Australian Unity Wellbeing Index
Survey 20.1

Report 20.1
April 2009

Part A: Report

"The Wellbeing of Australians –

The effect of fires in Victoria and Floods in Queensland"

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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 20.1, undertaken in February 2009. The survey was commissioned to detect whether the disastrous floods in North Queensland and fires in Victoria had affected the subjective wellbeing of the population.

This survey involved 1,500 respondents, with 500 drawn from each of Queensland, Victoria and South Australia. The questionnaire comprised only the Personal Wellbeing Index and a small set of basic demographic questions. In all other respects the methodology 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:

(a) The Personal Wellbeing Index has risen to its second-highest level yet recorded. It is only 0.4 points less than the peak value of 76.30 recorded at the time of the Athens Olympics.

(b) Satisfaction with Standard of Living has risen by a significant 1.4 points since Survey 20 and is now at its second highest level yet recorded.

(c) Satisfaction with Safety has risen to its highest level yet recorded.

(d) Satisfaction with Community has risen a significant 2.0 points since Survey 20 and is now at its highest level yet recorded.

Day-by-Day Results

(a) The floods in North Queensland and the fires in Victoria have constituted a major national disaster. The community response to these events has been a magnificent outpouring of emotional and tangible support.

(b) The highest values in the Personal Wellbeing Index occurred for Victoria at the time of new fire outbreaks and strong media coverage.

(c) The highest levels of community satisfaction also occurred at this time of high drama.

(d) In summary, it appears that the enhanced levels of wellbeing reflect a national response of good-will to, and sympathy for, the victims. These emotions engendered an enhanced sense of connection with the Australian community which, in turn, enhanced the sense of personal wellbeing.

Demographic Influences

It appears that the demographic differences between people did not systematically affect their changes in wellbeing associated with the Victorian fires.

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 report concerns only the Personal Wellbeing Index.

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 is from 70 points to 80 points. We find the Personal Wellbeing Index to always fall within this range. However, satisfaction with aspects of national life are normally lower, falling in the range 55 to 65 points in Australia.

The first index survey, of 2,000 adults from all parts of Australia, was conducted in April 2001. A total of 20 general population surveys have now been conducted, with the most recent in October 2008. Copies of earlier reports can be obtained either from the Australian Unity website (www.australianunity.com.au) or from the Australian Centre on Quality of Life website at Deakin University (http://www.deakin.edu.au/research/acqol/index.htm).

The same core index questions, forming the Personal Wellbeing Index, are asked within each survey. In addition we ask two highly general questions. One concerns '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. These explore specific issues of interest, either personal or national. Such data have several purposes. They allow validation of the Index, the creation of new population sub-groups, and permit further exploration of the wellbeing construct.

In addition to these general population surveys we sometimes conduct special purpose surveys. These are designed to measure the wellbeing of the population at some particular point in time coinciding with some happening that we consider may have the power to change population wellbeing.

The first of these special surveys was 18.1 conducted in February 2008 following seven successive home-loan rate rises. This report 20.1 is the second special survey and concerns the effects of bush-fires in Victoria and floods in Queensland.

1.1. 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. The means of our regular surveys range from 73.5 to 76.6, a fluctuation of only 3.1 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.

1.2. The Survey Methodology

A geographically representative national sample of people aged 18 years or over and fluent in English, were surveyed by telephone over the period 23rd February to 4th March. 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 12,980 numbers were called. Of these, 6,487 connected with a respondent and 1,500 agreed to complete the survey. This gives an effective response rate of 23.1%. If the response rate is calculated as (completes/completes + refusals), then it becomes 45.4%. This low response rate reflects, in part, the methodological constraint that an even geographic and gender split was maintained at all times through 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.

The 1,500 respondents for this survey were shared equally between Victoria (VIC), Queensland (QLD) and South Australia (SA). The first two states were selected due to the prior and on-going natural disasters of bush-fires (VIC) and floods (QLD). The other state (SA) was included as a comparison state where no such disasters had occurred at this time.

Section 3.1 in this report documents these disasters in terms of their time-course and extent of devastation. Due to issues of sensitivity regarding the mental state of people who may have been personally directly affected by these diasters, the areas in both states that had been burned or flooded were excluded from the telephone sampling. One result of this is that a higher proportion than is normal for our surveys was drawn from the major cities in VIC and QLD. This would tend to marginally reduce the Personal Wellbeing Index mean scores in those states since, in general, people living in country regions have higher wellbeing than people living in cities.

1.3. 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.

1.4. 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 Wellbeing with previous surveys.

(d) Chapter 3 presents a day-by-day analysis of these data over the period of data collection.

(e) Chapter 4 presents the results broken-down by demographic variables.

(f) Each Chapter contains a dot-point summary.

2. A Comparison Between Survey 20 and Survey 20.1

2.1. Overview

Table 2.1: Means and standard deviations of the 20th survey

Question	Mean	SD	Point change from December 2008	t-test p value
PERSONAL WELLBEING INDEX	75.93	12.31	1.05	**0.18**
Personal domains				
1. Standard of living	78.69	16.37	1.44	**.013**
2. Health	75.11	19.65	1.40	**.039**
3. Achieving in life	73.58	19.14	1.18	.077
4. Personal relationships	80.15	21.32	0.55	.455
5. How safe you feel	81.33	16.65	1.08	.067
6. Community connect	72.99	18.36	2.00	**.003**
7. Future security	70.51	19.22	0.73	.279
8. Spiritual/ Religious Fulfilment	71.79	24.27	0.48	.601
Life as a whole	78.64	16.95	1.62	**.006**

	Survey					
	S20.1			S1-20.1		
	N	M	SD	N	M	SD
PWI	1380	75.93	12.31	40589	75.03	12.42
Standard of living	1469	78.69	16.37	41879	77.39	17.33
Health	1467	75.11	19.65	41873	74.94	19.75
Achieving in life	1431	73.58	19.14	41659	73.62	18.41
Personal relationships	1456	80.15	21.32	41742	79.31	21.35
How safe you feel	1464	81.33	16.65	41761	78.49	18.08
Community connectedness	1456	72.99	18.36	41671	70.61	19.95
Future security	1438	70.51	19.22	41268	70.74	19.84
Spiritual/ Religious fulfilment	1209	71.79	24.27	9880	70.29	25.13
Life as a whole	1467	78.64	16.95	41854	77.53	17.28

The Major Indices

These results are found in Table 2.1 (Survey 20.1), Table A2.1 (Comparative between surveys).

2.2. Personal Wellbeing Index

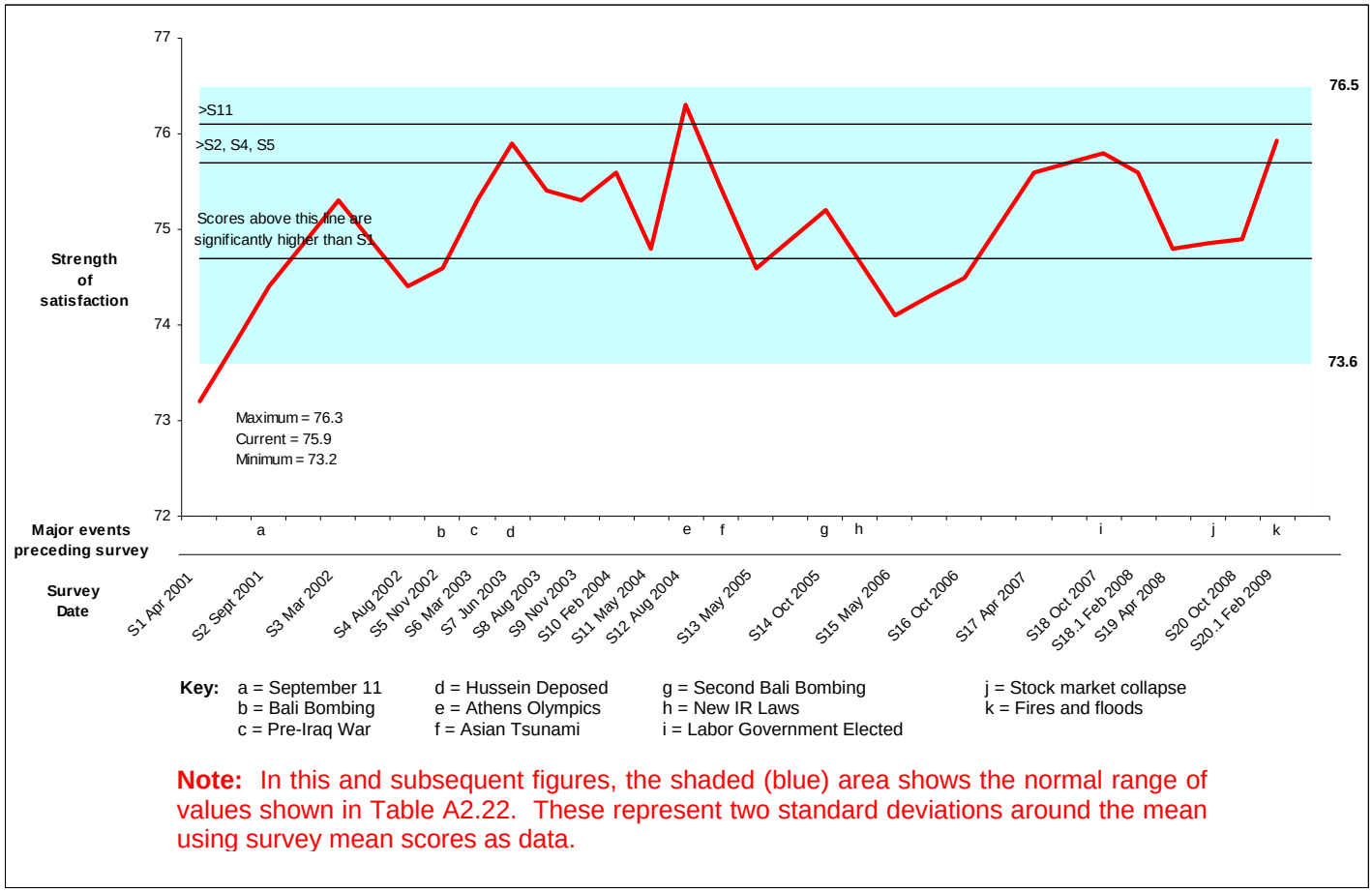


Figure 2.1: Personal Wellbeing Index

The Personal Wellbeing Index has risen by a significant 1.1 percentage points since Survey 20 in October 2008. It current value of 75.93 points is the second highest yet recorded, being only 0.4 point below the peak of 76.30 recorded at the time of the Athens Olympics (S12). However, this increase since the last survey is reflected in only some of the domains as will be demonstrated.

Over all the surveys, it is notable that the Personal Wellbeing Index is so stable. It has varied by just 3.1 points over all the surveys. Moreover, the change from one survey to the next has been 1 point or less except for 4 of the 21 surveys. These occasions have been S1-S2 (September 11), S11-S12/S12-S13 (Sydney Olympics) ,S14–S15 (Second Bali bombing), and the current S20-S20.1. The Personal Wellbeing Index is currently 2.7 points above its level at Survey 1, which is significant.

The influence of homeostasis

The purpose of SWB homeostasis is to maintain the wellbeing of each individual person close to their genetically-determined set-point, which averages 75 points. However, of course, wellbeing fluctuates around its set-point. These fluctuations can be very large if homeostasis is defeated in the presence of an unusually good or bad experience. While such experiences are unusual, when they do occur, people will normally return quite quickly to a level of wellbeing that approximates their set-point once again.

For these reasons, the wellbeing of individuals is normally highly predictable. It is lying within a restricted range around the set-point, called the set-point-range. The homeostatic processes attempt to hold each individual's wellbeing within this range. Therefore, since there is a normal distribution of set-points around 75, probably between about 60 and 90 points, there is an associated distribution of overlapping set-point-ranges. This explains why the population mean is so predictable. The distribution of scores conforms to the distribution of set-point ranges, and these are genetically determined.

Why, then, does the mean of the survey samples vary from one time to the next? The answer, we propose, is that events which are experienced by the whole population will exert a systematic influence on the wellbeing of the individuals making up the whole sample. These influences will act to cause the wellbeing of each affected individual to be more likely to lie either above or below its set-point. Thus, a national event, such as Olympic success, will exert a systematic influence, such that each person's wellbeing will be more likely to be found above their set-point than below. In other words, a meaningful national event will systematically change the probability of measured wellbeing being dominated by scores that lie within the upper or lower halves of the set-point-ranges. Moreover, the stronger and more universal the experience, the more likely is each individual level of wellbeing to be found above or below its set-point, and the more the sample average will deviate from 75 points.

So, how much variation in survey mean scores is possible? There are two answers to this. The first involves a catastrophic experience, such as might occur in a sudden financial depression. In this event, the average wellbeing of the sample will sink below any approximation of the normal range as a high proportion of the population suffer homeostatic defeat. This, however, will be a most unusual situation and one not yet experienced in the history of these surveys.

The second form of variation in survey mean scores will reflect systematic shifts in the probability of wellbeing being found above or below each set-point, but within each set-point range, and under homeostatic control. The extent of such variation depends on a number of factors as:

(a) The strength and ubiquity of the experience.

(b) The width of the set-point-range. While this remains somewhat speculative, a ball-park figure seems to be about 12 points.

(c) The strength of homeostasis vs the distance each measure of wellbeing lies beyond the set-point. We assume that the influence of homeostasis to control small fluctuations around the set-point is minimal. However, as wellbeing strays further and further from the set-point, homeostatic forces are increasingly unleashed to reign it back. We propose that these controlling forces increase in intensity with distance from the set-point until they lose control and SWB goes into free-rise or free-fall under the control of the experience.

So, given all these suppositions, how much movement is possible while most people's wellbeing remains under homeostatic control? The answer is uncertain but certainly much less than the full six points on either side of the set-point defining the set-point range. The boundaries of this range demarcate homeostatic failure and so wellbeing would normally be maintained much closer to the set-point.

The total variation of population mean scores to date is 3.1 percentage points, or about 1.5 points on either side of the average set-point. This represents just 25% of the set-point-range. What this indicates is that the mood of the nation normally fluctuates within only a very tight band of values. What is not known is the extent that these small movements indicate anything important about the frequency of psychopathology or changed behaviour at a national level.

Causal influences

It is not possible from these cross-sectional data to determine causation of the changes in personal wellbeing between surveys. However, a number of ideas concerning possible sources of influence can be advanced. These are acknowledged in the caption to each figure. It is at least notable that the major changes in the level of the PWI have been associated with major national events. This trend has been continued in this most recent survey.

2.3. Personal Wellbeing Domains

The personal domains have generally risen since Survey 20.

Standard of Living

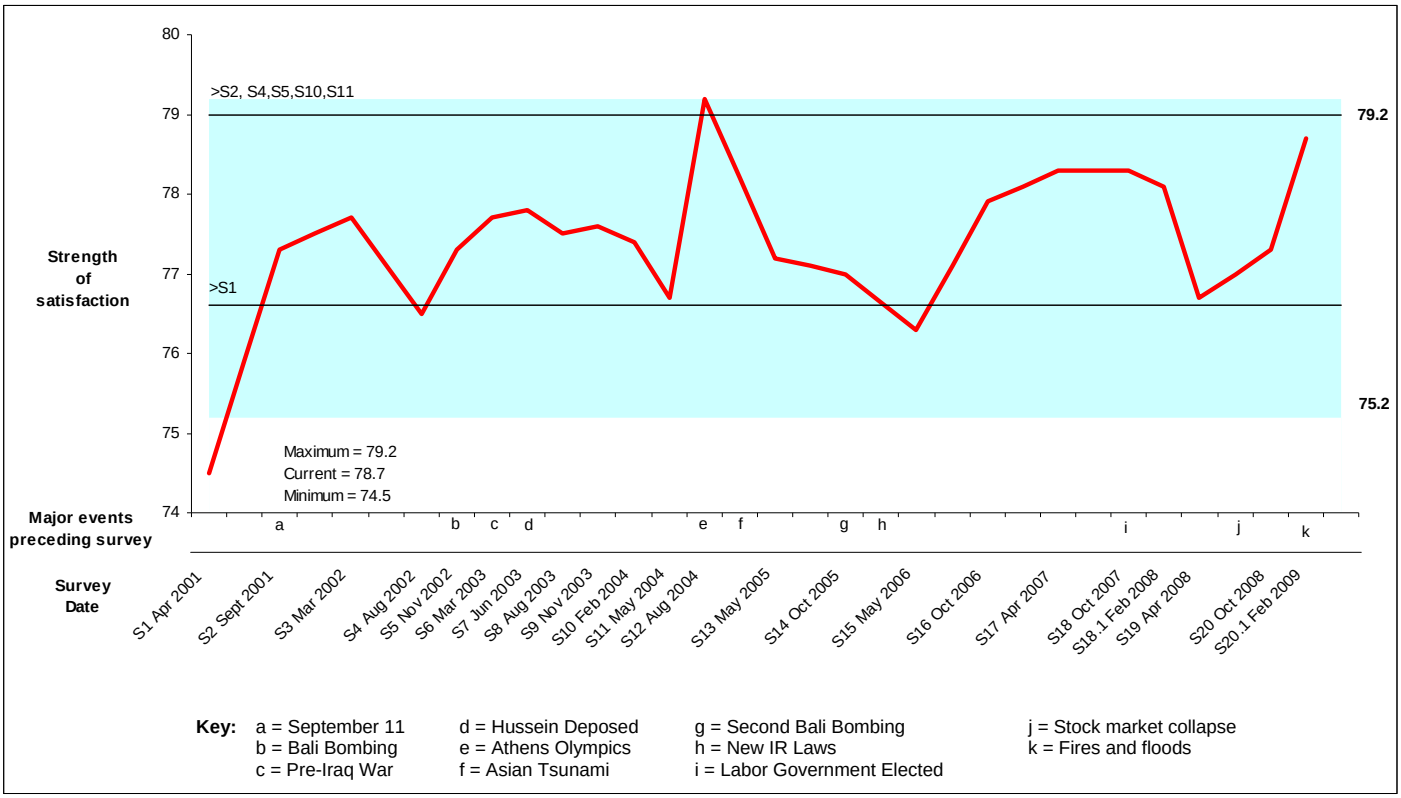


Figure 2.2: Satisfaction with **Standard of Living**

Satisfaction with standard of living has risen by a significant 1.4 points since Survey 20 (Table A2.1) and is now (78.7) at its second highest level yet recorded. 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 as this first survey. Thus, 19/21 (90.5%) of the subsequent 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 interesting to note that the rise in satisfaction with Standard of Living between May 2006 (S15) and October 2007 (S18) occurred despite a succession of 0.25 point rises in interest rates and that the current rise in wellbeing occurred in the face of a substantial economic down-turn. There are probably two current reasons for this. One is that the generally heightened level of wellbeing has carried all of the domains to higher levels. The second is that the poor national economic situation has had a serious negative effect on only a minority of the population. The people who have been personally adversely

affected are those who have lost their job, or who are reliant on interest from shares or other investments for their income. But these people are in a great minority. While a majority of people have lost wealth with the downturn, for the most part their investments are intact and so they feel they can just wait for the economy to recover. And, in the meantime, if they still have a job and a mortgage, and if their wage has not diminished, then they are better off financially than maybe they have ever been due to the decrease in interest rates and, so, their mortgage payments.

Health

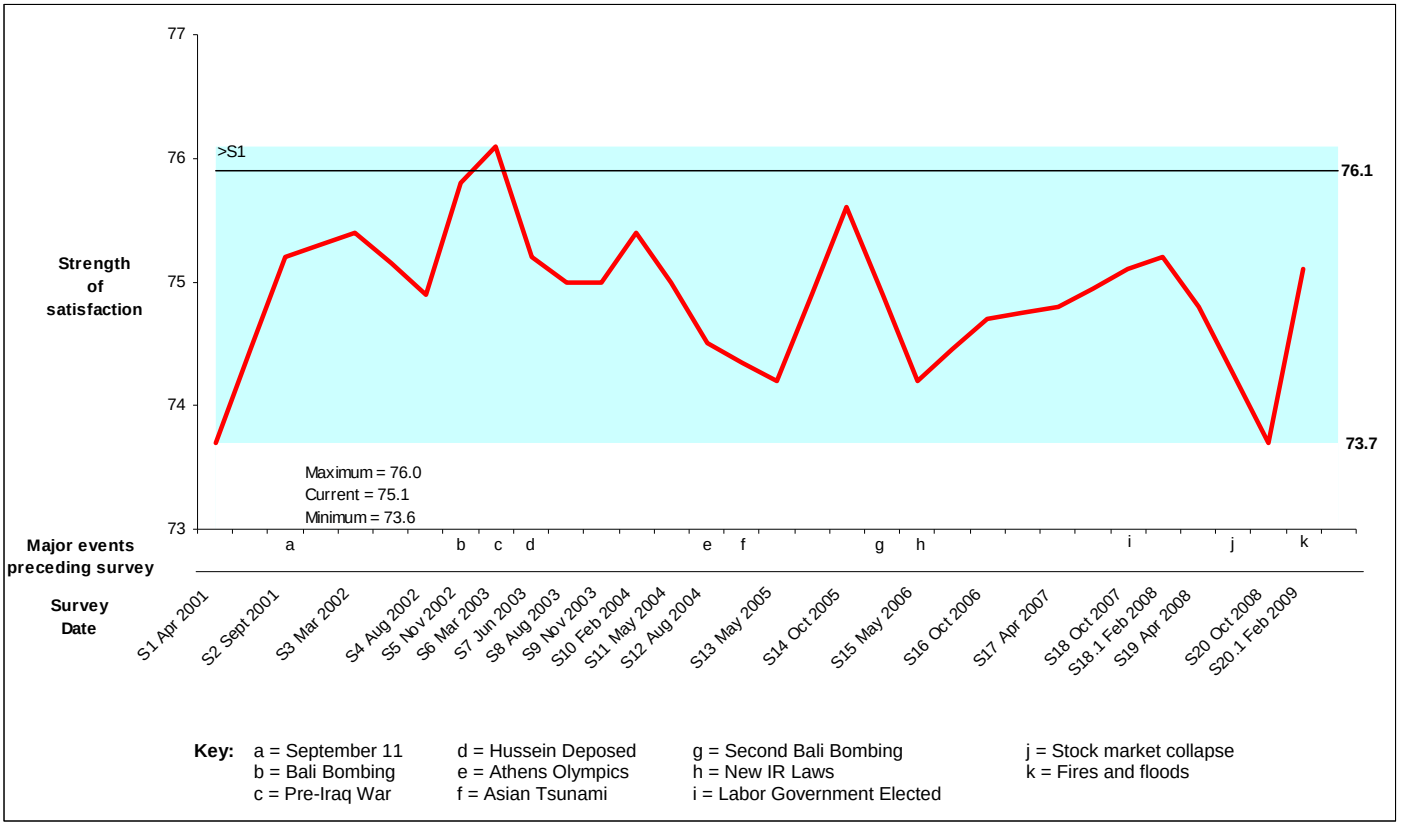


Figure 2.3: Satisfaction with **Health**

Satisfaction with health really does not change significantly between surveys and so is a good benchmark to indicate that the data set as a whole is reliable. In this survey (75.1 points) it has risen by a significant 1.4 points since Survey 20 but remains firmly within its normal range. 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 probably reflects a random fluctuation. The overall ANOVA between surveys is non-significant (p = .078) (Table A 2.1). It is evident that satisfaction with personal health is little influenced by either 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 points between April 2001 (S1:73.6) and March 2003 (S6:Pre-Iraq war:76.0).

Achieving in Life

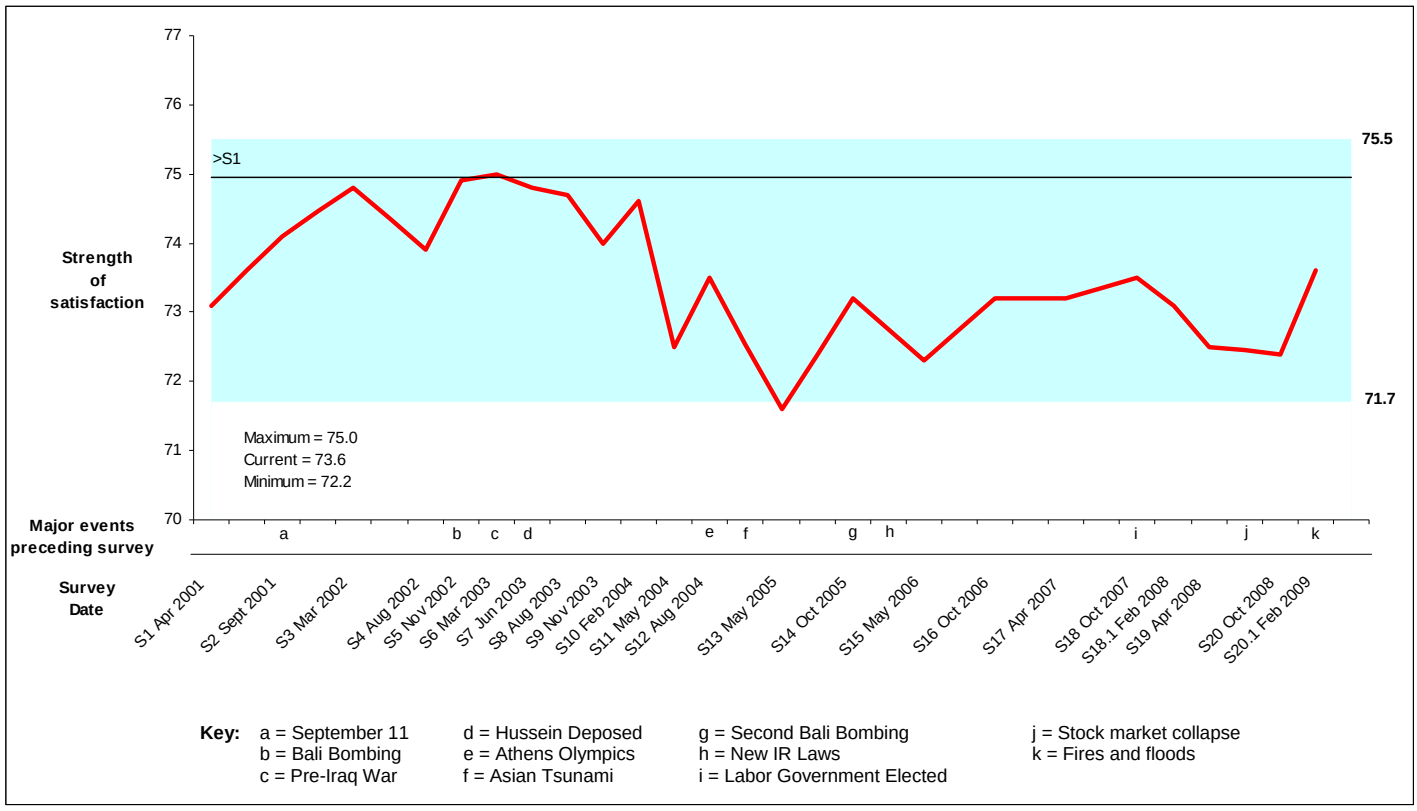


Figure 2.4: Satisfaction with **What you are Currently Achieving in Life**

Achieving in life, now at 73.6 points, has risen by a non-significant 1.2 points since Survey 20. 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 over this period 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

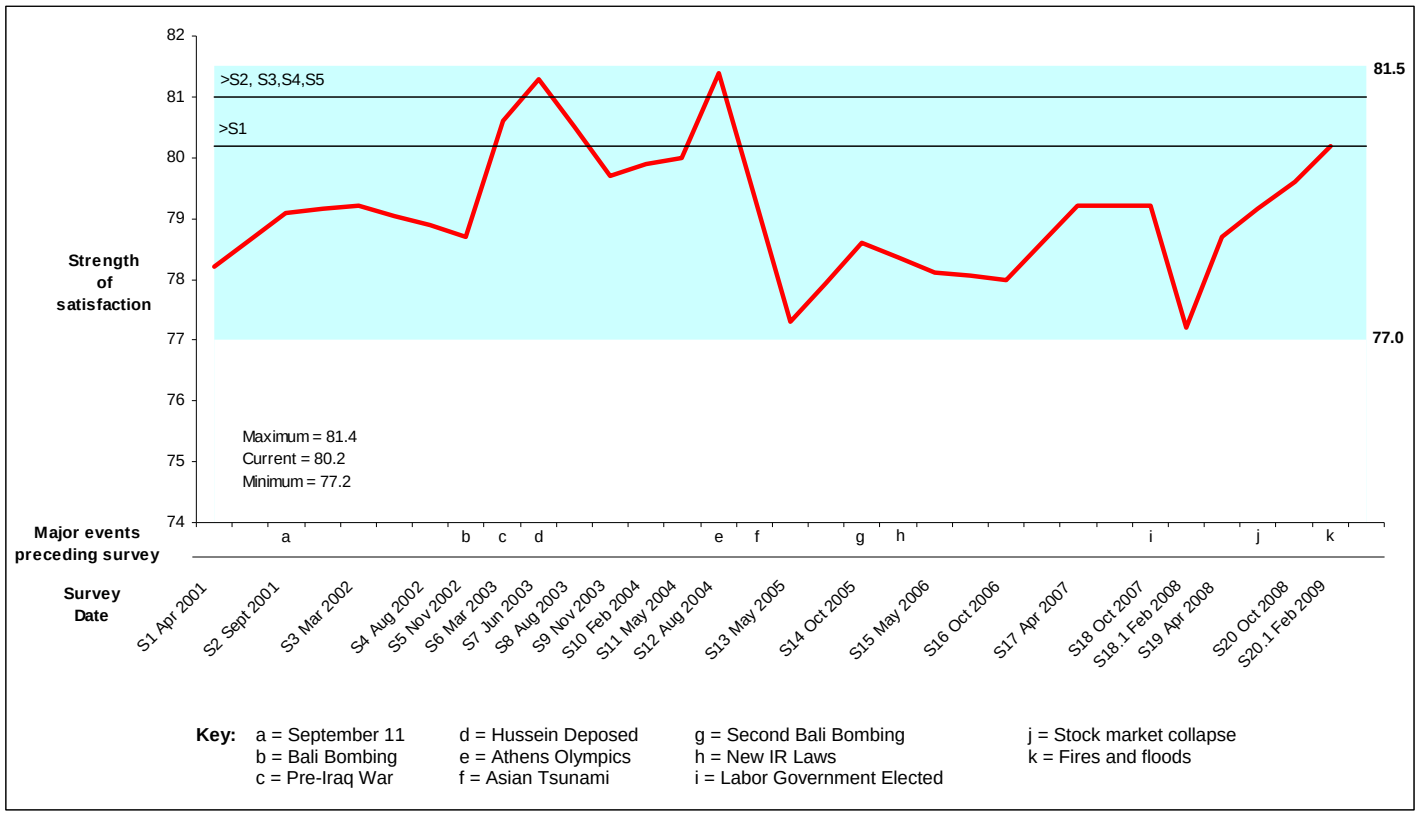


Figure 2.5: Satisfaction with **Relationships**

Satisfaction with relationships, now at 80.15 points, has risen by only 0.6 points since S20. It remains firmly within its normal range and no different from its level at Survey 1.

The highest value for this domain has been 81.39 points at the time of the Athens Olympics (S12). At Survey 13 this domain dropped to one of its lowest values (77.64) down 3.8 points from the Olympics level. 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

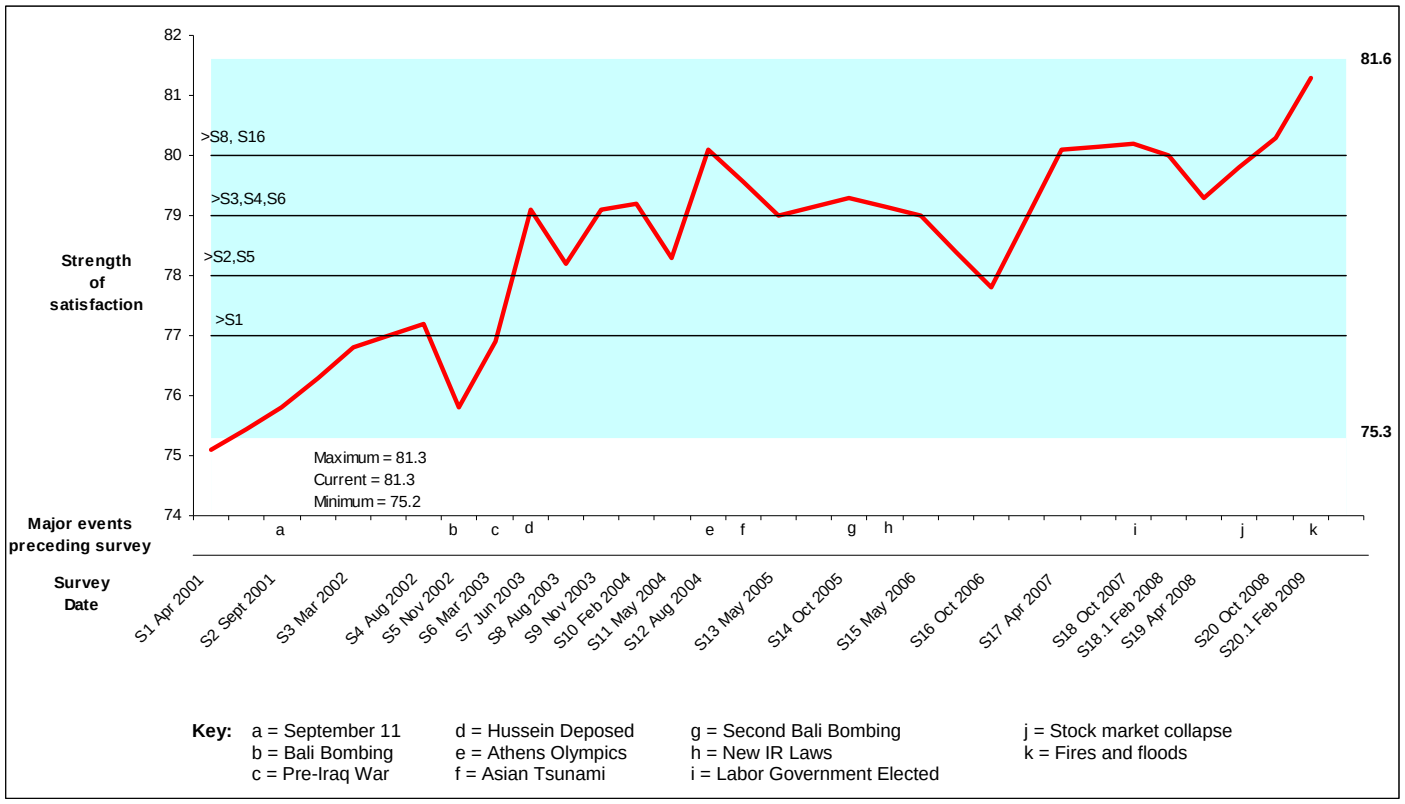


Figure 2.6: Satisfaction with **How Safe you Feel**

Satisfaction with personal safety, now at 81.33 points, is at its highest level yet recorded. It has risen by a non-significant 1.1 points since Survey 20 (Table 2.1), but this continues a long trend of rising satisfaction with safety. It is possible that the latest rise is the result of a contrast effect. That the images of danger from fire and floods had been so vividly portrayed by the media, yet the majority of people living in unaffected areas, such as the major cities, which dominate our samples. It is possible that these city dwellers felt an enhanced sense of safety in contrast.

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 further rise is hard to explain but is associated with a decreasing proportion of the sample feeling that a terrorist attack is likely. The range of scores is 5.1 points between April 2001 (S1:75.2) and October 2008 (S20: 80.3).

Community

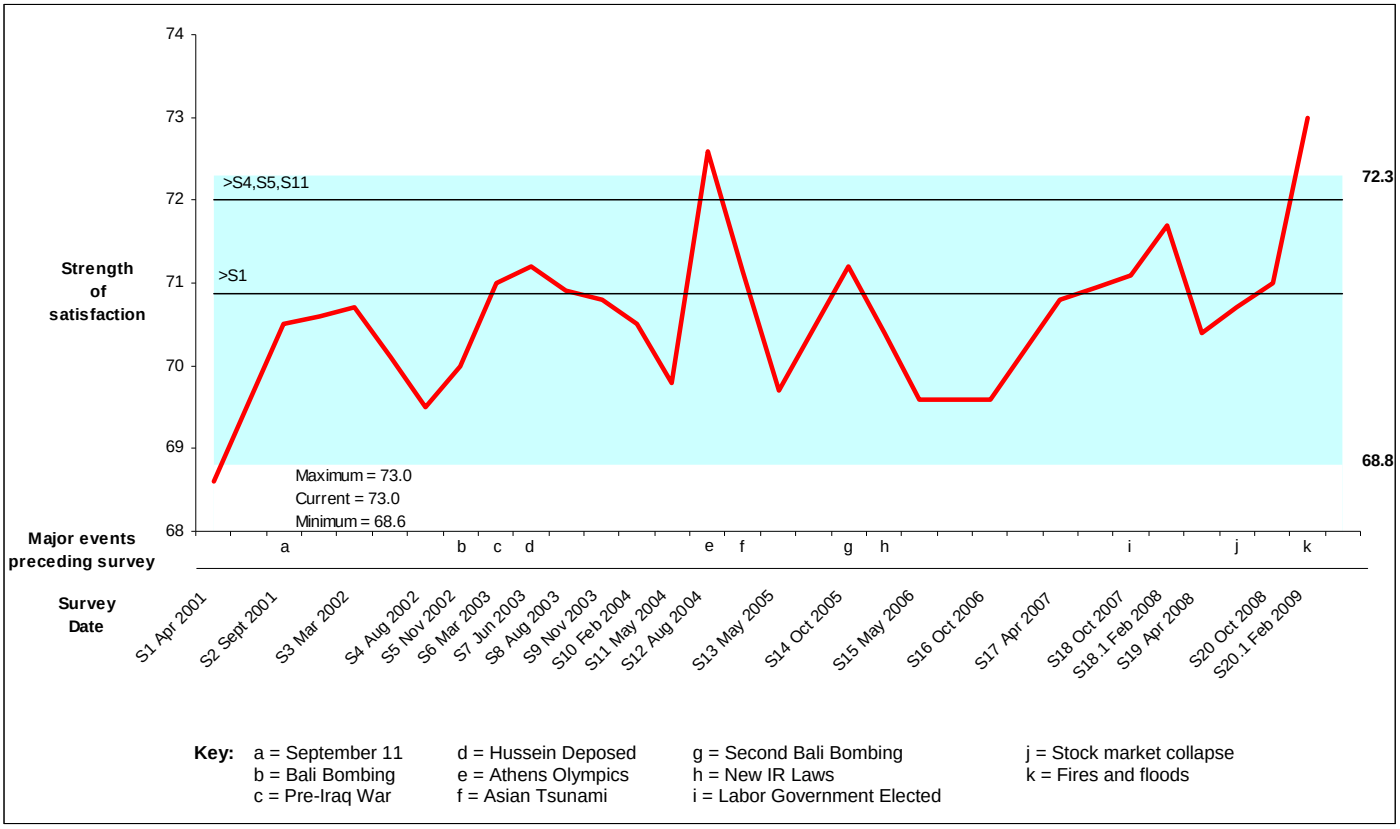


Figure 2.7: Satisfaction with **Feeling Part of Your Community**

People's satisfaction with feeling part of their community, now at 72.99 points, is at its highest level yet recorded. It has risen by a significant 2.0 points since Survey 20 and is now 0.3 points higher than it was at the time of the Athens Olympics. It is 4.4 points higher than it was in Survey 1. It seems self-evident that this rise has been due to the increased sense of community generated by the tragedy of the floods and fires. These events generated an enormous out-pouring of sympathy and tangible assistance, which caused the population to experience a heightened sense of belonging to the 'Australian family'.

Apart from the Olympic period elevation (S12) and the current survey, 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. A perceived source of threat will cause a group (or population) to become more socially cohesive. However, it must also be noted that the level of safety satisfaction also rose at the time of the Athens 2004 Olympics (Survey 12) and around the period of the election of the new Labor Government (Surveys 18 and 18.1). The range of scores is 4.0 points between April 2001 (S1:68.6) and August 2004 (S12:Olympics:72.6).

Future Security

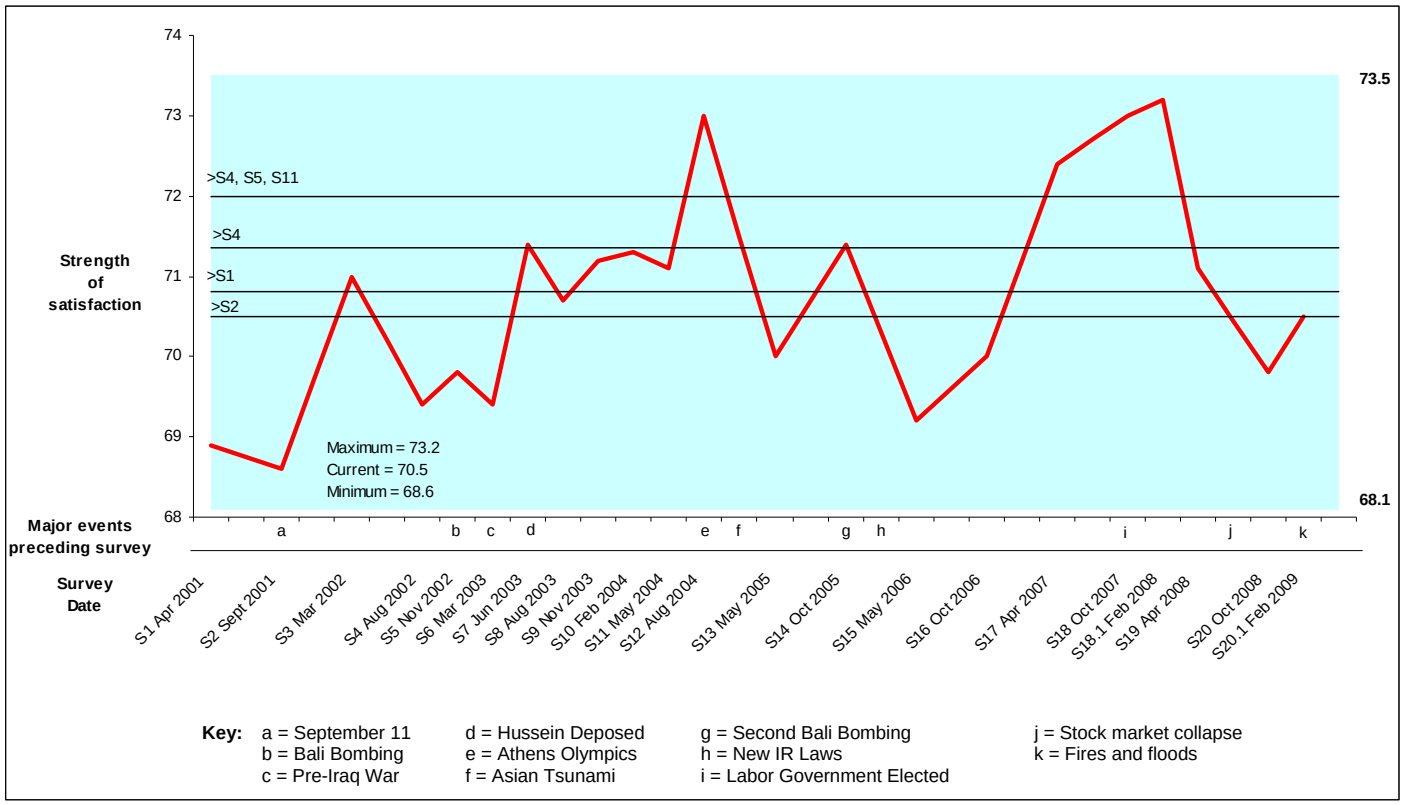


Figure 2.8: Satisfaction with **Future Security**

Satisfaction with future security, now at 70.5 points, has risen by a non-significant 0.7 points since Survey 20. It seems evident that the economy is dominating people's views of their future. It remains at a level no different from Survey 1.

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).

Spiritual/Religious

The new Personal Wellbeing Index domain 'How satisfied are you with your spiritual fulfilment or religion' was included for the first time in Survey 16. In Survey 17 this was changed to 'How satisfied are you with your spirituality or religion?' The current value of 71.8 points constitutes a non-significant change of 0.5 points from survey 20. It is evident that these natural disasters have not had a significant effect on satisfaction in this domain.

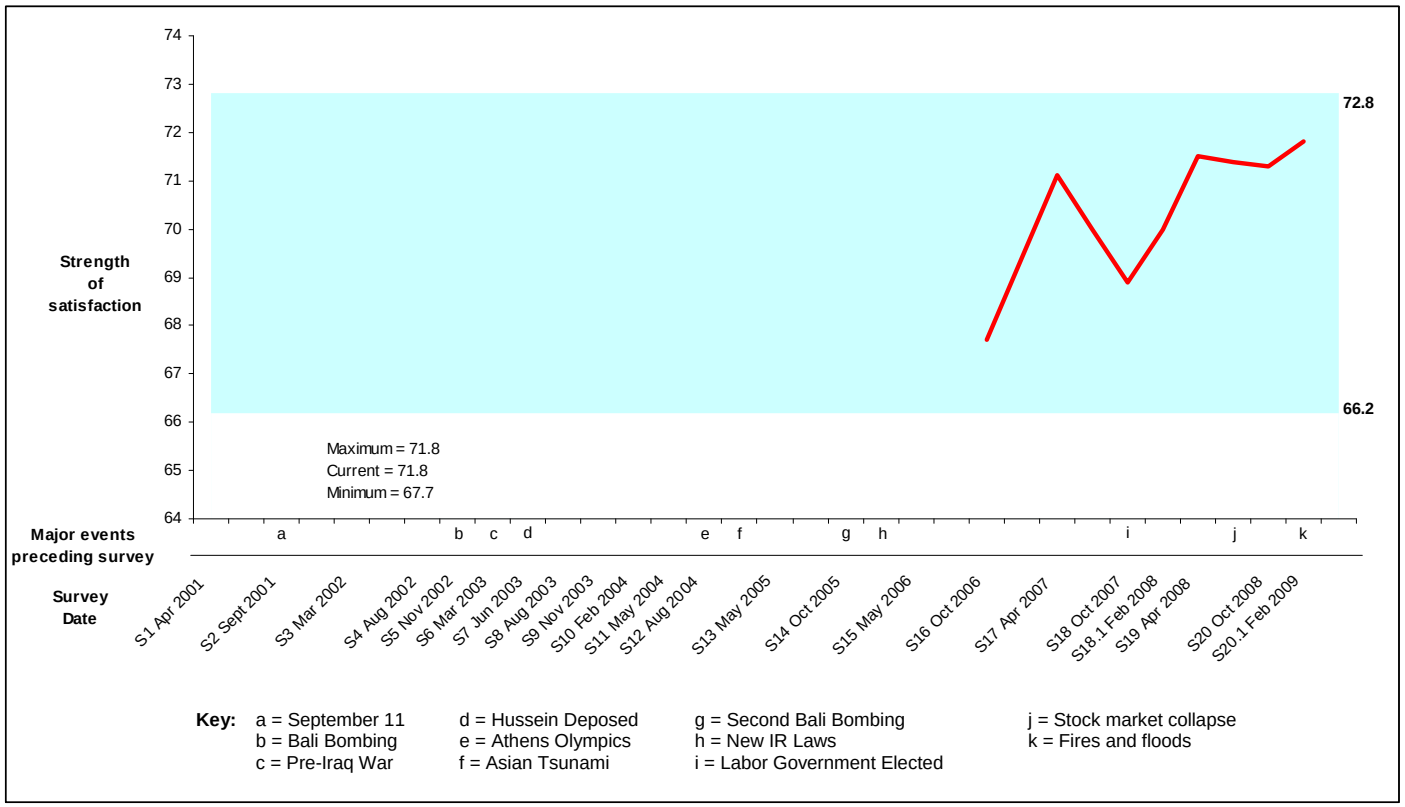


Figure 2.9: Satisfaction with Spirituality/Religion

Figure 2.10: Satisfaction with Spiritual/Religious vs. Personal Wellbeing Index (combined sample)

2.4. Australian Wellbeing Summary

A summary of these changes in population wellbeing is shown in Figure 2.11 below. In this figure, the vertical bars show the normal range for the Personal Wellbeing Index and for each domain. The bold vertical lines indicate the strength of satisfaction in Survey 20.1

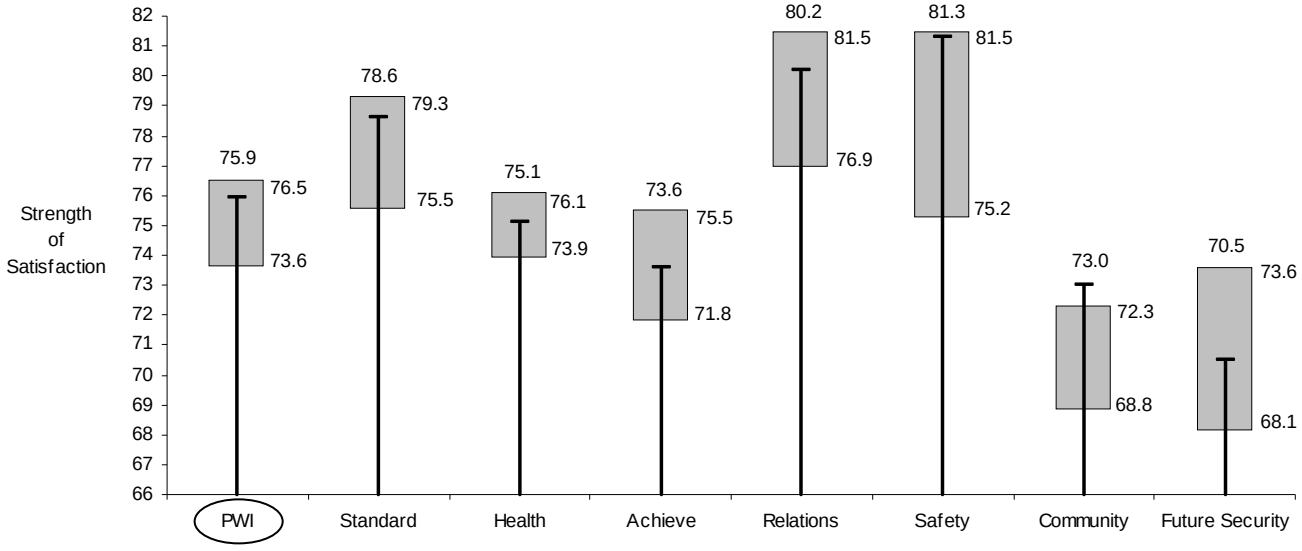


Figure 2.11: Normative Range for Group Data: **Personal Wellbeing** Mean Scores (N=20)

It can be seen that the Personal Wellbeing Index lies high in its normal range, and that this has been caused by just three of the domains. Standard of Living and Safety also lie at the top of their respective ranges, while Community lies above its normal range. It seems very likely that the enormous community response to the twin diasters has enhanced people's satisfaction with their own Australian community.

2.5. State Comparisons

The data for this survey were collected from Victoria (VIC), Queensland (QLD), and South Australia (SA). See the Methodology section (1.2) for a more complete description.

Before studying the data from this survey, it is useful to observe the baseline comparisons between the states, produced by combining all of our data from the regular surveys.

2.5.1. State/Territory Comparisons using Cumulative Data

Table A2.10 shows the mean Personal Wellbeing Index score for each State and Territory using the combined data (N = 38,792). The results are shown below.

Figure 2.12: State/Territory Comparisons using Combined Data using Combined Data (Personal Wellbeing Index)

Statistical tests of significance show that TAS, VIC, SA, QLD > NSW, WA. Most importantly for our current purpose, the three states sampled for this survey do not differ in terms of their overall wellbeing, and are separated from one another by only 0.2 percentage points.

2.5.2. State Comparisons for Survey 20.1

These results are drawn from Tables A2.6, A3.1, A3.2 and A3.3.

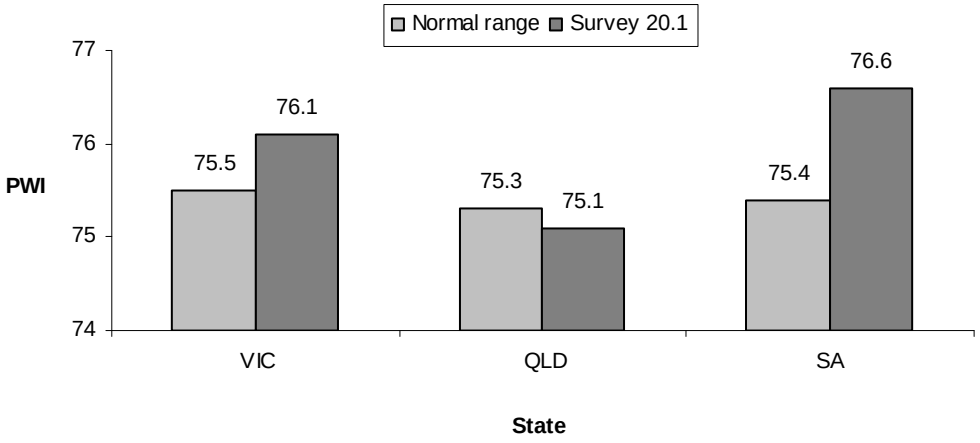


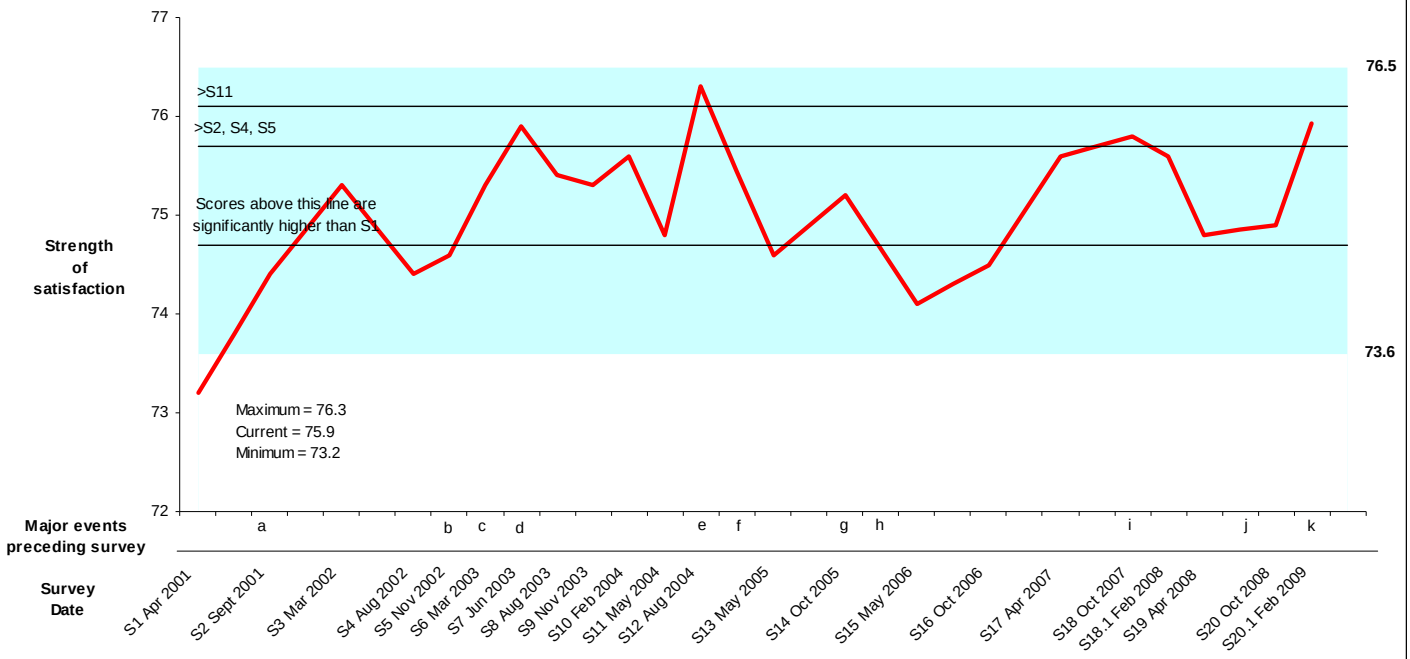
Figure 2.13: State Comparisons for Survey 20.1

A comparison of the two SA values by t-test (t = 1.873) just fails to reach significance (critical t = 1.963), so the difference is not significant.

A comparison of Community Satisfaction between the three states also failed to reach significance.

Dot Point Summary for the Wellbeing of Australians

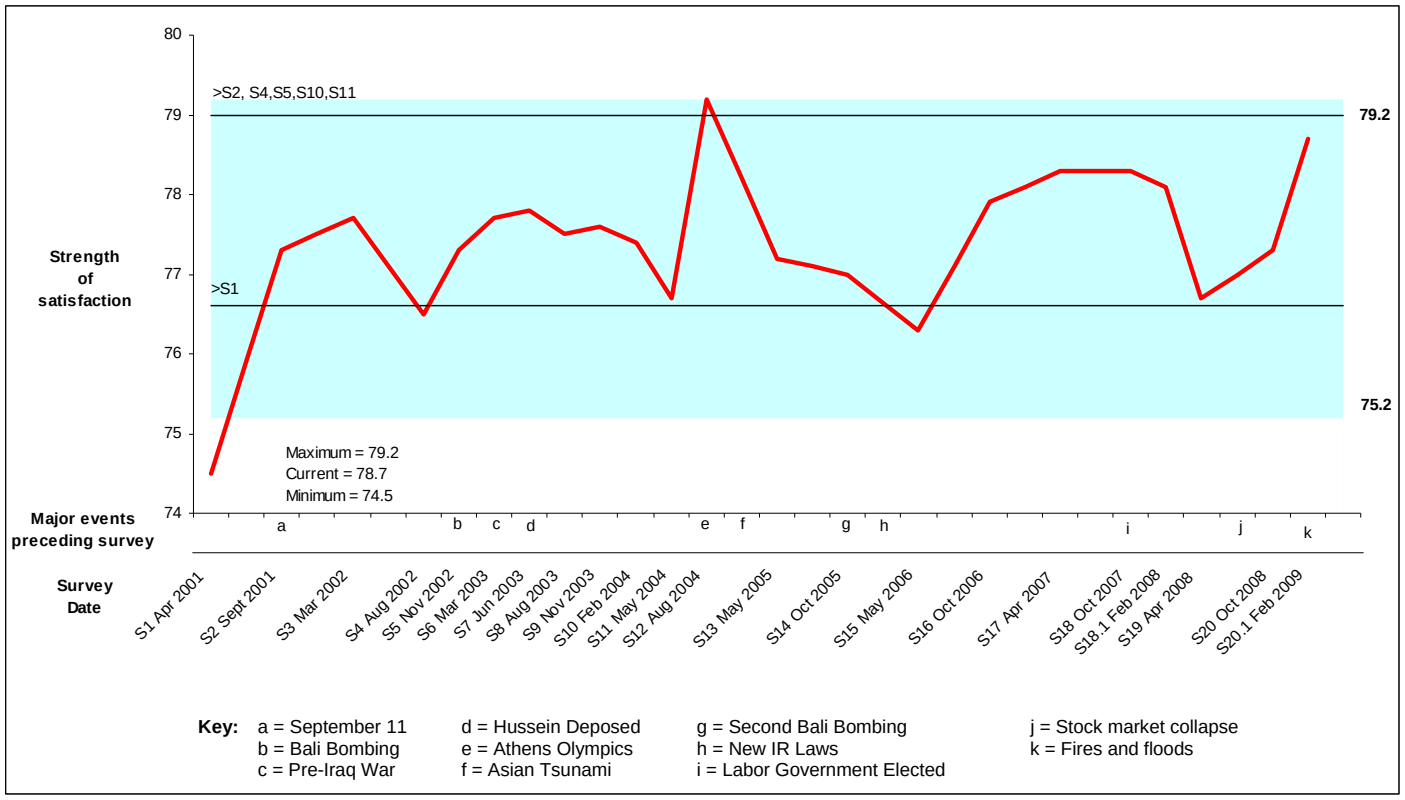
1. The Personal Wellbeing Index has risen to its second-highest level yet recorded. It is only 0.4 points less than the peak value of 76.30 recorded at the time of the Athens Olympics.



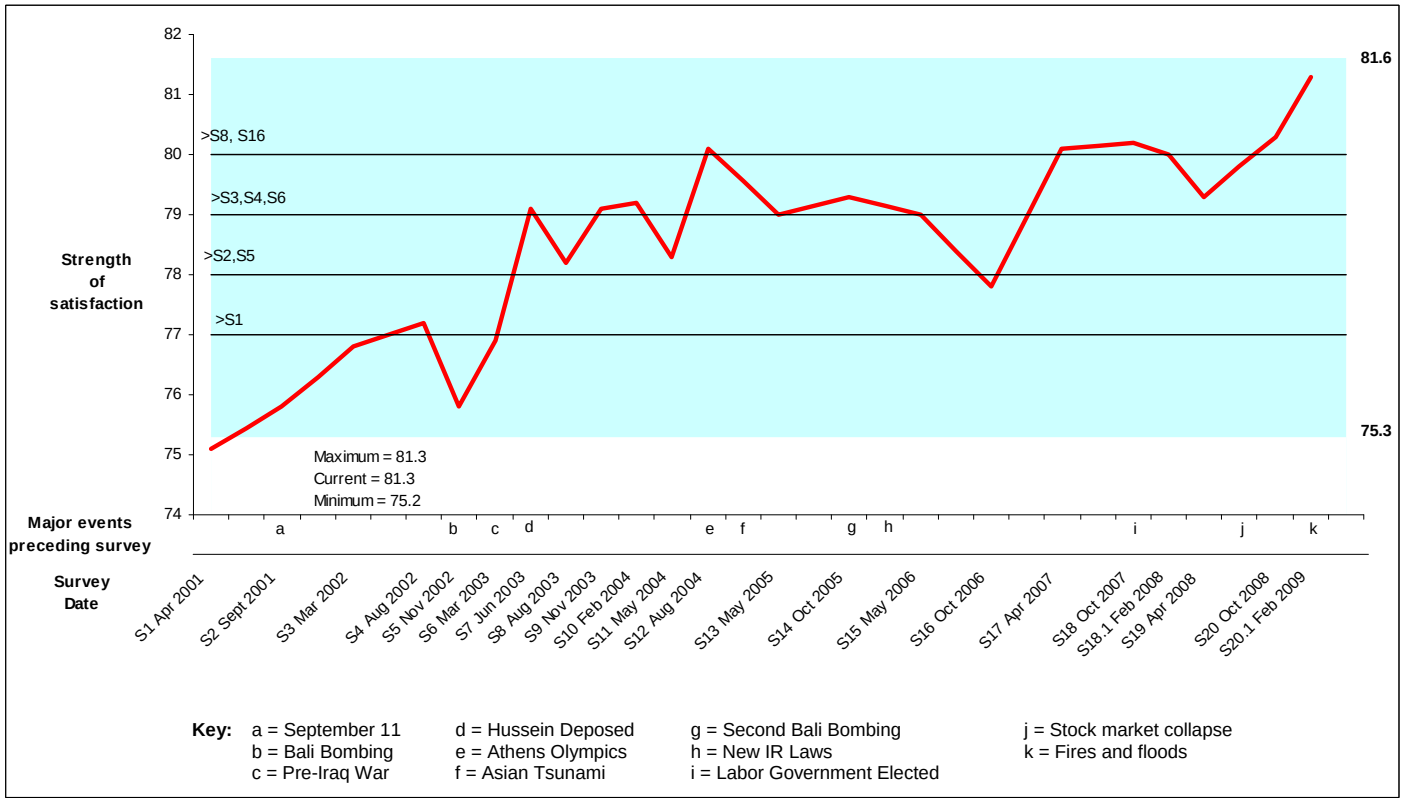
Key:
a = September 11
b = Bali Bombing
c = Pre-Iraq War
d = Hussein Deposed
e = Athens Olympics
f = Asian Tsunami
g = Second Bali Bombing
h = New IR Laws
i = Labor Government Elected
j = Stock market collapse
k = Fires and floods

Note: In this and subsequent figures, the shaded (blue) area shows the normal range of values shown in Table A2.22. These represent two standard deviations around the mean using survey mean scores as data.

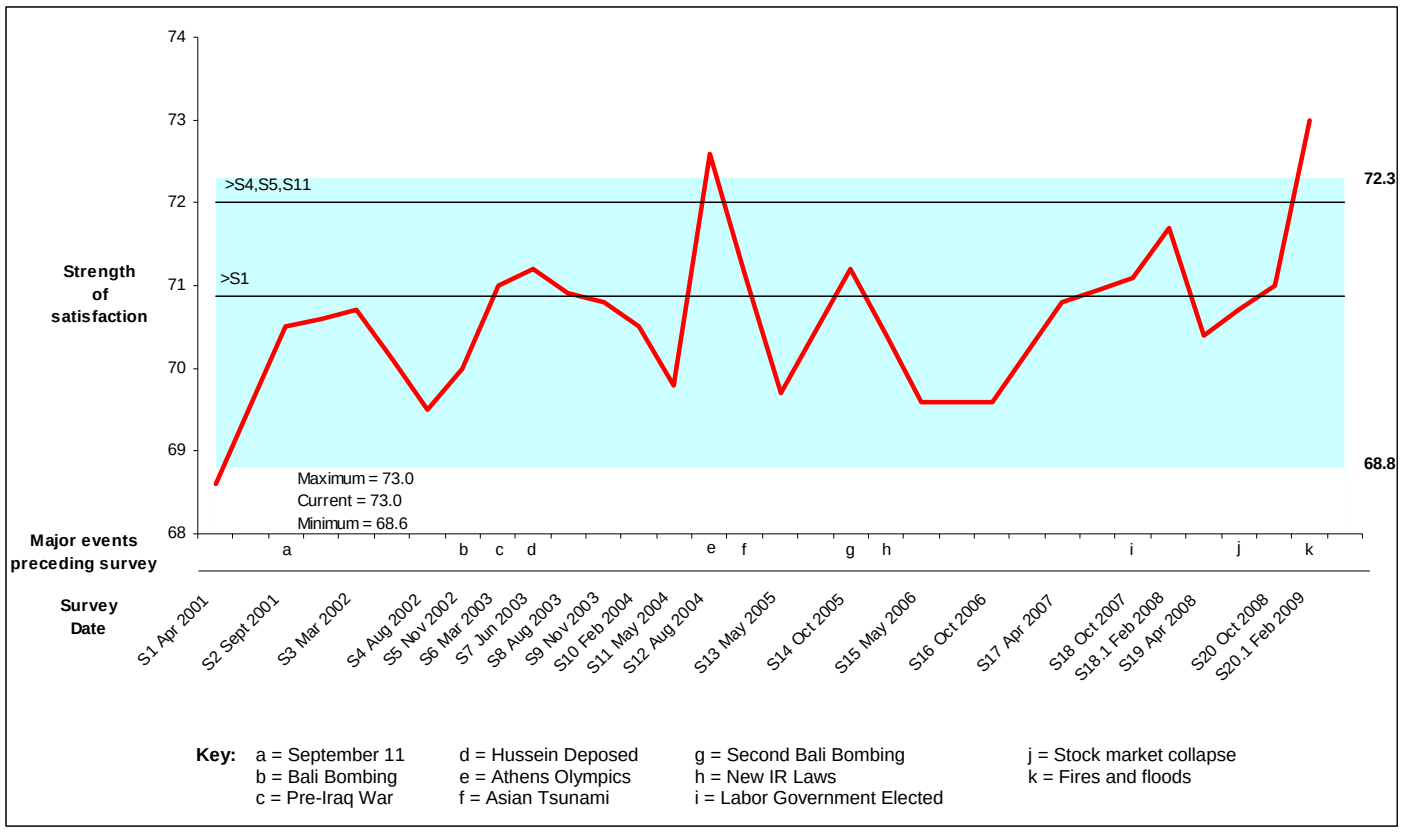
2. Satisfaction with Standard of Living has risen by a significant 1.4 points since Survey 20 and is now at its second highest level yet recorded.



3. Satisfaction with Safety has risen to its highest level yet recorded.



4. Satisfaction with Community has risen a significant 2.0 points since Survey 20 and is now at its highest level yet recorded.



3. Day-by-day Results

The period of data collection spanned 10 days, from Monday 23rd February to Wednesday 4th March. By the start of this period the floods in Queensland had been subsided for about two weeks but the fires in Victoria were still burning, with new outbreaks reported on the first day of data collection. A description of the major events reported by the media in each state follows.

3.1. The Victorian Bushfires

3.1.1. Overview

The 2009 Victorian bushfires on Saturday 7 February 2009 were the worst bushfires in Australia's history, surpassing both the Ash Wednesday fires in 1983 and the Black Friday fires in 1939. The bushfires travelled at alarming speed, up to 100km/h, across farmland and through plantations and heavily "managed" forests, including forests where recent fuel reduction burns had been done.

Bushfire and climate scientists have confirmed that Victoria's hottest day, combined with very strong north winds, created conditions for an unstoppable firestorm. The high temperatures, some in excess of 45 degrees, and dry air experienced throughout Victoria on Saturday resulted in very low fuel moisture content. Combined with the extended rainfall deficit for much of the state, this resulted in tinder-dry fuel that was very easily ignited and very difficult to extinguish. In addition, to the high pressure system there was an approaching cold front which helped to strengthen winds ahead of the front, as well as causing a wind change after the front passed. Very strong winds resulted in fires that spread very rapidly with the wind and were practically unstoppable until the weather moderated following the cool change. The death toll of 173 people surpasses the toll from the 1983 Ash Wednesday bushfires, in which 75 people died in Victoria and South Australia, and the Black Friday bushfires of 1939, which killed 71.

3.1.2. Day-by-day description of events

Saturday 7 February 2009

- 11:20 Smoke and flames first observed in a hilltop paddock in Kilmore East
- 12:30 Horsham fire started.
- 15:00 Fires that claimed Marysville first seen from Mt Despair fire tower.
- 16:20 Fire front arrives at Strathewen.
- 16:30 Fire front arrives at Kinglake
- 17:00 Wind direction changed from northerly to southerly in Melbourne
- 17:30 Fire commences at Eaglehawk, near Bendigo
- 18:00 Fire front approaching Marysville.
- 18:00 Beechworth fire started.
- 19:00 (approx). Fire front hits Marysville
- 19:30 Southerly wind associated with cool change passes through southerly regions of the Kilmore fire, changing the fire front direction to the north east.

Sunday 8 February 2009

- Kilmore and Murrindindi Mill fires merge to form the Kinglake fire complex.
- Wilsons Promontory fire started by lightning.
- On Sunday February 8th 2009 Newspapers reported '14 Killed In Blazes.' At least 14 people died in terrifying bushfires that swept across Victoria on the hottest day in the state's history yesterday. However, police warned the final death toll could be as high as 40. Deputy police commissioner Kieran Walshe said it was feared many more had perished in what would be the worst fire disaster since the 1963 Ash Wednesday blazes. He said six people died at Kinglake, four at Wandong, three at Strathewen and one at Clonbinane. All the Kinglake dead were in one vehicle.

Monday 9 February 2009

Papers report 84 Dead: Toll To Soar; 750 Homes Destroyed; Arsonists Relight Fires. Thousands of people are homeless and at least 84 people confirmed dead in Victoria's weekend inferno. The bushfires are Australia's worst natural disaster.

Tuesday 10 February 2009

Newspapers had headlines reading: A Nation Mourns-Apocalypse Now 130 Dead: 500 Homeless; Amazing Survival Stories. By now it was beginning to look as though there would be upwards of 300+ deaths by the end of this, and some estimates are above 500

Wednesday 11 February – Saturday 14 February 2009

Victoria's Inferno-Death Toll Soars to 181-Donations top $28 Million

Sunday 15 February 2009.

With temperatures in the low 30s, a new fire, allegedly deliberately lit with several ignition points, started in the late afternoon near Peters Road and Terrys Avenue intersection in Belgrave, spreading in a northerly direction to around the Terrys Avenue and Sandells Road Tecoma intersection, with between 4 – 5 hectares of mainly Dandenong Ranges N.P. burnt.

Tuesday 17 February 2009.

- Six fires are still burning out of control with another 19 contained fires still burning.
- Containment lines surrounded 85 per cent of the Kinglake Murrindindi Complex.
- The Kilmore East - Murrindindi Complex South fire was burning in Melbourne's O'Shannassy and Armstrong Creek water catchments.
- The Bunyip and Beechworth fires were close to being contained.

Monday 23 February 2009

Temperatures in the mid 30s, northerly winds and a cool change precipitated several new fires the most major being in the southern Dandenong Ranges near Upwey, South of Daylesford and the Otway Ranges, and directed previously burning fires in the Yarra Ranges towards settlements in the upper Yarra Valley. New fires were contained and control lines held existing fires away from settlements.

Friday 27 February 2009

- The Bunyip Ridge fire was still burning within control lines in the Bunyip State Park and State Forest areas
- The Kilmore East - Murrindindi Complex North fire is burning within containment lines on the South Eastern flank.
- Kilmore East - Murrindindi Complex South Fire activity continues in the areas close to several towns in the Yarra Valley and the Warbuton Valley.
- The Wilsons Prom Cathedral Fire was 24,150 hectares in size and still burning.
- The French Island fire was slowly burning in uninhabited grass and scrub bush land on the North East end of the island.

Tuesday 3 March 2009

Extreme bushfire conditions were predicted for Monday night and early Tuesday morning, involving very strong northerlies, with a change to arrive by Tuesday morning. Approximately 3 million sms messages warning of extreme fire danger conditions were sent from Victorian Police to Victorians with mobile phones as a technology trial. This message read:

"Extreme weather in Victoria expected on Mon night and Tues. High wind and fire risk. Listen to local ABC radio for emergency updates"

In fact, the following weather conditions were much milder than had been anticipated.

Wednesday 4 March 2009

Cooler conditions and rain from the 4th to the 6th of March enabled firefighters to control and contain several fires, the Kilmore-Murrindindi Complex South being completely contained. Predictions for favorable weather signal the easing of the threat to settlements from the major fires that have been burning since February 7.

Saturday 21 March 2009

The final death toll was announced as 210 (later revised down to 173) people. The residents of the devastated townships were allowed to return but warned of the risk of asbestos dust.

3.1.3. Extent of the damage

The fires destroyed at least 2,029 homes, 3,500 structures in total and damaged thousands more. Many towns north-east of the state capital Melbourne have been badly damaged or almost completely destroyed, including Marysville and Flowerdale. Many houses in the towns of Humevale and Koornalla were also destroyed or damaged, with several fatalities recorded at each location. The fires left an estimated 7,500 people homeless, many of whom sought temporary accommodation, much of it donated in the form of spare rooms, caravans, tents and beds in community relief centers.

One of the industries that has been affected by the bushfires has been the Victorian wine industry with 29 wineries in the Yarra Valley district affected. According to Yarra Valley Wine Growers' Association vice president Graham Van der Meulen around 350 acres of vineyards have been affected. The Yarra Yarra and Roundstone wineries were destroyed and other wineries lost warehouse, storage or machinery to the fires.

It was first thought that quite a large number of vines were completely lost though to the blazes but there are now hopes that they will recover to regrow within a couple of years.

The fruit from the wineries that were hit, though, was unsalvageable with the smoke damage affecting the juice. The grapes from these vines won't be able to be harvested this year and the Australian wine industry will have to cope with the loss of around 5% of the annual production for the year. The fires happened to coincide with harvest and many of the wineries have gone ahead with their picking, a good sign that they believe their grapes are not smoke affected.

April 6th: The Royal Automobile Club of Victoria (RACV) has paid out $124 million in insurance to members affected by the Black Saturday bushfires, including more than 100 homes in Marysville. RACV Insurance has to date received 2,307 claims as a result of the Black Saturday bushfires, with 50 per cent of these being for the total loss of homes and cars.

3.1.4. Death Tolls

Sunday 8 February: 84 had been reported dead.

Late evening Monday 9 February: 134 confirmed dead.

Tuesday midday, 10 February: the death toll was at 173. By late Tuesday evening, it had reached 181. 80 more people were still missing.

The official death toll from the Victoria bushfires remained at 181 up until the morning of Monday, 16 February 2009. By evening, after police had searched areas of rubble, that figure had risen to 189. A day later, after more searches, the toll hit 200.

Friday 20 February: Death toll rises to 209. The rise in the toll comes amid attempts by the Victorian Coroner's Office and police to identify remains found at various places throughout the state.

The worst-hit town is Marysville with 45 dead, followed by Strathewen with 42 fatalities, Kinglake with 38 and St Andrews 22.

Meanwhile, two people seriously injured in Victoria's deadly bushfires have been discharged from hospital in a rare piece of good news out of Australia's worst fire disaster.

Fifteen people remain in The Alfred, six are in a critical condition in its intensive care unit while the remaining nine people are in its burns unit in a stable condition.

Firefighters on Friday were continuing to fight four blazes that were out of control at Wilsons Promontory National Park, the Kilmore East-Murrindindi north and south.

Monday 23rd February - The death toll from the February 7 fires rose to 210 on Monday following the death of a Strathewen resident in hospital at the weekend.

Monday 30th March - Police lower the death toll from the Black Saturday bushfires from 210 to 173. Deputy Commissioner Walshe said disaster victim identification teams had originally believed they had collected the remains of 210 people but scientific investigations had revealed a lower number. He said some remains had been "co-mingled" while others had turned out to belong to animals.

3.1.5. The bushfires – support

8th of February: The Red Cross, within the first few days of the tragedy, had more than 36,000 individual donations. Premier John Brumby, launched the 2009 Victorian Bushfire Appeal Fund in partnership with the Australian Government and Red Cross to support communities impacted by devastating fires which have ravaged many parts of Victoria. Mr Brumby said the Bushfire Appeal Fund would support fire victims through the collection of cash donations and distribution of assistance to individuals and communities in towns and suburbs affected by the fires. The Victorian Government and the Federal Government will donate $4 million to the appeal, in addition to the $10 million announced earlier today by the Prime Minister Kevin Rudd. ANZ, Westpac and Commonwealth Bank

have each donated $1 million to the State Government's Victorian Bushfire Appeal, while National Australia Bank has established its own $1 million relief fund.

In addition, the Premier and Prime Minister also announced today an initial $10 million towards the Community Recovery Fund. The Community Recovery Fund will cover immediate costs of clean-up and removal of debris. It will also cover the restoration of community infrastructure damaged or destroyed in the fires, above and beyond the replacement of essential public assets.

9th February: Australians have donated more than $8.8 million in less than 24 hours to bushfire-ravaged communities in Victoria. At 4.30pm, more than 38,000 people gave $6.8 million to the Australian Red Cross since the organization launched its appeal with the Victorian Government yesterday afternoon. More than $2 million has been donated to the Salvation Army's appeal.

22nd of February: Australians observed a national day of mourning to honour the victims of Victoria's bushfires. Victoria's Premier, John Brumby, says the memorial will be a chance for everybody to grieve together.

With thousands of families left homeless by the fires, local communities are 'pitching in' to help financially and materially, as well as at the fire front. Since the recent disastrous Victorian bushfires, where extensive damage has been caused and over 200 lives lost, local communities have been fundraising in different ways.

Australian banks (as of 2nd April, 2009)

- ANZ: Donated $1 million to Victorian Bushfire Relief Appeal. Collecting customer donations at branches. (Raised $10.4 million).
- Commonwealth/Bankwest: Donated $1.1 million to Victorian Premier's Bushfire Appeal. Collecting customer donations at branches. (Raised $30 million).
- NABb: Donated $1 million to Victoria Bushfire Relief Fund. Collecting customer donations at branches. (Raised $18 million).
- Westpac/St George: Donated $1 million to Victorian Bushfire Relief Appeal. Will match all staff donations to support victims of bushfires. Collecting customer donations at branches. (Raised $15.2 million)

Community effort

- More than 50 Chinese community organizations in NSW responded to the call from the Australian Chinese Charity Foundation, raising $85,000 so far for the bushfire appeal.
- The City of Wanneroo donated $10,000 at its last council meeting. The Woodridge Community held a swapmeet and auction raising the magnificent total of $12,743.90, while students at Yanchep district High School collected donations last Friday raising $687.50.
- At the Shire of Gingin, president Wayne Fewster, raised the question about a possible $2,000 donation from Gingin council. A couple of councillors spoke against making a donation using council funds.
- Gingin District High School students enjoyed a day out of their uniforms to raise funds for the victims of the Victorian Bush fires. For the privilege of not wearing a uniform, students were charged a gold coin fee. Some very generous participants donated $50.
- Mercedes-Benz Australia/Pacific (MBAuP) has announced it is donating an initial sum of $107,000 to the Victorian Bushfire Fund. A sum of $100,000 will be made by MBAuP, with the company's board of seven directors each personally donating $1,000.

- More than 1000 people made the journey from Woy Woy to Gosford to show their support for victims of the Victorian bushfires. The Central Coast Walk for Victoria was coined by the Brisbane Water police command to help raise funds for families affected by the devastating bushfires in February. About $8500 was raised, with all proceeds donated to the Salvation Army and Red Cross for the Victorian Bushfire Appeal.

- 8th of April 2009: total cash raised for the Bushfire funds = 320 million

3.1.6. Endangered Species

An investigation by the Wilderness Society has found the intense fires burnt through the habitats of a number of rare animals including the Sooty Owl, Spotted Tree Frog, Ground Parrot and the Barred Glalaxias Fish. The implications may not be known in terms of the broader populations for some time, it may in fact be some years.

3.2. Queensland Floods

Sunday February 1

- Tropical Cyclone Ellie forms off the coast, threatening communities between Cairns and Ayr; parts of Bruce Highway are already cut off; Tropical Cyclone Ellie crosses the coast overnight, bringing heavy rain and flooding in Ingham and other parts of North Queensland.

Monday February 2

- Flood warnings are current for Herbert, Tully and Haughton Rivers, as well as coastal rivers between Townsville and Bowen; Floodwater is on the rise around Ingham; the Bruce Highway is cut north and south of Ingham.

Tuesday February 3

- Flooding becomes more widespread in Ingham, and Townsville suffers flash flooding.

Wednesday February 4

- By now Ingham is saturated, Hinchinbrook Mayor Pino Giandomenico says flooding is "horrendous." The Red Cross sends in a support team and the State Government sets up a Recovery Centre; Townsville begins clean up, but is on high alert for king tides next week.

Thursday February 5

- The clean up begins in Ingham

Friday February 6

- Premier Anna Bligh visits Ingham; EMQ says local SES crews are "fatigued"; Bruce Highway opens briefly to high clearance vehicles only; A big queue forms at the Recovery Centre; rain starts to fall again and a flash flooding warning is released.

Saturday February 7

- Locals are cleaned up, but bracing for more flooding; the SES continues food and medicine drops; State Opposition Leader Lawrence Springborg visits Ingham.

Sunday February 8

- The floodwater is back up in Ingham, almost as high as earlier in the week. Federal Treasurer Wayne Swan, State Emergency Services Minister Neil Roberts and the State Governor, her Excellency Penelope Wensley visit Ingham; wildlife around Ingham suffer from the flood resurgence; king tides in Townsville cause flash flooding in some areas.

Monday February 9

- Emergency Management Queensland continues to stress floodwater safety after several crocodile sightings in Ingham this week. Floodwater around Ingham begins to recede and the Bruce Highway south of Ingham finally reopens.

Tuesday February 10

- The clean up gets well underway in Ingham as blue skies shine over the saturated town

Wednesday February 11

- Most schools in the Ingham area back in action, but by late afternoon the blue skies have clouded over and it's raining again, fortunately it didn't last for long.

Thursday February 12

- Clean up effort well underway, the water continues to recede but reports are that crocs are still around; the Evacuation Centre closes.

Friday February 13

- Council gives advice on disposing of animal carcasses, Dengue Fever awareness heightens, severe road damage is revealed as the clean up continues.

3.3. Data Analysis

The following analyses are designed to give a picture of change across the ten days of data collection, from 23rd February to 4th March. A daily log of the events in Queensland and Victoria follows these figures. In the case of Queensland, the floods had subsided by the time the survey commenced. In Victoria, however, the fires were still very much in evidence during the whole period of data collection.

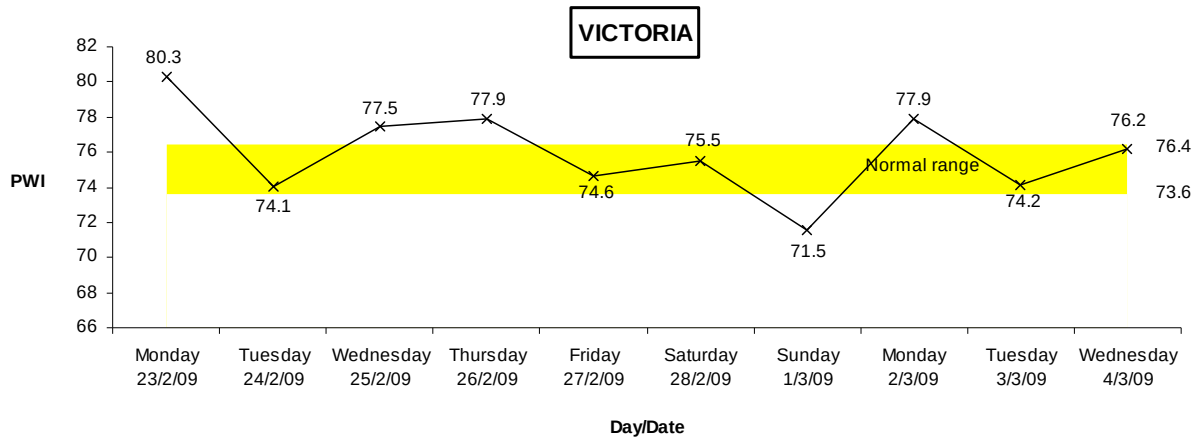


Figure 3.1: Victoria

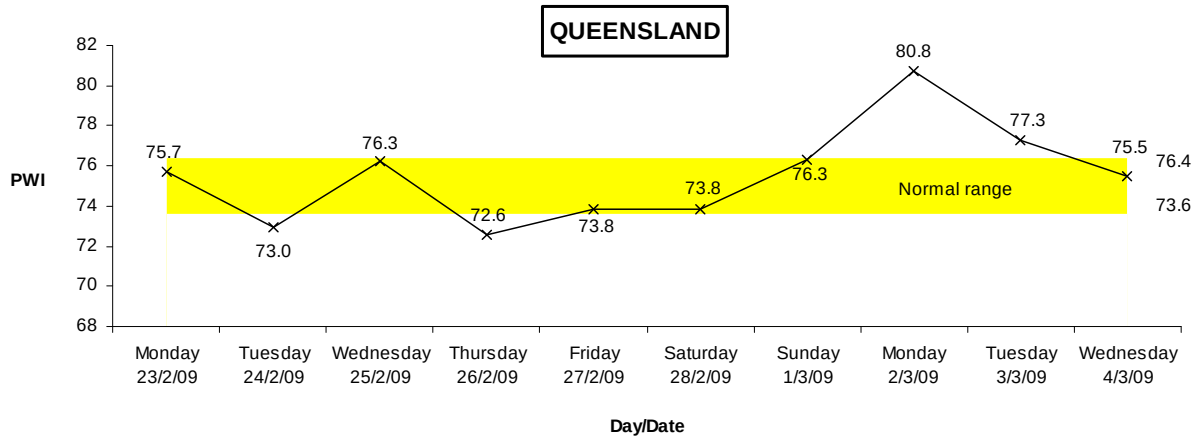


Figure 3.2: Queensland

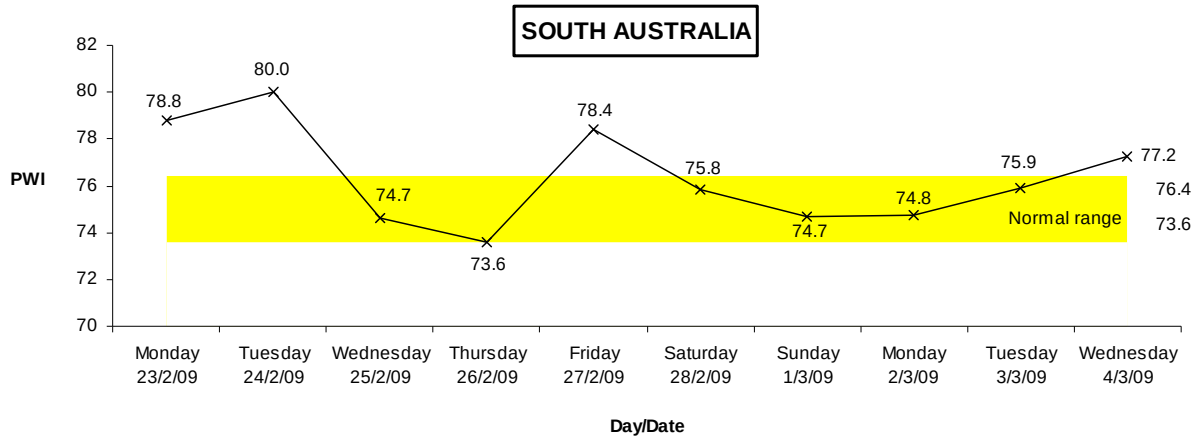


Figure 3.3: South Australia

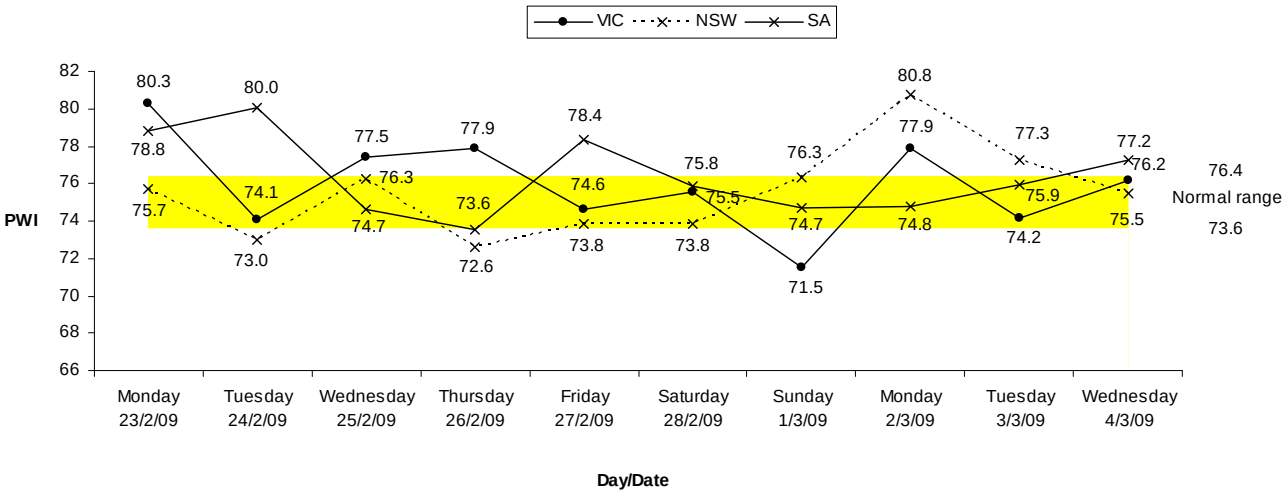


Figure 3.4: Combined States

All three of these states evidence considerable day-to-day variation in their wellbeing, due to the small samples (Tables A3.1, A3.2 and A3.3). However, they evidence a higher proportion of values lying above the range than lie below (VIC – 4 vs 1; QLD – 2 v 2; SA – 4 vs 0) as expected from their overall higher Personal Wellbeing Index than normal.

The highest values in both VIC (80.3 points) and SA (78.8 and 80.0) come at the beginning of data collection. These high values coincide with a fresh outbreak of three new fires in Victoria (see 3.1.3: Monday 23 February) and dangerous conditions pushing fires towards settlements. The strong media coverage of these events may have resulted in the higher wellbeing. This spike did not, however, occur in QLD.

3.3.1. Satisfaction with Community

The domain most strongly affected by these natural diasters is satisfaction with community. The day-to-day figures are shown below:

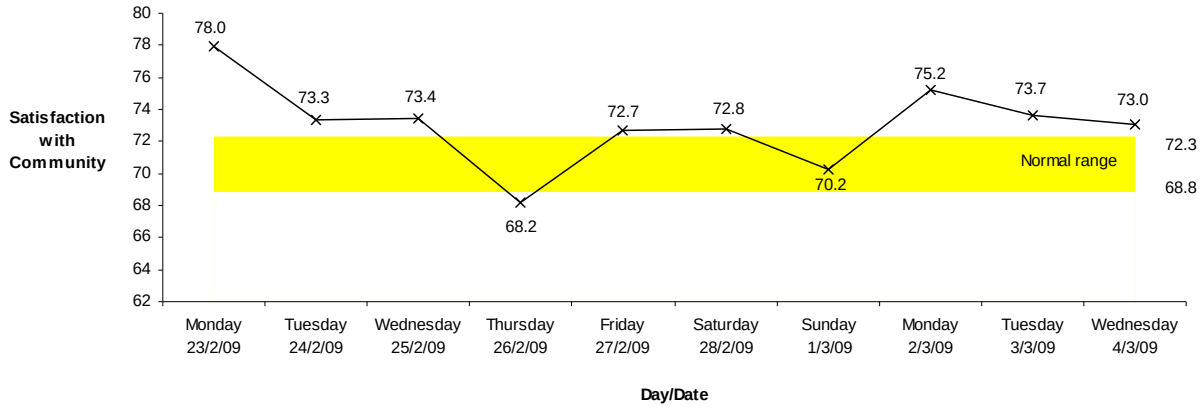


Figure 3.5: Satisfaction with Community (combined data)

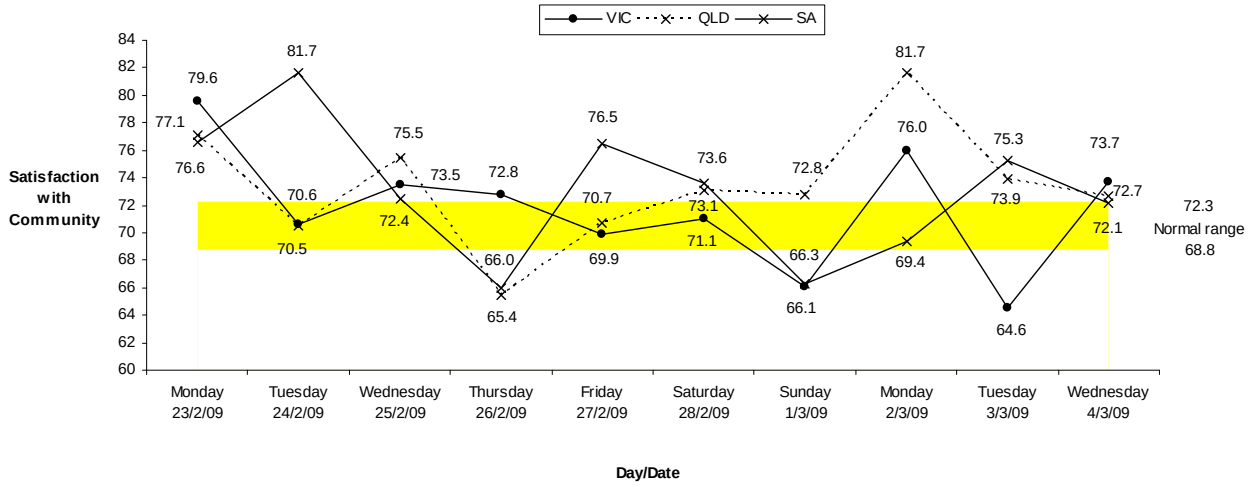


Figure 3.6: Satisfaction with Community (States)

Both the combined data (Figure 3.5) and the data from the individual states (Figure 3.6) clearly show the heightened wellbeing on the first day of data collection, and here it is evident in all three states.

3.3.2. Summary

There is no systematic difference between the three states in the pattern of their wellbeing response to the Victorian fires. On reflection, this is not surprising. Very few people in Victoria had direct contact with the effects of the fires, so all Australians, including almost all Victorians, were obtaining their information from the media.

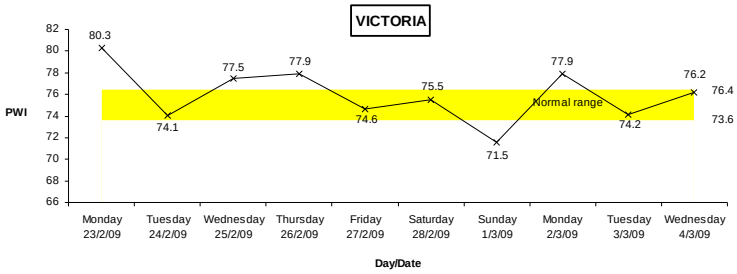
The community response, in terms of offering aid, was not only Australia-wide but very strong, and was rapidly gathering momentum by the start of the data collection period. Thus it seems likely that the enhanced wellbeing we recorded reflects a national response of good-will to, and sympathy for, the

victims. Individuals felt an enhanced connection with the Australian community and an enhanced personal wellbeing as a consequence.

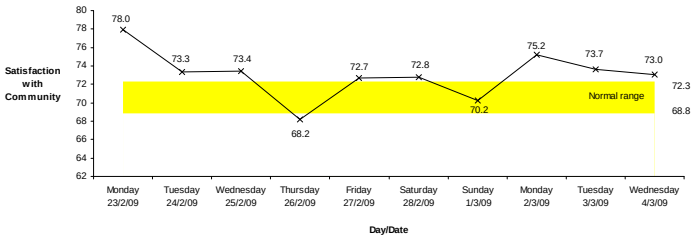
Dot Point Summary for Day-by-Day Results

1. The floods in North Queensland and the fires in Victoria have constituted a major national disaster. The community response to these events has been a magnificent outpouring of emotional and tangible support.

2. The highest values in the Personal Wellbeing Index occurred for Victoria at the time of new fire outbreaks and strong media coverage.



3. The highest levels of community satisfaction also occurred at this time of high drama.



4. In summary, it appears that the enhanced levels of wellbeing reflect a national response of good-will to, and sympathy for, the victims. These emotions engendered an enhanced sense of connection with the Australian community which, in turn, enhanced the sense of personal wellbeing.

4. Demographics

The abbreviated format of the questionnaire used in Survey 20.1 resulted in only three demographic variables being included. These are income, gender and age. The current data are compared with the cumulative data from Surveys 1-20.

4.1. Income

These results are found in Appendix 4.1 to 4.1.3. Neither the Personal Wellbeing Index nor the domains show any significant interaction between income and the two sets of data. The results for Community are shown below.

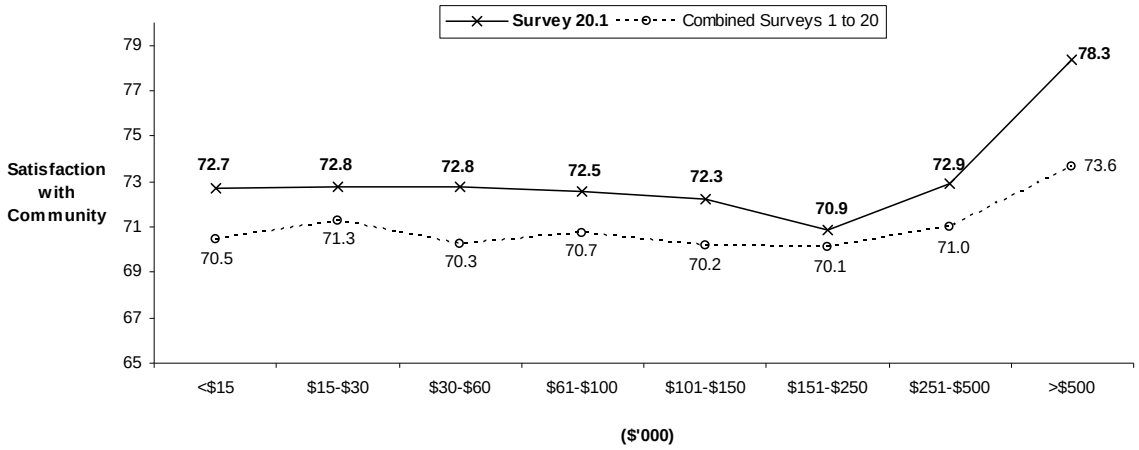


Figure 4.1: Satisfaction with Community x Income

The results of the Personal Wellbeing Index and other domains are shown below. None show a significant interaction between survey and income.

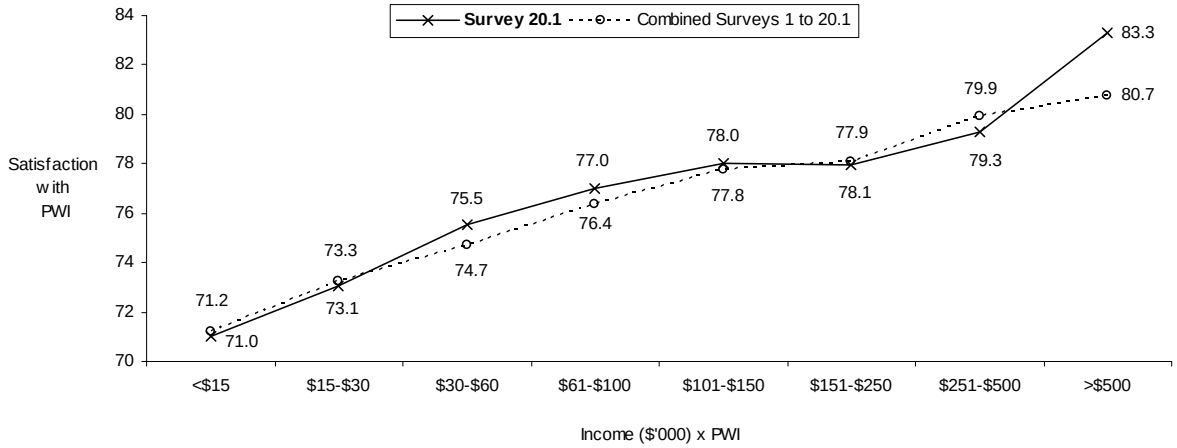


Figure 4.1.1: Satisfaction with Income x Personal Wellbeing Index

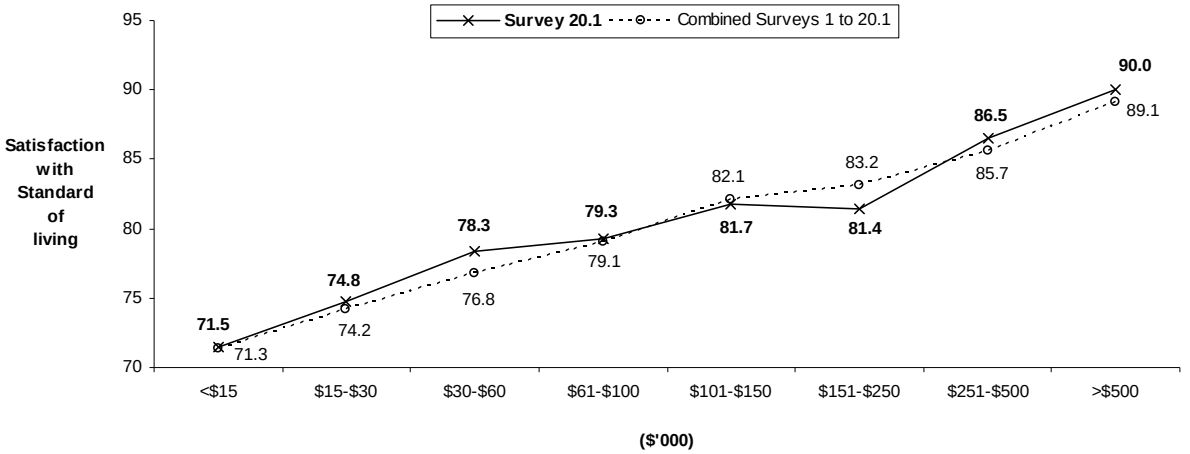


Figure 4.1.2: Satisfaction with Standard of Living x Income

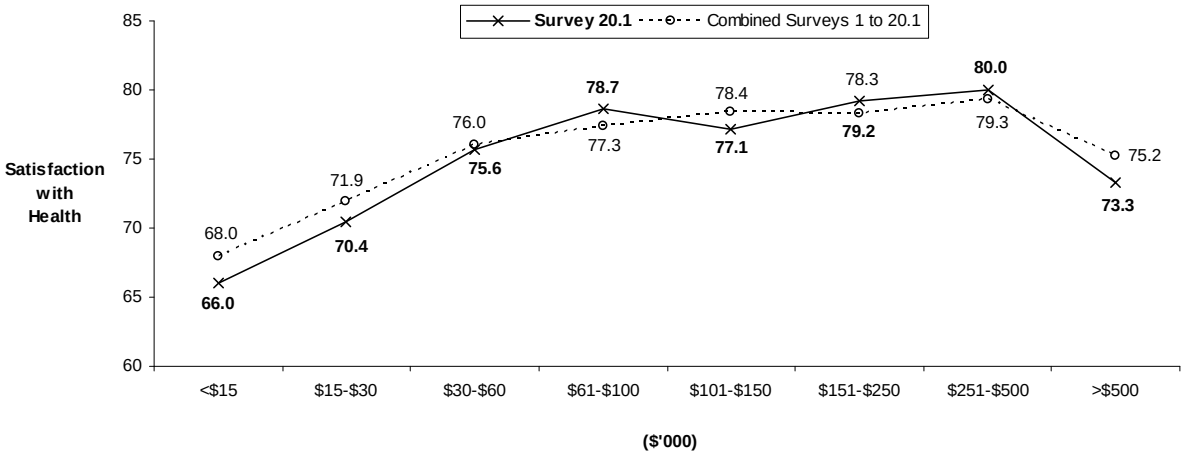


Figure 4.1.3: Satisfaction with Health x Income

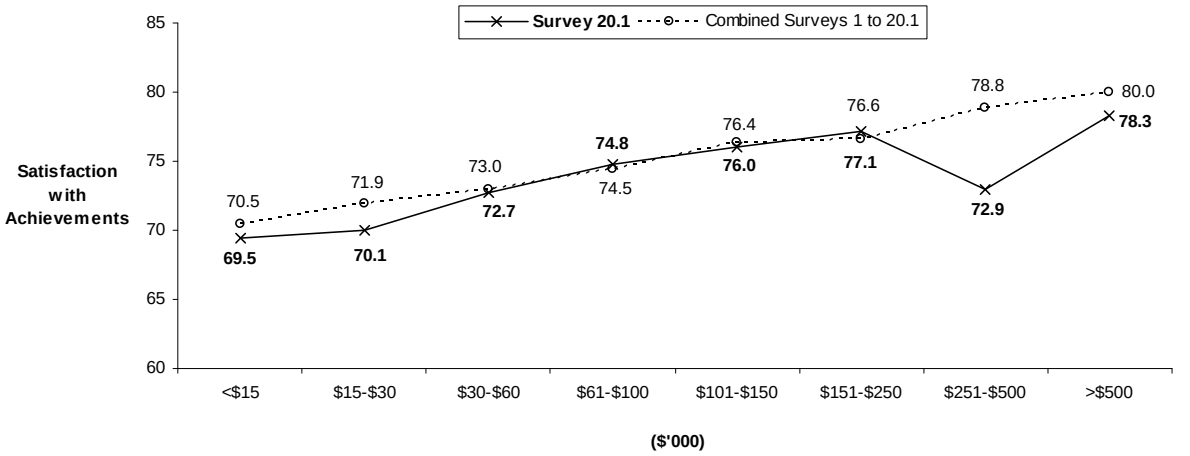


Figure 4.1.4: Satisfaction with Achieving in Life x Income

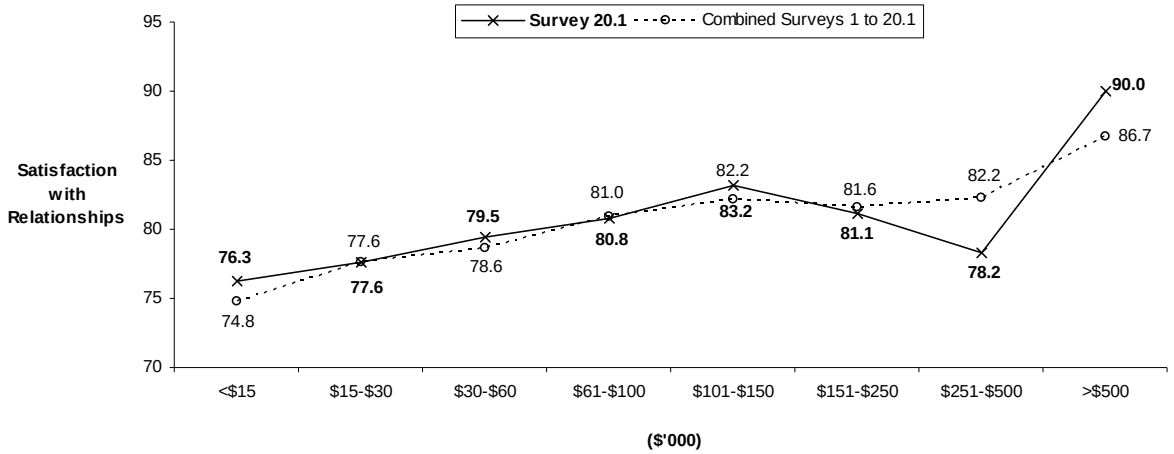


Figure 4.1.5: Satisfaction with Relationships x Income

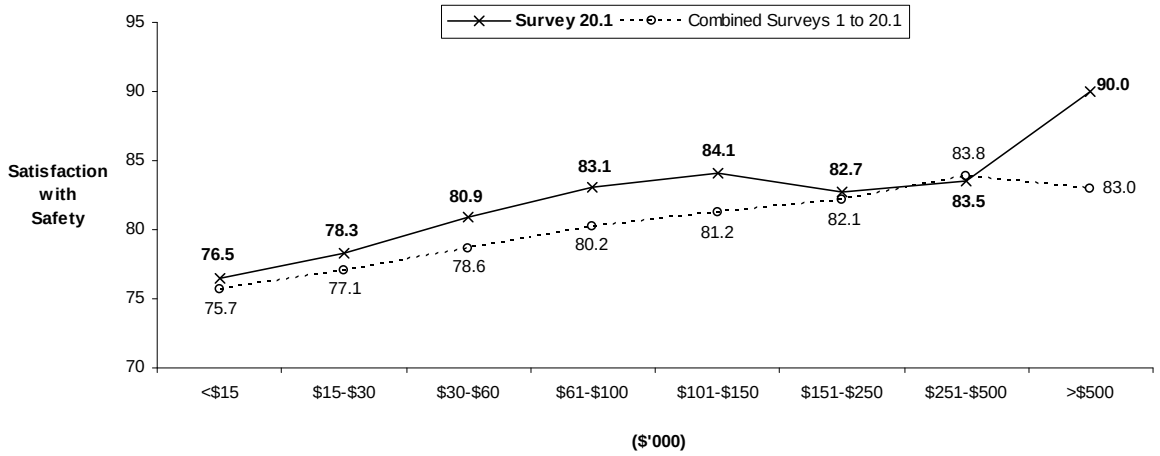


Figure 4.1.6: Satisfaction with Safety x Income

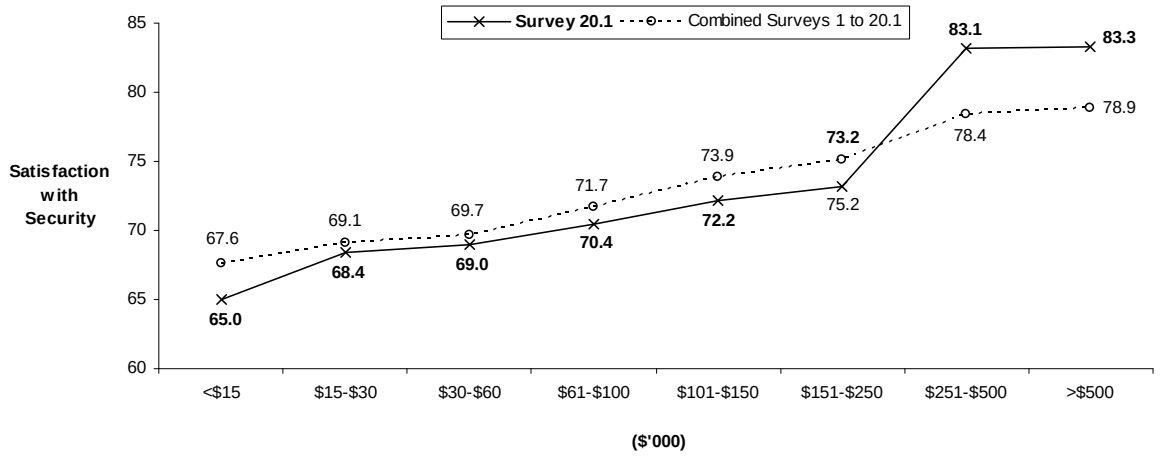


Figure 4.1.7: Satisfaction with Security x Income

4.2. Gender

Survey 20.1 shows gender differences in the domains of interest as Safety (males are higher) and Community (females are higher), as shown in Table A4.2 and Figure 4.2 below. These, however, simply reflect the normal gender differences we find in general population samples.

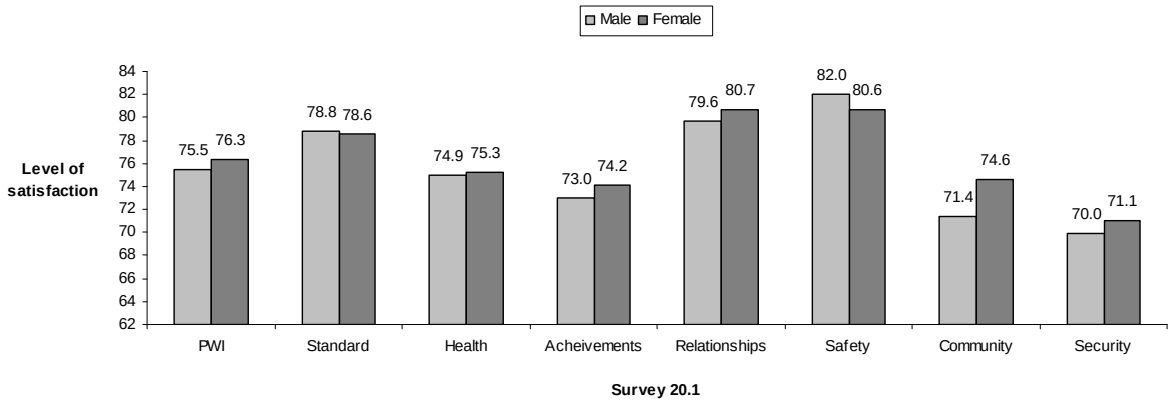


Figure 4.2: Satisfaction with Safety

When, however, these gender differences are compared against the gender specific normative data, it can be seen that males and females changed together in Survey 20.1. Safety for males rose 2.5 points above its normative level, while safety for females rose 3.0 points (see Figure 4.3 and Figure 4.4) below.

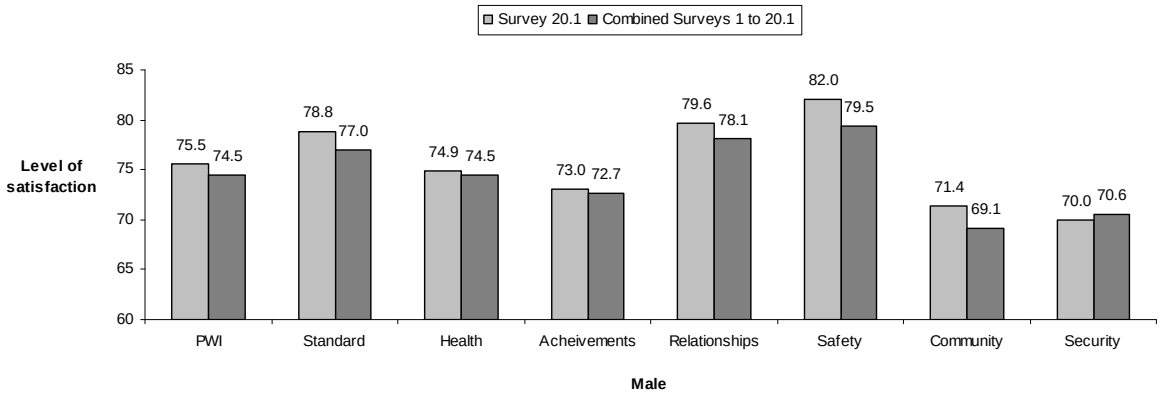


Figure 4.3: Satisfaction with Safety - Males

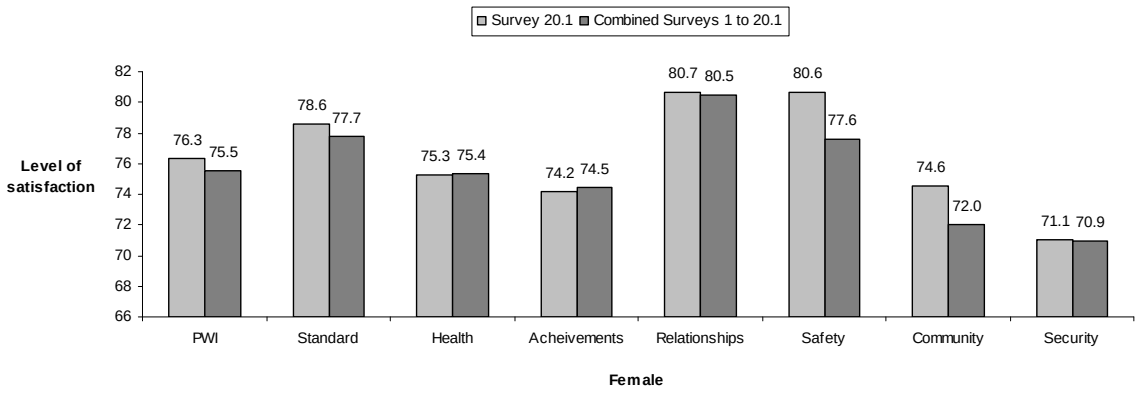


Figure 4.4: Satisfaction with Safety - Females

These comparisons against normative data are very important. If the results of Survey 20.1 were to be viewed in isolation, it would appear that males and females responded differently in Survey 20.1. Clearly, however, this is not the case, and domain satisfaction for both genders changed equivalently.

4.3. Age

All ages responded roughly equivalently as shown by Figure 4.5 below for safety.

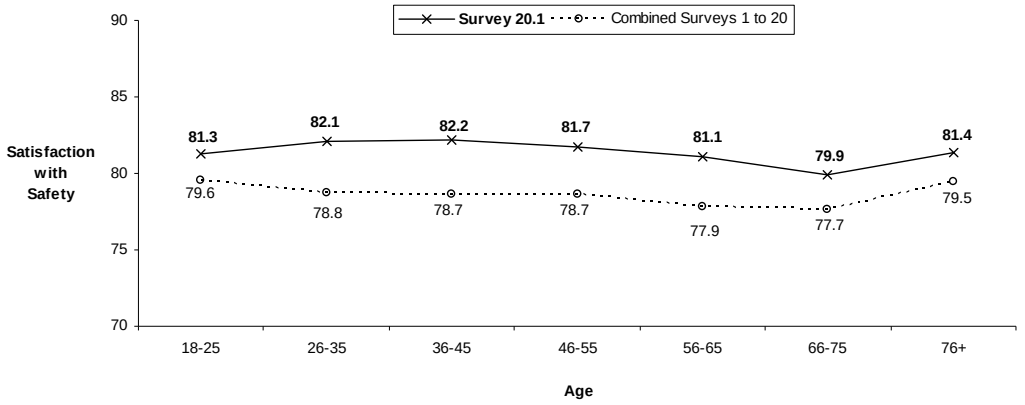


Figure 4.5: Satisfaction with Safety x Age

The results for the Personal Wellbeing Index and domains are shown below. None show a significant interaction between survey and age.

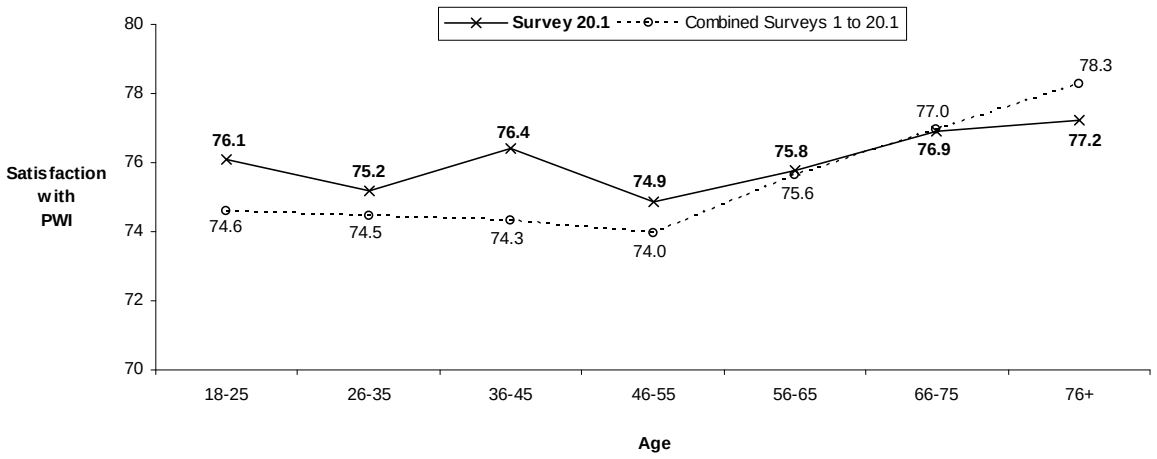


Figure 4.5.1: Satisfaction with PWI x Age

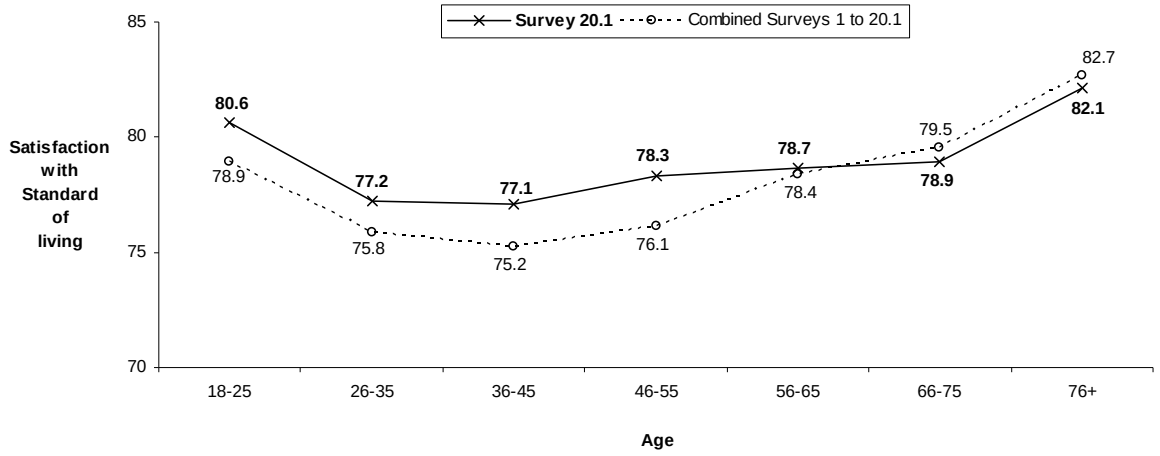


Figure 4.5.2: Satisfaction with Standard of Living x Age

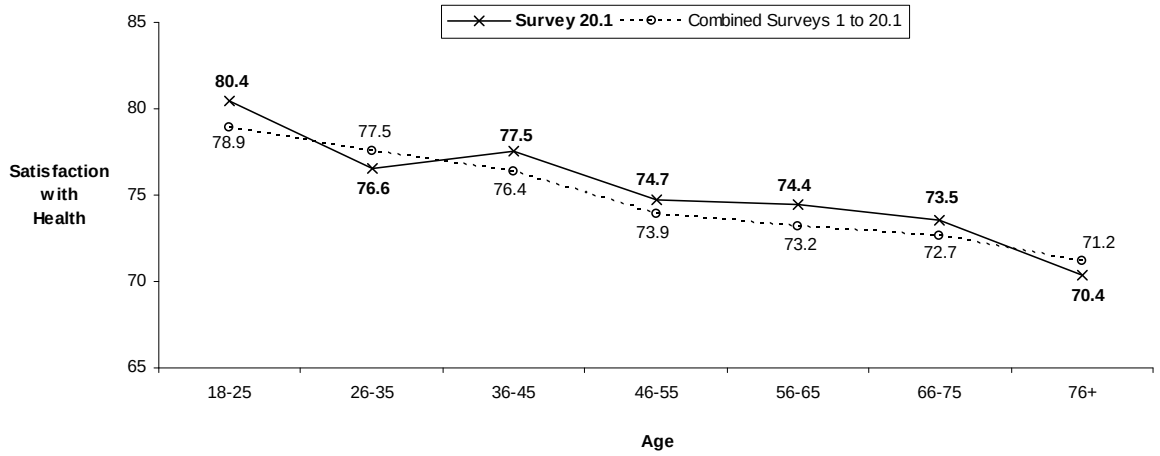


Figure 4.5.3: Satisfaction with Health x Age

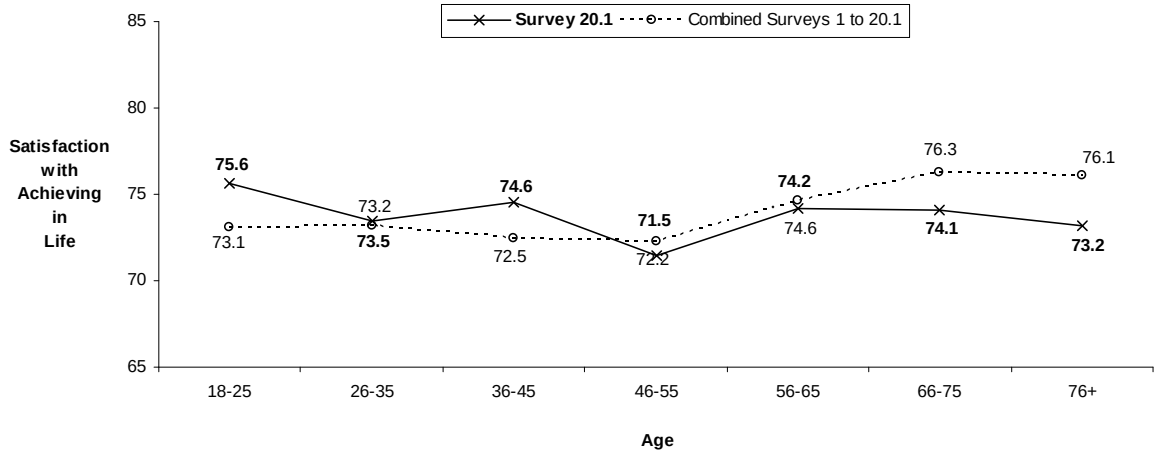


Figure 4.5.4: Satisfaction with Achievements x Age

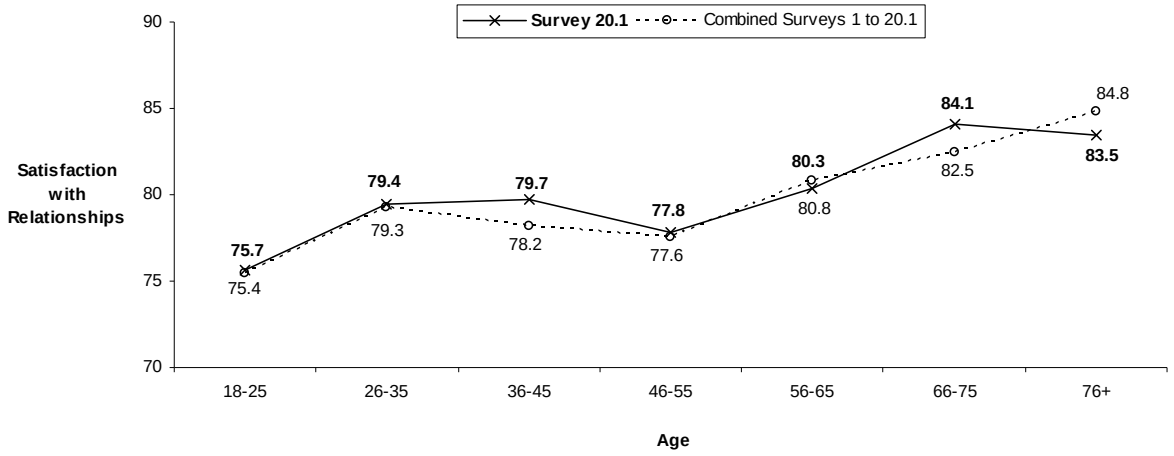


Figure 4.5.5: Satisfaction with Relationships x Age

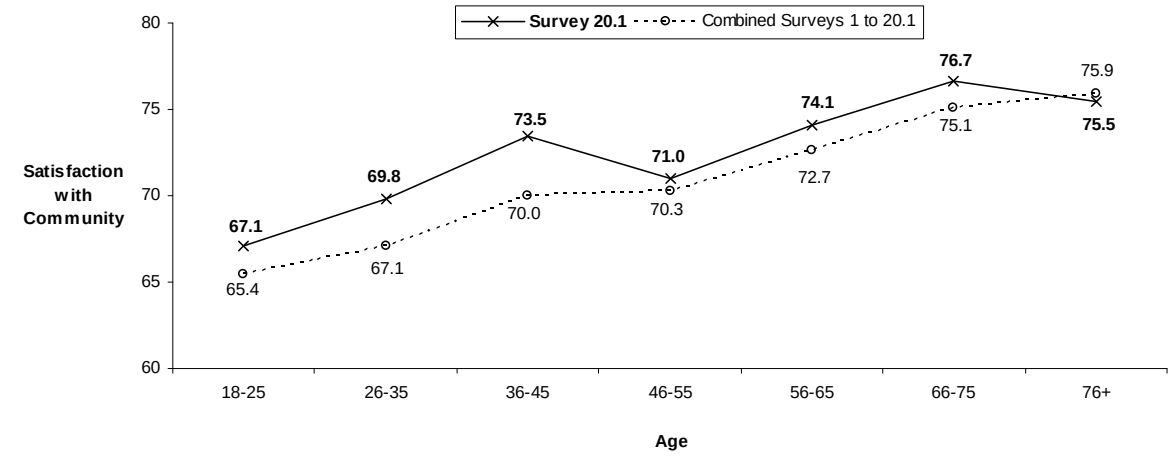


Figure 4.5.6: Satisfaction with Community x Age

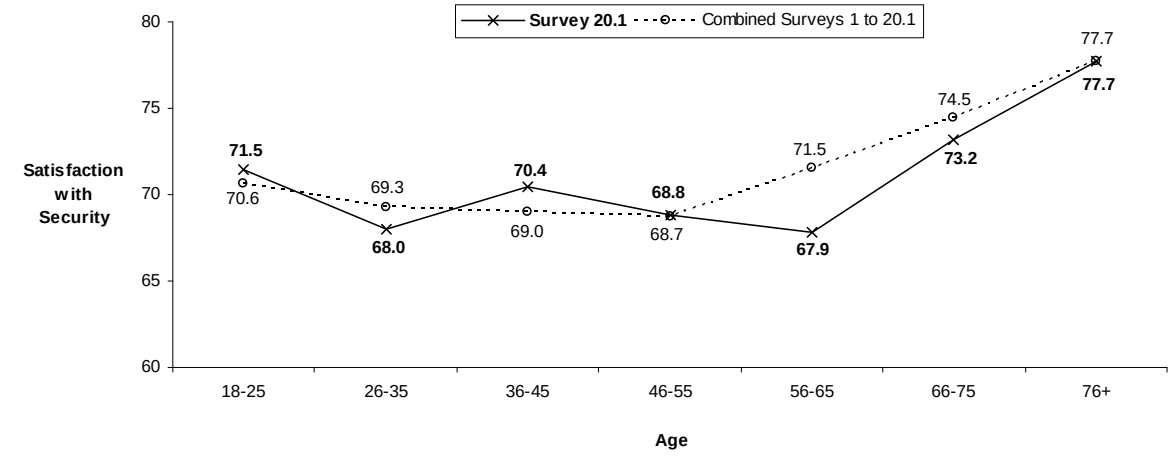


Figure 4.5.7: Satisfaction with Security x Age

4.4. Summary

No differential influences of income, gender or age could be detected in the extent that people responded in Survey 20.1. It appears that the population in general evidenced the increased satisfaction with safety and community that has been described in earlier chapters.

Dot Point Summary for Demographics

It appears that the demographic differences between people did not systematically affect their changes in wellbeing associated with the Victorian fires.