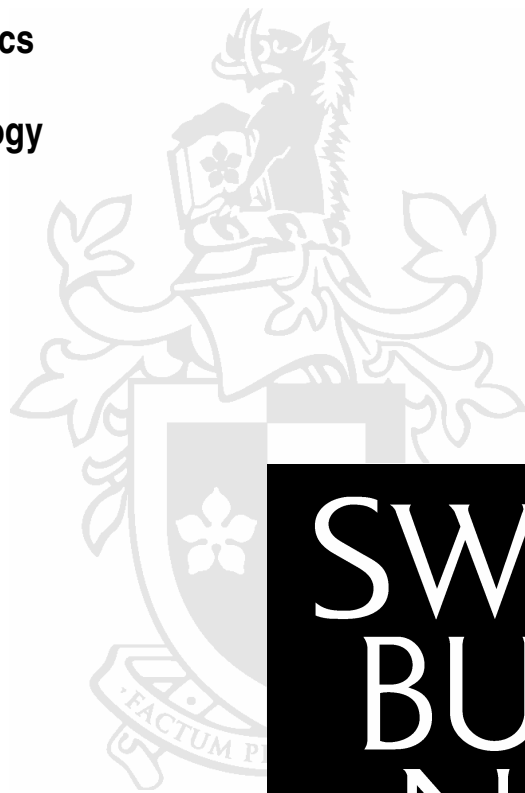


The Swinburne National Technology and Society Monitor

Social Psychology Research Unit
Psychological Sciences & Statistics
Faculty of Life & Social Sciences
Swinburne University of Technology

2008 Monitor



SWIN
BUR
NE

SWINBURNE UNIVERSITY
OF TECHNOLOGY

Table of Contents

Executive Summary	1
INTRODUCTION	2
Background	2
The Survey	2
PUBLIC PERCEPTIONS OF TECHNOLOGICAL CHANGE	3
Key Findings	3
COMFORT WITH THE RATE OF TECHNOLOGICAL CHANGE	4
COMFORT WITH NEW TECHNOLOGIES	5
Comfort with Wind Farms and Nuclear Power Plants in Australia	6
Comfort with Clean Coal and Carbon Emissions Trading	7
Comfort with GM Plants and Animals for Food	8
ATTITUDES TOWARDS SCIENCE AND TECHNOLOGY	9
TRUST IN ORGANISATIONS	10
MEDICAL TRUST	11
THE NATIONAL SURVEY SAMPLE	12
Social Psychology Research Unit	14
Swinburne University CATI Facility	14
Acknowledgements.....	14

Executive Summary

The Swinburne National Technology and Society Monitor provides an annual 'snapshot' of public perceptions of technological change. The Monitor is based on a national survey of 1000 Australians. The main findings of the 2008 Monitor are:

1. In general, Australians are comfortable with the rate of technological change in the world today.
2. Most Australians are very comfortable with having wind farms in Australia but are uncomfortable with having nuclear power plants in Australia.
3. Australians are more comfortable with the possibility of clean coal than with the Government's proposed carbon emissions trading scheme.
4. The degree of comfort with genetically modified (GM) plants and animals for food remains relatively low.
5. Australians trust scientific institutions and the non-commercial media for information about new technologies. They have less trust in major companies and the churches, with the least trust in the commercial media.
6. Australians report higher levels of trust in medical doctors than in mental health professionals.

Introduction

Background

We are living during a time of rapid technological change. Emerging technologies – notably information and life science technologies – have profound social, political, psychological and ethical implications. Public perceptions of emerging technologies are potentially volatile.

The Swinburne National Technology and Society Monitor was developed in 2003 at Swinburne University of Technology. It involves a representative nationwide survey of Australians, and provides an annual ‘snapshot’ of public perceptions regarding new technologies in Australia.

The 2008 Monitor is the sixth edition of the Swinburne National Technology and Society Monitor. It provides a general account of public perceptions about new technologies in Australia, including trust in institutions that provide information about new technologies.

The Survey

The 2008 survey included 1000 respondents. Participants in the national survey were asked:

- ◆ How comfortable they were with the current rate of technological change.
- ◆ How comfortable they were in relation to various technologies.
- ◆ The extent to which they agreed or disagreed with statements about the value of science and technology, and their beliefs as to the amount of control science should have over nature.
- ◆ How much they trusted various institutions, organisations and groups for information about new technologies.

Comfort with technologies was measured on an eleven point Likert scale where 0=not at all comfortable and 10=very comfortable. Agreement with statements about science and technology were measured on the same scale where 0=strongly disagree and 10=strongly agree. Trust was measured on a six point Likert scale where 0=don't trust at all and 5=trust a very great deal.

Public Perceptions of Technological Change

Key Findings

1. Australians are comfortable with the rate of technological change in general, but the degree of comfort varies for specific technologies.
2. Australians are much more comfortable with having wind farms than with having nuclear power plants in Australia.
3. Australians are moderately comfortable with the possibility of clean coal but less comfortable with the Government's proposed carbon emissions trading scheme.
4. While the degree of comfort with genetically modified (GM) plants and animals for food is relatively low, Australians remain more comfortable with GM plants for food than with GM animals for food.
5. Australians trust scientific institutions and the non-commercial media for information about new technologies. They do not trust government institutions, major companies or the churches. They have the least trust in the commercial media.
6. Australians report high levels of trust in medical doctors but lower levels of trust in mental health professionals.

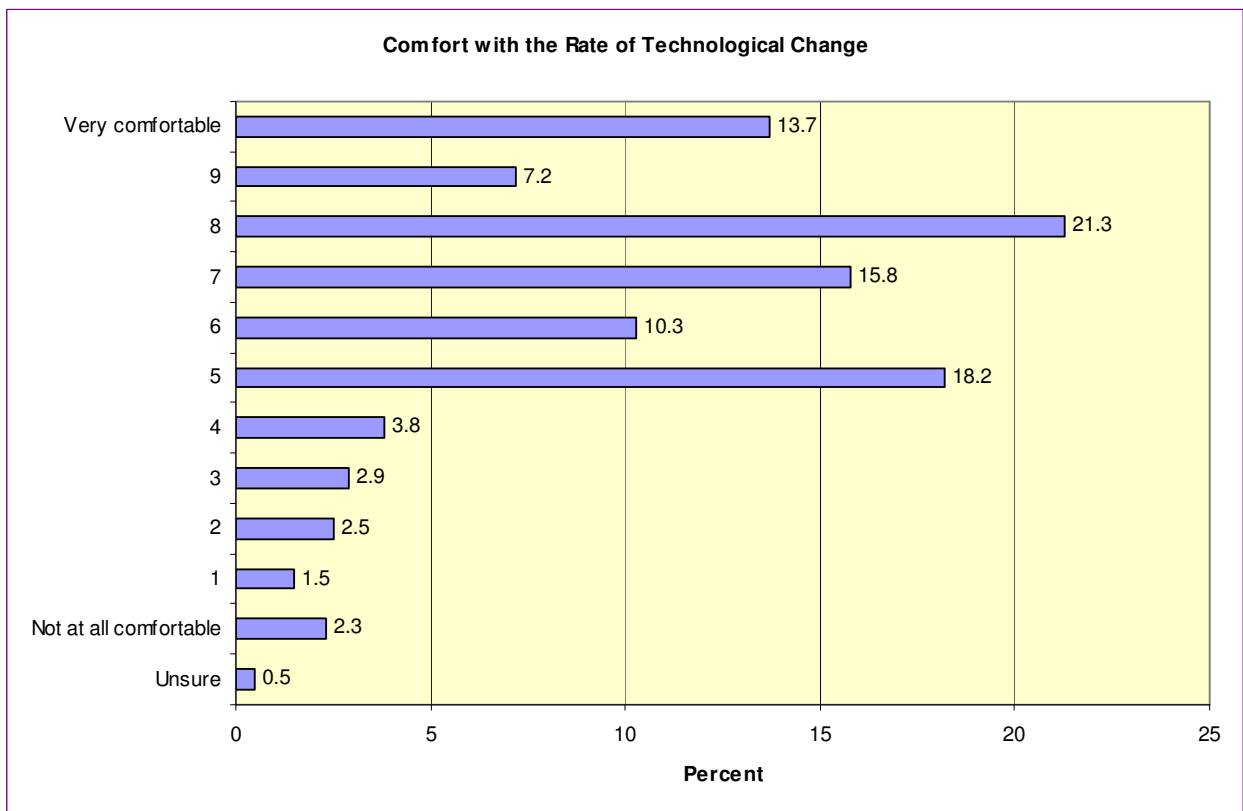
Comfort with the Rate of Technological Change

In general, Australians are comfortable with the rate of technological change in the world today (average rating = 6.7).

Sixty eight percent of the sample gave ratings above the mid-point of 5 on the 0 to 10 rating scale, while thirteen percent gave a rating below the mid-point of 5.

Eighteen percent of the sample reported they were neither comfortable nor uncomfortable (rating at mid-point of 5), and less than one percent reported being unsure of their comfort level with the rate of technological change.

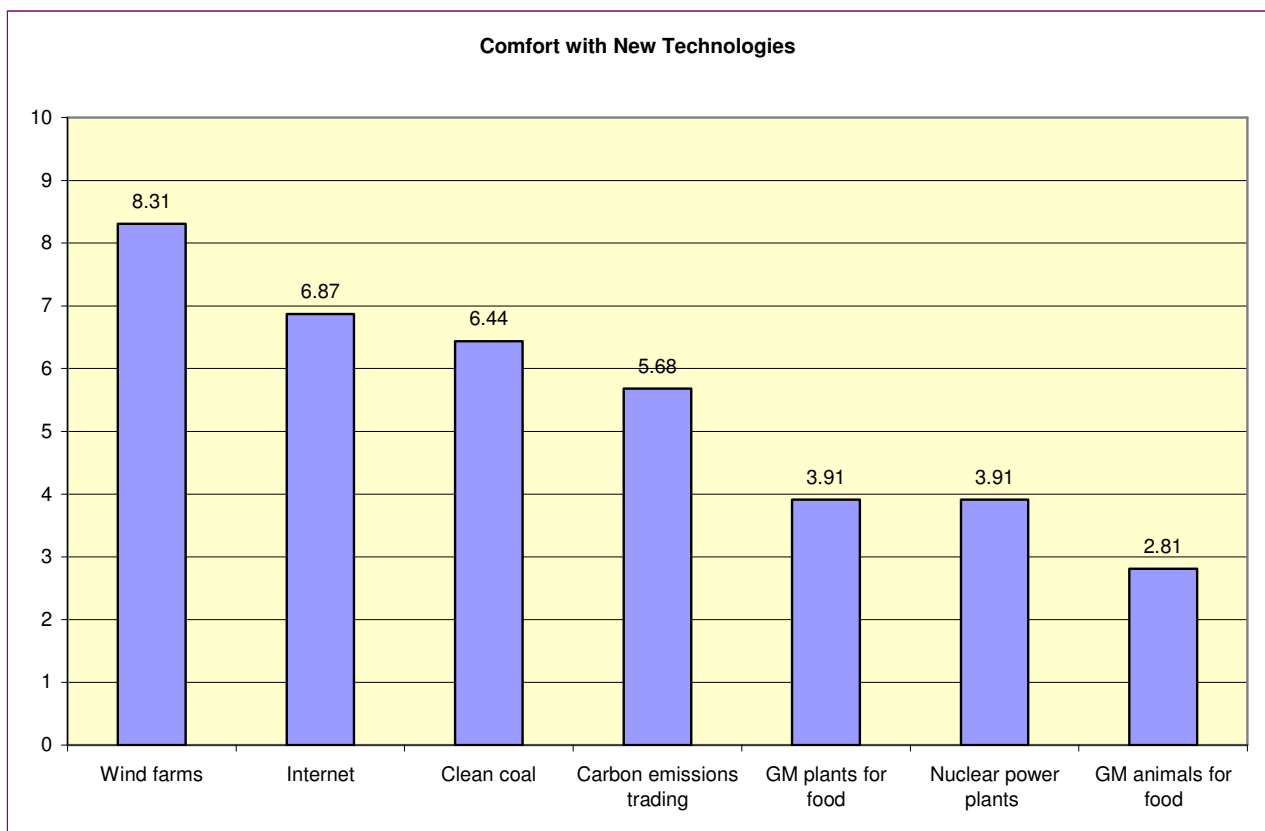
Men were significantly more comfortable with the rate of technological change than women, and younger people were significantly more comfortable than older people.



Comfort with New Technologies

Australians are very comfortable with wind farms in Australia. They are also moderately comfortable with the Internet and clean coal but somewhat less comfortable with carbon emissions trading.

Australians are uncomfortable with nuclear power plants in Australia and genetically modified foods. They are less comfortable with genetically modified animals for food than with genetically modified plants for food.



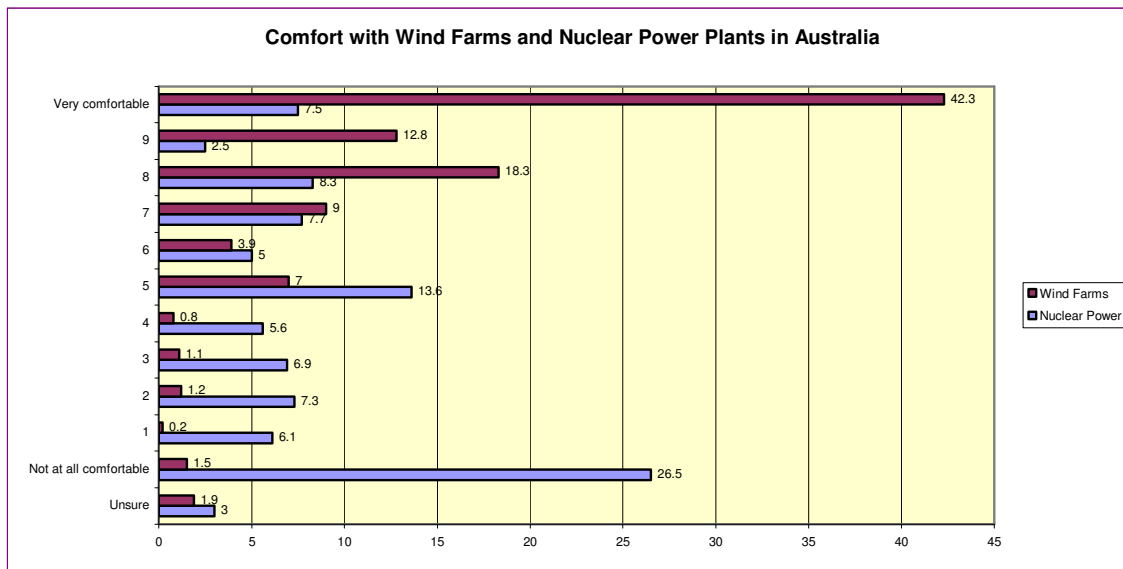
Comfort with Wind Farms and Nuclear Power Plants in Australia

In 2006 we examined, for the first time, Australians' levels of comfort with the thought of nuclear power plants in their own country. In 2007 we also examined the level of comfort with wind farms. Our 2008 data suggests continued discomfort with nuclear power in Australia, but high levels of comfort with wind farms.

On average, the level of comfort with wind farms in Australia was very high (average rating = 8.3) while the level of comfort with nuclear power plants was quite low (average rating = 3.9). Eighty six percent of respondents reported some level of comfort with wind farms, with 42% reporting they were very comfortable. By contrast, 31% of Australians reported some degree of comfort with nuclear power plants with only 7% reporting they were very comfortable.

Fifty two percent of the sample reported some degree of discomfort with nuclear power plants, with 26% giving comfort ratings of 0, indicating they were not at all comfortable. By comparison only 5% of the sample reported any discomfort with wind farms. A further 9% were unsure about wind farms and 17% were unsure about nuclear power plants in Australia.

On average, men were significantly more comfortable with both nuclear power and wind farms than women, but the difference was more pronounced for nuclear power.



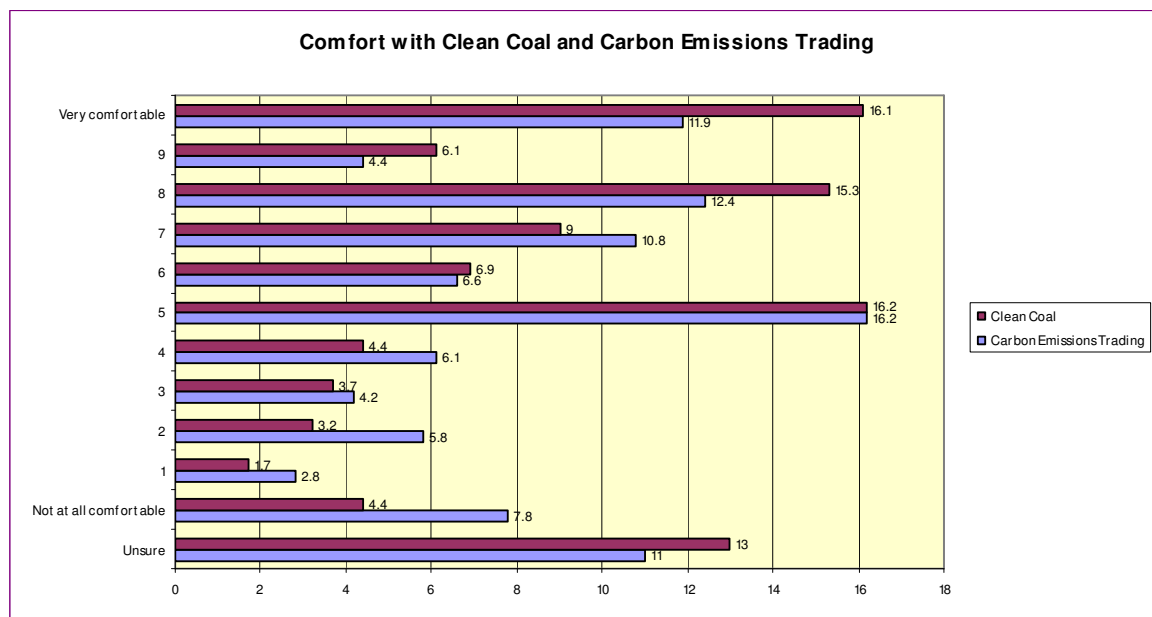
Comfort with Clean Coal and Carbon Emissions Trading

In 2008 we asked respondents how comfortable they were with clean coal and the Government's proposed carbon emissions trading scheme. Australians were moderately comfortable with the notion of clean coal (average rating = 6.4), but significantly less comfortable with the proposed carbon emissions trading scheme (average rating = 5.7).

Fifty three percent of the sample reported some level of comfort with clean coal in Australia, with 16% reporting they were very comfortable. A smaller proportion of respondents reported some level of comfort with the carbon emissions trading scheme (46%) with 12% reporting they were very comfortable.

Seventeen percent of respondents reported some degree of discomfort with clean coal with 4% reporting they were not at all comfortable. By contrast, 26% of respondents reported some degree of discomfort with the carbon emissions trading scheme, with 8% reporting they were not at all comfortable. Similar proportions of respondents reported being unsure about clean coal (13%) and carbon emissions trading (11%), and the same proportion of respondents (16%) reported they were neither comfortable nor uncomfortable with clean coal and carbon emission trading.

There were no differences between men and women in reported levels of comfort for clean coal and carbon emissions trading.



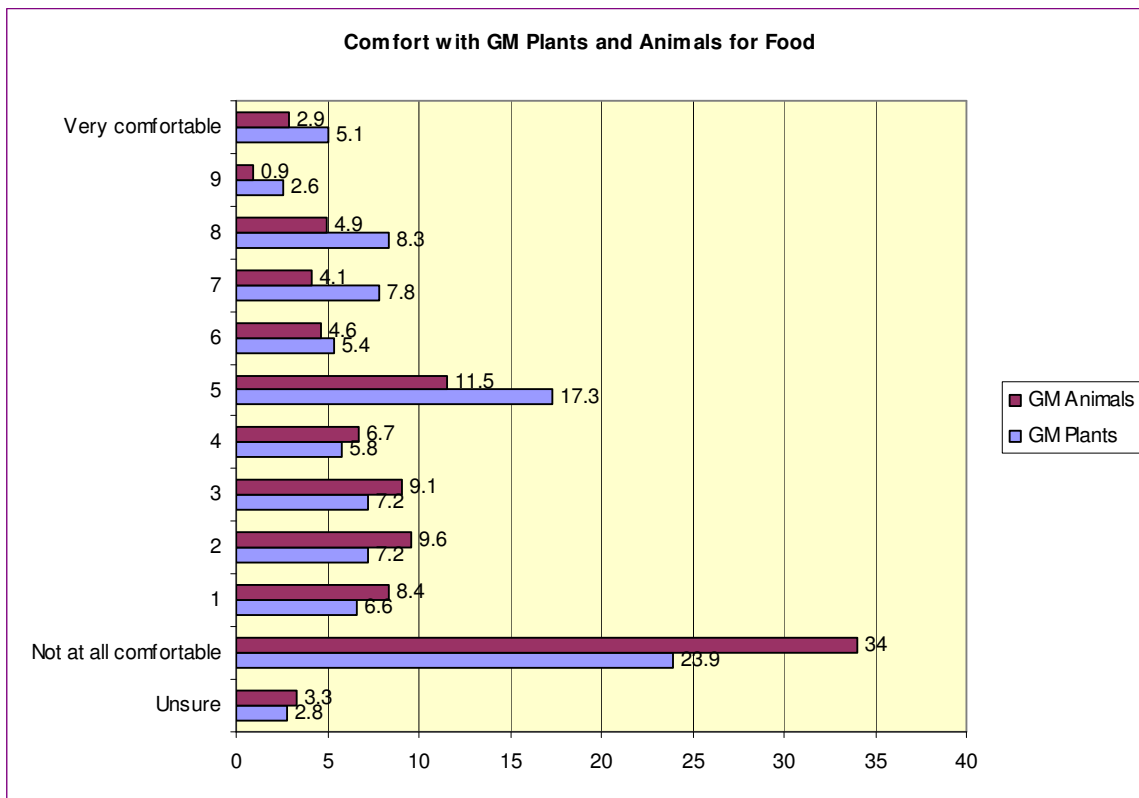
Comfort with GM Plants and Animals for Food

On average, Australians were more comfortable with genetically modified plants for food (average rating = 3.9) than with genetically modified animals for food (average rating = 2.8), but the degree of comfort for both is relatively low.

Twenty nine percent of the sample reported some comfort with genetically modified plants for food (rating above the mid point of 5 on the scale), while 17% reported some level of comfort with genetically modified animals for food.

The majority of the sample was uncomfortable (rating below the mid point of 5 on the scale) with genetically modified plants (51%) and animals (68%) for food. Of these respondents, most reported they were not at all comfortable with GM plants (24%) or animals (34%) for food. A further 20% reported being unsure of their comfort with genetically modified plants for food, while 15% reported being unsure of their comfort with genetically modified animals for food.

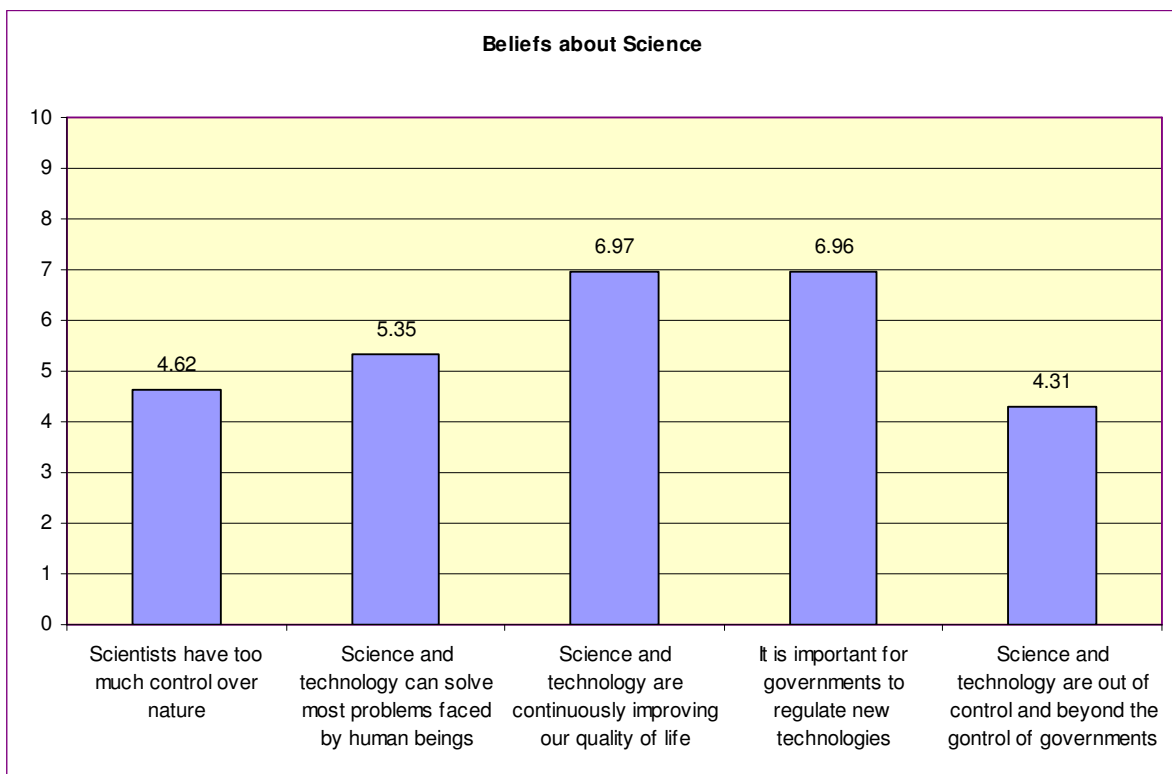
Men were significantly more comfortable with GM plants and animals for food than women.



Attitudes Towards Science and Technology

Australians generally agree that science and technology are improving our quality of life, and think it is important for governments to regulate new technologies.

There is somewhat less agreement about the level of control scientist have over nature, the degree to which science and technology can solve problems faced by human beings and the level of control that governments have over science and technology.



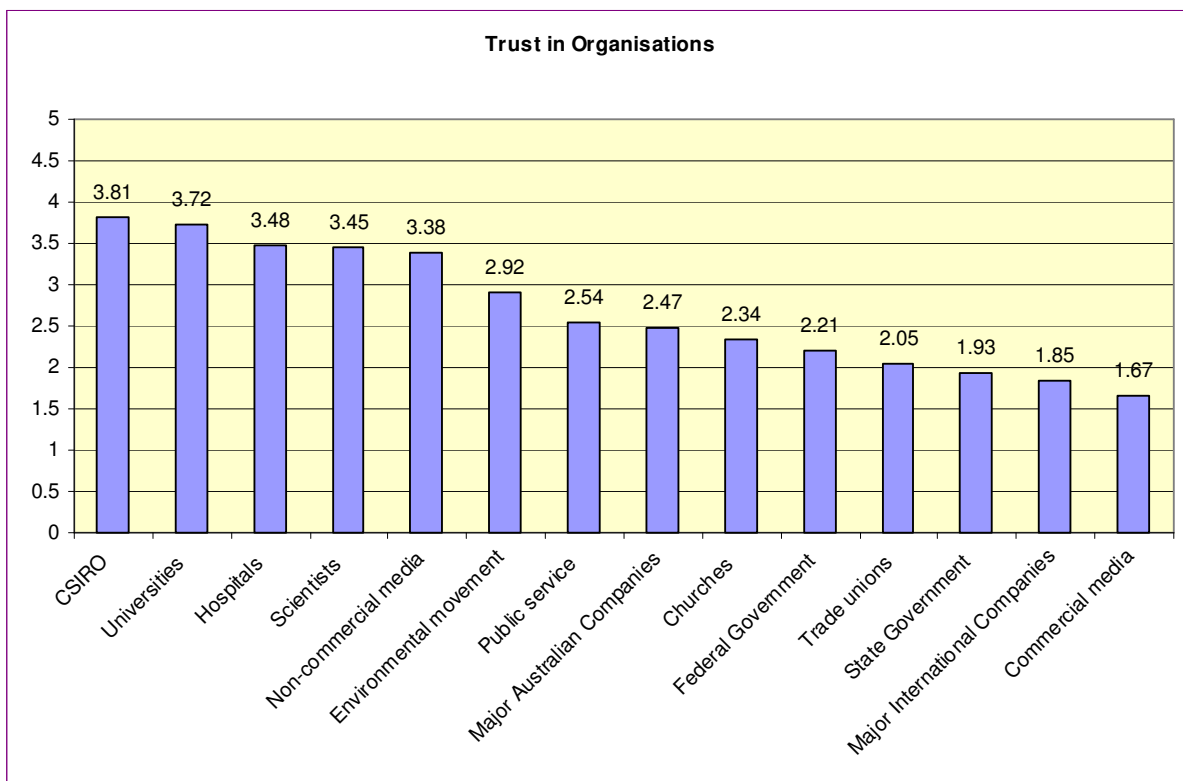
Trust in Organisations

The overall pattern of results for Australians' trust in people and organisations, in relation to information about science and technology, is very similar to the pattern of results found in previous years.

Australians continue to have the most trust in scientific institutions (such as CSIRO, universities and hospitals). Australians have a degree of trust in the environmental movement and the public service, but they do not trust the churches, major companies, governments or trade unions.

In 2008 respondents were asked to rate their degree of trust in major international companies for the first time. Results indicate that trust in major international companies is significantly lower than trust in major Australian companies.

Consistent with previous results, the level of trust in non-commercial media is similar to levels of trust in scientific organisations, while trust in the commercial media is the lowest of all the organisations.



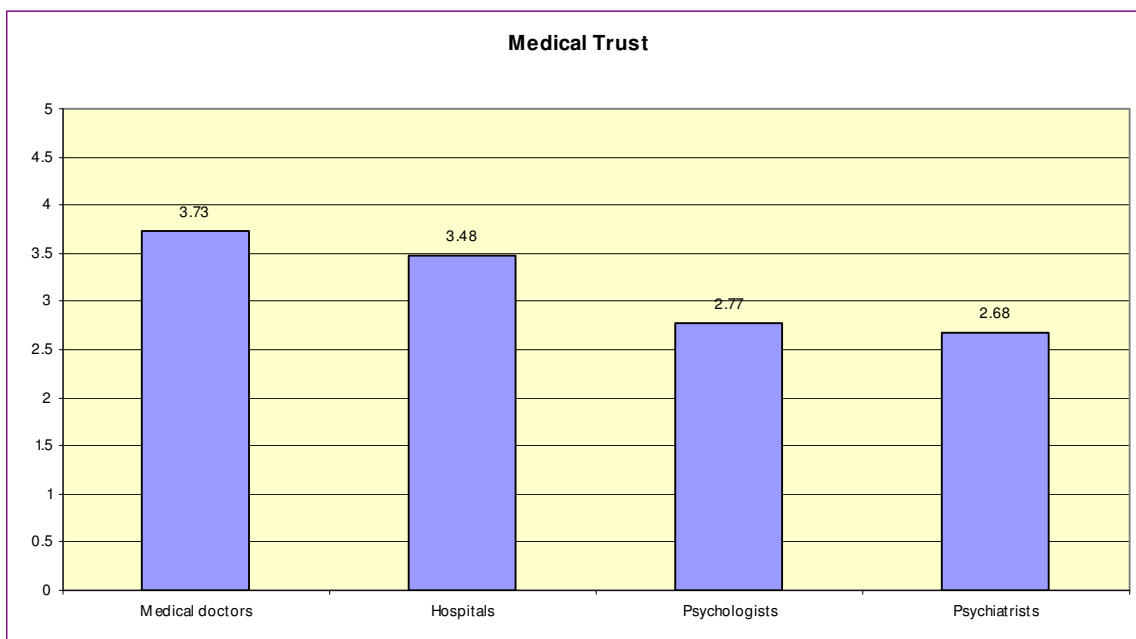
Medical Trust

In addition to the standard SNTSM question about trust in hospitals, the 2008 respondents were asked how much they trust medical doctors, psychologists and psychiatrists. Each medical trust target was rated on a 0 to 5 scale (0 = no trust at all, 5 = a great deal of trust).

Overall, Australian adults reported relatively high levels of trust in medical doctors and hospitals but lower trust in mental health professionals. Comparing respondents' trust scores across the four medical targets showed significantly higher public trust in medical doctors than in hospitals or mental health professionals, with trust in psychologists rated higher than trust in psychiatrists (all differences were significant at $p < .001$).

This sample reported similar levels of trust in medical doctors (3.73) as they reported for trust in universities (3.72) and the CSIRO (3.81). Trust ratings for mental health professionals were lower (psychologists = 2.77; psychiatrists = 2.68) and more in line with trust in the environmental movement (2.92) and the public service (2.54).

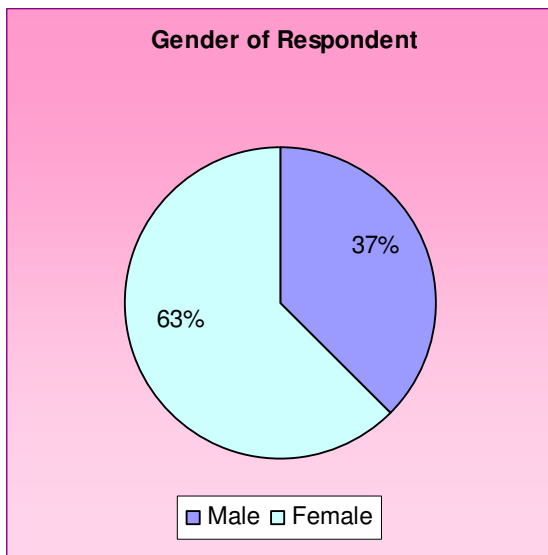
While there were no differences between men and women in their degree of trust in medical doctors, men reported greater trust in hospitals than did women, but women reported greater trust in both psychologists and psychiatrists than did men.



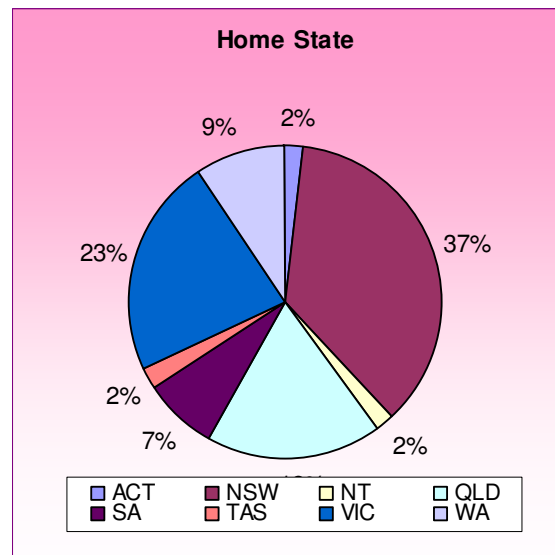
The National Survey Sample

1000 respondents took part in the 2008 national survey. The target population was the Australian general public aged 18 years and over. The survey was conducted 8 – 20 September 2008 using Computer Assisted Telephone Interviewing (CATI) technology.

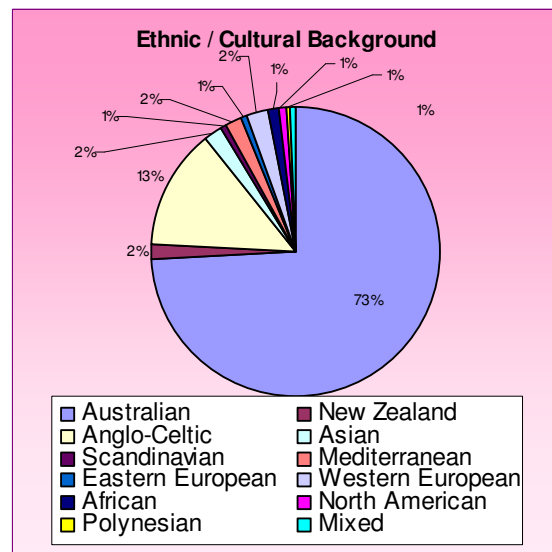
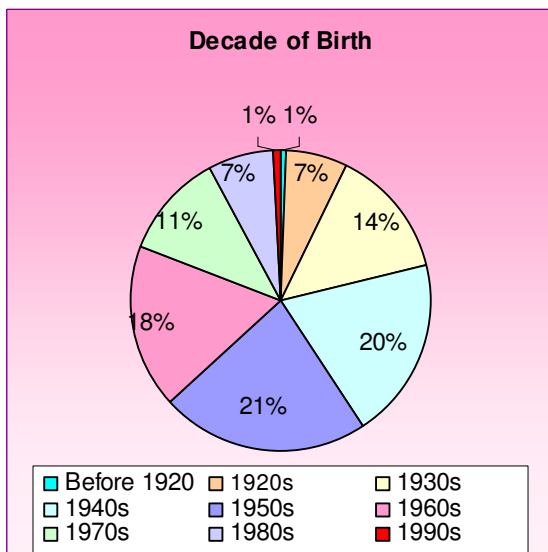
The following charts provide a graphical representation of the percentage of respondents in each demographic category.

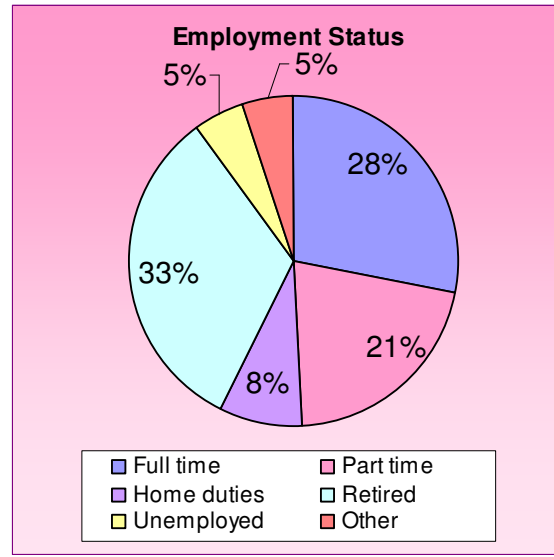
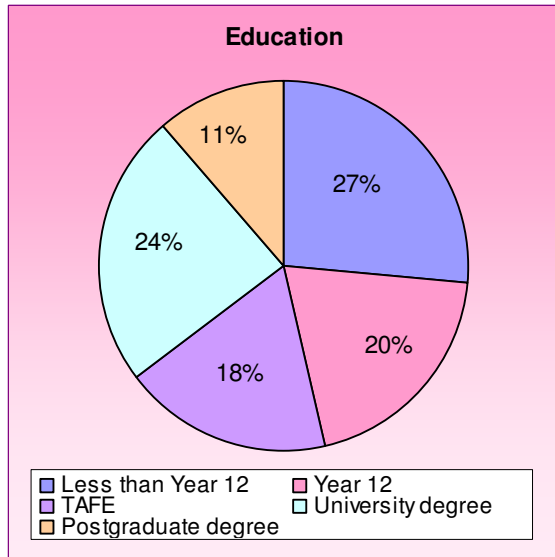


Sixty three percent of the sample was female and the average age of the respondents was 54 years.



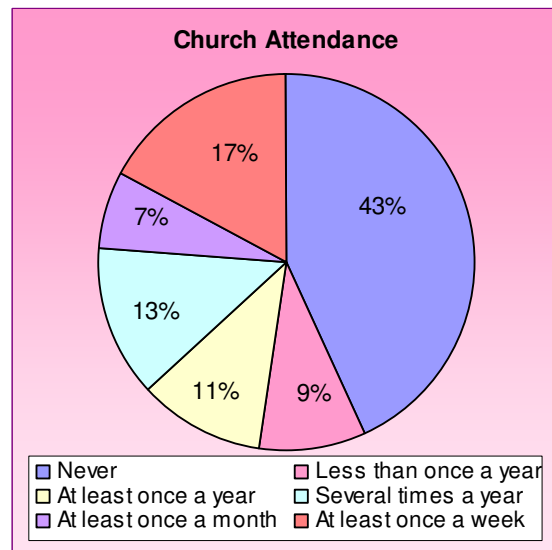
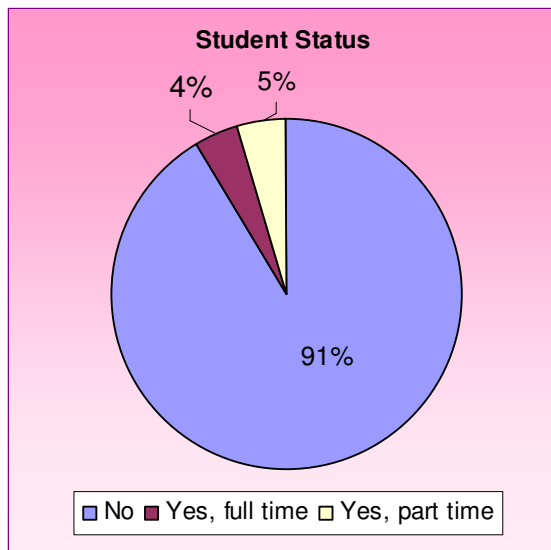
All states were represented in the sample. The majority of respondents identified their cultural background as Australian (73%).





Approximately half of the sample (53%) had completed tertiary education, and only 9% were currently students.

Approximately half of the sample was currently employed (49%). Forty three percent of the sample never attended church. Of those who did attend church, 17% did so at least once a week.



Social Psychology Research Unit

The Monitor is produced by the Social Psychology Research Unit (SPRU) located within Psychological Sciences and Statistics (PSS) at Swinburne University. Any questions can be directed towards the directors of SPRU:
Dr. Christine Critchley (03 92145480) ccritchley@swin.edu.au
Dr. Elizabeth Hardie (03 9214 5297) ehardie@swin.edu.au

Swinburne University CATI Facility

The Swinburne University Computer Assisted Telephone Interviewing (CATI) Facility is part of PSS, within the Faculty of Life & Social Sciences.

The CATI Facility specialises in designing and conducting high quality telephone surveys for academic, government and private organisations. Our aim is to simplify data collection for our clients while maintaining rigorous research standards.

The CATI Facility Executive Committee is comprised of:

Professor Glen Bates (Director)
Ms. Gordana Bruce (Manager)
Dr. Christine Critchley
Dr. Elizabeth Hardie

For further information about the services provided by the Swinburne University CATI Facility please contact Gordana Bruce:

Phone: (03) 9214-5783

E-mail: gbruce@swin.edu.au

Acknowledgements

The Swinburne National Technology and Society Monitor was made possible through financial support from the Faculty of Life and Social Sciences.

In particular, SPRU and the CATI Facility acknowledge the support of Professor Russell Crawford, Dean, Faculty of Life and Social Sciences, Swinburne University of Technology.

In addition, SPRU and the CATI Facility wish to acknowledge the support of John Neilson from OZINFO for technical support with OZQUEST, and Jarrod Walshe (Swinburne University) for research and technical support.

Finally, SPRU and the CATI Facility wish to thank the supervisors and telephone interviewers who conducted the interviews for the 2008 Monitor.

Supervisors (in alphabetical order)

Robyn Callaghan
Ruth O'Rourke
Andrew Perkins
Jess Porter

Interviewers (in alphabetical order)

Diana Bell	John Lombardo
Kristen Bruce	Tobias Manderson-Galvin
Alicia Burns	George McKibbin
Claire Connell	Ben Morling
Liz Crestani	Luke O'Byrne
Kylie Dickers	Janvier Phibbs
Vanessa Dixon	Carol Ramm
Amy Felman	Elizabeth Rowe
Vin Gill	Joe Sargent
Emilie Hattam	Sean Scully
Elizabeth Hutton	Michael Stephens
Nikki Jastrzebski	Tamsyn Van Rheenen
Lana Knapp	Penny Weeks