel low intensities of sadness, others will need to experience a high intensity of sadness before they will agree. Because of this, presuming that the felt intensity of sadness is maximal shortly after the event, at this time the maximal number of people will report recall sadness. This is because the felt intensity of sadness exceeds the minimum level required for reporting this emotion even in people with high thresholds. Then, over time, fewer of these high threshold people will experience recall sadness as the intensity of their emotional response

subsides and the intensity fails to exceed their threshold. Consequently, both the number of people and the average reported intensity of sadness decrease over time.

- (b) An alternative possibility is that the intensity of recall sadness that people require in order to acknowledge they have experienced such an event is fairly constant. There is a common threshold. Under these conditions the relationship between the number of people reporting the experience, and the average intensity of that experience, should show a biphasic response. In the initial stages following the event there should be a linear relationship between the number of people reporting they recall with sadness and the intensity of their reported experience. However, as the intensity falls below the threshold a new phenomenon will be seen. Here, the number of people will keep falling as fewer people experience threshold intensity, but the average reported intensity will level-off because the people who remain are reporting an intensity close to the common threshold.
- (c) Another possibility is that there is no threshold for reporting recall sadness. Anyone who feels any degree of sadness will agree that recalling September 11 makes them feel sadder than normal. In this situation both the number of people and the average reported intensity of sadness will be maximal shortly after the event. Both measures will then decrease together over time as fewer people experience any recall sadness at all.

In fact, the data show none of the above patterns. While the proportion of people reporting they experience recall sadness has decreased from 91% to 50% of the population, the average level of recall sadness has shown little systematic variation over time (Section 9.6). If the seven survey mean scores are used as data they have a mean of 70.52% and a standard deviation of 0.90%. There has, however, been a systematic decrease in the magnitude of the standard deviations (Table 9.4), as shown below.

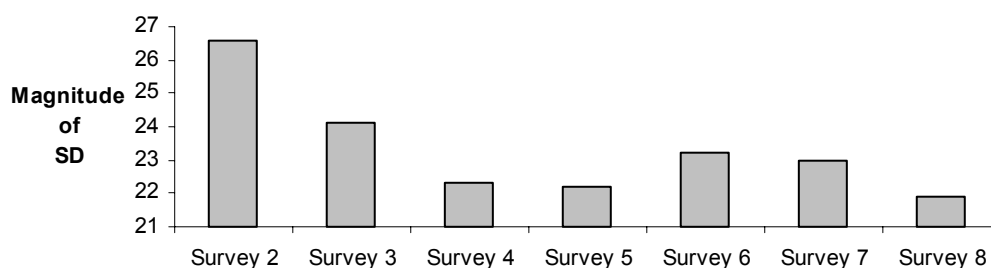


Figure 9.7: Strength of Sadness: Standard Deviations

As can be seen there was a sharp fall in the within-survey variance over the first year following September 11. Over this period the intensity of recall sadness also marginally decreased ($S2 > S4$, $p = .028$). Since then it has stabilised.

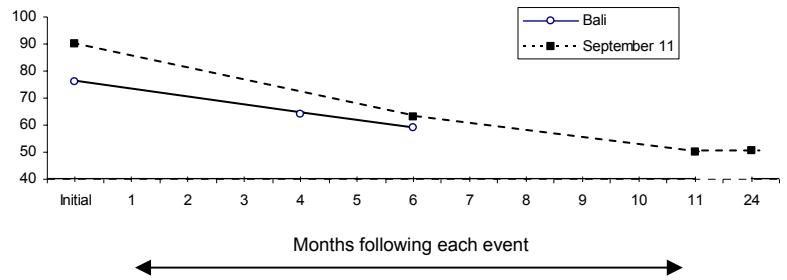
One explanation for all of these results is as follows. In the period immediately following September 11 the people who acknowledged that recalling the event made them feel sadder than normal were of two types. A minority of these people felt a genuine personal sadness when making the recall. They experienced a high intensity of sadness and increased the sample variance through their contribution of high scores. Over the following year this group of people virtually disappeared. The great majority of people, however, felt no personal sadness even immediately following September 11, but recognised the need to respond to the question in a socially appropriate manner. This social desirability responding accounts for the majority response at all times. Thus, the difference in average sadness intensity between Survey 2 and Survey 4 is just 2.7% and the current average value of around 70% represents the intensity people have in mind as a socially acceptable level of sadness to report.

- (d) If the strength of sadness is driven by perceptions of social desirability, then such sadness should have little relationship with personal wellbeing. It might, however, correlate with general levels of anxiety. This is because generally anxious people are likely to have a stronger propensity to engage in social desirability responding in order to contain their anxiety. The data are consistent with these predictions. The correlation between recall sadness and the personal Wellbeing Index is non-significant, whereas with world anxiety it is .35 (Report 7.0: Table A9.3).

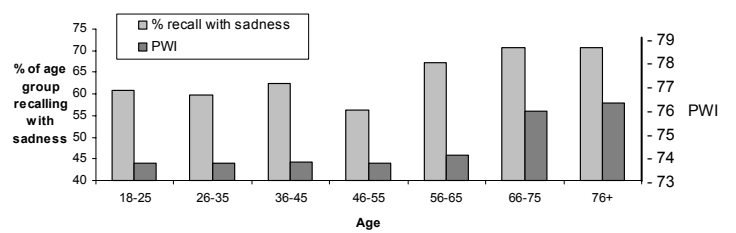
It can be concluded that the record of recalled sadness to the terrorist events represents the changing incidence of social desirability responding. Moreover, people who respond in this way regard 70 as an appropriate level of sadness to express in order to be perceived as responding in a socially acceptable manner (Table A9.4).

Dot Point Summary for Terrorist Attack Recall Sadness

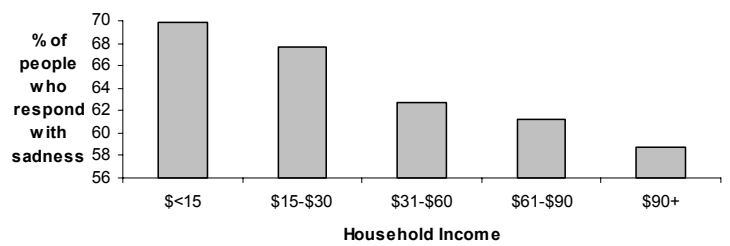
1. The percentage of people recalling September 11 with sadness has stabilised at about 50%.



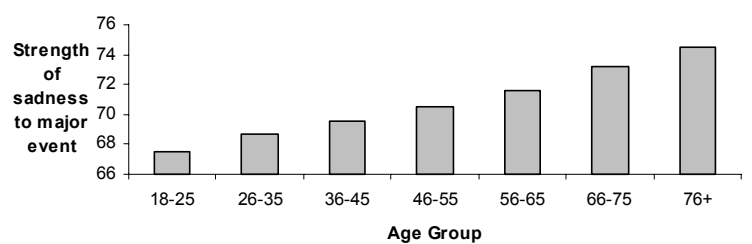
2. Age-related changes in the incidence of recall sadness match age-related increases in personal wellbeing ($r=.96$). These changes may reflect the operation of a common process, such as response acquiescence (see Section 5.3).



3. Strength of recall sadness decreases with income.



4. Strength of recall sadness increases with age.



10. Life Events

10.1. Occurrence of Personal Life Events

Prior to any mention of terrorist attacks or war, people are asked “Has anything happened to you recently causing you to feel happier or sadder than normal?” If they answer ‘Yes’, they are then asked whether this was a happy or a sad event, and to ‘rate its influence on a 0 to 10 scale, from very weak to very strong’.

If people were to be severely interrogated along these lines virtually everybody would recall an event of some kind that made them happier or sadder than normal. The time frame is loose (‘recently’) and the point of reference (‘normal’) is open to interpretation. But respondents are not interrogated, and if they answer that they have experienced no such event, the interviewer proceeds to the next item. Because of this, the item is either measuring people’s sensitivity to the positive and negative events in their lives, or the extent to which people are willing to identify such events. In either case it is measuring the direction of people’s attention to the positive or negative side of their life.

On average across the surveys, about half of the people sampled state they have experienced such an event (Table A10.1). The proportion, of people reporting a personal life event has peaked twice (Figure 10.1). The proportion at S6 (pre-Iraq war) (54.6%) is almost the same as that immediately following September 11 (S2) (55.0%). This allows a hypothesis that these two major events have increased people’s sensitivity to the events in their lives. One test for this is to use the eight percentage values from the eight surveys as data to create a mean (49.34) and standard deviation (4.15) (Table A10.1a). The results are shown in Figure 10.1.

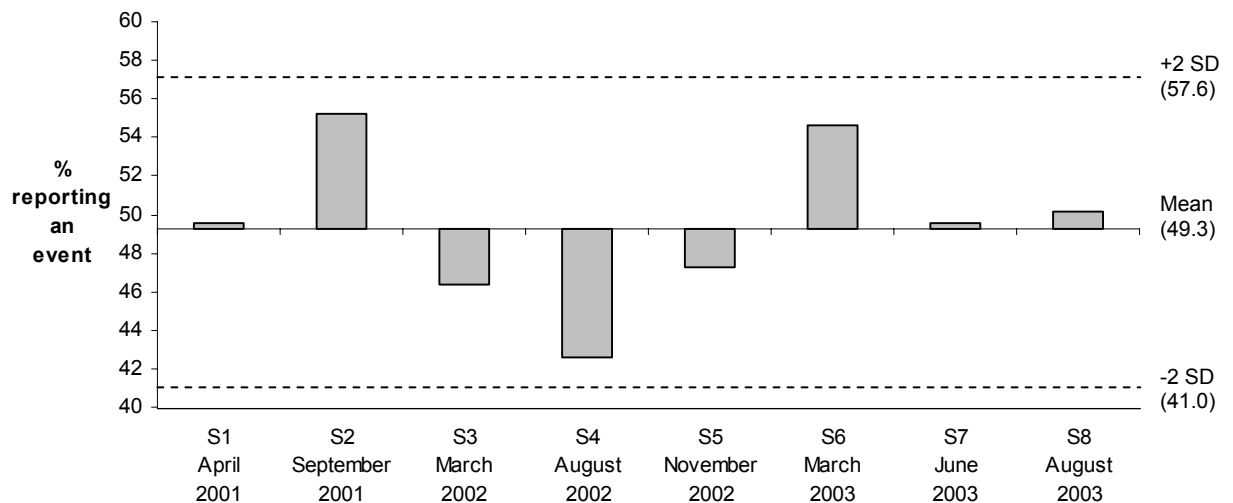


Figure 10.1: Percentage of Respondents Reporting the Experience of a Personal Life Event

There is a 12.6% range between the surveys in the percentage of people reporting a personal life event. While none of the individual values lie outside the two standard deviation range, this is likely to change as more data points are added by future surveys and the SD decreases. As it stands, three percentages stand out (Figure 10.1). Two are markedly higher than the mean, and correspond to the period immediately following September 11 (S2) and immediately preceding the Iraq war (S6). Thus, it may be that increased anxiety associated with such events also increased people’s sensitivity to events in their own lives.

The drop in reported events at S4 is more difficult to interpret. It may simply be a value that remains within the normal range. This will become clearer if future scores lie below the current mean.

The breakdown into happy and sad events is presented below:

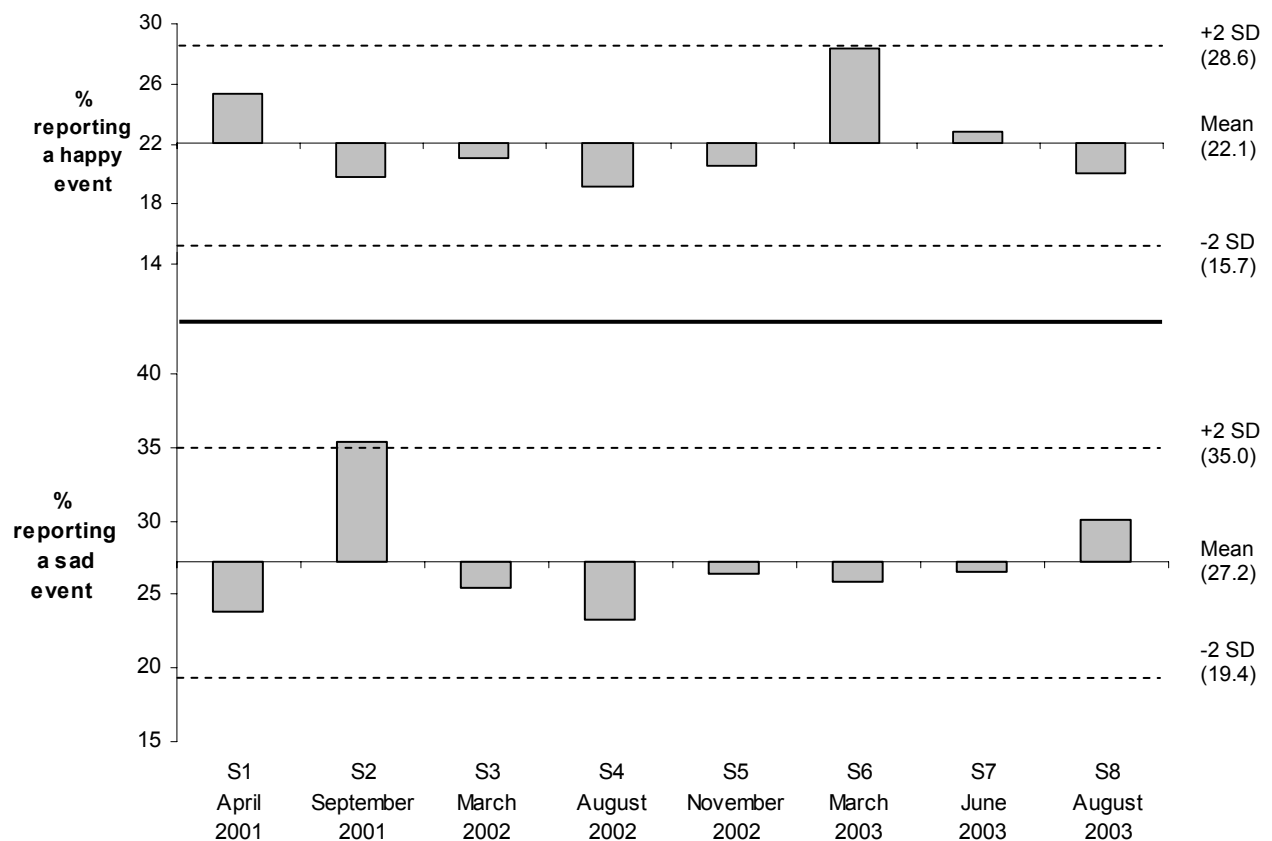


Figure 10.2: The Percentage of People Reporting a Happy or a Sad Event in Their Life

The construction of Figure 10.2 follows the same procedure as Figure 10.1. The mean happy event percentages from each survey, and the mean sad event percentages from each survey (Table A10.2), produce a mean, SD and 2 x SD range (Table A10.2a).

As can be seen, the patterns for happy and sad events are very different from one-another. Moreover, they are clearly not reciprocal. While an approximately equal proportion of people reported happy or sad events at most times, the increase in the incidence of people reporting happy events at S6, and sad events at S2, did not result in an usually low proportion of people reporting sad or happy events respectively. The correlation between the happy and sad percentages in Table A13.2 is -0.33 , which is non-significant. This apparent independence of sensitivity to happy and sad events is being masked, however, by gender differences, as the next section will show.

The most unusual occasion of people reporting a happy event coincided with the period immediately prior to the Iraq war (S6). The outstanding percentage of people reporting a sad event in their lives occurred immediately following September 11 (S2). This value lies significantly beyond the range of the other survey means.

One explanation of the pre-Iraq rise in happy events is that the looming war induced a state of activated positive affect as a defense against anxiety. The war differs from the terrorist attacks in that it had not yet taken place, and so was an anticipated event. Thus, to think of reasons why the war is unlikely to take place, or that it is morally justified, is one way people could stave-off the personal impact of dark thoughts of war. In doing this, they may shift their threshold for the recognition of

positive events in their lives and, as a consequence, more people report the occurrence of recent happy events.

Another possibility is that the prospect of war and the threat and danger it involves sharpens people's appreciation of life. But this does not explain why a comparable rise failed to occur following the terrorist attacks.

Summary interpretation

Immediately following September 11, more people than normal reported the occurrence of a sad event in their personal lives. The incidence of such people returned to normal within six months after the event.

The percentage of people reporting a happy event in their personal lives did not change significantly after September 11, but almost achieved a significant rise in the period immediately prior to the Iraq war (S6). At this time, the incidence of people reporting a sad event in their lives showed no change from normal.

10.1.1. Gender and Life Event Frequency

Females show a stronger tendency than men to report that something has happened to them recently causing them to feel happier or sadder than normal (Table A13.3). However, using the gender percentages from each survey as data, the overall gender difference is not quite significant ($t=1.958$, NS) (Table A10.3a).

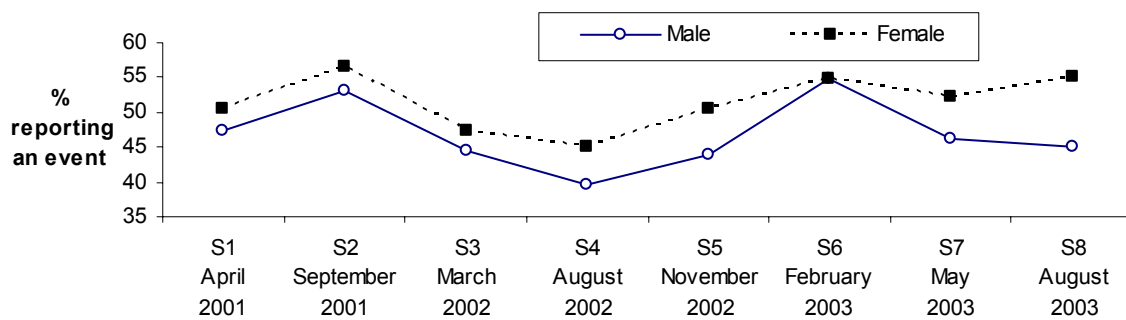


Figure 10.3: Gender Differences in Reporting a Personal Life Event: Distribution as % of Total Survey N

When the differential gender data from Table A10.3 are employed in the same manner as for Figure 10.2, the pattern is as follows:

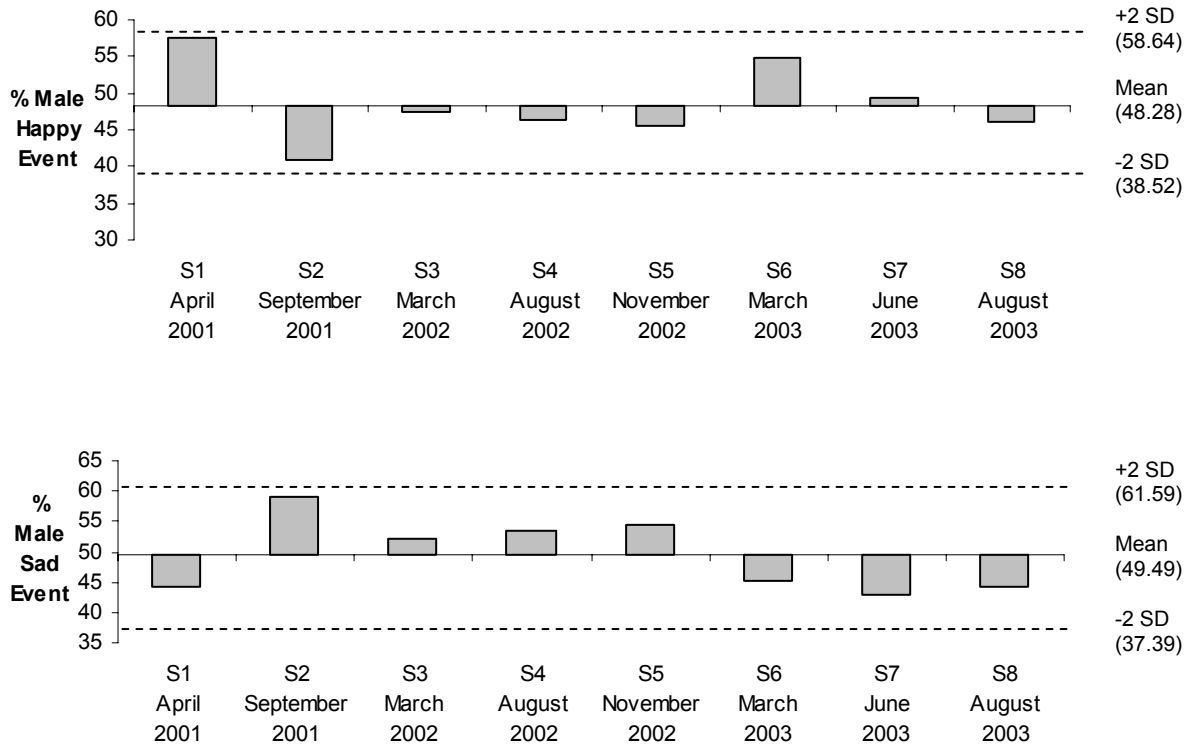


Figure 10.4: Proportion of Males Reporting a Happy or Sad Event

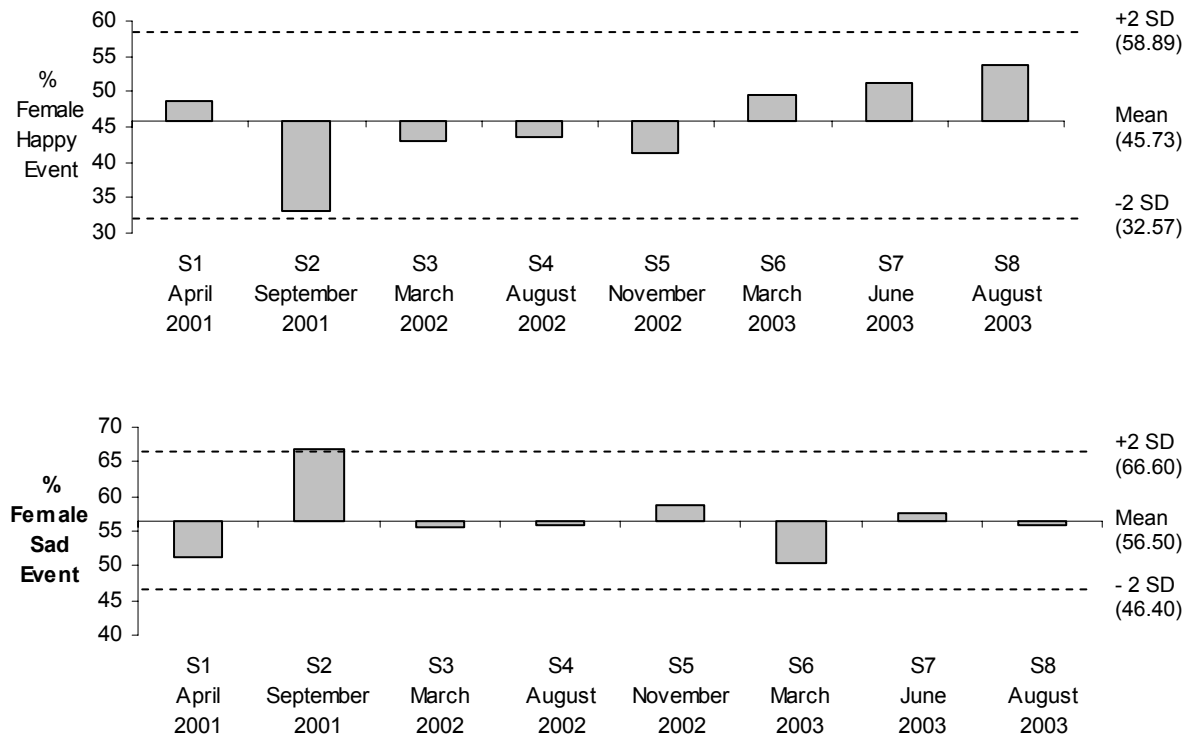


Figure 10.5: Proportion of Females Reporting a Happy or Sad Event

From the results shown in Table A10.3a it can be seen that the reciprocity between the reporting of positive and negative events has become more evident. The inverse correlations between the proportion of people reporting happy or sad events is significant for both genders ($p < .05$) (Males = .73; Females = .78). This is excellent evidence for the validity of this measure as an index of population sensitivity to the positive and negative events in their lives. As the proportion of people reporting a happy event rises, the proportion reporting a sad event falls, even though these two groups of people are independent from one another. Clearly, some external, global influence is predisposing the population to experience more happy or sad events. Moreover, since the changes presented in Figure 10.2 seem to be reasonably aligned to the major events of September 11 and the Iraq war, it can be hypothesized that major world events occurring outside Australia can predispose the population to experience their lives differently.

There is a tendency for about the same proportion of males and females to report an event, and about the same proportion to report a happy event (Table A10.3). Females, however, are more likely to report a sad event in their lives ($t(6) = 2.354, p < .05$).



Figure 10.6: Gender Differences: Proportion of People Reporting Happy or Sad Events

In order to further investigate these gender differences in a relative manner, the proportion of happy and sad events has been compared through the following process. Within each survey, those people who recorded a life event were split by a gender. Then, within gender, the percentage recording a happy or a sad event was calculated, and the difference between these two percentages is displayed. (Table A10.5; Figure 10.7).

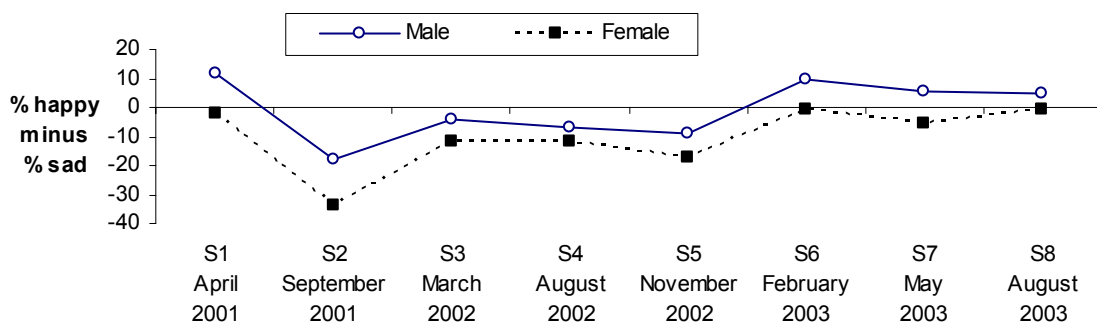


Figure 10.7: Gender Differences: Percent of Happy Events minus Percent of Sad Events

From this it is clear that the normal pattern of reporting was severely disrupted for both males and females by the events by S11, with both genders having a higher incidence of people who had experienced a negative life event. Following this, there was a differential rate of recovery for males and females.

The female data depict a higher proportion of women who report a negative than a positive event. This pattern was greatly exaggerated following September 11 but recovered to its normal level after six months.

The male pattern is different. Males are more prone to reporting positive than negative events. This balance was severely disrupted following September 11, at which time more males reported a negative than a positive event. However, unlike the females, the normal pattern of male reporting did not reappear until February 2003 (S6) some 17 months following the attack. Thus, it appears that the recovery of females in this regard is some three-times as fast as for males.

In order to determine whether the different proportions of people who have experienced happy/sad events across surveys relates to personal wellbeing, Table A10.4 has been prepared. This presents the correlations, separated by gender, between the proportion of people who have experienced a happy/sad event within each survey (Table A10.3) with the corresponding mean Personal Wellbeing Index or domain score for that survey. As can be seen, there is a very weak tendency for the frequency of happy events to correlate positively, and for sad events to correlate negatively; with the measures of personal wellbeing. While none of these correlations even approaches significance, they are remarkably consistent in terms of the direction of their relationship. The application of the Sign Test to the 14 happy/sad x domain values is significant for males (13 correct, one incorrect: $p < .001$) and for females (12 correct, 2 incorrect: $p = .006$). This indicates the presence of a weak but reliable connection between the tendency of populations to experience happy or sad events and personal wellbeing.

10.1.2. Age and Life Event Frequency

Table A10.6 lists, and then summarises, the effects of age on life events. These data are summarised in Figure 10.8. As can be seen, the probability of reporting a personal event that made the person feel happier or sadder than normal decreases steadily after 55 years of age. However, the relative experience of these two event types changes dramatically between 26-35 years and 36-45 years. Whereas the proportion of people reporting a happy event dominates in the two youngest-groups, beyond 36 years the majority of people who report an event in their lives report a negative event.

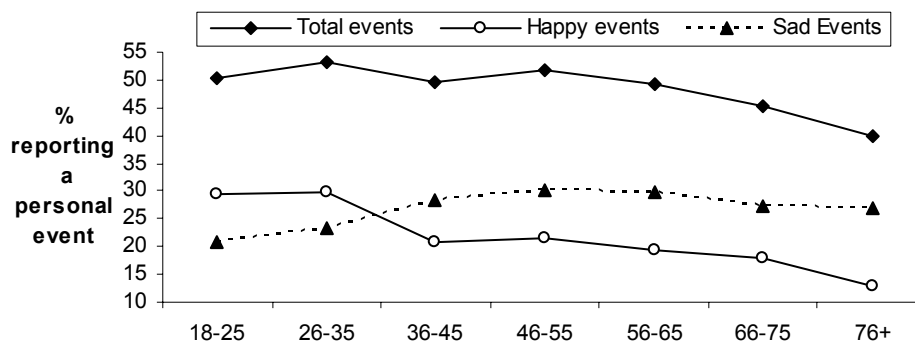


Figure 10.8: Age: Life Event Frequency (combined surveys)

It is difficult to reconcile these data with the finding that the PWI scores increase with age (Chapter 5). Either the experience of life events and the recall of personal events are unrelated, or the tendency to report negative events threatens SWB homeostasis and the homeostatic system compensates by raising SWB in a protective or compensatory manner.

10.1.3. Income and Life Event Frequency

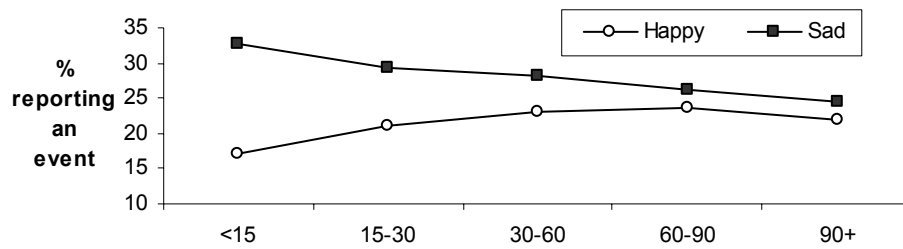


Figure 10.9: Income: Life Event Frequency (combined surveys)

The data for Figure 10.9 are drawn from Table A10.7. It can be seen that the income trends for the two life events are opposite. As income increases, the frequency of people reporting sad events decreases, and the frequency for happy events increases up to an income of about \$60,000.

This is consistent with a recently published review of the function of money in relation to wellbeing (Cummins, 2000). It is proposed that money is a flexible resource which allows people to avoid many aspects of life which have a negative effect on wellbeing. This permits rich people to maximise their potential for personal wellbeing to a greater extent than people who are poor. It also implies that rich people are less exposed to negative life events and more exposed to positive events, as indicated by these present data.

10.2. Perceived Intensity of Life Events

We ask people who have experienced a life event, “**how strong would you rate this influence?**” The strength across the surveys is as follows (Table A10.8):

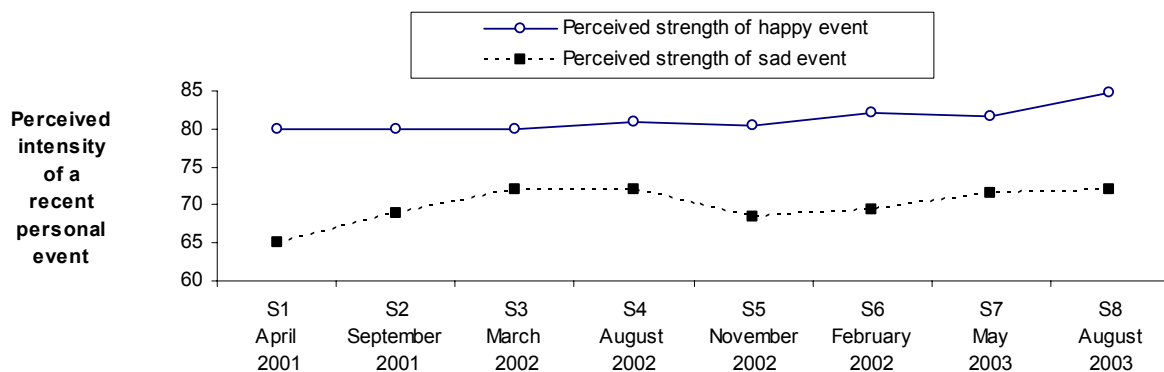


Figure 10.10: Perceived Intensity of Recent Personal Events

Most obviously from these data, the perceived strength of a happy event exceeds that of a sad event. For example, using the data from Survey 6, $t(1072) = 10.19, p < .001$. This is an example of the positive bias that pervades our thinking, and which is part of the homeostatic device that maintains subjective wellbeing as positive (Section 1.2).

More remarkable, however, is the stability of the experienced strength of happy, positive life events. Across the first five surveys, it varied between 79.3 and 80.9, a range of just 1.6%. Since then, however, happy event intensity has increased, and in the last survey (S8) the intensity level is higher than the first five surveys (Table A10.8). Why this change should occur at this time is not clear.

The intensity of sad events has shown more variability. Four surveys (S3, 4, 7, 8) have evidenced a higher intensity than it was at baseline (S1). Thus, the intensity of sad events has been maintained as stronger than it was prior to September 11.

10.2.1. Household Income and Life Event Intensity

No income group differences in intensity have been found (Table A10.9) either for happy events or sad events. However, the cell sizes are small and data need to be combined across surveys to make the tests more sensitive.

10.2.2. Gender and Life Event Intensity

The gender difference for the intensity of happy events is significant (Female > Male) but for sad events is non-significant (Table A10.10). This is a consistent finding across surveys.

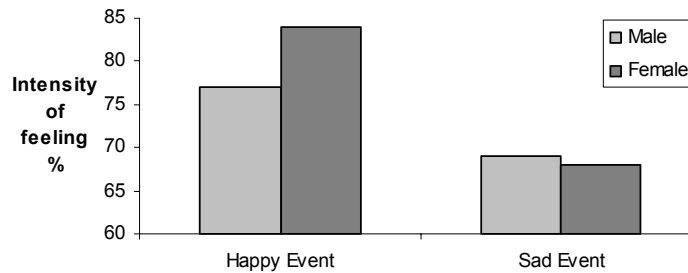


Figure 10.11: The Intensity of Happiness/Sadness to a Personal Life Event

It is interesting that this familiar pattern of increased emotional responsiveness in females only occurs for happy events. It is also notable that the strength of felt sadness for both genders approximately the same value of 70% as is found for people’s sadness when recalling terrorist attacks (see Chapter 11).

10.2.3. Age and Life Event Intensity

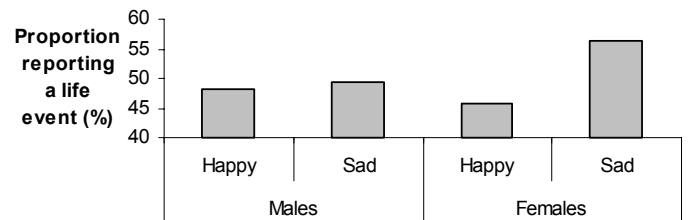
In order to examine closely the relationship between age and the experience of life event intensity, Table A10.11 shows the combined data from Surveys 1-8.

For both happy and sad event intensity there is no age effect and no Age x Survey interaction.

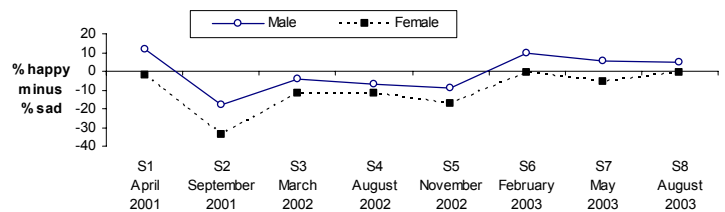
Dot Point Summary for Life Events

1. Across surveys: as the proportion of people reporting a happy event goes up, the proportion reporting a sad event goes down. Since these are quite separate groups of people this is excellent evidence that major world events happening outside Australia can predispose the population to experience their lives differently.

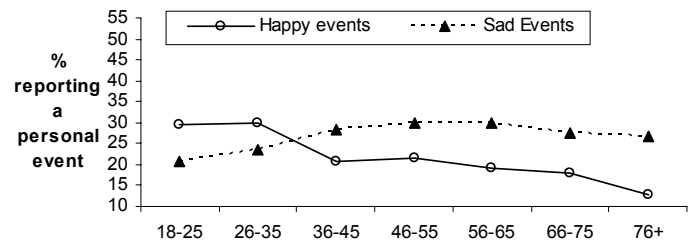
2. Females are more likely to report the occurrence of a sad than a happy event in their lives.



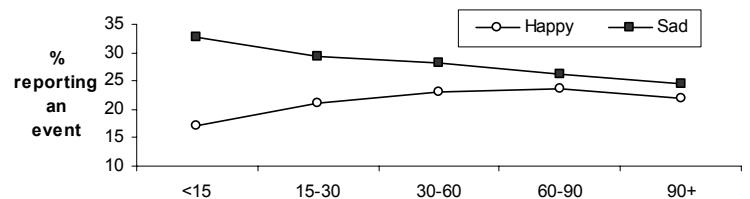
3. The proportion of people reporting the occurrence of happy or sad events in their lives recovered to normal faster for females than for males following September 11.



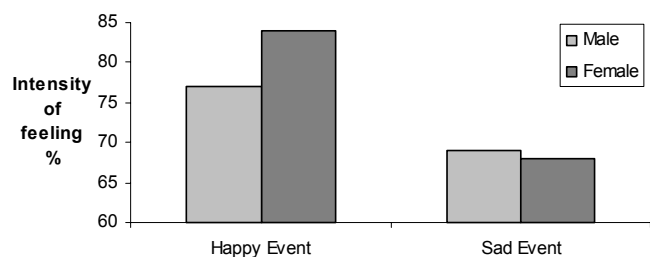
4. Young adults are more likely to report the experience of happy than sad events in their lives. This changes at 36-45 years. At this age and older, people are more likely to report the occurrence of a sad event.



5. People on low incomes are more likely to report the experience of a sad than a happy event in their lives.



6. Females experience happy events more intensely than males. There is no gender difference in the experienced intensity of sad personal events.



Appendix A1. References

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Appendix A2. Summary

The analyses in this Table have been computed using analysis of variance with post-hoc Tukey, or Dunnett T3 tests.

Table A2.1: Comparison between all 8 surveys measured in Degree of Satisfaction (%)

Question	Survey 1 (N=1974)		Survey 2 (N=1973)		Survey 3 (N=2030)		Survey 4 (N=1986)		Survey 5 (N=1966)		Survey 6 (N=1979)		Survey 7 (N=1965)		Survey 8 (N= 1980)		p	
	Mean	(SD)	Mean	(SD)	Mean	(SD)	Mean	(SD)	Mean	(SD)	Mean	(SD)	Mean	(SD)	Mean	(SD)		
PERSONAL WELLBEING INDEX	73.15	(13.33)	74.36	(13.02)	75.19	(12.52)	74.41	(12.27)	74.58	(12.29)	75.21	(11.84)	75.85	(11.55)	75.42	(11.82)	.000	
					<i>S3>S1 p = .000</i>				<i>S5>S1 p = .014</i>		<i>S6>S1 p=.000</i>		<i>S7>S1 p=.000</i>		<i>S8>S1 p=.000</i>			
												<i>S7>S2 p=.005</i>						
												<i>S7>S4 p=.006</i>						
												<i>S7>S5 p=.029</i>						
Personal Index domains																		
- standard of living	74.46	(19.41)	77.25	(18.46)	77.65	(18.17)	76.48	(17.39)	77.30	(17.24)	77.69	(17.39)	77.82	(16.93)	77.52	(16.47)	.000	
					<i>S2>S1 p = .000</i>		<i>S3>S1 p = .000</i>		<i>S4>S1 p = .017</i>		<i>S5>S1 p = .000</i>		<i>S6>S1 p = .000</i>		<i>S7>S1 p = .000</i>		<i>S8>S1 p=.000</i>	
- health	73.64	(21.31)	75.12	(20.47)	75.35	(20.98)	74.93	(19.77)	75.81	(19.68)	75.99	(19.59)	75.15	(19.69)	75.04	(19.55)	.013	
									<i>S5>S1 p = .025</i>		<i>S6>S1 p = .009</i>							
- achievements	73.17	(18.39)	74.18	(18.58)	74.83	(18.17)	73.98	(17.21)	74.88	(17.78)	74.99	(17.16)	74.77	(16.81)	74.66	(17.23)	.014	
											<i>S6>S1 p = .037</i>							
- relationships	78.20	(21.21)	79.12	(21.94)	79.22	(21.69)	78.98	(21.07)	78.69	(21.64)	80.58	(19.63)	81.32	(17.88)	80.52	(19.79)	.000	
										<i>S6>S1 p = .007</i>		<i>S7>S1 p=.000</i>		<i>S8>S1 p=.010</i>				
												<i>S7>S2 p=.019</i>						
												<i>S7>S3 p=.024</i>						
												<i>S7>S4 p=.005</i>						
												<i>S7>S5 p=.001</i>						
- safety	75.09	(20.19)	75.75	(20.01)	76.82	(19.66)	77.18	(18.50)	75.84	(19.20)	76.85	(18.50)	79.05	(17.01)	78.16	(17.77)	.000	
							<i>S4>S1 p = .019</i>						<i>S7>S1 p=.000</i>		<i>S8>S1 p=.000</i>			
												<i>S7>S2 p=.000</i>		<i>S8>S2 p=.002</i>				
												<i>S7>S3 p=.004</i>		<i>S8>S5 p=.002</i>				
												<i>S7>S4 p=.026</i>						
												<i>S7>S5 p=.000</i>						
												<i>S7>S6 p=.003</i>						
- community	68.59	(20.68)	70.54	(21.03)	70.68	(19.72)	69.54	(19.71)	69.97	(20.49)	70.98	(19.69)	71.17	(19.13)	70.91	(19.68)	.000	
					<i>S3>S1 p = .031</i>						<i>S6>S1 p = .006</i>		<i>S7>S1 p = .001</i>		<i>S8>S1 p=.009</i>			

Appendix A2 Summary continued

Question	Survey 1 (N=1974)		Survey 2 (N=1973)		Survey 3 (N=2030)		Survey 4 (N=1986)		Survey 5 (N=1966)		Survey 6 (N=1979)		Survey 7 (N=1965)		Survey 8 (N= 1980)		p	
	Mean	(SD)	Mean	(SD)	Mean	(SD)	Mean	(SD)	Mean	(SD)	Mean	(SD)	Mean	(SD)	Mean	(SD)		
- future security	68.91	(21.09)	68.56	(20.64)	71.00	(20.20)	69.35	(20.18)	69.82	(19.60)	69.44	(20.51)	71.41	(19.17)	70.76	(19.50)	.000	
					<i>S3>S1 p = .039</i>								<i>S7>S1 p = .003</i>		<i>S8>S2 p=.018</i>			
					<i>S3>S2 p = .005</i>								<i>S7>S2 p = .000</i>					
													<i>S7>S4 p = .031</i>					
Life as whole	75.17	(19.59)	77.00	(19.32)	78.14	(17.86)	77.15	(17.16)	77.68	(17.25)	78.15	(16.61)	78.23	(16.78)	77.97	(16.95)	.000	
					<i>S3>S1 p = .000</i>		<i>S4>S1 p = .020</i>		<i>S5>S1 p = .000</i>		<i>S6>S1 p = .000</i>		<i>S7>S1 p = .000</i>		<i>S8>S1 p = .000</i>			
Survey-specific aspects of Personal Life																		
- happiness satisfaction	78.60	(18.75)	79.77	(18.67)									80.41	(17.05)			.006	
													<i>S7>S1 p = .005</i>					
- happiness affect															78.63	(14.87)		
- contentment															76.79	(15.32)		
- neighbourhood															80.61	(18.13)		
NATIONAL WELLBEING INDEX	55.78	-	58.61	(14.42)	60.72	(15.45)	60.23	(15.17)	60.68	(15.28)	60.32	(15.22)	61.65	(14.79)	60.75	(14.54)	.000	
					<i>S3>S2 p = .000</i>		<i>S4>S2 p = .018</i>		<i>S5>S2 p = .000</i>		<i>S6>S2 p = .009</i>		<i>S7>S2 p = .000</i>		<i>S8>S2 p = .000</i>			
National Index domains																		
- economic situation	53.60	(20.16)	57.82	(18.66)	64.01	(19.61)	63.91	(19.32)	65.04	(19.07)	65.44	(18.77)	66.14	(18.22)	65.38	(17.88)	.000	
					<i>S2>S1 p = .000</i>		<i>S3>S1 p = .000</i>		<i>S4>S1 p = .000</i>		<i>S5>S1 p = .000</i>		<i>S6>S1 p = .000</i>		<i>S7>S1 p = .000</i>		<i>S8>S1 p = .000</i>	
													<i>S7>S2 p = .000</i>		<i>S8>S2 p = .000</i>			
													<i>S7>S3 p = .009</i>					
													<i>S7>S4 p = .005</i>					
- environment	57.92	(19.40)	59.87	(19.19)	60.91	(19.15)	59.08	(19.54)	57.92	(20.06)	59.85	(19.02)	59.60	(18.84)	60.42	(18.40)	.000	
					<i>S2>S1 p = .042</i>		<i>S3>S1 p = .000</i>				<i>S6>S1 p = .047</i>		<i>S7>S1 p = .000</i>		<i>S8>S1 p = .001</i>			
													<i>S8>S5 p = .001</i>					
					<i>S3>S5 p = .000</i>													
- social conditions	59.18	(19.89)	62.53	(17.96)	62.76	(18.77)	61.99	(18.89)	62.62	(18.84)	63.00	(18.48)	62.60	(17.76)	61.85	(18.45)	.000	
					<i>S2>S1 p = .000</i>		<i>S3>S1 p = .000</i>		<i>S4>S1 p = .000</i>		<i>S5>S1 p = .000</i>		<i>S6>S1 p = .000</i>		<i>S7>S1 p = .000</i>		<i>S8>S1 p = .000</i>	
- Australia governed	-	-	58.69	(23.66)	52.80	(25.04)	53.26	(24.50)	55.77	(24.27)	53.45	(26.29)	55.78	(25.48)	53.45	(23.97)	.000	
					<i>S2>S3 p = .000</i>				<i>S5>S3 p = .003</i>				<i>S7>S3 p = .005</i>					
					<i>S2>S4 p = .000</i>				<i>S5>S4 p = .028</i>									
					<i>S2>S5 p = .003</i>													
					<i>S2>S6 p = .000</i>													
					<i>S2>S7 p = .005</i>													
					<i>S2>S8 p = .000</i>													
- business	-	-	55.41	(18.88)	59.88	(19.23)	59.31	(18.62)	61.11	(18.55)	58.86	(19.35)	60.86	(18.46)	60.96	(17.59)	.000	
					<i>S3>S2 p = .000</i>		<i>S4>S2 p = .000</i>		<i>S5>S2 p = .000</i>		<i>S6>S2 p = .000</i>		<i>S7>S2 p = .000</i>		<i>S8>S2 p = .000</i>			
													<i>S7>S6 p = .025</i>		<i>S8>S6 p = .011</i>			

Appendix A2 Summary continued

Question	Survey 1 (N=1974)		Survey 2 (N=1973)		Survey 3 (N=2030)		Survey 4 (N=1986)		Survey 5 (N=1966)		Survey 6 (N=1979)		Survey 7 (N=1965)		Survey 8 (N= 1980)		p
	Mean	(SD)	Mean	(SD)	Mean	(SD)	Mean	(SD)	Mean	(SD)	Mean	(SD)	Mean	(SD)	Mean	(SD)	
- national security	-	-	57.32	(20.18)	63.33	(20.16)	62.93	(20.21)	61.04	(19.72)	60.53	(21.26)	65.17	(18.78)	63.59	(18.75)	.000
					<i>S3>S2 p = .000</i>		<i>S4>S2 p = .000</i>		<i>S5>S2 p = .000</i>		<i>S6>S2 p = .000</i>		<i>S7>S2 p = .000</i>		<i>S8>S2 p=.000</i>		
					<i>S3>S5 p = .008</i>		<i>S4>S6 p = .007</i>						<i>S7>S4 p = .009</i>		<i>S8>S5 p=.001</i>		
													<i>S7>S5 p = .000</i>		<i>S8>S6 p=.000</i>		
													<i>S7>S6 p = .000</i>				
Life in Australia	69.64	(20.90)	73.89	(20.05)	84.79	(17.29)	83.83	(16.76)	83.58	(17.39)	84.43	(16.54)	83.04	(17.04)	82.81	(17.07)	.000
					<i>S2>S1 p = .000</i>	<i>S3>S1 p = .000</i>	<i>S4>S1 p = .000</i>	<i>S5>S1 p = .000</i>	<i>S6>S1 p = .000</i>	<i>S7>S1 p = .000</i>	<i>S8>S1 p=.000</i>						
						<i>S3>S2 p = .000</i>	<i>S4>S2 p = .000</i>	<i>S5>S2 p = .000</i>	<i>S6>S2 p = .000</i>	<i>S7>S2 p = .000</i>	<i>S8>S2 p=.000</i>						
						<i>S3>S7 p=.037</i>											
						<i>S3>S8 p=.003</i>											
Trends																	
- own life changing for the better	63.81	(19.22)	63.54	(19.63)	-	-	-	-	63.56	(19.28)	-	-					.887
- Australia changing for the better	52.84	(19.83)	53.62	(19.25)	-	-	-	-	53.27	(19.84)	-	-					.456

Appendix A2.2: Normative Ranges Calculated from Survey Mean Scores

Table A2.2: Normative Ranges Calculated from Survey Mean Scores

	Mean	SD	-2 SD	+2 SD
PWI	74.77	0.84	73.09	76.45
Standard	77.02	1.12	74.78	79.26
Health	75.13	0.71	73.71	76.55
Achievements	74.43	0.62	73.19	75.67
Relationships	79.58	1.09	77.40	81.76
Safety	76.84	1.31	74.22	79.46
Community	70.30	0.88	68.54	72.06
Future Security	69.91	1.04	67.83	71.99
Life as a whole	77.44	1.03	75.38	79.50

In the Figures below, the mean and 2SD scores have been calculated from the combined survey mean scores (Table A2.2). The vertical bars above each survey represent the individual survey mean scores referenced to the grand mean. If these survey means scores lie outside the 2SD range they are significantly different from the means of the other surveys.

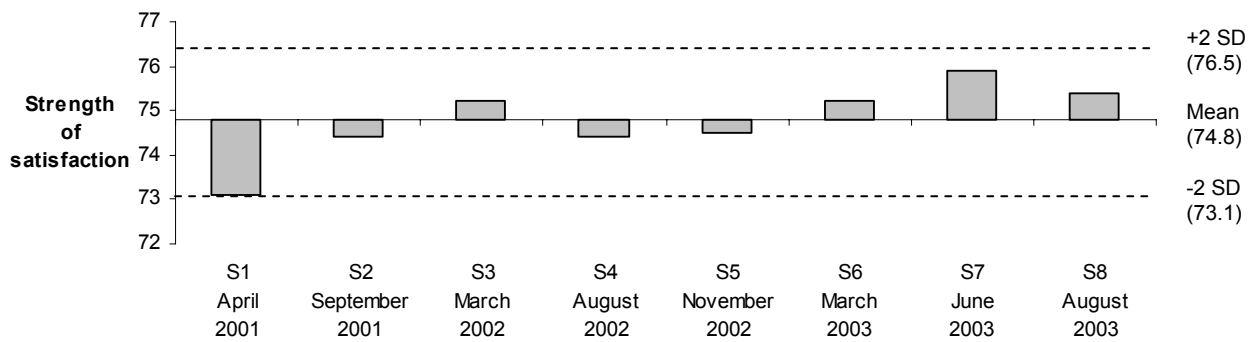


Figure A2.1: Personal Wellbeing Index

The value at S1 (73.1) corresponds to a Z score of 1.99, making it marginally significantly different from the other means.

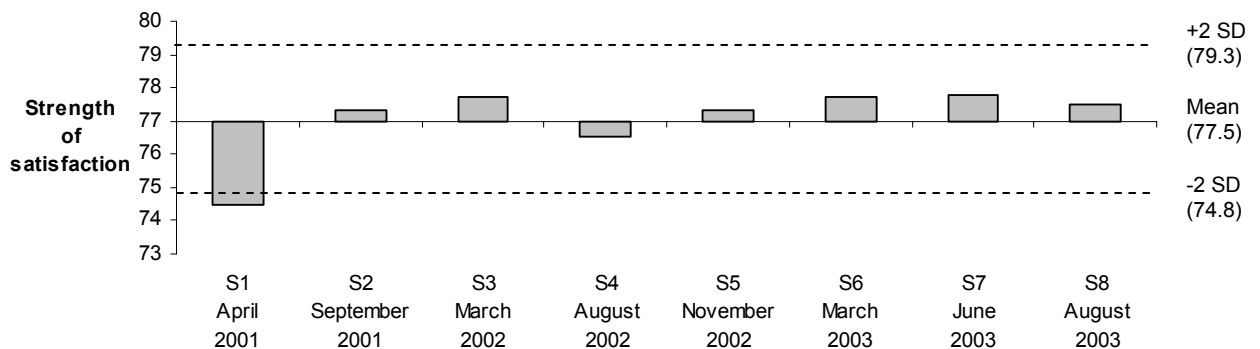


Figure A2.2: Standard of Living

The value at S1 (74.46) corresponds to a Z score of 2.29 which makes it significantly different from the other mean scores.

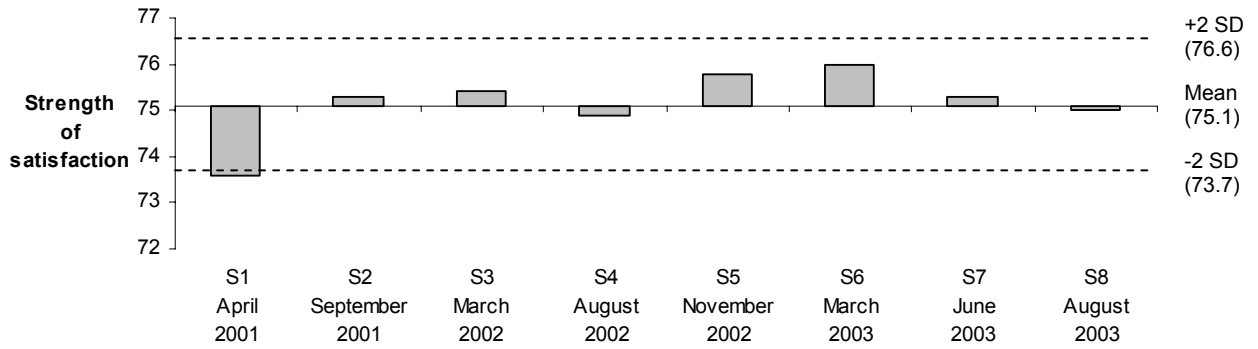


Figure A2.3: Health

The value at S1 (73.64) corresponds to a Z score of 2.10 which makes it significantly different from the other mean scores.

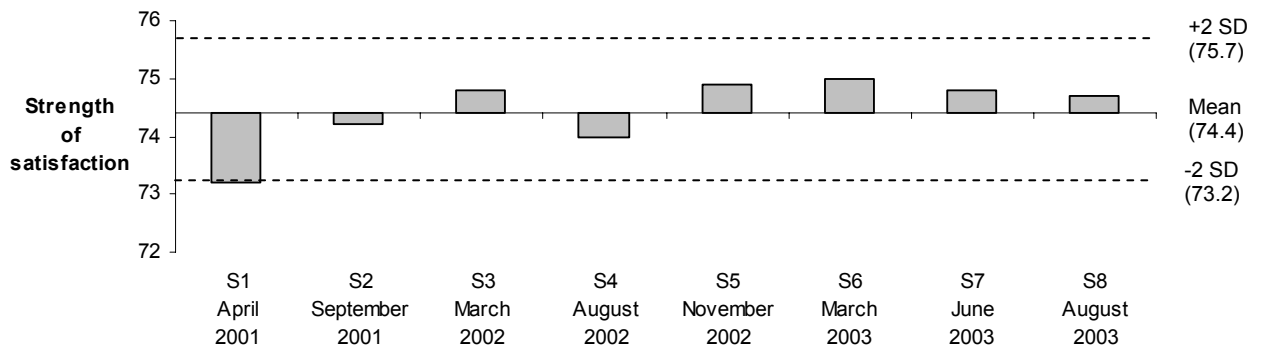


Figure A2.4: Achievements

The value at S1 (73.17) corresponds to a Z score of 2.03 which is significant.

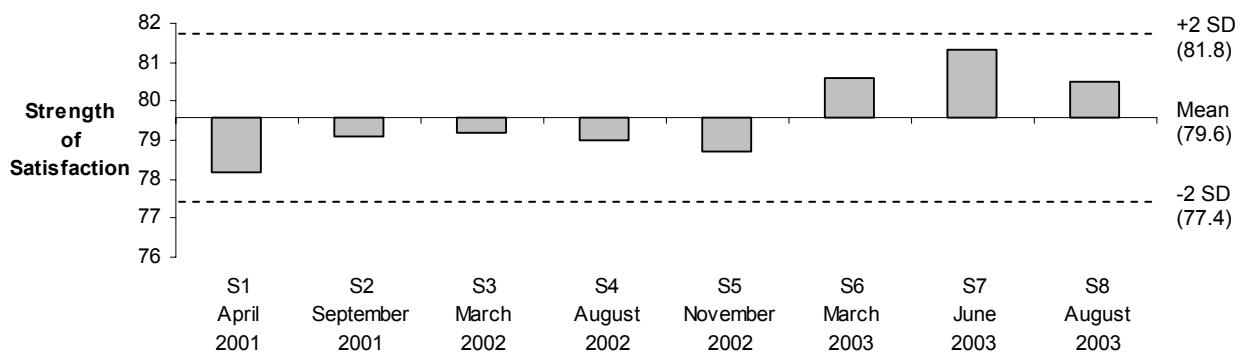


Figure A2.5: Relationships

The value at S7 (81.32) corresponds to a Z score of 1.58 which is not significant.

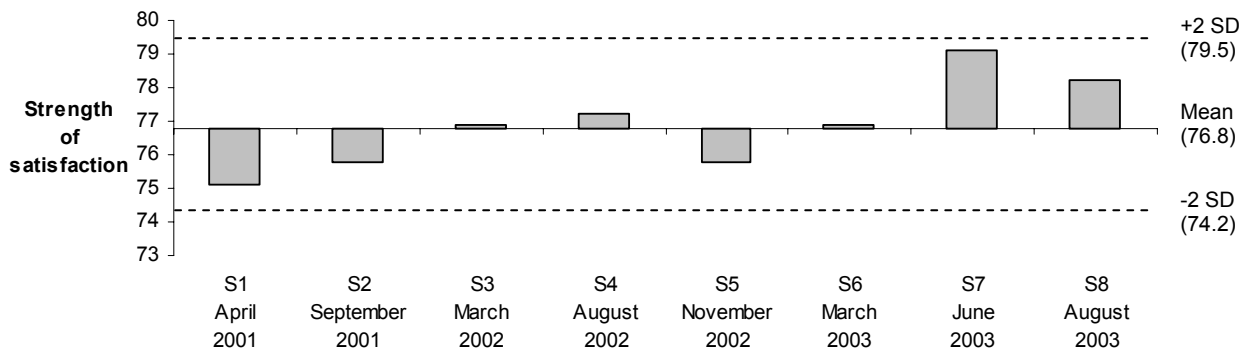


Figure A2.6: Safety

The value at S7 (79.05) corresponds to a Z score of 1.69 which is not significant.

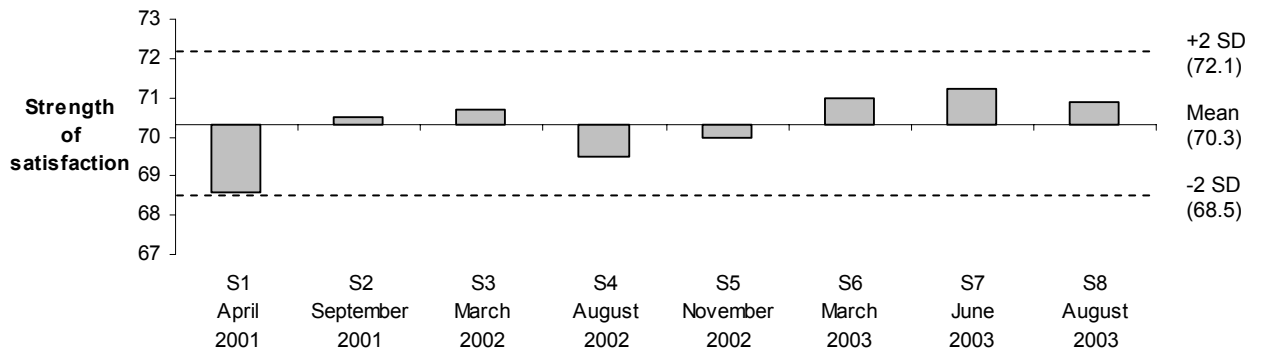


Figure A2.7: Community

The value at S1 (68.59) corresponds to a Z score of 1.94 which is not significant.

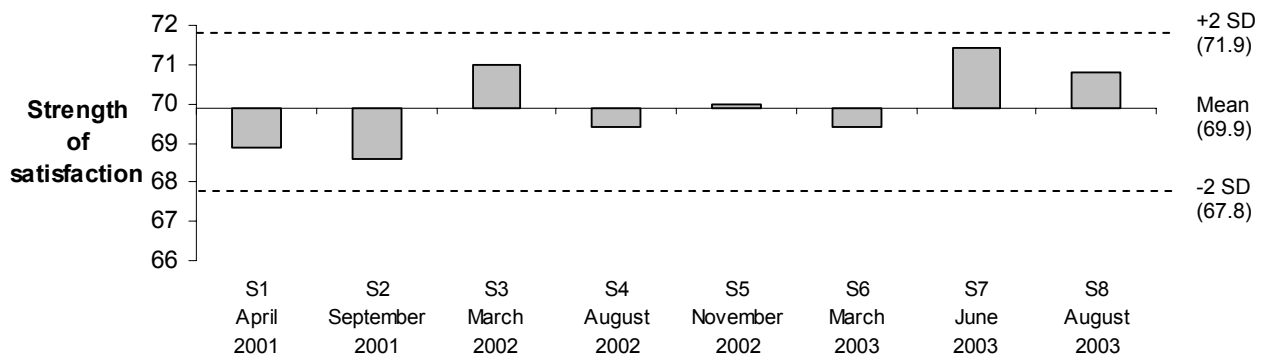


Figure A2.8: Future Security

The value at S7 (71.41) corresponds to a Z score of 1.44 which is not significant.

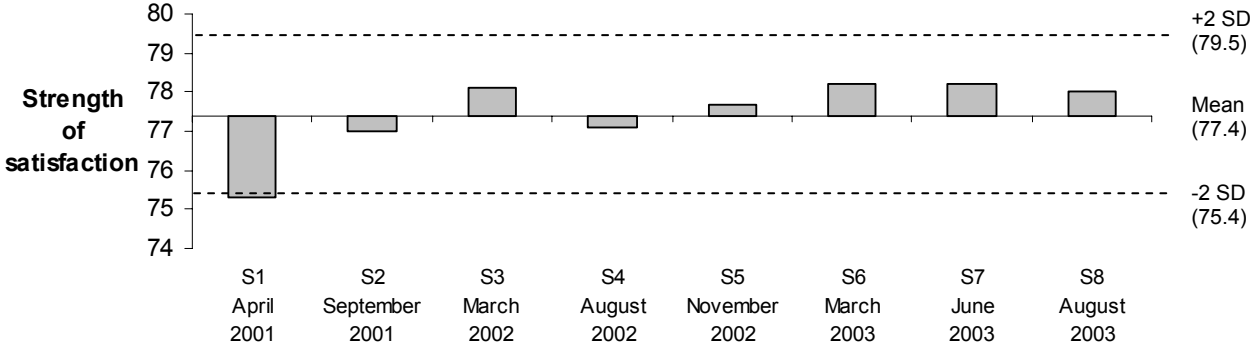


Figure A2.9: Life as a Whole

The value at S1 (75.17) corresponds to a Z score of 2.20 which is significantly outside the distribution of the other mean scores.

Appendix A3. Household Income

Table A3.1: Household Income

	≤\$15,000		>\$15,000- \$30,000		>\$31,000- \$60,000		>\$61,000- \$90,000		>\$91,000- \$120,000		>\$120,000+		P=
N =	316		308		464		297		150		101		
	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	
PERSONAL WELLBEING INDEX	73.32	14.08	74.57	13.49	75.05	11.10	76.47	9.55	77.56	8.05	77.39	9.85	.000
Personal domains							>\$15K p=.024		>\$15K p=.004		<\$15K p=.025		
									>\$31-60K p=.045				
1. Standard of living	74.44	19.42	75.11	19.12	76.21	15.34	79.70	13.66	81.87	11.37	82.18	11.97	.000
							<\$15K p=.002		<\$15K p=.000		<\$15K p=.000		
							\$15-30K p=.011		\$15-30K p=.000		\$15-30K p=.000		
2. Health	68.54	22.02	73.41	20.41	77.09	18.65	76.53	16.60	78.20	17.50	78.12	14.81	.000
					<\$15K p=.000		<\$15K p=.000		<\$15K p=.000		<\$15K p=.000		
3. Achievements in life	74.68	19.29	73.99	19.60	73.45	16.70	74.98	15.38	74.87	14.37	76.14	12.25	.514
4. Personal relationships	77.71	24.35	80.42	21.09	78.86	19.27	83.30	16.00	83.93	13.36	81.29	15.53	.000
							>\$15K p=.012		>\$15K p=.006				
							>\$31-60K p=.009		>\$31-60K p=.005				
5. How safe you feel	76.34	18.82	77.16	19.23	78.70	17.24	78.72	15.48	81.14	14.54	80.59	16.05	.032
									<\$15K p=.041				
6. Community Conn.	72.07	21.98	72.39	19.88	70.72	20.03	69.66	17.42	69.80	16.97	69.21	16.95	.343
7. Future security	69.09	22.51	69.36	22.21	70.04	18.70	71.77	16.08	73.67	13.78	74.10	17.24	.014
Life as a whole	75.92	20.75	78.18	18.65	76.59	15.90	79.23	14.06	79.80	13.63	80.69	11.85	.006
SURVEY-SPECIFIC PERSONAL ASPECTS													
- Neighbourhood	79.24	21.83	80.81	18.87	80.86	17.37	80.91	15.65	82.27	14.05	83.00	14.53	.394
- Contentment	76.04	17.34	77.65	16.95	75.68	14.83	77.27	13.39	77.65	11.05	77.62	12.58	.340
- Happiness	77.94	16.81	79.29	16.88	77.72	14.28	79.19	12.87	79.00	11.22	79.31	11.34	.554
NATIONAL WELLBEING INDEX	58.12	16.36	59.83	15.82	61.48	13.24	60.67	13.74	61.86	11.97	63.58	13.77	.019
National domains											<\$15K p=.031		
1. Economic situation	60.54	20.51	63.12	18.66	67.08	16.34	67.16	16.13	69.52	14.01	68.32	18.17	.000
					<\$15K p=.000		<\$15K p=.000		<\$15K p=.000		<\$15K p=.006		
					\$15-30K p=.043				\$15-30K p=.001				

Appendix A3: Household Income continued

	≤\$15,000		>\$15,000- \$30,000		>\$31,000- \$60,000		>\$61,000- \$90,000		>\$91,000- \$120,000		>\$120,000+		P=
N =	316		308		464		297		150		101		
	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	
2. State of the environment	60.10	20.44	60.46	19.25	60.80	17.82	58.66	16.91	58.38	18.15	61.43	16.31	.501
3. Social conditions	61.03	21.54	61.49	20.04	61.58	17.44	61.35	16.43	63.47	17.34	63.60	15.73	.634
4. Government	53.78	26.68	50.40	26.17	54.31	21.86	53.37	23.28	54.16	22.15	56.57	23.74	.249
5. Business	59.29	19.16	59.24	19.27	61.19	16.48	60.86	16.88	61.85	14.19	65.25	14.87	.022
											<\$15K p=.027		
											\$15-30K p=.021		
6. National Security	62.53	20.23	63.14	19.77	63.22	17.43	62.92	18.20	64.14	17.50	67.96	16.37	.128
Life in Australia	83.31	19.15	82.20	17.95	83.55	15.82	83.14	16.31	81.68	15.31	82.70	14.41	.793
SURVEY-SPECIFIC NATIONAL ASPECTS													
- Belonging	87.71	16.32	87.33	18.20	85.27	16.60	84.21	17.27	84.77	16.34	82.18	19.11	.014
- Share core values	74.53	17.88	73.14	19.15	70.81	19.22	70.41	17.43	67.82	16.66	69.60	16.41	.002
									<\$15K p=.004				
									\$15-30K p=.044				

Table A3.2: Income Distribution

	<\$15,000	\$15,000-\$30,000	\$30,000-\$60,000	\$60,000-\$90,000	\$90,000-\$120,000	\$120,000+	Total
N	316	308	464	297	150	101	1636
%	19.3	18.8	28.4	18.2	28.4	18.2	82.6% answered

Table A3.3: Income x Gender: Distribution

Income	Male (49.5%)		Female (50.5%)		Total
	N	%	N	%	
<\$15,000	122	15.1%	194	23.5%	316
\$15,000-\$30,000	150	18.5%	158	19.1%	308
\$30,000-\$60,000	232	26.6%	232	28.1%	464
\$60,000-\$90,000	160	19.8%	137	16.6%	297
\$90,000-\$120,000	83	10.2%	67	8.1%	150
\$120,000+	63	7.8%	38	4.6%	101
Total	810		826		1636

$\chi^2(5,1636) = 26.14, p=.000$

Table A3.4: Income x Gender: Personal Wellbeing Index

	PWB	Male	Female	p=
<\$15,000	(M)	71.32	74.63	.048
	(SD)	14.83	13.46	
	(N)	117	180	
\$15,000-\$30,000	(M)	74.41	74.72	.845
	(SD)	14.54	12.41	
	(N)	145	147	
\$31,000-\$60,000	(M)	74.01	76.08	.048
	(SD)	10.04	12.01	
	(N)	225	225	
\$61,000-\$90,000	(M)	75.48	77.61	.057
	(SD)	9.72	9.25	
	(N)	156	135	
\$91,000-\$120,000	(M)	77.37	77.78	.756
	(SD)	7.40	8.83	
	(N)	82	67	
\$120,000+	(M)	76.19	79.42	.128
	(SD)	9.25	10.61	
	(N)	63	37	
p=		Welch (5,788) = 3.84, p=.002	Welch (5, 791) = 2.55, p=.029	
		\$31-60K > <15K, p=.003		
		\$91-120K > <15K, p=.026		

Table A3.5: Income x Age: Distribution

Age	<\$15,000		\$15,000-\$30,000		\$30,000-\$60,000		\$60,000-\$90,000		\$90,000-\$120,000		\$120,000+		Total	
	N	%	N	%	N	%	N	%	N	%	N	%	N	%
18-25	15	4.8%	23	7.5%	36	7.8%	23	7.8%	16	10.9%	8	8.0%	121	7.5%
26-35	22	7.1%	31	10.1%	94	20.4%	62	20.9%	26	17.7%	16	16.0%	251	15.5%
36-45	21	6.7%	46	15.0%	107	23.2%	99	33.4%	44	29.9%	35	35.0%	352	21.7%
46-55	33	10.6%	41	13.4%	122	26.5%	66	22.3%	44	29.9%	26	26.0%	332	20.5%
56-65	54	17.3%	63	20.6%	62	13.4%	36	12.2%	13	8.8%	13	13.0%	241	14.9%
66-75	96	30.8%	68	22.2%	28	6.1%	6	2.0%	2	1.4%	1	1.0%	201	12.4%
76+	71	22.8%	34	11.1%	12	2.6%	4	1.4%	2	1.4%	1	1.0%	124	7.6%
Total	312	100%	306	100%	461	100%	296	100%	147	100%	100	100%	1622	100%

Table A3.6: Income x Age: Distribution (*Collapsed*)

Age	\$15,000-\$30,000		\$31,000-\$60,000		\$61,000+		Total	
	N	%	N	%	N	%	N	%
18-35	54	17.6%	130	28.2%	151	27.8%	335	25.6%
36-45	46	15.0%	107	23.2%	178	32.8%	331	25.3%
46-55	41	13.4%	122	26.5%	136	25.0%	299	22.8%
56+	165	53.9%	102	22.1%	78	14.4%	345	26.3%
Total	306	23.4%	461	35.2%	543	41.2%	1310	100.0%

$\chi^2(6, 1310) = 172.24, p=.000$

Table A3.7: Income x Age: Personal Wellbeing Index

	<\$15,000	\$15,000-\$30,000	\$31,000-\$60,000	\$61,000+	Total
18-25 (N)	15	22	35	47	121
% within Age	4.8%	7.5%	7.8%	8.7%	
(Mean)	69.71	73.83	73.92	78.21	p=.027
(SD)	9.15	9.85	11.91	8.95	
				<\$15K p=.027	
26-35 (N)	21	30	91	101	251
% within Age	7.1%	10.1%	20.4%	19.2%	
(Mean)	62.59	71.10	74.84	76.73	p=.000
(SD)	10.83	15.43	10.22	7.78	
		<\$15K p=.019	<\$15K p=.000	<\$15K p=.000	
36-45 (N)	20	44	105	178	352
% within Age	6.7%	15.0%	23.2%	32.8%	
(Mean)	65.14	71.62	74.50	75.70	p=.014
(SD)	15.38	14.01	10.08	10.07	
				<\$15K p=.039	
46-55 (N)	29	39	118	133	332
% within Age	10.6%	13.4%	26.5%	25.0%	
(Mean)	68.33	69.45	74.54	76.57	p=.005
(SD)	16.80	14.91	12.14	9.06	
				\$15-30K p=.039	
56-65 (N)	53	61	58	60	241
% within Age	17.3%	20.6%	13.4%	11.4%	
(Mean)	71.29	73.84	75.74	78.83	p=.004
(SD)	14.56	14.08	11.72	7.92	
				<\$15K p=.007	
66-75 (N)	91	62	28	9	201
% within Age	30.8%	22.2%	6.1%	1.7%	
(Mean)	76.22	80.88	80.10	83.49	p=.048
(SD)	13.77	9.59	8.04	7.66	
76+ (N)	65	32	12	7	124
% within Age	22.8%	11.1%	2.6%	1.3%	
(Mean)	80.13	77.59	75.36	80.41	p=.472
(SD)	9.27	12.59	13.61	16.69	

Table A3.8: Income, Age and Gender: Distribution

	<\$15,000	\$15,000-\$30,000	\$30,000-\$60,000	\$60,000-\$90,000	\$90,000-\$120,000	\$120,000+	Total
Male 18-25	8	11	17	14	10	6	66
Female 18-25	7	12	19	9	6	2	55
Male 26-35	10	14	40	26	14	9	113
Female 26-35	12	17	54	36	12	7	138
Male 36-45	9	19	51	56	21	19	175
Female 36-45	12	27	56	43	23	16	177
Male 46-55	12	20	60	32	25	16	165
Female 46-55	21	21	62	34	19	10	167
Male 56-65	21	30	37	22	8	10	128
Female 56-65	33	33	25	14	5	3	113
Male 66-75	37	31	16	5	2	1	92
Female 66-75	59	37	12	1	0	0	109
Male 76+	24	23	10	4	2	1	64
Female 76+	47	11	2	0	0	0	60
Total	312	306	461	296	147	100	1622

No χ^2 Analysis – Cell Size

Table A3.9: Household Income Differences Across Surveys: Personal Wellbeing Index

		2			3			4			5			6			7			8		
		<15	30-60	90+	<15	30-60	90+	<15	30-60	90+	<15	30-60	90+	<15	30-60	90+	<15	30-60	90+	<15	30-60	90+
PWB	Mean	71.50	74.83	77.48	71.33	75.62	77.26	71.00	74.46	76.26	71.91	74.53	77.91	72.98	74.22	77.00	72.54	75.16	78.71	73.32	75.05	77.49
	SD	15.20	12.04	10.95	15.67	10.65	11.60	14.74	11.35	11.77	14.09	12.22	9.48	13.06	11.48	10.18	15.47	11.38	8.87	14.08	11.01	8.80
Std living	Mean	73.38	78.09	83.43	70.64	78.33	82.75	71.95	76.04	80.08	74.21	75.92	82.30	71.44	75.37	82.54	71.35	76.92	83.07	74.44	76.21	81.99
	SD	22.13	16.40	14.00	23.25	16.28	14.99	21.24	16.28	15.80	22.48	16.51	12.40	23.19	16.90	12.83	22.84	15.50	12.24	19.42	15.34	11.59
Health	Mean	70.05	76.47	79.80	68.68	77.08	77.24	67.15	76.94	76.62	69.00	75.89	79.05	70.51	77.17	78.73	67.76	76.71	78.80	68.54	77.09	78.17
	SD	23.46	19.27	17.64	25.19	18.38	20.22	24.93	17.92	19.12	23.70	19.13	15.87	24.17	18.38	16.32	25.03	18.17	16.12	22.02	18.65	16.44
Achievements	Mean	72.89	73.73	76.76	72.17	75.11	75.88	73.44	73.26	76.03	74.21	74.53	76.03	73.75	72.96	76.19	73.59	73.01	77.96	74.68	73.45	75.38
	SD	20.12	18.74	15.64	21.58	16.14	17.19	21.45	16.46	16.88	19.93	18.02	14.37	20.98	16.73	15.51	19.24	17.09	12.43	19.29	16.70	13.54
Relationships	Mean	76.67	79.63	82.89	74.97	79.63	81.64	76.31	79.19	80.56	74.17	77.18	82.22	78.71	79.43	81.36	77.79	79.86	83.07	77.71	78.86	82.87
	SD	25.30	21.20	16.67	27.47	20.43	18.78	24.77	19.40	19.44	28.00	22.17	15.23	21.90	20.12	17.01	23.73	18.27	14.34	24.35	19.27	14.30
Safety	Mean	71.64	76.88	76.62	73.73	77.99	78.08	74.07	77.45	78.46	73.43	77.40	80.63	75.85	77.66	77.75	75.50	79.61	80.71	76.34	78.70	80.92
	SD	23.40	18.95	18.22	23.43	17.67	18.22	22.69	17.50	17.30	20.98	18.27	14.74	19.98	17.37	16.52	21.64	15.94	15.76	18.82	17.24	15.14
Community	Mean	70.66	70.05	69.02	70.25	70.45	69.98	67.61	68.86	70.18	73.64	70.88	69.44	70.51	69.06	70.97	72.59	69.71	70.83	72.07	70.72	69.56
	SD	23.62	20.45	19.78	22.19	19.11	19.18	22.19	18.78	19.41	23.14	18.91	18.86	21.01	19.53	18.39	20.90	19.21	17.54	21.98	20.03	16.93
Future Sec.	Mean	65.17	68.95	73.82	68.08	70.77	73.37	66.78	68.86	71.64	68.59	69.48	75.71	68.37	68.09	71.54	67.42	69.31	76.79	69.09	70.04	73.84
	SD	22.89	19.82	17.90	23.78	18.15	19.19	23.16	18.69	20.38	23.28	19.24	16.07	20.67	19.88	18.58	23.84	19.68	15.70	22.51	18.70	15.22
Life as Whole	Mean	75.39	76.94	81.86	74.00	78.72	81.06	73.87	77.07	79.32	76.14	76.28	80.56	77.51	76.50	80.21	75.02	76.60	80.91	75.92	76.59	80.16
	SD	22.62	18.40	14.23	22.10	15.58	16.27	21.59	15.76	15.67	21.34	17.12	12.48	20.40	15.94	13.51	22.68	16.38	11.90	20.75	15.90	12.93

Legend:
 <15 = <\$15,000
 30-60 = \$30,000-\$60,000
 90+ = \$90,000+

Table A3.10: Normative Ranges Calculated from combined survey mean scores (no data for S1) (N=7)

	Mean Scores (N=6)											
	<\$15,000				\$30,000-\$60,000				\$91,000+			
	Mean	SD	-2 SD	+2 SD	Mean	SD	-2 SD	+2 SD	Mean	SD	-2 SD	+2 SD
PWI	72.08	0.88	70.32	73.84	74.84	0.48	73.88	75.80	77.44	.76	75.92	78.98

Table A3.11: S2-8 PWB combined across income

	N	Mean	SD
<\$15,000	1841	72.00	14.76
%15,000-\$30,000	2324	73.77	13.37
\$31,000-\$60,000	3297	74.85	11.45
\$61,000-\$90,000	1905	76.63	10.44
>\$90,000	1950	77.25	10.66
Total	11317	74.87	12.30

Income: F (4, 11282) =54.24, p=.000

Survey: F (6, 11282) = 2.49, p=.021

Income x Survey: F (24, 11282) = .69, p=.863

Table A3.12: Income x Surveys 7 & 8

Variable	Income	Survey 7			Survey 8		
		N	Mean	SD	N	Mean	SD
PWB Income: F(5,3004) = 11.57, p=.000 Survey: F(1,3004) = 1.16, p=.281 Income x Survey: F(5,3004) = .45, p=.817	<\$15K	210	72.54	15.47	297	73.32	14.08
	\$15-\$30K	307	75.16	11.92	292	74.57	13.49
	\$31-\$60K	404	75.16	11.38	450	75.05	11.10
	\$61-90K	280	77.03	9.93	291	76.47	9.55
	\$91-120K	139	78.42	8.46	149	77.56	8.05
	>\$120K	97	79.13	9.45	100	77.39	9.85
	Total	1437	75.72	11.70	1579	75.28	11.69
	p=	.000			.000		
		\$61-90K > <\$15K, p=.000 \$91-120K > <\$15K, p=.000 \$91-120K > \$31-60K, p=.049 \$120+K > <\$15K, p=.000 \$120+K > \$15-30K, p=.038 \$120+K > \$31-60K, p=.030			\$61-90K > <\$15K, p=.024 \$91-120K > <\$15K, p=.001 \$91-120K > \$31-60K, p=.045 \$120+K > <\$15K, p=.025		
	Standard of living Income: F(5,3103) = 23.96, p=.000 Survey: F(1,3103) = .000, p=.998 Income x Survey: F(5,3103) = 1.24, p=.289	<\$15K	210	72.54	15.47	297	73.32
\$15-\$30K		307	75.16	11.92	292	74.57	13.49
\$31-\$60K		404	75.16	11.38	450	75.05	11.10
\$61-90K		280	77.03	9.93	291	76.47	9.55
\$91-120K		139	78.42	8.46	149	77.56	8.05
>\$120K		97	79.13	9.45	100	77.39	9.85
Total		1437	75.72	11.70	1579	75.28	11.69
p=		.000			.000		
		\$61-90K > <\$15K, p=.000 \$61-90K > \$15-30K, p=.000 \$61-90K > \$31-60K, p=.026 \$91-120K > <\$15K, p=.000 \$91-120K > \$31-60K, p=.000 \$91-120K > \$61-90K, p=.000 \$120+K > <\$15K, p=.000 \$120+K > \$15-30K, p=.000 \$120+K > \$31-60K, p=.000			\$61-90K > <\$15K, p=.002 \$61-90K > \$15-30K, p=.011 \$61-90K > \$31-60K, p=.017 \$91-120K > <\$15K, p=.000 \$91-120K > \$31-60K, p=.000 \$91-120K > \$61-90K, p=.000 \$120+K > <\$15K, p=.000 \$120+K > \$15-30K, p=.000 \$120+K > \$31-60K, p=.000		
Health Income: F(5,3104) = 20.25, p=.000 Survey: F(1,3104) = .10, p=.747 Income x Survey: F(5,3104) = .18, p=.972		<\$15K	223	67.76	25.03	314	68.54
	\$15-\$30K	317	73.72	19.94	308	73.41	20.41
	\$31-\$60K	417	76.71	18.17	464	77.09	18.65
	\$61-90K	284	77.43	17.54	297	76.53	16.60
	\$91-120K	140	78.36	15.71	150	78.20	17.50
	>\$120K	101	79.41	16.72	101	78.12	14.81
	Total	1482	75.20	19.62	1634	74.82	19.31
	p=	.000			.000		
		\$15-30K > <\$15K, p=.006 \$30-60K > <\$15K, p=.000 \$61-90K > <\$15K, p=.000 \$91-120K > <\$15K, p=.000 \$120+K > <\$15K, p=.000			\$30-60K > <\$15K, p=.000 \$61-90K > <\$15K, p=.000 \$91-120K > <\$15K, p=.000 \$120+K > <\$15K, p=.000		
	Achievements Income: F(5,3096) = 3.40, p=.005 Survey: F(1,3096) = 1.23, p=.268 Income x Survey: F(5,3096) = .77, p=.571	<\$15K	220	73.59	19.24	314	74.68
\$15-\$30K		316	73.99	17.94	308	73.99	19.60
\$31-\$60K		415	73.01	17.09	464	73.45	16.70
\$61-90K		283	75.69	14.75	297	74.98	15.38
\$91-120K		140	76.79	11.89	150	74.87	14.37
>\$120K		100	79.60	13.02	101	76.14	12.25
Total		1474	74.63	16.60	1634	74.36	17.15
p=		.000			.514		
		\$120+K > <\$15K, p=.018 \$120+K > \$15-30K, p=.012 \$120+K > \$31-60K, p=.000					
Personal relationships Income: F(5,3099) = 6.69, p=.000 Survey: F(1,3099) = .51, p=.477 Income x Survey: F(5,3099) = .57, p=.723		<\$15K	222	77.79	23.73	314	77.71
	\$15-\$30K	316	81.93	18.06	307	80.42	21.09
	\$31-\$60K	416	79.86	18.27	463	78.86	19.27
	\$61-90K	284	82.75	15.44	297	83.30	16.00
	\$91-120K	140	82.29	14.41	150	83.93	13.36
	>\$120K	101	84.16	14.23	101	81.29	15.53
	Total	1479	81.07	18.16	1632	80.36	19.61
	p=	.013			.001		
		\$61-90K > <\$15K, p=.000 \$120+K > <\$15K, p=.000			\$61-90K > <\$15K, p=.000 \$91-120K > <\$15K, p=.000 \$61-90K > \$30-60K, p=.000		
	Safety Income: F(5,3093) = 4.82, p=.000 Survey: F(1,3093) = .36, p=.547 Income x Survey: F(5,3093) = .39, p=.855	<\$15K	314	76.34	18.82	222	75.50
\$15-\$30K		306	77.16	19.23	315	78.67	16.67
\$31-\$60K		462	78.70	17.24	415	79.61	15.94
\$61-90K		297	78.72	15.48	283	80.04	15.12
\$91-120K		149	81.14	14.54	140	80.86	15.38
>\$120K		101	80.59	16.05	101	80.50	16.33
Total		1629	78.30	17.39	1476	79.05	16.95
p=		.032			.076		
		\$91-120K > <\$15K, p=.000					

Appendix A3: Household Income continued

Variable	Income	Survey 7			Survey 8			
		N	Mean	SD	N	Mean	SD	
Community Income: F(5,3085) = 2.15, p=.056 Survey: F(1,3085) = .71, p=.400 Income x Survey: F(5,3085) = .34, p=.891	<\$15K	220	72.59	20.90	314	72.07	21.98	
	\$15-\$30K	314	73.09	19.09	305	72.39	19.88	
	\$31-\$60K	415	69.71	19.21	459	70.72	20.03	
	\$61-90K	283	70.81	18.07	295	69.66	17.42	
	\$91-120K	140	71.00	18.08	150	69.80	16.97	
	>\$120K	101	70.59	16.84	101	69.21	16.95	
	Total	1473	71.26	18.99	1624	70.92	19.51	
	p=	.216			.343			
	Security Income: F(5,3046) = 8.54, p=.000 Survey: F(1,3046) = .89, p=.347 Income x Survey: F(5,3046) = .90, p=.482	<\$15K	217	67.42	23.84	308	69.09	22.51
		\$15-\$30K	312	70.10	19.54	296	69.36	22.21
\$31-\$60K		408	69.31	19.68	455	70.04	18.70	
\$61-90K		282	72.23	17.09	293	71.77	16.08	
\$91-120K		139	77.19	15.13	150	73.67	13.78	
>\$120K		98	76.22	16.53	100	74.10	17.24	
Total		1456	70.98	19.48	1602	70.64	19.32	
p=		.000			.014			
			\$91-120K > <\$15K, p=.000 \$91-120K > \$15-30K, p=.001 \$91-120K > \$31-60K, p=.000 \$91-120K > \$61-90K, p=.039 \$120+K > <\$15K, p=.003 \$120+K > \$15-30K, p=.037 \$120+K > \$31-60K, p=.007					
NWB Income: F(5,2804) = 2.63, p=.022 Survey: F(1,2804) = .73, p=.392 Income x Survey: F(5,2804) = 1.32, p=.255		<\$15K	183	59.87	17.29	246	58.12	16.36
	\$15-\$30K	276	61.65	15.21	276	59.83	15.82	
	\$31-\$60K	384	60.72	14.17	428	61.48	13.24	
	\$61-90K	276	62.38	13.93	279	60.67	13.74	
	\$91-120K	136	63.10	13.46	140	61.86	11.97	
	>\$120K	97	60.98	16.02	95	63.58	13.77	
	Total	1352	61.39	14.87	1464	60.62	14.38	
	p=	.317			.019			
					\$120+K > <\$15K, p=.031			
	Economic situation Income: F(5,3022) = 12.46, p=.000 Survey: F(1,3022) = .47, p=.494 Income x Survey: F(5,3022) = 1.18, p=.316	<\$15K	208	61.97	22.51	297	60.54	20.51
\$15-\$30K		312	64.81	18.55	298	63.12	18.66	
\$31-\$60K		408	65.00	17.24	452	67.08	16.34	
\$61-90K		279	68.35	16.34	292	67.16	16.13	
\$91-120K		139	68.99	16.07	147	69.52	14.01	
>\$120K		101	69.60	17.55	101	68.32	18.17	
Total		1447	65.87	18.25	1587	65.43	17.75	
p=		.000			.000			
			\$61-90K > <\$15K, p=.000 \$91-120K > <\$15K, p=.000 \$120+K > <\$15K, p=.002			\$15-30K > <\$15K, p=.000 \$30-60K > <\$15K, p=.000 \$30-60K > \$15-30K, p=.000 \$61-90K > <\$15K, p=.000 \$91-120K > <\$15K, p=.000 \$91-120K > \$15-30K, p=.000 \$120+K > <\$15K, p=.002		
State of the environment Income: F(5,3057) = .48, p=.794 Survey: F(1,3057) = 2.32, p=.128 Income x Survey: F(5,3057) = 1.32, p=.254		<\$15K	213	59.30	21.37	309	60.10	20.44
	\$15-\$30K	309	58.74	18.73	302	60.46	19.25	
	\$31-\$60K	413	58.67	17.82	462	60.80	17.82	
	\$61-90K	282	60.96	18.16	292	58.66	16.91	
	\$91-120K	140	57.50	17.84	148	58.38	18.15	
	>\$120K	101	57.72	21.40	98	61.43	16.31	
	Total	1458	59.04	18.89	1611	60.03	18.41	
	p=	.466			.501			
	Social conditions Income: F(5,3053) = .25, p=.938 Survey: F(1,3053) = .12, p=.729 Income x Survey: F(5,3053) = .11, p=.361	<\$15K	214	62.71	20.42	301	61.03	21.54
		\$15-\$30K	308	61.56	18.03	303	61.49	20.04
\$31-\$60K		413	61.89	15.94	457	61.58	17.44	
\$61-90K		283	63.29	16.85	296	61.35	16.43	
\$91-120K		140	61.93	17.75	150	63.47	17.34	
>\$120K		100	59.60	19.79	100	63.60	15.73	
Total		1458	62.06	17.71	1607	61.72	18.49	
p=		.619			.634			
Government Income: F(5,3062) = .28, p=.923 Survey: F(1,3062) = .17, p=.168 Income x Survey: F(5,3062) = 2.51, p=.028		<\$15K	213	53.47	29.51	307	53.78	26.68
		\$15-\$30K	314	58.06	25.49	302	50.40	26.17
	\$31-\$60K	414	54.42	24.22	459	54.31	21.86	
	\$61-90K	283	54.45	24.62	294	53.37	23.28	
	\$91-120K	139	56.76	21.44	149	54.16	22.15	
	>\$120K	101	53.76	27.45	99	56.57	23.74	
	Total	1464	55.25	25.40	1610	53.43	24.09	
	p=	.280			.249			
	Business Income: F(5,2957) = 2.99, p=.011 Survey: F(1,2957) = .10, p=.748 Income x Survey: F(5,2957) = 2.10, p=.063	<\$15K	202	58.66	21.64	269	59.29	19.16
		\$15-\$30K	297	61.28	18.77	291	59.24	19.27
\$31-\$60K		404	59.18	18.26	447	61.19	16.48	
\$61-90K		282	61.91	17.61	292	60.86	16.88	
\$91-120K		138	64.71	16.13	146	61.85	14.19	
>\$120K		100	60.50	18.55	101	65.25	14.87	
Total		1423	60.72	18.64	1546	60.76	17.35	
p=		.014			.022			
			\$91-120K > <\$15K, p=.038 \$91-120K > \$15-30K, p=.031			\$120+K > <\$15K, p=.038 \$120+K > \$15-30K, p=.032		

Appendix A3: Household Income continued

Variable	Income	Survey 7			Survey 8		
		N	Mean	SD	N	Mean	SD
National security	<\$15K	209	63.54	21.75	293	62.53	20.23
Income: F(5,3002) = 1.40, p=.221	\$15-\$30K	302	65.26	19.11	299	63.14	19.77
Survey: F(1,3002) = 2.19, p=.139	\$31-\$60K	404	64.48	19.55	453	63.22	17.43
Income x Survey: F(5,3002) = .68, p=.643	\$61-90K	283	65.16	17.53	291	62.92	18.20
	\$91-120K	138	67.10	16.22	145	64.14	17.50
	>\$120K	99	65.25	21.06	98	67.96	16.37
	Total	1435	64.95	19.22	1579	63.40	18.53
	p=	.610			.128		
Life in Australia	<\$15K	218	82.80	20.86	314	83.31	19.15
Income: F(5,3073) = .28, p=.925	\$15-\$30K	312	83.17	16.70	304	82.20	17.95
Survey: F(1,3073) = .04, p=.840	\$31-\$60K	411	82.55	16.57	462	83.55	15.82
Income x Survey: F(5,3073) = .45, p=.813	\$61-90K	284	83.87	15.88	290	83.14	16.31
	\$91-120K	140	83.14	16.19	149	81.68	15.31
	>\$120K	101	81.88	18.75	100	82.70	14.41
	Total	1466	82.99	17.27	1619	82.95	16.87
	p=	.905			.793		

Table A3.13: Surveys 7 & 8 PWB combined across income

	N	Mean	SD	Incremental Increase
<\$15,000	507	73.00	14.66	-
\$15,000-\$30,000	599	74.87	12.70	1.87
\$31,000-\$60,000	854	75.10	11.23	0.23
\$61,000-\$90,000	571	76.74	9.73	1.64
\$91,000-\$120,000	288	77.97	8.25	1.23
>\$120,000	197	78.25	9.67	0.28
Total	3016	75.49	11.69	

Welch (5, 3010)=12.33, p=.000

Table A3.14: Normative Ranges Calculated from combined Surveys 7 & 8

	<\$15,000 (N=507)				\$30,000-60,000 (N=854)				\$90,000-120,000 (N=288)				>\$120,000 (N=197)			
	Mean	SD	-2 SD	+2 SD	Mean	SD	-2 SD	+2 SD	Mean	SD	-2 SD	+2 SD	Mean	SD	-2 SD	+2 SD
PWI	73.00	14.66	43.68	102.32	75.10	11.23	52.64	97.56	77.97	8.25	61.47	94.47	78.25	9.67	58.91	97.59

Appendix A4. Gender

Table A4.1: Gender Differences

N =	Male		Female		p=
	969		1011		
	Mean	SD	Mean	SD	
PERSONAL WELLBEING INDEX	74.45	11.83	76.36	11.73	.000
Personal domains					
1. Standard of living	77.05	16.18	77.96	16.74	.216
2. Health	74.01	19.15	76.03	19.89	.021
3. Achievements in life	73.41	17.75	75.86	16.64	.002
4. Personal relationships	78.64	20.14	82.32	19.29	.000
5. How safe you feel	78.52	17.97	77.82	17.58	.387
6. Community connect	69.38	19.84	72.39	19.42	.001
7. Future security	69.95	20.36	71.55	18.60	.071
Life as a whole	76.90	17.51	78.99	16.35	.006
SURVEY-SPECIFIC PERSONAL ASPECTS					
- Neighbourhood	79.72	18.18	81.47	18.05	.032
- Contentment	75.01	15.68	78.49	14.78	.000
- Happiness	77.32	15.18	79.89	14.47	.000
NATIONAL WELLBEING INDEX	60.58	15.30	60.93	13.70	.608
National domains					
1. Economic situation	65.66	19.38	65.09	16.26	.485
2. State of the environment	59.82	19.50	60.99	17.26	.160
3. Social conditions	61.62	19.01	62.06	17.89	.599
4. Government	52.25	24.88	54.61	23.01	.031
5. Business	60.62	18.33	61.31	16.81	.395
6. National Security	63.93	19.61	63.25	17.85	.431
Life in Australia	81.37	18.17	84.19	15.83	.000
SURVEY-SPECIFIC NATIONAL ASPECTS					
- Belonging	83.32	18.88	87.31	16.17	.000
- Share core values	70.67	19.07	72.43	17.62	.035

Table A4.2: Gender x Survey

Variable	Survey	Male			Female		
		Mean	SD	N	Mean	SD	N
PWI Gender: $F(1,15357) = 66.49, p = .000$ Survey: $F(7,15357) = 9.79, p = .000$ Gender x Age: $F(7,15357) = 1.01, p = .420$	1	71.85	14.12	831	74.10	12.64	1143
	2	73.32	13.26	727	74.96	12.84	1246
	3	73.56	13.68	689	76.11	11.71	1212
	4	73.64	12.12	935	75.17	12.37	963
	5	74.13	12.13	943	75.03	12.44	958
	6	74.69	11.69	948	75.71	11.97	974
	7	75.18	11.71	928	76.49	11.37	975
	8	74.45	11.83	941	76.36	11.73	960
	Total	73.91	12.54	6942	75.46	12.19	8431
	$p =$.000			.000		
	$S5 > S1, p = .008$ $S6 > S1, p = .000$ $S7 > S1, p = .000$ $S8 > S1, p = .001$			$S3 > S1, p = .002$ $S7 > S1, p = .000$ $S8 > S1, p = .001$			
Standard of living Gender: $F(1,15827) = 33.44, p = .000$ Survey: $F(7,15827) = 8.46, p = .000$ Gender x Age: $F(7,15827) = .93, p = .479$	1	72.71	20.45	831	75.74	18.53	1143
	2	76.89	18.41	727	77.46	18.50	1246
	3	76.32	19.46	734	78.40	17.35	1295
	4	75.34	16.70	970	77.56	17.96	1016
	5	76.65	16.61	969	77.94	17.81	997
	6	76.93	16.98	972	78.42	17.76	1003
	7	77.03	17.04	958	78.57	16.80	1006
	8	77.05	16.18	969	77.96	16.74	1007
	Total	76.15	17.70	7130	77.74	17.73	8713
	$p =$.000			.006		
	$S2 > S1, p = .001$ $S3 > S1, p = .010$ $S5 > S1, p = .000$ $S6 > S1, p = .000$ $S7 > S1, p = .000$ $S8 > S1, p = .000$			$S3 > S1, p = .008$ $S6 > S1, p = .017$ $S7 > S1, p = .006$			
Health Gender: $F(1,15826) = 21.18, p = .000$ Survey: $F(7,15826) = 2.57, p = .012$ Gender x Age: $F(7,15826) = 1.02, p = .414$	1	72.98	22.03	831	74.11	20.77	1143
	2	74.33	20.17	727	75.58	20.65	1246
	3	73.16	21.93	731	76.58	20.32	1295
	4	74.11	19.56	970	75.71	19.95	1015
	5	75.64	18.56	969	75.97	20.71	995
	6	75.28	19.39	974	76.67	19.77	1004
	7	74.75	19.41	959	75.53	19.96	1005
	8	74.01	19.15	968	76.03	19.89	1010
	Total	74.35	19.96	7129	75.77	20.28	8713
	$p =$.061			.094		
Achievements Gender: $F(1,15779) = 64.32, p = .000$ Survey: $F(7,15779) = 2.84, p = .006$ Gender x Age: $F(7,15779) = .89, p = .510$	1	71.30	19.49	831	74.53	17.42	1143
	2	73.38	18.46	727	74.65	18.64	1246
	3	72.60	19.58	724	76.09	17.21	1281
	4	72.90	17.20	968	75.02	17.17	1006
	5	73.74	17.40	966	75.98	18.09	995
	6	74.07	17.33	971	75.88	16.96	1002
	7	73.95	16.89	955	75.56	16.69	1002
	8	73.41	17.75	968	75.86	16.64	1010
	Total	73.22	17.95	7110	75.43	17.40	8685
	$p =$.049			.187		
Personal relationships Gender: $F(1,15784) = 118.49, p = .000$ Survey: $F(7,15784) = 6.78, p = .000$ Gender x Age: $F(7,15784) = 1.61, p = .127$	1	77.06	21.36	831	79.02	21.06	1143
	2	75.75	23.18	727	81.08	20.95	1246
	3	76.17	23.00	729	80.96	20.71	1280
	4	77.34	21.58	967	80.54	20.45	1011
	5	76.39	22.23	964	80.92	20.82	992
	6	79.08	20.10	973	82.05	19.06	1001
	Total	77.06	21.36	831	79.02	21.06	1143

Appendix A4 Gender continued

Variable	Survey	Male			Female		
		Mean	SD	N	Mean	SD	N
	7	80.10	18.29	955	82.48	17.41	1006
	8	78.64	20.14	966	82.32	19.29	1009
	Total	77.68	21.20	7112	81.13	20.09	8688
	p=	.000					
		<i>S7 > S1, p = .038</i> <i>S7 > S2, p = .001</i> <i>S7 > S3, p = .004</i> <i>S7 > S5, p = .002</i>			<i>S6 > S1, p = .014</i> <i>S7 > S1, p = .001</i> <i>S8 > S1, p = .004</i>		
Safety Gender: F(1,15780) = 35.19, p= .000 Survey: F(7,15780) = 8.96 p = .000 Gender x Age: F(7,15780) = 1.86, p=.071	1	75.19	20.90	831	75.01	19.66	1143
	2	77.08	19.10	727	74.97	20.48	1246
	3	77.74	20.04	725	76.30	19.44	1285
	4	78.21	18.01	967	76.18	18.90	1009
	5	77.86	18.20	969	73.86	19.94	994
	6	78.10	18.09	969	75.64	18.82	1003
	7	79.82	17.46	954	78.32	16.55	1004
	8	78.52	17.97	964	77.82	17.58	1006
	Total	77.89	18.69	7106	75.98	19.07	8690
	p=	.000			.000		
		<i>S7 > S1, p = .001</i> <i>S7 > S2, p = .001</i> <i>S7 > S5, p = .000</i> <i>S7 > S6, p = .021</i> <i>S8 > S1, p = .013</i> <i>S8 > S2, p = .011</i> <i>S8 > S5, p = .000</i>			<i>S4 > S1, p = .031</i> <i>S6 > S1, p = .047</i> <i>S7 > S1, p = .000</i> <i>S8 > S1, p = .009</i>		
Community Gender: F(1,15731) = 117.26, p= .000 Survey: F(7,15731) = 4.34 p = .000 Gender x Age: F(7,15731) = .78, p=.601	1	66.13	22.12	831	70.38	19.37	1143
	2	67.59	21.54	727	72.26	20.55	1246
	3	68.22	20.56	724	72.09	19.09	1270
	4	67.59	19.97	964	71.40	19.27	1004
	5	68.72	20.67	965	71.20	20.24	988
	6	69.73	19.93	973	72.19	19.38	999
	7	69.49	19.57	952	72.78	18.56	998
	8	69.38	19.84	962	72.39	19.42	1001
	Total	68.43	20.50	7098	71.83	19.52	8649
	p=	.004			.097		
		<i>S6 > S1, p = .009</i> <i>S7 > S1, p = .021</i> <i>S8 > S1, p = .032</i>					
Future security Gender: F(1,15589) = 8.09, p= .004 Survey: F(7,15589) = 5.04, p = .000 Gender x Age: F(7,15589) = 1.14, p=.334	1	67.57	22.14	831	69.88	20.24	1143
	2	68.24	20.56	727	68.75	20.69	1246
	3	69.79	21.44	719	71.69	19.43	1267
	4	69.09	19.85	945	69.60	20.51	991
	5	70.15	19.93	954	69.50	19.28	973
	6	69.35	20.90	959	69.51	20.13	989
	7	70.86	19.51	943	71.94	18.83	986
	8	69.95	20.36	957	71.55	18.60	975
	Total	69.43	20.56	7035	70.29	19.79	8570
	p=				.000		
		<i>S7 > S1, p = .027</i>			<i>S3 > S2, p = .001</i> <i>S7 > S2, p = .004</i> <i>S8 > S2, p = .023</i>		

Table A4.3: Gender x Age (Survey 8)

Variable	Age Group	Male			Female			p=
		Mean	SD	N	Mean	SD	N	
PWB Age: F(6,1862) = 6.90, p=.000 Gender: F(1,1862) = 11.29, p=.001 Gender x Age: F(6,1862) = .61, p=.723	18-25	75.83	10.44	102	75.87	10.59	72	.977
	26-35	72.34	12.08	131	75.28	10.57	163	.030
	36-45	73.45	10.58	195	75.27	11.92	208	.104
	46-55	73.24	12.37	183	75.15	12.83	197	.141
	56-65	74.58	12.31	148	75.83	12.37	128	.406
	66-75	76.39	13.05	102	80.42	9.87	118	.011
	76+	78.40	11.35	68	80.09	10.73	61	.386
	Total	74.38	11.85	929	76.32	11.68	947	
	p=	.004			.000			
		76+ > 26-35, p=.011 76+ > 36-45, p=.045 76+ > 46-55, p=.035			66-75 > 26-35, p=.004 66-75 > 36-45, p=.002 66-75 > 46-55, p=.002 66-75 > 56-65, p=.031			
Happiness Age: F(6,1933) = 9.79, p=.000 Gender: F(1,1933) = 13.38, p=.000 Gender x Age: F(6,1933) = .72, p=.545	18-25	78.54	13.09	103	79.74	15.89	77	.591
	26-35	75.59	15.67	136	80.77	11.18	169	.001
	36-45	75.70	13.80	200	79.06	13.81	213	.014
	46-55	75.19	15.91	187	76.03	17.38	209	.615
	56-65	77.58	15.09	153	79.09	14.70	132	.394
	66-75	81.96	15.20	107	84.76	11.99	124	.127
	76+	81.59	14.51	69	84.85	12.15	68	.156
	Total	77.32	15.00	955	79.88	14.47	992	
	p=	.000			.000			
		66-75 > 26-35, p=.016 66-75 > 36-45, p=.008 66-75 > 46-55, p=.003 66-75 > 46-55, p=.003 66-75 > 46-55, p=.003 76+ > 46-55, p=.036			26-35 > 46-55, p=.030 66-75 > 36-45, p=.002 66-75 > 46-55, p=.000 66-75 > 56-65, p=.017 76+ > 36-45, p=.025 76+ > 46-55, p=.000			
Contentment Age: F(6,1930) = 8.75, p=.000 Gender: F(1,1930) = 20.22, p=.000 Gender x Age: F(6,1930) = 1.03, p=.401	18-25	75.35	13.90	101	76.75	16.01	77	.540
	26-35	72.72	15.70	136	78.76	12.31	169	.000
	36-45	72.80	15.47	200	77.28	14.51	213	.003
	46-55	74.49	16.56	187	75.60	16.92	209	.512
	56-65	75.13	15.43	154	78.32	15.10	131	.080
	66-75	79.43	14.72	106	83.55	11.84	124	.022
	76+	80.72	14.07	69	83.38	13.34	68	.259
	Total	75.08	15.54	953	78.48	14.74	991	
	p=	.000			.000			
		66-75 > 26-35, p=.016 66-75 > 36-45, p=.008 76+ > 26-35, p=.008 76+ > 36-45, p=.004			66-75 > 18-25, p=.022 66-75 > 36-45, p=.003 66-75 > 46-55, p=.000 76+ > 36-45, p=.042 76+ > 46-55, p=.003			
Neighbourhood Age: F(6,1932) = 7.24, p=.000 Gender: F(1,1932) = 3.91, p=.045 Gender x Age: F(6,1932) = 1.83, p=.090	18-25	76.60	21.40	103	80.13	18.44	76	.239
	26-35	74.12	20.60	136	79.23	17.39	169	.022
	36-45	79.40	17.00	200	80.28	17.91	213	.608
	46-55	79.09	17.45	186	80.24	18.35	208	.523
	56-65	82.66	15.93	154	81.65	20.93	133	.651
	66-75	81.78	18.92	107	87.66	13.56	124	.008
	76+	87.25	13.16	69	83.82	18.29	68	.212
	Total	79.64	18.24	955	81.43	18.08	991	
	p=	.000			.002			
		76+ > 18-25, p=.022 76+ > 26-35, p=.000 76+ > 36-45, p=.003 76+ > 46-55, p=.002 26-35 > 56-65, p=.002			66-75 > 26-35, p=.001 66-75 > 36-45, p=.005 66-75 > 46-55, p=.005			
Belonging Age: F(6,1926) = 11.08, p=.000 Gender: F(1,1926) = 19.74, p=.000 Gender x Age: F(6,1926) = .87, p=.515	18-25	81.76	19.42	102	81.45	19.09	76	.913
	26-35	78.52	21.56	135	84.44	16.47	169	.009
	36-45	81.36	18.92	198	85.19	17.40	212	.034
	46-55	82.47	19.07	186	87.98	14.90	208	.002
	56-65	86.82	16.56	154	89.10	15.64	133	.232
	66-75	87.76	16.21	107	91.84	14.33	125	.045
	76+	88.70	15.33	69	93.64	11.32	66	.035
	Total	83.35	18.76	951	87.29	16.21	989	
	p=	.000			.000			
		56-65 > 26-35, p=.007 66-75 > 26-35, p=.004 66-75 > 36-45, p=.045 76+ > 26-35, p=.003 76+ > 36-45, p=.033			66-75 > 18-25, p=.002 66-75 > 26-35, p=.001 66-75 > 36-45, p=.004 76+ > 18-25, p=.000 76+ > 26-35, p=.000 76+ > 36-45, p=.003 76+ > 46-55, p=.029			

Appendix A4 Gender continued

Variable	Age Group	Male			Female			p=
		Mean	SD	N	Mean	SD	N	
Share core values	18-25	70.10	21.55	102	68.05	19.33	77	.506
Age: F(6,1882) = 4.15, p=.000	26-35	69.78	17.28	134	70.74	16.80	163	.630
Gender: F(1,1882) = 4.32, p=.038	36-45	69.29	18.93	196	70.91	17.03	209	.366
Gender x Age: F(6,1882) = .82, p=.555	46-55	69.18	19.91	182	71.76	18.88	204	.192
	56-65	72.72	19.63	151	73.57	17.18	129	.699
	66-75	74.25	16.56	106	76.58	16.98	120	.296
	76+	71.43	17.68	63	78.33	15.75	60	.024
	Total	70.69	19.01	934	72.36	17.68	962	
	p=							.001
					66-75 > 18-25, p=.016			
					76+ > 18-25, p=.012			

Table A4.4: Gender x Age Surveys 1-8 Combined

Variable	Age Group	Male			Female			p=
		N	Mean	SD	N	Mean	SD	
PWB Age: F(6,15073) = 29.76, p=.000 Gender: F(1,15073) = 45.31, p=.000 Gender x Age: F(6,15073) = 99, p=.433	18-25	832	73.55	11.71	741	74.20	10.92	.256
	26-35	1020	72.56	12.12	1307	74.95	11.27	.000
	36-45	1385	73.00	12.15	1802	74.85	12.55	.000
	46-55	1368	72.98	13.01	1684	74.37	13.15	.003
	56-65	1063	75.22	12.29	1246	76.47	11.98	.013
	66-75	750	76.35	12.21	925	77.73	11.70	.019
	76+	416	76.70	14.08	548	77.98	11.86	.135
	Total	6834	73.93	12.50	8253	75.49	12.18	
	p=	.000			.000			
		76+ > 18-25, p=.002			76+ > 18-25, p=.002			
		76+ > 26-35, p=.000			76+ > 26-35, p=.000			
		76+ > 36-45, p=.000			76+ > 36-45, p=.000			
		76+ > 46-55, p=.000			76+ > 46-55, p=.000			
		66-75 > 18-25, p=.000			66-75 > 18-25, p=.000			
	66-75 > 26-35, p=.000			66-75 > 26-35, p=.000				
	66-75 > 36-45, p=.000			66-75 > 36-45, p=.000				
	66-75 > 46-55, p=.000			66-75 > 46-55, p=.000				
	56-65 > 26-35, p=.000			56-65 > 18-25, p=.000				
	56-65 > 36-45, p=.000			56-65 > 26-35, p=.019				
	56-65 > 46-55, p=.000			56-65 > 36-45, p=.007				
				56-65 > 46-55, p=.000				
Standard of living Age: F(6,15516) = 41.22, p=.000 Gender: F(1,15516) = 30.40, p=.000 Gender x Age: F(6,15516) = .94, p=.465	18-25	843	78.36	16.23	751	79.00	16.28	.434
	26-35	1035	74.46	16.64	1326	76.68	17.08	.002
	36-45	1427	73.61	17.40	1836	75.17	18.30	.013
	46-55	1401	74.57	18.75	1727	76.59	18.04	.002
	56-65	1087	78.06	16.80	1309	78.81	18.29	.297
	66-75	775	78.79	17.95	970	80.24	17.34	.089
	76+	442	80.23	18.97	601	83.33	15.81	.005
	Total	7010	76.18	17.65	8520	77.74	17.75	
	p=	.000			.000			
		76+ > 26-35, p=.000			76+ > 18-25, p=.000			
		76+ > 36-45, p=.000			76+ > 26-35, p=.000			
		76+ > 46-55, p=.000			76+ > 36-45, p=.000			
		66-75 > 26-35, p=.000			76+ > 46-55, p=.000			
		66-75 > 36-45, p=.000			76+ > 56-65, p=.000			
	66-75 > 46-55, p=.000			76+ > 66-75, p=.000				
	56-65 > 26-35, p=.000			66-75 > 26-35, p=.000				
	56-65 > 36-45, p=.000			66-75 > 36-45, p=.000				
	56-65 > 46-55, p=.000			66-75 > 46-55, p=.000				
	18-25 > 26-35, p=.000			56-65 > 26-35, p=.042				
	18-25 > 36-45, p=.000			56-65 > 36-45, p=.007				
	18-25 > 46-55, p=.000			56-65 > 46-55, p=.018				
				18-25 > 26-35, p=.045				
				18-25 > 36-45, p=.000				
				18-25 > 46-55, p=.022				
Health Age: F(6,15515) = 27.46, p=.000 Gender: F(1,15472) = 13.01, p=.000 Gender x Age: F(6,15515) = 2.76, p=.011	18-25	844	78.76	18.37	753	77.37	18.62	.135
	26-35	1035	75.51	18.65	1326	78.08	19.13	.001
	36-45	1426	75.13	18.28	1835	78.02	19.11	.000
	46-55	1401	73.22	20.45	1728	74.84	20.67	.029
	56-65	1086	73.42	20.59	1308	74.82	20.96	.099
	66-75	775	72.61	21.79	970	72.52	21.26	.930
	76+	442	69.62	22.41	600	71.37	22.53	.214
	Total	7009	74.35	19.95	8520	75.74	20.31	
	p=	.000			.000			
		18-25 > 26-35, p=.003			18-25 > 66-75, p=.000			
		18-25 > 36-45, p=.000			18-25 > 76+, p=.000			
		18-25 > 46-55, p=.000			26-35 > 46-55, p=.000			
		18-25 > 56-65, p=.000			26-35 > 56-65, p=.001			
		18-25 > 66-75, p=.000			26-35 > 66-75, p=.001			
	18-25 > 76+, p=.000			36-45 > 46-55, p=.000				
	76+ > 26-35, p=.000			36-45 > 56-65, p=.000				
	76+ > 36-45, p=.000			36-45 > 66-75, p=.000				
	76+ > 56-65, p=.000			46-55 > 76+, p=.019				
				56-65 > 76+, p=.031				
Achievements Age: F(6,15472) = 38.50, p=.000 Gender: F(1,15472) = 41.24, p=.000 Gender x Age: F(6,15472) = 1.14, p=.336	18-25	842	71.82	17.74	754	73.28	17.19	.096
	26-35	1033	71.66	17.70	1325	74.36	16.59	.000
	36-45	1422	71.23	17.40	1829	73.83	16.98	.000
	46-55	1399	72.33	18.12	1728	74.20	17.82	.004
	56-65	1085	74.60	17.84	1302	77.74	17.23	.000
	66-75	772	77.77	16.88	967	78.96	17.75	.156
	76+	439	77.40	19.46	589	78.12	17.54	.545
	Total	6992	73.22	17.92	8494	75.42	17.39	
	p=	.000			.000			
		76+ > 18-25, p=.000			76+ > 26-35, p=.000			
		76+ > 26-35, p=.000			76+ > 36-45, p=.000			
		76+ > 36-45, p=.000			76+ > 46-55, p=.000			
		76+ > 46-55, p=.000			66-75 > 26-35, p=.000			
		66-75 > 18-25, p=.000			66-75 > 36-45, p=.000			
	66-75 > 26-35, p=.000			66-75 > 46-55, p=.000				
	66-75 > 36-45, p=.000			56-65 > 26-35, p=.000				

Appendix A4 Gender continued

Variable	Age Group	Male			Female			p=
		N	Mean	SD	N	Mean	SD	
		66-75 > 46-55, p=.000 66-75 > 26-35, p=.000 56-65 > 18-25, p=.012 56-65 > 26-35, p=.000 56-65 > 36-45, p=.000 56-65 > 46-55, p=.027			56-65 > 36-45, p=.000 56-65 > 46-55, p=.000			
Personal relationships Age: F(6,1926) = 11.08, p=.000 Gender: F(1,1926) = 19.74, p=.000 Gender x Age: F(6,1926) = .87, p=.515	18-25	844	72.94	21.59	753	78.57	18.89	.000
	26-35	1034	76.57	21.51	1326	80.96	20.01	.000
	36-45	1422	76.56	21.04	1836	80.08	20.60	.000
	46-55	1400	76.81	22.20	1723	79.45	21.65	.001
	56-65	1085	80.02	20.32	1302	83.03	19.25	.000
	66-75	772	81.99	19.12	963	83.78	18.54	.050
	76+	440	83.32	18.69	594	84.58	18.07	.277
	Total	6997	77.74	21.15	8497	81.14	20.07	
	p=	.000			.000			
		26-35 > 18-25, p=.004 36-45 > 18-25, p=.001 46-55 > 18-25, p=.000 56-65 > 18-25, p=.000 56-65 > 26-35, p=.003 56-65 > 36-45, p=.001 56-65 > 46-55, p=.004 66-75 > 18-25, p=.000 66-75 > 26-35, p=.000 66-75 > 36-45, p=.000 66-75 > 46-55, p=.000 76+ > 18-25, p=.000 76+ > 26-35, p=.000 76+ > 36-45, p=.000 76+ > 46-55, p=.000			56-65 > 18-25, p=.000 56-65 > 36-45, p=.001 56-65 > 46-55, p=.004 66-75 > 18-25, p=.000 66-75 > 26-35, p=.015 66-75 > 36-45, p=.001 66-75 > 46-55, p=.000 76+ > 18-25, p=.000 76+ > 26-35, p=.000 76+ > 36-45, p=.000 76+ > 46-55, p=.000			
Safety Age: F(6,15473) = 1.36, p=.227 Gender: F(1,15473) = 32.99, p=.000 Gender x Age: F(6,15473) = 1.21, p=.300	18-25	841	78.79	18.03	753	75.92	18.25	.002
	26-35	1032	78.26	17.89	1324	76.19	17.95	.006
	36-45	1420	78.37	17.75	1832	76.50	18.18	.003
	46-55	1395	77.66	19.46	1726	76.23	19.15	.041
	56-65	1086	78.05	18.24	1303	74.78	19.72	.000
	66-75	774	76.46	20.13	968	75.88	20.69	.554
	76+	440	77.52	19.99	593	76.42	20.36	.387
	Total	6988	77.95	18.65	8499	76.01	19.05	
	p=	.267			.319			
Community connectedness Age: F(6,15473) = 71.10, p=.000 Gender: F(1,15473) = 81.25, p=.000 Gender x Age: F(6,15473) = 2.4, p=.025	18-25	840	63.86	21.35	749	65.65	19.31	.079
	26-35	1031	63.88	20.64	1320	69.13	18.46	.000
	36-45	1421	67.61	20.03	1825	71.69	19.38	.000
	46-55	1395	68.88	20.30	1713	70.85	19.88	.007
	56-65	1082	70.81	19.49	1299	74.25	19.18	.000
	66-75	770	73.90	19.61	961	77.24	18.50	.000
	76+	440	74.16	20.32	590	75.88	19.86	.175
	Total	6979	68.46	20.51	8457	71.90	19.49	
	p=	.000			.000			
		36-45 > 18-25, p=.001 36-45 > 26-35, p=.001 46-55 > 18-25, p=.000 46-55 > 26-35, p=.000 46-55 > 36-45, p=.001 56-65 > 18-25, p=.000 56-65 > 26-35, p=.003 56-65 > 36-45, p=.005 56-65 > 46-55, p=.000 66-75 > 18-25, p=.000 66-75 > 26-35, p=.000 66-75 > 36-45, p=.000 66-75 > 46-55, p=.000 76+ > 18-25, p=.000 76+ > 26-35, p=.018 76+ > 36-45, p=.000 76+ > 46-55, p=.000			26-35 > 18-25, p=.001 36-45 > 18-25, p=.004 46-55 > 18-25, p=.000 56-65 > 18-25, p=.000 56-65 > 26-35, p=.003 56-65 > 36-45, p=.005 56-65 > 46-55, p=.000 66-75 > 18-25, p=.000 66-75 > 26-35, p=.000 66-75 > 36-45, p=.000 66-75 > 46-55, p=.000 76+ > 18-25, p=.000 76+ > 26-35, p=.000 76+ > 36-45, p=.000 76+ > 46-55, p=.000			
Future security Age: F(6,1882) = 4.15, p=.000 Gender: F(1,1882) = 4.32, p=.038 Gender x Age: F(6,1882) = .82, p=.555	18-25	839	69.82	18.69	748	69.43	18.46	.672
	26-35	1028	67.60	20.03	1315	69.21	18.20	.044
	36-45	1405	67.07	19.72	1822	68.88	19.43	.009
	46-55	1381	67.46	22.17	1708	68.30	20.94	.281
	56-65	1078	71.38	20.74	1275	71.21	20.22	.837
	66-75	766	73.20	19.99	943	74.61	19.18	.139
	76+	424	75.71	20.59	577	75.46	20.01	.849
	Total	6921	69.44	20.56	8388	70.31	19.75	
	p=	.000			.000			
		56-65 > 26-35, p=.000 56-65 > 36-45, p=.000 56-65 > 46-55, p=.000 66-75 > 18-25, p=.016 66-75 > 26-35, p=.000 66-75 > 36-45, p=.000 66-75 > 46-55, p=.000			56-65 > 36-45, p=.000 56-65 > 46-55, p=.000 66-75 > 18-25, p=.000 66-75 > 26-35, p=.000 66-75 > 36-45, p=.000 66-75 > 46-55, p=.000 66-75 > 56-65, p=.000			

Appendix A4 Gender continued

Variable	Age Group	Male			Female			p=
		N	Mean	SD	N	Mean	SD	
		<i>76+ > 18-25, p=.000</i>			<i>76+ > 18-25, p=.000</i>			
		<i>76+ > 26-35, p=.000</i>			<i>76+ > 26-35, p=.000</i>			
		<i>76+ > 36-45, p=.000</i>			<i>76+ > 36-45, p=.000</i>			
		<i>76+ > 46-55, p=.000</i>			<i>76+ > 46-55, p=.000</i>			
		<i>76+ > 56-65, p=.004</i>			<i>76+ > 56-65, p=.000</i>			

Appendix A5. Chronological Age

Table A5.1: Age Differences Survey 8 . Mean SD

N =	18-25		26-35		36-45		46-55		56-65		66-75		76+		P
	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	
PERSONAL WELLBEING INDEX	75.85	10.47	73.97	11.34	74.39	11.31	74.23	12.63	75.16	12.33	78.55	11.60	79.20	11.05	.000
											>26-35 p=.000 >36-45 p=.000 >46-55 p=.000 >56-65 p=.023		>26-35 p=.000 >36-45 p=.001 >46-55 p=.001 >56-65 p=.021		
Personal domains															
1. Standard of living	79.21	16.38	74.36	16.01	75.42	16.19	76.57	16.44	77.60	16.69	80.56	16.39	85.47	14.50	.000
											>26-35 p=.000 >36-45 p=.002 >46-55 p=.047		>18-25 p=.012 >26-35 p=.000 >36-45 p=.000 >46-55 p=.000 >56-65 p=.000		
2. Health	80.56	18.66	76.26	17.89	77.29	17.62	73.84	19.65	71.18	22.27	73.94	18.96	71.32	20.90	.000
											>46-55 p=.002 >56-65 p=.000 >66-75 p=.010 >76+ p=.000		>56-65 p=.024 >76+ p=.030		
3. Achievements in life	73.22	16.90	73.15	16.48	72.20	15.99	73.08	18.07	76.10	17.66	79.78	16.98	78.24	17.72	.000
										>36-45 p=.048	>18-25 p=.002 >26-35 p=.000 >36-45 p=.000 >46-55 p=.000		>36-45 p=.007		
4. Personal relationships	76.44	20.97	78.69	19.91	78.81	20.44	79.37	20.31	81.81	19.46	84.61	18.28	86.20	15.49	.000
											>18-25 p=.001 >26-35 p=.008 >36-45 p=.005 >46-55 p=.020		>18-25 p=.000 >26-35 p=.000 >36-45 p=.000 >46-55 p=.001		
5. How safe you feel	81.28	16.18	79.27	16.67	78.71	16.41	77.28	18.23	76.40	18.75	77.19	19.63	78.76	17.84	.066
6. Community connect	66.48	20.73	66.94	21.20	69.34	18.61	70.26	19.20	72.32	19.54	77.01	18.23	76.93	18.37	.000
										>18-25 p=.027 >26-35 p=.015	>18-25 p=.000 >26-35 p=.000 >36-45 p=.000		>18-25 p=.000 >26-35 p=.000 >36-45 p=.002		
7. Future security	72.50	17.45	69.03	17.86	68.58	17.79	69.12	20.26	69.78	21.03	74.49	21.91	78.47	18.29	.000
											>26-35 p=.024 >36-45 p=.000 >46-55 p=.000		>26-35 p=.000 >36-45 p=.000 >46-55 p=.000 >56-65 p=.000		

Appendix A5 Chronological Age continued

	18-25		26-35		36-45		46-55		56-65		66-75		76+		P
	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	
Life as a whole	76.83	14.47	77.11	15.65	76.44	16.23	75.23	17.61	78.36	19.22	82.51	16.91	84.60	14.09	.000
											>18-25 p=.006 >26-35 p=.000 >36-45 p=.006 >46-55 p=.005		>18-25 p=.006 >26-35 p=.000 >36-45 p=.010 >46-55 p=.009		
SURVEY-SPECIFIC ASPECTS															
PERSONAL															
- Neighbourhood	78.10	20.22	76.95	19.03	79.85	17.46	79.70	17.92	82.20	18.39	84.94	16.49	85.55	15.95	.000
											>18-25 p=.003 >26-35 p=.000 >36-45 p=.000 >46-55 p=.000 >56-65 p=.003		>18-25 p=.007 >26-35 p=.002 >36-45 p=.000 >46-55 p=.000 >56-65 p=.000		
- Contentment	75.96	14.82	76.07	14.22	75.11	15.13	75.08	16.74	76.60	15.34	81.65	13.38	82.04	13.73	.000
											>18-25 p=.035 >26-35 p=.001 >36-45 p=.000 >46-55 p=.000 >56-65 p=.001		>26-35 p=.015 >36-45 p=.000 >46-55 p=.000 >56-65 p=.016		
- Happiness	79.06	14.33	78.46	13.59	77.43	13.89	75.63	16.68	78.28	14.90	83.46	13.61	83.21	13.45	.000
											>18-25 p=.039 >26-35 p=.002 >36-45 p=.000 >46-55 p=.000 >56-65 p=.001		>26-35 p=.026 >36-45 p=.001 >46-55 p=.000 >56-65 p=.020		
NATIONAL WELLBEING INDEX	63.18	14.98	59.26	14.59	60.51	13.53	60.22	14.08	59.23	15.81	62.10	13.39	64.54	15.66	.004
													>26-35 p=.040 >56-65 p=.040		
National domains															
1. Economic situation	65.96	18.20	64.69	17.94	65.74	15.78	66.26	17.43	63.37	19.21	63.95	17.87	68.89	20.25	.070
2. State of the environment	61.99	19.60	57.67	18.69	60.54	18.08	59.24	18.07	59.26	18.22	62.19	17.67	66.18	17.99	.000
													>26-35 p=.000 >36-45 p=.035 >46-55 p=.003 >56-65 p=.006		
3. Social conditions	65.34	19.37	60.93	17.05	61.48	17.47	60.43	19.01	59.23	19.25	63.92	17.01	66.75	20.11	.000
		>46-55 p=.048 >56-65 p=.009											>26-35 p=.045		

Appendix A5 Chronological Age continued

	18-25		26-35		36-45		46-55		56-65		66-75		76+		P	
	N =	<i>Mean</i>	<i>SD</i>	<i>Mean</i>	<i>SD</i>	<i>Mean</i>	<i>SD</i>	<i>Mean</i>	<i>SD</i>	<i>Mean</i>	<i>SD</i>	<i>Mean</i>	<i>SD</i>			
4. Government		53.67	23.20	50.27	23.26	52.15	22.84	52.55	23.81	52.70	24.92	56.13	24.34	62.44	25.35	.000
														>18-25 <i>p</i> =.022 >26-35 <i>p</i> =.000 >36-45 <i>p</i> =.000 >46-55 <i>p</i> =.001 >56-65 <i>p</i> =.002		
5. Business		65.93	18.06	59.04	17.74	59.85	16.52	59.97	16.83	60.94	19.13	62.46	16.20	62.10	19.10	.001
														>26-35 <i>p</i> =.001 >36-45 <i>p</i> =.003 >46-55 <i>p</i> =.004		
6. National Security		66.33	20.58	62.45	18.55	63.32	17.92	63.54	18.42	61.77	19.04	64.55	18.41	66.05	18.95	.110
Life in Australia		80.90	19.32	80.67	17.60	82.98	15.16	83.00	16.36	84.06	16.30	82.60	18.35	86.12	18.14	.033
														>26-35 <i>p</i> =.033		
SURVEY-SPECIFIC ASPECTS	NATIONAL															
Belonging		81.63	19.23	81.81	19.10	83.34	18.23	85.38	17.19	87.87	16.15	89.96	15.33	91.11	13.70	.000
										>18-25 <i>p</i> =.007	>18-25 <i>p</i> =.000 >26-35 <i>p</i> =.000 >36-45 <i>p</i> =.000 >46-55 <i>p</i> =.013	>18-25 <i>p</i> =.000 >26-35 <i>p</i> =.000 >36-45 <i>p</i> =.000 >46-55 <i>p</i> =.002				
Share core values		69.22	20.59	70.30	16.99	70.12	17.97	70.54	19.39	73.11	18.51	75.49	16.79	74.80	17.05	.000
												>18-25 <i>p</i> =.011 >26-35 <i>p</i> =.023 >36-45 <i>p</i> =.008 >46-55 <i>p</i> =.021				

Table A5.2: Age Differences Across Surveys (Personal Wellbeing Index)

Survey	Survey 1 (N= 1973)		Survey 2 (N= 1973)		Survey 3 (N= 1813)		Survey 4 (N= 1813)		Survey 5 (N= 1823)		Survey 6 (N= 1867)		Survey 7 (N= 1881)		Survey 8 (N= 1876)		p	
	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD		
18-25	72.88	12.97	73.89	12.09	73.05	11.25	73.95	11.63	73.21	10.61	74.07	10.05	74.24	10.88	75.85	10.47	.273	
N	207		244		176		209		204		187		172		174			
26-35	72.93	12.25	74.25	12.65	74.76	11.46	72.79	11.62	73.71	11.53	74.35	11.57	74.68	10.97	73.97	11.34	.323	
N	316		307		240		287		312		289		282		294			
36-45	72.45	12.95	74.33	14.17	74.74	11.88	73.62	13.39	74.29	12.43	73.80	11.33	74.99	11.30	74.39	11.31	.105	
N	436		404		352		394		400		413		385		403			
45-55	72.85	12.97	73.01	13.22	74.52	13.13	73.72	12.27	73.83	13.61	73.11	14.43	74.81	12.49	74.23	12.63	.303	
N	409		400		385		377		370		361		370		380			
56-65	73.91	12.90	75.00	13.00	76.67	12.70	75.78	11.34	76.36	12.27	76.93	10.94	76.59	11.62	75.16	12.33	.050	
N	238		270		318		267		279		324		337		276			
66-75	75.38	13.33	75.83	12.55	76.42	13.36	77.08	10.59	76.37	11.59	78.44	9.90	79.02	11.28	78.55	11.60	.006	
N	219		218		233		167		208		208		202		220			
76+	72.49	17.89	75.93	11.75	79.07	10.89	77.07	13.70	77.36	11.56	80.92	10.46	79.09	10.40	79.20	11.05	.000	
N	148		130		109		122		99		99		133		129			
					<i>S3>S1, p=.009</i>								<i>S6>S1, p=.000</i>		<i>S7>S1, p=.005</i>		<i>S8>S1, p=.005</i>	
											<i>S6>S2, p=.023</i>							
Total	73.16	13.33	74.36	13.02	75.35	12.39	74.41	12.24	74.68	12.24	75.21	11.85	75.85	11.55	75.36	11.80	.000	

Table A5.3: Age Differences Calculated Using the Raw Data from all Surveys (Personal Wellbeing Index)

Age	N	Mean	SD	- 2 SD	+2 SD	Range
18-25	1573	73.86	11.35	51.16	96.56	45.4
26-35	2327	73.90	11.71	50.48	97.32	46.84
36-45	3187	74.04	12.41	49.22	98.86	49.64
45-55	3052	73.75	13.10	47.55	99.95	52.40
56-65	2309	75.89	12.14	51.61	100.17	48.56
66-75	1675	77.11	11.95	53.21	101.01	47.80
76+	964	77.43	12.88	51.67	103.19	51.52
Total	15087	74.78	12.35	50.08	99.48	49.40

Welch (6, 15080)=29.59, p=.000

18-25 < 56-65, p=.000

26-35 < 56-65, p=.000

36-45 < 56-65, p=.000

46-55 < 56-65, p=.000

18-25 < 66-75, p=.000

26-35 < 66-75, p=.000

36-45 < 66-75, p=.000

46-55 < 66-75, p=.000

56-65 < 66-75, p=.034

18-25 < 76+, p=.000

26-35 < 76+, p=.000

36-45 < 76+, p=.000

46-55 < 76+, p=.000

56-65 < 76+, p=.034

Table A5.4: Age Differences Calculated using Survey Mean Scores for each Age Group (N=8)

	Mean	SD	-2SD	+2SD	Range	
18-25	73.89	0.94	72.01	75.77	S1-S8	3.76
26-35	73.93	.75	72.43	75.43	S1-S3	3.00
36-45	74.07	.80	72.47	75.67	S1-S7	3.20
46-55	73.76	.73	72.30	75.22	S1-S7	2.92
56-66	75.80	1.04	73.72	77.88	S1-S6	4.16
66-75	77.14	1.37	74.36	79.88	S1-S7	5.52
76+	77.64	2.60	72.44	82.84	S1-S6	10.4

Welch (6,49) =10.37, p=.000

18-25 < 56-65, p=.032

26-35 < 56-65, p=.022

36-45 < 56-65, p=.043

46-55 < 56-65, p=.011

18-25 < 66-75, p=.002

26-35 < 66-75, p=.002

36-45 < 66-75, p=.003

46-55 < 66-75, p=.001

Table A5.5: Age x Gender Differences Across Surveys (Personal Wellbeing Index)

Survey	Survey 1 (N= 1974)				Survey 2 (N= 1973)				Survey 3 (N= 1901)				Survey 4 (N= 1898)			
	Males (N= 831)		Females (N=1143)		Males (N=727)		Females (N=1246)		Males (N=689)		Females (N=1212)		Males (N=935)		Females (N=963)	
	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD
18-25	71.86	14.40	73.74	11.61	72.92	12.79	74.72	11.45	71.81	11.72	73.95	10.87	74.00	12.16	73.88	10.94
N	95		112		112		132		74		102		121		88	
26-35	71.85	12.72	73.72	11.87	72.94	12.22	74.96	12.84	72.34	11.96	75.96	11.05	71.00	12.24	74.54	10.74
N	133		183		107		200		80		160		142		145	
36-45	72.05	12.55	72.73	13.25	72.08	14.42	75.63	13.89	72.60	13.00	75.71	11.23	72.37	13.97	74.80	12.75
N	180		256		148		256		109		243		191		203	
45-55	71.62	13.52	73.77	12.50	72.71	13.94	73.19	12.81	71.64	13.59	76.12	12.61	73.14	11.27	74.24	13.10
N	175		234		148		252		137		248		177		200	
56-65	72.99	14.14	74.68	11.75	74.14	12.98	75.50	13.02	75.35	14.19	77.47	11.67	74.65	10.70	76.82	11.84
N	109		129		99		171		120		198		128		139	
66-75	73.20	12.81	76.82	13.52	76.22	12.55	75.63	12.59	76.51	14.40	76.36	12.72	76.87	10.26	77.30	10.98
N	87		132		73		145		90		143		85		82	
76+	67.25	23.26	75.33	13.47	75.04	12.06	76.33	11.66	78.97	10.89	79.15	10.98	78.46	11.45	75.43	15.91
N	52		96		40		90		47		62		66		56	
Total	71.85	14.12	74.11	12.64	73.32	13.26	74.96	12.84	73.77	13.30	76.24	11.76	73.71	12.15	75.12	12.31

Table A5.5: Age x Gender Differences Across Surveys (Personal Wellbeing Index) (continued)

Survey	Survey 5 (N= 1901)		Survey 6 (N= 1922)		Survey 7 (N= 1903)		Survey 8 (N= 1901)		P Gender P Gender x Survey									
	Males (N=943)		Females (N=958)		Males (N=948)		Females (N=974)		Males (N=928)		Females (N=975)		Males (N=921)		Females (N=960)			
	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD		
18-25	73.82	11.02	72.15	9.85	73.07	9.82	75.38	10.27	74.53	10.81	73.91	11.02	75.83	10.44	75.87	10.59	F(1,1557) =1.52, p=.218	
N	129		75		106		81		93		79		102		72		F(7,1557) =.82,p=.527	
26-35	72.89	12.39	74.52	10.58	73.11	12.07	75.37	11.08	73.96	11.29	75.40	10.63	72.34	12.08	75.28	10.57	F(1,2311) =23.93, p=.000	
N	156		156		130		159		141		141		131		163		F(7,2311) =.36,p=.928	
36-45	73.77	10.99	74.76	13.65	73.37	11.05	74.19	11.58	73.91	11.04	75.88	11.45	73.45	10.58	75.27	11.92	F(1,3171) =1.44, p=.184	
N	193		207		196		217		173		212		195		208		F(7,3171) =.70, p=.669	
45-55	73.51	13.10	74.11	14.08	73.01	14.04	73.23	14.94	74.62	12.19	74.98	12.78	73.24	12.37	75.15	12.83	F(1,3036) =.87, p=.003	
N	174		196		200		161		174		196		183		197		F(7,3036) = 1.08, p=.373	
56-65	75.62	13.07	77.03	11.50	77.13	9.78	76.75	11.93	76.09	11.59	77.12	11.67	74.58	12.31	75.83	12.37	F(1,2293) = 6.74, p=.009	
N	132		147		155		169		172		165		148		128		F(7,2293) =.34, p=.936	
66-75	76.02	11.48	76.73	11.75	77.80	10.29	79.06	9.52	77.34	12.37	80.90	9.63	76.39	13.05	80.42	9.87	F(1,1659) = 7.42, p=.007	
N	104		104		102		106		107		95		102		118		F(7,1659) = 1.25, p=.270	
76+	75.86	12.32	78.47	10.95	80.16	11.41	81.56	9.66	78.37	12.33	79.64	8.66	78.40	11.35	80.09	10.73	F(1,948) = 4.06, p=.004	
N	40		54		45		54		58		75		68		61		F(1,948) =1.93,p=.063	
Total	74.19	12.08	75.16	12.38	74.66	11.71	75.75	11.97	75.21	11.67	76.46	11.41	74.38	11.85	76.32	11.68		

Overall S1-8:

Gender: F(1,15073) = 45.13, p=.000

Gender x Age: F(7,15073) = .99, p=.433

Table A5.6: Males - Age Differences Calculated using Survey Mean Scores for each Age Group (N=8)

	Mean	SD	-2SD	+2SD	Range
18-25	73.55	11.71	50.13	96.97	46.84
26-35	72.56	12.12	48.32	96.80	48.48
36-45	73.00	12.15	48.70	97.30	48.60
46-55	72.98	13.01	46.97	98.99	52.02
56-66	75.22	12.29	50.64	99.80	49.16
66-75	76.35	12.21	51.93	100.77	48.84
76+	76.70	14.09	48.52	104.88	56.36

Welch (6, 6287)=14.40, p=.000

26-35 < 56-65, p=.000

36-45 < 56-65, p=.000

46-55 < 56-65, p=.000

18-25 < 66-75, p=.000

26-35 < 66-75, p=.000

36-45 < 66-75, p=.000

46-55 < 66-75, p=.000

18-25 < 76+, p=.002

26-35 < 76+, p=.000

36-45 < 76+, p=.000

46-55 < 76+, p=.000

Table A5.7: Females - Age Differences Calculated using Survey Mean Scores for each Age Group (N=8)

	Mean	SD	-2SD	+2SD	Range
18-25	74.21	10.92	52.37	96.05	43.68
26-35	74.95	11.27	52.41	97.49	45.08
36-45	74.85	12.55	49.75	99.95	50.20
46-55	74.37	13.15	48.07	100.67	52.60
56-66	76.47	11.98	52.51	100.43	47.92
66-75	77.73	11.70	54.33	101.13	46.80
76+	77.98	11.86	54.26	101.70	47.44

Welch (6, 8246)=16.08, p=.000

18-25 < 56-65, p=.019

26-35 < 56-65, p=.007

36-45 < 56-65, p=.000

46-55 < 56-65, p=.000

18-25 < 66-75, p=.000

26-35 < 66-75, p=.000

36-45 < 66-75, p=.000

46-55 < 66-75, p=.000

18-25 < 76+, p=.000

26-35 < 76+, p=.000

36-45 < 76+, p=.000

46-55 < 76+, p=.000

Appendix A6. Connection to Australia

Table A6.1: Reason for Connection to Australia

N =	Environment		Democracy		Sporting Culture		Multicultural Society		Lifestyle		p
	212		264		219		287		976		
	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	
PERSONAL WELLBEING INDEX	74.81	12.75	75.95	11.33	74.16	12.68	74.61	12.40	75.90	11.38	.179
1. Standard of living	74.81	18.51	79.51 >multicult <i>p</i> =.020 >enviro <i>p</i> =.030	15.18	74.47	17.56	75.21	17.22	78.89 >enviro <i>p</i> =.030 >sport <i>p</i> =.007 >multicult <i>p</i> =.013	15.57	.000
2. Health	74.48	19.03	73.98	19.37	74.43	21.55	75.51	18.52	75.56	19.27	.728
3. Achievements in life	75.19	16.88	73.88	18.14	73.67	17.37	73.24	19.28	75.35	16.30	.326
4. Personal relationships	79.34	20.92	82.81 >sport <i>p</i> =.012	18.55	76.35	23.93	79.27	19.44	81.30 >sport <i>p</i> =.043	18.87	.008
5. How safe you feel	79.10	18.05	77.71	18.20	78.62	17.65	77.60	18.22	78.21	17.42	.878
6. Community connect	70.00	23.23	72.45	18.17	69.17	21.13	71.16	20.79	70.91	18.52	.436
7. Future security	70.77	19.32	71.36	19.59	71.20	19.78	68.78	21.12	71.06	18.85	.482
Life as a whole	77.31	17.03	78.83	16.95	74.29	19.48	76.47	18.23	79.16 >sport <i>p</i> =.043	15.68	.003
SURVEY-SPECIFIC PERSONAL ASPECTS											
- Neighbourhood	78.86	21.87	82.62 >sport <i>p</i> =.014	15.32	77.44	19.32	79.37	19.18	81.54 >sport <i>p</i> =.040	17.08	.004
- Contentment	75.45	16.22	77.41	15.36	75.32	16.13	74.90	16.22	77.88	14.33	.012
- Happiness	76.93	15.32	78.44	14.47	78.54	16.36	76.72	16.70	79.70	13.68	.018
NATIONAL WELLBEING INDEX	55.66	14.43	64.18 >enviro <i>p</i> =.000 >sport <i>p</i> =.001 >multicult <i>p</i> =.001	13.45	58.75	15.60	58.90	15.74	62.10 >enviro <i>p</i> =.000 >multicult <i>p</i> =.033	13.50	.000
1. Economic situation	62.37	17.73	68.19 >enviro <i>p</i> =.004 >sport <i>p</i> =.007 >multicult <i>p</i> =.003	17.61	62.69	19.34	63.79	17.93	66.41 >enviro <i>p</i> =.024 >sport <i>p</i> =.042	17.18	.000
2. State of the environment	55.76	19.38	62.64 >enviro <i>p</i> =.000	18.17	59.07	20.21	58.57	20.38	61.83 >enviro <i>p</i> =.000	16.74	.000
3. Social conditions	56.84	17.94	64.13 >enviro <i>p</i> =.000	17.15	61.91 >enviro <i>p</i> =.035	19.64	60.95	19.97	62.79 >enviro <i>p</i> =.000	17.71	.000

Appendix A6 Connection to Australia continued

N =	Environment		Democracy		Sporting Culture		Multicultural Society		Lifestyle		p
	212		264		219		287		976		
	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	
4. Government	45.92	24.37	59.16	23.11	49.40	23.44	49.35	25.79	55.85	22.68	.000
			>enviro <i>p</i> =.000 >sport <i>p</i> =.000 >multicult <i>p</i> =.000						>enviro <i>p</i> =.000 >multicult <i>p</i> =.002		
5. Business	55.99	18.48	63.20	16.25	59.76	18.73	59.19	19.06	62.43	16.55	.000
			>enviro <i>p</i> =.000						>enviro <i>p</i> =.000		
6. National Security	61.21	20.53	65.45	17.17	60.00	20.14	63.88	19.68	64.47	17.78	.003
			>sport <i>p</i> =.014						>sport <i>p</i> =.013		
Life in Australia	79.95	18.24	83.04	17.16	80.19	18.87	80.74	18.92	84.86	14.93	.000
									>enviro <i>p</i> =.003 >sport <i>p</i> =.009 >multicult <i>p</i> =.009		
SURVEY-SPECIFIC NATIONAL ASPECTS											
- Belonging	81.76	20.59	87.12	16.68	85.34	16.51	80.67	21.25	87.38	14.97	.000
			>enviro <i>p</i> =.024 >multicult <i>p</i> =.001						>enviro <i>p</i> =.002 >multicult <i>p</i> =.009		
- Share core values	66.00	19.34	72.66	17.58	72.63	16.94	66.51	22.41	73.97	16.35	.000
			>enviro <i>p</i> =.001 >multicult <i>p</i> =.001		>enviro <i>p</i> =.001 >multicult <i>p</i> =.002				>enviro <i>p</i> =.000 >multicult <i>p</i> =.000		

Table A6.2: Distribution

Beliefs that make you feel connected to Australia	N	%
our natural environment	212	10.8
our sense of democracy	264	13.5
our sporting culture	219	11.2
our multicultural society	287	14.7
our lifestyle	976	49.8
Total	1958	100.0

Table A6.3: Income and Attachment to Australia

N =	≤\$15,000		\$15,000- \$30,000		\$31,000- \$60,000		\$61,000- \$90,000		\$91,000- \$120,000		>\$120,000+		P=
	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	
Sense of Belonging in Australia	87.71	16.32	87.33	18.20	85.27	16.60	84.21	17.27	84.77	16.34	82.18	19.11	.014
N =	300		299		456		293		147		99		
Share Core Values with Australians	74.53	17.88	73.14	19.15	70.81	19.22	70.41	17.43	67.82	16.66	69.60	16.41	.002
									<\$15K p=.004				
									\$15-30K p=.044				

Table A6.4: Frequency Distribution of Belonging and Share Core Values

	Sense of belonging		Share core values	
	N	%	N	%
0	8	0.4	9	.5
10	7	0.4	11	.6
20	12	0.6	15	.8
30	14	0.7	37	1.9
40	27	1.4	69	3.6
50	58	2.9	199	10.3
60	94	4.8	253	13.1
70	194	9.8	411	21.3
80	367	18.6	521	27.1
90	404	20.5	213	11.1
100	785	39.8	188	9.8
Total	1970	100	1926	100.0
Mean		85.36		71.56
SD		17.66		18.36

Table A6.5: Connection to Australia x Income

Variable	Income	Beliefs	Mean	SD	N	% of Total
PWB Connection: $F(5,1537) = 3.20, p=.007$ Income: $F(4,1537) = 1.12, p=.344$ Connection X Income: $F(20,1537) = .71, p=.817$	<\$15K	Environment	72.11	13.42	38	12.9
		Democracy	75.13	13.08	44	15.0
		Sporting culture	71.54	14.92	38	12.9
		Multicultural	71.47	14.43	37	12.6
		Lifestyle	73.97	14.44	137	46.6
		Total	73.28	14.14	294	100
	\$15-30K	Environment	77.54	14.36	32	11.0
		Democracy	72.83	13.26	47	16.2
		Sporting culture	73.71	13.62	30	10.3
		Multicultural	74.43	14.34	51	17.6
		Lifestyle	74.70	13.16	130	44.8
		Total	74.56	13.53	290	100
	\$31-60K	Environment	72.31	15.13	50	11.2
		Democracy	76.68	10.09	46	10.3
		Sporting culture	73.59	10.43	45	10.0
		Multicultural	74.51	10.86	65	14.5
		Lifestyle	75.79	10.45	242	54.0
		Total	75.08	11.11	448	100
	<\$61-90K	Environment	75.83	9.26	37	12.8
		Democracy	79.65	12.28	33	11.4
		Sporting culture	74.38	9.85	29	10.0
		Multicultural	74.87	9.72	39	13.6
		Lifestyle	76.65	8.78	151	52.2
		Total	76.42	9.57	289	100
<\$91-120K	Environment	77.98	9.45	12	8.1	
	Democracy	76.15	7.19	23	15.5	
	Sporting culture	77.06	4.86	18	12.2	
	Multicultural	76.47	12.94	17	11.5	
	Lifestyle	78.11	7.36	78	52.7	
	Total	77.48	8.02	148	100	
>\$120K	Environment	79.05	8.34	12	12.2	
	Democracy	74.57	10.60	10	10.2	
	Sporting culture	73.14	17.99	10	10.2	
	Multicultural	80.24	6.78	12	12.2	
	Lifestyle	78.02	8.49	54	55.1	
	Total	77.57	9.86	98	100	
NWB Connection: $F(5,1425) = 2.31, p=.042$ Income: $F(4,1425) = 11.46, p=.000$ Connection X Income: $F(20,1425) = .78, p=.741$	<\$15K	Environment	52.26	18.78	28	
		Democracy	58.49	16.58	32	
		Sporting culture	55.54	17.60	34	
		Multicultural	56.62	17.11	34	
		Lifestyle	60.25	14.62	115	
		Total	57.93	16.27	243	
	\$15-30K	Environment	55.73	14.81	32	
		Democracy	63.72	15.20	43	
		Sporting culture	61.31	15.24	28	
		Multicultural	59.38	17.47	48	
		Lifestyle	59.32	15.72	123	
		Total	59.81	15.85	274	
	\$31-60K	Environment	55.63	13.15	50	
		Democracy	66.45	10.45	46	
		Sporting culture	59.48	13.04	45	
		Multicultural	58.58	16.20	62	
		Lifestyle	62.96	12.30	225	
		Total	61.48	13.24	428	
	<\$61-90K	Environment	54.81	13.51	35	
		Democracy	66.51	14.54	32	
		Sporting culture	58.91	15.97	29	
		Multicultural	58.38	15.55	37	
		Lifestyle	61.93	11.86	145	
		Total	60.77	13.66	278	
<\$91-120K	Environment	54.09	17.36	11		
	Democracy	63.41	10.83	21		
	Sporting culture	62.25	12.64	17		
	Multicultural	57.11	12.17	15		
	Lifestyle	63.60	10.70	75		
	Total	61.95	11.96	139		
>\$120K	Environment	60.30	5.81	11		
	Democracy	69.33	8.58	10		
	Sporting culture	53.33	18.63	9		
	Multicultural	58.03	10.61	11		
	Lifestyle	67.12	12.86	52		
	Total	64.14	13.06	93		

Variable	Income	Beliefs	Mean	SD	N
Strength of Belonging Connection: $F(5,1587) = 3.11, p=.009$ Income: $F(4,1587) = 8.78, p=.000$ Connection X Income: $F(20,1587) = 1.12, p=.325$	<\$15K	Environment	85.56	20.35	36
		Democracy	90.42	16.50	48
		Sporting culture	85.38	17.90	39
		Multicultural	83.50	17.91	40
		Lifestyle	89.05	14.06	148
		Total	87.68	16.34	311
	\$15-30K	Environment	81.21	24.72	33
		Democracy	92.04	13.84	49
		Sporting culture	92.19	9.41	32
		Multicultural	82.26	23.67	53
		Lifestyle	88.18	15.78	137
		Total	87.43	18.08	304
	\$31-60K	Environment	82.64	19.53	53
		Democracy	87.66	14.17	47
		Sporting culture	82.77	16.11	47
		Multicultural	81.34	17.05	67
		Lifestyle	86.87	16.12	246
		Total	85.24	16.60	460
	<\$61-90K	Environment	79.21	17.76	38
		Democracy	86.06	17.49	33
		Sporting culture	87.93	12.92	29
Multicultural		75.85	26.27	41	
Lifestyle		86.36	13.76	154	
Total		84.10	17.27	295	
<\$91-120K	Environment	83.33	20.15	12	
	Democracy	78.70	23.99	23	
	Sporting culture	81.58	15.00	19	
	Multicultural	83.13	18.52	16	
	Lifestyle	87.82	12.13	78	
	Total	84.73	16.39	148	
>\$120K	Environment	80.83	20.21	12	
	Democracy	81.00	14.49	10	
	Sporting culture	85.45	21.15	11	
	Multicultural	70.00	24.49	12	
	Lifestyle	86.30	14.31	54	
	Total	83.03	17.81	99	
Strength of connection Connection: $F(5,1553) = 4.20, p=.001$ Income: $F(4,1553) = 11.23, p=.000$ Connection X Income: $F(20,1553) = .90, p=.587$	<\$15K	Environment	71.39	17.10	36
		Democracy	73.70	18.78	46
		Sporting culture	71.54	18.99	39
		Multicultural	70.81	21.26	37
		Lifestyle	77.70	15.53	139
		Total	74.65	17.63	297
	\$15-30K	Environment	69.37	22.28	32
		Democracy	77.17	17.97	46
		Sporting culture	76.25	18.09	32
		Multicultural	66.35	23.85	52
		Lifestyle	74.74	16.11	135
		Total	73.23	19.11	297
	\$31-60K	Environment	62.26	20.81	53
		Democracy	76.22	16.55	45
		Sporting culture	73.26	15.78	46
		Multicultural	64.55	22.54	66
		Lifestyle	72.78	18.03	245
		Total	70.75	19.19	455
	<\$61-90K	Environment	67.03	18.69	37
		Democracy	68.48	16.98	33
		Sporting culture	71.72	15.13	29
		Multicultural	62.68	23.88	41
		Lifestyle	73.91	14.33	151
		Total	70.62	17.29	291
	<\$91-120K	Environment	53.33	19.69	12
		Democracy	66.09	18.52	23
		Sporting culture	67.89	16.19	19
Multicultural		66.25	19.62	16	
Lifestyle		71.18	13.85	76	
Total		67.95	16.65	146	
>\$120K	Environment	64.55	15.72	11	
	Democracy	70.00	9.43	10	
	Sporting culture	72.00	18.14	10	
	Multicultural	63.33	23.48	12	
	Lifestyle	71.67	15.39	54	
	Total	69.69	16.42	97	

Table A6.6: Age x Connection to Australia

Variable	Age	Beliefs	Mean	SD	N	% of Total
PWI Connection: $F(6, 1824) = 5.16, p = .000$ Age: $F(4, 1824) = 1.45, p = .216$ Connection X Age: $F(24, 1824) = 1.54, p = .045$	18-25	Environment	70.66	12.71	13	7.5
		Democracy	76.43	11.71	10	5.8
		Sporting culture	79.52	8.80	39	22.5
		Multicultural	75.56	11.46	28	16.2
		Lifestyle	75.08	10.04	83	48.0
		Total	75.90	10.47	173	100
	26-35	Environment	73.68	14.56	33	11.3
		Democracy	78.71	8.68	20	6.8
		Sporting culture	71.35	12.77	35	11.9
		Multicultural	72.86	11.39	61	20.8
		Lifestyle	74.46	10.36	144	49.1
		Total	73.96	11.36	293	100
	36-45	Environment	71.73	9.92	43	10.8
		Democracy	73.66	10.88	34	8.5
		Sporting culture	69.69	16.25	42	10.5
		Multicultural	72.70	11.17	65	16.3
		Lifestyle	76.33	10.13	215	53.9
		Total	74.32	11.33	399	100
	46-55	Environment	71.87	16.26	45	11.9
		Democracy	73.89	10.63	54	14.3
		Sporting culture	73.89	9.19	36	9.5
		Multicultural	75.47	12.86	53	14.1
		Lifestyle	74.62	12.79	189	50.1
		Total	74.24	12.66	377	100
	56-65	Environment	78.41	8.49	26	9.5
		Democracy	74.32	12.38	47	17.2
		Sporting culture	75.88	12.04	26	9.5
		Multicultural	74.86	13.54	37	13.6
		Lifestyle	74.77	12.81	137	50.2
		Total	75.15	12.39	273	100
	66-75	Environment	79.41	10.08	29	13.3
		Democracy	77.87	11.97	49	22.5
Sporting culture		77.07	12.38	19	8.7	
Multicultural		77.67	16.25	19	8.7	
Lifestyle		78.92	10.88	102	46.8	
Total		78.48	11.62	218	100	
76+	Environment	82.59	8.98	16	12.7	
	Democracy	78.11	11.33	34	27.0	
	Sporting culture	71.65	14.58	13	10.3	
	Multicultural	80.71	10.57	6	4.8	
	Lifestyle	80.63	10.07	57	45.2	
	Total	79.27	11.07	126	100	

Appendix A6 Connection to Australia continued

Variable	Age	Beliefs	Mean	SD	N
NWI Connection: $F(6, 1695) = 1.78, p = .100$ Age: $F(4, 1695) = 8.65, p = .000$ Connection X Age: $F(24, 1695) = .143, p = .082$	18-25	Environment	61.28	15.14	13
		Democracy	59.58	13.02	8
		Sporting culture	65.38	14.60	35
		Multicultural	67.24	12.02	26
		Lifestyle	62.55	14.99	79
		Total	63.67	14.38	161
	26-35	Environment	55.36	13.93	32
		Democracy	67.86	10.80	21
		Sporting culture	52.81	17.76	32
		Multicultural	56.79	17.42	55
		Lifestyle	61.41	12.03	134
		Total	59.26	14.59	274
	36-45	Environment	54.64	13.13	42
		Democracy	62.33	11.99	35
		Sporting culture	56.20	15.91	39
		Multicultural	59.51	13.82	64
		Lifestyle	62.66	12.78	206
		Total	60.58	13.52	386
	46-55	Environment	52.69	17.04	44
		Democracy	66.01	10.86	53
		Sporting culture	58.38	13.14	37
		Multicultural	56.33	13.65	49
		Lifestyle	62.18	13.11	181
		Total	60.42	13.94	364
	56-65	Environment	53.26	12.67	24
		Democracy	61.74	17.19	44
		Sporting culture	61.07	10.77	25
		Multicultural	56.40	19.54	38
		Lifestyle	59.91	15.38	130
		Total	59.21	15.86	261
	66-75	Environment	60.12	13.14	27
		Democracy	62.80	13.12	44
		Sporting culture	59.42	17.88	20
		Multicultural	62.40	11.30	16
		Lifestyle	62.65	12.99	88
		Total	61.98	13.40	195
	76+	Environment	59.79	13.14	8
		Democracy	66.60	14.86	26
		Sporting culture	57.41	19.67	9
		Multicultural	50.42	26.51	4
		Lifestyle	66.15	13.65	42
		Total	64.12	15.53	89

Appendix A6 Connection to Australia continued

Variable	Age	Beliefs	Mean	SD	N
Strength of belonging Connection: $F(6, 1886) = 8.58, p=.000$ Age: $F(4, 1886) = 6.61, p=.000$ Connection X Age: $F(24, 1886) = 1.52, p=.052$	18-25	Environment	71.43	21.07	14
		Democracy	75.00	26.35	10
		Sporting culture	87.44	14.46	39
		Multicultural	77.24	22.50	29
		Lifestyle	84.64	14.09	84
		Total	82.44	17.74	176
	26-35	Environment	78.24	23.67	34
		Democracy	83.81	10.24	21
		Sporting culture	80.86	23.93	35
		Multicultural	77.10	21.76	62
		Lifestyle	84.44	16.03	151
		Total	81.78	19.12	303
	36-45	Environment	81.36	19.36	44
		Democracy	80.83	20.20	36
		Sporting culture	80.95	18.05	42
		Multicultural	79.70	20.00	66
		Lifestyle	85.84	16.61	219
		Total	83.42	18.08	407
	46-55	Environment	77.02	25.10	47
		Democracy	85.79	15.11	57
		Sporting culture	86.32	12.82	38
		Multicultural	86.55	17.87	55
		Lifestyle	87.37	13.91	194
		Total	85.68	16.53	391
	56-65	Environment	87.69	12.43	26
		Democracy	90.64	13.74	47
		Sporting culture	86.79	13.07	28
		Multicultural	76.67	26.56	42
		Lifestyle	90.78	12.25	141
		Total	87.99	16.17	284
	66-75	Environment	89.00	13.98	30
		Democracy	88.63	20.00	51
Sporting culture		91.90	11.67	21	
Multicultural		89.47	15.45	19	
Lifestyle		90.46	14.03	108	
Total		89.91	15.39	229	
76+	Environment	90.00	15.19	14	
	Democracy	93.61	7.98	36	
	Sporting culture	87.86	13.11	14	
	Multicultural	86.67	18.62	6	
	Lifestyle	90.49	15.86	61	
	Total	90.84	13.81	131	

Appendix A6 Connection to Australia continued

Variable	Age	Beliefs	Mean	SD	N
Share core values Connection: $F(6,1843) = 3.17, p=.004$ Age: $F(4,18436) = 8.80, p=.000$ Connection X Age: $F(24,1843) = 1.16, p=.317$	18-25	Environment	62.86	24.31	14
		Democracy	65.00	24.61	10
		Sporting culture	76.67	17.82	39
		Multicultural	61.03	28.20	29
		Lifestyle	70.24	16.40	85
		Total	69.27	20.64	177
	26-35	Environment	67.19	15.91	32
		Democracy	70.48	12.03	21
		Sporting culture	69.71	19.32	35
		Multicultural	63.28	20.63	61
		Lifestyle	73.99	14.56	148
		Total	70.30	16.99	297
	36-45	Environment	66.59	20.79	44
		Democracy	69.17	16.80	36
		Sporting culture	69.52	16.22	42
		Multicultural	66.46	20.50	65
		Lifestyle	72.60	16.62	215
		Total	70.32	17.87	402
	46-55	Environment	62.17	21.07	46
		Democracy	71.43	17.31	56
		Sporting culture	74.59	14.64	37
		Multicultural	67.55	22.52	53
		Lifestyle	72.93	18.43	191
		Total	70.84	19.18	383
	56-65	Environment	61.92	18.33	26
		Democracy	76.30	18.78	46
		Sporting culture	74.81	15.53	27
		Multicultural	66.00	24.99	40
		Lifestyle	76.01	15.55	138
		Total	73.18	18.55	277
	66-75	Environment	71.72	16.05	29
		Democracy	74.08	19.14	49
		Sporting culture	73.81	16.87	21
		Multicultural	77.37	18.51	19
		Lifestyle	76.95	15.20	105
		Total	75.38	16.65	223
	76+	Environment	72.31	17.39	13
		Democracy	72.81	15.08	32
		Sporting culture	68.57	18.75	14
		Multicultural	78.33	19.41	6
		Lifestyle	77.78	15.50	54
		Total	74.79	16.25	119

Table A6.7: Gender x Connection to Australia

Variable	Gender	Beliefs	Mean	SD	N
PWI Gender: $F(1,1872) = 5.00, p=.025$ Connection: $F(4,1872) = 1.35, p=.251$ Gender X Connection: $F(4, 1872) = 2.09, p=.080$	Male	Environment	74.43	12.42	100
		Democracy	76.31	10.70	119
		Sporting culture	74.02	11.82	148
		Multicultural	72.13	13.40	133
		Lifestyle	74.85	11.48	429
		Total	74.47	11.87	929
	Female	Environment	75.18	13.11	106
		Democracy	75.62	11.90	134
		Sporting culture	74.49	14.58	64
		Multicultural	76.98	10.90	139
		Lifestyle	76.78	11.23	510
		Total	76.32	11.75	953
NWI Gender: $F(1,1743) = .001, p=.973$ Connection: $F(4,1743) = 13.74, p=.000$ Gender X Connection: $F(4,1743) = 1.46, p=.213$	Male	Environment	54.96	14.70	95
		Democracy	65.49	13.77	116
		Sporting culture	59.21	15.32	143
		Multicultural	57.40	16.54	129
		Lifestyle	62.13	14.35	409
		Total	60.65	15.09	892
	Female	Environment	56.35	14.21	96
		Democracy	62.90	13.06	119
		Sporting culture	57.59	16.36	56
		Multicultural	60.42	14.79	127
		Lifestyle	62.07	12.72	463
		Total	61.01	13.64	861
Strength of belonging Gender: $F(1,1939) = 21.34, p=.000$ Connection: $F(4,1939) = 11.90, p=.000$ Gender X Connection: $F(4,1939) = 3.98, p=.003$	Male	Environment	77.45	23.95	102
		Democracy	85.87	17.78	121
		Sporting culture	85.49	15.64	153
		Multicultural	76.12	22.95	139
		Lifestyle	86.17	14.86	436
		Total	83.62	18.28	951
	Female	Environment	85.83	15.89	108
		Democracy	88.18	15.68	143
		Sporting culture	85.00	18.50	66
		Multicultural	85.03	18.53	145
		Lifestyle	88.36	15.00	536
		Total	87.35	16.02	998
Share core values Gender: $F(1,1896) = 4.55, p=.033$ Connection: $F(4,1896) = 15.28, p=.000$ Gender X Connection: $F(4,1896) = 2.71, p=.029$	Male	Environment	63.92	22.57	97
		Democracy	72.63	16.61	118
		Sporting culture	72.89	16.42	152
		Multicultural	62.88	23.16	139
		Lifestyle	73.90	16.38	428
		Total	70.90	18.78	934
	Female	Environment	67.87	15.77	108
		Democracy	72.68	18.42	138
		Sporting culture	72.00	18.22	65
		Multicultural	70.14	21.09	139
		Lifestyle	74.02	16.34	522
		Total	72.46	17.55	972

Table A6.8: Ethnicity x Connection to Australia

		Environment	Democracy	Sporting Culture	Multicultural	Lifestyle	Total
Australian	N	120	123	142	96	584	1065
	%	11.3%	11.5%	13.3%	9.0%	54.8%	100.0
Non-Australian	N	92	141	77	191	392	893
	%	10.3%	15.8%	8.6%	21.4%	43.9%	100.0
Total	N	212	264	219	287	976	1958

$\chi^2(4,1958)=78.93, p=.000$

Table A6.9: Ethnicity x Gender: Connection to Australia

Connection Group		Environment		Democracy		Sporting Culture		Multicultural		Lifestyle		Total
		Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Total
Australian	N (%)	60 (50.0)	60 (50.0)	55 (44.7)	68 (55.3)	99 (69.7)	43 (30.3)	54 (56.3)	42 (43.8)	273 (46.7)	311 (53.3)	1065 (100.0)
PWI		74.19 (11.31)	76.25 (11.47)	75.90 (10.48)	76.08 (10.89)	73.53 (12.43)	72.93 (14.74)	73.05 (12.18)	75.68 (10.71)	74.46 (11.11)	77.16 (11.13)	
NWI		55.64 (13.95)	56.98 (12.29)	65.03 (14.54)	63.85 (12.06)	57.97 (16.28)	56.75 (14.64)	54.73 (17.01)	57.13 (14.33)	61.19 (15.18)	61.88 (12.66)	
Belonging		81.67 (20.18)	86.55 (13.58)	90.91 (12.95)	90.15 (12.87)	86.57 (16.17)	86.05 (16.35)	77.04 (23.44)	88.57 (15.86)	87.57 (14.04)	89.84 (14.54)	
Connection		63.86 (22.50)	67.46 (15.15)	74.81 (15.27)	73.79 (17.52)	73.33 (16.72)	71.90 (17.98)	58.87 (24.39)	68.33 (21.74)	74.29 (16.14)	76.24 (15.32)	
Non-Australian	N (%)	42 (45.6)	50 (54.3)	66 (46.8)	75 (53.2)	54 (70.1)	23 (29.9)	87 (45.5)	104 (54.5)	165 (42.1)	227 (57.9)	893 (100.0)
PWI		74.76 (13.94)	73.83 (14.94)	76.66 (10.95)	75.21 (12.78)	74.92 (10.67)	77.27 (14.17)	71.52 (14.19)	77.54 (14.99)	75.50 (15.08)	76.26 (11.38)	
NWI		54.04 (15.80)	55.58 (16.39)	65.87 (13.20)	62.08 (13.89)	61.44 (13.30)	59.69 (20.44)	59.04 (16.14)	61.93 (14.83)	63.72 (12.72)	62.33 (12.83)	
Belonging		71.43 (27.64)	85.00 (18.32)	81.67 (20.12)	86.40 (17.76)	83.52 (14.56)	83.04 (22.25)	75.53 (22.76)	83.59 (19.40)	83.84 (15.91)	86.33 (15.41)	
Connection		64.00 (22.96)	68.37 (16.63)	70.91 (17.52)	71.67 (19.28)	72.08 (15.98)	72.17 (19.06)	65.35 (22.16)	70.93 (20.87)	73.25 (16.81)	70.96 (17.23)	
Total	N	102	110	121	143	153	66	141	146	438	538	1958

Connection Group x Ethnicity & Gender

Environment: $\chi^2(1,212)=.39,p=.530$
 Democracy: $\chi^2(1,264)=.12,p=.733$
 Sporting Culture: $\chi^2(1,219)=.00,p=.949$
 Multicultural: $\chi^2(1,287)=2.93,p=.087$
 Lifestyle: $\chi^2(1,976)=2.05,p=.152$

	Australian: Gender x Connection Groups	Non-Australian: Gender x Connection Groups
PWI	Gender: $F(1,1020) = 2.43, p=.119$ Connection Groups: $F(4,1020) = 1.49, p=.204$ Gender x Connection Groups: $F(4,1020) = .71, p=.588$	Gender: $F(1,842) = 1.78, p=.000$ Connection Groups: $F(4,842) = .66, p=.622$ Gender x Connection Groups: $F(4,842) = 2.31, p=.056$
NWI	Gender: $F(1,947) = .12, p=.726$ Connection Groups: $F(4,947) = 8.62, p=.000$ Gender x Connection Groups: $F(4,947) = .32, p=.863$	Gender: $F(1,786) = .16, p=.690$ Connection Groups: $F(4,786) = 6.93, p=.000$ Gender x Connection Groups: $F(4,786) = 1.26, p=.285$
Belong in Australia	Gender: $F(1,1051) = 8.53, p=.004$ Connection Groups: $F(4,1051) = 5.85, p=.000$ Gender x Connection Groups: $F(4,1051) = 2.83, p=.024$	Gender: $F(1,878) = 14.36, p=.000$ Connection Groups: $F(4,878) = 4.51, p=.001$ Gender x Connection Groups: $F(4,878) = 2.37, p=.051$
Share core values	Gender: $F(1,1031) = 3.50, p=.062$ Connection Groups: $F(4,1031) = 1.49, p=.14.83, p=.000$ Gender x Connection Groups: $F(4,1031) = 1.68, p=.152$	Gender: $F(1,855) = 1.24, p=.001$ Connection Groups: $F(4,855) = 2.80, p=.025$ Gender x Connection Groups: $F(4,855) = 1.61, p=.171$

After adjusting for age and gender differences, there was no significant difference between sense of belonging or strength of sharing core values and income.

Belonging: $F(5,1608) = .48, p=.789$
 Connection Groups: $F(5,1573) = 1.46, p=.199$

Table A6.10: Ethnicity x Connection to Australia

		Environment	Democracy	Sporting Culture	Multicultural	Lifestyle	Total
NES	N	56	63	46	142	196	503
	%	26.4%	23.9%	21.0%	49.5%	20.1%	25.7%
Australian		107	111	127	81	525	951
		50.5%	42.0%	58.0%	28.2%	53.8%	48.6%
MES	N	49	90	46	64	255	504
	%	23.1%	34.1%	21.0%	22.3%	26.1%	25.7%
Total	N	212	264	219	287	976	1958

$\chi^2(8,1958)=124.84,p=.000$

Table A6.11: Ethnicity x Gender: Connection to Australia

Connection Group		Environment		Democracy		Sporting Culture		Multicultural		Lifestyle		Total
		Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Total
Australian	N	55	52	47	64	88	39	46	35	250	275	951
	(%)	51.4	48.6	42.3	57.7	69.3	30.7	56.8	43.2	47.6	52.4	
PWI		73.72	75.80	75.28	76.10	73.24	72.51	72.06	75.06	74.48	76.66	
		11.51	11.34	10.86	11.08	12.76	14.89	12.28	10.60	11.25	11.32	
NWI		55.10	57.77	64.19	63.69	57.37	55.65	53.73	56.18	61.41	61.50	
		14.12	11.21	15.50	12.39	16.85	14.99	17.86	14.44	15.16	12.70	
Belonging		80.91	87.45	90.43	89.84	86.48	85.38	76.96	87.71	87.99	89.78	
		20.84	13.83	13.34	13.15	15.47	16.83	24.48	16.99	13.71	14.45	
Core Values		63.85	69.22	76.36	72.74	72.61	71.84	56.67	69.71	74.41	76.22	
		23.02	15.08	14.48	17.48	16.50	17.84	24.86	19.92	16.05	15.13	
NES	N	25	31	34	29	34	12	71	71	79	117	503
	(%)	44.6	55.4	54.0	46	73.9	26.1	50.0	50.0	40.3	59.7	
PWI		75.60	73.72	75.21	74.40	74.37	78.33	71.01	78.37	76.65	78.92	
		13.34	17.45	10.68	9.61	10.08	13.55	14.58	10.05	9.33	10.07	
NWI		56.45	57.76	65.68	65.67	62.68	62.59	60.69	63.05	63.80	64.28	
		16.95	18.59	11.63	8.02	11.20	20.19	15.42	12.91	13.16	12.53	
Belonging		71.20	83.67	81.76	84.83	82.94	81.67	74.06	84.00	83.80	88.63	
		29.34	14.74	11.20	16.82	17.50	24.06	23.03	17.81	16.12	14.38	
Core Values		66.25	66.13	71.18	75.19	72.94	65.00	67.57	71.82	72.82	71.39	
		21.83	18.01	16.65	20.45	16.97	24.68	22.49	21.55	16.27	17.42	
MES	N	22	27	40	50	31	15	24	40	109	146	504
	(%)	44.9	55.1	44.4	55.6	67.4	32.6	37.5	62.5	42.7	57.3	
PWI		74.81	75.49	78.50	75.69	75.86	76.29	75.40	76.37	74.37	75.30	
		13.88	11.30	10.47	13.95	10.96	14.69	11.91	12.41	13.30	11.76	
NWI		53.02	51.88	66.84	60.35	60.40	59.85	54.70	60.19	62.57	61.31	
		13.93	13.73	13.48	15.73	14.53	17.82	15.88	17.29	13.21	12.81	
Belonging		75.91	85.19	84.00	88.00	85.48	86.67	80.42	84.50	83.70	85.45	
		24.04	20.45	19.85	17.84	14.10	18.77	19.67	21.12	15.98	16.16	
Core Values		61.43	67.31	69.75	71.22	73.67	78.00	60.83	67.63	73.52	72.00	
		23.08	14.58	18.33	18.67	16.08	10.82	19.32	21.62	17.32	17.18	
Total	N											

Connection Group x Ethnicity & Gender

Environment: $\chi^2(1,212)=.94,p=.626$ Democracy: $\chi^2(1,264)=2.29,p=.318$ Sporting Culture: $\chi^2(1,219)=.51,p=.774$ Multicultural: $\chi^2(1,287)=5.41,p=.067$ Lifestyle: $\chi^2(1,976)=3.72,p=.156$

Table A6.12: Ethnicity: Gender x Reason for Connection (wellbeing).

			DF	N	F	p
Australian	PWI	Gender:	1	908	2.30	.130
		Connection:	4		1.57	.180
		Gender x Connection:	4		.44	.778
	NWI	Gender:	1	845	.23	.630
		Connection:	4		8.23	.000
		Gender x Connection:	4		.42	.798
	Belong in Australia	Gender:	1	938	7.48	.006
		Connection:	4		5.55	.000
		Gender x Connection:	4		2.57	.036
	Share core values	Gender:	1	917	4.97	.026
		Connection:	4		12.84	.000
		Gender x Connection:	4		3.19	.013
NES	PWI	Gender:	1	469	2.92	.088
		Connection:	4		1.88	.113
		Gender x Connection:	4		2.23	.064
	NWI	Gender:	1	440	.25	.616
		Connection:	4		3.26	.012
		Gender x Connection:	4		.12	.974
	Belong in Australia	Gender:	1	489	8.27	.004
		Connection:	4		4.21	.002
		Gender x Connection:	4		1.29	.274
	Share core values	Gender:	1	481	.01	.907
		Connection:	4		1.41	.228
		Gender x Connection:	4		1.00	.407
MES	PWI	Gender:	1	475	.00	.977
		Connection:	4		.57	.683
		Gender x Connection:	4		.39	.816
	NWI	Gender:	1	438	.22	.641
		Connection:	4		5.75	.000
		Gender x Connection:	4		1.48	.209
	Belong in Australia	Gender:	1	492	4.20	.041
		Connection:	4		1.02	.398
		Gender x Connection:	4		.51	.729
	Share core values	Gender:	1	478	2.84	.092
		Connection:	4		5.00	.001
		Gender x Connection:	4		.98	.416

Appendix A7. Pets

Table A7.1: Wellbeing of Pet Owners and Non-Owners

N =	Yes 1193		No 796		p
	Mean	SD	Mean	SD	
PERSONAL WELLBEING INDEX	75.25	11.58	75.67	12.17	.449
1. Standard of living	77.13	16.37	78.11	16.61	.193
2. Health	74.86	19.70	75.32	19.34	.610
3. Achievements in life	74.44	16.78	75.01	17.91	.479
4. Personal relationships	81.03	18.59	79.76	21.49	.174
5. How safe you feel	78.20	17.48	78.07	18.21	.872
6. Community connect	70.72	19.94	71.19	19.29	.601
7. Future security	69.94	19.38	71.95	19.62	.027
Life as a whole	77.65	16.70	78.46	17.34	.304
SURVEY-SPECIFIC PERSONAL ASPECTS					
- Neighbourhood	80.50	17.70	80.78	18.79	.747
- Contentment	76.57	14.87	77.11	16.00	.449
- Happiness	78.32	14.50	79.11	15.43	.257
NATIONAL WELLBEING INDEX	60.42	14.22	61.28	15.03	.228
1. Economic situation	64.98	17.68	65.99	18.19	.226
2. State of the environment	59.60	18.19	61.65	18.65	.017
3. Social conditions	61.26	18.28	62.75	18.70	.083
4. Government	52.62	23.10	54.74	25.22	.062
5. Business	61.15	17.53	60.68	17.69	.576
6. National Security	62.71	18.64	64.93	18.84	.011
Life in Australia	82.76	16.62	82.87	17.75	.891
SURVEY-SPECIFIC NATIONAL ASPECTS					
- Belonging	85.46	17.24	85.19	18.30	.743
- Share core values	71.65	18.32	71.44	18.44	.801

Table A7.2: Frequency of Pet Ownership

Do have a pet	N	%
Yes	1193	60.3
No	786	39.7
Total	1979	100.0

Table A7.3: Pet Ownership x Gender

Do have a pet	Male	%	Female	%	Total
Yes	544	56.2%	649	64.2%	1193
No	424	43.8%	362	35.8%	786
Total	968	100%	1011	100%	1979

Table A7.4: Pet Ownership According to Household Income

Own Pet	<\$15,000		\$15,000-\$30,000		\$30,000-\$60,000		\$60,000-\$90,000		\$90,000-\$120,000		\$120,000+		Total	
	N	%	N	%	N	%	N	%	N	%	N	%	N	%
Yes	155	49.1	174	56.5	293	63.1	202	68.0	106	70.7	65	64.4	995	60.8
No	161	50.9	134	43.5	171	36.9	95	32.0	44	30.3	36	35.6	641	39.2
Total	316		308		464		297		150		101		1636	

Table A7.5: Income and Pets – Strength of Caring About Pet

N =	≤\$15,000		\$15,000-\$30,000		\$31,000-\$60,000		\$61,000-\$90,000		\$91,000-\$120,000		>\$120,000+		P=
	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	
	156		175		294		204		107		66		
Strength of caring about Pet	91.67	11.24	87.89	17.14	86.60	16.69	84.71	16.02	85.79	18.43	82.73	20.80	.000
	<\$15K p=.002				<\$15K p=.000				<\$15K p=.021				

Table A7.6: Pet Ownership, Income and Personal Domains

Variable	Own Pet	<\$15,000		\$15,000-\$30,000		\$30,000-\$60,000		\$60,000-\$90,000		\$90,000-\$120,000		\$120,000+		p
		Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	
PWB	Yes	72.34	14.30	74.14	13.00	75.04	11.40	76.42	9.27	77.50	7.89	77.49	10.80	Pets: F(1, 1567) = .50, p=.480 Pets x Income: F(5, 1567) = .31, p=.907
	No	74.25	13.86	75.14	14.13	75.07	10.61	76.55	10.16	77.69	8.51	77.18	7.92	
Standard Of living	Yes	71.56	19.03	74.08	19.47	75.73	15.92	79.70	12.57	81.42	12.07	81.69	12.57	Pets: F(1, 1622) = 4.51, p=.034 Pets x Income: F(5, 1622) = 1.05, p=.386
	No	77.20	19.44	76.47	18.64	77.02	14.30	79.68	15.81	82.95	9.54	83.06	10.91	
Health	Yes	67.35	21.74	73.85	20.61	76.45	19.31	75.89	17.20	78.58	18.07	77.69	15.89	Pets: F(1, 1622) = .53, p=.465 Pets x Income: F(5, 1622) = .41, p=.846
	No	69.69	22.29	72.84	20.21	78.19	17.45	77.89	15.22	77.27	16.19	78.89	12.82	
Achieve	Yes	73.70	19.13	74.94	18.80	73.75	16.66	74.31	15.05	75.09	14.02	76.62	14.06	Pets: F(1, 1622) = .03, p=.858 Pets x Income: F(5, 1622) = .79, p=.603
	No	75.62	19.45	72.76	20.61	72.92	16.79	76.42	16.04	74.32	15.31	75.28	8.10	
Pers Rel/ships	Yes	77.91	22.79	81.16	19.67	79.56	18.95	83.91	14.14	84.15	12.79	80.77	16.89	Pets: F(1, 1620) = .56, p=.455 Pets x Income: F(5, 1620) = .17, p=.974
	No	77.52	25.81	79.48	22.82	77.65	19.80	82.00	19.38	83.41	14.78	82.22	12.90	
Safety	Yes	75.32	21.10	77.21	19.17	78.53	17.51	79.65	14.47	80.29	15.09	80.92	15.38	Pets: F(1, 1617) = .05, p=.821 Pets x Income: F(5, 1617) = .76, p=.577
	No	77.31	17.51	77.09	19.38	79.00	16.81	76.74	17.35	83.18	13.08	80.00	17.40	
Community Connection	Yes	71.90	22.06	71.16	21.45	71.17	20.68	69.40	17.77	69.53	16.35	70.92	16.93	Pets: F(1, 1612) = .03, p=.873 Pets x Income: F(5, 1612) = .72, p=.608
	No	72.24	21.97	74.02	17.56	69.94	18.88	70.21	16.72	70.45	18.55	66.11	16.78	
Future Security	Yes	67.42	23.65	66.31	22.97	69.86	18.12	71.36	16.05	74.25	12.72	73.85	17.38	Pets: F(1, 1590) = 2.49, p=.115 Pets x Income: F(5, 1590) = 1.49, p=.191
	No	70.70	21.31	73.36	20.59	70.36	19.70	72.63	16.19	72.27	16.12	74.57	17.21	
Life as a Whole	Yes	74.00	21.31	78.45	19.66	76.61	15.89	78.71	13.25	79.34	13.54	80.62	12.61	Pets: F(1, 1612) = 1.08, p=.298 Pets x Income: F(5, 1612) = .72, p=.608
	No	77.76	20.09	77.84	17.31	76.37	15.97	80.32	15.67	80.91	13.95	80.83	10.52	

Table A7.7: Pet Ownership, Age and Personal Domains

Variable	Age	Own Pet						p
		Yes			No			
		Mean	SD	N	Mean	SD	N	
PWB	18-25	75.33	10.13	109	76.70	11.05	65	Age: F(6,1861) = 7.11, p=.000 Pets x Age: F(6, 1861) = 1.33, p=.242
	26-35	74.38	10.74	179	73.33	12.25	115	
	36-45	75.18	10.84	283	72.54	12.19	120	
	46-55	74.20	12.23	270	74.31	13.62	110	
	56-65	74.32	13.17	165	76.41	10.91	111	
	66-75	79.07	11.39	95	78.15	11.84	124	
	76+	80.82	9.62	28	78.76	11.42	101	
Standard Of living	18-25	78.83	16.94	111	79.85	15.52	67	Age: F(6,1861) = 7.11, p=.000 Pets x Age: F(6, 1861) = 1.33, p=.242
	26-35	74.12	16.96	187	74.75	14.42	118	
	36-45	75.40	16.41	289	75.48	15.74	124	
	46-55	76.81	15.60	279	76.00	18.39	115	
	56-65	77.98	16.60	173	77.02	16.88	114	
	66-75	80.98	16.08	102	80.31	16.72	129	
	76+	86.45	9.50	31	85.19	15.69	106	
Health	18-25	79.91	19.62	113	81.64	17.02	67	Age: F(6,1933) = 5.33, p=.000 Pets x Age: F(6,1933) = .91, p=.487
	26-35	75.40	18.53	187	77.63	16.83	118	
	36-45	77.44	17.77	289	76.94	17.35	124	
	46-55	72.79	19.64	280	76.38	19.53	116	
	56-65	69.71	22.66	173	73.42	21.57	114	
	66-75	74.41	19.73	102	73.59	18.47	128	
	76+	74.19	18.93	31	70.48	21.46	105	
Achieve	18-25	72.30	17.47	113	74.78	15.89	67	Age: F(6,1933) = 7.45, p=.000 Pets x Age: F(6,1933) = .56, p=.762
	26-35	73.37	15.45	187	72.80	18.06	118	
	36-45	73.04	15.40	289	70.24	17.18	124	
	46-55	73.39	17.65	280	72.33	19.13	116	
	56-65	75.84	18.83	173	76.49	15.80	114	
	66-75	80.49	14.78	102	79.30	18.62	128	
	76+	78.00	15.18	30	78.30	18.44	106	
Pers Rel/ships	18-25	77.35	20.53	113	74.93	21.77	67	Age: F(6,1930) = 6.79, p=.000 Pets x Age: F(6, 1930) = 1.06, p=.383
	26-35	79.68	17.75	187	77.12	22.91	118	
	36-45	80.59	18.62	289	74.63	23.76	123	
	46-55	80.72	19.08	278	76.12	22.76	116	
	56-65	81.45	19.70	173	82.37	19.15	114	
	66-75	85.25	15.20	101	84.22	20.45	128	
	76+	86.13	13.58	31	86.23	16.06	106	
Safety	18-25	80.80	15.82	113	82.12	16.87	66	Age: F(6, 1925) = 1.52, p=.168 Pets x Age: F(6, 1617) = 2.50, p=.021
	26-35	80.49	14.64	185	77.35	19.36	117	
	36-45	79.58	15.59	287	76.69	18.07	124	
	46-55	76.24	18.42	279	79.83	17.57	115	
	56-65	74.48	20.70	172	79.30	14.98	114	
	66-75	78.12	19.53	101	76.28	19.73	129	
	76+	81.61	16.14	31	77.92	18.29	106	
Comm. Connect	18-25	65.98	20.81	112	67.31	20.71	67	Age: F(6, 1918) = 10.36, p=.000 Pets x Age: F(6, 1918) = 1.13, p=.341
	26-35	68.54	21.46	185	64.40	20.61	116	
	36-45	70.21	18.17	287	67.30	19.54	122	
	46-55	70.87	19.49	277	68.78	18.50	115	
	56-65	71.06	21.07	170	74.21	16.93	114	
	66-75	77.03	18.68	101	76.98	18.01	129	
	76+	77.74	20.93	31	76.70	17.66	106	
Future Security	18-25	71.71	17.93	111	73.85	16.65	65	Age: F(6,1892) = 6.25, p=.000 Pets x Age: F(6, 1892) = 1.27, p=.267
	26-35	69.06	17.25	181	68.98	18.83	118	
	36-45	69.34	17.60	287	66.80	18.19	122	
	46-55	69.02	20.26	275	69.38	20.37	113	
	56-65	67.56	22.33	168	73.15	18.49	111	
	66-75	74.23	21.69	97	74.49	22.14	127	
	76+	80.34	14.01	29	77.94	19.36	102	
Life as a Whole	18-25	76.11	14.97	113	78.06	13.62	67	Age: F(6,1933) = 8.90, p=.000 Pets x Age: F(6, 1933) = .70, p=.642
	26-35	76.74	15.54	187	77.71	15.87	118	
	36-45	76.89	16.20	289	75.40	16.30	124	
	46-55	76.11	16.53	280	73.10	19.89	116	
	56-65	78.08	20.13	172	78.77	17.86	114	
	66-75	82.55	16.33	102	82.58	17.44	128	
	76+	86.13	9.89	31	84.15	15.11	106	

Table A7.8: Pet Ownership, Gender and Personal Domains

Variable	Gender	Own Pet						p
		Yes			No			
		Mean	SD	N	Mean	SD	N	
PWB	Male	74.58	11.15	530	74.27	12.67	410	Gender: $F(1,1896) = 15.01$, $p=.000$ Pet x Gender: $F(1,1865) = 2.71$, $p=.100$
	Female	75.82	11.92	614	77.33	11.34	346	
Standard Of living	Male	77.39	15.69	544	76.63	16.81	424	Gender: $F(1,1971) = 3.28$, $p=.070$ Pet x Gender: $F(1,1971) = 6.01$, $p=.014$
	Female	76.90	16.94	646	79.86	16.24	361	
Health	Male	73.90	19.40	544	74.16	18.86	423	Gender: $F(1,1973) = 5.66$, $p=.017$ Pet x Gender: $F(1,1973) = .17$, $p=.681$
	Female	75.67	19.93	649	76.68	19.83	361	
Achieve	Male	73.68	17.07	544	73.07	18.61	423	Gender: $F(1,1965) = 12.45$, $p=.000$ Pet x Gender: $F(1,1965) = 3.10$, $p=.078$
	Female	75.08	16.52	648	77.27	16.79	362	
Pers Rel/ships	Male	80.61	17.26	543	76.14	23.12	422	Gender: $F(1,1970) = 22.62$, $p=.000$ Pet x Gender: $F(1,1970) = 15.15$, $p=.000$
	Female	81.39	19.64	647	83.98	18.57	362	
Safety	Male	78.45	17.98	541	78.55	17.97	422	Gender: $F(1,1965) = .83$, $p=.363$ Pet x Gender: $F(1,1965) = .13$, $p=.715$
	Female	78.00	17.07	645	77.51	18.48	361	
Comm. Connect	Male	69.11	19.82	539	69.69	19.90	422	Gender: $F(1,1958) = 11.72$, $p=.001$ Pet x Gender: $F(1,1958) = .03$, $p=.870$
	Female	72.07	19.96	642	72.95	18.42	359	
Future Security	Male	68.79	20.55	538	71.36	20.01	418	Gender: $F(1,1927) = 3.57$, $p=.059$ Pet x Gender: $F(1,1927) = .22$, $p=.643$
	Female	70.93	18.27	625	72.66	19.15	350	
Life as a Whole	Male	77.07	17.08	543	76.70	18.09	424	Gender: $F(1,1973) = 9.83$, $p=.002$ Pet x Gender: $F(1,1973) = 3.14$, $p=.077$
	Female	78.14	16.37	649	80.53	16.21	361	

Table A7.9: Females: Pet Ownership x Income x Age (Personal Relationships)

Pet Owners					Non-Pet Owners				
Income	Age	Mean	SD	N	Income	Age	Mean	SD	N
<\$15K	18-25	80.00	14.14	2	<\$15K	18-25	76.00	15.17	5
	26-35	67.50	18.32	8		26-35	30.00	20.00	4
	36-45	45.00	29.53	10		36-45	75.00	7.07	2
	46-55	78.00	29.57	15		46-55	52.50	41.13	4
	56-65	78.42	17.72	19		56-65	81.43	25.98	14
	66-75	88.62	11.56	29		66-75	85.67	19.06	30
	76+	88.13	9.81	16		76+	90.00	12.11	31
	Total	78.69	22.62	99		Total	81.78	23.20	90
\$15-30K	18-25	73.00	30.57	10	\$15-30K	18-25	90.00	.00	2
	26-35	81.67	15.28	12		26-35	68.00	21.68	5
	36-45	75.00	26.46	20		36-45	67.14	31.47	7
	46-55	80.59	25.36	17		46-55	60.00	14.14	4
	56-65	82.50	14.10	20		56-65	87.69	14.81	13
	66-75	82.86	17.65	21		66-75	90.00	9.66	16
	76+	86.67	11.55	3		76+	81.25	18.85	8
	Total	79.90	21.31	103		Total	81.09	19.69	55
\$31-60K	18-25	62.00	33.93	10	\$31-60K	18-25	81.11	16.91	9
	26-35	76.41	19.93	39		26-35	86.00	8.28	15
	36-45	81.59	14.93	44		36-45	77.50	18.15	12
	46-55	77.67	22.97	43		46-55	79.47	20.41	19
	56-65	85.38	19.41	13		56-65	92.50	11.38	12
	66-75	80.00	18.97	6		66-75	83.33	16.33	6
	76+	78.19	20.93	155		76+	95.00	7.07	2
	Total	81.43	14.64	7		Total	83.47	16.15	75
\$61-90K	18-25	84.55	12.99	22	\$61-90K	18-25	90.00	14.14	2
	26-35	89.39	11.71	33		26-35	89.29	13.28	14
	36-45	83.91	14.06	23		36-45	79.00	22.83	10
	46-55	83.00	11.60	10		46-55	90.91	7.01	11
	56-65	85.68	12.85	95		56-65	85.00	12.91	4
	66-75	86.67	12.11	6		66-75	70.00	.	1
	76+	90.00	9.26	8		76+	86.43	15.11	42
	Total	85.00	12.25	14		Total	87.50	12.58	4
\$91-120K	18-25	80.67	17.51	15	\$91-120K	18-25	86.67	12.25	9
	26-35	96.67	5.77	3		26-35	85.00	19.15	4
	36-45	85.43	13.78	46		36-45	85.00	7.07	2
	46-55	100.00	.	1		46-55	86.32	12.57	19
	56-65	85.00	7.07	2		56-65	80.00	.	1
	66-75	84.17	19.29	12		66-75	94.00	5.48	5
	76+	88.33	19.41	6		76+	82.50	9.57	4
	Total	90.00	10.00	3		Total	82.50	5.00	4
>\$120K	18-25	86.67	16.85	24	>\$120K	18-25	86.43	8.42	14
	26-35	80.00	14.14	2		26-35	81.58	14.63	19
	36-45	67.50	18.32	8		36-45	81.28	21.12	47
	46-55	45.00	29.53	10		46-55	78.41	20.11	44
	56-65	78.00	29.57	15		56-65	78.91	21.52	46
	66-75	78.42	17.72	19		66-75	86.67	17.96	45
	76+	88.62	11.56	29		76+	86.42	16.30	53
	Total	88.13	9.81	16		Total	88.54	13.70	41
Income: F(5,487) = 4.94, p=.000					Income: F(5,260) = 4.40, p=.001				
Age: F(6,487) = 2.86, p=.009					Age: F(6,260) = 2.90, p=.010				
Income x Age: F(23,487) = 1.90, p=.007					Income x Age: F(23,260) = 2.13, p=.002				

Table A7.10: Males: Pet Ownership x Income x Age (Personal Relationships)

Pet Owners					Non-Pet Owners				
Income	Age	Mean	SD	N	Income	Age	Mean	SD	N
<\$15K	18-25	85.00	21.21	2	<\$15K	18-25	61.67	28.58	6
	26-35	61.43	26.73	7		26-35	56.67	25.17	3
	36-45	87.50	13.89	8		36-45	90.00	.	1
	46-55	73.33	18.62	6		46-55	61.67	33.12	6
	56-65	76.67	28.70	15		56-65	56.67	32.66	6
	66-75	77.69	20.88	13		66-75	68.33	32.93	24
	76+	50.00	.	1		76+	86.52	13.01	23
	Total	75.96	23.45	52		Total	72.03	28.11	69
\$15-30K	18-25	84.29	17.18	7	\$15-30K	18-25	65.00	17.32	4
	26-35	73.75	19.23	8		26-35	66.67	36.70	6
	36-45	80.00	17.32	11		36-45	63.75	42.41	8
	46-55	74.17	16.21	12		46-55	65.00	31.62	8
	56-65	84.29	19.10	14		56-65	78.12	17.59	16
	66-75	92.50	8.66	12		66-75	89.44	11.10	18
	76+	94.00	8.94	5		76+	86.11	18.83	18
	Total	82.75	16.97	69		Total	78.21	24.95	78
\$31-60K	18-25	81.25	14.58	8	\$31-60K	18-25	60.00	29.15	9
	26-35	80.00	19.75	21		26-35	75.79	15.02	19
	36-45	79.33	17.01	30		36-45	75.00	20.90	20
	46-55	82.33	15.41	43		46-55	65.88	24.25	17
	56-65	82.61	16.30	23		56-65	78.57	19.94	14
	66-75	78.89	12.69	9		66-75	81.43	13.45	7
	76+	50.00	.	1		76+	74.44	22.42	9
	Total	80.81	16.39	135		Total	73.05	21.24	95
\$61-90K	18-25	68.57	13.45	7	\$61-90K	18-25	78.57	28.54	7
	26-35	83.53	10.57	17		26-35	74.44	20.68	9
	36-45	82.68	14.67	41		36-45	71.33	27.22	15
	46-55	81.30	16.87	23		46-55	82.22	14.81	9
	56-65	86.00	16.82	15		56-65	81.43	12.15	7
	66-75	100.00	.	1		66-75	97.50	5.00	4
	76+	86.67	15.28	3		76+	70.00	.	1
	Total	82.34	15.08	107		Total	78.08	21.70	52
\$91-120K	18-25	80.00	13.23	9	\$91-120K	18-25	80.00	.	1
	26-35	88.33	8.35	12		26-35	90.00	.00	2
	36-45	80.00	11.77	14		36-45	70.00	24.49	7
	46-55	82.50	11.83	16		46-55	82.22	10.93	9
	56-65	82.00	19.24	5		56-65	93.33	5.77	3
	66-75	100.00	.	1		66-75	90.00	.	1
	76+	80.00	.	1		76+	80.00	.	1
	Total	82.93	12.14	58		Total	80.83	16.40	24
>\$120K	18-25	77.50	5.00	4	>\$120K	18-25	75.00	7.07	2
	26-35	77.50	18.93	4		26-35	84.00	11.40	5
	36-45	77.69	19.22	13		36-45	65.00	12.25	6
	46-55	71.00	19.12	10		46-55	88.33	14.72	6
	56-65	82.22	9.72	9		56-65	90.00	.	1
	66-75	77.00	16.20	40		66-75	80.00	.	1
	76+	78.92	14.30	37		76+	90.00	.	1
	Total	79.57	18.02	69		Total	79.55	14.63	22
Income: F(5,421) = 2.49, p=.031					Income: F(5,298) = 1.32, p=.257				
Age: F(6,421) = 1.69, p=.123					Age: F(6,298) = .87, p=.515				
Income x Age: F(28,421) = 1.28, p=.158					Income x Age: F(30,298) = .87, p=.666				

Table A7.11: Attachment to Pet - Age and Gender

Variable	Age	Males			Females			p
		Mean	SD	N	Mean	SD	N	
Attachment	18-25	87.70	17.83	61	87.74	18.88	53	Gender: F(1,1168) = 12.11, p=.000 Age: F(6,1168) = 4.69, p=.000 Gender x Age: F(6,1168) = 3.21, p=.004
	26-35	85.45	16.90	77	87.84	15.16	111	
	36-45	79.62	19.28	133	88.16	15.26	158	
	46-55	81.07	18.06	121	91.13	13.31	159	
	56-65	88.71	13.37	93	90.96	15.35	83	
	66-75	92.33	9.72	43	91.69	11.91	59	
	76+	83.64	16.29	11	90.50	9.99	20	
	Total	84.36	17.33	539	89.56	14.74	643	

Table A7.12: Income x Pets x Gender ANOVA: Personal Wellbeing Index and Domains

Personal Wellbeing Index	
Income	F(5,1555) = 4.85, p=.000
Pets	F(1,1555) = .65, p=.421
Gender	F(1,1555) = 8.77, p=.003
Income x Pets	F(5,1555) = .34, p=.892
Income x Gender	F(5,1555) = .52, p=.761
Pets x Gender	F(1,1555) = .23, p=.632
Income x Pets x Gender	F(5,1555) = .49, p=.786
Standard of living	
Income	F(5,1610) = 8.81, p=.000
Pets	F(1,1610) = 3.50, p=.062
Gender	F(1,1610) = 1.94, p=.164
Income x Pets	F(5,1610) = .78, p=.567
Income x Gender	F(5,1610) = 1.84, p=.102
Pets x Gender	F(1,1610) = .73, p=.393
Income x Pets x Gender	F(5,1610) = 1.32, p=.254
Health	
Income	F(5,1610) = 11.17, p=.000
Pets	F(1,1610) = .83, p=.363
Gender	F(1,1610) = 7.98, p=.005
Income x Pets	F(5,1610) = .42, p=.833
Income x Gender	F(5,1610) = .83, p=.532
Pets x Gender	F(1,1610) = .49, p=.485
Income x Pets x Gender	F(5,1610) = 1.28, p=.270
Achievements	
Income	F(5,1610) = .51, p=.768
Pets	F(1,1610) = .02, p=.899
Gender	F(1,1610) = 1.18, p=.278
Income x Pets	F(5,1610) = .71, p=.617
Income x Gender	F(5,1610) = 1.47, p=.195
Pets x Gender	F(1,1610) = .08, p=.776
Income x Pets x Gender	F(5,1610) = 1.22, p=.299
Personal relationships	
Income	F(5,1608) = 4.26, p=.001
Pets	F(1,1608) = .50, p=.481
Gender	F(1,1608) = 15.73, p=.000
Income x Pets	F(5,1608) = .09, p=.994
Income x Gender	F(5,1608) = 1.16, p=.327
Pets x Gender	F(1,1608) = 4.87, p=.028
Income x Pets x Gender	F(5,1608) = .90, p=.483
Safety	
Income	F(5,1605) = 2.55, p=.026
Pets	F(1,1605) = .18, p=.670
Gender	F(1,1605) = .08, p=.772
Income x Pets	F(5,1605) = .92, p=.469
Income x Gender	F(5,1605) = 1.07, p=.373
Pets x Gender:	F(1,1605) = .01, p=.935
Income x Pets x Gender	F(5,1605) = 1.94, p=.085
Community connectedness	
Income	F(5,1600) = 1.00, p=.419
Pets	F(1,1600) = .03, p=.855
Gender	F(1,1600) = 2.63, p=.105
Income x Pets	F(5,1600) = .84, p=.521
Income x Gender	F(5,1600) = .96, p=.441
Pets x Gender	F(1,1600) = .62, p=.432
Income x Pets x Gender	F(5,1600) = .61, p=.695
Future security	
Income	F(5,1578) = 2.63, p=.023
Pets	F(1,1578) = 3.07, p=.080
Gender	F(1,1578) = 5.30, p=.022
Income x Pets	F(5,1578) = 1.70, p=.132
Income x Gender	F(5,1578) = .94, p=.454
Pets x Gender	F(1,1578) = .82, p=.366
Income x Pets x Gender	F(5,1578) = .30, p=.913

Appendix A8. Citizenship, Country of Birth and Ethnic Origin

Table A8.1: Means and Standard Deviations

Question	Citizenship					Country of Birth					Ethnicity				
	Australian N=1830		Non-Australian N=149		t-test p value	Australia N=1480		Other N=499		t-test p value	Australian N=1073		Other N=906		t-test p value
	Mean	SD	Mean	SD		Mean	SD	Mean	SD		Mean	SD	Mean	SD	
PERSONAL WELLBEING INDEX	75.47	11.85	74.79	11.35	.494	75.49	11.75	75.20	12.02	.650	75.34	11.45	75.51	12.25	.749
Personal domains															
1. Standard of living	77.78	16.47	74.30	16.12	.012	78.01	16.35	76.04	16.76	.022	78.04	16.18	76.90	16.79	.125
2. Health	74.99	19.64	75.61	18.49	.700	75.17	19.71	74.66	19.07	.609	75.31	19.46	74.72	19.67	.509
3. Achievements in life	74.64	17.22	74.97	17.42	.824	74.94	17.08	73.83	17.68	.220	74.61	17.18	74.72	17.30	.893
4. Personal relationships	80.56	19.66	80.07	21.39	.786	80.37	19.82	80.98	19.73	.547	79.76	20.16	81.43	19.32	.061
5. How safe you feel	78.23	17.53	77.30	20.52	.591	78.47	17.32	77.24	19.04	.205	78.56	17.03	77.69	18.62	.284
6. Community connect	70.92	19.59	70.76	20.85	.927	70.89	19.31	70.98	20.77	.931	70.86	18.90	70.97	20.58	.904
7. Future security	70.76	19.53	70.75	19.23	.999	70.56	19.40	71.33	19.82	.459	70.41	19.09	71.17	19.98	.396
Life as a whole	78.10	17.00	76.38	16.28	.218	78.31	16.95	76.95	16.95	.121	78.44	16.20	77.41	17.80	.179
Survey-specific personal Aspects															
- Neighbourhood	80.74	17.95	78.98	20.26	.307	80.85	18.06	79.92	18.34	.329	81.07	17.92	80.07	18.37	.220
- Contentment	76.82	15.18	76.35	17.07	.745	77.14	14.94	75.75	16.37	.095	77.15	14.81	76.35	15.90	.250
- Happiness	78.70	14.74	77.85	16.42	.543	78.84	14.45	78.04	16.07	.325	78.89	14.57	78.33	15.23	.410
NATIONAL WELLBEING INDEX	60.66	14.54	61.94	14.53	.349	60.50	14.64	61.52	14.19	.197	60.18	14.62	61.44	14.42	.069
National domains															
1. Economic situation	65.48	17.88	64.07	17.87	.370	65.59	17.89	64.74	17.84	.366	65.62	18.02	65.09	17.72	.516
2. State of the environment	59.99	18.28	65.76	19.13	.001	59.46	18.14	63.29	18.86	.000	58.87	18.49	62.26	18.12	.000
3. Social conditions	61.59	18.50	65.07	17.55	.023	61.10	18.33	64.06	18.65	.002	61.02	18.39	62.82	18.48	.032
4. Government	53.43	23.98	53.80	23.98	.862	53.43	23.87	53.52	24.30	.943	52.97	23.63	54.02	24.37	.339
5. Business	60.91	17.54	61.64	18.20	.653	61.01	17.61	60.80	17.53	.821	60.94	17.68	60.99	17.49	.994
6. National security	63.43	18.70	65.74	19.31	.180	62.77	18.82	66.07	18.32	.001	62.65	18.52	64.70	18.96	.017
Life in Australia	82.91	17.09	81.49	16.80	.322	83.31	16.87	81.31	17.58	.028	82.57	17.30	83.09	16.80	.498
Attachment to Australia															
- Belonging	86.15	16.99	75.38	22.36	.000	87.45	15.97	79.07	20.74	.000	87.40	16.05	82.93	19.12	.000
- Share core values	71.66	18.27	70.29	19.55	.429	72.10	17.98	69.94	19.41	.032	72.59	17.86	70.34	18.88	.000

Table A8.1a: Ethnicity: Born/Not Born in Australia

Question	Australian N=1073		Ethnic – Born in Australia N=427		Ethnic – Not Born in Australia N=480		p
	Mean	SD	Mean	SD	Mean	SD	
PERSONAL WELLBEING INDEX	75.34	11.45	76.11	12.45	74.97	12.05	.172
Personal domains							
1. Standard of living	78.04	16.18	78.20	16.67	75.73	16.84	.027
2. Health	75.31	19.46	75.32	20.20	74.20	19.18	.392
3. Achievements in life	74.61	17.18	75.81	16.72	73.75	17.76	.074
4. Personal relationships	79.76	20.16	82.02	18.71	80.90	19.84	.381
5. How safe you feel	78.56	17.03	78.50	18.01	76.96	19.14	.216
6. Community connect	70.86	18.90	71.17	20.40	70.79	20.76	.779
7. Future security	70.41	19.09	71.43	20.20	70.93	19.80	.710
Life as a whole	78.44	16.20	78.20	18.48	76.70	17.15	.207
Survey-specific personal Aspects							
- Neighbourhood	81.07	17.92	80.59	18.36	79.60	18.40	.422
- Contentment	77.15	14.81	77.36	15.10	75.45	16.55	.071
- Happiness	78.89	14.57	79.01	13.97	77.73	16.25	.201
NATIONAL WELLBEING INDEX	60.18	14.62	61.59	14.61	61.30	14.26	.775
National domains							
1. Economic situation	65.62	18.02	65.50	17.44	64.72	17.99	.514
2. State of the environment	58.87	18.49	61.12	17.14	63.28	18.92	.073
3. Social conditions	61.02	18.39	61.67	18.15	63.84	18.73	.080
4. Government	52.97	23.63	55.00	24.34	53.13	24.40	.252
5. Business	60.94	17.68	61.29	17.47	60.72	17.52	.634
6. National security	62.65	18.52	63.42	19.46	65.86	18.44	.057
Life in Australia	82.57	17.30	85.33	15.51	81.09	17.65	.000
Attachment to Australia							
- Belonging	87.40	16.05	87.49	15.81	78.82	20.86	.000
- Share core values	72.59	17.86	70.88	18.25	69.85	19.45	.417

Note: The p value is calculated through a t-test between ethnic born/not born in Australi

Table A8.2: Ethnicity: Distribution

Valid	Citizenship		Country Born		Ethnic Origin	
	Frequency	%	Frequency	%	Frequency	%
Australia	1783	90.3	1481	75.1	959	48.7
Asia	14		59		58	
Burma			1	0.1		
Cambodia					2	0.1
China	3	0.2	12	0.6	20	1.0
East Timor			1	0.1	1	0.1
Hong Kong	3	0.2	8	0.4	8	0.4
Indonesia	1	0.1	4	0.2	3	0.2
Japan						
Laos			1	0.1	1	0.1
Malaysia	3	0.2	9	0.4	4	0.2
Philippines	2	0.1	11	0.6	10	0.5
Singapore			4	0.2	4	0.2
Korea			1	0.1		
Taiwan			4	0.2	4	0.2
Thailand	1	0.1	2	0.1	1	0.1
Vietnam	1	0.1	1	0.1		
UK	58		190		467	
Ireland	3	0.2	10	0.5	71	3.6
Scotland	2	0.1	12	0.6	42	2.1
Britain	53	2.7	168	8.5	354	18.0
Wales						
New Zealand	27	1.4	42	2.1	31	1.6
Europe	16		87		166	
Finland	1	0.1	3	0.2	4	0.2
France	1	0.1	4	0.2	4	0.2
Germany	6	0.3	26	1.3	52	2.6
Greece			10	0.5	21	1.1
Iceland			1	0.1	1	0.1
Italy	6	0.3	13	0.7	42	2.1
Malta	1	0.1	5	0.3	9	0.5
Netherlands	2	0.1	18	0.9	22	1.1
Poland			5	0.3	11	0.6
Sweden			2	0.1		
Switzerland						
Eastern Europe	1		28		43	
Bulgaria			1	0.1	2	0.1
Czech Republic			1	0.1	1	0.1
Estonia						
Former Yugoslavia Republics			14	0.7	24	1.2
Hungary			2	0.1		
Macedonia	1	0.1	4	0.2	6	0.3
Portugal			1	0.1		
Romania						
Russia			2	0.1	5	0.3
Slovenia			1	0.1		
Turkey			2	0.1	4	0.2
Ukraine						
India	2	0.1	16	0.8	16	0.8
Sri Lanka	9	0.5	16	0.8	16	0.8
North Africa			11		15	
Africa			4	0.2	2	0.1
Cyprus						
Egypt			3	0.2	3	0.2
Iran			3	0.2		
Israel			1	0.1	1	0.1
Kuwait						
Lebanon					9	0.5
Palestine						
United States of America	7	0.4	9	0.5	6	0.3
Canada						
Pacific	2		9		1	
South Pacific Islands	2	0.1	6	0.3		
Tonga						
Papua New Guinea			3	0.2	1	0.1
South America	2	0.1	6	0.3	4	0.2
Argentina						
Chile						
Brunei						
Ghana						
Kenya						
South Africa	2	0.1	8	0.4	9	0.5
Dual Australian - other	48	2.4	5		114	5.8
Dual countries - non Australia	2	0.1			40	2.0
Other	2				5	
Missing	5		13		24	
Total	1980		1980		1969	

Table A8.3: Country of Birth: Personal Wellbeing Index (Survey 8)

Variable	Country of Birth	N	Mean	SD	p
Personal Wellbeing Index	NES	232	73.98	12.17	F(2,1898) = 2.58, p=.076
	AUS	1434	75.49	11.75	
	MES	235	76.41	11.77	
Standard of living	NES	248	74.35	16.73	F(2,1973) = 5.28, p=.005
	AUS	1479	78.01	16.35	
	MES	249	77.71	16.66	
Health	NES	250	74.08	18.80	F(2,1975) = .35, p=.707
	AUS	1480	75.17	19.71	
	MES	248	75.24	19.36	
Achievements	NES	250	71.72	18.71	F(2,1975) = 4.55, p=.011
	AUS	1479	74.94	17.08	
	MES	249	75.94	16.34	
Personal relationships	NES	250	80.04	20.17	F(2,1972) = .75, p=.473
	AUS	1476	80.37	19.82	
	MES	249	81.93	19.27	
Safety	NES	244	76.07	20.59	F(2,1967) = 1.50, p=.225
	AUS	1477	78.47	17.32	
	MES	249	78.39	17.36	
Community connect	NES	246	70.77	21.60	F(2,1960) = .03, p=.968
	AUS	1474	70.89	19.31	
	MES	243	71.19	19.93	
Future security	NES	239	69.54	20.38	F(2,1929) = 2.30, p=.101
	AUS	1452	70.56	19.40	
	MES	241	73.11	19.12	

Table A8.4: Country of Birth Personal Wellbeing Index (combined Surveys 4 and 8)

Variable	Country of Birth	N	Mean	SD	F	p
Personal Wellbeing Index	NES	444	73.47	12.18	3.96	.019
	AUS	2831	75.03	12.03		
	MES	506	75.51	12.04		
Standard of living	NES	480	74.48	16.66	6.03	.002
	AUS	2931	77.33	17.00		
	MES	529	77.39	16.70		
	Total	3940	76.99	16.94		
Health	NES	482	74.48	19.08	.18	.883
	AUS	2931	75.06	19.69		
	MES	528	74.87	20.26		
	Total	3941	74.96	19.69		
Achievements	NES	478	71.40	18.21	8.10	.000
	AUS	2924	74.65	17.06		
	MES	529	75.18	16.86		
	Total	3931	74.33	17.21		
Personal relationships	NES	482	79.00	20.50	.60	.549
	AUS	2921	79.74	20.42		
	MES	528	80.42	20.74		
	Total	3931	79.74	20.47		
Safety	NES	473	75.92	20.10	2.12	.121
	AUS	2924	77.93	17.87		
	MES	528	77.84	17.80		
	Total	3925	77.68	18.15		
Community connect	NES	476	69.29	20.32	.67	.512
	AUS	2913	70.29	19.59		
	MES	521	70.63	19.73		
	Total	3910	70.21	19.70		
Future security	NES	458	68.80	20.12	3.17	.042
	AUS	2875	69.92	19.87		
	MES	516	71.88	19.56		
	Total	3849	70.05	19.87		

Table A8.5: Country of Birth: National Wellbeing Index (Survey 8)

Variable	Country of Birth	N	Mean	SD	p
National Wellbeing Index	NES	217	62.71	14.45	F(2,1973) = 2.26, p=.104
	AUS	1332	60.50	14.64	
	MES	220	60.34	13.87	
Economic situation	NES	242	64.63	18.08	F(2,1920) = .42, p=.658
	AUS	1438	65.59	17.89	
	MES	241	64.85	17.63	
	Total	1921	65.38	17.88	
Environment	NES	246	66.34	19.18	F(2,1948) = 14.96, p=.000 NES>AUS, p=.000
	AUS	1461	59.46	18.14	
	MES	244	60.20	18.06	
	Total	1951	60.42	18.40	
Social conditions	NES	248	64.96	19.28	F(2,1945) = 5.35, p=.005 NES>AUS, p=.007
	AUS	1455	61.10	18.33	
	MES	245	63.14	17.98	
	Total	1948	61.85	18.45	
Government	NES	241	55.15	24.92	F(2,1941) = 1.11, p=.330
	AUS	1461	53.43	23.87	
	MES	242	51.90	23.61	
	Total	1944	53.45	23.97	
Business	NES	234	60.64	17.31	F(2,1869) = .05, p=.956
	AUS	1410	61.01	17.61	
	MES	228	60.96	17.78	
	Total	1872	60.96	17.59	
National security	NES	237	67.34	19.25	F(2,1905) = 6.68, p=.001 NES>AUS, p=.001
	AUS	1432	62.77	18.82	
	MES	239	64.81	17.29	
	Total	1908	63.59	18.75	

Table A8.6: Country of Birth: National Wellbeing Index (Combined Surveys)

Variable	Country of Birth	N	Mean	SD	F	p
National Wellbeing Index	NES	419	63.21	14.17	8.50 NES>AUS, p=.000 NES>MES, p=.037	.000
	AUS	2603	60.01	14.99		
	MES	460	60.74	14.41		
Economic situation	NES	470	64.45	18.70	.45	.636
	AUS	2853	64.56	18.67		
	MES	513	65.38	18.29		
	Total	3836	64.66	18.62		
Environment	NES	469	66.12	19.66	30.99 NES>AUS, p=.000 NES>MES, p=.000	.000
	AUS	2887	58.74	18.69		
	MES	521	59.39	19.01		
	Total	3877	59.72	19.00		
Social conditions	NES	475	65.64	18.73	13.51 NES>AUS, p=.000	.000
	AUS	2861	61.07	18.59		
	MES	518	63.07	18.41		
	Total	3854	61.90	18.64		
Government	NES	470	55.34	23.86	1.88	.153
	AUS	2895	53.15	24.34		
	MES	518	52.68	23.90		
	Total	3883	53.36	24.23		
Business	NES	456	60.90	17.80	.52	.593
	AUS	2784	60.00	18.17		
	MES	490	60.37	18.31		
	Total	3730	60.16	18.14		
National security	NES	461	67.51	19.24	13.98 NES>AUS, p=.000 NES>MES, p=.014	.000
	AUS	2817	62.42	19.34		
	MES	502	64.00	20.04		
	Total	3780	63.25	19.49		

Table A8.7: Country of Birth: Survey Specific Items (Survey 8)

	Country of Birth	N	Mean	SD	p
Neighbourhood	NES	248	78.75	19.87	F(2,1973) = .152, p=.220
	AUS	1479	80.85	18.06	
	MES	249	81.08	16.63	
	Total	1976	80.61	18.13	
Generally content	NES	247	73.77	17.06	F(2,1971) = 5.67, p=.004 AUS>NES, p=.004 MES>NES, p=.011
	AUS	1478	77.14	14.94	
	MES	249	77.71	15.45	
	Total	1974	76.79	15.32	
Generally happy	NES	250	76.80	17.15	F(2,1974) = 2.27, p=.103
	AUS	1478	78.84	14.45	
	MES	249	79.28	14.85	
	Total	1977	78.63	14.87	
Sense of belonging in Australia	NES	245	77.02	22.00	F(2,1967) = 34.52, p=.000 AUS>NES, p=.000 AUS>MES, p=.000
	AUS	1477	87.45	15.97	
	MES	248	81.09	19.24	
	Total	1970	85.36	17.66	
Share core values with other Australians	NES	239	69.79	20.07	F(2,1923) = 2.51, p=.082
	AUS	1448	72.10	17.98	
	MES	239	70.08	18.76	
	Total	1926	71.56	18.36	

Table A8.8: Country of Birth: Income Distribution (Survey 8)

		<\$15,000	\$15,000-\$30,000	\$31,000-\$60,000	\$61,000-\$90,000	\$91,000-\$120,000	>\$120,000	Total
NES	N	48	35	56	31	17	13	200
	%	24.0%	17.5%	28.0%	15.5%	8.5%	6.5%	100.0%
AUS	N	233	222	357	236	109	70	1227
	%	19.0%	18.1%	29.1%	19.2%	8.9%	5.7%	100.0%
MES	N	35	51	51	30	24	18	209
	%	16.7%	24.4%	24.4%	14.4%	11.5%	8.6%	100.0%

$\chi^2(10,1636) = 15.58, p=.112$

Table A8.9: Country of Birth: Household Income (combined data)

		<\$15,000	\$15,000-\$30,000	\$31,000-\$60,000	\$61,000-\$90,000	>\$90,000	Total
NES	N	77	81	113	63	50	384
	%	20.1%	21.2%	29.4%	16.4%	13.0%	100%
AUS	N	466	469	768	457	312	2472
	%	18.9%	19.0%	31.1%	18.5%	12.6%	100%
MES	N	85	104	114	60	71	434
	%	19.6%	24.0%	26.3%	13.8%	16.4%	100%

$\chi^2(8,3290) = 17.02, p=.030$

Table A8.10: Country of Birth: Gender Distribution (combined surveys)

		Male	Female	Total
NES	N	249	233	482
	%	51.7%	48.3%	100.0%
AUS	N	1420	1513	2933
	%	48.4%	51.6%	100.0%
MES	N	262	267	529
	%	49.5%	50.5%	100.0%

$\chi^2(2,3944) = 1.82, p=.402$

Table A8.11: Country of Birth: Age Distribution (combined surveys)

		18-25	26-35	36-45	46-55	56-65	66-75	76+	Total
NES	N	56	70	108	102	62	43	20	461
	%	12.1%	15.2%	23.4%	22.1%	13.4%	9.3%	4.3%	100.0%
AUS	N	317	476	594	583	387	297	212	2866
	%	11.1%	16.6%	20.7%	20.3%	13.5%	10.4%	7.4%	100.0%
MES	N	15	52	114	100	115	75	39	510
	%	2.9%	10.2%	22.4%	19.6%	22.5%	14.7%	7.6%	100.0%

$\chi^2(12,3837) = 83.19, p=.000$

Table A8.12: Country of Birth: Reasons for Connection to Australia (Survey 8)

		Natural environment	Democracy	Sporting culture	Multicultural society	Lifestyle	Total
NES	N	24	36	15	94	77	246
	%	9.8%	14.6%	6.1%	38.2%	31.3%	100.0%
AUS	N	165	195	183	152	771	1466
	%	11.3%	13.3%	12.5%	10.4%	52.6%	100.0%
MES	N	23	33	21	41	128	246
	%	9.3%	13.4%	8.5%	16.7%	52.0%	100.0%

$\chi^2(8,1958) = 142.34, p=.000$

Table A8.13: Country of Birth: Distribution of Pet Ownership (Survey 8)

		Own a pet		
		Yes	No	Total
NES	N	115	135	250
	%	46.0%	54.0%	100.0%
AUS	N	918	562	1480
	%	62.0%	38.0%	100.0%
MES	N	160	89	249
	%	64.3%	35.7%	100.0%

$\chi^2(2,1979) = 24.83, p=.000$

Table A8.14: Country of Birth: PWI x Gender Distribution (combined surveys)

		N	Mean	SD	p
NES	Male	237	72.35	12.75	.038
	Female	207	74.75	11.39	
AUS	Male	1377	74.16	11.91	.000
	Female	1454	75.87	12.09	
MES	Male	255	75.16	11.57	.509
	Female	251	75.87	12.51	

Table A8.15: Country of Birth: PWI x Age Distribution (combined surveys)

		N	Mean	SD	P
NES	18-25	54	73.60	12.69	.250
	26-35	66	71.28	10.47	
	36-45	103	72.04	11.53	
	46-55	90	74.56	11.42	
	56-65	57	73.16	12.69	
	66-75	36	73.25	15.72	
	76+	20	78.71	13.42	
	Total	426	73.22	12.18	
AUS	18-25	311	74.97	10.97	.000
	26-35	463	73.52	11.78	
	36-45	580	74.21	12.37	
	46-55	568	73.91	12.66	
	56-65	375	75.66	11.77	
	66-75	279	78.27	10.18	
	76+	195	78.44	12.41	
	Total	2771	75.02	12.00	
MES	18-25	15	76.00	9.12	.171
	26-35	50	74.43	9.73	
	36-45	109	74.40	13.20	
	46-55	97	73.93	12.30	
	56-65	110	76.10	11.63	
	66-75	72	78.87	11.85	
	76+	35	76.20	12.36	
	Total	488	75.53	12.02	

Table A8.16: Country of Birth: PWI x Reasons for Connection to Australia (Survey 8)

		N	Mean	SD	p
NES	Natural environemnt	23	73.54	12.90	.112
	Democracy	34	73.45	10.98	
	Sporting culture	15	74.57	9.68	
	Multicultural society	85	71.78	13.83	
	Lifestyle	72	77.06	10.51	
	Total	229	74.05	12.21	
AUS	Natural environemnt	161	74.31	12.99	.279
	Democracy	186	76.21	11.33	
	Sporting culture	177	74.17	12.80	
	Multicultural society	148	75.69	11.39	
	Lifestyle	749	75.80	11.43	
	Total	1421	75.47	11.78	
MES	Natural environemnt	22	79.81	9.88	.522
	Democracy	33	77.01	11.72	
	Sporting culture	20	73.71	14.12	
	Multicultural society	39	76.63	12.06	
	Lifestyle	118	75.84	11.67	
	Total	232	76.33	11.80	

Table A8.17: Groupings Based on Geographic Location: Personal Wellbeing and Sense of Belonging (Survey 8)

Grouping	N	PWI		Belonging		Share Core Values	
		Mean	SD	Mean	SD	Mean	SD
Citizenship	13	70.77	9.56	70.00	27.69	69.09	13.00
Asia	56	76.79	10.99	81.05	17.18	70.18	19.86
United Kingdom	25	75.83	10.25	77.04	23.83	68.75	20.71
New Zealand	15	74.67	10.78	78.24	20.99	81.88	18.70
Europe	46	75.84	12.81	77.45	19.61	73.11	17.69
Dual Australia-Other	13	70.77	9.56	70.00	27.69	69.09	13.00
		F(4,150) = .78, p=.542		F(4,156) = .84, p=.503		F(4,156) = 1.51, p=.203	
Country of Birth							
Asia	54	74.44	10.86	73.28	20.89	67.72	16.37
United Kingdom	180	76.70	11.94	82.38	18.02	71.20	18.60
New Zealand	39	75.27	11.12	80.24	21.13	67.95	17.65
Europe	83	74.58	12.40	81.00	22.29	71.26	23.96
East Europe	22	74.16	10.58	79.57	17.96	71.82	15.32
Sri Lanka	16	65.80	14.40	69.33	17.51	64.29	16.97
India	16	79.64	10.81	80.63	15.69	71.25	14.08
		F(6,403) = 2.63, p=.016		F(6,426) = 2.39, p=.028		F(6,411) = .74, p=.616	
		UK>Sri Lanka, p=.008		UK>Asia, p=.034			
Ethnicity							
Asia	51	72.44	11.51	73.75	20.94	66.67	17.59
United Kingdom	448	75.66	12.58	85.29	17.14	71.32	18.27
New Zealand	30	76.52	10.01	81.61	20.51	68.62	15.29
Europe	161	75.57	12.42	83.24	19.94	70.65	20.96
East Europe	38	76.39	10.34	80.77	17.83	71.32	15.63
India	16	79.64	10.73	80.00	14.14	72.50	11.25
Sri Lanka	16	66.96	14.87	72.00	18.21	65.33	15.98
North Africa	18	76.11	14.08	73.16	31.28	61.58	25.22
Dual-Australian	112	78.14	9.75	87.61	15.43	72.37	18.73
Dual-Non-Australian	39	79.38	8.14	90.25	12.71	72.31	18.70
		F(9,919) = 2.51, p=.008		F(9,957) = 4.52, p=.008		F(9,936) = 1.17, p=.310	
		Sri Lanka<Dual Aus, p=.017		UK>Asia, p=.008			
		Sri Lanka<Dual Non-Aus, p=.017		Dual Non-Aus>Asia, p=.001			

Table A8.18: Ethnicity & Personal Wellbeing (combined Surveys 4 and 8)

Variable	Ethnicity	N	Mean	SD	F	p
Personal Wellbeing Index	NES	829	74.95	11.80	.952	.386
	AUS	1709	74.63	12.13		
	MES	1220	75.25	12.15		
	Total	3758	74.90	12.07		
Standard of living	NES	875	76.62	15.84	.401	.670
	AUS	1768	76.95	17.15		
	MES	1272	77.28	17.46		
	Total	3915	76.98	16.97		
Health	NES	877	75.66	18.63	1.239	.290
	AUS	1769	75.01	19.84		
	MES	1271	74.31	20.19		
	Total	3917	74.93	19.69		
Achievements	NES	873	73.63	17.58	1.279	.279
	AUS	1765	74.29	17.28		
	MES	1269	74.84	16.81		
	Total	3907	74.32	17.20		
Personal relationships	NES	876	79.74	20.68	1.654	.191
	AUS	1763	79.17	20.75		
	MES	1267	80.54	20.00		
	Total	3906	79.74	20.49		
Safety	NES	868	77.14	18.93	.450	.638
	AUS	1764	77.80	17.85		
	MES	1268	77.82	18.11		
	Total	3900	77.66	18.18		
Community connect	NES	869	70.60	20.01	1.354	.258
	AUS	1759	69.66	19.43		
	MES	1257	70.76	19.81		
	Total	3885	70.23	19.69		
Future security	NES	846	70.46	19.03	1.699	.183
	AUS	1733	69.39	19.87		
	MES	1245	70.64	20.34		
	Total	3824	70.03	19.85		

Table A8.19: Ethnicity: National Domains (combined surveys)

Variable	Ethnicity	N	Mean	SD	F	p
National Wellbeing Index	NES	781	62.31	14.02	8.61	.000
	AUS	1575	59.73	14.95		
	MES	1104	60.33	15.14		
Economic situation	NES	861	64.61	18.25	.424	.654
	AUS	1719	64.47	18.70		
	MES	1232	65.10	18.77		
	Total	3812	64.70	18.62		
Environment	NES	855	63.89	18.91	27.38	.000
	AUS	1745	58.23	18.66		
	MES	1252	58.97	19.07		
	Total	3852	59.73	18.98		
Social conditions	NES	867	65.04	17.83	18.88	.000
	AUS	1722	60.44	18.37		
	MES	1241	61.77	19.34		
	Total	3830	61.91	18.65		
Government	NES	861	54.38	23.25	1.28	.277
	AUS	1747	52.82	24.11		
	MES	1250	53.50	24.96		
	Total	3858	53.39	24.20		
Business	NES	837	60.92	17.88	1.22	.297
	AUS	1682	60.12	17.81		
	MES	1188	59.65	18.74		
	Total	3707	60.15	18.13		
National security	NES	845	65.27	19.15	7.33	.001
	AUS	1699	62.14	19.13		
	MES	1212	63.41	20.12		
	Total	3756	63.25	19.49		

Table A8.20: Ethnicity: Survey Specific Items (Survey 8)

	Ethnicity	N	Mean	SD	F	p	
Neighbourhood	NES	505	80.36	18.65	.07	.934	
	AUS	958	80.71	18.00			
	MES	513	80.68	17.89			
	Total	1976	80.61	18.13			
Generally content	NES	505	76.53	15.62	.10	.908	
	AUS	958	76.90	14.90			
	MES	511	76.83	15.82			
	Total	1974	76.79	15.32			
Generally happy	NES	508	78.70	15.75	.03	.970	
	AUS	957	78.67	14.55			
	MES	512	78.50	14.60			
	Total	1977	78.63	14.87			
Sense of belonging in Australia	NES	503	82.43	19.63	13.36	.000	
	AUS	956	87.37	16.13			AUS > NES, p=.000
	MES	511	84.46	17.90			AUS > MES, p=.007
	Total	1970	85.36	17.66			
Share core values with other Australians	NES	495	70.40	19.46	3.01	.049	
	AUS	934	72.61	17.76			
	MES	497	70.74	18.27			
	Total	1926	71.56	18.36			

Table A8.21: Ethnicity and Income Distribution (combined survey data)

		<\$15,000	\$15,000-\$30,000	\$31,000-\$60,000	\$61,000-\$90,000	>\$90,000	Total
NES	N	120	153	216	126	89	704
	%	17.0%	21.7%	30.7%	17.9%	12.6%	100.0%
AUS	N	279	271	484	278	190	1502
	%	18.6%	18.0%	32.2%	18.5%	12.6%	100.0%
MES	N	219	226	291	176	151	1063
	%	20.6%	21.3%	27.4%	16.6%	14.2%	100.0%

$\chi^2(8,3269) = 15.32, p=.053$

Table A8.22: Ethnicity and Gender Distribution (combined surveys)

		Male	Female	Total
NES	N	440	437	877
	%	50.2%	49.8%	100.0%
AUS	N	891	879	1770
	%	50.3%	49.7%	100.0%
MES	N	591	681	1272
	%	46.5%	53.5%	100.0%

$\chi^2(2,3919) = 5.03, p=.081$

Table A8.23: Ethnicity and Age Distribution (combined surveys)

		18-25	26-35	36-45	46-55	56-65	66-75	76+	Total
NES	N	117	175	187	162	99	70	37	847
	%	13.8%	20.7%	22.1%	19.1%	11.7%	8.3%	4.4%	100.0%
AUS	N	210	288	365	355	239	163	118	1738
	%	12.1%	16.6%	21.0%	20.4%	13.8%	9.4%	6.8%	100.0%
MES	N	57	133	261	263	224	178	113	1229
	%	4.6%	10.8%	21.2%	21.4%	18.2%	14.5%	9.2%	100.0%

$\chi^2(12,3814) = 146.57, p=.000$

Table A8.24: Ethnicity: Reasons for Connection to Australia (Survey 8)

		Natural environment	Democracy	Sporting culture	Multicultural society	Lifestyle	Total
NES	N	56	63	46	142	196	503
	%	11.1%	12.5%	9.1%	28.2%	39.0%	100%
AUS	N	107	111	127	81	525	951
	%	11.3%	11.7%	13.4%	8.5%	55.2%	100%
MES	N	49	90	46	64	255	504
	%	5.2%	9.5%	4.8%	6.7%	26.8%	100%

$\chi^2(8, 1958) = 124.8, p=.000$

Table A8.25: Ethnicity: Distribution of Pet Ownership (Survey 8)

		Own a pet		
		Yes	No	Total
NES	N	281	227	508
	%	55.3%	44.7%	100%
AUS	N	600	358	958
	%	62.6%	37.4%	100%
MES	N	312	201	513
	%	60.8%	39.2%	100%

$\chi^2(2, 1979) = 7.50, p=.023$

Appendix A9. Bali Bombing and September 11 Recall Sadness

Table A9.1: The Percentage of People Feeling Sad when Recalling S11 or Bali

	September 2001	March 2002	August 2002	November 2002	February 2003	May 2003	August 2003
Event recalled	S11	S11	S11	Bali	Bali	Bali	S11
Total N	1790	1261	986	1494	1257	1154	989
% of Total	90.7%	62.8%	50.0%	76.1%	63.8%	59.1%	50.3%
N of Males (within gender)	622	393	418	672	574	510	535
% of males	85.6%	54.1%	43.3%	69.4%	59.1%	53.6%	55.6%
N of females (within gender)	1168	868	568	822	683	644	441
% of females	93.7%	67.8%	56.4%	82.6%	68.3%	64.5%	44.0%
% females - % males	8.3	13.7	13.1	13.2	9.2	10.9	-11.6

Table A9.2: Gender x Age Effects on USA/Bali Sadness: Distribution

Survey 8	Yes sadder by USA				Total recall with sadness	Total in sample	% of age group
	Male	% of Males	Female	% of Females			
18-25 (N)	39	9.3	46	8.3	85	180	47.2
26-35 (N)	54	12.9	76	13.8	130	305	42.6
36-45 (N)	90	21.5	109	19.7	199	413	48.2
46-55 (N)	78	18.7	127	23.0	205	396	51.8
56-65 (N)	71	17.0	77	13.9	148	287	51.6
66-75 (N)	53	12.7	69	12.5	122	231	52.8
76+ (N)	33	7.9	48	8.7	81	137	59.1
Total (N)	418	100.0	552	100.0	970	1949	

Survey 7	Yes sadder by Bali				Total recall with sadness	Total in sample	% of age group
	Male	% of Males	Female	% of Females			
18-25 (N)	47	9.3	46	7.2	93	177	52.5
26-35 (N)	65	12.8	78	12.2	143	284	50.4
36-45 (N)	97	19.2	142	22.2	239	398	60.1
46-55 (N)	96	19.0	120	18.8	216	380	56.8
56-65 (N)	98	19.4	119	18.6	217	349	62.2
66-75 (N)	61	12.1	69	10.8	130	204	63.7
76+ (N)	42	8.3	65	10.2	107	150	71.3
Total (N)	506	100.0	639	100.0	1145	1942	

Survey 6	Yes sadder by Bali				Total recall with sadness	Total in sample	% of age group
	Male	% of Males	Female	% of Females			
18-25 (N)	63	11.2	48	7.2	111	191	58.1
26-35 (N)	67	11.9	108	16.2	175	293	59.7
36-45 (N)	119	21.1	144	21.7	263	417	63.1
46-55 (N)	120	21.2	119	17.9	239	371	64.4
56-65 (N)	92	16.3	123	18.5	215	338	63.6
66-75 (N)	74	13.1	79	11.9	153	218	70.2
76+ (N)	30	5.3	44	6.6	74	109	67.9
Total (N)	565	100.0	665	100.0	1230	1937	

Survey 5	Yes sadder by Bali				Total recall with sadness	Total in sample	% of age group
	Male	% of Males	Female	% of Females			
18-25 (N)	81	12.2	64	7.9	145	205	70.7
26-35 (N)	106	16.0	127	15.7	233	319	73.0
36-45 (N)	133	20.1	166	20.5	299	407	73.5
46-55 (N)	128	19.3	162	20.0	290	380	76.3
56-65 (N)	98	14.8	133	16.5	231	294	78.6
66-75 (N)	85	12.8	105	13.0	190	220	86.4
76+ (N)	31	4.7	51	6.3	82	105	78.1
Total (N)	662	100.0	808	100.0	1470	1930	

Survey 4	Yes sadder by USA				Total recall with sadness	Total in sample	% of age group
	Male	% of Males	Female	% of Females			
18-25 (N)	56	13.8	46	8.5	102	211	48.3
26-35 (N)	52	12.8	76	14.0	128	295	43.4
36-45 (N)	79	19.5	112	20.7	191	411	46.5
46-55 (N)	78	19.2	113	20.9	191	391	48.8
56-65 (N)	67	16.5	94	17.4	161	278	57.9
66-75 (N)	42	10.3	59	10.9	101	183	55.2
76+ (N)	32	7.9	41	7.6	73	135	54.1
Total (N)	406	100.0	541	100.0	947	1904	

Survey 3	Yes sadder by USA				Total recall with sadness	Total in sample	% of age group
	Male	% of Males	Female	% of Females			
18-25 (N)	26	6.9	71	8.6	97	183	53.0
26-35 (N)	39	10.3	99	11.9	138	242	57.0
36-45 (N)	60	15.8	147	17.7	207	377	54.9
46-55 (N)	85	22.4	175	21.1	260	403	64.5
56-65 (N)	74	19.5	158	19.1	232	344	67.4
66-75 (N)	62	16.4	117	14.1	179	253	70.8
76+ (N)	33	8.7	62	7.5	95	129	73.6
Total (N)	379	100.0	829	100.0	1208	1931	

Survey 2	Yes sadder by USA				Total recall with sadness	Total in sample	% of age group
	Male	% of Males	Female	% of Females			
18-25 (N)	89	14.3	124	10.6	213	244	87.3
26-35 (N)	87	14.0	186	15.9	273	307	88.9
36-45 (N)	126	20.3	242	20.7	368	404	91.1
46-55 (N)	130	20.9	233	19.9	363	400	90.8
56-65 (N)	87	14.0	161	13.8	248	270	91.9
66-75 (N)	67	10.8	137	11.7	204	218	93.6
76+ (N)	36	5.8	85	7.3	121	130	93.1
Total (N)	622	100.0	1168	100.0	1790	1973	

Total S2-S8	Yes sadder by Bali or USA				Total recall with sadness	Total in sample	% of age group
	Male	% of Males	Female	% of Females			
18-25 (N)	401	11.3	445	9.8	846	1391	60.8
26-35 (N)	470	13.2	750	16.5	1220	2045	59.7
36-45 (N)	704	19.8	452	9.9	1766	2827	62.4
46-55 (N)	1086	30.5	1011	22.2	1764	2721	64.8
56-65 (N)	585	16.4	865	19.0	1450	2160	67.2
66-75 (N)	444	12.5	635	13.9	1079	1528	70.6
76+ (N)	237	6.6	396	8.7	633	895	70.7
Total (N)	3558	100.0	4554	100.0	8112	13567	59.8

Table A9.3: Income x Sadness: Distribution within Income Group

	<\$15	\$15-30	\$30-60	\$60-90	\$91+	Total
S2 September 2001 (S11)						
N saddened	378	415	530	283	184	1790
N survey						
% saddened	21.1%	23.2%	29.6%	15.8%	10.3%	
S3 March 2002 (S11)						
N saddened	224	284	313	143	297	1261
N survey						
% saddened	17.8%	22.5%	24.8%	11.3%	23.6%	
S4 August 2002 (S11)						
N saddened	174	184	254	128	246	986
N survey						
% saddened	17.6%	18.7%	25.8%	13.0%	24.9%	
S5 November 2002 (Bali)						
N saddened	118	181	252	142	91	784
N survey						
% saddened	15.1%	23.1%	32.1%	18.1%	11.6%	
S6 February 2003 (Bali)						
N saddened	143	207	308	179	148	985
N survey						
% saddened	14.5%	21.0%	31.3%	18.2%	15.0%	
S7 May 2003 (Bali)						
N saddened	150	203	232	157	114	856
N survey						
% saddened	17.5%	23.7%	27.1%	18.3%	13.3%	
S8 May 2003 (S11)						
N saddened	172	165	224	147	115	823
N survey	316	308	464	297	251	
% saddened	54.4	53.6	48.3	49.5	45.9	
TOTAL						
N saddened	1359	1639	2113	1179	1195	
N survey	1944	2422	3369	1927	2034	
%	69.9	67.7	62.7	61.2	58.8	

NB: Total N is low for S5 due to different item to measure income.

Table A9.4: Strength of Sadness When Recalling Terrorist Attacks

	September 11				Bali		
	S2	S3	S4	S8	S5	S6	S7
N	1,790	1233	968	983	1,487	1250	1145
Mean	71.86	70.48	69.15	69.91	70.95	70.10	71.16
SD	26.64	24.07	22.32	22.15	23.16	22.98	21.87

Table A9.5: Strength of Terrorist Attack Sadness x Age

Age		18-25	26-35	36-45	46-55	56-65	66-75	76+
S11 (Survey 2)	N	213	273	368	363	248	204	121
	Mean	69.20	70.95	72.39	72.09	71.45	73.33	74.63
	SD	25.68	25.09	26.78	26.64	27.84	26.72	28.72
S11 (Survey 3)	N	97	135	205	255	226	174	89
	Mean	68.14	67.93	67.76	71.18	70.71	73.45	75.62
	SD	20.78	22.79	24.87	24.56	24.41	25.14	22.66
S11 (Survey 4)	N	100	128	187	190	157	97	70
	Mean	67.60	68.91	68.50	68.05	68.66	73.09	71.14
	SD	20.11	20.93	22.12	23.25	23.75	22.38	22.94
Bali (Survey 5)	N	145	231	298	290	230	189	80
	Mean	68.34	67.79	67.55	71.41	75.04	73.81	75.88
	SD	21.92	24.20	22.47	24.03	22.77	21.79	22.76
Bali (Survey 6)	N	111	175	262	239	215	150	73
	Mean	65.41	67.09	71.49	70.00	70.65	72.67	72.88
	SD	21.05	23.69	22.05	24.20	23.51	21.13	23.95
Bali (Survey 7)	N	93	143	239	214	217	130	101
	Mean	66.56	69.72	69.41	70.47	73.09	72.69	76.53
	SD	21.29	20.52	22.28	23.05	22.01	20.68	21.09
S11 (Survey 8)	N	87	136	206	209	149	125	79
	Mean	60.92	64.41	69.90	67.70	72.35	76.64	76.84
	SD	22.45	23.25	22.44	23.09	21.29	20.16	18.85
Mean of total		67.54	68.73	69.52	70.53	71.60	73.17	74.45

Survey 2: $F(6,1789) = .78, p=.596$
 Survey 3: $F(6,1180) = 2.00, p=.063$
 Survey 4: $F(6,928) = .79, p=.577$
 Survey 5: $F(6,1462) = 4.45, p=.000$
 Survey 6: $F(6,1224) = 1.96, p=.069$
 Survey 7: $F(6,1136) = 2.50, p=.021$
 Survey 8: $F(6,984) = 7.74, p=.000$
 36-45 > 18-25, $p=.024$
 56-65 > 18-25, $p=.002$
 56-65 > 26-35, $p=.038$
 66-75 > 18-25, $p=.000$
 66-75 > 26-35, $p=.001$
 76+ > 18-25, $p=.000$
 76+ > 26-35, $p=.001$

Surveys 2-8 combined: $F(6,8682) = 12.12, p=.000$
 46-55 > 18-25, $p=.019$
 56-65 > 18-25, $p=.000$
 56-65 > 26-35, $p=.003$
 66-75 > 18-25, $p=.000$
 66-75 > 26-35, $p=.000$
 66-75 > 36-45, $p=.001$
 66-75 > 46-55, $p=.008$
 76+ > 18-25, $p=.000$
 76+ > 26-35, $p=.000$
 76+ > 36-45, $p=.000$
 76+ > 46-55, $p=.001$

After adjusting for income differences, significant difference remained in influence of terrorist attack across age:

Surveys 2-8 combined: $F(6,7382) = 5.84, p=.000$

Table A9.6: Gender x Sadness: Degree of Sadness

		N	Mean	SD	p=
Survey 2	Male	622	68.73	(26.90)	.000
	Female	1168	73.53	(26.36)	
Survey 3	Male	384	69.56	(24.88)	.366
	Female	849	70.90	(23.71)	
Survey 4	Male	414	67.58	(22.45)	.059
	Female	554	70.32	(22.17)	
Survey 5	Male	670	69.19	(22.81)	.008
	Female	817	72.39	(23.35)	
Survey 6	Male	573	68.94	(23.25)	.100
	Female	677	71.08	(22.72)	
Survey 7	Male	509	69.90	(21.84)	.081
	Female	636	72.17	(21.86)	
Survey 8	Male	426	67.84	(22.73)	.011
	Female	557	71.49	(21.59)	

Surveys 2-8 combined:

Gender: $F(1,8842) = 30.18, p = .000$

Survey: $F(6,8842) = 1.27, p = .226$

Gender x Survey: $F(6,8842) = .76, p = .599$

Table A9.7: Income Across Multi Surveys: Strength of Sadness

		Income Group				
		<\$15,000	\$15-\$30	\$30-\$60	\$60-\$90	\$90,000+
Survey 2 (S11)	N	378	415	320	283	184
	Mean	72.46	72.19	71.72	71.48	70.87
Survey 3 (S11)	SD	28.19	26.16	26.82	24.90	26.74
	N	223	278	312	142	89
Survey 4 (S11)	Mean	72.64	71.15	68.40	69.01	66.18
	SD	26.94	24.25	23.99	20.60	24.89
Survey 5 (Bali)	N	171	184	256	129	86
	Mean	72.40	70.82	67.93	69.53	64.65
Survey 6 (Bali)	SD	23.45	22.93	21.64	21.21	19.80
	N	116	180	252	142	111
Survey 7 (Bali)	Mean	74.57	72.94	67.34	69.65	69.82
	SD	24.08	22.98	23.99	22.10	22.32
Survey 8 (S11)	N	143	207	307	178	148
	Mean	71.40	70.82	69.61	67.98	69.73
Survey 9 (Bali)	SD	23.60	23.38	23.88	22.05	21.19
	N	145	201	231	157	114
Survey 10 (Bali)	Mean	74.41	73.83	69.00	67.13	68.33
	SD	23.12	21.14	21.13	21.37	22.81
Survey Mean		73.14	71.90	69.74	68.85	68.90

Survey 2: $F(4, 1789) = .15, p = .965$

Survey 3: $Welch(4, 1232) = 1.11, p = .351$

Survey 4: $F(4, 967) = 1.63, p = .165$

Survey 5: $F(4, 780) = 2.80, p = .025$

Survey 6: $F(4, 982) = .56, p = .693$

Survey 7: $F(4, 847) = 3.84, p = .004$ (No significant post-hoc tests)

Survey 8: $F(4, 814) = 7.22, p = .000$

<\$15K > \$60-90K, $p = .000$

\$30-60K > \$60-90K, $p = .025$

<\$15K > \$90+K, $p = .000$

\$30-60K > \$90+K, $p = .012$

Surveys 2-8 combined:

Survey: $F(6, 7387) = 1.21, p = .300$

Income: $F(4, 7387) = 9.86, p = .000$

Survey x Income: $F(24, 7387) = 1.17, p = .258$

<\$15K > \$30-\$60K, $p = .001$

<\$15K > \$60-\$90K, $p = .000$

<\$15K > \$90+K, $p = .000$

\$15-30K > \$60-\$90K, $p = .005$

\$15-30K > \$90+K, $p = .009$

Survey: $F(6, 7354) = 1.46, p = .188$

Income: $F(4, 7354) = 3.83, p = .004$

Survey x Income: $F(24, 7354) = 1.23, p = .196$

After adjusting for gender differences, significant difference remained in influence of terrorist attack across income:

Surveys 2-8 combined: $F(4, 7416) = 7.69, p = .000$

After adjusting for gender differences, no significant differences remained in income across Surveys 2-8:

Survey: $F(4, 7386) = 8.71, p = .000$

Income: $F(4, 7386) = 1.01, p = .414$

Survey x Income: $F(24, 7386) = 1.14, p = .292$

Appendix A10. Life Events

Table A10.1: The proportion of people experiencing a recent personal life event (**replace values**)

	S1 April 2001	S2 September 2001	S3 March 2002	S4 August 2002	S5 November 2002	S6 February 2003	S7 May 2003	S8 August 2003
N (total sample)	1974	1973	2030	1986	1966	1979	1965	1978
N (reporting event)	971	1090	939	843	928	1078	964	992
% of total	49.2	55.2	46.4	42.6	47.3	54.6	49.3	50.1

Table A10.1a: Means and SDs based on Survey Means (% of Total)

N	Mean	SD	Mean -2SD	Mean +2SD
8	49.34	4.15	41.04	57.64

Table A10.2: The number of people reporting a recent personal event that makes them feel happier or sadder than normal

Number of people reporting	S1 April 2002	S2 September 2001	S3 March 2002	S4 August 2002	S5 November 2002	S6 February 2003	S7 May 2003	S8 August 2003
a happy event								
N	501	391	426	381	401	561	445	396
%	25.4	19.8	21.1	19.2	20.4	28.4	22.7	20.0
a sad event								
N	470	699	513	462	527	517	519	596
%	23.8	35.4	25.4	23.3	26.8	26.2	26.5	30.1

Table A10.2a: Means and SDs based on Survey Means: % of Happy and Sad Events

	N	Mean	SD	Mean -2SD	Mean +2SD
Happy %	8	22.13	3.23	15.67	28.59
Sad %	8	27.19	3.92	19.35	35.03
Correlation between the % happy and sad mean scores across all surveys = -.328, N.S.					

Table A10.3: Gender Differences in Life Events Across the Four Surveys (replace values)

	April 2001			September 2001			March 2002			August 2002			November 2002			February 2003			May 2003			August 2003		
	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total
TOTAL IN SURVEY	831	1,143	1,974	727	1,246	1,973	733	1,294	2,027	970	1,016	1,986	969	996	1,965	973	1,005	1,978	954	1,003	1,957	969	1,011	1,980
HAPPY	220	281	501	158	233	391	156	270	426	179	202	381	193	208	401	291	270	561	217	228	445	183	213	396
N % within gender	55.7	48.8		40.9	33.1		47.9	44.0		46.5	44.1		45.5	41.3		54.7	49.5		48.8	51.2		46.2	53.8	
SAD	175	295	470	228	471	699	170	343	513	206	256	462	231	296	527	241	276	517	223	296	519	263	333	596
N % within gender	44.3	51.2		59.1	66.9		52.1	56.0		53.5	55.9		54.5	58.7		45.3	50.5		43.0	57.0		44.1	55.8	
TOTAL %	395	576	971	386	704	1,090	326	613	939	385	458	843	424	504	928	532	546	1,078	440	524	964	446	546	992
	47.5	50.4	49.2	53.1	56.5	55.2	44.5	47.4	46.3	39.7	45.1	42.4	43.8	50.6	47.2	54.7	54.3	54.5	46.1	52.2	49.3	45.0	55.0	50.1

These percentages are calculated against the total number of people in each gender group who reported a life event that made them happier or sadder than normal. The Chi-square tests are as follows:

April 2001: Chi-square = 4.482, df=2, p=.037
 September 2001: Chi-square = 6.655, df=2, p=.012
 March 2002: Chi-square = 1.245, df=2, p=.271
 August 2002: Chi-square = 0.482, df=2, p=.532
 November 2002: Chi-square = 1.694, df=2, p=.206
 February 2003: Chi-square = 3.245, df=2, p=.080
 May 2003: Chi-square = 2.974, df=2, p=.088
 August 2003: Chi-square = 13.020, df=2, p=.001

Table A10.3a: t-tests of Gender Differences Using Percentage Scores

Event	Males (%)				Females (%)				N	t	p<
	Mean	SD	X - 2SD	X + 2SD	Mean	SD	X - 2SD	X + 2SD			
Happy	48.28	4.88	38.52	58.04	45.73	6.58	32.57	58.89	8	-	N.S.
Sad	49.49	6.05	37.39	61.59	56.50	5.05	46.60	66.60	8	2.354	.05
Total	46.80	4.94			51.44	3.88			8	1.958	N.S.
Correlation between % happy vs. sad across surveys											
Males = .729 p<.05											
Females = .778 p<.05											

Table A10.4: Correlations Between Event Frequency and Personal Wellbeing x Gender (across surveys)

	Male		Female	
	Event Type		Event Type	
	Happy	Sad	Happy	Sad
Personal Wellbeing Index	.04	-.15	.06	-.06
Standard	.03	-.09	.00	-.06
Health	.02	-.14	.01	-.05
Achievements	.04	-.11	.06	-.04
Relationships	.04	-.13	.04	.00
Safety	.05	-.05	.03	-.07
Community	-.01	-.05	.03	.01
Future Security	.01	-.10	.05	-.07

- Note: (a) The dependent variable is personal wellbeing across surveys (Table A4.2).
 (b) The survey event frequencies and Personal Wellbeing Index (domain) means are used as data (i.e. N=8).
 (c) Happy is the total number of people (e.g. males) who experienced a happy event expressed as a percentage of the total number of (males) in the survey (see Happy % within gender Table A10.3).

Table A10.5: Difference Between the % of People Reporting Happy and Sad Events

		S1 April 2001	S2 September 2001	S3 March 2002	S4 August 2002	S5 November 2002	S6 February 2003	S7 May 2003	S8 August 2003
Happy %	Males	11.4	-18.2	-4.2	-7.0	-9.0	9.4	5.8	5.13
Minus Sad %	Females	-2.4	-33.8	-12.0	-11.8	-17.4	-1.0	-5.8	-0.59

Table A10.6 Life Event Distribution x Age

	18-25	26-35	36-45	46-55	56-65	66-75	76+	Total
Survey 1								
Sample N	207	316	436	409	238	219	148	1973
Event N	116	177	225	197	103	96	57	971
% of Total Sample								
Happy %	36.7	37.3	25.5	21.5	18.9	20.1	12.8	
Sad %	19.3	18.7	26.1	26.7	24.4	23.7	25.7	
Total Sample %	56.0	56.0	51.6	48.2	43.3	43.8	38.5	
Survey 2								
Sample N	244	307	404	400	270	218	130	1973
Event N	139	183	227	233	149	100	59	1090
% of Total Sample								
Happy %	26.6	25.1	18.3	17.8	20.4	15.1	12.3	
Sad %	30.3	34.5	37.9	40.5	34.8	30.7	33.1	
Total Sample %	56.9	59.6	56.2	58.3	55.2	45.9	45.4	
Survey 3								
Sample N	183	239	377	402	341	253	129	1924
Event N	82	130	177	194	157	110	44	894
% of Total Sample								
Happy %	24.6	26.8	23.3	23.4	16.7	15.8	11.6	
Sad %	20.2	27.6	23.6	24.9	29.3	27.7	22.5	
Total Sample %	44.8	54.4	46.9	48.3	46.0	43.5	34.1	
Survey 4								
Sample N	211	293	410	391	278	182	134	1899
Event N	88	120	164	189	121	76	58	816
% of Total Sample								
Happy %	26.1	23.2	15.6	20.7	18.7	16.5	14.9	
Sad %	15.6	17.7	24.4	27.6	24.8	25.3	28.4	
Total Sample %	41.7	41.0	40.0	48.3	43.5	41.8	43.3	
Survey 5								
Sample N	205	319	407	380	294	218	104	1927
Event N	99	164	190	189	130	102	37	911
% of Total Sample								
Happy %	29.3	28.2	20.1	20.5	15.0	14.2	10.6	
Sad %	19.0	23.2	26.5	29.2	29.3	32.6	25.0	
Total Sample %	48.3	51.4	46.7	49.7	44.2	46.8	35.6	
Survey 6								
Sample N	191	293	415	369	338	218	108	1932
Event N	111	164	226	209	195	107	48	1060
% of Total Sample								
Happy %	38.7	41.0	22.7	25.2	26.9	25.7	20.4	
Sad %	19.4	15.0	31.8	31.4	30.8	23.4	24.1	
Total Sample %	58.1	56.0	54.5	56.6	57.7	49.1	44.5	
Survey 7								
Sample N	176	284	398	378	348	204	147	1935
Event N	95	147	197	193	176	88	62	958
% of Total Sample								
Happy %	31.8	28.5	23.1	22.8	21.3	19.6	10.9	
Sad %	22.2	23.2	26.4	28.3	29.3	23.5	31.3	
Total Sample %	54.0	51.8	49.5	51.1	50.6	43.1	42.2	
Survey 8								
Sample N	180	305	413	396	287	232	137	1950
Event N	73	174	208	215	149	111	50	980
% of Total Sample								
Happy %	23.3	28.9	18.9	22.0	15.7	16.4	10.9	
Sad %	17.2	28.2	31.5	32.3	36.2	31.5	25.5	
Total Sample %	40.6	57.0	50.4	54.3	51.9	47.8	36.5	

Survey 1: % of Total Sample $\chi^2(6,971) = 40.810, p=.000$
 Survey 2: % of Total Sample $\chi^2(6,1090) = 16.633, p=.011$
 Survey 3: % of Total Sample $\chi^2(6,894) = 16.918, p=.010$
 Survey 4: % of Total Sample $\chi^2(6,816) = 23.865, p=.001$

Survey 5: % of Total Sample $\chi^2(6,911) = 35.737, p=.000$
 Survey 6: % of Total Sample $\chi^2(6,1060) = 56.478, p=.000$
 Survey 7: % of Total Sample $\chi^2(6,958) = 22.701, p=.001$
 Survey 8: % of Total Sample $\chi^2(6,950) = 27.574, p=.000$

	Combined samples						
	18-25	26-35	36-45	46-55	56-65	66-75	76+
Sample N	1598	2361	3263	3130	2398	1747	1043
Event N	803	1259	1614	1619	1180	790	415
% of Total Sample							
Happy %	29.6	29.9	20.9	21.7	19.3	17.9	12.8
Sad %	20.7	23.4	28.5	30.1	29.9	27.4	26.9
Total Sample %	50.3	53.3	49.5	51.7	49.2	45.2	39.8
Happy % minus sad %	8.9	6.5	-7.6	-8.4	-10.6	-9.5	-14.1

Table A10.7 Life Event Distribution x Income

	<\$15	\$15-30	\$30-60	\$60-90	\$90+	Total
Survey 2						
Sample N	408	462	592	307	204	1973
Event N	204	252	334	184	116	1090
% of Total Sample	50.0	54.5	56.4	59.9	56.9	
Happy %	16.2	21.9	19.9	20.2	21.6	
Sad %	33.8	32.7	36.5	39.7	35.3	
Survey 3						
Sample N	326	435	535	257	470	2023
Event N	160	207	257	122	193	939
% of Total Sample	49.1	47.6	48.0	47.5	41.1	
Happy %	18.1	21.1	23.7	21.0	20.0	
Sad %	31.0	26.4	24.3	26.5	21.1	
Survey 4						
Sample N	312	349	535	283	501	1980
Event N	137	156	232	117	201	843
% of Total Sample	43.9	44.7	43.4	41.3	40.1	
Happy %	15.1	22.3	20.7	18.4	18.6	
Sad %	28.8	22.3	22.6	23.0	21.6	
Survey 5						
Sample N	138	234	331	195	126	1024
Event N	71	98	168	97	58	492
% of Total Sample	51.4	41.9	50.8	49.8	47.8	
Happy %	13.0	12.8	22.4	23.1	23.6	
Sad %	38.4	29.1	28.4	26.7	24.2	
Survey 6						
Sample N	215	317	490	302	236	1560
Event N	121	185	274	150	136	866
% of Total Sample	56.3	58.4	55.9	49.7	57.8	
Happy %	25.1	24.0	31.2	30.8	28.9	
Sad %	31.2	34.4	24.7	18.9	28.9	
Survey 7						
Sample N	222	316	416	283	241	1478
Event N	108	168	213	141	108	738
% of Total Sample	48.6	53.2	51.2	49.8	44.8	
Happy %	18.5	22.8	22.8	28.6	23.7	
Sad %	30.2	30.4	28.4	21.2	21.2	
Survey 8						
Sample N	316	308	464	297	251	1636
Event N	161	153	247	148	133	842
% of Total Sample	50.9	49.7	53.2	49.8	53.0	
Happy %	14.2	20.5	20.3	23.2	24.7	
Sad %	36.7	29.2	33.0	26.6	28.3	

Survey 2: % of Total Sample $\chi^2(4,1090) = 3.673, p=.452$
 Survey 3: % of Total Sample $\chi^2(4,939) = 7.354, p=.118$
 Survey 4: % of Total Sample $\chi^2(4,843) = 8.739, p=.067$

Survey 5: % of Total Sample $\chi^2(4,492) = 15.176, p=.004$
 Survey 6: % of Total Sample $\chi^2(4,866) = 19.114, p=.001$
 Survey 7: % of Total Sample $\chi^2(4,738) = 12.815, p=.012$
 Survey 8: % of Total Sample $\chi^2(4,842) = 15.334, p=.004$

	Combined Samples (Surveys 2-8)				
	<15	15-30	31-60	61-90	90+
Sample N	1944	2422	3369	1927	2034
Event N	962	1219	1725	959	945
% of Total Sample	49.5	50.3	51.2	49.8	46.5
Happy %	17.0	21.1	23.0	23.7	22.0
Sad %	32.6	29.2	28.3	26.2	24.5
Happy % minus sad %	-15.6	-8.1	-5.3	-2.5	-2.5

Table A10.8: Life Event Intensity x Survey

Event Intensity	Survey	S1 April 2002	S2 September 2001	S3 March 2002	S4 August 2002	S5 November 2002	S6 February 2003	S7 May 2003	S8 August 2003	p=
A happy event	(Mean)	79.34	79.39	80.29	80.90	80.55	82.06	81.64	84.75	.079
	(SD)	16.74	17.81	17.65	16.51	16.18	16.30	14.88	14.59	
	(N)	501	391	420	379	401	559	445	396	
A sad event	(Mean)	65.21	69.16	71.48	71.53	68.28	69.40	71.52	72.04	.000
	(SD)	25.91	25.24	23.26	22.34	23.55	23.96	22.25	22.38	
	(N)	470	699	507	458	524	515	514	593	

A Happy Event: Welch(7,3484) = 5.328, p=.000

S8 > S1, p=.000

S8 > S2, p = .000

S8 > S3, p=.002

S8 > S4, p = .017

S8 > S5, p=.004

A Sad Event: Welch(7,4272) = 4.480, p=.000

S3 > S1, p=.002

S4 > S1, p = .002

S7 > S1, p=.001

S8 > S1, p=.000

Table A10.9: Life Event Intensity x Income

Survey 7	Income	<\$15,000	\$15,000- \$30,000	\$30,000- \$60,000	\$60,000- \$90,000	\$90,000- \$120,000	>\$120,000	p=
A happy event	(Mean)	84.63	84.03	80.84	81.60	78.97	79.29	.343
	(SD)	14.33	15.98	13.66	14.44	12.35	15.38	
	(N)	41	72	95	81	29	28	
A sad event	(Mean)	74.93	71.16	72.97	68.67	61.54	77.50	.081
	(SD)	24.70	21.73	20.77	23.32	23.78	21.92	
	(N)	67	95	118	60	26	24	

A Happy Event: F(5,340) = 1.132, p=.343

A Sad Event: F(5,384) = 1.979, p=.081

Survey 8	Income	<\$15,000	\$15,000- \$30,000	\$30,000- \$60,000	\$60,000- \$90,000	\$90,000- \$120,000	>\$120,000	p=
A happy event	(Mean)	84.22	88.73	83.83	82.17	84.21	85.42	.201
	(SD)	10.97	11.71	16.40	15.42	16.05	15.32	
	(N)	45	63	94	69	38	24	
A sad event	(Mean)	73.62	71.22	73.51	71.90	68.57	70.69	.842
	(SD)	21.92	24.76	21.79	18.82	27.01	19.44	
	(N)	116	90	151	79	42	29	

A Happy Event: F(5,327) = 1.464, p=.201

A Sad Event: Welch(5,501) = .409, p=.842

Table A10.10: Life Event Intensity x Gender

	Survey 6			Survey 7			Survey 8		
	Male	Female	p=	Male	Female	p=	Male	Female	p=
Happy event									
Mean	79.41	84.91	.000	80.00	83.20	.023	82.68	86.53	.009
SD	16.84	15.23		14.27	15.30		13.98	14.89	
N	290	269		217	228		182	213	
Sad event									
Mean	69.16	69.60	.836	70.78	72.06	.519	71.07	72.81	.347
SD	23.41	24.47		22.59	22.02		22.34	22.42	
N	239	276		218	296		262	331	

Survey 6: A Happy Event: t(,557) = -4.03, p=.000

A Sad Event: t(513) = -.21, p=.836

Survey 7: A Happy Event: t(443) = -2.28, p=.023

A Sad Event: t(512) = -.65, p=.519

Survey 8: A Happy Event: t(394) = -2.64, p=.009

A Sad Event: t(591) = -0.94, p=.347

Table A10.11: Age Effects on Life Event Intensity Across Surveys 1-8

Age Group	Survey Number	Happy Event			Sad Event		
		Mean	SD	N	Mean	SD	N
18-25	1	78.42	16.97	76	62.75	26.31	40
	2	82.46	16.11	65	68.51	25.09	74
	3	79.32	16.20	44	71.89	17.45	37
	4	82.91	15.24	55	70.00	18.54	33
	5	83.17	13.59	60	69.23	22.76	39
	6	77.43	18.36	74	71.08	18.22	37
	7	80.18	15.19	56	63.85	24.99	39
	8	83.57	15.43	42	66.13	24.45	31
	Surveys 1-8 Total	80.70	16.13	472	67.94	22.81	330
26-35	1	82.63	15.44	118	63.56	28.51	59
	2	80.52	20.51	77	70.47	21.66	106
	3	84.19	16.25	62	68.48	25.07	66
	4	79.10	18.15	67	69.62	24.65	52
	5	81.00	17.49	90	69.05	24.50	74
	6	84.92	16.55	120	74.55	19.70	44
	7	81.36	15.15	81	72.42	25.24	66
	8	87.27	12.48	88	73.29	22.70	85
	Surveys 1-8 Total	82.82	16.61	703	70.22	24.04	552
36-45	1	76.67	18.36	111	69.12	24.84	114
	2	79.32	17.78	74	69.22	25.87	153
	3	79.08	17.16	87	69.77	23.92	88
	4	80.00	17.55	64	72.10	23.02	100
	5	78.78	15.27	82	67.22	22.08	108
	6	82.77	16.81	94	71.76	23.19	131
	7	81.52	14.60	92	70.76	22.09	105
	8	85.51	13.35	78	72.69	21.81	130
	Surveys 1-8 Total	80.34	16.61	682	70.36	23.46	929
46-55	1	78.07	17.48	88	62.94	24.47	109
	2	77.32	18.28	71	71.42	25.78	162
	3	80.22	16.74	93	74.55	23.09	99
	4	80.62	13.36	81	72.78	21.26	108
	5	81.41	15.52	78	68.91	25.32	110
	6	80.98	13.99	92	63.91	29.28	115
	7	83.14	14.16	86	74.43	19.28	106
	8	82.41	15.85	87	73.20	23.68	128
	Surveys 1-8 Total	80.58	15.74	676	70.29	24.60	937
56-65	1	82.22	12.95	45	64.31	25.35	58
	2	78.55	14.71	55	65.32	28.76	94
	3	81.75	15.83	57	71.31	23.89	99
	4	83.27	17.00	52	68.81	23.96	67
	5	80.91	18.28	44	69.18	24.60	85
	6	80.67	16.54	90	67.31	23.12	104
	7	80.14	15.30	74	70.60	22.82	100
	8	84.89	13.92	45	74.23	20.98	104
	Surveys 1-8 Total	81.34	15.70	462	69.20	24.22	711
66-75	1	76.36	16.58	44	64.62	27.83	52
	2	74.85	19.55	33	68.06	23.37	67
	3	78.00	22.44	40	71.91	22.54	68
	4	82.76	16.45	29	69.35	23.13	46
	5	79.35	16.72	31	64.00	23.62	70
	6	84.11	14.49	56	75.69	19.21	51
	7	82.50	14.81	40	74.68	22.25	47
	8	83.95	18.24	38	66.94	22.05	72
	Surveys 1-8 Total	80.42	17.57	311	69.07	23.26	473
76+	1	84.21	15.39	19	67.37	27.18	38
	2	83.13	13.52	16	68.37	24.49	43
	3	84.67	13.02	15	73.93	22.50	28
	4	79.50	19.59	20	72.78	21.33	36
	5	68.18	17.79	11	73.85	19.20	26
	6	88.64	10.82	22	66.15	24.34	26
	7	85.63	17.11	16	70.22	20.61	45
	8	86.00	14.04	15	73.53	22.14	34
	Surveys 1-8 Total	83.21	15.78	134	70.62	22.82	276
Total	1	79.34	16.74	501	65.21	25.91	470
	2	79.39	17.81	391	69.16	25.24	699
	3	80.65	17.11	398	71.59	23.15	485
	4	81.06	16.38	368	71.09	22.43	442
	5	80.45	16.22	396	68.22	23.68	512
	6	82.24	16.21	548	69.37	24.03	508
	7	81.64	14.88	445	71.50	22.29	508
	8	84.81	14.59	393	72.16	22.44	584
	Surveys 1-8 Total	81.19	16.33	3440	69.81	23.81	4208

Influence of Happy LE:

Age: $F(1,3384) = 1.65, p=.129$ Survey: $F(7,3384) = 4.18, p=.000$ Age x Survey: $F(42,3384) = 1.19, p=.189$

Influence of Sad LE:

Age: $F(6,4152) = .74, p=.615$ Survey: $F(7, 4152) = 3.53, p=.001$ Age x Survey: $F(42,4152) = 1.03, p=.414$

Appendix A11. Other Australian Indexes

The Australian Bureau of Statistics has published, Measuring Australia's Progress, which reports on national performance according to about 15 headline indicators and a range of background indicators. This research, however, is confined to objective indicators.

The Australia Institute constructs the Genuine Progress Indicator (GPI) for Australia. This composite index adjusts GDP for a range of economic, social and environmental factors which GDP either ignores or treats inappropriately.

The Centre for Independent Studies publishes a biennial State of the Nation report, covering a wide range of statistical indicators of Australia's well-being. Again, however, this effort is focused on objective indicators – things that can be measured in material terms.

The Evatt Foundation and the Public Sector Research Centre at the University of NSW produce an annual The State of the States 2001 report, which assesses the States on 15 indicators of social, environmental and economic policy. Various market research companies include life satisfaction questions in regular surveys, but do not compile a comprehensive and systematic index of wellbeing.

Clemenger Communications produce an annual Clemenger Report.

Appendix A12. Questionnaire

Survey #8 Questionnaire

The Australian Unity Wellbeing Index- August 2003

"Hello, my name is I'm calling on behalf of the Australian Unity Wellbeing Index and Deakin University. We are doing a survey on how people feel about life in Australia that will only take about 5 minutes to complete."

"To help with our selection process can I speak to a female/male who had the most recent birthday, and is at least 18 years old?"

"The Australian Unity Wellbeing Index involves asking you questions about how satisfied you are with different aspects of your life, and more generally, life in Australia. Would you like to share your views by being involved in the survey?"

From Date	<input type="text" value="19/05/2003"/>	From Time	<input type="text" value="2:11:54 PM"/>
To Date	<input type="text" value="19/05/2003"/>	To Time	<input type="text" value="2:11:54 PM"/>
Ask for name	<input type="text"/>	Operators Name	<input type="text" value="AUSTUNITY\G"/>
			<input type="button" value="Nominate Call-Back"/>

"Thank you. The information you provide will be used to publish an overall survey result and it can be accessed by writing to Deakin University or Australian Unity or you can visit their websites. I'd also like to inform you that you're welcome to withdraw from this survey at any time, and if you do, your answers will not be included in the analysed results."

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

"Zero means you feel completely dissatisfied. 10 means you feel completely satisfied. And the middle of the scale is 5, which means you feel neutral."

"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,-----"

1. 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

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

How satisfied are you ...?

2. with your standard of living?
 0 1 2 3 4 5 6 7 8 9 10
3. with your health?
 0 1 2 3 4 5 6 7 8 9 10
4. with what you achieve in life?
 0 1 2 3 4 5 6 7 8 9 10
5. with your personal relationships?
 0 1 2 3 4 5 6 7 8 9 10
6. with how safe you feel?
 0 1 2 3 4 5 6 7 8 9 10
7. with feeling part of your community?
 0 1 2 3 4 5 6 7 8 9 10
8. with your future security?
 0 1 2 3 4 5 6 7 8 9 10
9. with the neighbourhood where you live?
 0 1 2 3 4 5 6 7 8 9 10

Turning now to life in Australia-----“

10. How satisfied are you with life in Australia?
 0 1 2 3 4 5 6 7 8 9 10
- How satisfied are you with----
11. the economic situation in Australia?
 0 1 2 3 4 5 6 7 8 9 10
12. the state of the natural environment in Australia?
 0 1 2 3 4 5 6 7 8 9 10
13. the social conditions in Australia?
 0 1 2 3 4 5 6 7 8 9 10
14. Government in Australia?
 0 1 2 3 4 5 6 7 8 9 10
15. business in Australia?
 0 1 2 3 4 5 6 7 8 9 10

16. national security in Australia?
0 1 2 3 4 5 6 7 8 9 10

I am now going to ask how you feel, not just at the moment, but generally in your life.
On a scale from 0 to 10-----

17. How content do you generally feel?
0 1 2 3 4 5 6 7 8 9 10

18. How happy do you generally feel?
0 1 2 3 4 5 6 7 8 9 10

I am now going to ask you about being in Australia. On a scale from 0 to 10-----

19. how strongly do you feel a sense of belonging in Australia?
0 1 2 3 4 5 6 7 8 9 10

20. how strongly do you feel you share your core values with the average Australian?
0 1 2 3 4 5 6 7 8 9 10

21. I am going to ask what makes you feel connected to Australia.

I will read a list of five common beliefs and ask which one makes you feel most connected to Australia.

[Instruction: Record the number tag of one choice only. If the respondent cannot decide between two or more, select the one they first mentioned]

Our natural environment(1)

Our sense of democracy(2)

Our sporting culture(3)

Our multicultural society(4)

Our life style(5)

(6) **[Instruction: If the respondent refuses to nominate any of the above, score 6].**

NOTE TO PROGRAMMER: Can you please arrange for the above five options to come up in random sequence for each new presentation of the questionnaire, while RETAINING the response number tag. ie 'Our natural environment' must always have the number tag '1'.

Turning now to a question on citizenship -----“

30. What is your citizenship?

31. Let me ask about your ancestry
In which country were you born?

What is your ethnic origin ?

[Drop down menu, but no prompt from interviewer]

32. 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? Please stop me when I say your household income category

- Less than \$15,000
- \$15,000 to \$30,000
- \$31,000 to \$60,000
- \$61,000 to \$90,000
- \$91,000 to \$120,000
- More than \$120,000

33. We are going to carry out another survey like this in 6 months' time. Would you be willing to help us again?

Yes No

[If YES] Thank You. Can you please tell me your name? You will not be identified in any report, but we need to record your name in order to contact you again.

Interviewer type in Title (Mr Ms Miss)

First Name

Surname

Street Address

Suburb

Post Code

[Do not type in any other information in the boxes other than the name. If person declines, please leave blank.]

[If NO, or YES] Thank you for helping us with this survey.