

Australian Unity Wellbeing Index Survey 18.1

**Report 18.1
February 2008**

Part A: The Report

*“The Wellbeing of Australians –
The effect of seven successive home-loan rate rises”*

Robert A. Cummins
School of Psychology, Deakin University

Adrian Tomy, Jacqui Woerner and Adele Gibson,
Doctoral Students, School of Psychology, Deakin University

**Australian Centre on Quality of Life
Deakin University, 221 Burwood Highway
Melbourne, Victoria 3125, Australia**

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Correspondence should be directed to:

Professor Robert A. Cummins
Deakin University
Geelong, Victoria 3217
Australia

Email: cummins@deakin.edu.au

Website: <http://www.deakin.edu.au/research/acqol/index.htm>

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Executive Summary

Introduction

The Australian Unity Wellbeing Index monitors the subjective wellbeing of the Australian population. Our first survey was conducted in April 2001 and this report concerns a special Survey 18.1, undertaken in February 2008. The survey was commissioned to detect whether a series of interest rate rises (Figure 1.1, page 1) had decreased the subjective wellbeing of the population.

This survey involved just 1,000 respondents, instead of our usual 2,000. Moreover, the questionnaire comprised only the Personal Wellbeing Index, a small set of basic demographic questions, and four questions on finance. In all other respects the mythology of the survey followed our normal procedures.

The Theory

The theoretical framework for the interpretation of data is the theory of Subjective Wellbeing Homeostasis. This proposes that each person has a 'set-point' for personal wellbeing that is internally maintained and defended. This set-point is genetically determined and, on average, causes personal wellbeing to be held at 75 points on a 0-100 scale. The normal level of individual set-point variation is between about 60-90 percentage points. The provision of personal resources, such as money or relationships, cannot normally increase the set-point on a long term basis due to the genetic ceiling. However, they can strengthen defences against negative experience. Moreover, for someone who is suffering homeostatic defeat, the provision of additional resources may allow them to regain control of the wellbeing. In this case the provision of resources will cause personal wellbeing to rise until the set-point is achieved.

Low levels of personal resources, such as occasioned by low income or absence of a partner, weakens homeostasis. If personal challenges such as stress or pain exceed resources, homeostasis is defeated, and subjective wellbeing decreases below its normal range.

The Analyses

All data have been standardized to a 0-100 range. Thus, the magnitude of group differences is referred to in terms of percentage points. Reference is also made to normative ranges. These have been calculated for the Personal Wellbeing Index in terms of the whole data-set that combines data across all surveys (see Appendix 2). Norms have also been calculated separately for each of the Personal Wellbeing Index domains. They have also been calculated for gender, age groups and work-status groups. These norms are presented at the back of their respective chapters. All of the reported trends are statistically significant.

Dot point summaries are provided at the end of each Chapter.

The Results

Personal Wellbeing Index:

The Personal Wellbeing Index has not changed significantly since April 2007. It remains higher than it was at Survey 1 and at one of the highest levels yet recorded. The rise has been driven by the domains of Safety and Future Security. These domains are at, or close to, their highest levels yet recorded. The reason for these rises is not known.

- ▶ *The level of population wellbeing remains high and shows no adverse effects of the interest rate rises.*

Money Matters:

- (a) Shares: People who own shares have higher wellbeing because they tend to be wealthy.
- (b) Cost of living: Only the 9.2% of the sample whose worry level about the cost of living is 10/0 have lower wellbeing.
- (c) Rate rises: No level of worry about rate rises is linked to low wellbeing.
- (d) Conclusion: The current series of rate increases has had little effect on the wellbeing of the Australian population. To some extent this shows people's capacity to absorb such increases into their lives without distress. It also reflects the gradual nature of these rises such that people have time to adapt.

This latter point has policy implications for governance. A series of small rate rises is likely to be better tolerated by the population than a single large rise.

- ▶ *Worry about rate rises is not linked to decreased population wellbeing.*

Demographic Influences

Household Income:

- (a) Personal wellbeing consistently rises with income up to \$101-150K. The 6.4 point gain over this range is associated with a change in wellbeing from below to well above the normative range. Whether the rise in SWB becomes significant beyond \$101-150K will be revealed by the addition of further data.
 - (b) The cost of increasing happiness increases with income. One additional percentage point of wellbeing for someone with a household income of \$151-250K is an additional \$250,000.
 - (c) Income has the largest effect on the domain of satisfaction with Standard of Living. It has no systematic influence on satisfaction with Community Connection.
- ▶ *Happiness is bought at discount by people who are poor. For people with a household income <\$15,000, and additional \$7,500 buys an extra point of wellbeing. At a household income of \$151,000-\$250,000, an extra point requires an additional \$250,000.*

Gender:

- (a) Females generally have higher levels of personal wellbeing than males. However, this is survey-dependent and it is curious that there has been no significant gender difference over the past six surveys.
- (b) The only personal domain to be lower for females is safety. This dropped lower following September 11 for females but not for males. These differences were maintained for about 18 months. Since then the gender differences have been unpredictable but have been significant over the past seven surveys.
- (c) Relationships shows a significant interaction between gender and survey. It seems possible that the sense of threat over surveys 2-12 increased the level of relationship satisfaction for both genders, but more so for females than males. Since May 2005 the satisfaction level of both genders has returned to their baseline Survey 1 values.
- (d) Gender differences in personal wellbeing only emerge at 26-35 years of age. They then progressively decrease with increasing age. The reason for this is not understood.
- (e) The gender difference in satisfaction with relationships is most pronounced in the youngest groups. Males are lower than females.
- (f) Conclusion: There are no obvious gender-related effects of the rate-rises.
 - ▶ *While females have generally shown higher wellbeing over the past five years, the gender difference has been non-significant over the past six surveys. This may signal that the gender differences have been caused by world events. Future surveys will inform this idea.*

Age:

- (a) The Personal Wellbeing Index for the 36-45y group is above their normative level for Survey 18.1.
- (b) For the third and consecutive time in seven years, the oldest and the youngest groups are not significantly different from one another. Both are no different from Survey 1.
- (c) Conclusion: There is no obvious effect of the rate-rises on the age-related data.
 - ▶ *The rate-rises seem to have had little effect on the wellbeing of either gender.*

1. Introduction

The Australian Unity Wellbeing Index is a 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 various aspects of life – both personal and national – affects our sense of wellbeing.

The 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 Australian Unity Wellbeing Index measures quality of life as experienced by the average Australian.

The Index yields two major numbers. The Personal Wellbeing Index is the average level of satisfaction across seven aspects of personal life – health, personal relationships, safety, standard of living, achieving, 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. This current survey has employed only the Personal Wellbeing Index. It is not a regular survey but one especially commissioned to determine whether a long series of rises in interest rates had affected the wellbeing of Australians.

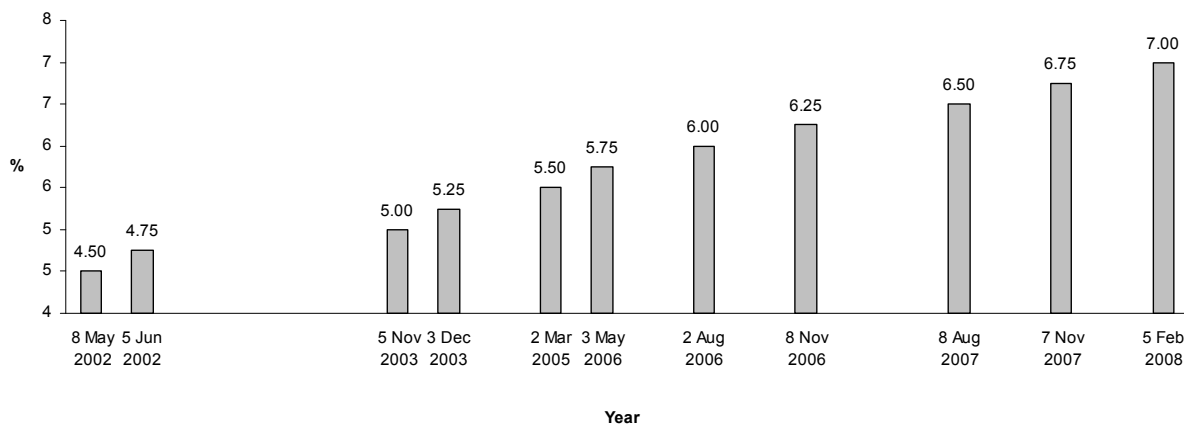


Figure 1.1: Interest Rate Rises May 2002 – February 2008

1.1. Background

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 percentage points of satisfaction. That is, on a standardised scale from 0 (completely dissatisfied) to 100 (completely satisfied) the average person rates their level of life satisfaction as 75.

The normal range of values for individuals is not known with certainty but is probably within the range of 60 to 90 points. When group means are calculated, the variation is much less and the normative range in Australia is 73.4 to 76.4 points. We always find the Personal Wellbeing Index for population means to fall within this range.

The first full survey, of 2,000 adults from all parts of Australia, was conducted in April 2001. Since then 17 additional surveys have been conducted, with the most recent survey in October 2007. Copies of these 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 (<http://www.deakin.edu.au/research/acqol/index.htm>). This report concerns 1,000 adults recruited for the special purpose of this survey.

In addition to the Personal Wellbeing Index we ask a highly general question as ‘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 comparison with such data.

Each survey also includes demographic questions and a small number of additional items that change from one survey to the next. The items in this survey concern the perceived impact of rising interest rates.

1.2. Understanding Personal Wellbeing

The major measurement instrument used in our surveys is the Personal Wellbeing Index (PWI). This is designed as the first level deconstruction of ‘Life as a Whole’. It comprises seven questions relating to satisfaction with 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 73.4 to 76.4, a fluctuation of only 3.0 points. 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, on average, at about 75 points. 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 points, 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.

Fortunately for us, 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 may evidence homeostatic failure. The identification of sub-groups that contain a larger than normal proportion in homeostatic failure of people is an important feature of our survey analyses.

1.3. The Survey Methodology

A geographically representative national sample of people aged 18 years or over and fluent in English, was surveyed by telephone over the period 6th-11th February 2008. 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 7,503 calls were made. Of these, 3,836 connected with a respondent and 1001 agreed to complete the survey. This gives an effective response rate of 26.1%. This response rate reflects, in part, the methodological constraint that an even geographic and gender split was maintained at all times throughout the survey. 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.

Unlike gender, the age composition of the sample 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).

1.4. Presentation of results and type of analysis

In the presentation of results to follow, the trends that are described in the text are all statistically significant at $p < .05$. More detailed analyses are presented as Appendices. These are arranged in sections that correspond numerically with sections in the main report. All Appendix Tables have the designation 'A' in addition to their numerical identifier (e.g. Table A9.2).

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

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.

The raw data for this and all previous reports are available from our website: http://www.deakin.edu.au/research/acqol/index_wellbeing/index.htm.

1.5. Internal Report Organisation

- (a) The new results from this survey are summarised in Table 2.1 (see Chapter 2).
- (b) Most Tables are presented as appendices.
- (c) Chapter 2 presents a comparative analysis of Personal and National Wellbeing 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) Chapter 6 concerns Money Matters.
- (f) Each Chapter contains a dot-point summary.

2. A Comparison Between Survey 18.1 and Survey 18

2.1. Overview

Table 2.1: Means and standard deviations of the 18.1 survey

Question	Mean	SD	Point change from April 2007	Significance of change
PERSONAL WELLBEING INDEX	75.59	12.76	-22	.661
Personal domains				
1. Standard of living	78.12	16.84	-21	.761
2. Health	75.19	19.13	.07	.927
3. Achieving	73.06	18.58	-45	.540
4. Personal relationships	77.18	23.84	-2.04	.025
5. How safe you feel	80.01	16.96	-.18	.791
6. Community connect	71.70	19.39	.58	.456
7. Future security	73.17	18.96	.16	.832
Life as a whole	77.81	17.34	-.53	.430
NATIONAL WELLBEING INDEX	63.72	15.42	+1.95	.000
National domains				
1. Economic situation	70.88	19.32	+2.69	.000
2. State of the environment	58.39	19.62	+2.44	.000
3. Social conditions	62.35	18.73	+.39	.509
4. Government	56.10	26.19	+2.13	.008
5. Business	64.67	19.02	+1.97	.001
6. National security	69.61	19.06	+1.88	.002
Life in Australia	82.64	17.76	-.85	.119
Likelihood of Terrorist Attack in Australia				
% who think it likely	49.4		-7.1%%	
Strength of likelihood	66.51	19.26	+.31	.723

The Major Indices

2.2. Personal Wellbeing Index

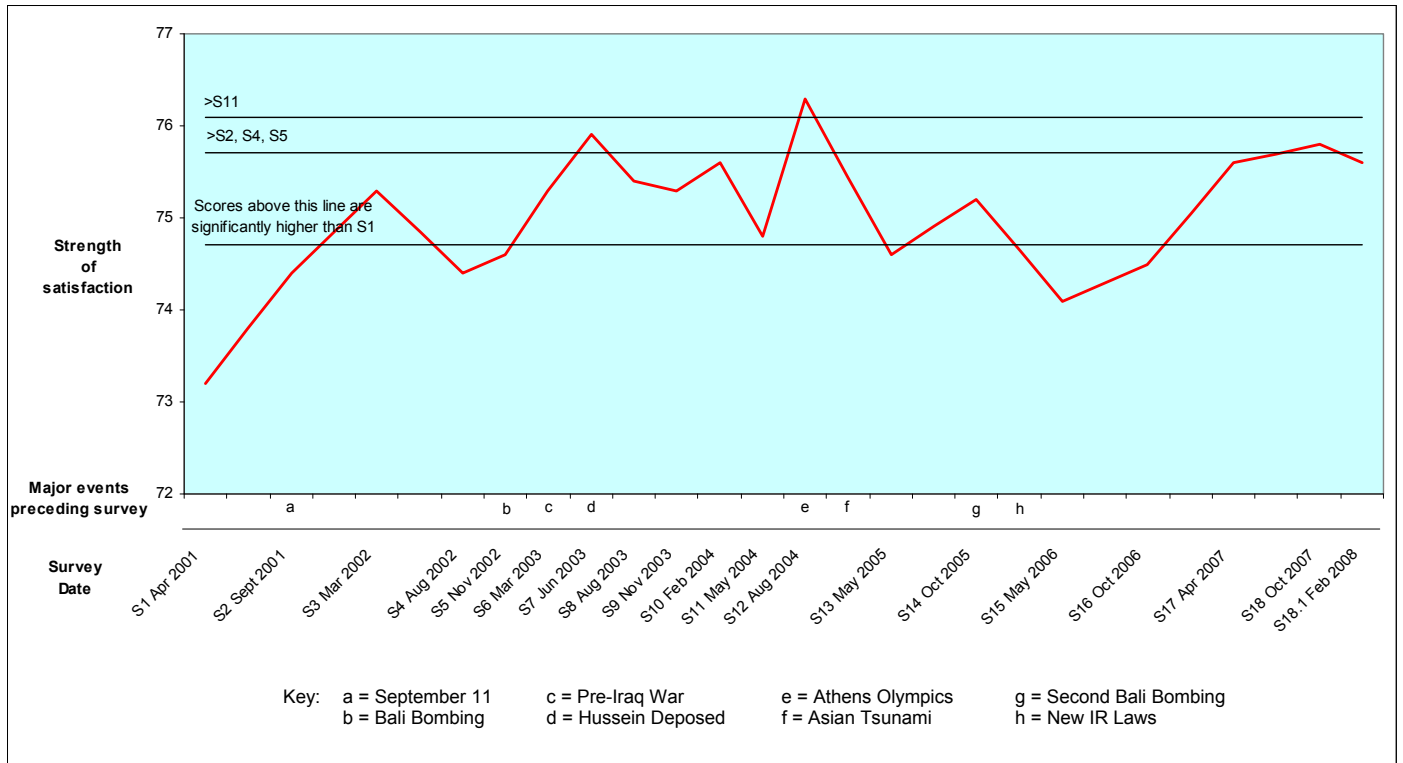


Figure 2.1: Personal Wellbeing Index

The Personal Wellbeing Index has fallen by a non-significant 0.2 percentage points since the previous survey (Tables 2.1 and A2.1). The only domain to show a change greater than one percentage point is relationships that fell by 2.0 points.

In other respects it is notable that the Personal Wellbeing Index is so stable. Over the 18 surveys it has varied by just 3.1 points and, except for S1-S2 (September 11), S11-S12/S12-S13 (Sydney Olympics) and S14-S15 (Second Bali bombing), the change from one survey to the next is less than 1%. The range of values has been from 73.2 (S1) to 76.3 (S12) and the Personal Wellbeing Index is currently 2.6 points above its level at Survey 1, which is significant. It is also significantly higher than Survey 2 and Survey 15.

The most obvious trend for the Personal Wellbeing Index is that it rose following September 11 and remained generally higher. Of the 18 surveys conducted since Survey 1, 11 (61.1%) have been significantly higher than this initial value.

It seems that both positive and negative events have acted to raise the wellbeing of the Australian population. In terms of the negative events, it appears that the presence of external threat causes the population wellbeing to rise. This has occurred 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 possible that the Second Bali Bombing, which substantially increased the perceived probability of a terrorist attack in Australia (see section 2.8) prevented the Personal Wellbeing Index continuing its fall back to the baseline value recorded at

that time. In Survey 12, the positive influence of Olympic success also caused personal wellbeing to rise, to an even greater extent than either of the terrorist or war events. It is notable that the same set of domains seem to be affected by both kinds of event, as can be seen in Section 2.2 of this chapter.

It is important to note that the general economic situation in Australia has remained strong throughout this period with low interest rates and low unemployment. To what extent this has been influential in causing the general elevation of the Personal Wellbeing Index is unknown. However, the strong economy is unlikely to be a cause of the rise since September 11 because these same economic conditions existed prior to the first survey.

In other respects Australia was remarkably politically stable over Surveys 1-18, with Prime Minister Howard leading the Liberal Party to successful re-election in both November 2001 and October 2004. At the time of Survey 18 (October 2007) it was looking as though a change of Government was likely at the November 2007 election, and indeed this transpired with Kevin Rudd becoming the new Labor Prime Minister. However, this was thought to be due to a generally sense in the electorate that it was time for a change, rather than a perception of the government as incompetent. Moreover, the policies of the two major parties contesting the election were very similar. These factors further enhance the sense of political and social stability, as shown by the lack of significant change in the Personal Wellbeing Index at the time of this February survey.

2.3. Personal Wellbeing Domains

Standard of Living

The personal domains have generally remained stable since the last survey. The only one to show a significant change is satisfaction with spirituality/religion, which has fallen.

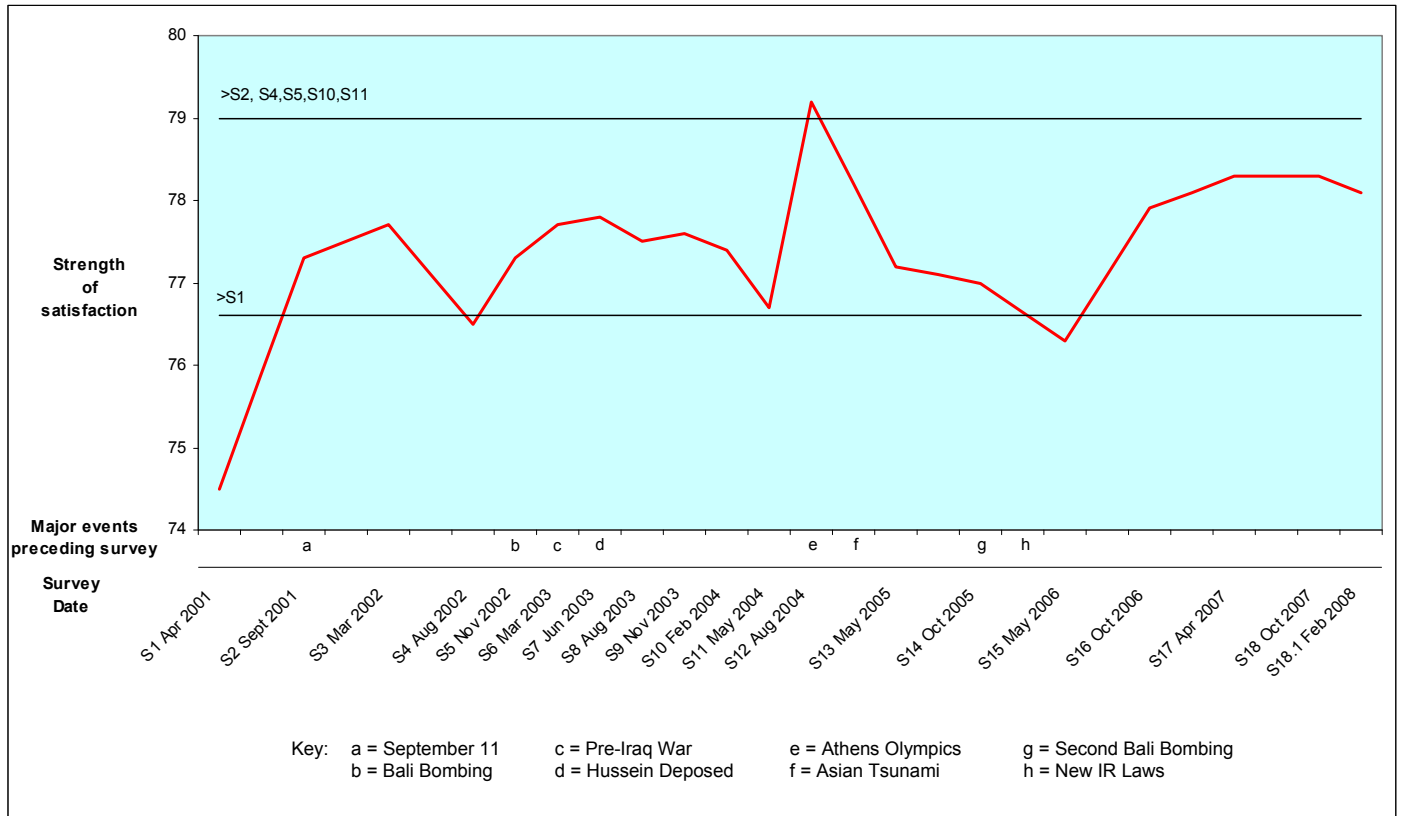


Figure 2.2: Satisfaction with **Standard of Living**

Satisfaction with standard of living has numerically fallen 0.2 points (non-significant) since Survey 18 (Table A2.1). This maintains an upward trend since May 2006 (S15). The values for this domain have generally remained significantly higher than they were at Survey 1, with only two (Survey 4 in 2002 and Survey 15 in 2006) being statistically at the same level. Thus, 15/17 (88.2%) of survey mean scores are higher than Survey 1. The range of scores is 4.7% between April 2001 (S1:74.5) and August 2004 (S12:Olympics: 79.2).

It is fascinating to note that the rise in satisfaction with Standard of Living since May 2006 has occurred despite a succession of 0.25 point rises in interest rates.

Health

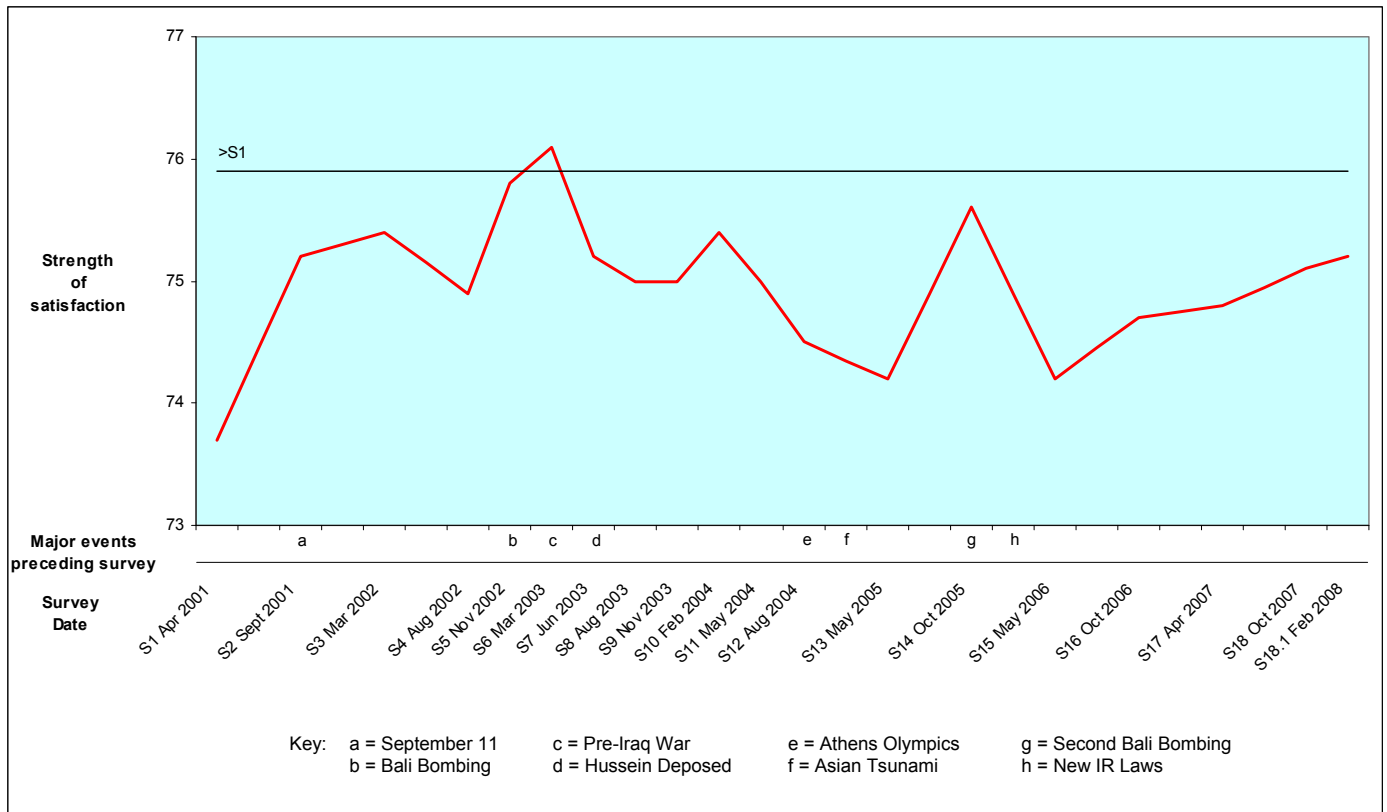


Figure 2.3: Satisfaction with **Health**

Satisfaction with health has risen by a non-significant 0.1 point since Survey 18. It remains not different (+1.5 points) from its level at Survey 1.

Historically, this domain rose briefly at March 2003 (S6:Pre-Iraq war) but quickly returned to its original level. It is notable that the level of significance at Survey 6 was marginal ($p=.02$) and so may reflect a random fluctuation. The overall ANOVA between surveys is also only marginally significant (Table A 2.1). It is evident that satisfaction with personal health is little influenced by world or national events and this stability is confirmation that the change in other domains since Survey 1 are valid. The range of scores is 2.4% between April 2001 (S1:73.6) and March 2003 (S6:Pre-Iraq war:76.0).

Achieving

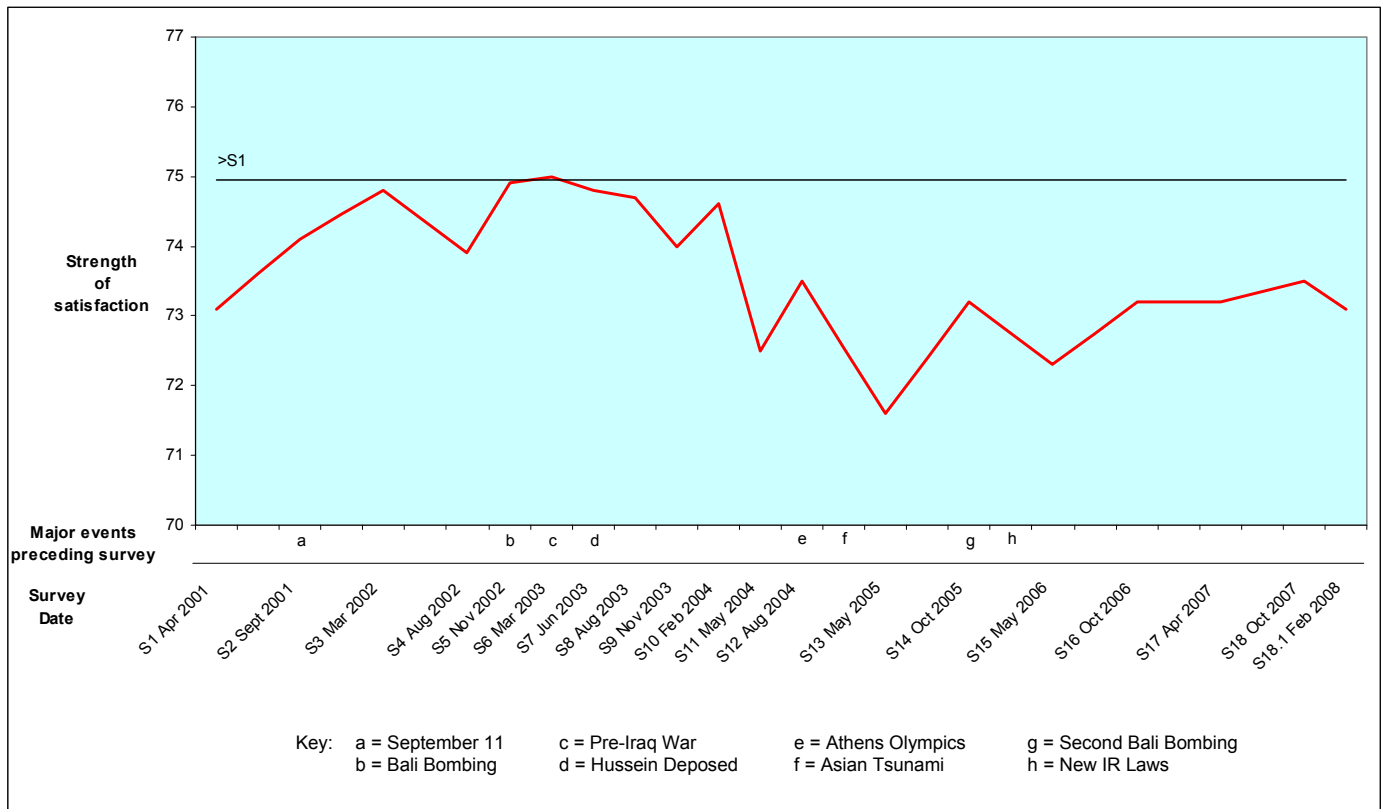


Figure 2.4: Satisfaction with **What you are Currently Achieving in Life**

Achieving in life has not fallen by a non-significant 0.4 points since Survey 18. It remains no different than it was at Survey 1.

The wording of this item has changed once. From Survey 1 to Survey 10, satisfaction with ‘what you achieve’ barely changed over the surveys. It was marginally higher at Survey 6 (Pre-Iraq war), and the range of scores was 1.8% between April 2001 (S1:73.2) and March 2003 (S6:Pre-Iraq war:75.0).

In Survey 11 the wording of this item changed from ‘How satisfied are you with what you achieve in life?’ to ‘How satisfied are you with what you are currently achieving in life?’. The reason for this change is to make it more explicit that the question referred to current life rather than to some past aggregation of achievement.

The effect of this word change has significantly reduced the score for this domain. The average value over Survey 1 to Survey 10 is 74.47 (SD=0.45). The average value over Survey 11-Survey 17 is 72.96 (SD = 0.53). So it appears to still be a highly reliable measure that has stabilised about 1.5 points below the original and no different from Survey 1.

Relationships

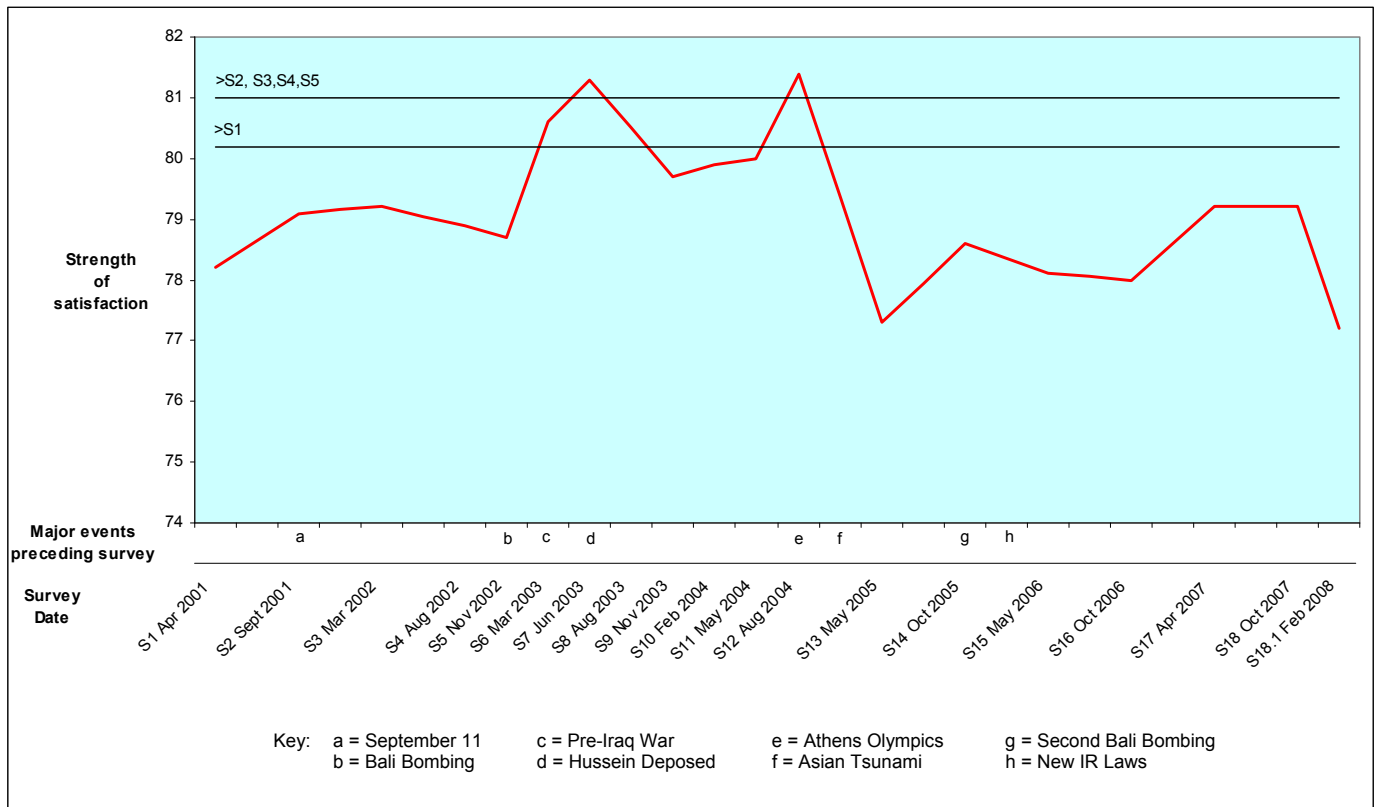


Figure 2.5: Satisfaction with Relationships

Satisfaction with relationships has fallen by a massive and significant 2.0 points since Survey 18. It remains no difference from Survey 1 but now lies numerically 1.0 point below its level at Survey 1. The only other survey to fall below the level of Survey 1 is Survey 13, which registered 77.6 points. Thus, the current value of 77.2 points is the lowest yet recorded. While there is no obvious reason for this it is important to note that its current level is not significantly below that of Survey 1.

The highest value for this domain has been 81.39 points at the time of the Athens Olympics (S12). It has fallen a massive 4.2 points since then. At Survey 13 this domain recorded its lowest ever value (77.64) down 3.8 points from the Olympics (S12) value of 81.39 points. It has not statistically changed since then.

The overall pattern of change for this domain does not conform to that of the Personal Wellbeing Index (Figure 2.1) in that the earlier 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 fact that these other domain changes were reactions to a past event, whereas 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 (relationships and community). Perhaps the anticipation of war drew people closer to their family and friends as well as enhancing bonding with the general community. These changes then dissipated as the period of the war was left behind, but the domain was again briefly elevated during the period of the Olympics. The range of scores is 4.2 points between February 2008 (S18.1:77.2) and February 2008 (S18.1: Olympics:81.4).

Safety

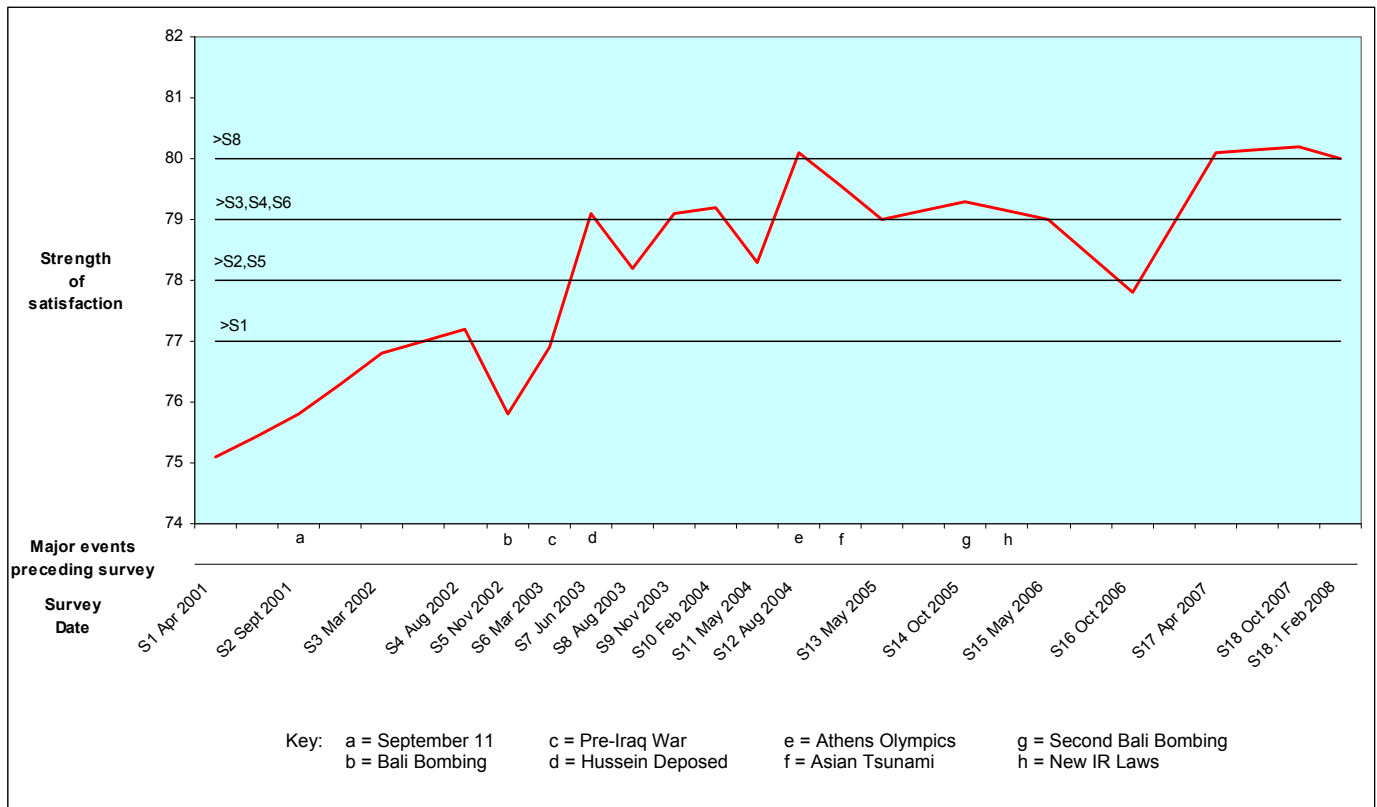


Figure 2.6: Satisfaction with **How Safe you Feel**

Satisfaction with personal safety has fallen by a non-significant 0.2 points since Survey 18 (Table 2.1). It remains at one of its highest level yet recorded.

The first major rise followed the defeat of Saddam Hussein in Iraq at Survey 7 and has been maintained ever since. This sustained rise may have been linked to the positive feelings of relief following the defeat of Hussein without unleashing weapons of mass destruction, and subsequently our increasingly strong American alliance. The rise during the Olympics (S12) may have been more due to the overall sense of elevated wellbeing than to specific feelings of greater safety. The current rise is hard to explain but is associated with a relatively low proportion of the sample feeling that a terrorist attack is likely (see Section 2.8). The range of scores is 5.0 points between April 2001 (S1:75.2) and October 2007 (S18: 80.2).

It is interesting to relate these data on safety to the sense of terrorist threat that is felt by the population. Since Survey 9 (November 2003) we have asked people ‘whether they think a terrorist attack is likely in Australia in the near future’ and, if they say ‘Yes’, we ask about the strength of their belief that such an attack will occur.

These data are combined with the population levels of ‘Satisfaction with Safety’ in Table A2.9. It can be seen that the average level of safety satisfaction correlates negatively with the percentage of people who think an attack is likely ($r = -.49$) and less strongly with the strength of belief among those respondents who think an attack likely ($r = -.15$). The correlation of $-.49$ explains about 24% of the variance between these two measures, which is a significant degree of co-variation. Other factors that will be contributing variance to safety are homeostasis, personal circumstances and, quite possibly, the sense of security offered by an effective wellbeing military force and alliance with the USA. The

latter influence, exemplified by the rise in safety at Survey 7 (defeat of Hussein) may represent a constant background factor onto which the fluctuations in terrorist attack probabilities are imposed.

One implication of these results is that raising terrorist attack fears through issuing terrorist alerts, harms the safety satisfaction, and thereby compromises the overall wellbeing of vulnerable members of the population.

Community

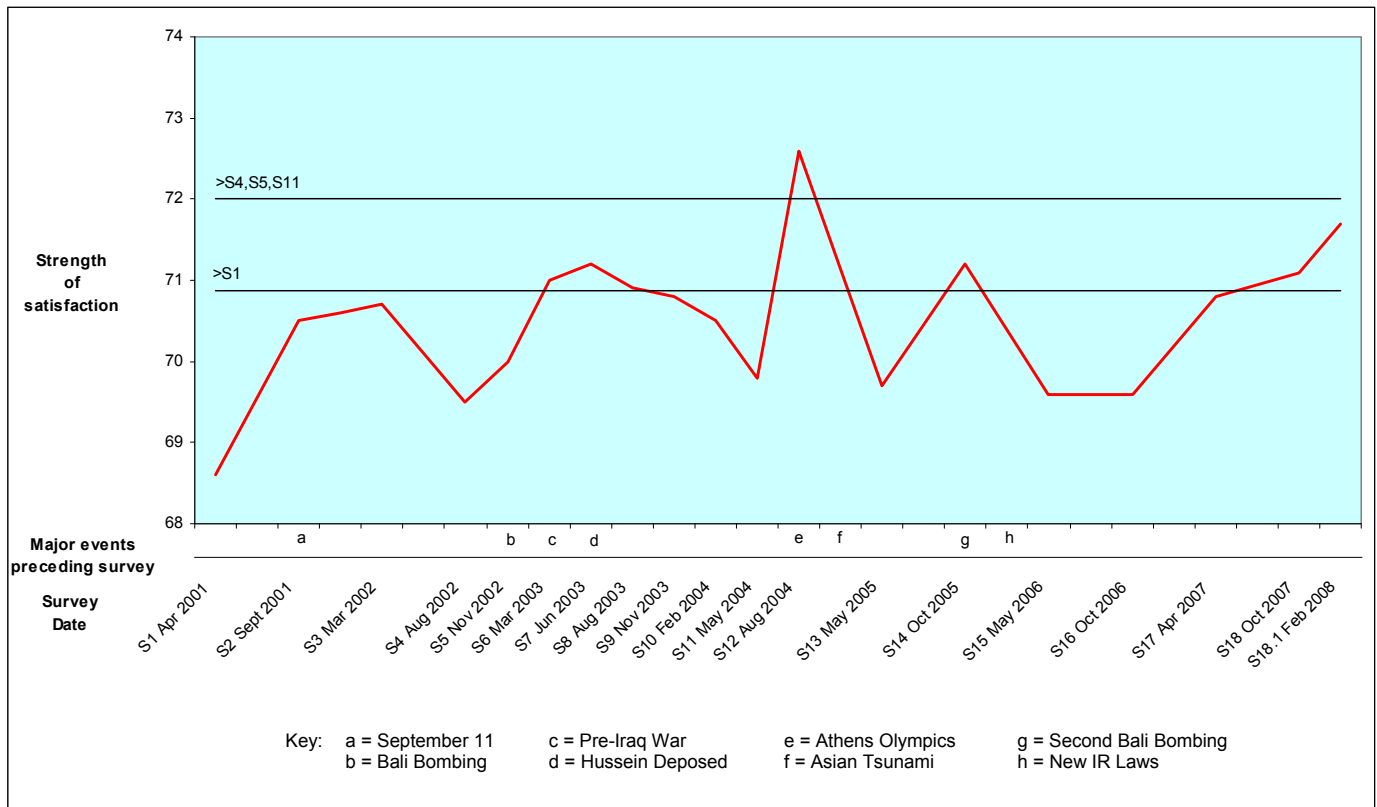


Figure 2.7: Satisfaction with **Feeling Part of Your Community**

People’s satisfaction with feeling part of their community has risen by a non-significant 0.6 points since Survey 18. It remains statistically higher than Survey 1.

Apart from the Olympic period elevation (S12), the previous rises are coherently related to times of major conflict. In the six months following September 11, satisfaction with community connectedness went up from its lowest level in April 2001, and was maintained at this higher level for a further six months. It then fell, but returned to an even higher level in the lead-up to the Iraq war (S6). This higher level was maintained for six months following the defeat of Hussein (S9), then dissipated only to be recharged once again following the second Bali bombing (S14). This pattern is consistent with social psychological theory. An external threat will cause a group (or population) to become more socially cohesive. The range of scores is 4.0 points between April 2001 (S1:68.6) and August 2004 (S12:Olympics:72.6).

Future Security

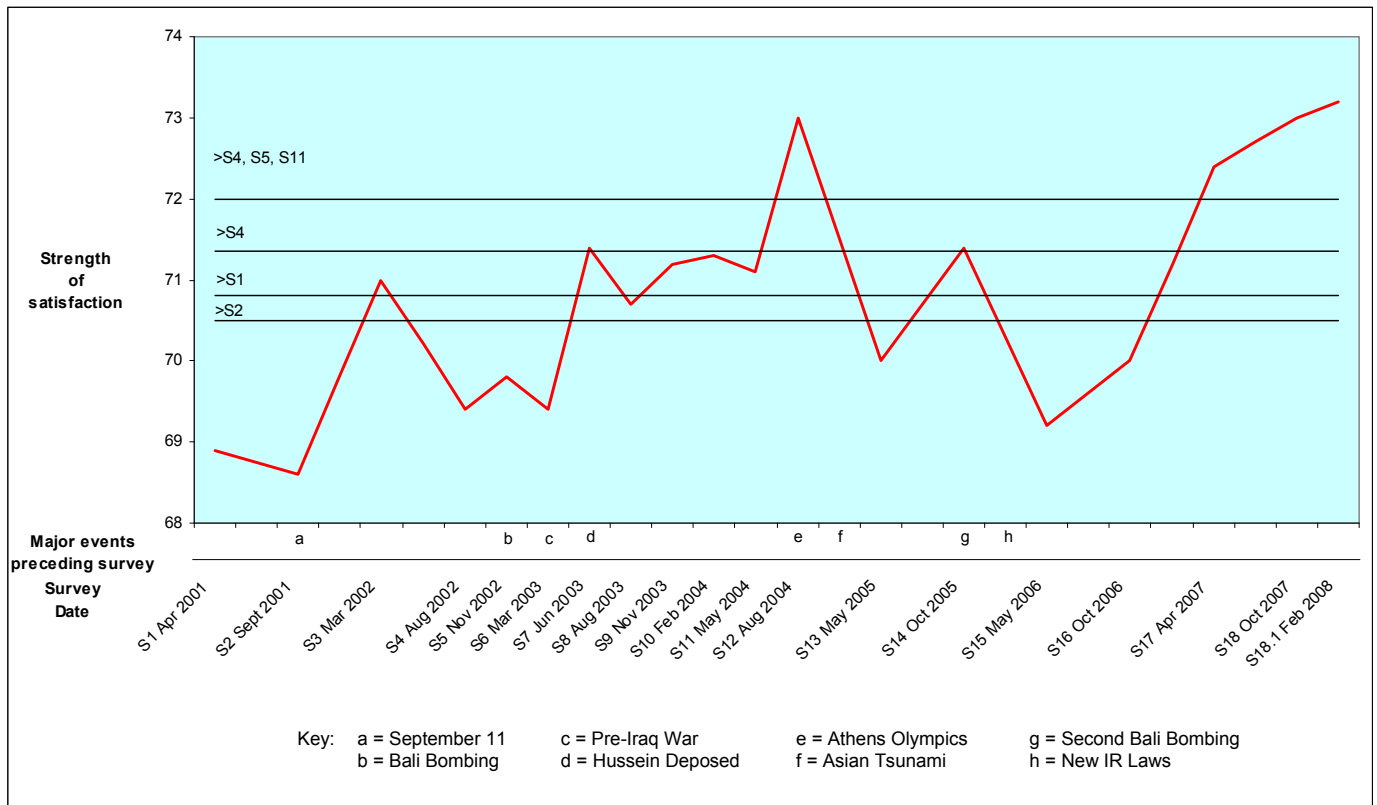


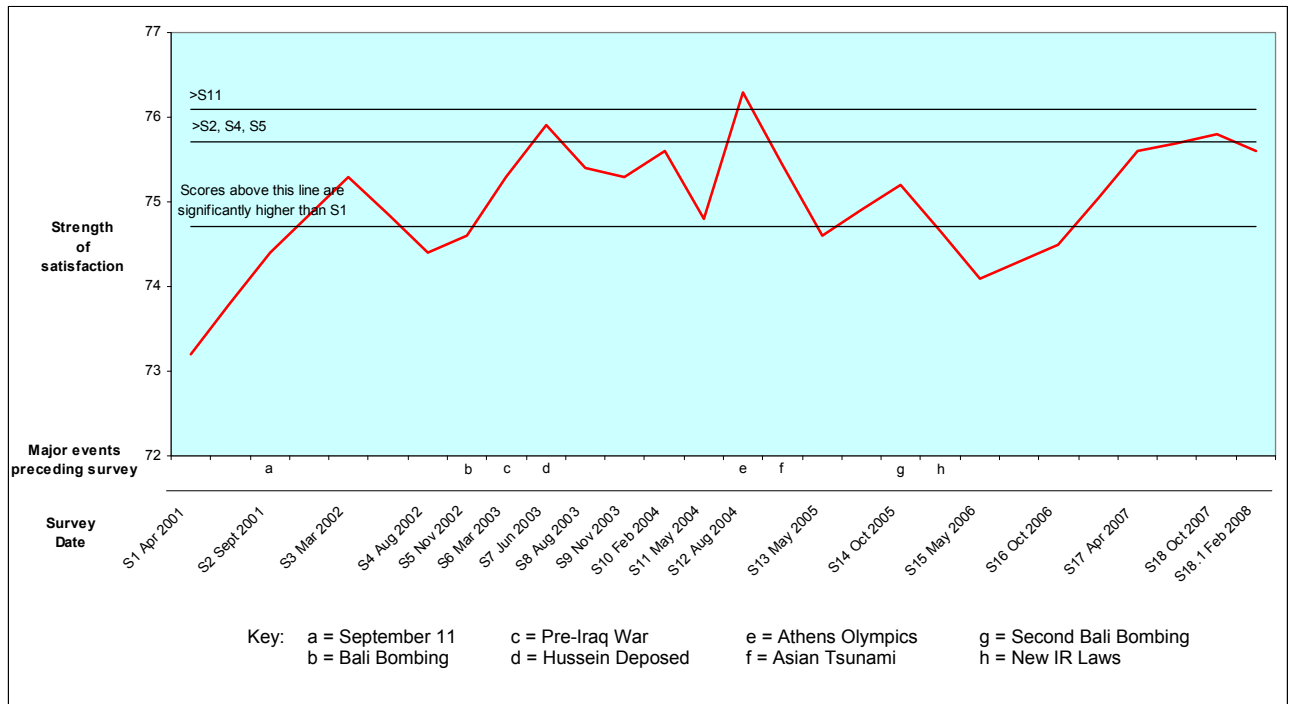
Figure 2.8: Satisfaction with **Future Security**

Satisfaction with future security has risen by a non-significant 0.2 points since Survey 18. It fell strongly and significantly by 2.2 points between Surveys 14 and 15. Since that it has risen progressively higher and is now at its highest recorded level (73.2).

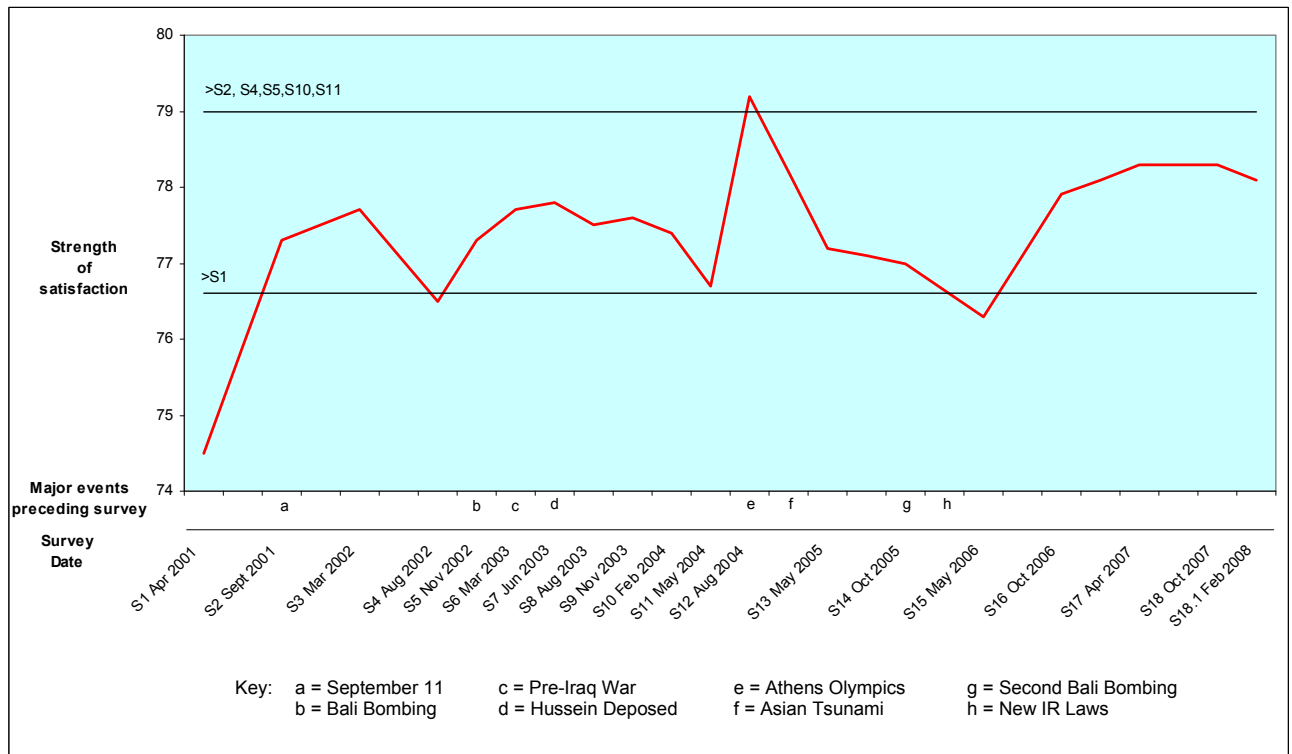
In previous surveys, satisfaction with future security dropped to its lowest level immediately following September 11, and then rose to a significantly higher level six months later (S3). It then rose again immediately following the Iraq war (S7), and then gradually fell back. This pattern is very similar to that shown by safety and the explanations are probably similar to those that have been stated for the safety domain. The correlation between the survey mean scores for safety and future security is $r = .45$ (Table A2.18). The range of scores is 4.6 points between September 2001 (S2: 68.6) and February 2008 (S18.1: 73.2).

Dot Point Summary for the Wellbeing of Australians

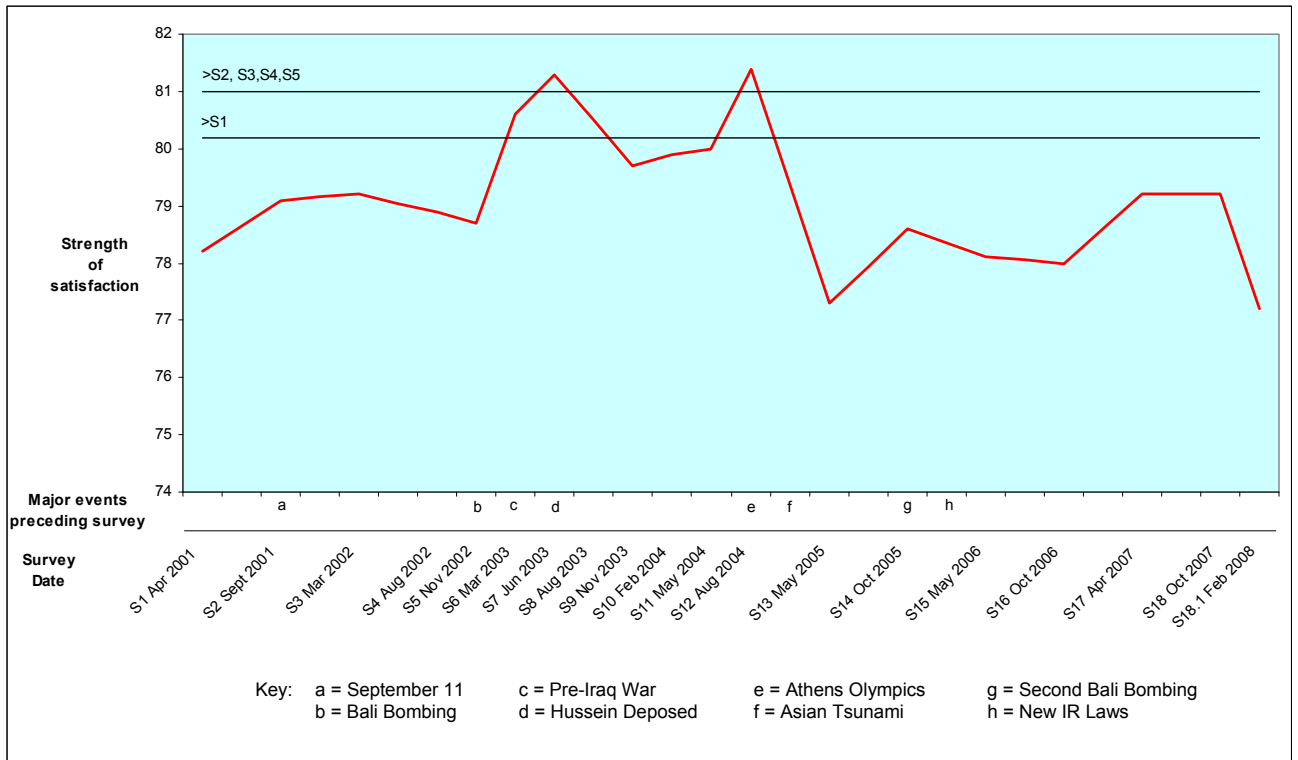
1. The Personal Wellbeing Index has fallen by a non-significant 0.2 percentage points since October 2007. It remains higher than it was in the first survey in April 2001.



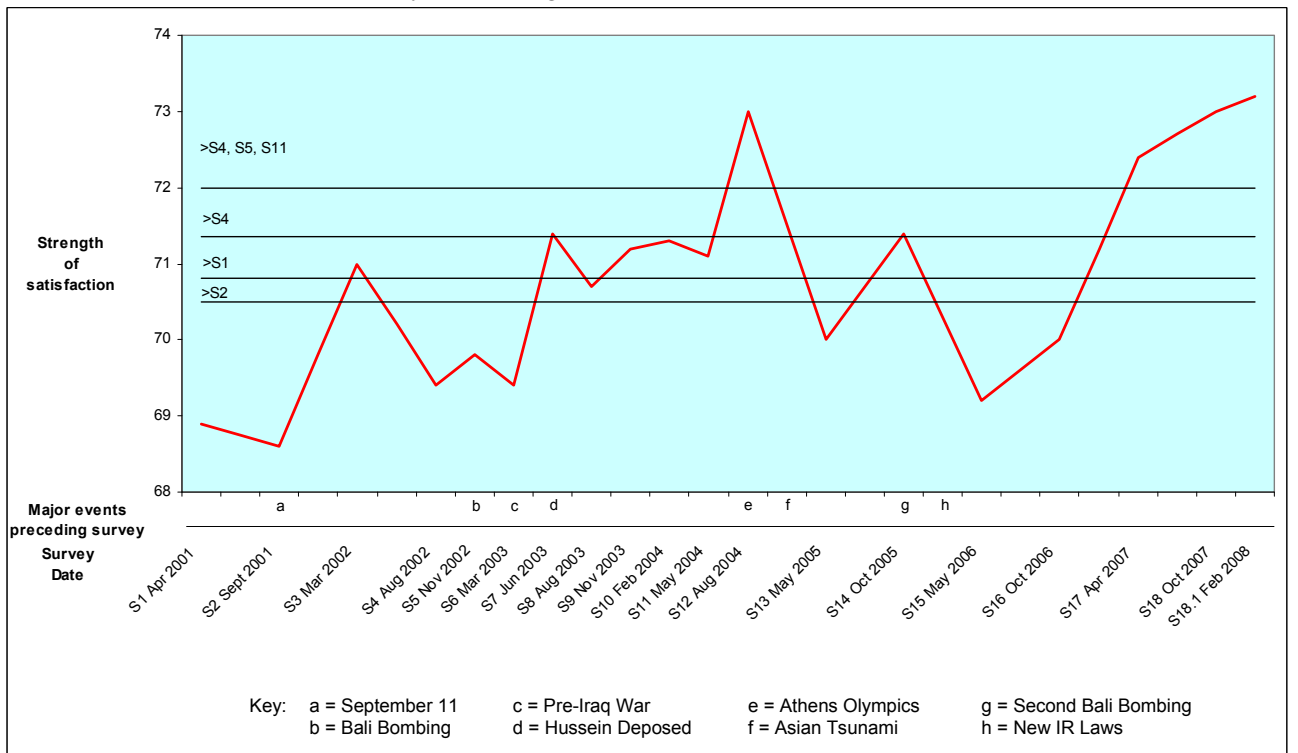
2. Satisfaction with Standard of Living has remained stable over the past 18 months despite a succession of raises in interest rates.



3. Satisfaction with Relationships has decreased to its lowest point yet recorded. However, this is not statistically below the level at Survey 1.



4. Satisfaction with Future Security is at its highest recorded level.



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.”

Table 3.1: Income Frequency (Survey 18.1)

	Cumulative		Survey 18.1	
	Cumulative (Survey 7-18)	% of respondents to this question	N	% of respondents to this question
Less than \$15,000	2495	13.0	51	6.0
\$15,000 to \$30,000	3714	19.1	132	15.8
\$31,000 to \$60,000	5700	29.1	226	27.0
\$61,000 to \$100,000	4192	21.2	207	24.7
\$101,000 to \$150,000	3148	16.0	137	16.4
\$151,000 to \$250,000	289	1.2	68	8.1
\$251,000 to \$500,000	68	0.3	13	1.6
\$500,000 or more	26	0.1	3	0.4
Total	19,632	79.6%	837	87.7% of respondents answered this question

The data in Table 3.1 are derived from Tables A3.1 and A3.2. The proportions in each income category are all within 1.4 percentage points of survey 18, even though the overall sample size is only half normal. The three categories \$151-250K, \$250-500K and \$500K+ were only introduced in Survey 17. It can be seen that the sample for Survey 18.1 is considerably wealthier than the running average. This trend started being noticeable from Survey 16. The reason for this current change is not known but it should bias the overall Personal Wellbeing Index to be higher than it would have been with a regularly proportioned sample.

As background to the data in this chapter, annual gross incomes are currently as follows:

Category		<\$15,000	\$15,000-\$30,000	\$31,000-\$60,000
Age pension	- single	13,312		
	- couple		22,204	
Disability support Pension	- Single <18y	11,596		
	- Single with children	13,312		
	- Couple with children		22,204	
Unemployment	- Single 18-21y	9,048		
	- Single with children	11,856		
	- Partnered, no children	9,048		
	- Partnered, with children	9,932		
Minimum full-time wage		25,168		
Median full-time wage (July 2006)			36,400	
Average full-time wage (August 2006) ¹			54,652	

¹Average Weekly Earnings (ABS Website)

From the above it is notable that the only people who have an income <\$15,000 are single people on some form of welfare support. When people live with another adult, household income moves into the next income bracket of \$15,000-\$30,000. This is highly significant for the interpretation of results between these categories, since the presence of a partner has a substantial effect to facilitate wellbeing (see Chapter 11, Report 14.0). Thus, determining the cause of the below-normal wellbeing experienced by people with household incomes <\$15,000 is confounded by the lack of a partner, disability, unemployment, and single parenthood. In this light it is somewhat surprising that SWB only rises by about two percentage points as income changes from <\$15K to \$15-30K (see Figure 3.1).

The income category of \$15-30K contains a very mixed group. It includes people on all types of welfare payment who are living with at least one other person. It also includes people living alone who are full-time employed on a low wage. It is not until the income bracket \$31-60K that most people on welfare are excluded. Even here, however, it is quite possible for someone on welfare to be

living with another person who has a higher income, or to be living in a shared household with other adults.

The influence of these various factors can only be determined by the break-down of data into sub-groups. This is being progressively achieved as the combined data-set becomes large enough to support the reliable analysis of these sub-groups.

3.1. Income and Wellbeing

3.1.1. *Personal Wellbeing Index*

The relationship between income and the Personal Wellbeing Index is given in Table A3.1 for Survey 18.1, for comparative surveys in Table A3.3, and combined surveys in Table A3.4. The range of the Personal Wellbeing Index across income groups is 7.2 percentage points (Figure 3.1).

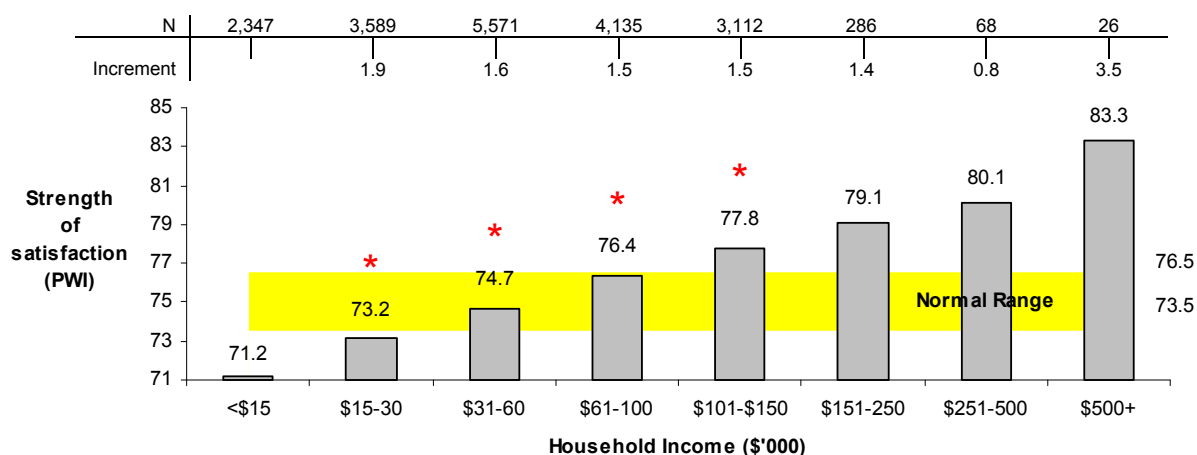


Figure 3.1: Income and the **Personal Wellbeing Index** (combined surveys)

The * in Figure 3.1 denote a significant increment in wellbeing from the immediately lower level of income. There are four such increments covering the four income levels above <\$15,000. The final increment is at \$101-150K where wellbeing is higher than it was at \$61-100K (Table A3.4). To some extent these determinations of significance are a function of the number of respondents and it is likely that as numbers accumulate in the highest category it will become significantly higher than the \$101-150K group. From these current data we must conclude that income loses its ability to reliably raise wellbeing beyond a household income of \$100-150K.

These calculations clearly indicate the diminishing returns with increasing household income. At the lowest income level an additional \$15,000 buys 2.0 percentage points of wellbeing, or \$7,500 per point. From the \$15-30K baseline, it takes an additional \$30,000 (\$31-\$60K) to buy 1.5 percentage points, or \$20,000 per point. The complete calculation of the cost of a percentage-point rise in the Personal Wellbeing Index at each income level as shown in Table 3.2.

Table 3.2: The Cost of Each PWI Increment

Income (\$)	\$ increment	Points gained	\$ per point
<15 to 15-30	15,000	2.0	7,500
15-30 to 31-60	30,000	1.5	20,000
31-60 to 61-100	40,000	1.7	23,529
61-100 to 101-150	50,000	1.4	35,714
101-150 to 151-250	100,000	1.3	76,923
151-250 to 251-500	250,000	1.0	250,000

The relationship between income and wellbeing shows the strongest connection at the lowest levels of income. Thus, a rise of \$7,500 in gross household income is sufficient to raise average wellbeing by one percentage point. To some extent, however, this also reflects the different composition of the household in terms of disability and unemployment, as previously outlined.

Beyond an income of \$15-30, the cost of an additional percentage point of wellbeing is around \$25,000-\$35,000 up to a gross household income of \$101-150K. Beyond this the cost becomes exponential, with the cost of a percentage point beyond \$101-150K doubling to \$76,923. Beyond that the cost leaps to \$250,000.

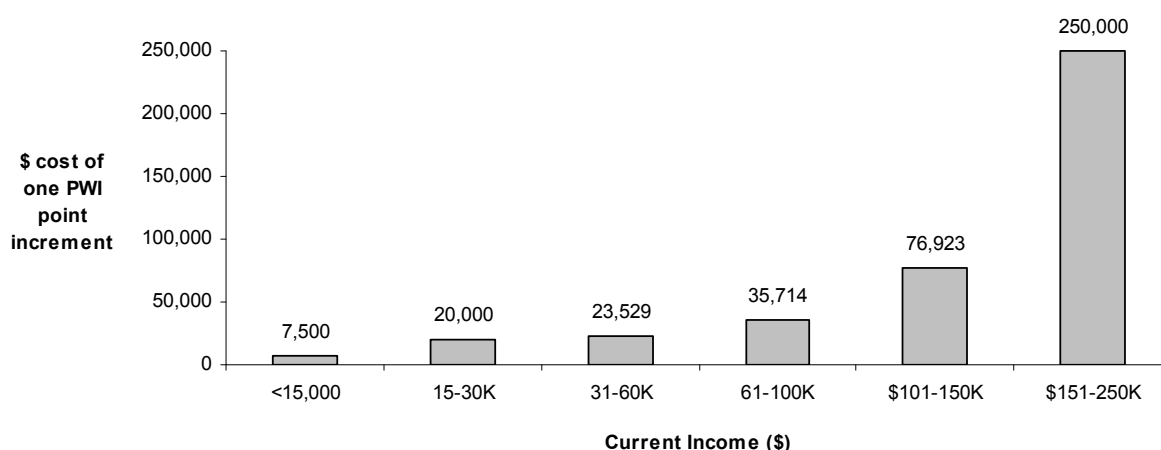


Figure 3.2: The cost of purchasing a percentage point of personal wellbeing

There are two further observations on these data. First, while the extent of significance between income increments (Table A3.35) is N dependent, and therefore likely to change as more people are added to each income category, there is no reason to expect this to change the calculations of percentage-point costings above. These rely only on the reliability of each Personal Wellbeing Index mean score. Here the numbers are large enough to be reliable except for the very highest category (N=68). The second observation is that these data confirm, as a reasonable approximation, the upper limit of 81 percentage points as the maximum for group data. This is consistent with many previous calculations based on other data.

It is also notable, however, that the income groups reflect more than simply differences in household income. As shown in Table 3.1, the category of <\$15,000 is very over-represented by single people on pensions and people who are unemployed. Since living alone and unemployment are both associated with low SWB, especially for males, these are additional and powerful influences on the low SWB of the <\$15,000 group.

3.1.2. *Personal Domains*

Statistical comparisons between income levels for all Personal Wellbeing Index and National Wellbeing Index variables using the combined data set of Surveys 7-17 are provided in Tables A3.4 and A3.5 respectively.

1. While Table A3.4 shows that the personal domains generally follow the pattern of the Index, there are a few exceptions. First, some domains are insensitive to the effects of income. These include the personal domain of community and the national domain of the Environment. This is so even though they are sensitive to differences between surveys. It is interesting that these are probably the least personalized (proximal) domains and, so, are likely the domains least affected by personal demographics.

It is notable that the only domain to show a significant income x survey interaction (left side of Table A3.3) is Achieving, and this was caused by the name change described in Chapter 2 and Section 2.3 below.

2. The other personal domains show a great deal of variation in both the income threshold that causes the domain value to change, and also in the degree of consistency between surveys.

- 2.1 In terms of income increments, satisfaction with health is sensitive to income. In each survey either the lowest possible increment (\$15-30K) or the \$31-60K has shown a significant difference from <\$15K. Interestingly, however, this sensitivity disappears at incomes higher than \$30K. That is, there are hardly any differences in health satisfaction between the groups with a household income >\$30,000 in the surveys.

This pattern likely reflects the fact that people in serious ill-health are likely to be over-represented in the lowest income groups. Thus, these groups, most particularly the <\$15 group, comprise an usually high proportion of people whose ill-health is so severe that the associated pain or stress is defeating SWB homeostasis. However, other people in this income group are undoubtedly healthy, and will have normal levels of health satisfaction. The consequence of this mixture is an overall low group mean and a large standard deviation. The standard deviation of the <\$15 group is predictably larger than that for higher income groups (Table A3.4), as it is also for the other domains.

- 2.2 The domain that shows the greatest sensitivity at high levels of household income is Standard of Living. The data show incremented levels of rising satisfaction up to \$91-120K in Surveys 7, 8 and 9, and many other instances where \$150+ > \$60-90K. This degree of enhanced sensitivity reflects the degree of match between the dependent and the independent variable. These differences have disappeared in Survey 17 and above due to the new income categories and small Ns. They will return as the cell Ns increase with the addition of further surveys.

- 2.3 The domain of Achieving has shown good discrimination between the income groups. The wording of this item changed in Survey 11 (from 'achieve in life' to 'are achieving in life') and this increased the discriminative capacity of the domain. Prior to this change the range of values across the income groups was about 6 points. The wording change has increased this to about 12 points. This is consistent with the new wording for this item being more appropriate for the Personal Wellbeing Index. The income discrimination occurs up to \$61-100K.

These data also allow an examination of the relative contribution of the domains to the income-sensitivity of the Personal Wellbeing Index. This can be done by observing the number of significant income group comparisons within each domain of Table A3.3 from Survey 7 to the present. These are as follows:

	Number of significant income-group comparisons with domains	% of total
Standard	- 139	31.2
Health	- 99	22.2
Achieve	- 63	14.2
Future Security	- 57	12.8
Relationships	- 56	12.6
Safety	- 31	7.0
Community	- 0	0.0
Total	- 445	100.0

This is interesting in demonstrating an enormous degree of difference between the domains in the extent to which they are influenced by household income. Over half of the influence (53.4%) is provided by the two domains of Standard of Living and Health. The contribution of the others is generally unreliable, being present in some surveys but not others except for Community which is insensitive to income.

2.4 It is notable that 'community' is insensitive to income.

3.1.3. Domain Discrimination with Income

The actual percentage point differences in the Personal Wellbeing Index domains between the highest income group with reliable data (\$251-500K) and lowest (<\$15K) income groups within each domain (Table A3.4) are shown below.

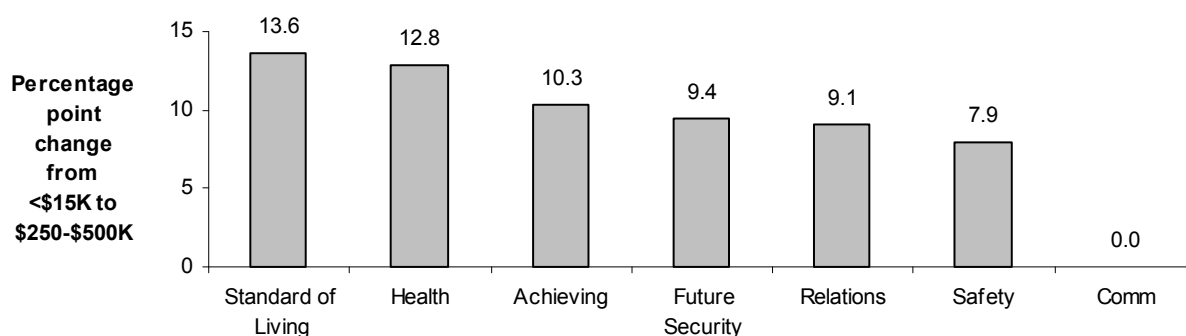


Figure 3.3: Magnitude of Difference Within the Personal Domains from <\$15K to \$250-500K

This is a logical sequence, in that the top three domains can be more easily 'bought' than the three lowest. Standard of Living is most obviously related to income, while good medical care can also be purchased, and people may gain a sense of achievement by having a household income that is higher than average. On the other hand, safety is hard to purchase. People who feel unsafe may not be able to purchase arrangements that make them feel safe. And connection to others, either via relationships or community, requires personal effort rather than wealth.

These results provide important information for interventions designed to enhance wellbeing. Very often such interventions concentrate on the inter-personal domains, and whether these domains are amenable to change through such interventions, when they are not very amenable to change via wealth, is an interesting issue.

The second point worth noting is that this domain order shows some relationship with multiple regression analyses that study the contribution of each domain to 'Satisfaction with Life as a Whole' (Table A2.17).

Table 3.3: Rank Order of Domains

	Points change with income	Rank	Predicting Life as a Whole Survey 4	
			β	Rank
Standard	13.6	1	.28	1
Health	12.8	2	.04	6
Achieving	10.3	3	.27	2
Relationships	9.1	5	.16	3
Safety	7.9	6	.03	7
Community	0.0	7	.05	5
Future	9.4	4	.06	4

The Spearman Rank Order coefficient between these two rankings is .464, which falls well short of significance (critical value .714). This discounts the possibility that the sensitivity of the domains to household income is related to the contribution made by the individual domains to ‘life as a whole’.

3.1.4. Personal Wellbeing Index Changes Across Surveys x Income

Table A3.6 provides these results. There is an overall trend of decreasing wellbeing with time within the lower income groups. Within three lowest income brackets there are six significant differences and all are in the direction of higher means in earlier surveys. There does not appear to be any coherent pattern across the income surveys.

3.2. Income and Gender

The gender distribution of income shows more females in the lower income groupings (Table A3.8). This is mainly a consequence of relative longevity. More females live in single-pension households.

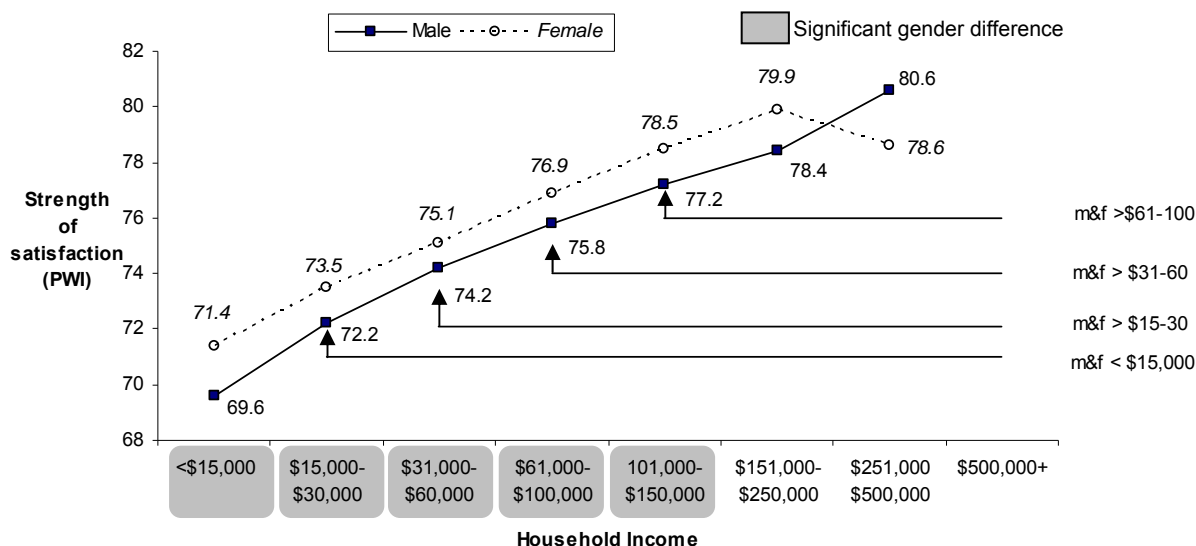


Figure 3.4: Gender x Household Income (combined data)

Females tend to have higher wellbeing at all incomes except the highest. The shape of these slopes are similar. Both genders show a significant and progressive rise in Personal Wellbeing up to \$101-150K. Thereafter, increased income provides no reliable increase in wellbeing for either gender. However, this lack of significance is more related to small N values than to the Personal Wellbeing Index mean scores, which continues to rise.

In summary, the higher wellbeing of females is evident throughout the range of incomes and both genders conform to the incremental wellbeing increase with rising income shown in Figure 3.1.

3.3. Income and Age

The age distribution of income is provided in Table A3.9 for Survey 18 and Table A3.10 for the combined survey data. These show a concentration of low income in the groups aged 66+ years. It can also be seen from the combined survey data that the most elderly group has the highest level of personal wellbeing despite having the lowest household income. This indicates a decreased reliance on money, as an external resource. These people have a level of personal wellbeing that is much more highly controlled by internal factors.

The following figure comprises data taken from Table A3.10.

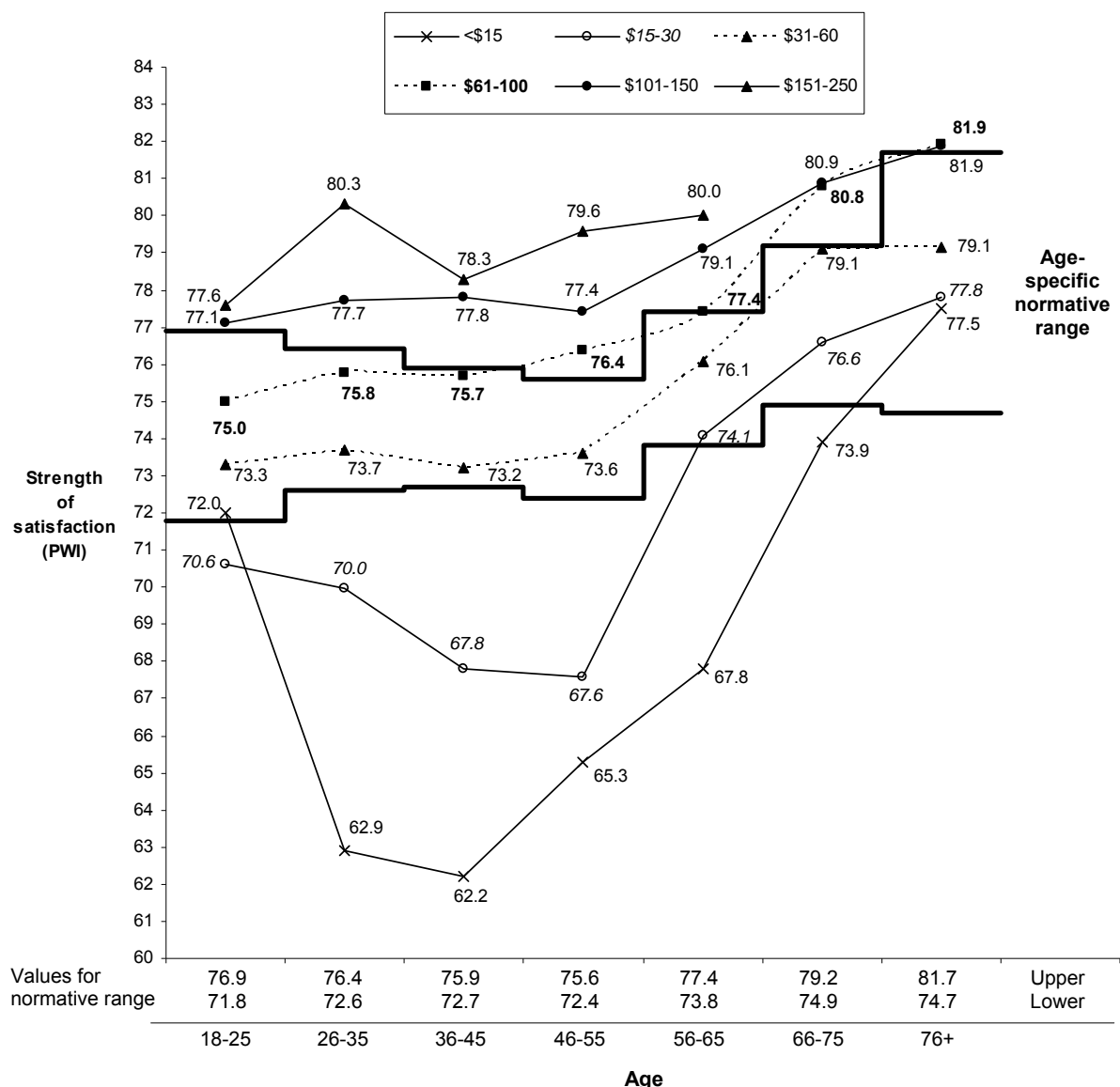


Figure 3.5: Income x Age (combined data)

The most obvious feature of this figure is that low household income is seriously compromising the wellbeing of people aged 26-55. The value of 62.2 points at 36-45 years is extremely low and it is clear that these people are living in situations where personal wellbeing is being severely damaged by their life circumstances. The people in such households clearly require assistance.

It can also be seen that:

- (a) The effects of low household income to reduce middle-age wellbeing is evident for the two lowest income groups. At an income of \$31-60K wellbeing remains within the normal range for all ages.
- (b) There is a clear rank-order of wellbeing that reflects household income. This is pretty well maintained at all ages but is most pronounced in the normal working age-range of 26-65 years.

3.3.1. Income x Age x Gender

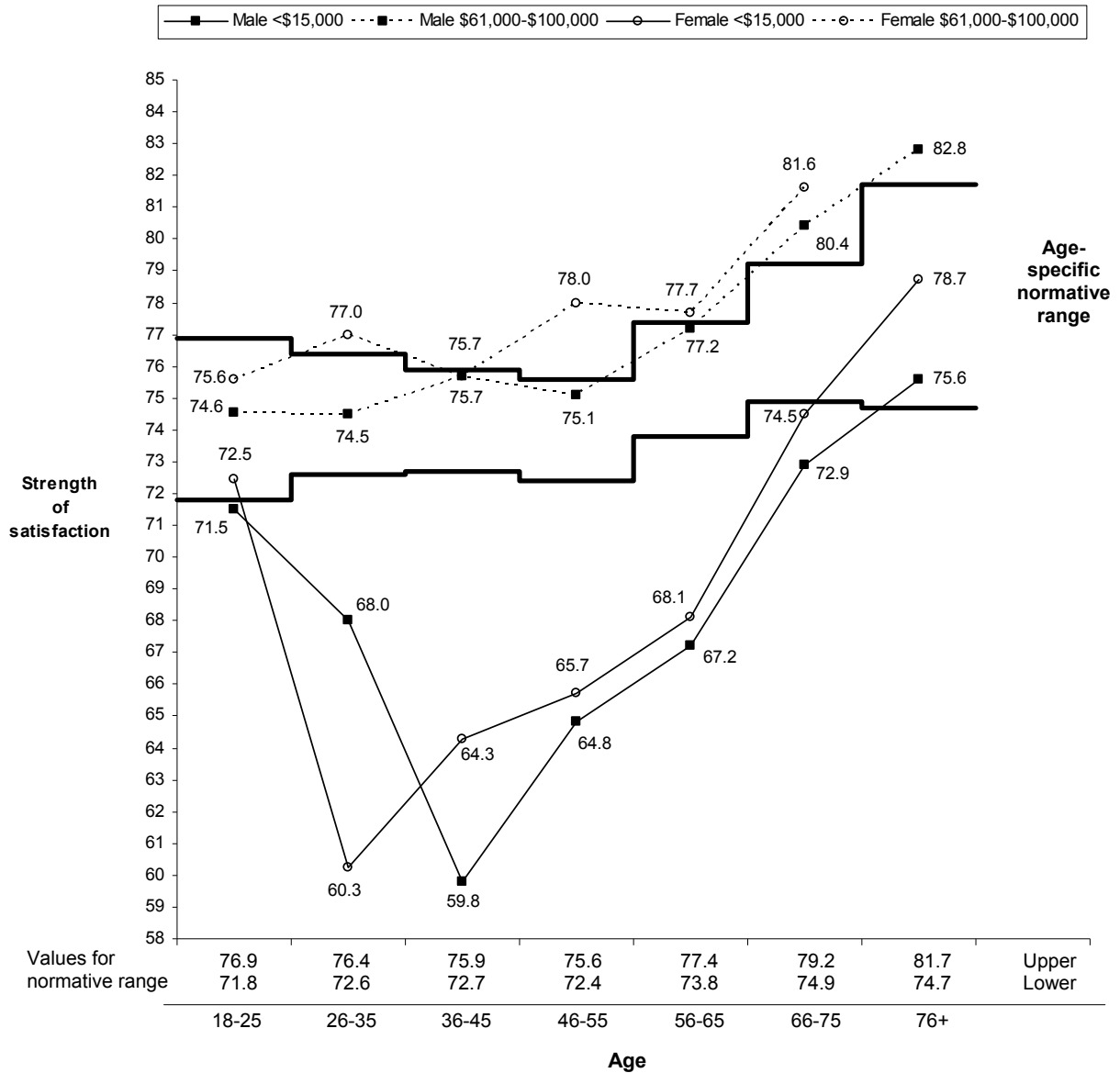


Figure 3.6: Income x Age x Gender (combined data)

These data are taken from Tables A3.11 and A3.12. In general it can be seen that the generally higher wellbeing of females is evident. However, there is a curious reversal in the low income groups aged 26-35 years in which females have lower wellbeing than males. This may be due to marital status with more females in this age group being sole parents. This requires further investigation.

3.4. Regression of PWI Domains against Life as a Whole

Tables A3.26-A3.32 show the regressions of the seven Personal Wellbeing Index domains against 'Satisfaction with Life as a Whole' across the range of household income. A summary is provided in Table A3.31. The relative proportion of explained and unique variance is shown below:

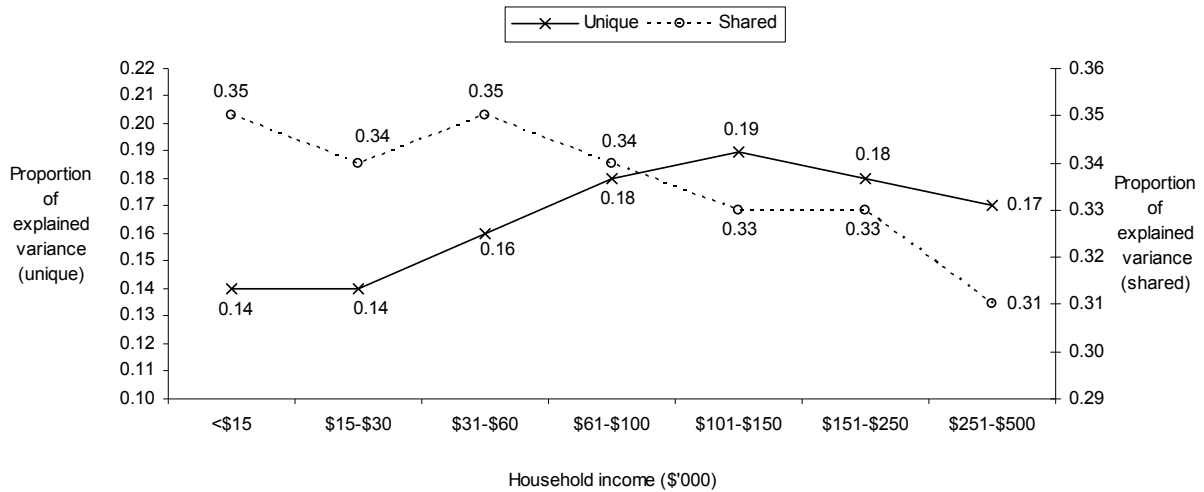
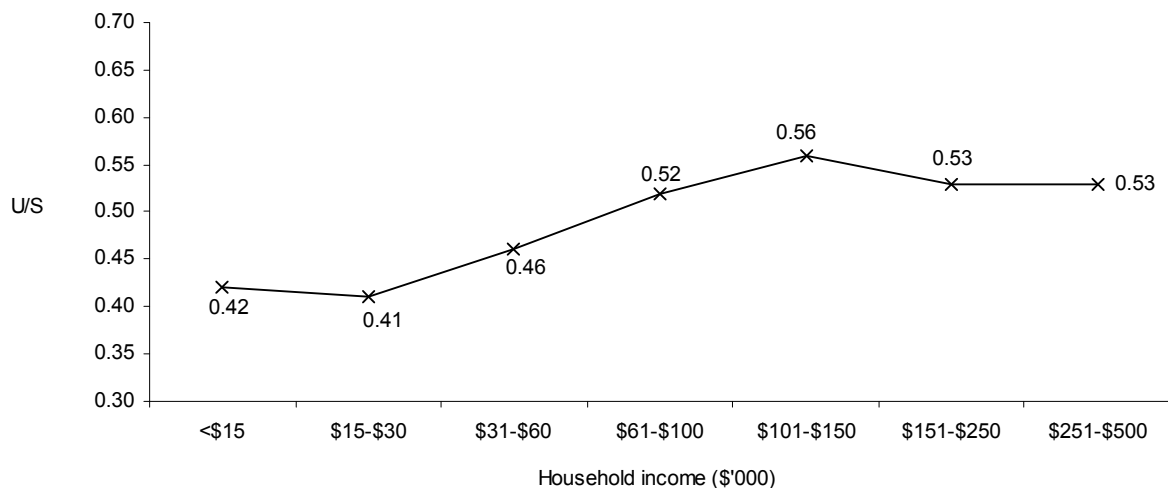


Figure 3.7: The Proportion of Unique and Shared Variance by Income

As can be seen, while there is little variation in both sources of variance, they both seem to show systematic trends. The variation in the shared variance component is just 4 percentage points (from 31% to 35%) and its trend-line is down. The variation in the unique variance is slightly higher at 7 percentage points (from 14% to 21%) and its trend-line is rising up to \$121-150K, after which it falls. The total R^2 also ranges over 6 percentage points (from 48-54%).

The first conclusion from this is that the Personal Wellbeing Index works well at all levels of household income. The second is that the domains capture more unique than shared variance as household income rises. This is shown below.



Key: U/S = Unique variance divided by shared variance

Figure 3.8: The Proportion of Unique/Shared Variance by Household Income

This indicates that, as income rises, the domains play a larger role in explaining the total variance. This is consistent with the progressive release of domains from the influence of homeostatic failure due to low income. It can be seen that this rise continues up to \$91-120K after which there is no further systematic increase. This is the same income level that shows the maximum rise in its effects on levels of wellbeing (Figure 3.1).

In order to investigate changes in the individual domain contributions these are plotted below:

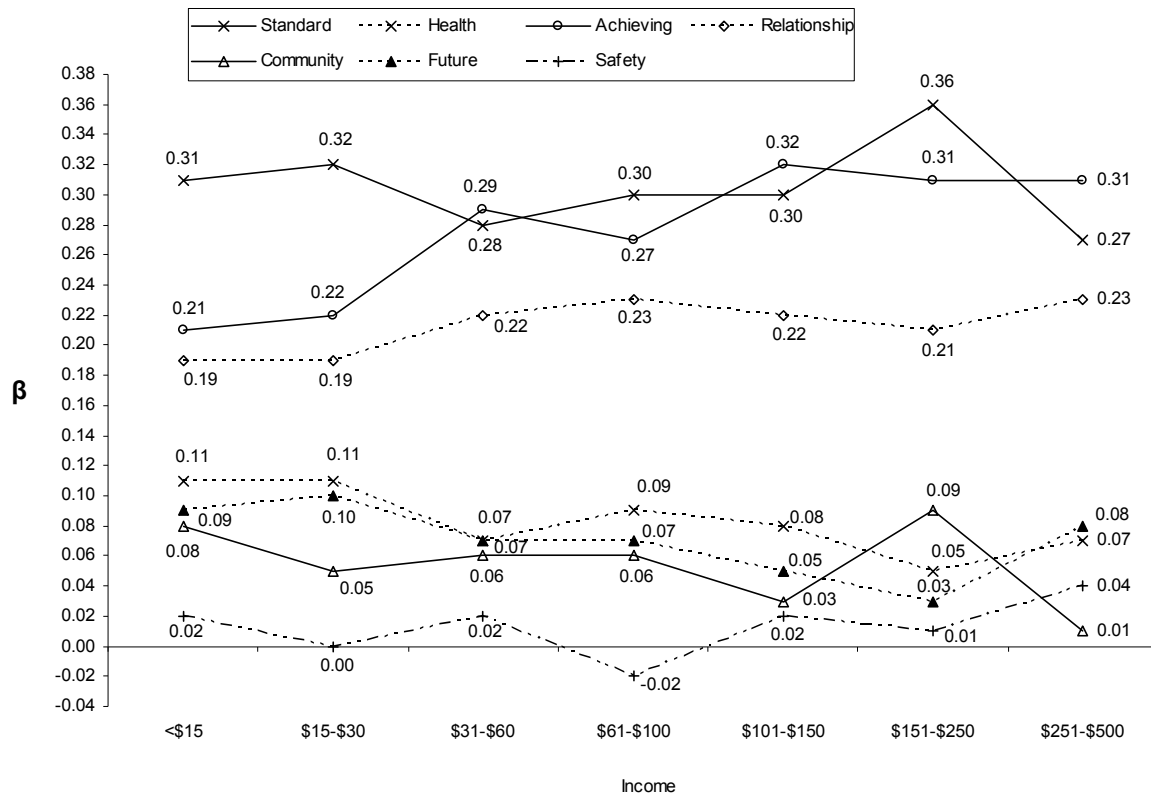
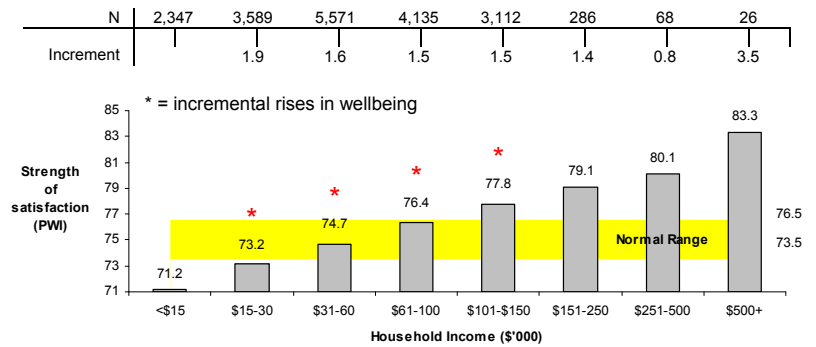


Figure 3.9: Domain Variance Contributions x Income (combined data)

These data are drawn from Tables A3.26 to A3.32.

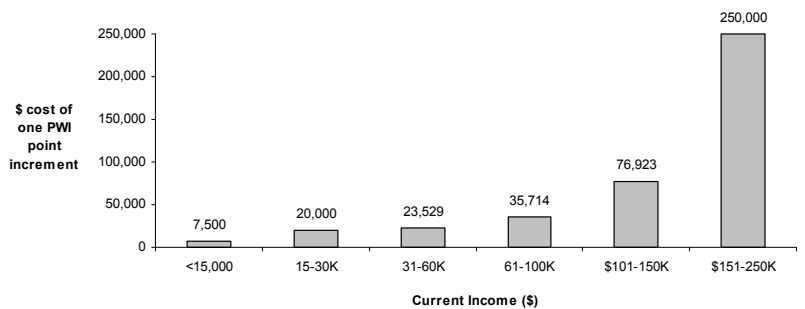
Dot Summary Points for Household Income:

1. Personal wellbeing consistently rises with income up to \$101-150K. The 6.4 point gain over this range is associated with a change in wellbeing from below to well above the normative range. Whether the rise in SWB becomes significant beyond \$101-150K will be revealed by the addition of further data.



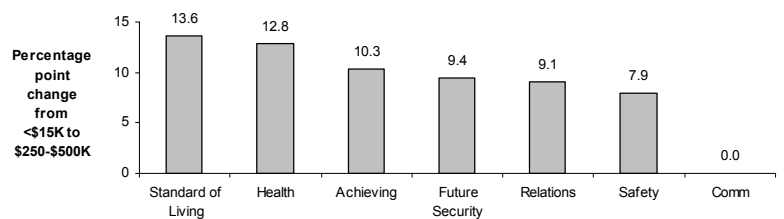
Wellbeing reliably rises with income only up to a household income of \$101-150K.

2. The cost of increasing happiness increases with income. One additional percentage point of wellbeing for someone with a household income of \$151-250K is an additional \$250,000.



As household income rises it becomes much more expensive to buy an extra point of wellbeing.

3. Income has the largest effect on the domain of satisfaction with Standard of Living. It has no systematic influence on satisfaction with Community Connection.



Income has no reliable influence on feeling connected to the community.

4. Gender

4.1. Overall Distribution

The sample comprised 490 males (50.0%) and 490 females (50.0%) (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.

4.2.1. Personal Wellbeing Index

On average, across all surveys, females rate themselves 1.1 percentage points higher than males on the PWI (Table A4.2; Figure 4.1). The shaded surveys in this figure indicate those with a significant gender difference. The gender x survey interaction is significant. In this current Survey 18.1, the gender difference is not significant and this is the sixth survey in a row to show this result. This is a unique pattern over the seven years of these surveys.

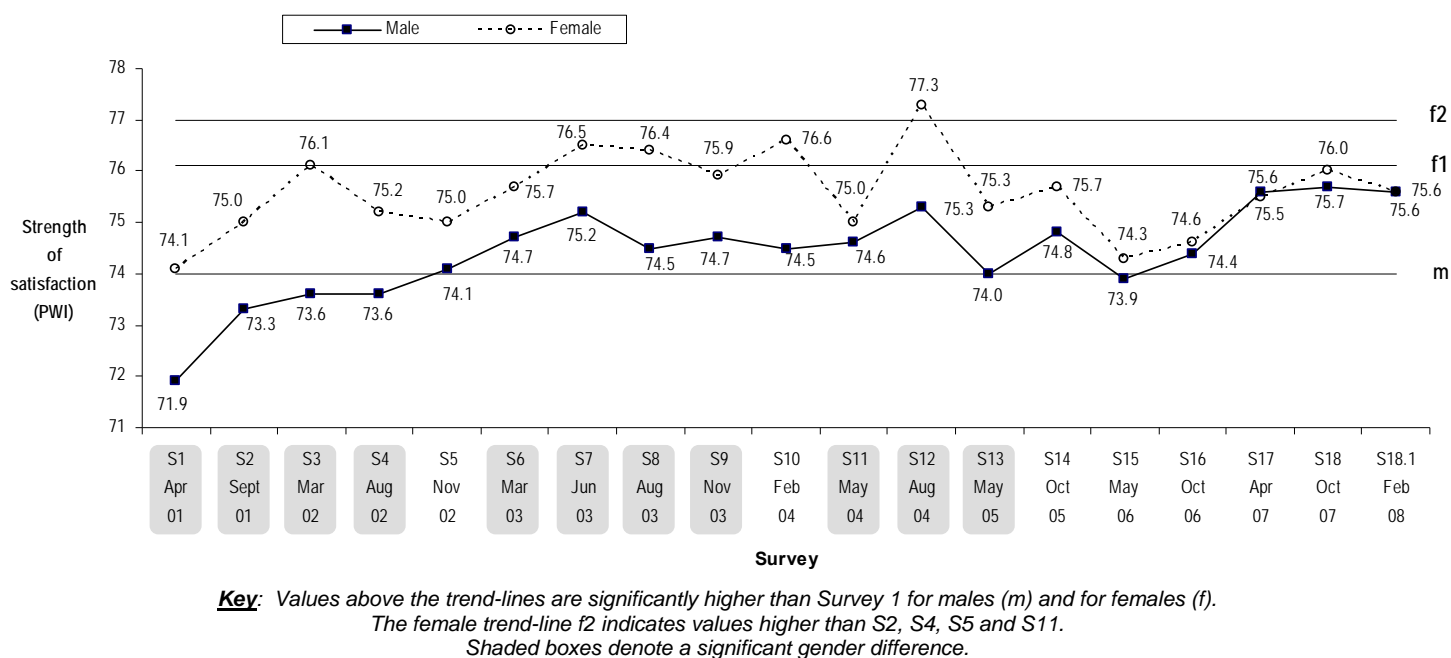


Figure 4.1: Gender x Survey: **Personal Wellbeing Index**

The gender difference in Survey 17 of 0.1 points was the first time that the male Personal Wellbeing Index had numerically (but not significantly) exceeded the female score and the male values over the past three surveys have been the highest yet recorded, being 3.8 points higher than at Survey 1. The surveys since October 2005 (S14) seem to herald a new era for gender differences in the Personal Wellbeing Index. Using the reference point of the first survey, the female scores became significantly higher after one year (S3, March 2002) and remained variably higher over the next 2-5 years (S12, August 2004) with 5/10 surveys during this period being higher than Survey 1. Then the female values returned to normal, with the last six surveys, since Survey 13 in May 2005, being no different from Survey 1.

The male scores, on the other hand, first rose to be higher than Survey 1 at Survey 6 (March 2003) and have essentially remained at this higher level ever since. The interaction between the genders over surveys is significant (Table A4.2). This coming-together of the gender values has been caused by an

increase in male wellbeing. The male levels of Personal Wellbeing Index are currently 3.8 points above the male level at Survey 1 and this difference is significant (Table A4.2). The Personal Wellbeing Index for the females is a non-significant 1.4 points higher than Survey 1. The reason for this selective rise in the wellbeing of male is not known.

Also remarkable is the consistency of the separation between the genders over the 17 surveys, which has varied from +0.1% at Surveys 17, to -2.5% at Survey 3. In other words, the degree of separation has varied by a maximum of 2.6 percentage points. No precedent exists in the literature for such consistency in survey data. It is also notable that this 2.6 point variation is less than the range of both male (3.8 points) and female (3.2 points) Personal Wellbeing Index scores across the surveys, showing that they are tending to move up or down together.

4.2.2. Personal Wellbeing Domains

All of the domains except Safety show an overall higher level of satisfaction for females across the surveys (Table A4.2). Safety, on the other hand, is higher for males and is shown below.

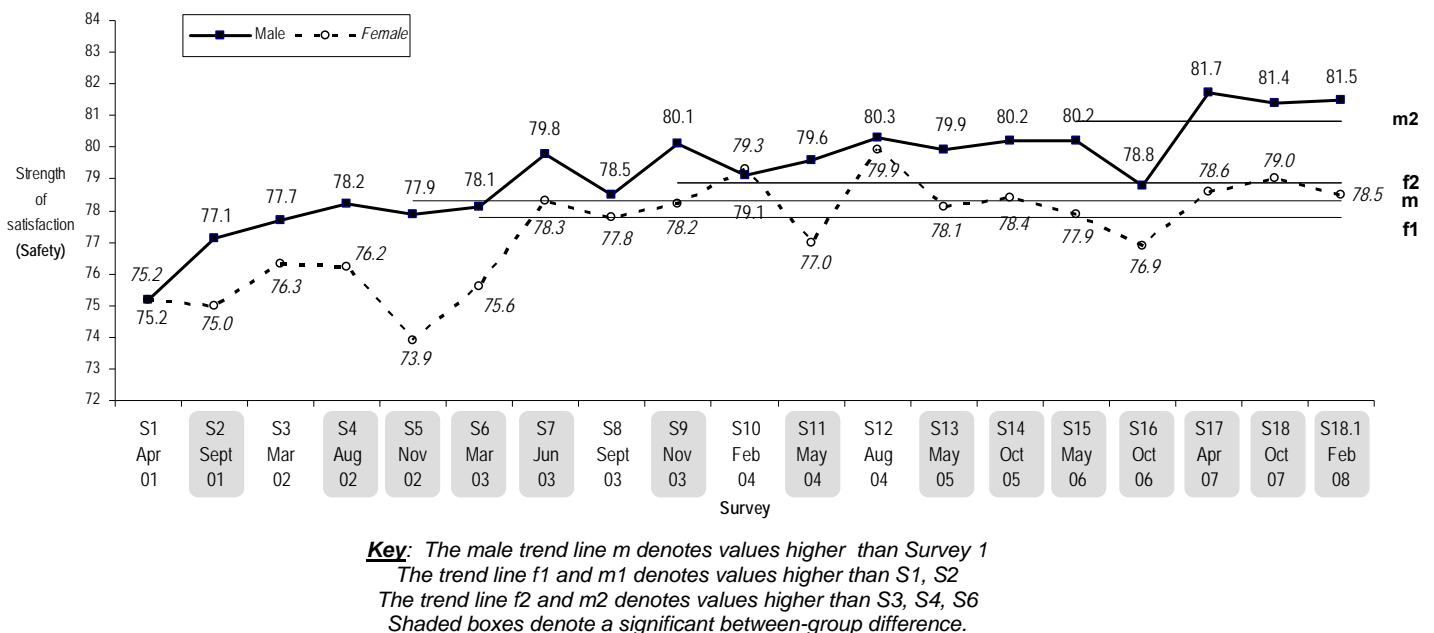


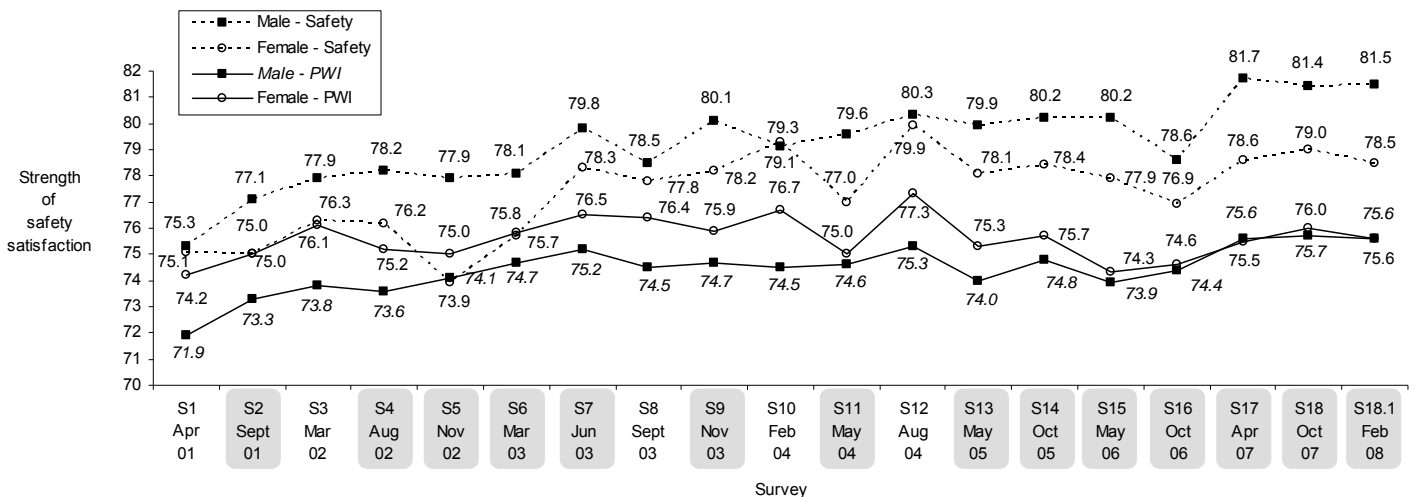
Figure 4.2: Satisfaction with Safety across all Surveys

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

- (a) It is the only domain to be generally higher in males. This has occurred on 14/19 occasions (shaded).
- (b) The satisfaction with safety for males has risen significantly since Survey 16 and the last three recordings have represented its highest levels yet recorded. It is significantly higher than seven previous surveys. It is also the highest male domain, being 5.4 points higher than satisfaction with relationships.
- (c) Safety, split by gender, is the domain that is most sensitive to the events that have been impacting on population wellbeing. The trend lines for both males and females (Figure 4.2) generate 67 significant differences within gender across the surveys (Table A4.2). The next highest is Future Security with 47 significant differences. The maximum ‘safety’ value for females occurred at Survey 12 (Olympics). The maximum value for males (81.7 points) occurred at Survey 17 and is 6.5 points higher than it was at Survey 1. The maximum female

value (79.9 points) is 4.7 points higher than at Survey 1. This is a remarkable degree of correspondence.

- (d) Safety is one of the three domains to produce a significant gender x survey interaction. The interaction is caused by the rising trend of female safety lagging behind males between Survey 1 and Survey 7. Whereas male safety satisfaction rose significantly by Survey 4 (one year following September 11) female safety did not rise until Survey 7 (10 months later following the end of the Iraq war). Following the end of Iraq war (S7) the safety of both genders was held above Survey 1 for a period of nine months. At 12 months following the war (S11) female safety fell to be no different from Survey 1 while male safety remained higher.
- (e) Safety is the only domain that fails to contribute unique variance to the prediction of satisfaction with Life as a Whole (see Cummins et al., 2003b). And this gave rise to a discussion in Report 11.0 as to whether safety should be considered a domain of the Personal Wellbeing Index. However, analysis of data from the International Wellbeing Group (see manual for the Personal Wellbeing Index) indicates that safety does contribute unique variance to 'life as a whole' in some other countries. Thus, while it may be regarded as a 'sleeper' domain in Australia, its inclusion in the Personal Wellbeing Index is far from gender-neutral as the following figures shows:

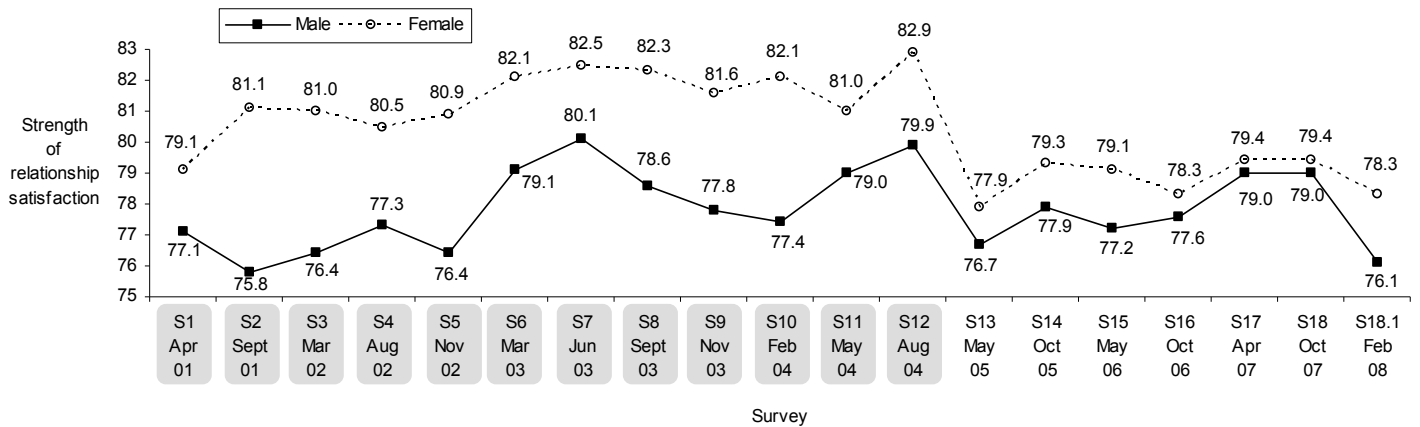


Key: Shaded boxes denote a significant gender difference for safety.

Figure 4.3: Gender x Survey (Safety and Personal Wellbeing Index)

In the figure above, safety is plotted along with the Personal Wellbeing Index for each gender. What is evident from this Figure is that for females, the domain of safety tends to approximate the value of the whole index. The largest discrepancy from the Personal Wellbeing Index is 3.6 points at Survey 15. This is not true, however, for males. Here the safety domain lies consistently and substantially higher than the male Personal Wellbeing Index. The lowest discrepancy is 3.4 points (S1) and the largest is 6.3 points at Survey 15. Thus, the inclusion of safety in the Personal Wellbeing Index acts to reduce the overall Index advantage for females. It will be interesting to determine whether this also occurs in other countries.

The second domain that shows a significant interaction between gender and surveys is Relationships (Table A4.2).



Key: Shaded boxes denote a significant gender difference.

Figure 4.4: Gender x Survey (Relationship Satisfaction)

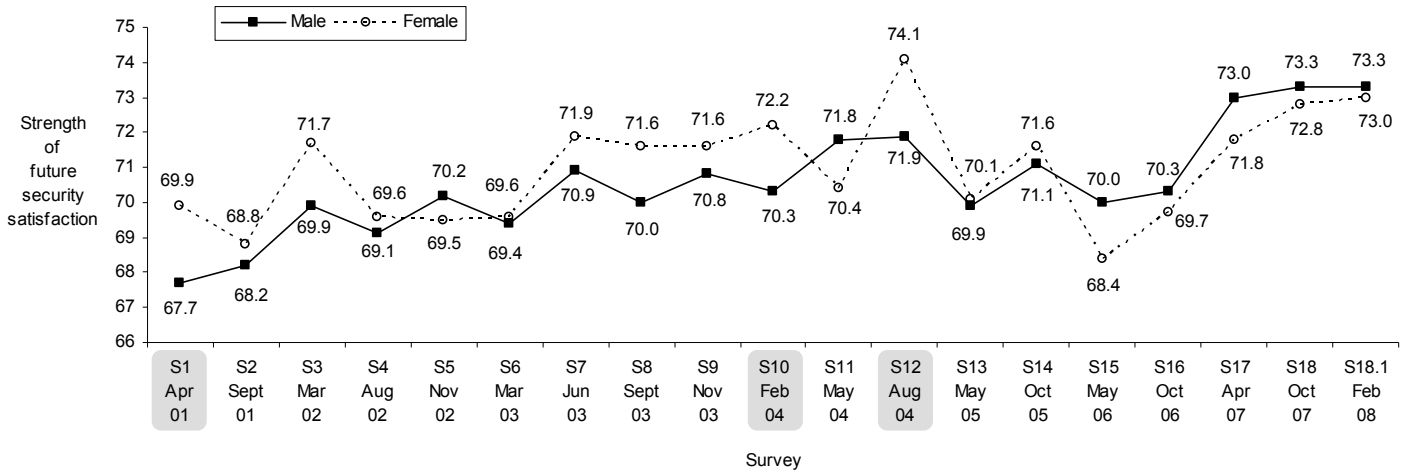
Relationship satisfaction has fallen since the previous survey, for both genders, but only significantly for males. The value for males is the second lowest on record, have fallen 2.9 points since the previous survey.

Over the first 12 surveys, females had higher relationship satisfaction than males. However, following Survey 12 (Olympics) the pattern has dramatically changed, with none of the next six surveys showing a significant gender difference. In fact, the gender difference in Relationships was quite marginal at Survey 1 (2.0 points, $p = .036$) and the values for relationship satisfaction for both genders have returned to be no different from Survey 1. The current gender difference is 2.2 points.

From this it appears that:

- (a) Following September 11 (at S2 for females) and the pre-Iraq war (at S6 for males) relationship satisfaction became stronger.
- (b) This rise was maintained for females, was more variable for males but, for both genders, returned to Survey 1 values in the post-Olympic period (S13-15). The value for Relationship satisfaction for both genders is now <2 percentage points different from its value at Survey 1.
- (c) It is possible that the sense of threat through either armed conflict or international sporting competition caused an increased sense of interpersonal bonding reflected by increased relationship satisfaction. Since there has been no such concern over the past 2 years, relationship satisfaction has returned to normal.

The third domain to show a gender x survey interaction is satisfaction with Future Security. This is shown in Figure 4.5 below.



Key: Shaded boxes denote a significant gender difference.

Figure 4.5: Gender x Survey (Future Security Satisfaction)

Male satisfaction with Future Security is at its highest level yet recorded. It is 5.9 points higher than at Survey 1 and is significantly higher than six of the previous surveys. Female satisfaction is no different from its level at Survey 1 but is higher than the five previous surveys.

The persistent rise in male satisfaction with future security is hard to understand. It may be related to consistently good economic conditions and the continued presence of terrorist attacks and armed conflict outside Australia.

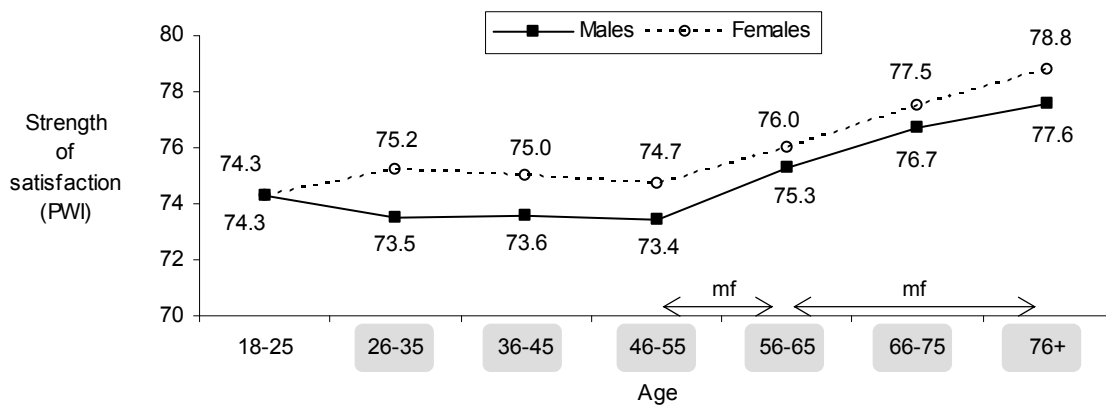
4.3. Gender and Age

4.3.1. Personal Wellbeing Index

Gender differences with age

Table A4.3 shows no age x gender related differences between Surveys 18 and 18.1. While differences were recorded between Survey 16 and 17, it is not clear what might be responsible for such inconsistency.

Table A4.4 provides the Gender x Age analysis using the entire database from all surveys. The combined PWI data are shown below (minimum N=1,081 for Male 76+y).



Key: Ages linked by ↔ are significantly different for males (m) and for females (f). Shaded boxes denote a significant gender difference.

Figure 4.6: Gender x Age: Personal Wellbeing Index (combined surveys)

For both genders there is a highly consistent age-related change in the Personal Wellbeing Index. The initial rise in wellbeing occurs at 56-65 years for males and 66-75 years for females, at which age the Personal Wellbeing Index rises higher than the younger age-groups. A second rise occurs at 66-75y (significant only for males), and a third rise at 76+ years. Further discussion of these changes is provided in the chapter on Age.

The pattern of age-related change in the Personal Wellbeing Index is different between genders, with the age x gender interaction being significant ($p = .03$) (Table A4.4). As can be seen from Figure 4.6 differences between genders (shaded) are significant between all age groups except the youngest group.

The most interesting aspect of this comparison is the systematic change in the gender difference with age, as shown below.

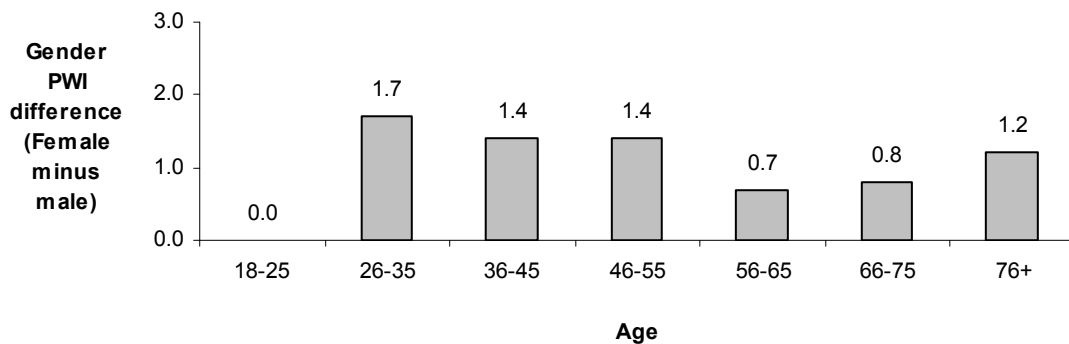


Figure 4.7: Gender x Age: **Female PWI minus Male PWI (combined data)**

There is a very systematic pattern of gender difference in personal wellbeing that emerges initially, and most strongly, within the 26-35y groups, and thereafter diminishes.

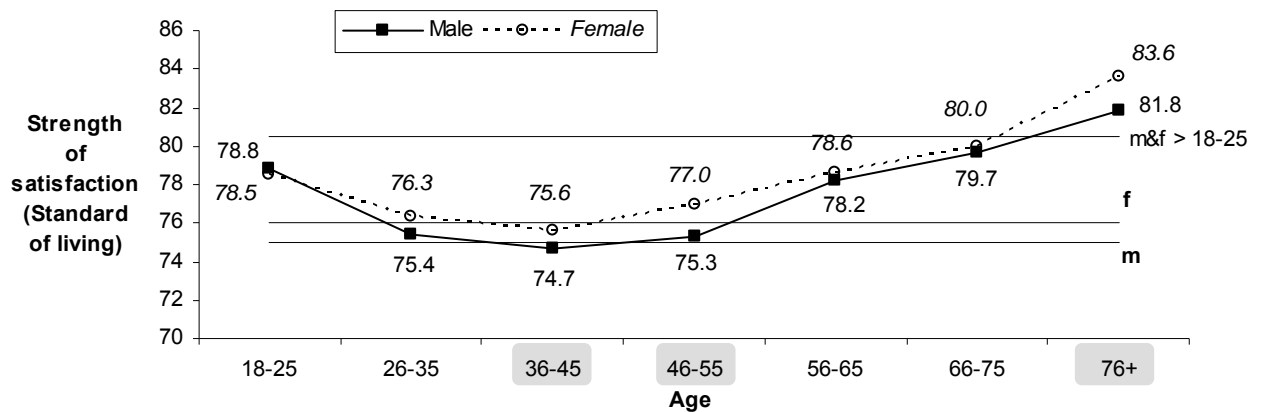
This lack of a gender difference at 18-25y is so anomalous that Table 4.5 presents these data across all surveys for verification. As can be seen, not one survey has produced a significant gender difference at this age.

Report 11.0 investigated whether this marked gender difference for the two youngest groups applies to the individual domains. Figure 4.8 in that report revealed that the apparent simplicity of the sudden increase in the magnitude of gender differences from 18-25 to 26-35 years is not replicated at the level of domains. While three domains (eg. Standard of Living) show the same pattern as the overall Personal Wellbeing Index, others show no age-related change (Relationships) or even the reverse pattern (Future Security). No simple pattern can be discerned.

The reason for the sudden appearance of a gender wellbeing difference at 26-35 years remains mysterious.

4.3.2. Gender x Age: Domains

4.3.2.1. Standard of Living



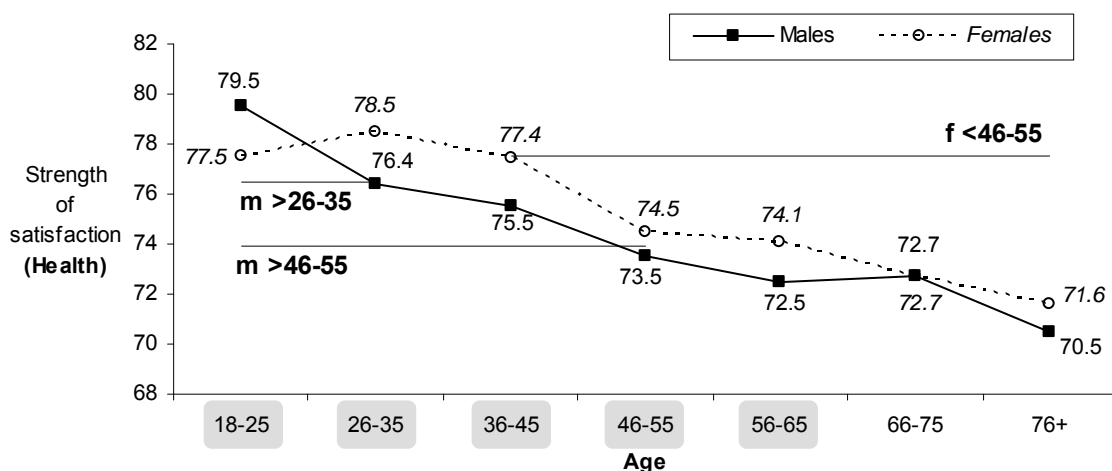
Key: Values above the trend-lines are significantly higher than 36-45 for males (m) and for females (f). Shaded boxes denote a significant between-group difference.

Figure 4.8: Gender x Age: **Standard of Living** (combined data)

With the exception of the youngest group, females tend to be more satisfied with their standard of living than males. However, the age-trends for standard of living are very similar for both genders (Table A4.4) and there is no gender x age interaction. From an initial value of about 78.5 points, satisfaction for both genders falls significantly to reach a low at 36-45 years. It does not significantly rise until 56-65 years, at which age it reaches a level of equivalent to the 18-25y group. The level of satisfaction continues to increase until, at 76+ years, it exceeds both the 18-25y level and the 56-65y level.

This pattern is remarkable in the extent to which it is the reverse of household income. The middle-age groups have the highest income, and the oldest groups have the lowest income. It may reflect disposable income but this cannot be determined from the current data. Whether this pattern is caused by child-related expenditure is worthy of future investigation.

The pattern of Figure 4.8 is also shown by the domains of Achievements and Community Connectedness (Table A4.4). The other domains, however, exhibit a rather different pattern as follows:



Key: Values above the trend-lines are significantly higher than the designated groups for males (m) and for females (f). Shaded boxes denote a significant between-group difference.

Figure 4.9: Gender x Age: **Health** (combined surveys)

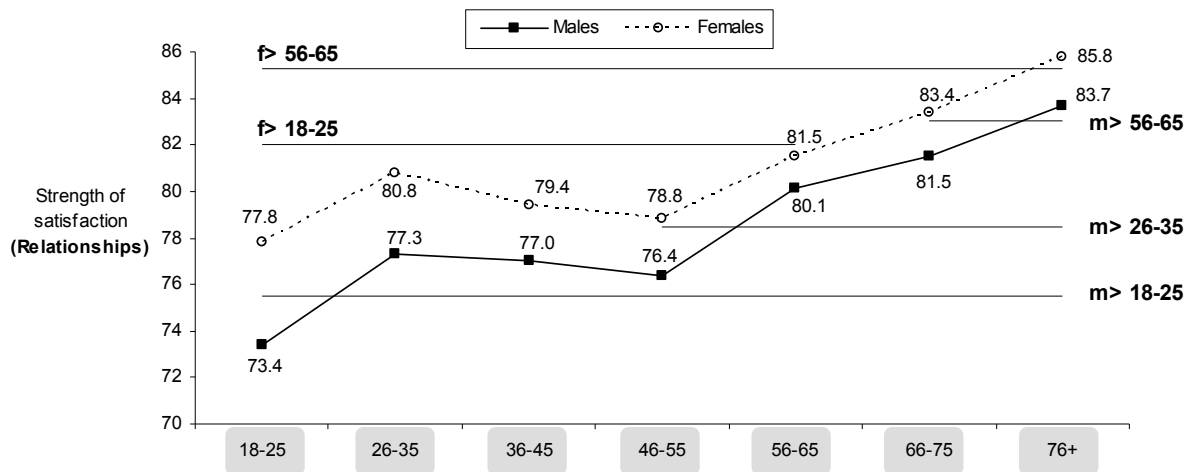
Satisfaction with health shows a significant gender x age interaction ($p=.000$). At 18-25 years satisfaction with health is higher for males (Table A4.4 : $p=.002$ Minimum $N=1,583$). Thereafter the two genders show a very different pattern of change.

Male health satisfaction shows an immediate drop of 3.1 points between 18-25 and 26-35 years. Thereafter it stabilizes, only to fall significantly again at 46-55 years.

Female satisfaction, on the other hand, remains steady over the 18 to 45 years, until falling sharply by 2.9 points at 46-55 years. From that age it gradually decreases, also at about 1 percentage point per decade.

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. From 66 years and older there is no gender difference in health satisfaction.

4.3.2.2. Relationships



Key: Values above the trend-lines are significantly higher than the designated age groups for males (m) and for females (f). Shaded boxes denote a significant between-group difference.

Figure 4.10: Gender x Age: **Relationships** (combined surveys)

Even though the gender difference is significant at each age group (minimum $N = 1,039$), there is also a significant interaction ($p = .027$). It is apparent that the gender difference in relationship satisfaction diminishes with age.

4.3.2.3. Safety

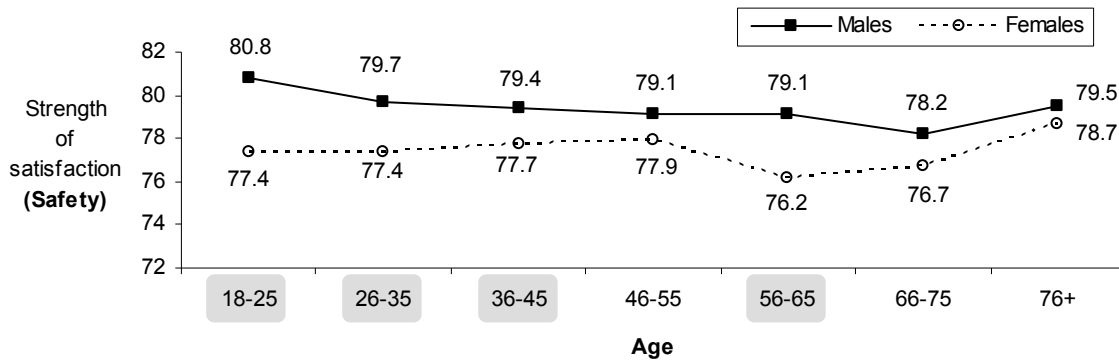


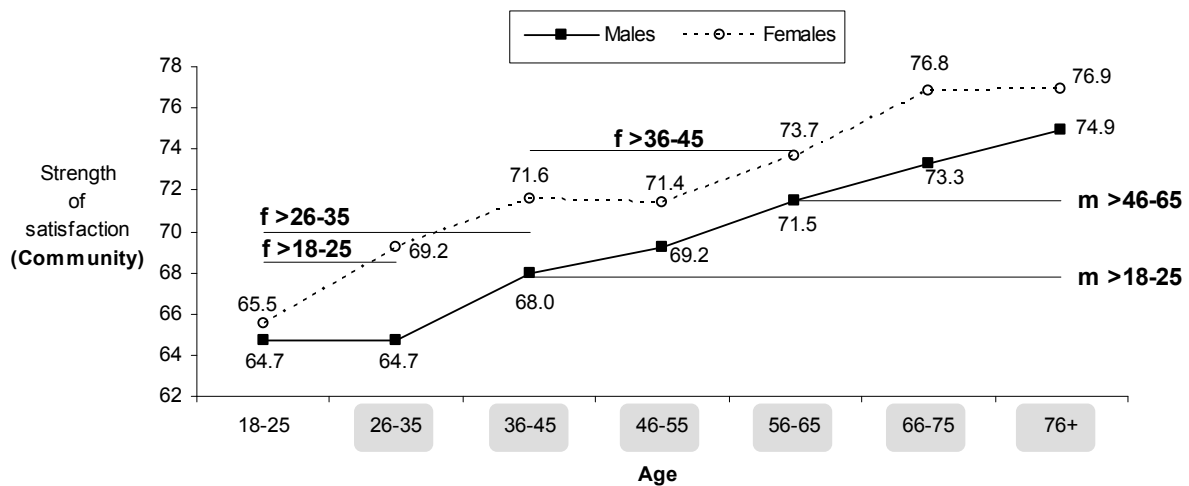
Figure 4.11: Gender x Age: **Safety** (combined surveys)

There is a significant gender x age interaction ($p=.011$) reflecting convergence between the genders with increasing age. Gender difference in satisfaction with safety does not occur beyond 66 years (Minimum $N=1,042$).

Across the ages, both genders show their lowest level of safety satisfaction quite late in life, at 56-65 years for females and 66-75 years for males. This trend then reverses, with safety rising for the oldest groups.

4.3.2.4. Community

The other gender x age interaction occurs for Community ($p=.000$) and is shown in Figure 4.12 below (minimum cell size = 1,071).



Key: Values above the trend-lines are significantly higher than the designated groups for males (m) and for females (f). Shaded boxes denote a significant between-group difference.

Figure 4.12: Gender x Age: **Community Connection** (combined surveys)

While both genders show increasing satisfaction with Community Connection as they get older, there is no gender difference within the 18-25y group. Moreover, whereas females show a marked 3.7 point increase in satisfaction from 18-25 to 26-35, males show no change (0.2 points). Over the following decade, however, male satisfaction increases by 3.2 points.

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. It could also be tied to an earlier age for marriage by females.

NORMATIVE DATA

4.4. Normative Data Based on Individual Scores

4.4.1. *Personal Wellbeing Index*

The normative data for individuals on the Personal Wellbeing Index are presented below derived from the individual values of 14,499 males and 16,114 females (Table A4.14).

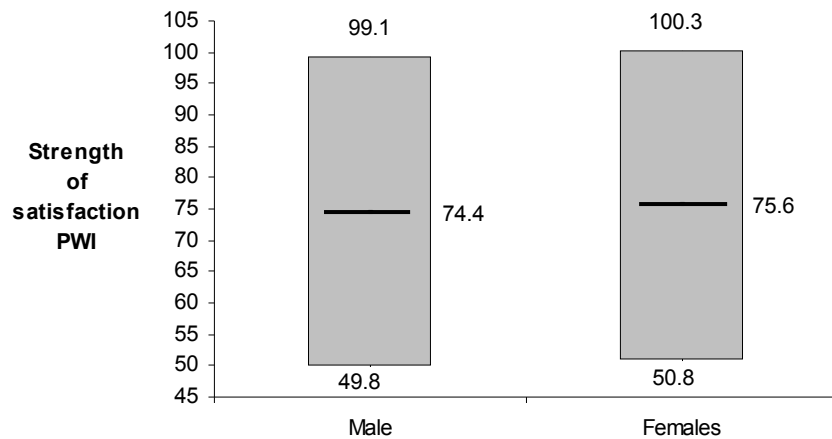


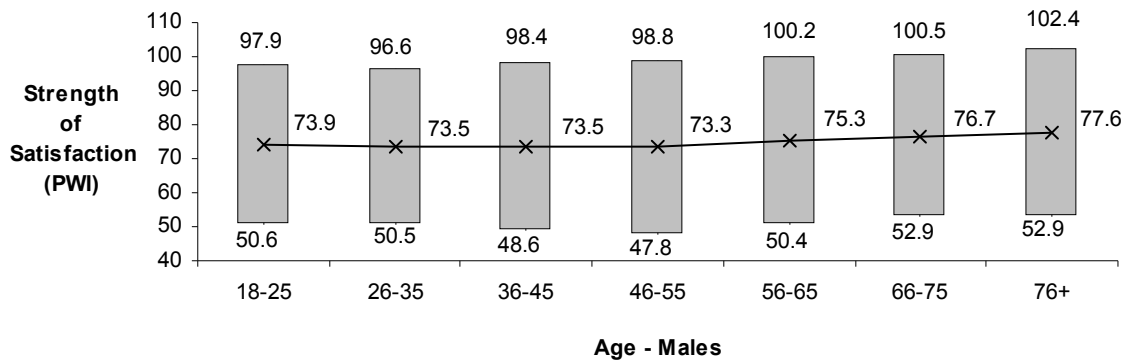
Figure 4.13: Gender Normative Data for Individuals: **Personal Wellbeing Index**

The vertical bars represent two standard deviations around the mean. In contrast with the normative data for household income, the groups that differ have approximately the same degree of difference at the top of their distributions (1.2 points) as at the bottom (1.0 points). This is also reflected in the mean score difference (1.1 points) indicating a symmetrical advantage to females throughout the distributions.

4.4.2. Age Norms (individual scores)

These normative data are taken from Table 2 A4.4.

4.4.2.1. Male Norms x Age



4.4.2.2. Female Norms x Age

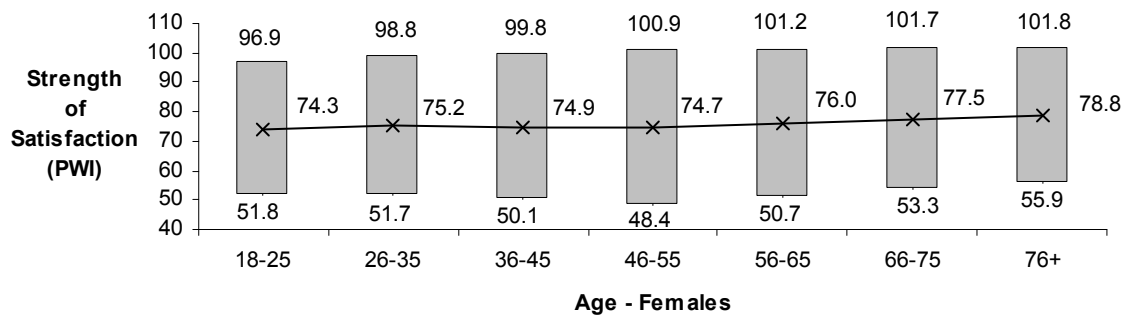


Figure 4.14: Gender x Age: Normative Data for Individuals: **Personal Wellbeing Index**

It is apparent that there is greater gender variation at the bottom of these normative ranges than at the top. The following two figures show this in more detail.

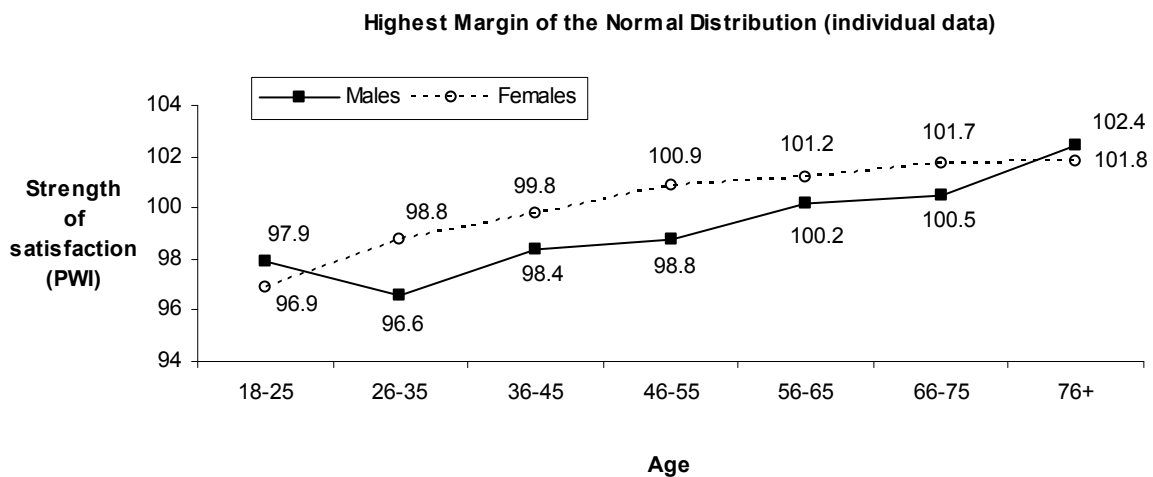


Figure 4.15: Gender x Age: **Highest Margins of the Normal Range Calculated from Individuals**

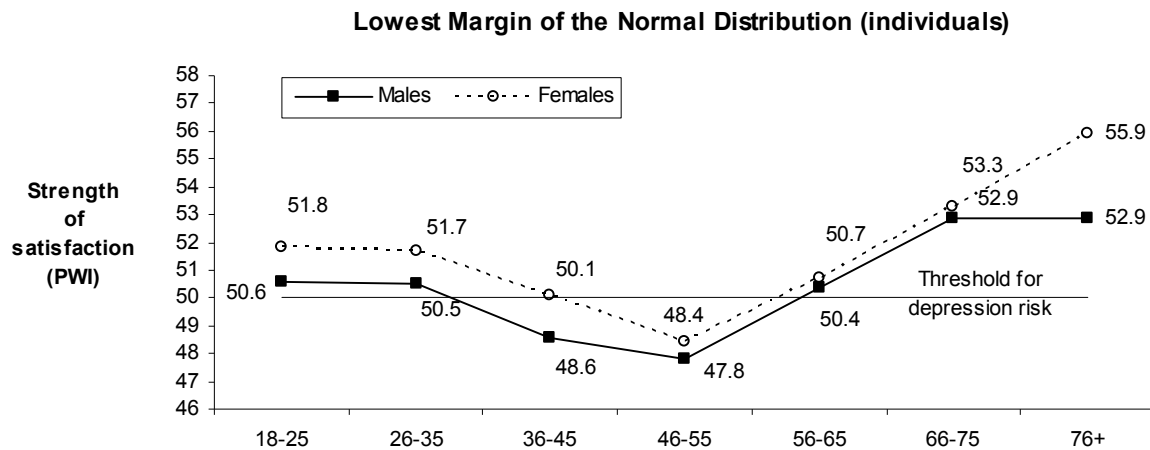


Figure 4.16: Gender x Age: **Lowest Extent of the Normative Range Calculated from Individuals**

In relation to these two figures the following observations can be made:

1. The top and bottom of the distributions change with age in quite different ways. The top of the ranges gradually increases with age Figure 4.15. The bottom of the ranges shows a bi-phasic pattern, where the range extends downward to 46-55 years, after which it rises.
2. The decrease in the bottom of the distribution starts at (36-45y). Two age cohorts of males (36-45, 46-55y) lie below the threshold (50%) that signals increased risk of depression, compared with just one age cohort (46-55y) for females.
3. These patterns are consistent with the mean age-related gender differences shown in Figure 4.6. In general, the top of the female range is higher and the bottom of the female range is higher. This reflects the overall higher Personal Wellbeing Index score for females over the intermediate age ranges.
4. These distributions also inform the lack of a gender difference in the Personal Wellbeing Index of the youngest group. As can be seen, at the lower range margin there is a consistent advantage to females (Figure 4.16). However, at the top of the ranges, the youngest group shows a marginally higher level for males than for females (Figure 4.13)
5. The lack of a consistent gender difference across the age groups makes it unlikely that the overall gender differences in the Personal Wellbeing Index represent a more positive female response bias. It also indicates that the drop in the lower range margin of the distribution between 26-55 years is likely to be experientially introduced. It is notable that this range coincides with the child-care years. A future analysis should split this analysis into people living with or without children.

It can be seen that the Personal Wellbeing Index values are more consistently higher for females when comparing the bottoms of the gender-specific normative ranges than the tops. The bottom scores average to a 1.44 point advantage to the females, whereas the top scores advantage females by an average of just 0.90 points.

These results are consistent with the idea that the gender difference is not the product of a differential response bias, but rather due to a higher proportion of vulnerable people within the male group. Moreover, it appears this vulnerability exists at all ages except for the youngest 18-25y group.

4.5. Normative Data based on Survey Mean Scores

4.5.1. Personal Wellbeing Index and Domains

Survey mean scores (N=18, Table A4.15).

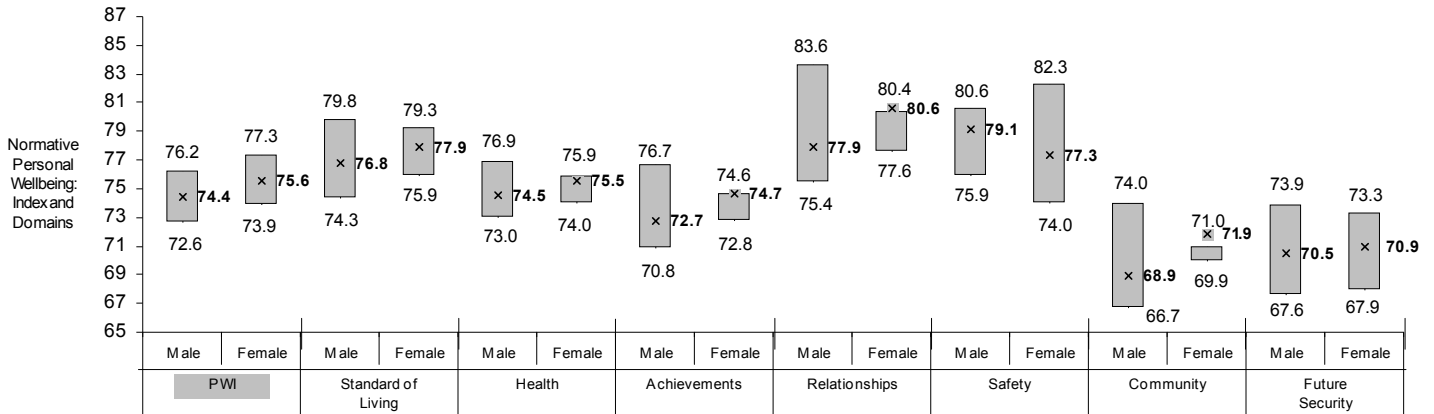


Figure 4.17: Index and Domains: **Normative Personal Wellbeing**

The interesting feature of Figure 4.17 is the magnitude of the 2SD range. This indicates the extent of variation over the course of the 18 surveys and, so, shows the relative volatility of the gendered domains to world events. These ranges are presented in Table 4.2 below.

Table 4.1: Range (2SD) of Personal Wellbeing Mean Scores over Surveys, 1-13

	PWI	Standard	Health	Achieve	Relations	Safety	Community	Future Security
Male	3.3	4.9	3.0	4.0	5.0	5.7	4.2	4.6
Female	3.6	4.1	3.1	4.0	6.1	6.7	4.3	6.0
Difference M-F	-0.3	+0.8	-0.1	+0.0	-1.1	-1.0	-0.1	-1.4

In relation to these values and Figure 4.17 the following observations can be made:

1. The pattern of domain volatility across surveys is similar for males and females.
2. For both genders, the most volatile domain is safety, with a 2SD range of 5.7 points (males) and 6.7 points (females).
3. For both genders, most stable domain is 'health' (3.0 and 3.1 points).

4.5.2. Normative: Gender x Age

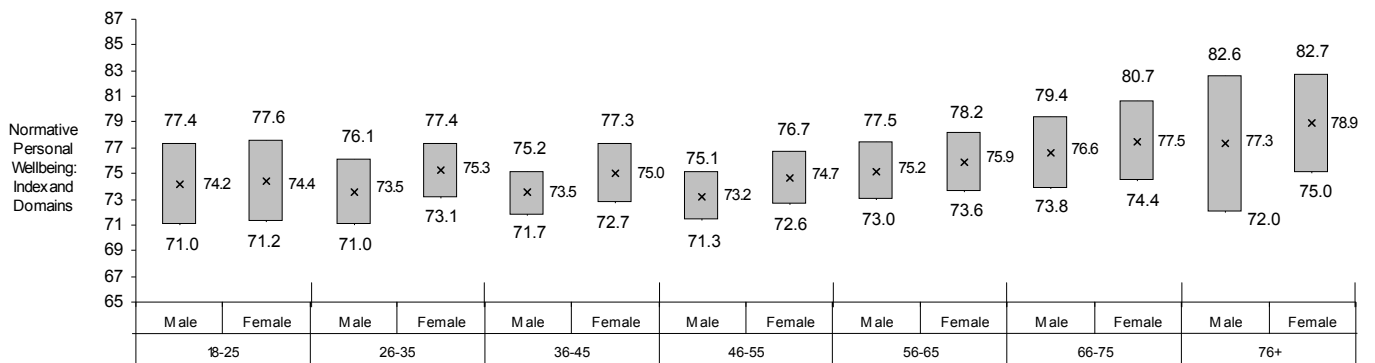
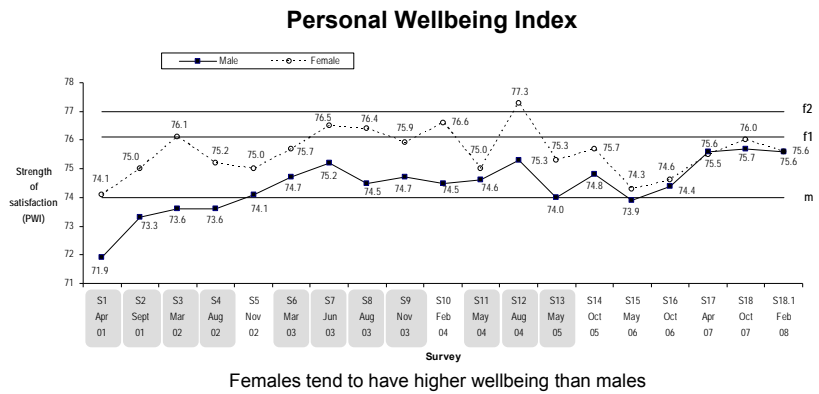


Figure 4.18: Normative Gender x Age

These data have been drawn from Tables A4.16 and A4.17. They show that the gender difference in wellbeing only develops after the age bracket of 18-25 years.

Dot Summary Points for Gender

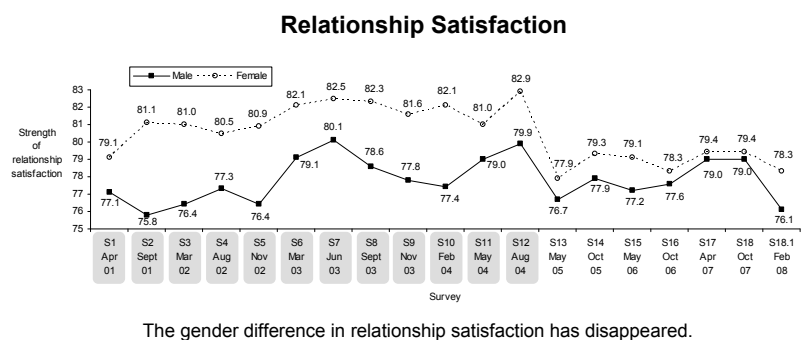
1. Females generally have higher levels of personal wellbeing than males. However, this is survey-dependent and it is curious that there has been no significant gender difference over the past six surveys.



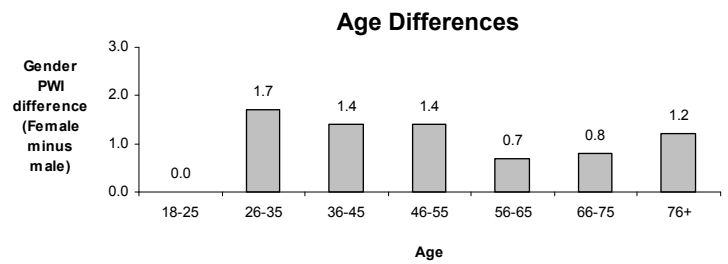
2. The only personal domain to be lower for females is safety. This dropped lower following September 11 for females but not for males. These differences were maintained for about 18 months. Since then the gender differences have been unpredictable but have been significant over the past seven surveys.



3. Relationships shows a significant interaction between gender and survey. It seems possible that the sense of threat over surveys 2-12 increased the level of relationship satisfaction for both genders, but more so for females than males. Since May 2005 the satisfaction level of both genders has returned to their baseline Survey 1 values.

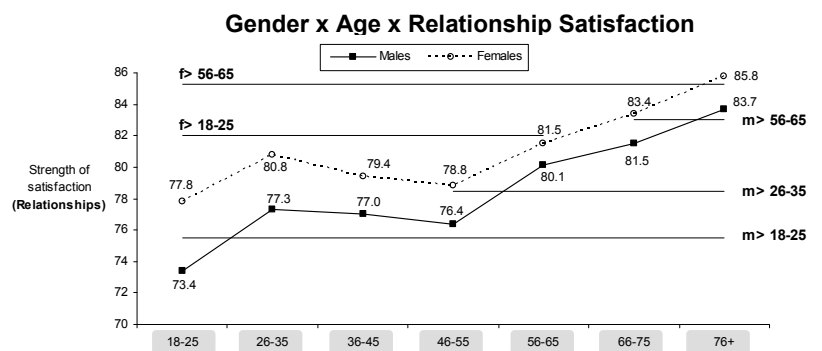


4. Gender differences in personal wellbeing only emerge at 26-35 years of age. They then progressively decrease with increasing age. The reason for this is not understood.



There is no gender difference in wellbeing at 18-25 years.

5. The gender difference in satisfaction with relationships is most pronounced in the youngest groups. Males are lower than females.



Males have particularly low satisfaction with relationships at 18-25 years.

6. Conclusion: There are no obvious gender-related effects of the rate-rises.

5. Age

5.1. Distribution Overall

The sample is well represented in all age groups (Table A5.1). The minimum number of respondents is in the 76+y group (N=51) and the maximum in the 46-55y group (N=236).

5.2. Age and Wellbeing

5.2.1. *Personal Wellbeing Index*

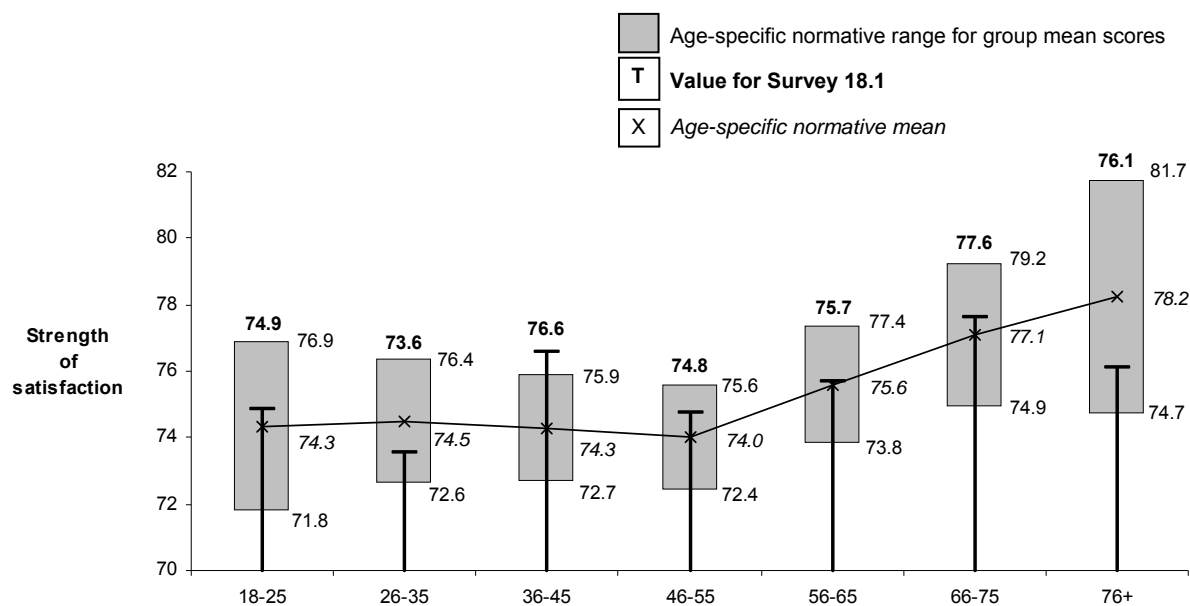


Figure 5.1: Age: **Personal Wellbeing Index** (Survey 18.1 vs. Normative Data)

All age groups lie within their normal range except for the 36-45y group who lie 0.7 points above their normal range. There is no obvious reason for this and the result probably reflects a random variation. There is no difference across the age groups for these Survey 18.1 values (Table A5.1).

5.2.2. Age x Surveys

Figure 5.2 shows the changes in Personal Wellbeing Index that have occurred for the youngest and the oldest group (Table A5.2).

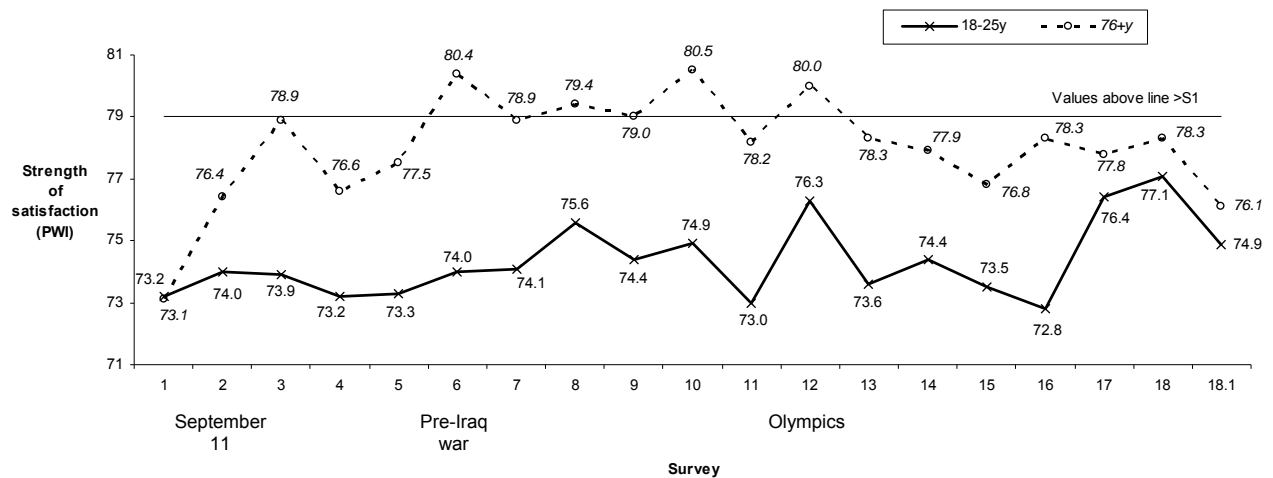


Figure 5.2: Age x Survey (Personal Wellbeing Index)

For the third and consecutive time in seven years, the oldest and the youngest groups are not significantly different from one another, being separated by just 1.2 points. The notable features of this are:

1. Neither group is significantly higher than they were at Survey 1 (Table A5.2).
2. The oldest group has shown a decreasing trend over the past nine surveys. The current value of 76.1 points is the lowest since Survey 2.
3. The youngest group has dropped from its highest level yet recorded at Survey 18.

In historical terms, the data from Survey 1, immediately prior to September 11, showed no age-related differences in personal wellbeing between the youngest and oldest groups (Figure 5.2). In subsequent surveys the three oldest groups showed a progressive increase in personal wellbeing (Table A5.2). In contrast, the youngest group remained remarkably steady prior to Survey 12, with a maximum variation of only 1.9 points. Olympic success at Survey 12 then apparently caused the Personal Wellbeing Index to rise, but this was a very transitory effect which had dissipated by the time of the following Survey 13 (Table A5.2) and the overall ANOVA across the 15 surveys for this youngest group was non-significant at that time. This has now changed and the differences across surveys are significant (Table A5.1). The total range of values for this youngest group is 5.1 points. This range was achieved by the lowest at Survey 16 (72.8) and the highest at Survey 18 (77.1).

In contrast, the oldest group (Table A5.2) has changed over a range of 7.4 points (Survey 1: 73.1, Survey 10: 80.54). This rise became significantly different from Survey 1 six months after September 11 (Survey 3: +5.9 points) and rose significantly again to reach its peak value (80.4 points) in the period immediately prior to the Iraq war. This elevation above the first survey continued until Survey 13, in the period following the Olympic games, and now seems to be gradually subsiding. It can be reasonably concluded that the period of elevated SWB for this oldest group, which spanned the period between March 2002 (S3) and August 2004 (S12), is now over. However, it still has quite a way to fall before it returns to the same level as it was in Survey 1. In summary, the 76+ year group has shown a 2.5 year elevation in their subjective wellbeing that seems to have been triggered by September 11, perhaps maintained by a sense of external threat through the Iraq war and terrorist threats, and which is now over.

The scores for the middle-range age groups have shown sporadic changes but, as shown in Table A5.2, only marginally significant changes over time.

Any explanations for this pattern must account for the transitory nature of the rise in the oldest groups. Possible contenders are as follows:

- (a) The first involves reminiscence regarding the Second World War, the fact of survival, and the mateship of that time.
- (b) The second involves heightened arousal. Both interest and anxiety are stimulated by terrorist atrocities and Australia at war. If the anxiety can be dampened, then positive arousal dominates.

Anxiety may be quelled if the Government message, that ‘our side’ is winning the ‘war on terror’, is seen as credible. Moreover, elderly people are generally more receptive to such propaganda. They have a stronger positive regard for Government than younger people (Table A5.1), and fewer elderly people consider the terrorist risk in Australia to be high (Table A5.1). As one consequence, the continued media presentation of overseas terrorist activities may have caused the heightened sense of wellbeing in elderly Australians.

- (c) There is evidence from other research that older people are better at accentuating the positives and ignoring the negatives. However, this explanation does not account for the transitory nature of the rises in wellbeing, and neither does it account for the finding of no age-group differences prior to September 11.
- (d) It is possible that older people, having more established personal and community relationships, can draw on these more effectively during times of threat to buffer the negative impact of world events. It may also be that the sense of threat caused these people, many of whom live alone, to bond and connect more strongly with their peers, and that these enhanced relationships have persisted, maintaining the elevated sense of wellbeing.

This last hypothesis is tested by studying the relative influence of surveys on the domains. The data are the mean domain scores for the 76+ year group from Survey 6, at which point this group’s Personal Wellbeing Index reached its maximum (Figure 5.2) through to Survey 15 (Table A5.2). Thus, each calculation is based on seven domain mean scores.

Table 5.1: Mean Domain Score Changes for 76+y (Personal Wellbeing Index)

Domain	Values at Survey 1	Values at Survey 6	Values at Survey 15	Survey 6 relative to Survey 1	Survey 15 relative To Survey 1
Standard	78.06	84.02	82.25	+6.76	+4.19
Health	66.21	72.42	68.02	+6.21	+1.81
Achieve	75.73	77.63	72.94	+1.90	-2.79
Relations	78.23	86.11	78.13	+7.88	-0.10
Safety	71.85	80.01	81.08	+8.16	+9.23
Community	69.92	77.17	75.18	+7.25	+5.26
Future Security	71.45	79.16	76.98	+7.71	+5.53

It can be seen from these figures that the domains fall into two groups as:

1. One domain (Achieving in Life) has shown little change. The lower value at Survey 15 may be largely due to the item wording change (see Chapter 2).

The fact that the domain of Achieve did not rise with the others adds credibility to the reliability and validity of the changes that have been found. If some generic influence was the cause, such as a change in positive arousal (Hypothesis b), it would be expected that all of the domains would rise. The fact this has not occurred lends credence to the idea that some more specific influence is the engine behind these changes.

2. The other six domains show highly variable levels in relation to Survey 1.

5.2.2.1. The Oldest Group

The two domains of Health and Relationships are illustrated in Figure 5.3.

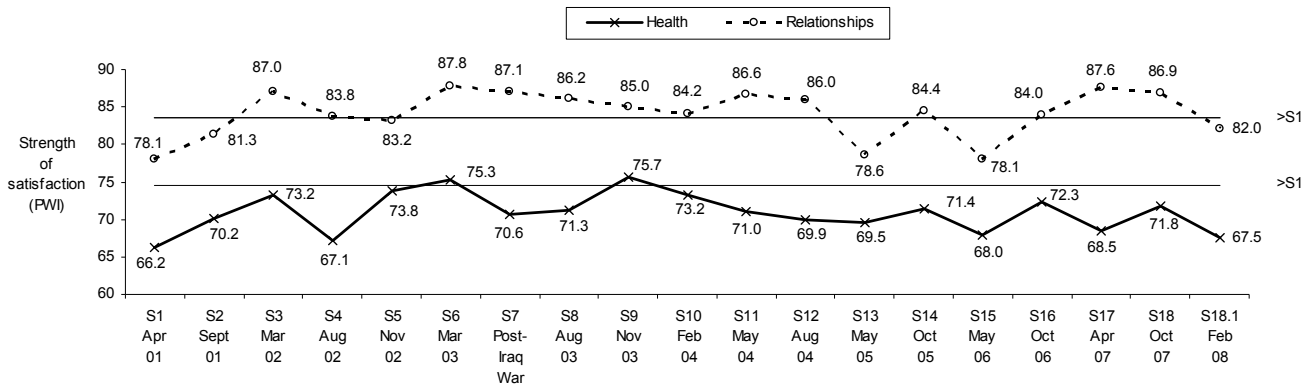


Figure 5.3: Age x Survey: 76y+, Health and Relationships

Both of these domains have shown substantial change, with a range of 9.5 points for health and 9.7 for relationships.

The significant rises in health satisfaction at Survey 6 and Survey 9 are remarkable because, for the population as a whole, this domain has been the most consistent showing no significant change between surveys (Chapter 2). However, over the past 4.0 years it has remained at a level not statistically different from Survey 1.

The rise in relationship satisfaction has been more persistent and has remained fairly consistently above Survey 1. Its value in the current survey is no different from Survey 1.

It is not at all clear why only the most elderly group is affected in this way. This is discussed in depth in Report 15.0.

5.2.3. Personal Wellbeing Domains

Most of the domains show the same pattern of no age-related changes as shown in Figure 5.1 (Table A5.1). The data for Health satisfaction in Survey 18.1 are shown below in relation to age-normative data for groups (Table A5.30).

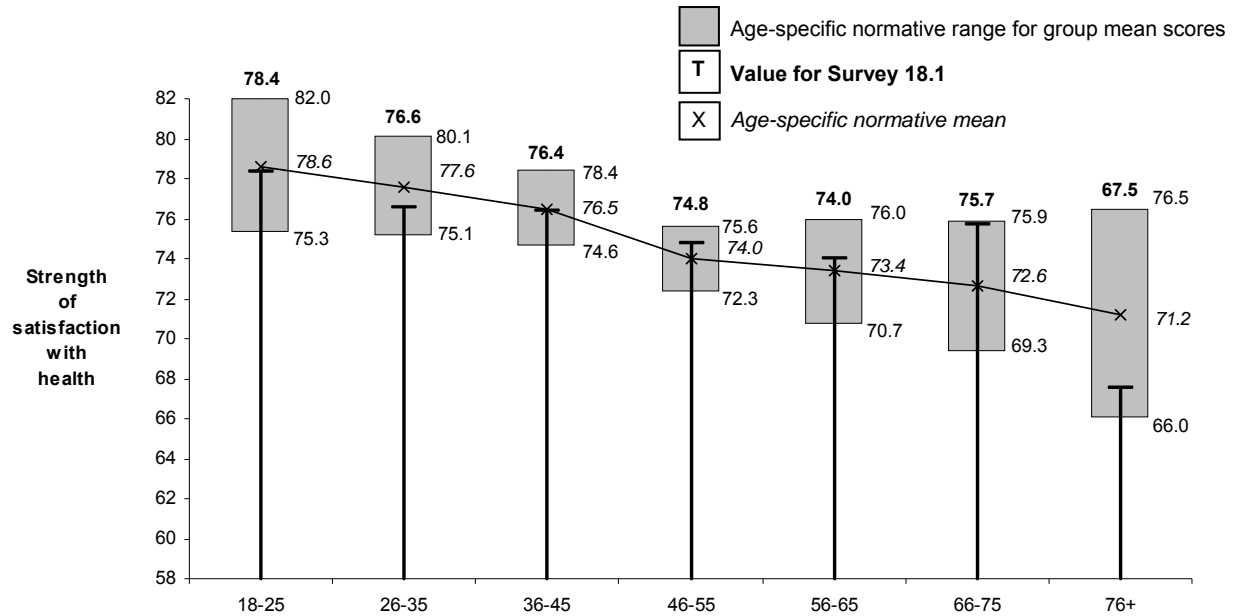


Figure 5.4: Age: Satisfaction with **Health** (Survey 18.1)

In terms of normative data, the cell size is N=18 (Table A5.14). The following can be noted:

- (a) Health satisfaction is within the normal range for all age groups.
- (b) Health satisfaction of the oldest group is 3.7 points below its normative mean score.

The results in relation to normative Relationships (Table A5.33) are as follows:

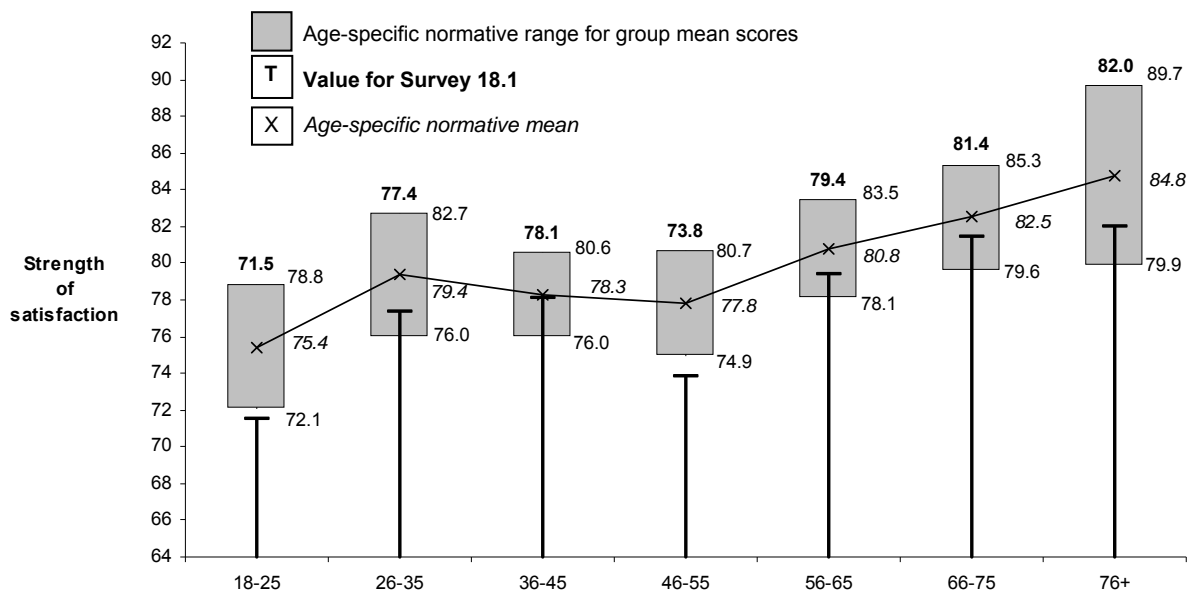


Figure 5.5: Age: Satisfaction with **Relationships** (Survey 18.1)

In Survey 18.1, all values are below their normative mean score and two age groups (18-25 and 36-45y) lie below their normative range.

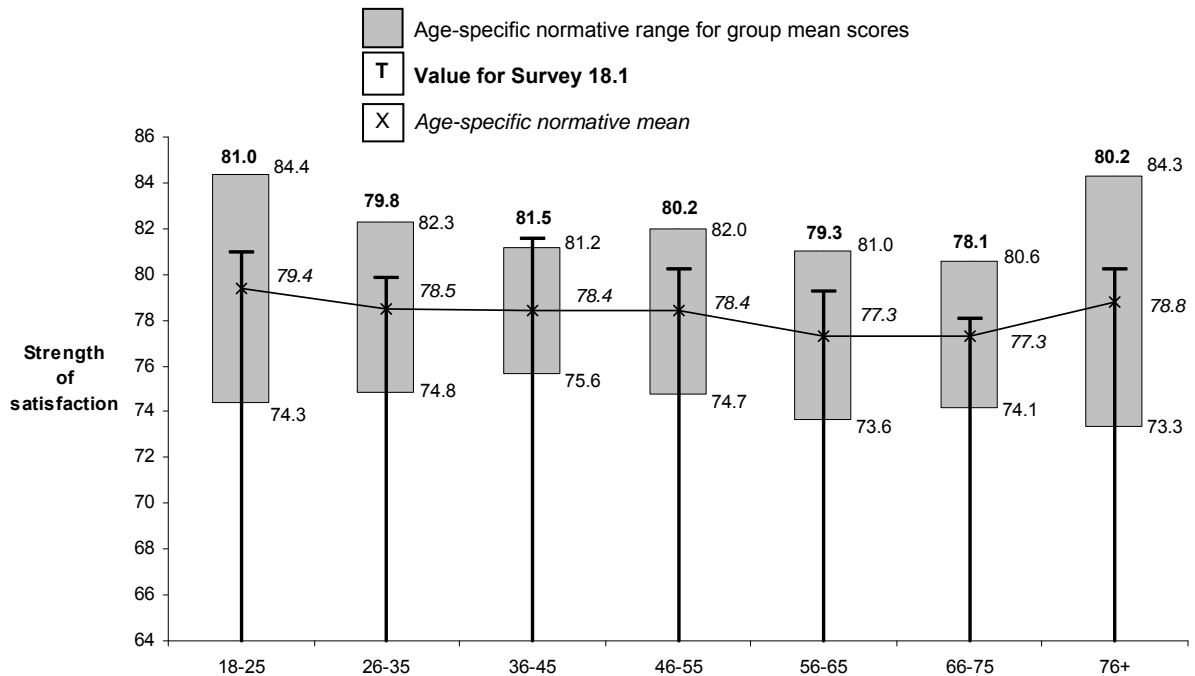


Figure 5.6: Age: Satisfaction with **Safety** (Survey 18.1)

In Survey 18, all values are within their normal ranges.

The results in relation to Community Connection (Table A5.35) are shown below:

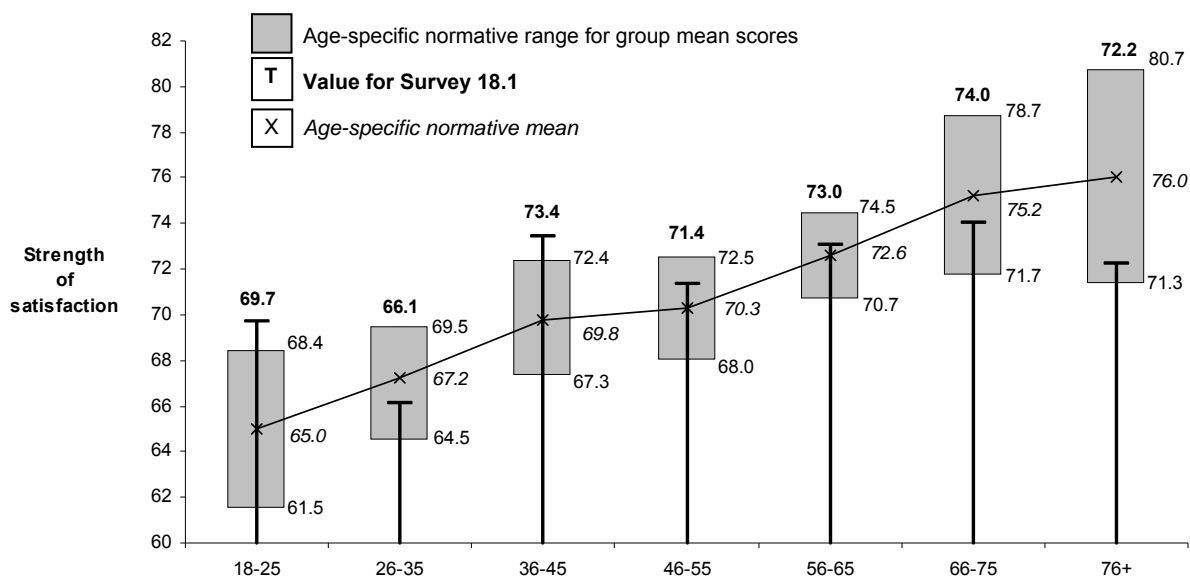


Figure 5.7: Age: Satisfaction with **Community Connection** (Survey 18.1)

Two age groups (18-25 and 36-45y) lie above their normative range.

5.2.4. Life as a Whole

This increases with age in much the same pattern as for the Personal Wellbeing Index in Figure 5.1.

5.3. Normative Data Generated from Individual Scores

Table A5.20 has been constructed by averaging the Personal Wellbeing Index values of all individuals who fall within each age-range across all surveys. The minimum N=2,173 (76+ year group). These results are shown in Figure 5.8.

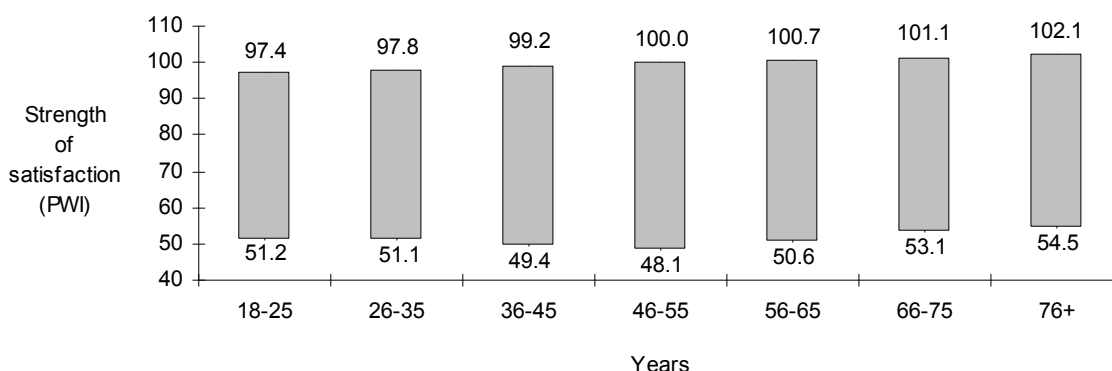


Figure 5.8: Normative Range for Each Age Group Derived from the Scores of Individuals (**Personal Wellbeing Index**)

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=33,576) conforms almost precisely with the theoretical normal range of 50-100 points. The top of the empirical range (Table A5.21) averages 99.8 points and the bottom averages 50.3 points. Second, the differences between the ranges of the seven age groupings is

just 5.7 points (from 46.3 : 18-25y to 51.9 : 46-55y). The correlation between the mean and standard deviation across the seven age groups is .198 (NS).

- (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 (individual values <50). This is due to the people without partners within this age range. 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 and is consistent with the decoupling hypothesis presented earlier.
- (c) The top of the range shows a gradual but persistent rise. This is quite different from the rise in the Personal Wellbeing Index calculated using survey mean scores, which shows the sudden emergence of higher scores at 56+ years (Figure 5.11). 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 0.4%, 1.4%, 0.8%, 0.7%, 0.4%, 1.0%. 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. It is also consistent with progressive decoupling of wellbeing from illbeing.

5.4. Normative Domain Scores (raw data)

Tables A5.23 and A5.25 show the accumulated data for health and relationships.

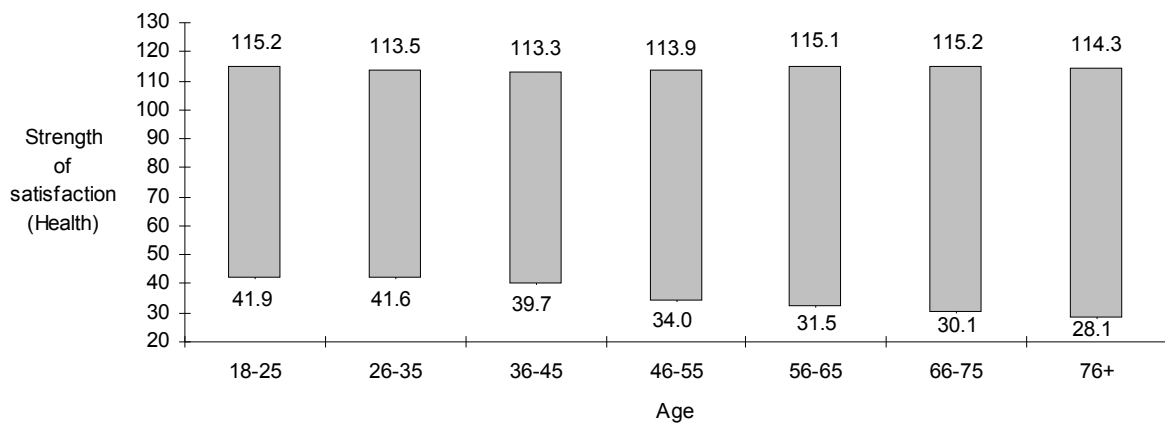


Figure 5.9: Age x **Satisfaction with Health**: Normative Raw Data

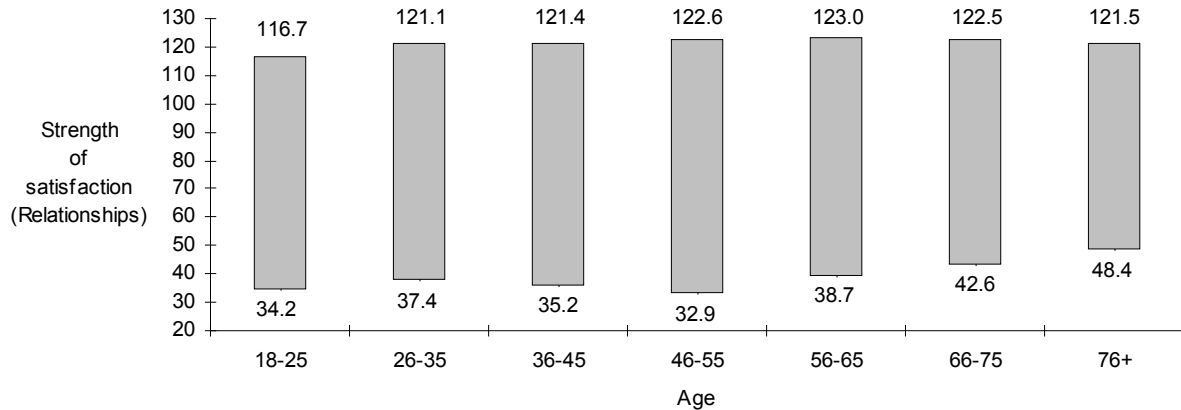


Figure 5.10: Age x Satisfaction with Relationships: Normative Raw Data

It is evident that most of the variation with age occurs mainly at the lower margin of each normative range. The upper range of health varies by just 1.8 percentage points across the seven age ranges, which is evidence of remarkable stability. The upper range for relationships varies by 6.2 percentage points. In contrast, the variation across age in the lower range for health is 13.8 points and relationships is 15.5 points. These are remarkably similar degrees of change in opposite directions. The correlation between these lower margins for health and relationships is $-.79$. This is consistent with the idea of domain compensation, where a decrease in one domain is compensated by a rise in another in order to maintain a steady state of SWB.

5.5. Normative Data from Survey Mean Scores (N=18)

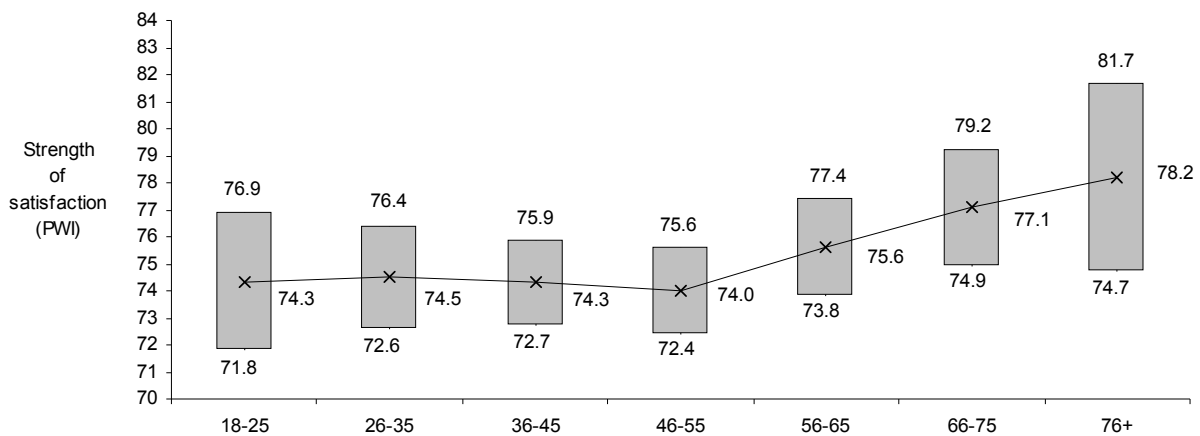


Figure 5.11: Normative Range for each age group derived from the survey mean scores (**Personal Wellbeing Index: N=18**)

Figure 5.11 has been constructed by using the survey mean scores (N=17) for each age-group as data (Table A5.28). The vertical bars denote the range created by two standard deviations on either side of the age-group mean.

The range for the oldest (76+y) group (7.0 points) is far larger than for the middle-age groups (3.2 points for 46-55y group). The rise in this range is evident from the 66-75 (4.4 points) group.

It is also evident that this increased variance is occurring mainly from the top of the range. From Figure 5.11 it can be seen that the top of the 76+y range (81.7 points) is around 6 points higher than it is for the four youngest groups, while the bottom of the range (74.7 points) is about 2 points higher.

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, taking the group mean with them.

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

A detailed discussion of these differences is available in Cummins et al (2004).

5.6. Normative Domain Scores (Survey Mean Scores : N=18)

Tables A5.30 and A5.32 show the accumulative data for health and relationships.

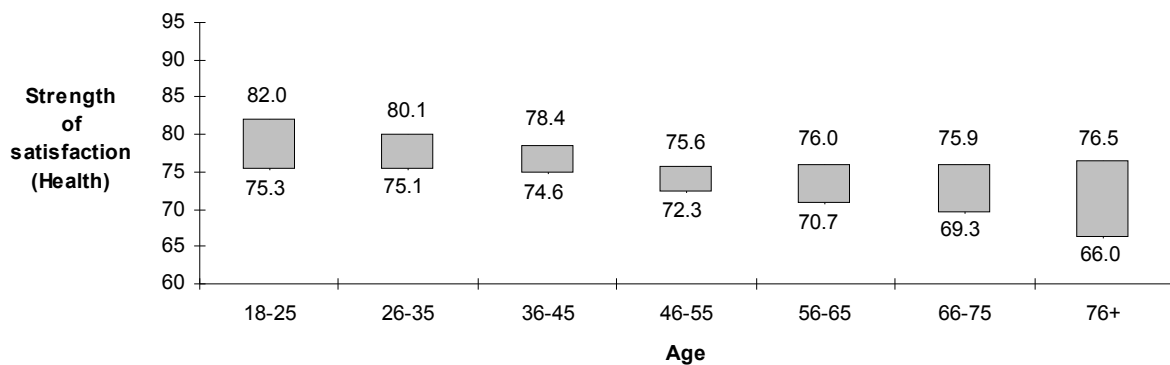


Figure 5.12: Age x **Satisfaction with Health**: Survey Mean Scores

Satisfaction with health shows a falling-contracting pattern up to 55 years, such that both the top and the bottom of the ranges decrease, but with the top decreasing faster. At older ages, the top of the range remains at about 76 points while the bottom of the range continues to fall.

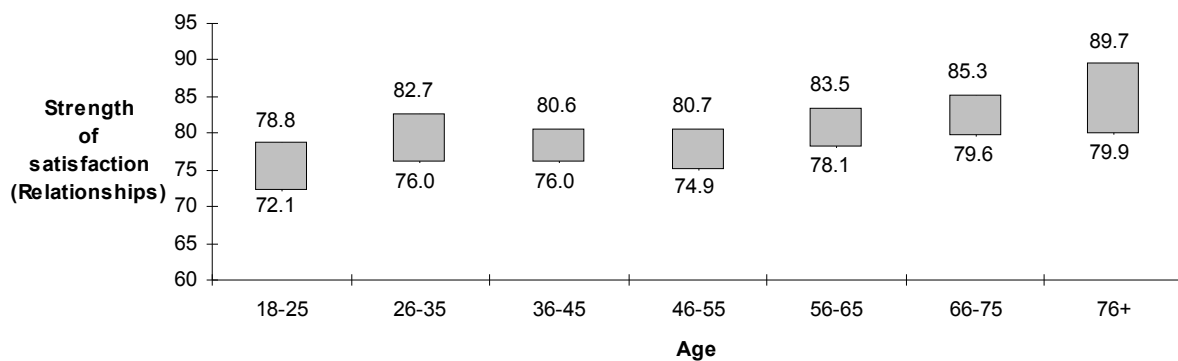
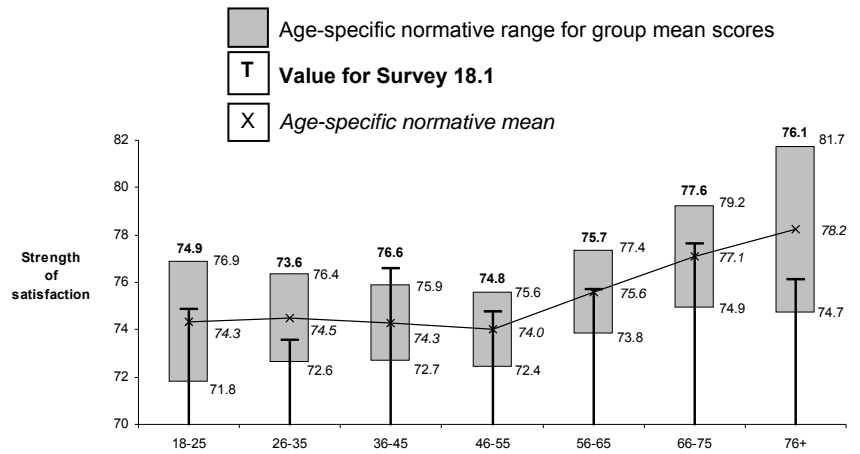


Figure 5.13: Age x **Satisfaction with Relationships**: Survey Mean Scores

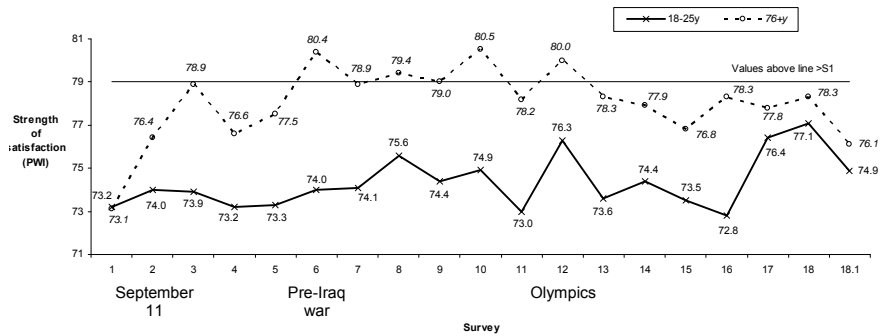
Satisfaction with relationships shows a rising pattern with age for both the top and the bottom of the normal range. The top of the range rises to a greater extent. There is a major shift from 18-25 years to 26-35 years.

Dot Summary Points for Age

1. The Personal Wellbeing Index for the 36-45y group is above their normative level for Survey 18.1.



2. For the third and consecutive time in seven years, the oldest and the youngest groups are not significantly different from one another. Both are no different from Survey 1.



After having risen, all age groups are now returned to be no different from Survey 1.

3. Conclusion: There is no obvious effect of the rate-rises on the age-related data.

6. Money Matters

6.1. Shares

We asked: “Does anyone in your household currently own any shares in the stock market (except from superannuation)?”

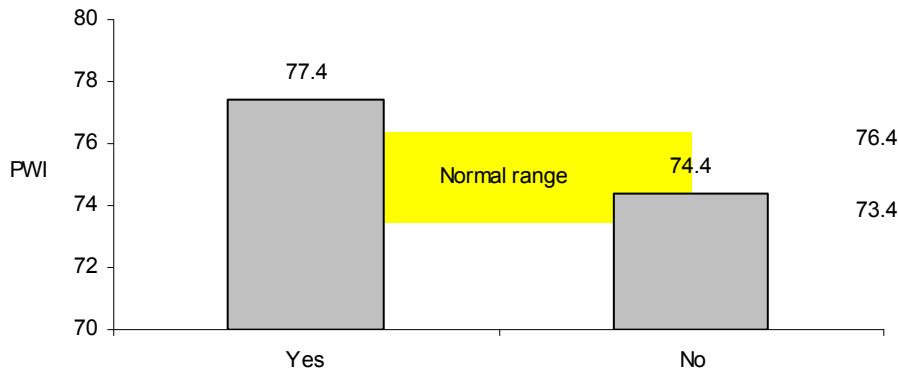


Figure 6.1: Own Shares x Personal Wellbeing Index

Not surprisingly, people who own shares (41% of the sample) have higher wellbeing than those who do not (Table A6.1). These people are predominantly male (Table A6.2), aged 36-75 years (Table A6.3), and with higher income (Table A6.4).

6.2. Cost of Living

We asked: “How worried are you about the cost of living?”

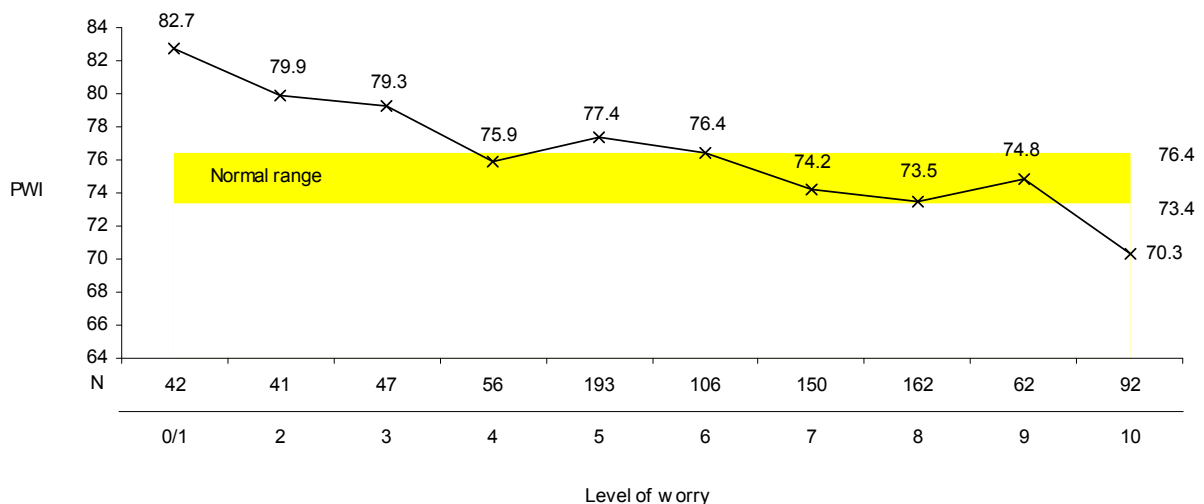


Figure 6.2: Worry about cost of living x Personal Wellbeing Index

These data come from Table A6.5. It is apparent that worry about the cost of living is not a major issue for most people. Only those 9.2% whose level of worry is 10/10 have a Personal Wellbeing Index that is reliably below the normal range.

This same pattern is pretty much repeated for each of the Personal Wellbeing Index domains (Tables A6.6 to A6.12) with two exceptions. Neither Health (Table A6.7) nor Relationships (A6.9) show a significant downward trend. It seems that both of these domains are predominantly influenced by other concerns.

6.3. Interest Rates

We asked: “How worried are you about interest rises?”

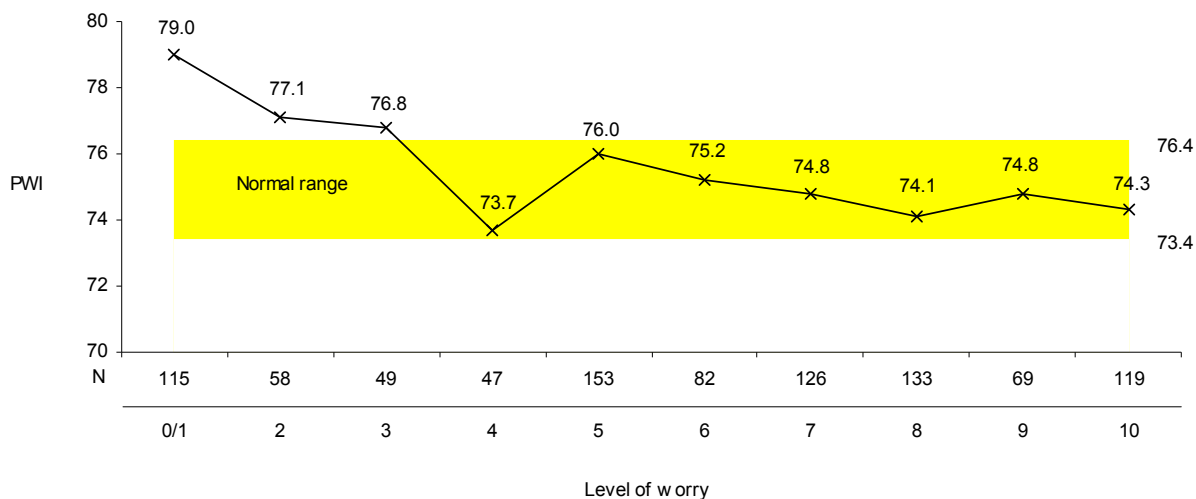


Figure 6.3: Worry at interest rates x Personal Wellbeing Index

The data for Figure 6.3 come from Table A6.13. This figure is interesting in two respects. First it shows that worry about interest rates has no impact on wellbeing. The slight downward trend is non-significant and all values remain in the normal range.

Second, it is most interesting to discover a potential source of ‘worry’ that has no reliable link with the Personal Wellbeing Index even when the level of worry is rated as 10/10. This means that the 11.9% of the sample who registered this extreme level of worry are not simply an extremely anxious or depressed sub-set of the sample with low wellbeing due to their general psychological state. If this was the case their group mean would lie below the normal range. Instead, this appears to be a group who are able to register a level of extreme concern with the knowledge that interest rates are climbing, but this concern is not personalised, so it does not affect their personal wellbeing.

This is an excellent validation for the sources of worry that are associated with low wellbeing. Where this is found, the low wellbeing can be reasonably attributed to the influence of the specific source of the worry.

As might be expected, this pattern does not differ for gender (Table A6.14) or age (Table A6.15).

One further observation relates to the nature of the question and the proportion of the sample endorsing an extreme level of worry. A crucial aspect of the question is that it concerns something that is not under personal control and is highly distal in relation to the self. The rate rises are controlled by the Reserve Bank and there is nothing an individual can do to control the Bank’s decisions on this matter.

They can, however, take control of their own lives in the face of such rises. This may involve primary control through reduced discretionary spending and secondary control through such ideas as the rises will soon cease, their wages are rising, and so these difficult times are transitory. Of course, both forms of control have a limited capacity and at some level of difficulty, they will fail to maintain

wellbeing, and the Personal Wellbeing Index will fall. However, for the majority of the sample this level of difficulty has not yet been reached.

6.4. Investments

We asked: “*How worried are you about your investments?*”

Table A6.16 shows much the same pattern as Figure 6.2, with only the 4.8% of the sample who rate their level of worry as 10/10 showing wellbeing below the normal range (72.6 points).

There is no interaction of worry about investments with gender (Table A6.17) or with age (Table A6.18.), or with owning shares (Table A6.19).

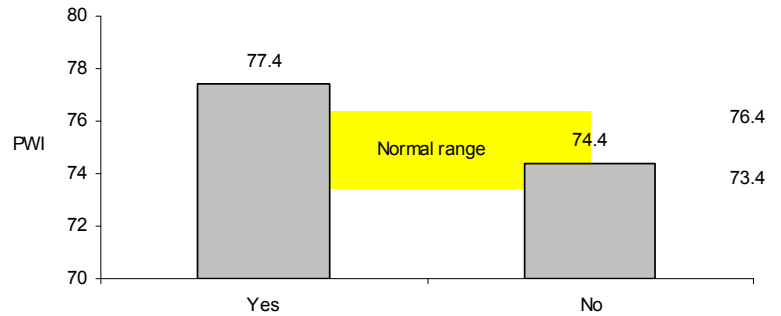
6.5. Summary

The current series of rate increases has had little effect on the wellbeing of the Australian population. To some extent this shows people’s capacity to absorb such increases into their lives without distress. It also reflects the gradual nature of these rises such that people have time to adapt.

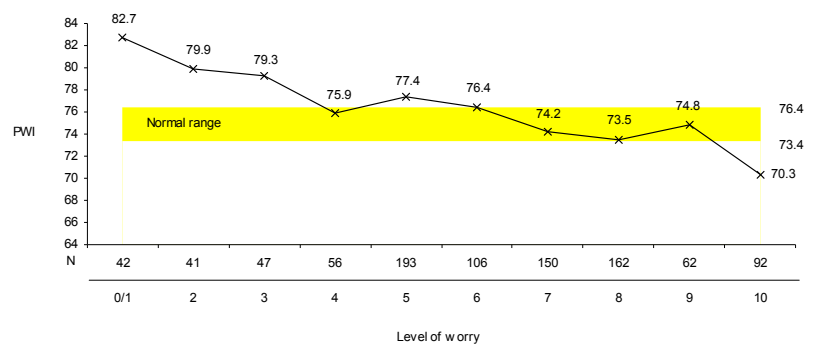
This latter point has policy implications for governance. A series of small rate rises is likely to be better tolerated by the population than a single large rise.

Dot Summary Points for Money Matters

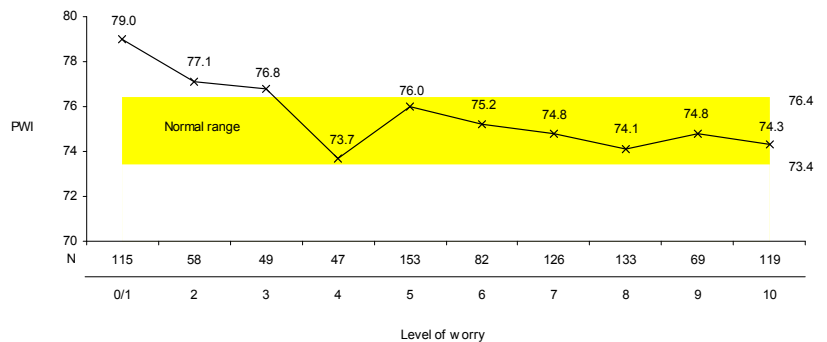
1. Shares:
People who own shares have higher wellbeing because they tend to be wealthy.



2. Cost of living:
Only the 9.2% of the sample whose worry level about the cost of living is 10/0 have lower wellbeing.



3. Rate rises:
No level of worry about rate rises is linked to low wellbeing.



4. Conclusion: The current series of rate increases has had little effect on the wellbeing of the Australian population. To some extent this shows people’s capacity to absorb such increases into their lives without distress. It also reflects the gradual nature of these rises such that people have time to adapt.

This latter point has policy implications for governance. A series of small rate rises is likely to be better tolerated by the population than a single large rise.

Appendix A1

A1.1 References to the Text

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