How do Australians engage with science?

A survey commissioned by Inspiring Australia through the Australian National Centre for the Public Awareness of Science (CPAS), The Australian National University

REPORT OF PRELIMINARY FINDINGS

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1 Executive Summary

1.1 Background

Australians' engagement with aspects of science and technology has received increasing research attention over the last decade. As written in The *Inspiring Australia* strategy (2010), 'Australia aspires to an innovative society with a technologically skilled workforce, a scientifically literate community and well informed decision makers' The strategy 'aims to build a strong, open relationship between science and society, underpinned by effective communication of science and its uses' (p. xiii).

1.2 Research Objectives

The *Inspiring Australia* research 'Project C – Building on the Outcomes' objective was to provide a nationally representative baseline of Australian attitudes toward and behaviours related to science and technology that could then be used to monitor any changes over time. Specific points of interest included understanding Australians' awareness, interest and engagement with science and technology, understanding current and preferred sources of information about science and technology, and exploring attitudes towards a range of values associated with science and technology and whether science is regarded as a good career option.

1.3 Research Design

A computer assisted telephoning interviewing (CATI) methodology was used to administer an Australia-wide survey using a sampling frame sourced via random digit dialling. Pilot fieldwork was conducted to check that the survey was being administered as it should. A random sampling methodology was undertaken among Australians aged 18 and above. In total, n=1,020 participants completed the survey, where minimum quotas (based on ABS 2011 figures) for each target sample was met. The data collection period was from 11th of February through to 24th of February 2014 with an average survey length of 18 minutes.

1.4 Key Findings

Engagement with science and technology

- There appears to be frequent engagement with science and technology with 82% recalling having watched, listened or read something to do with science or technology at least fortnightly in the last year.
- Of a list of topics presented, the science and technology related topics were rated as having high levels of interest to most participants, around two thirds expressed interest in science and technology related topics. Health and medical topics were of most interest.
- One-in-two were able to name an Australian scientific or technological achievement.
- Most report having discussed technology (87%) and science (77%) in social settings in the previous 12 months and 66% say they have visted a science centre, science museum, botanic garden, zoo or similar in the same time period.
- Half indicated that there are things they would like to know more about with regards to science and technology.

Seeking out information about science and technology

- Around half (46%) report searching for information about science at least fortnightly in the past year; similarly, 44% said they had searched for information about technology at least fortnightly in the same time period.

- The internet was the most popular initial source of information for those searching for information about science or technology (more than four-in-five mentioned the internet or an internet search engine).
- Two-in-five said that they get enough information about technology through the media and around a third think they get enough information about science in the media (two fifths and a quarter disagreed respectively).
- When asked about preferred sources of information about science and technology, the internet (or search engines) was the most commonly mentioned (59% for science and 58% for technology).
- Most (90%) reported being able to find what they were searching for when looking for information about science or technology; of these, most reported that the information they found was generally easy to understand (67% for scientific information, 73% for technological information). Just less than a quarter (23%) said the scientific information they found was generally hard to understand, a smaller proportion, 17% said the same about the technological information they found.

Trusted sources of information

- When asked unprompted, friends and family (12%) and CSIRO (also 12%) were the most commonly mentioned trusted sources of accurate information about science. A cause for concern was the finding for this question that 30% of the respondents either did not know who to trust (21%) or did not trust anyone (9%).
- From a presented list of nine different types of people, scientists were the most trusted groups of people to explain the impacts of scientific or technological advances. The most trusted of the different groups tested was *well known scientists such as Nobel Prize winners or Australians of the Year* (82%), followed by *CSIRO scientists* (78%) and *Australia's Chief Scientists* (75%).

Attitudes towards science and technology

- Most gave a high agreement rating to the statements *Australia should be a world leader in science research and development* (8.1 on a ten point scale); *Australia should be a world leader in technology research and development* (7.9) and *the results of publicly-funded scientific research should be made publicly available* (8.3).
- The majority (88%) said that they thought that a career in science is a good choice.
- When participants were asked how important a range of professions were in terms of contributing positively to society, doctors were ranked the highest (75% stating they were very or quite important), then teachers (69%) followed by scientists (60%).
- Most participants regarded science as important to helping society with a mean agreement rating of 8.0 out of ten for the statement *Science is very important to solving many of the problems facing us as a society today*. The statement *Scientific research makes a direct contribution to economic growth in Australia* received a mean agreement rating of 7.4.

2 Research Context

2.1 Background

The aim of the *Inspiring Australia* strategy is to foster a strong, open relationship between science and the Australian community[1] that engages the wider community in science and in turn showcases the social, economic and environmental benefits of Australia's investment in science and research. The strategy 'aims to build a strong, open relationship between science and society, underpinned by effective communication of science and its uses' (p. xiii).

The 2010 *Inspiring Australia: a national strategy for engagement with the sciences* report recommended a 'program of research in science engagement - such as baseline and longitudinal attitudinal and behavioural studies…' to inform future investment decisions by government and its partners.

2.2 Research Objectives

A key objective of this study was to provide a nationally representative baseline of Australian attitudes toward and behaviours related to science and technology that can be used for monitoring any changes over time. While the overarching objectives of the research will be to examine and understand the attitudes and behaviours of Australians towards science as well as the levels of engagement and interest, specifically these can be broken down to be:

- Frequency with which people access and search for information about science and technology
- Whether people want to know more about scientific and technological issues
- Whether people know where to obtain information about science and technology
- How aware people are about Australian achievements in science and technology
- How satisfied people are with the media as a source of information
- How engaged people are with science or science-related venues, events and activities
- What people think about science as a career option

The method that was undertaken to achieve these objectives is discussed in the next section – Research Design.

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1 http://www.innovation.gov.au/science/InspiringAustralia/Documents/InspiringAustraliaReport.pdf

3 Research Design

The following section outlines Ipsos' approach to the conduct of the research, the sample sizes achieved, and specifics relating to the quantitative analysis.

3.1 Conduct of Quantitative Research

Ipsos worked with the Australian National Centre for the Public Awareness of Science (The Australian National University) in the design of a survey instrument that would average approximately 20 minutes in length. The questionnaire used is attached at Appendix B.

Computer assisted telephone interviewing (CATI) was used to administer the survey using a sampling frame sourced via random digit dialling. The landline telephone sample was 73% and the mobile sample was 27%. Pilot fieldwork was conducted on the 10th of February with n=30 participants to check the survey was being administered as it should. The main research period was from 11th of February through to 24th of February 2014 with an average survey length of 18 minutes.

3.2 Sample Sizes

A simple random sampling approach was utilised to ensure each member of the target audience had an equal chance of selection in the study. Randomly generated telephone numbers (both mobile and landline) were used to create the sample frame. This ensured that all telephone numbers, not just publically listed or landline numbers formed part of the sample frame.

Overall, there were n=1,020 completes from the survey, where minimum quotas (based on ABS 2011 figures) for each target sample was met. The following table outlines the breakdown of the sample, as collected by gender, age, location and state.

Gender	**%**	**n**
Male	49%	498
Female	51%	522
Total Gender	**100%**	**1,020**
Age	**%**	**n**
18-24	12%	122
25-34	18%	179
35-44	18%	183
45-54	19%	190
55-64	13%	132
65-74	14%	141
75+	7%	70
Total Age*	**100%**	**1,017**
Location (Major cities/regional/remote)	**%**	**n**
Major cities	69%	700
Regional	20%	209
Remote	9%	96
Refused*	1%	15
Total Location (remote)	**100%**	**1020**
Location (State/Territory)	**%**	**n**
NSW	31%	322
VIC	24%	251

TAS	2%	22
SA	8%	77
QLD	21%	201
WA	10%	106
NT	1%	9
ACT	2%	17
Refused*	2%	15
Total Location (state)	**100%**	**1,020**

In addition to the quotas set for state and territories, a location quota was set for remoteness whereby postcodes were considered to fall into one of three categories: major cities, regional and remote areas. This is a measure used by the ABS and is defined by the Accessibility/Remoteness Index of Australia (ARIA)[2] based on the remoteness of an area to the nearest urban centre.

3.3 Analysis

All statistical significance testing in this report was performed using the Q computer software package.[3] Significance testing was performed using independent samples t-tests for comparison of means and z-tests for comparisons of proportions, all conducted at the 95% confidence level using the effective sample size.

Weighting

Data was weighted to 2011 ABS population data by age and gender. As well, given differences were noted across questions by highest level of education, this variable was also included in the weighting – this being taken from the ABS Education and Work, Australia, May 2013 data.[4]

While weighting is applied to make a sample more accurate, any data manipulation can introduce error. Ipsos account for this by using an *effective error margin* – a process that estimates the degree of error introduced into a sample by a weighting scheme and accounting for it in all statistical tests applied. At the overall level, the effective error margin for this project was +/- 3.1% - this based on an overall effective sample size of n=983.

This effective error margin provides highly robust levels of accuracy for this important research.

Those respondents where there was missing data for a weighting variable i.e. someone refused to provide their education level; these were assigned a weight factor of '1' – thus having no net effect on the weighting scheme.

[2] ARIA was developed by the Commonwealth Department of Health and Aged Care (DHAC) and the National Key Centre For Social Applications of GIS (GISCA). More information can be found: http://www.ausstats.abs.gov.au/ausstats/subscriber.nsf/0/3E15ACB95DA01A65CA2571AA0018369F/$File/12160_2006.pdf

[3] Q Professional. Version: 4.5.5.0. 2003-2014 Numbers International Pty Ltd. Key developers (in alphabetical order): O. Bock, T. Bock, J. Kurianski

[4] Geographic location was not incorporated into the weighting as when rolling up 'regional' and 'remote' into a 'non-metro' group, the target of 70% vs. 30% was met.

Representativeness of the sample

The table below outlines the (a) population figures[5], (b) as collected sample and (c) weighted sample for gender, age, location and level of education.

Gender	**% population (a)**	**% sample (b)**	**% weighted sample (c)**
Male	49%	49%	49%
Female	51%	51%	51%
Age	**% population**	**% sample**	**% weighted sample**
18-24	12%	12%	12%
25-34	18%	18%	18%
35-44	19%	18%	18%
45-54	18%	19%	19%
55-64	15%	13%	15%
65-74	10%	14%	10%
75+	8%	7%	9%
State/Territory			
New South Wales	32%	32%	31%
Victoria	25%	25%	24%
Tasmania	2%	2%	2%
South Australia	8%	8%	8%
Queensland	20%	20%	21%
Western Australia	10%	10%	10%
Northern Territory	1%	1%	1%
ACT	2%	2%	2%
Refused / Postcode not known	-	1%	2%
Location	**% population**	**% sample**	**% weighted sample**
Major cities of Australia	70%	69%	67%
Regional Australia	28%	20%	22%
Remote Australia	2%	9%	10%
Refused / Postcode not known	-	1%	2%
Level of education	**% population**	**% sample**	**% weighted sample**
Bachelor or higher	25%	35%	25%
Lower than bachelor	75%	64%	74%
Prefer not to say	-	1%	1%

[5] All population data except educational data sourced from ABS 2011 Census data accessed via TableBuilder http://www.abs.gov.au/websitedbs/censushome.nsf/home/tablebuilder?opendocument&navpos=240 educational data sourced from ABS 2013 data http://www.abs.gov.au/ausstats/abs@.nsf/mf/6227.0

3.4 How to read this report

Banners

For ease in representing the data for each question, we have constructed two banners (presented as a single table split into two parts). A banner allows an individual question, or bank of questions to be cross-tabulated against more than just one question. In this report we have included a banner that has gender, age and location. This allows the reader to see the proportion for a question, by overall and by individual gender, ages (four categories: 18-34, 35-54, 55-74 and 75 plus) and geographic locations (three categories: major cities, regional areas, remote areas). The second part of banner includes the frequency of searching for information about science and frequency of searching for information about technology (three categories for each: at least fortnightly, less than fortnightly, never) and convenient internet access. It is important to note, that if a Refused/Don't Know was selected by respondents for any of the demographic questions within a banner, these have been excluded from the analysis. An example is provided below (Q6).

	Total	Male	Female	18-34 years	35-54 years	55-74 years	75 years plus	Major cities	Regional	Remote
Yes	50%	56%	44%	46%	56%	48%	39%	53%	43%	43%
No	43%	39%	46%	46%	37%	44%	50%	41%	46%	49%
Not that I can think of	8%	6%	9%	8%	7%	7%	11%	7%	11%	8%

		Frequency of searching - Science			Frequency of searching - Technology			Convenient internet	
	Total	At least fortnightly	Less than fortnightly	Never	At least fortnightly	Less than fortnightly	Never	Yes	No
Yes	50%	66%	44%	21%	61%	47%	24%	52%	38%
No	43%	28%	48%	71%	32%	46%	66%	41%	51%
Not that I can think of	8%	6%	9%	8%	7%	8%	10%	7%	11%

Significance testing

Tests of significance were conducted between key groups of interest (e.g. 'males' vs. 'females', different ages groups etc.) at the 95% confidence level and are reported where appropriate. Where significance testing has occurred between pairs such as male vs. female this has been undertaken as independent-samples t-tests. However, where significance testing has occurred between more than two categories within a group e.g. Age, significance testing has been used that tests one category against the average of the other categories (i.e. against the total excluding itself). Such a test is ideal for multiple comparisons as it reduces the likelihood of displaying a significant difference where one does not exist. For this Second Order Rao-Scott Chi-Squared Tests of Independence were used.

A 'significant difference' means that we can be 95% confident that the difference observed between the two samples reflects a true difference in the population of interest, and is not a result of chance. Such descriptions are not value judgements on the importance of the difference. The reader is encouraged to make a judgement as to whether the differences are 'meaningful' or not.

Significance within the tables are displayed by **green** and **red** figures; green figures green indicating the figure reported is significantly higher; red indicating the figure is significantly lower (see example above).

Interpreting nets

While we have reported means for questions where answers appear on a 0 through 10 scale, we have also constructed nets. These nets combine 0-3 ratings as the negative, 4-6 as the neutral and 7-10 as the positive. While this is an arbitrary re-code, it is a commonly used way of illustrating and describing distributions for such questions.

Rounding

It is important to note, that within charts and tables, due to rounding, percentages may not always add to 100%.

3.1 The survey population

3.1.1 Survey demography

The following table displays the sample demographic breakdown, in particular by gender, age, location, access to internet, ATSI (Aboriginal and Torres Strait Islander) status, LOTE (Language Other Than English) status, household structure, highest level of education completed, level of education in science or technology, whether employed within the science or technology arena and household income.

These proportions in the following table are the unweighted figures, and represent the sample as collected.

Gender	**%**	**n**
Male	49%	498
Female	51%	522
Total Gender	**100%**	**1,020**
Age	**%**	**n**
18-24	12%	122
25-34	18%	179
35-44	18%	183
45-54	19%	190
55-64	13%	132
65-74	14%	141
75+	7%	70
Location (Major cities/regional/remote)	%	n
Major cities	69%	700
Regional	20%	209
Remote	9%	96
Refused*	1%	15
Convenient internet access	**%**	**n**
Yes	88%	894
No	12%	124
Don’t know	0%	2
Aboriginal or Torres Strait Islander origin	**%**	**n**
Yes	2%	19
No	98%	999
Prefer not to say	0%	2
Whether other language than English spoken at home	**%**	**n**
Yes	11%	126
No	89%	893

Prefer not to say	0%	1
Current household situation	**%**	**n**
Only young single people (no children)	7%	75
A young couple without children	6%	62
A family where most children are under 13 years	20%	207
A family where most children are 13 years or older	29%	291
A mature couple with no/independent/children left home	23%	231
A mature single with no/independent/children left home	14%	139
Other	1%	9
Prefer not to say	1%	6
Highest level of education completed	**%**	**n**
Year 10 at secondary school or less	16%	160
Year 11 at secondary school	4%	39
Year 12 at secondary school (higher School certificate)	15%	156
TAFE degree or certificate e.g. trade certificate	16%	166
Associate diploma Certificate II, Advanced Diploma	13%	131
A university bachelor degree	22%	224
A university postgraduate degree	13%	134
Prefer not to say	1%	10
Level of education in science	**%**	**n**
I have only studied science at primary school	3%	30
I studied compulsory/general science subjects in high school	34%	348
I studied elective/specific science subjects in high school	26%	266
I studied science subjects after high school at TAFE or university	31%	321
I have never studied science before	5%	55
Current employment in areas of science or technology	**%**	**n**
Yes, I currently work in the area of science or technology	21%	210
No, but I used to work in the area of science or technology	14%	139
No, I never worked in the area of science or technology	66%	671
Pre-tax income of entire household	**%**	**n**
Less than $20,000	6%	64
$20,000 to $39,999	11%	112
$40,000 to $74,999	16%	159
$75,000 to $99,999	13%	133
$100,000 to $149,999	16%	160
$150,000 to $199,999	9%	88
$200,000 to $249,999	3%	33
$250,000 to $299,999	1%	15
$300,000 or more	2%	16
Prefer not to say	24%	240

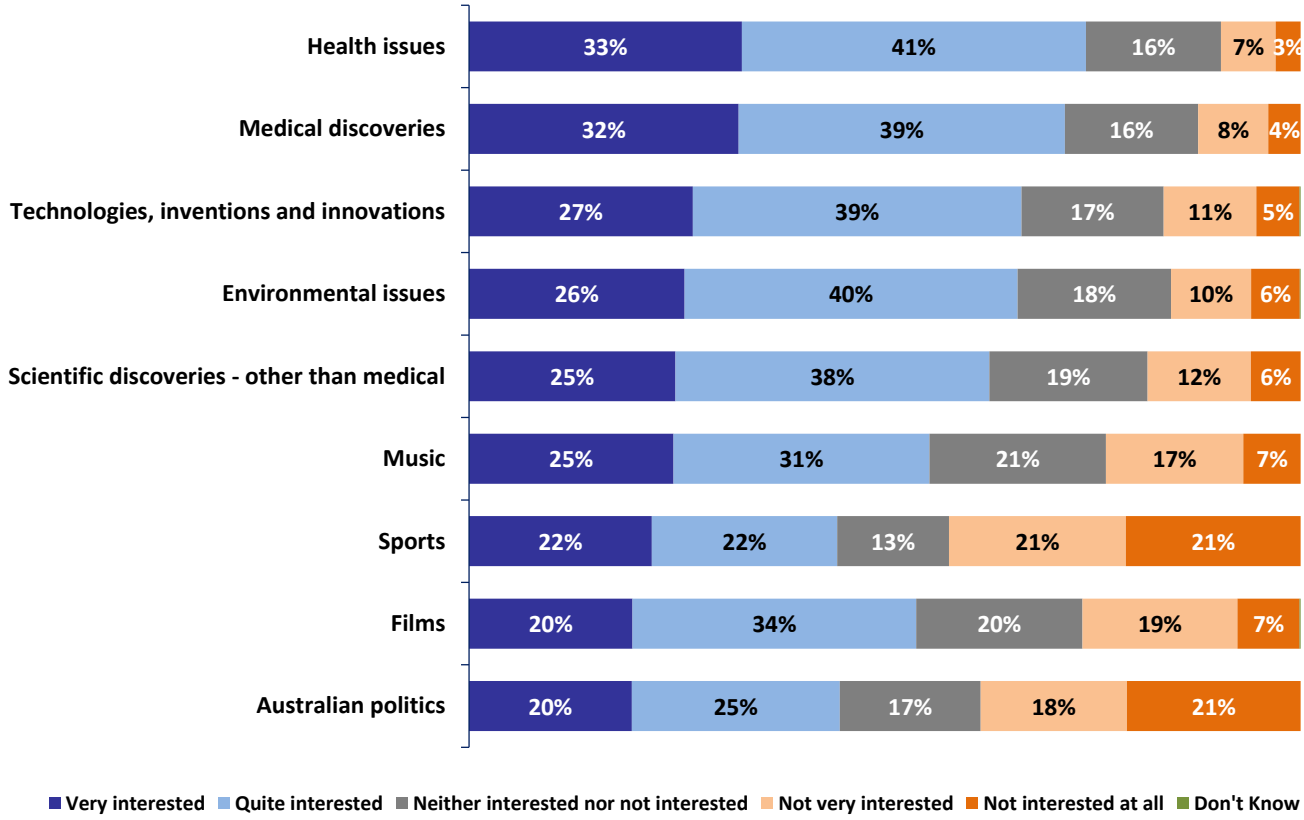
4 Findings

4.1 Public engagement with science and technology

4.1.1 Interest in science and technology

There appears to be a high level of interest in science and technology amongst Australians. Survey participants were asked to rate their level of interest in news, information and stories relating to nine topics (see Figure 1). Of the nine topics presented, health issues was the most popular, around three quarters (74%) of participants said that they were *quite* (41%) or *very interested* (33%). Also very popular, with 72% saying they were *quite* or *very interested*, was information about medical discoveries. Two-thirds (66%) reported being *quite* (39%) or *very interested* (27%) in information about technologies, inventions and innovations and environmental issues. Sixty three (63%) of people said that they were interested in scientific discoveries (not including medical discoveries), 25% *very interested* and 38% *quite interested*.

Figure 1 Level of interest in different topics with regards to news, information or stories



Q3: Can you tell me how interested you are in news, information or stories about the following?
Total sample; Weight; base n = 1020
Note: Percentages in chart may not add up to 100% due to rounding

As can be seen in Table 1, males were more likely to indicate that they were interested in scientific discoveries (other than medical) (71%) and technologies, inventions and innovations (80%) than females (55% and 53% were *quite* or *very interested* in these two topics respectively). As shown, females were more likely to be interested in health issues (79%) and medical discoveries (75%) than males. Unsurprisingly, those who search for information about science and technology at least fortnightly were more likely to report that they were *very* or *quite* interested in scientific discoveries (79% of those who search for information about science at least fortnightly compared with 53% of those who search less than fortnightly and 39% of those who never search) and technologies, innovations and inventions (81% of those who search for information about technology at least fortnightly compared with 58% of those who search less than fortnightly and 45% of those who never search for information about technology). Participants' interest in these topics did not vary with age group or location.

Table 1 Level of interest towards scientific discoveries and technology: Net interested (very interested + quite interested)

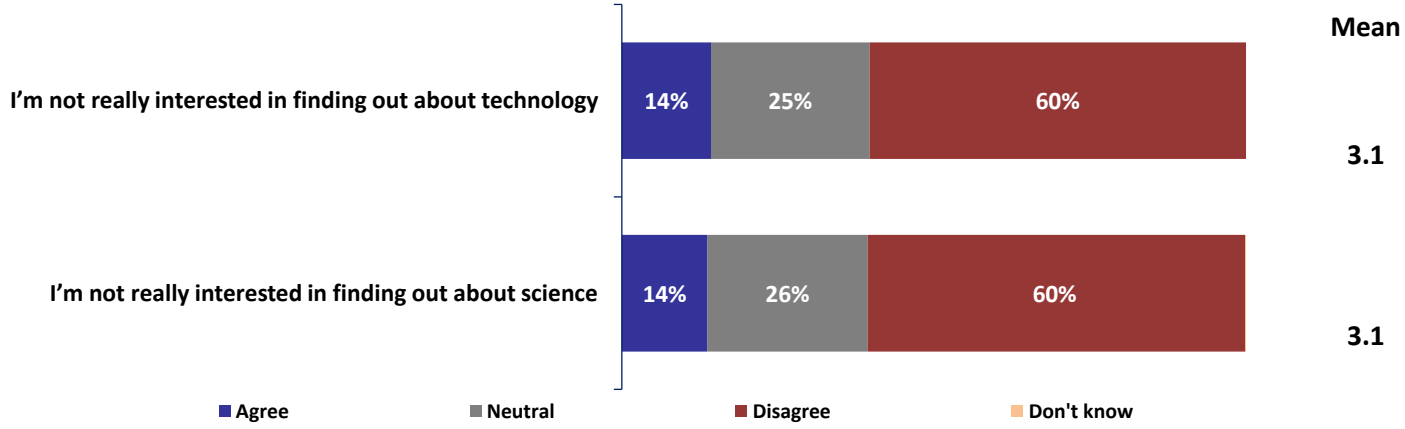
	Total	Male	Female	18-34 years	35-54 years	55-74 years	75 years plus	Major cities	Regional	Remote
Health issues	74%	69%	79%	65%	74%	80%	87%	73%	78%	78%
Medical discoveries	72%	68%	75%	62%	74%	79%	76%	69%	79%	78%
Technologies, inventions and innovations	66%	80%	53%	68%	66%	67%	58%	66%	68%	68%
Environmental issues	66%	65%	67%	59%	69%	67%	71%	66%	68%	64%
Scientific discoveries - other than medical	63%	71%	55%	62%	62%	64%	64%	62%	65%	62%

		Frequency of searching - Science			Frequency of searching - Technology			Convenient internet	
	Total	At least fortnightly	Less than fortnightly	Never	At least fortnightly	Less than fortnightly	Never	Yes	No
Health issues	74%	76%	74%	71%	73%	76%	72%	73%	82%
Medical discoveries	72%	78%	66%	68%	75%	68%	71%	71%	79%
Technologies, inventions and innovations	66%	78%	61%	48%	81%	58%	45%	68%	58%
Environmental issues	66%	71%	64%	59%	69%	64%	63%	65%	69%
Scientific discoveries - other than medical	62%	79%	53%	39%	73%	58%	43%	63%	63%

Q3: Can you tell me how interested you are in news, information or stories about the following?
Total sample; Weight; base n = 1020 Q3. Level of interest by net very interested and quite interested

Participants were also asked to rate their agreement with the statements *I'm not really interested in finding out about technology* and *I'm not really interested in finding out about science*. Supporting the findings from Question three that they were quite or very interested (depicted in Figure 1 and Table 1 above), most gave a score that indicated that they disagreed with these statements (see Figure 2). For both statements, 60% gave a rating of 0-3 indicating that they disagree with the statement and 14% gave a rating of between 7-10 indicating that they agree with the statement.

Figure 2 Extent of agree to disagree in finding out about technology and science



Q12: I am now going to read out some statements. For each would you please tell me how much you agree or disagree with each of them on a scale of zero through to ten, where zero is **strongly disagree** and ten is **strongly agree**? You can provide any number between zero and ten.
Total sample; Weight; base n = 1020 Q12. Extent of agree to disagree in the above statements.
Note: Agree (7-10), Neutral (4-6), Disagree (0-3)

As can be seen from Table 2, males were more likely to give a lower agreement rating to both statements indicating that they are more interested than females in finding out about science (a mean rating of 2.7 vs. 3.5 out of ten for females) and technology (a mean score of 2.6 vs. 3.6 for females), again reflecting the findings of Question 3. Those who live in major cities were more likely to give a lower mean score to each statement signifying that they are more likely to be interested in science and technology. People living in major cities gave a mean score of 2.9 to the statement *I'm not really interested in finding out about science* compared with a mean score of 3.6 for those who do not live in a major city (3.5 for those living in regional areas, 3.8 for those in remote areas). Similarly for the statement *I'm not really interested in finding out about technology*, the mean rating for those living in major cities was 3.0 compared with 3.5 for those not living in a major city (3.4 for those living in regional areas, 3.5 for those in remote areas).

Younger participants were more likely to give a lower mean agreement rating to both these statements. Those aged 18-54 gave a mean agreement rating of 2.7 to both statements compared with 3.5 for those aged 55-74, and those aged 75 and older gave a mean agreement score of 5.0 for *I'm not really interested in finding out about technology* and 5.1 for the same statement regarding science.

Table 2 Extent of agree to disagree in finding out about technology and science

	Total	Male	Female	18-34 years	35-54 years	55-74 years	75 years plus	Major cities	Regional	Remote
I'm not really interested in finding out about technology	3.1	2.6	3.6	2.7	2.7	3.5	5.0	3.0	3.4	3.5
I'm not really interested in finding out about science	3.1	2.7	3.5	2.7	2.7	3.5	5.1	2.9	3.5	3.8

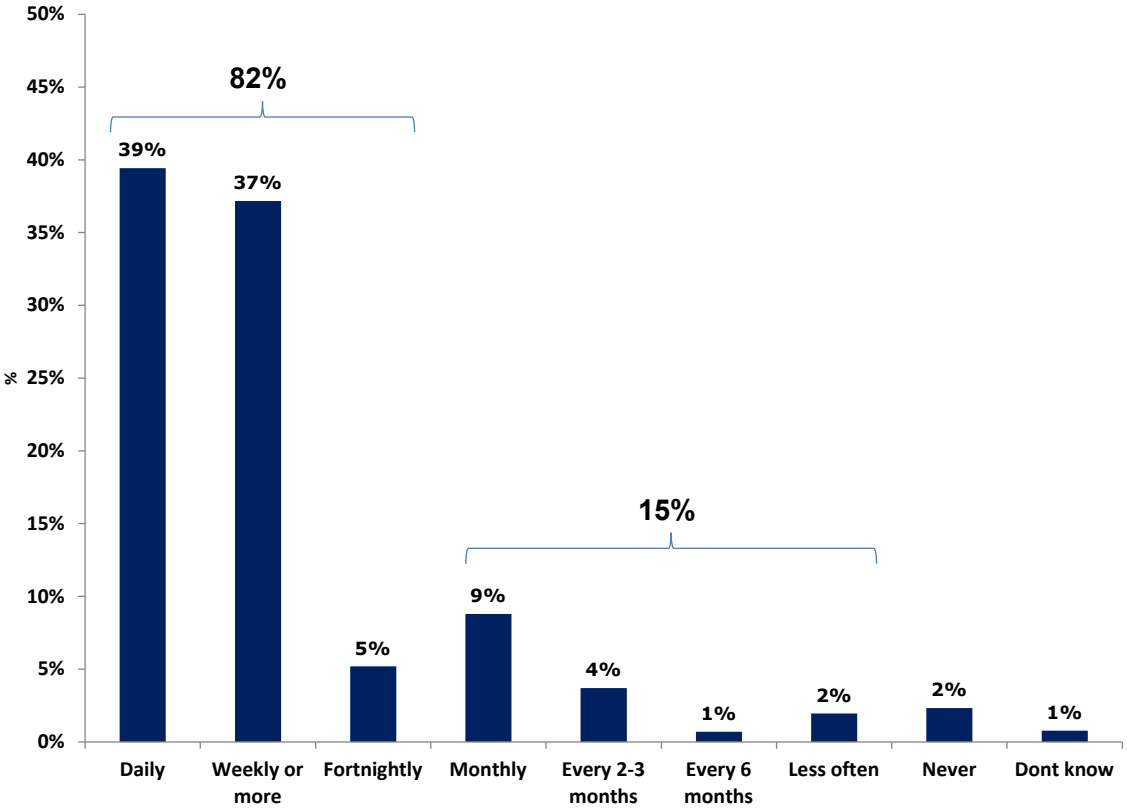
		Frequency of searching - Science			Frequency of searching - Technology			Convenient internet	
	Total	At least fortnightly	Less than fortnightly	Never	At least fortnightly	Less than fortnightly	Never	Yes	No
I'm not really interested in finding out about technology	3.1	2.0	3.6	5.0	2.0	3.6	5.0	3.0	4.1
I'm not really interested in finding out about science	3.1	2.0	3.5	5.2	2.1	3.5	5.1	2.9	4.2

Q12: I am now going to read out some statements. For each would you please tell me how much you agree or disagree with each of them on a scale of zero through to ten, where zero is **strongly disagree** and ten is **strongly agree**? You can provide any number between zero and ten.
Total sample; Weight; base n = 1020 Q12. Extent of agree to disagree in the above statements.

4.1.2 Listening to, watching or reading about science and technology

Australians recall receiving information about science or technology quite frequently. Reflecting over the previous 12 months, 82% said that they had listened, watched or read something to do with science or technology at least fortnightly. Around two-in-five (39%) said that they had listened, watched or read something to do with science or technology *daily*, a similar proportion, 37%, estimated they had at least *weekly* (but less frequently than daily). Only two percent said they had not listened, watched or read something to do with science or technology in the last year.

Figure 3 Frequency of listening, watching or reading anything to do with science or technology in the last 12 months



Q5: Within the last 12 months, how often have you listened to, watched or read about anything to do with science or technology on radio, television, in newspapers or online?
Total sample; Weight; base n = 1020 Q5. How often have you listened, watched or read anything to do with science and technology in the last 12 months.

As can be seen in Table 3, the frequency of listening, reading or watching something to do with science or technology was similar amongst those aged between 18 and 74. On average 83% of 18 to 74 year olds recalled listening, reading or watching something to do with science or technology at least fortnightly. Those aged 75 and older were less likely to recall listening, reading or watching things to do with science or technology at least fortnightly; two thirds (66%) of this age group did so.

Just more than half (55%) of those who say they never search for information about science, and 58% of those who say they never search for information about technology say they recalled listening, reading or watching something to do with science or technology at least fortnightly, meaning that over half of those who do not seek out information about these topics still engage with science and technology although in a more passive way. Unsurprisingly, those with convenient access to the internet were more likely to say they had listened, read or watched things to do with science or technology at least fortnightly in the last year, 84% compared with two-thirds (66%) of those who do not have convenient access to the internet.

Table 3 Frequency of listening, watching or reading anything to do with science and technology in the last 12 months

	Total	Male	Female	18-34 years	35-54 years	55-74 years	75 years plus	Major cities	Regional	Remote
At least fortnightly	82%	84%	80%	83%	87%	80%	66%	81%	85%	84%
Less than fortnightly	15%	14%	16%	16%	12%	16%	24%	16%	13%	14%
Never	2%	1%	3%	1%	2%	3%	5%	3%	2%	1%
Don't know	1%	1%	1%	0%	0%	1%	4%	1%	0%	1%

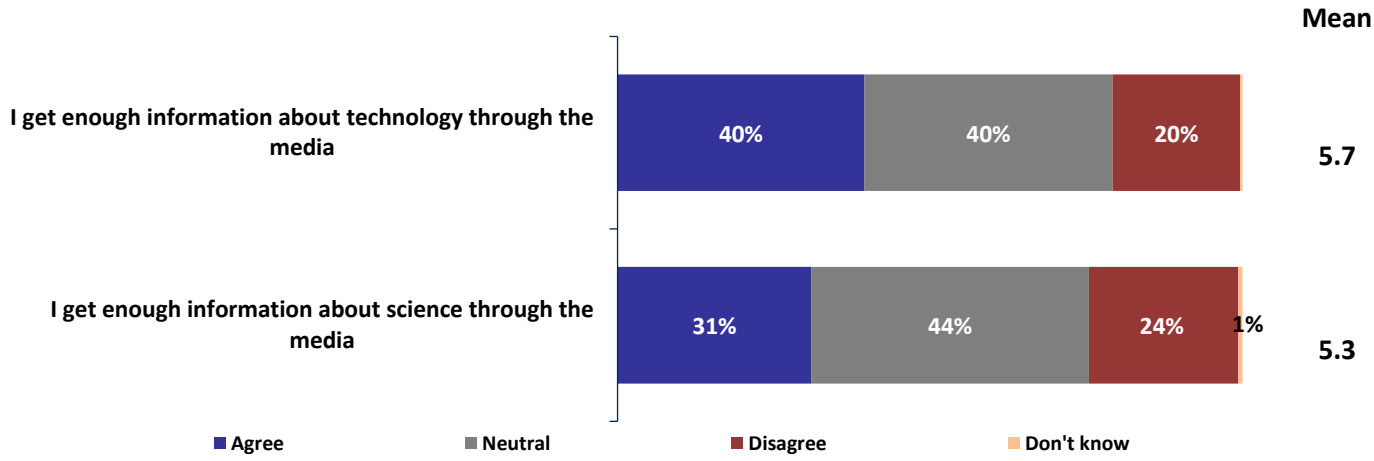
		Frequency of searching - Science			Frequency of searching - Technology			Convenient internet	
	Total	At least fortnightly	Less than fortnightly	Never	At least fortnightly	Less than fortnightly	Never	Yes	No
At least fortnightly	82%	96%	78%	55%	92%	79%	58%	84%	66%
Less than fortnightly	15%	4%	21%	32%	7%	19%	28%	14%	24%
Never	2%	0%	0%	11%	0%	1%	11%	2%	6%
Don't know	1%	0%	1%	2%	0%	0%	4%	0%	3%

Q5: Within the last 12 months, how often have you listened to, watched or read about anything to do with science or technology on radio, television, in newspapers or online?
Total sample; Weight; base n = 1020 Q5. How often have you listened, watched or read anything to do with science and technology in the last 12 months.

4.1.3 Adequacy of information through the media

Survey participants were asked to rate their agreement with the statements *I get enough information about technology through the media* and *I get enough information about science through the media*. Figure 4 shows the proportion of participants who gave a rating of 7-10 (labelled 'agree'), 4-6 (labelled as 'neutral') and 0-3 (labelled as 'disagree'). Participants were more likely to agree that they obtain enough information about technology through the media compared with science (40% giving a rating considered to constitute agreement for technology vs. 31% for science).

Figure 4 Extent of agree to disagree in getting enough information about technology and science through the media



Q12: I am now going to read out some statements. For each would you please tell me how much you agree or disagree with each of them on a scale of zero through to ten, where zero is **strongly disagree** and ten is **strongly agree**? You can provide any number between zero and ten.
Total sample; Weight; base n = 1020 Q12. Extent of agree to disagree in the above statements.
Note: Agree (7-10), Neutral (4-6), Disagree (0-3)

As shown in Table 4, females were more likely than males to give a higher mean agreement rating to the statement *I get enough information about technology through the media* than males (5.9 and 5.4 respectively), however, there was no difference between mean ratings for the statement regarding science. Older Australians aged 75 plus were more likely to give a higher mean rating to both statements suggesting that they are more satisfied with the amount of information available through the media than those aged 74 and less. The mean rating for *I get enough information about technology through the media* was 6.6 for those aged 75 and older (compared with a mean of 5.6 for those aged 18-74) and 6.4 for *I get enough information about science through the media* compared with 5.2 for those aged 18-74. Those aged 35-54 years gave the lowest mean rating for *I get enough information about technology through the media* suggesting they were the least satisfied age group in terms of receiving information about technology from the media.

Unsurprisingly, those who search for information about science and technology at least fortnightly were more likely to give a lower mean rating of agreement to these statements regarding getting enough information from the media, compared with those who never search. Those who search for information about science at least fortnightly gave a mean rating of 4.9 to the statement *I get enough information about science through the media* compared with a mean of 5.9 for those who never search. Similarly, those who search for information about technology at least fortnightly gave a mean rating of 5.3 to the statement *I get enough information about technology through the media* compared with a mean of 6.3 for those who never search.

Table 4 Extent of agree to disagree in getting enough information about technology and science through the media

	Total	Male	Female	18-34 years	35-54 years	55-74 years	75 years plus	Major cities	Regional	Remote
I get enough information about technology through the media	5.7	5.4	5.9	5.8	5.3	5.7	6.6	5.7	5.7	5.7
I get enough information about science through the media	5.3	5.2	5.4	5.1	5.1	5.4	6.4	5.3	5.4	5.3

		Frequency of searching - Science			Frequency of searching - Technology			Convenient internet	
	Total	At least fortnightly	Less than fortnightly	Never	At least fortnightly	Less than fortnightly	Never	Yes	No
I get enough information about technology through the media	5.7	5.2	5.9	6.4	5.3	5.8	6.3	5.6	5.8
I get enough information about science through the media	5.3	4.9	5.5	5.9	5.1	5.3	5.9	5.3	5.5

Q12: I am now going to read out some statements. For each would you please tell me how much you agree or disagree with each of them on a scale of zero through to ten, where zero is **strongly disagree** and ten is **strongly agree**? You can provide any number between zero and ten.
Total sample; Weight; base n = 1020

4.1.4 Curiosity about science and technology

Half (50%) of the survey respondents reported that there are things involving science that they would like to know more about (compared with 46% who said there are things relating to technology they would like to know more about, see Table 5 and Table 7). Males were more likely to say there were things involving science they would like to know more about (56%) compared with females (44%). Those aged 35-54 were most likely to say there was something involving science they would like to know more about (56%).

Those who search for information on science and technology at least fortnightly were more likely to say that there was something involving science they would like to know more about, 66% of those who search at least fortnightly said there was something involving science they would like to know more about compared with 44% who search less frequently. Despite reporting that they had never searched for information about science in the past year, 21% of this group said there was something about science they would like to know more about.

Table 5 Is there is anything involving science that you would like to know more about

	Total	Male	Female	18-34 years	35-54 years	55-74 years	75 years plus	Major cities	Regional	Remote
Yes	50%	56%	44%	46%	56%	48%	39%	53%	43%	43%
No	43%	39%	46%	46%	37%	44%	50%	41%	46%	49%
Not that I can think of	8%	6%	9%	8%	7%	7%	11%	7%	11%	8%

		Frequency of searching - Science			Frequency of searching - Technology			Convenient internet	
	Total	At least fortnightly	Less than fortnightly	Never	At least fortnightly	Less than fortnightly	Never	Yes	No
Yes	50%	66%	44%	21%	61%	47%	24%	52%	38%
No	43%	28%	48%	71%	32%	46%	66%	41%	51%
Not that I can think of	8%	6%	9%	8%	7%	8%	10%	7%	11%

Q6: Is there anything involving science that you would like to know more about?
Total sample; Weight; base n = 1020

Of the 528 participants who said there was something relating to science they were interested in knowing more about, 5% said 'not that I can think of'. Table 6 shows the topics mentioned by participants interested in finding out more about science when asked specifically what sorts of things they would like to know more about (only topics mentioned by more than three percent are shown). Of the 501 participants who mentioned something, 29% said medicine or something relating to medicine and 13% mentioned things to do with health reflecting the overall interest of Australians with regards to health issues and medical discoveries as demonstrated by Figure 1. Around one-in-six (16%) mentioned topics to do with the environment and 13% mentioned things to do with astronomy, space and cosmology.

Table 6 Interested topics involving science

	Total
Medicine (medical research, science, technology etc.)	29%
Environment	16%
Health	13%
Astronomy / space / cosmology	13%
Innovations / discoveries / new inventions / research / emerging technologies etc.	11%
Physics / astrophysics / quantum physics	8%
Biology	6%
Climate science (climate change/global warming)	6%
Agriculture / farming	6%
Sustainability, renewable energy, conservation etc.	5%
Nature / natural science / earth science	4%
Neurology / Neuroscience / Psychology / Mental health	4%
Engineering	4%

Q8: What topics involving science would you like to know more about?
Weight; Note: Sample is inclusive of 95% (n=501) who would like to know more about science, and included a comment in Q8. Only topics mentioned by >3% included in table.

Just less than half (46%) said there was something involving technology that they would like to know more about. Participants were thus more likely to say there was something about science they wanted to know more about, than technology. Given that there was a higher mean agreement score with the statement *I get enough information about technology through the media* (5.7) than *I get enough information about science through the media* (5.3), see Table 4, this suggests that media coverage of technology might better cater for Australians' interest in technology than coverage of science.

As can be seen in Table 7, males were more likely to say there was something involving technology that they would like to know more about (53% vs. 40% of females said *yes*). Reflecting the pattern observed for interest in knowing more about science as depicted in Table 5, those aged 35-54 were more likely to indicate there were topics involving technology that they would like to know more about (53% compared with 40% of those aged 18-34, 46% of those aged 55-74 and 36% of those aged 75 plus). Those living in major cities were also more likely to say there were things involving technology that they would like to know more about (49% said *yes*) compared with those not living in major cities (38% of those living in regional areas and 42% of those living in remote areas).

Table 7 Is there anything involving technology that you would like to know more about

	Total	Male	Female	18-34 years	35-54 years	55-74 years	75 years plus	Major cities	Regional	Remote
Yes	46%	53%	40%	40%	53%	46%	36%	49%	38%	42%
No	47%	40%	54%	54%	41%	46%	57%	45%	55%	50%
Not that I can think of	7%	7%	6%	6%	6%	7%	7%	6%	7%	8%

		Frequency of searching - Science			Frequency of searching - Technology			Convenient internet	
	Total	At least fortnightly	Less than fortnightly	Never	At least fortnightly	Less than fortnightly	Never	Yes	No
Yes	46%	60%	42%	20%	63%	38%	18%	48%	33%
No	47%	35%	51%	71%	32%	54%	76%	46%	60%
Not that I can think of	7%	5%	6%	9%	5%	8%	6%	6%	7%

Q9: Is there anything involving technology that you would like to know more about?
Total sample; Weight; base n = 1020

Of the 493 participants who said there was something relating to technology they were interested in knowing more about, 7% said 'not that I can think of'. Table 8 shows the topics relating to technology that participants were interested in finding out more about (only topics mentioned by more than three percent of the people who answered this question are shown). Of the 458 participants who then specified a topic, around one-in-five (21%) said computers or something relating to computers, a similar proportion (20%) said things to do with innovations and inventions. Seventeen percent (17%) mentioned medical related technology issues and 15% mentioned things to do with consumer electronics. One-in-ten (10%) said they were interested in things to do with communications such as the internet.

Table 8 Interested topics involving technology

	Total
Computers (computer science, software development etc.)	21%
Innovations / new inventions / emerging technologies / gadgets etc.	20%
Medicine (medical research, science, technology etc.)	17%
Electronics / consumer technology (e.g. smartphones, tablets, televisions etc.)	15%
Communications (internet, telecommunications, NBN etc.)	10%
Sustainability, renewable / alternative energy etc.	9%
Practical applications / how to use technology better / improving efficiency	9%
Energy / electricity / oil	5%
Environment	5%
Quality of life / improvements	4%
Automobiles / Motor vehicles	4%

Q11: What topics involving technology would you like to know more about?
Weight; Note: Sample is inclusive of 93% (n=458) who would like to know more about technology, and included a comment in Q9. Only topics mentioned by >3% included in table

4.1.5 Searching for information

Participants were asked where they generally go first to seek out information relating to science (see Table 9). The majority (88%) reported using the internet, search engines or specific websites. Just more than two-in-five (43%) answered *internet*, and a similar proportion (41%) said *Google*. Older participants were more likely to mention using libraries or books as their initial searching point, one-in-ten (10%) of those aged 55-74 and around a quarter (24%) of those aged 75 years and older mentioned libraries or books compared with just one percent of those aged less than 55. Unsurprisingly, those without convenient access to the internet were more likely to mention books or the library (24%) compared with those who do have convenient internet access (2%). However, lack of convenient internet access did not mean these participants were significantly less likely to mention the internet or Google as the source they typically used first to find out information about science.

Table 9 Where did you generally go first to find information about Science

	Total	Male	Female	18-34 years	35-54 years	55-74 years	75 years plus	Major cities	Regional	Remote
Internet (NFI)	43%	49%	37%	41%	44%	45%	37%	41%	44%	53%
Google	41%	32%	50%	45%	42%	36%	23%	43%	38%	28%
Library/ Books	4%	3%	5%	1%	1%	10%	24%	3%	8%	4%
Newspaper-magazines-journals-print media	2%	2%	1%	2%	2%	0%	4%	1%	3%	0%
Other Internet search engine (NFI)	2%	2%	1%	2%	3%	0%	0%	2%	1%	1%

		Frequency of searching - Science			Frequency of searching - Technology			Convenient internet	
	Total	At least fortnightly	Less than fortnightly	Never	At least fortnightly	Less than fortnightly	Never	Yes	No
Internet (NFI)	43%	46%	40%	-	46%	40%	42%	45%	27%
Google	41%	36%	47%	-	38%	45%	24%	42%	32%
Library/ Books	4%	3%	5%	-	2%	6%	22%	2%	24%
Newspaper-magazines-journals-print media	2%	2%	1%	-	2%	1%	6%	1%	4%
Other Internet search engine (NFI)	2%	2%	1%	-	1%	2%	0%	2%	0%

Q16: How or where did you generally go FIRST to find information about science?
Weight; base n = 816 those who answered 1-3 at Q15. Only sources mentioned by >1% included in table

Reflecting similar responses to where people go to first to find information about science, the majority (again, 88%) of participants said they used the internet or an internet search-engine first to find information about technology (see Table 10). Just less than half (46%) said they generally go to the internet first to find information about technology, around two-in-five (38%) specifically mentioned the search engine Google. Friends and family, and library and books were mentioned by three percent of participants each. Mirroring the pattern observed when asked where people looked for information about science, again, unsurprisingly, those without convenient internet access were more likely to mention first seeking technology information through a library or books; once again, these people were not significantly less likely to say that they would use the internet to seek information on technology.

Table 10 Where did you generally go first to find information about technology

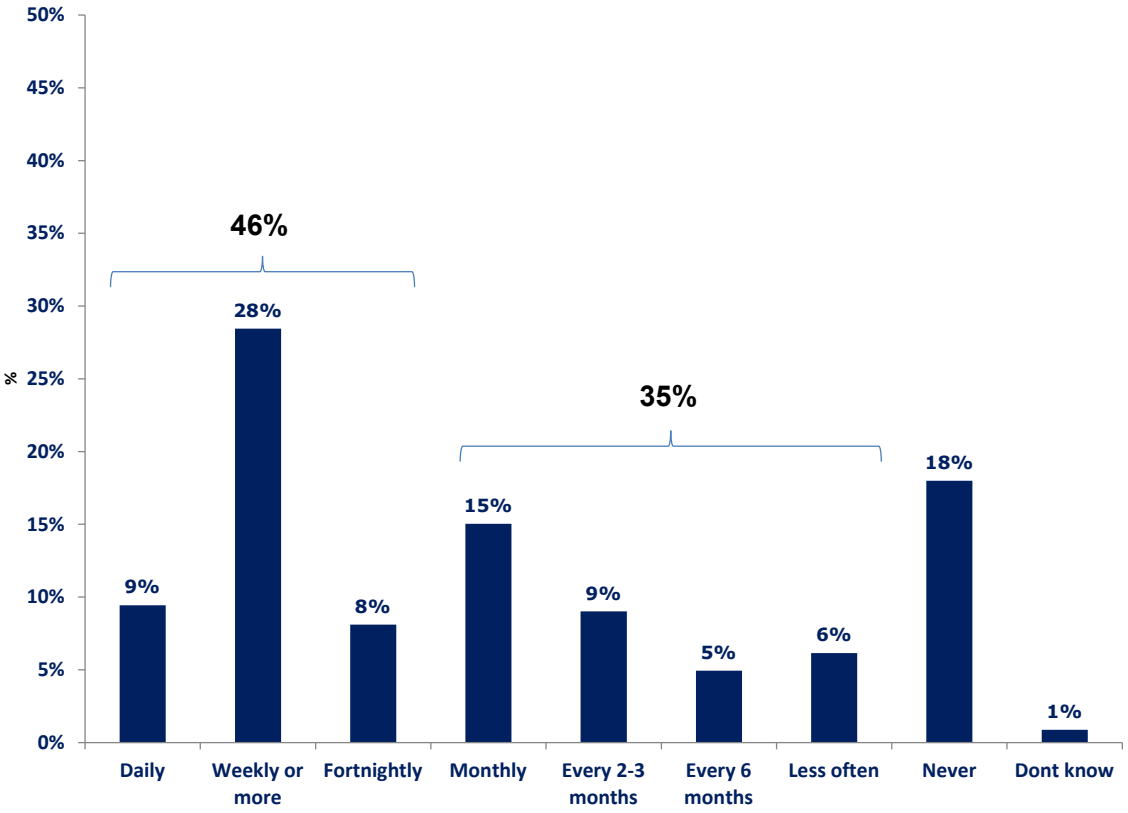
	Total	Male	Female	18-34 years	35-54 years	55-74 years	75 years plus	Major cities	Regional	Remote
Internet (NFI)	46%	50%	41%	45%	46%	48%	40%	44%	46%	51%
Google	38%	34%	43%	45%	38%	31%	23%	40%	37%	32%
Friends or family	3%	2%	5%	2%	3%	3%	12%	3%	4%	5%
Library/ Books	3%	2%	4%	2%	1%	7%	14%	2%	5%	2%
Internet search engine (NFI)	2%	3%	1%	1%	3%	2%	0%	2%	1%	3%

		Frequency of searching - Science			Frequency of searching - Technology			Convenient internet	
	Total	At least fortnightly	Less than fortnightly	Never	At least fortnightly	Less than fortnightly	Never	Yes	No
Internet (NFI)	46%	47%	45%	41%	48%	43%	-	47%	29%
Google	38%	35%	43%	38%	36%	41%	-	39%	32%
Friends or family	3%	3%	4%	9%	2%	5%	-	3%	9%
Library/ Books	3%	3%	3%	4%	1%	5%	-	2%	15%
Other	2%	3%	1%	2%	3%	1%	-	2%	2%
Internet search engine (NFI)	2%	3%	1%	2%	3%	1%	-	2%	0%

Q19: How or where did you generally go FIRST to find information about technology?
Weight; base n = 856, those who answered 1-3 at Q18. Only sources mentioned by >1% included in table

As illustrated in Figure 5, around one-in-ten (9%) of participants reported searching for information about science daily; just more than a quarter (28%) said weekly or more frequently (but less frequently than daily) and eight percent said at least fortnightly (but less frequently than weekly). This means that almost half (46%) report searching for things to do with science at least fortnightly overall. Almost one-in-five (18%) said that they never search for information relating to science.

Figure 5 Frequency of searching for information about science



Q14: How often, if at all, do you search for information about science?
Total sample; Weight; base n = 1020

As can be seen in Table 11, younger participants were more likely to search for information about science more frequently than older people. Just more than half (56%) of those aged 18-34 said they searched for science information at least fortnightly, similar to 35-54 year olds (52%), this fell to 39% of those aged 55-74 and to 16% for those aged older than 75. Males were more likely to report searching for information about science at least fortnightly (56% compared with 37% of females) and females were more likely to search less than fortnightly than males and were also more likely to say that they never search for information about science (21% of females said never vs. 15% of males). Those living in remote areas were less likely to report frequent searching for information about science; around a third (34%) of remote participants said they searched at least fortnightly compared with 47% of those who lived in non-remote areas (48% of those living in major cities and 46% of those living in regional Australia). As might be expected, those with convenient access to the internet were more likely to say they search for scientific information at least fortnightly, 49% compared with 28% of those who do not have convenient internet access.

Table 11 Frequency of searching for information about science

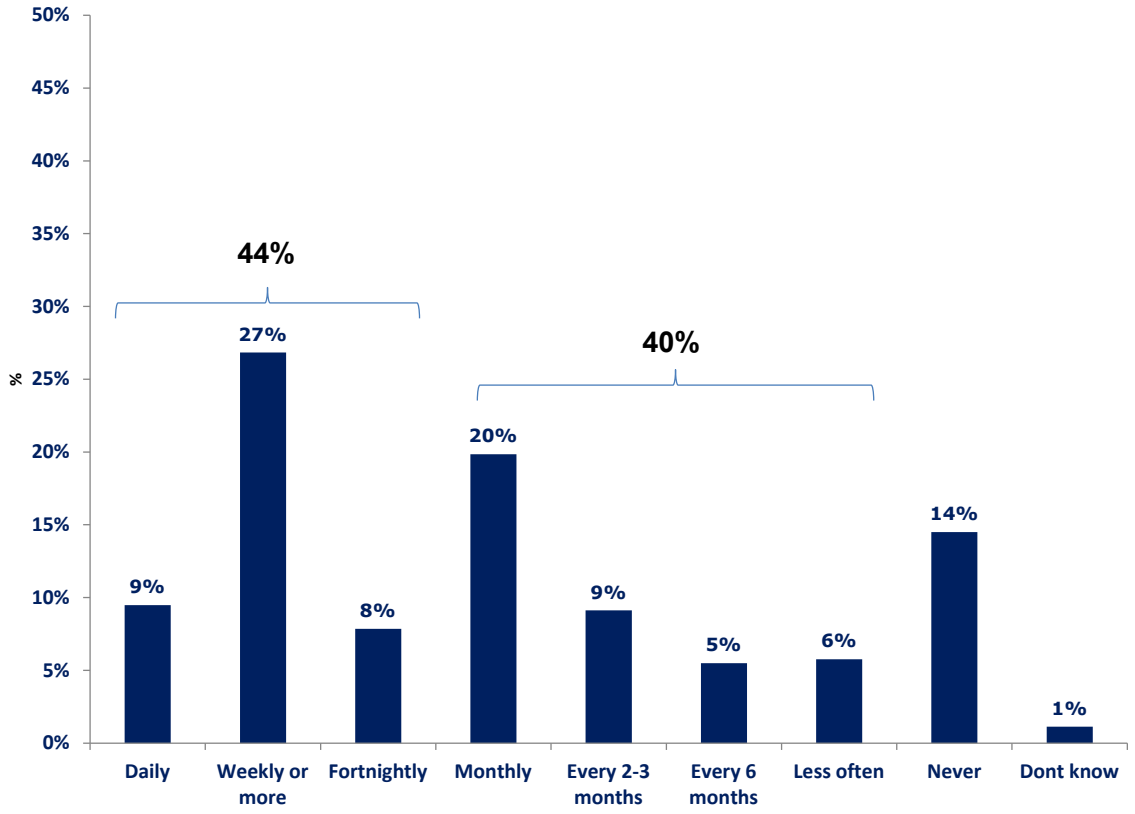
	Total	Male	Female	18-34 years	35-54 years	55-74 years	75 years plus	Major cities	Regional	Remote
At least fortnightly	46%	56%	37%	54%	52%	39%	16%	48%	46%	34%
Less than fortnightly	35%	28%	42%	36%	34%	37%	31%	36%	33%	36%
Never	18%	15%	21%	10%	13%	23%	50%	16%	21%	28%
Don't know	1%	1%	0%	0%	0%	1%	3%	1%	1%	3%

		Frequency of searching - Science			Frequency of searching - Technology			Convenient internet	
	Total	At least fortnightly	Less than fortnightly	Never	At least fortnightly	Less than fortnightly	Never	Yes	No
At least fortnightly	46%	100%	0%	0%	81%	24%	4%	49%	28%
Less than fortnightly	35%	0%	100%	0%	15%	64%	16%	36%	27%
Never	18%	0%	0%	100%	4%	12%	80%	14%	43%
Don't know	1%	0%	0%	0%	0%	0%	0%	1%	2%

Q14: How often, if at all, do you search for information about science?
Total sample; Weight; base n = 1020

The reported frequency of searching for information about technology was similar to that of searching for information about science (see Figure 5 above and Figure 6). Forty-four percent (44%) recalled searching at least fortnightly. The same proportion, 9%, said they searched for information about technology daily. Around a quarter (27%) said they looked for information about technology at least weekly (but less frequently than daily) and 8% said they searched fortnightly (less frequently than weekly). One-in-seven (14%) said that they never search for information about technology.

Figure 6 Frequency of searching for information about technology



Q17: How often, if at all, do you search for information about **technology**?
Total sample; Weight; base n = 1020

As depicted in Table 12, males were more likely to say they search for technological information more frequently; 58% of males said they searched at least fortnightly compared with 31% of females. Females were more likely to say they never searched (19% compared with 10% of males). As with searching for science, older participants were less likely to report frequent technological information searching, the youngest cohort (18-34) reported the highest level of searching at least fortnightly (55%), followed by 35-54 year olds (48%). Thirty seven percent (37%) of 55-74 year olds said they searched at least fortnightly and 12% of those aged 75 plus did so. Those living in remote Australia were less likely to search as frequently as those living in regional Australia or cities (31% searched at least fortnightly compared with 43% and 46% respectively). Those with convenient internet access were more likely to search for technological information more frequently, 47% of those who had convenient access did so compared with 23% of those who do not.

Table 12 Frequency of searching for information about technology

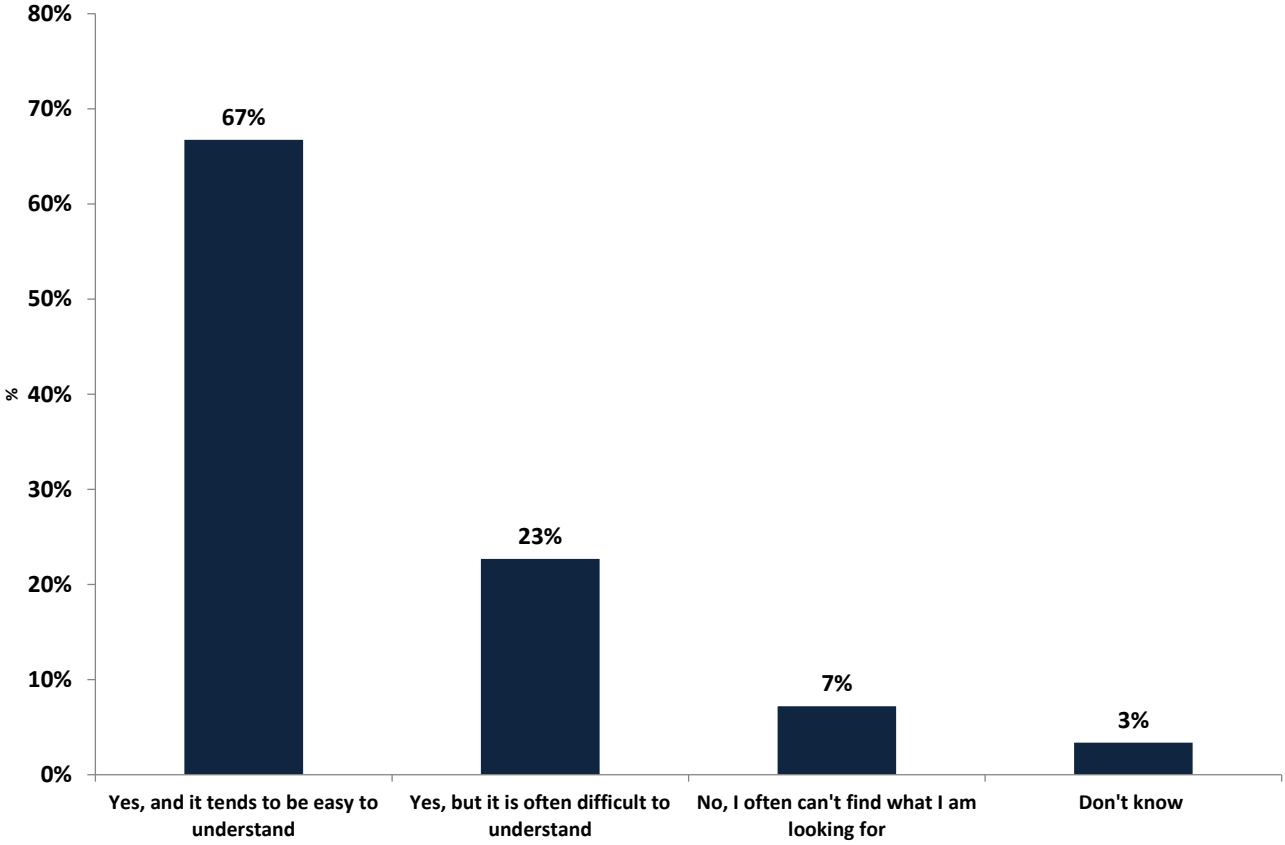
	Total	Male	Female	18-34 years	35-54 years	55-74 years	75 years plus	Major cities	Regional	Remote
At least fortnightly	44%	58%	31%	55%	48%	37%	12%	46%	43%	31%
Less than fortnightly	40%	30%	50%	40%	42%	41%	30%	41%	39%	43%
Never	14%	10%	19%	5%	9%	21%	53%	12%	17%	23%
Don't know	1%	1%	1%	0%	1%	1%	5%	1%	1%	3%

		Frequency of searching - Science			Frequency of searching - Technology			Convenient internet	
	Total	At least fortnightly	Less than fortnightly	Never	At least fortnightly	Less than fortnightly	Never	Yes	No
At least fortnightly	44%	77%	19%	9%	100%	0%	0%	47%	23%
Less than fortnightly	40%	21%	73%	26%	0%	100%	0%	42%	29%
Never	14%	1%	7%	65%	0%	0%	100%	10%	46%
Don't know	1%	1%	1%	0%	0%	0%	0%	1%	2%

Q17: How often, if at all, do you search for information about technology?
Total sample; Weight; base n = 1020

Those who said they searched for information about science were asked whether they generally found what they were looking for (see Figure 7). The majority, 90%, said yes. Around two-thirds (67%) said they did and *it tends to be easy to understand* and around a quarter (23%) said they did *but it is often difficult to understand*. Seven percent (7%) said they did not generally find what they were looking for and the remaining 3% said *don't know*.

Figure 7 Success when searching for information about science



Q15: Did you generally find what you were looking for (science)?
Weight; base n = 844: those who report looking for information about science

As can be seen in Table 13, there were no significant differences participants regarding their success on the basis of gender, age or residential location. However, those who report having convenient access to the internet were more likely to say they found easy to understand information about science (68%) compared with those without convenient access (50%). Those who search for science at least fortnightly were more likely to say they were able to find information that they found easy to understand (72% compared with 59% of those who search less often).

Table 13 Success when searching for information about science

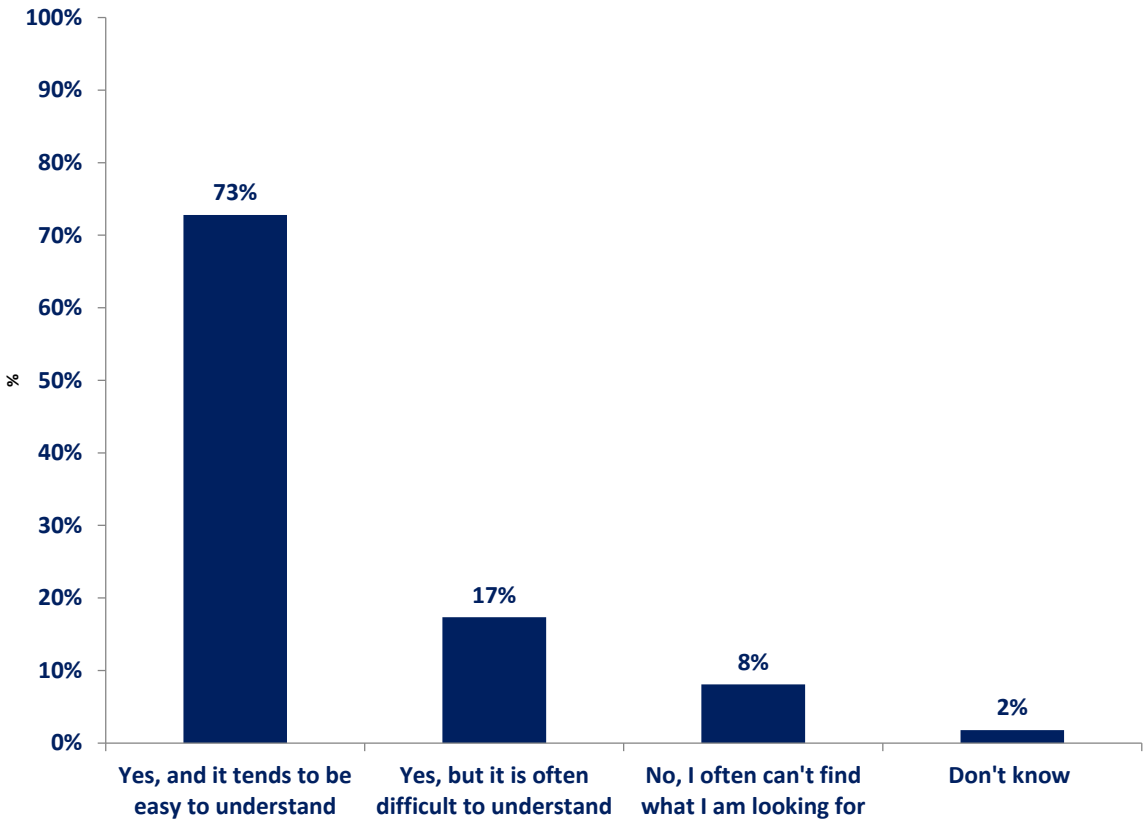
	Total	Male	Female	18-34 years	35-54 years	55-74 years	75 years plus	Major cities	Regional	Remote
Yes, and it tends to be easy to understand	67%	70%	63%	73%	66%	59%	57%	67%	70%	60%
Yes, but it is often difficult to understand	23%	18%	27%	19%	23%	28%	23%	23%	21%	26%
No, I often can't find what I am looking for	7%	8%	6%	5%	7%	9%	13%	7%	6%	9%
Don't know	3%	3%	4%	2%	3%	4%	7%	3%	3%	4%

		Frequency of searching - Science			Frequency of searching - Technology			Convenient internet	
	Total	At least fortnightly	Less than fortnightly	Never	At least fortnightly	Less than fortnightly	Never	Yes	No
Yes, and it tends to be easy to understand	67%	72%	59%	-	73%	60%	53%	68%	50%
Yes, but it is often difficult to understand	23%	20%	26%	-	18%	28%	28%	23%	23%
No, I often can't find what I am looking for	7%	6%	9%	-	6%	7%	16%	6%	21%
Don't know	3%	2%	5%	-	2%	5%	2%	3%	6%

Q15: Did you generally find what you were looking for (science)?
Weight; base n = 844: those who report looking for information about science

Those who said they searched for information on technology were asked whether they generally found what they were looking for and nine-in-ten (90%) said that they did. Almost three quarters (73%) said they usually found what they were looking for and *it tends to be easy to understand*, while 17% said they generally found what they were looking for *but it is often difficult to understand*. Eight percent (8%) said they did not generally find what they were looking for and 2% said *don't know*. See Figure 8.

Figure 8 Success when searching for information about technology



Q18. Did you generally find what you were looking for (technology)?
Weight; base n = 870: those who report looking for information about technology

As illustrated in Table 14, males (78%) were more likely to report success in finding easily understandable information about technology, compared with females (68%). Success in finding easy to understand information about technology, however, varied by age group. Those aged 18-34 were most likely to say they tended to find information that was easy to understand (84%) as did 73% of those aged 35-54, falling to 61% of those aged 55-74 and 44% of those aged 75 and over. Those who search for technology information at least fortnightly were more likely to say they were able to find information that they found easy to understand (79% compared with 66% of those who search less often for technology information).

Table 14 Success when searching for information about technology

	Total	Male	Female	18-34 years	35-54 years	55-74 years	75 years plus	Major cities	Regional	Remote
Yes, and it tends to be easy to understand	73%	78%	68%	84%	73%	61%	44%	73%	74%	78%
Yes, but it is often difficult to understand	17%	14%	21%	9%	19%	24%	26%	16%	21%	13%
No, I often can't find what I am looking for	8%	6%	10%	5%	6%	13%	21%	9%	4%	9%
Don't know	2%	2%	2%	1%	1%	2%	9%	2%	1%	0%

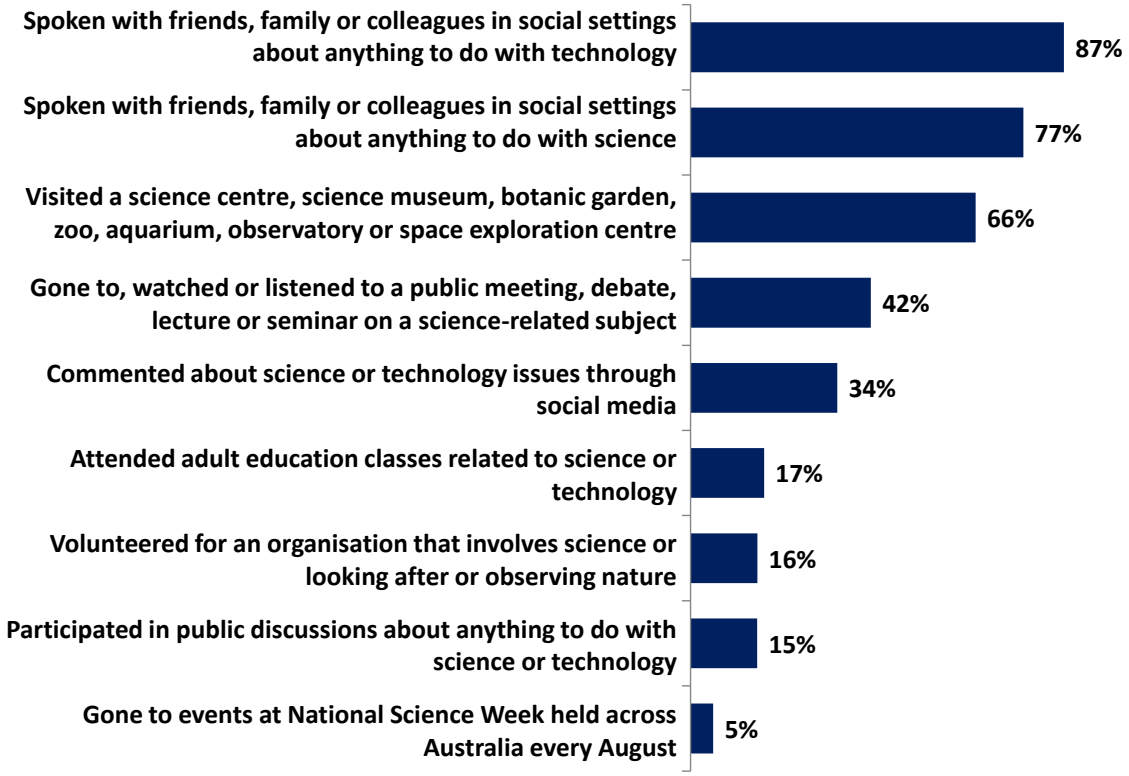
		Frequency of searching - Science			Frequency of searching - Technology			Convenient internet	
	Total	At least fortnightly	Less than fortnightly	Never	At least fortnightly	Less than fortnightly	Never	Yes	No
Yes, and it tends to be easy to understand	73%	75%	72%	56%	79%	66%	-	75%	53%
Yes, but it is often difficult to understand	17%	16%	17%	32%	15%	20%	-	17%	20%
No, I often can't find what I am looking for	8%	8%	8%	10%	5%	11%	-	7%	24%
Don't know	2%	1%	2%	2%	1%	2%	-	2%	3%

Q18. Did you generally find what you were looking for (technology)?
Weight; base n = 870: those who report looking for information about technology

4.1.6 Participation in science and technology related leisure activities

Survey participants were asked whether they had undertaken any of nine activities relating to science and technology in the previous year (listed in Figure 9). The most commonly undertaken activity was speaking with *friends, family or colleagues in social settings about anything to do with technology*, 87% reported having done this. The second most commonly undertaken activity was speaking with *friends, family or colleagues in social settings about anything to do with science*, around three-quarters (77%) said that they had done this in the previous 12 months. Two-thirds (66%) said that they had visited a *science centre, science museum, botanic garden, zoo, aquarium, observatory or space exploration centre* in the last year. Around two-in-five (42%) said they had *gone to, watched, or listened to a public meeting, debate, lecture or seminar on a science-related subject* and around a third (34%) reported having *commented about science or technology issues through social media* in the last 12 months.

Figure 9 Activities undertaken in the past 12 months



Q13: Which of the following activities have you undertaken **in the past 12 months**?
Total sample; Weight; base n = 1020

Of the top five most commonly undertaken activities in the previous year, those aged 75 and older were least likely to have participated in them (see Table 15). Those living in major cities were more likely to have *spoken with friends, family or colleagues in social settings about anything to do with technology* (90% compared with 80% of those not living in major cities (i.e. 84% of those living in regional Australia and 74% of those living in remote areas). Unsurprisingly, those living in remote Australia were least likely to report having visited a science centre, museum, zoo or similar compared with those living elsewhere (51% compared with 69% of those living in major cities and 65% of those living in regional areas). Those living in remote areas were also less likely to have *gone to, watched or listened to a public meeting, debate, lecture or seminar on a science-related subject* (26% compared with 45% of those living in major cities and 39% of those living in regional areas)

and *commented about science or technology issues through social media* (18% compared with 37% of those living in major cities and 30% of those living in regional areas). The only activity where there was a difference between males and females was going to, watching or listening *to a public meeting, debate, lecture or seminar on a science-related subject*, where almost half of males (48%) compared with 36% of females were more likely to have done this in the previous year. Those aged 35-54 were the age group most likely to have taken part in a National Science Week activity, 8% said they had done so and interestingly there were no differences in attendance between those in major cities, regional or remote Australia.

Those participants with convenient access to the internet were more likely to have taken part in the six most commonly undertaken activities than those without convenient access, but this was probably a factor of their geographic location as those living in major cities were more likely to have convenient internet access.

There was a strong association between survey respondents who searched for information about science and technology at least fortnightly and those who were more likely to have participated in all the science and technology related activities in the past year. Reflecting this, those who never searched for information about science or technology were less likely to have participated in any of these activities (see Table 15).

Table 15 Activities undertaken in the past 12 months

	Total	Male	Female	18-34 years	35-54 years	55-74 years	75 years plus	Major cities	Regional	Remote
Spoken with friends, family or colleagues in social settings about anything to do with technology	87%	89%	84%	91%	89%	83%	71%	90%	84%	74%
Spoken with friends, family or colleagues in social settings about anything to do with science	77%	80%	75%	81%	81%	75%	55%	79%	76%	68%
Visited a science centre, science museum, botanic garden, zoo, aquarium, observatory or space exploration centre	66%	64%	68%	75%	70%	57%	46%	69%	65%	51%
Gone to, watched or listened to a public meeting, debate, lecture or seminar on a science-related subject	42%	48%	36%	52%	44%	35%	17%	45%	39%	26%
Commented about science or technology issues through social media	34%	36%	32%	49%	37%	20%	8%	37%	30%	18%
Attended adult education classes related to science or technology	17%	18%	16%	24%	16%	13%	10%	18%	17%	12%
Volunteered for an organisation that involves science or looking after or observing nature	16%	16%	15%	14%	17%	16%	14%	13%	17%	23%
Participated in public discussions about anything to do with science or technology	15%	18%	13%	15%	18%	13%	15%	15%	18%	9%
Gone to events at National Science Week held across Australia every August	5%	4%	6%	6%	8%	2%	1%	5%	5%	4%

		Frequency of searching - Science			Frequency of searching - Technology			Convenient internet	
	Total	At least fortnightly	Less than fortnightly	Never	At least fortnightly	Less than fortnightly	Never	Yes	No
Spoken with friends, family or colleagues in social settings about anything to do with technology	87%	96%	88%	59%	96%	89%	51%	89%	70%
Spoken with friends, family or colleagues in social settings about anything to do with science	77%	92%	74%	44%	92%	73%	44%	80%	57%
Visited a science centre, science museum, botanic garden, zoo, aquarium, observatory or space exploration centre	66%	79%	63%	41%	74%	67%	39%	69%	45%
Gone to, watched or listened to a public meeting, debate, lecture or seminar on a science-related subject	42%	64%	29%	11%	60%	34%	9%	44%	30%
Commented about science or technology issues through social media	34%	51%	26%	6%	48%	29%	4%	37%	18%
Attended adult education classes related to science or technology	17%	27%	12%	4%	26%	13%	3%	18%	10%
Volunteered for an organisation that involves science or looking after or observing nature	16%	21%	13%	6%	19%	14%	9%	15%	18%
Participated in public discussions about anything to do with science or technology	15%	24%	10%	5%	23%	10%	5%	16%	15%
Gone to events at National Science Week held across Australia every August	5%	9%	3%	1%	9%	3%	0%	5%	5%

Q13: Which of the following activities have you undertaken **in the past 12 months**?
Total sample; Weight; base n = 1020

4.2 Australians' attitudes towards science and technology

4.2.1 Trusted sources of scientific information

As can be seen in Table 16, the most commonly mentioned trusted source of accurate scientific information was friends and family (12%) and CSIRO (also 12%). The next most commonly mentioned trusted sources of accurate information were television presenters (8%) and scientific organisations (7%). Further investigation is required to understand why 30% of the survey population either did not know who to trust or could not think of anyone (21%) or trusted no one (9%).

Table 16 Trusted sources of accurate scientific information

	Total
Friends/family	12%
CSIRO	12%
Television presenters	8%
Scientific organisation	7%
University scientists	6%
Government	5%
Newspapers / magazines	5%
Scientists - NFI	4%
ABC / ABC website	4%
Internet	3%
Journal articles and / or peer-reviewed journals	3%
Doctors	3%
Radio presenters	3%
Other	27%
Don't know	21%
Don't trust anyone/ No one	9%

Q20: Who, if anyone, do you trust as a source of accurate scientific information? This could be a person, an organisation or a media source. Only sources mentioned by >2% included in table
Total sample; Weight; base n = 1020

Although spontaneous mention of scientists and scientific organisations as trusted source of accurate scientific information was quite low, when participants were asked their level of trust of a nine different types of people to

explain the impacts of scientific or technological advances, a much higher level of trust towards scientists was observed (see Figure 10).

As illustrated in Table 17, those respondents with a higher level of formal education (having attained a bachelor's degree or postgraduate qualification) were more likely to mention friends and family as a trusted source of accurate scientific information than those without a tertiary qualification (20% and 9% respectively). Similarly, those with a bachelor's degree or higher were more likely than those without to name scientific organisations (11% compared with 5%); university scientists (12% compared with 4%); government (10% compared with 4%); newspapers / magazines (8% compared with 4%); and journal articles (7% compared with 2%). Those with higher levels of education were also less likely to say 'don't know' (13% did so compared with 23% of those without a bachelor's degree) and were less likely to indicate that they did not trust anyone (5% compared with 11% of those without a bachelor's degree). Investigation into the trusted messengers of scientific information for those with lower levels of formal education would therefore be most useful in terms of examining why 30% of the total survey population either did not know who to trust or could not think of anyone or trusted no one.

Table 17 Trusted sources of accurate scientific information by level of education

	Total (n=1020)	Highest level of completed education		
		Less than bachelor degree (n=652)	Bachelor degree or higher (n=358)	Prefer not to say (n=10)
Friends/family	12%	9%	20%	10%
CSIRO	12%	13%	9%	20%
Television presenters	8%	8%	6%	10%
Scientific organisation	7%	5%	11%	0%
University scientists	6%	4%	12%	0%
Government	5%	4%	10%	10%
Newspapers / magazines	5%	4%	8%	10%
Scientists - NFI	4%	4%	5%	0%
ABC / ABC website	4%	3%	6%	0%
Internet	3%	3%	5%	0%
Journal articles and / or peer-reviewed journals	3%	2%	7%	0%
Doctors	3%	3%	3%	0%
Radio presenters	3%	3%	4%	10%
Other	27%	25%	36%	10%
Don't know	21%	23%	13%	40%
Don't trust anyone/ No one	9%	11%	5%	0%

Q20: Who, if anyone, do you trust as a source of accurate scientific information? This could be a person, an organisation or a media source. Only sources mentioned by >2% included in table
Total sample; Weight; base n = 1020

As can be seen in Table 18, females were more likely to mention family or friends as a trusted source of accurate scientific information than males (12% of females mentioned family or friends compared with 7% of males). Those without convenient access to the internet were also more likely to mention friends and family as trusted sources of accurate information about science (21% compared with 10% of those who do have convenient access). Those who search for information about science and technology at least fortnightly were more likely to mention CSIRO as a trusted source of accurate scientific information (mentioned by 15% of those who search for science information at least fortnightly and 16% of those who search for technology information at least fortnightly). Those who search for information about science and technology at least fortnightly were also less likely to say 'don't know' in response to this question (mentioned by 12% of those who search for science information at least fortnightly and 15% of those who search for technology information at least fortnightly compared with the average of 21%).

Table 18 Trusted sources of accurate scientific information

	Total	Male	Female	18-34 years	35-54 years	55-74 years	75 years plus	Major cities	Regional	Remote
Friends/family	12%	7%	16%	14%	10%	11%	16%	12%	12%	10%
CSIRO	12%	13%	10%	7%	15%	15%	4%	13%	7%	14%
Television presenters	8%	6%	9%	8%	6%	8%	15%	8%	9%	3%
Scientific organisation	7%	7%	6%	7%	8%	6%	1%	7%	5%	7%
University scientists	6%	5%	7%	7%	8%	4%	2%	7%	7%	3%
Government	5%	6%	5%	5%	7%	4%	1%	6%	4%	5%
Newspapers / magazines	5%	5%	5%	4%	7%	3%	6%	5%	5%	4%
Scientists - NFI	4%	4%	4%	4%	4%	4%	7%	4%	4%	8%
ABC / ABC website	4%	3%	5%	4%	4%	4%	3%	5%	4%	1%
Internet	3%	3%	4%	6%	3%	1%	2%	3%	2%	5%
Journal articles and / or peer-reviewed journals	3%	2%	4%	5%	4%	2%	0%	3%	5%	0%
Doctors	3%	1%	5%	2%	3%	5%	5%	4%	1%	3%
Radio presenters	3%	2%	4%	2%	3%	3%	5%	4%	2%	2%
Other	27%	31%	24%	29%	29%	24%	23%	29%	22%	30%
Don't know	21%	22%	20%	23%	18%	20%	25%	18%	27%	22%
Don't trust anyone/ No one	9%	11%	8%	6%	11%	12%	6%	9%	8%	11%

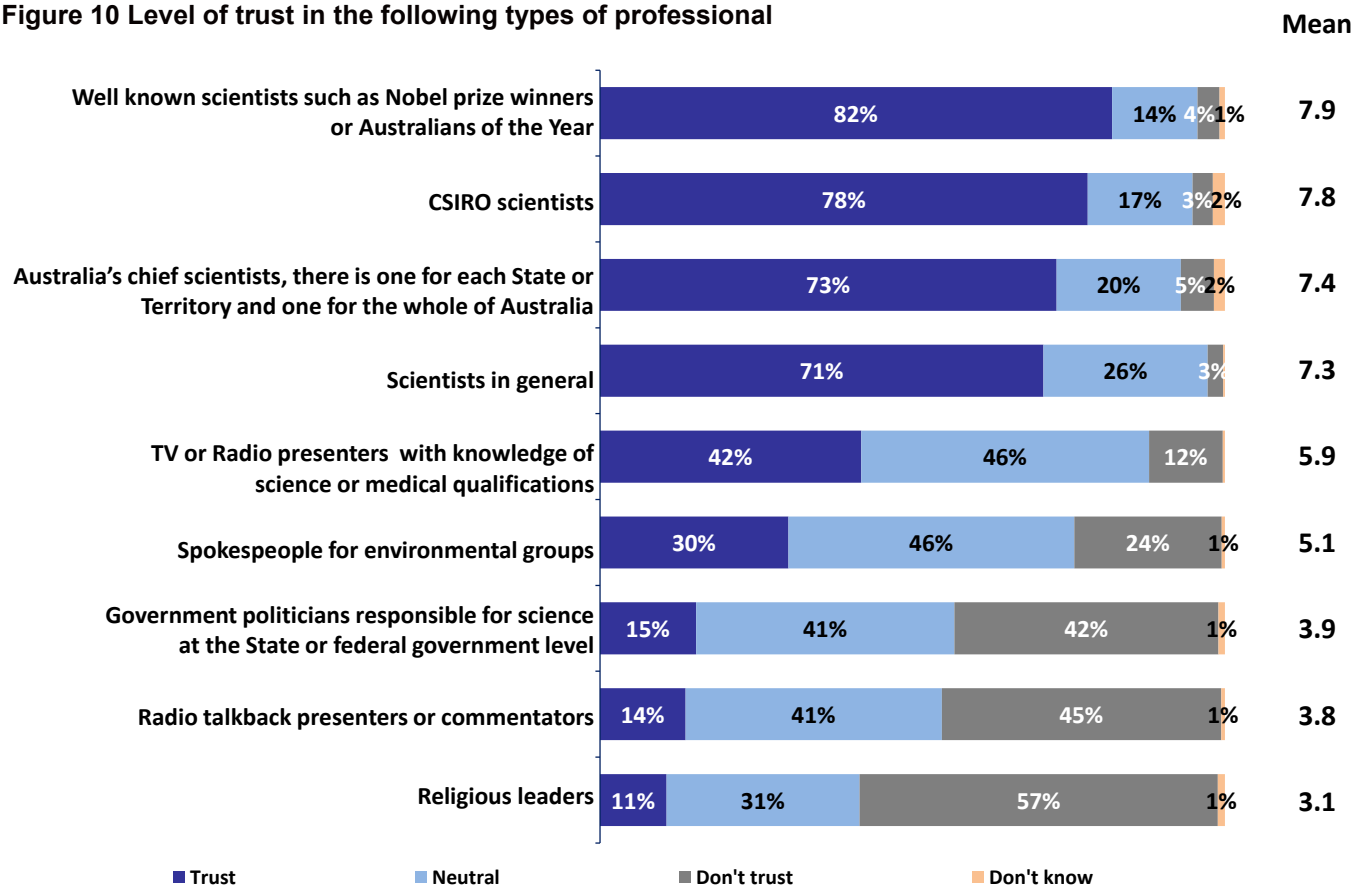
		Frequency of searching - Science			Frequency of searching - Technology			Convenient internet	
	Total	At least fortnightly	Less than fortnightly	Never	At least fortnightly	Less than fortnightly	Never	Yes	No
Friends/family	12%	12%	11%	12%	9%	15%	11%	10%	21%
CSIRO	12%	15%	10%	8%	16%	9%	7%	13%	4%
Television presenters	8%	8%	7%	10%	6%	9%	11%	7%	13%
Scientific organisation	7%	7%	7%	5%	8%	6%	4%	7%	6%
University scientists	6%	8%	6%	3%	8%	5%	3%	7%	4%
Government	5%	6%	6%	2%	6%	7%	1%	6%	4%
Newspapers / magazines	5%	5%	5%	3%	5%	5%	4%	5%	7%
Scientists - NFI	4%	6%	3%	3%	5%	4%	3%	4%	5%
ABC / ABC website	4%	5%	4%	2%	5%	3%	2%	4%	3%
Internet	3%	4%	5%	0%	3%	5%	1%	4%	2%
Journal articles and / or peer-reviewed journals	3%	5%	2%	1%	5%	3%	1%	4%	0%
Doctors	3%	3%	4%	2%	2%	4%	4%	3%	3%
Radio presenters	3%	3%	2%	5%	2%	3%	5%	3%	5%
Other	27%	36%	23%	15%	33%	24%	20%	28%	21%
Don't know	21%	12%	28%	28%	15%	25%	27%	21%	22%
Don't trust anyone/ No one	9%	7%	8%	18%	8%	8%	15%	9%	12%

Q20: Who, if anyone, do you trust as a source of accurate scientific information? This could be a person, an organisation or a media source. Only sources mentioned by >2% included in table
Total sample; Weight; base n = 1020

Participants were asked to rate their level of trust on a zero to ten scale and scores of 7-10 were classified as 'trusted'. The highest level of trust observed was for *well known scientists such as Nobel Prize winners or Australians of the Year* (82%) followed by *CSIRO scientists* (78%), *Australia's Chief Scientists* (73%), and *scientists in general* (71%).

The level of trust towards these four types of scientists was notably higher than the five other types of professionals. The next most trusted group after scientists was *TV or Radio presenters with knowledge of science or medical qualifications* with around two-in-five (42%) trusting them. Just as scores of 7-10 were classified as 'trust', scores of 0-3 were classified as 'don't trust'. Four of the nine types of people tested with survey participants received a 'don't trust' score from around a quarter or more of participants. *Spokespeople for environmental groups* were given a trust rating by 30%, but around a quarter (24%) also gave this group a 'don't trust' rating. For three types of professionals, a greater proportion selected a 'don't trust' rating than 'trust'. For *Government politicians responsible for science at the State or federal government level*, 15% gave a 'trust' rating while 42% gave a 'don't trust' rating (the remaining 41% gave a neutral rating of 4-6). Similarly, *Radio talkback presenters or commentators,* 14% gave a trust rating and 45% gave a 'don't trust' rating (again, 41% gave a more neutral score of 4-6). The least trusted group to explain the impacts of scientific or technological advances was *religious leaders*, around one-in-ten (11%) gave a 'trust' rating and more than half (57%) gave a 'don't trust' rating.

Figure 10 Level of trust in the following types of professional



Q21: And how much trust do you have in the following types of people to explain the impacts of scientific or technological advances for you. Please answer this on a scale from zero through to ten, where zero would mean 'Don't trust at all' through to ten which means 'Trust completely'.
Total sample; Weight; base n = 1020
Note: Trust (7-10), Neutral (4-6), Don't trust (0-3)

Table 19 shows that there were no significant difference between participants in their trust of scientists (all four types) on the basis of their gender, age and location. However, amongst the professionals who were trusted by relatively fewer participants to explain the impacts of scientific or technological advances, females were more likely to give a higher trust rating compared with males. It can also be seen that the level of trust towards radio talkback presenters and religious leaders was lower amongst participants living in major cities compared to those living in regional and remote areas.

The level of trust in particular professionals to explain the impacts of scientific or technological advances is higher for all four types of scientists (well-known scientists, CSIRO scientists, Australia's Chief Scientists and scientists in general) amongst those who search for information about science and technology *at least fortnightly* in comparison to those who *never* search for information about science or technology.

Table 19 Level of trust towards the following types of professional, mean score on 0-10 scale

	Total	Male	Female	18-34 years	35-54 years	55-74 years	75 years plus	Major cities	Regional	Remote
Well known scientists such as Nobel Prize winners or Australians of the Year	7.9	7.8	8.0	8.1	8.0	7.7	7.7	8.0	7.9	7.8
CSIRO scientists	7.8	7.7	7.8	7.7	8.0	7.7	7.3	7.8	7.7	7.9
Australia's Chief Scientists, there is one for each State or Territory and one for the whole of Australia	7.4	7.3	7.5	7.5	7.5	7.3	7.2	7.4	7.4	7.4
Scientists in general	7.3	7.2	7.3	7.4	7.4	7.1	6.8	7.3	7.2	6.9
TV or Radio presenters with knowledge of science or medical qualifications	5.9	5.6	6.1	6.1	5.8	5.8	5.8	5.8	6.0	6.1
Spokespeople for environmental groups	5.1	4.7	5.4	5.8	4.9	4.6	4.6	5.3	4.9	4.3
Government politicians responsible for science at the State or federal government level	3.9	3.6	4.1	4.4	3.5	3.4	4.9	3.9	4.0	3.6
Radio talkback presenters or commentators	3.8	3.5	4.1	4.1	3.5	3.7	4.2	3.7	3.9	4.6
Religious leaders	3.0	2.7	3.4	2.7	2.9	3.3	4.4	2.9	3.4	3.4

		Frequency of searching - Science			Frequency of searching - Technology			Convenient internet	
	Total	At least fortnightly	Less than fortnightly	Never	At least fortnightly	Less than fortnightly	Never	Yes	No
Well known scientists such as Nobel Prize winners or Australians of the Year	7.9	8.2	7.9	7.2	8.1	8.0	7.1	8.0	7.3
CSIRO scientists	7.8	8.1	7.7	7.2	8.0	7.8	7.1	7.8	7.3
Australia's Chief Scientists, there is one for each State or Territory and one for the whole of	7.4	7.6	7.5	6.7	7.6	7.5	6.7	7.5	7.0

Australia									
Scientists in general	7.3	7.6	7.2	6.7	7.5	7.3	6.5	7.3	7.1
TV or Radio presenters with knowledge of science or medical qualifications	5.9	5.9	6.0	5.6	5.8	6.1	5.5	5.9	5.6
Spokespeople for environmental groups	5.1	5.3	5.2	4.4	5.3	5.2	4.2	5.1	4.6
Government politicians responsible for science at the State or federal government level	3.9	3.7	4.1	3.6	3.8	4.1	3.4	3.8	3.9
Radio talkback presenters or commentators	3.8	3.5	4.0	4.3	3.5	4.1	4.0	3.8	3.9
Religious leaders	3.0	2.7	3.3	3.3	2.7	3.3	3.3	3.0	3.5

Q21: And how much trust do you have in the following types of people to explain the impacts of scientific or technological advances for you. Please answer this on a scale from zero through to ten, where zero would mean 'Don't trust at all' through to ten which means 'Trust completely'.
Total sample; Weight; base n = 1020
Note: Trust (7-10), Neutral (4-6), Don't trust (0-3)

Participants who were interested in knowing more about science were asked how they would like to get this information. More than half (59%), reported that they would want to use the internet to get this information. The second most commonly mentioned way, by around two-in-five (39%) of the 528 respondents to this question was via television (see Table 20).

Table 20 Preferred sources of information about science

	Total
The internet / Google / internet search engines - NFI	59%
Television / TV programs / TV channels e.g. National Geographic, Discovery channel	39%
Printed material / brochures / leaflets	15%
Radio	11%
Newspapers / online news	7%
Science / technology magazines / journals	7%
Books / encyclopaedias	6%
Internet	5%
Other	17%
Don't know / can't remember	2%

Q7: And how would you like to get this information? Only sources >4% shown;
Weight; base n = 528 those who would like to know more about science

Participants who were interested in knowing more about technology were asked how they would like to get this information and the answers were very similar to their the preferences for information about science. For example, 58% reported that they would want to use the internet to get this information. The second most commonly mentioned way, mentioned by just more than a third (35%) of the 493 respondents, was via television (35%), see Table 21.

Table 21 Preferred sources of information about technology

	Total
The internet / Google / internet search engines - NFI	58%
Television / TV programs / TV channels e.g. National Geographic, Discovery channel	35%
Printed material / brochures / leaflets	13%
Radio	9%
Books / encyclopaedias	7%
Science / technology magazines / journals	6%
Internet	5%
Newspapers / online news	5%
Friends / family	5%
Other	22%
Don't know / can't remember	3%

Q10. And how would you like to get this information? Only sources >4% shown
Weight; base n = 493: those who would like to know more about technology

4.2.2 Perceptions of different professions' contribution to society

Participants rated doctors to be *very important* in contributing positively to society (75%), followed by teachers (69%), scientists (60%), engineers (48%) and members of the military (46%). In comparison, it can be seen that only around one tenth of participants agreed that entertainers (13%), artists (14%) and religious leaders (11%) are *very important*.

Table 22 Relative importance of scientists' positive contribution to society compared with other professions

	Very important	Quite important	Neither important nor not important	Not very important	Not important at all	Don't Know
Doctors	75%	20%	3%	1%	1%	0%
Teachers	69%	23%	4%	2%	1%	0%
Scientists	60%	31%	5%	3%	1%	0%
Engineers	48%	40%	9%	3%	1%	0%
Members of the military	46%	33%	13%	5%	2%	0%
Journalists	17%	34%	25%	15%	8%	0%
Lawyers	17%	33%	26%	15%	9%	0%
Politicians	16%	30%	21%	17%	16%	0%
Entertainers	13%	32%	32%	18%	5%	0%
Artists	14%	28%	30%	20%	8%	0%
Religious leaders	11%	20%	22%	23%	22%	1%

Q4. How important do you feel the following professions are in contributing positively to society?
Total sample; Weight; base n = 1020

As can be seen in Table 23, there are no significant difference amongst participants on the basis of their age, gender and location towards level of importance among doctors, scientists and engineers in contributing positively to society. Scientists are deemed to be more important among those who search for information about science at least fortnightly (96%) compared to those who never (84%). Likewise, level of importance among engineers in contributing positively to society is lower among those who never search for information about science (80%).

Table 23 Relative importance of positive contribution among doctors, scientists and engineers to society

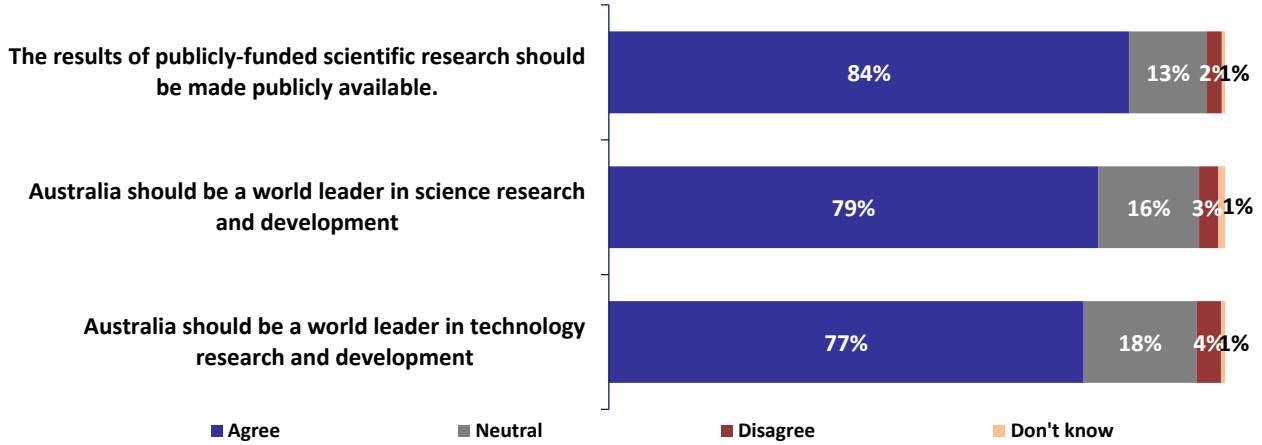
	Total	Male	Female	18-34 years	35-54 years	55-74 years	75 years plus	Major cities	Regional	Remote
Doctors	95%	94%	96%	96%	95%	94%	97%	95%	94%	96%
Scientists	91%	93%	89%	90%	91%	91%	94%	90%	94%	89%
Engineers	88%	88%	87%	87%	87%	88%	90%	86%	91%	93%

		Frequency of searching - Science			Frequency of searching - Technology			Convenient internet	
	Total	At least fortnightly	Less than fortnightly	Never	At least fortnightly	Less than fortnightly	Never	Yes	No
Doctors	95%	96%	95%	93%	95%	96%	94%	95%	95%
Scientists	91%	96%	89%	84%	94%	90%	85%	92%	87%
Engineers	88%	91%	87%	80%	91%	85%	82%	88%	87%

Q4. How important do you feel the following professions are in contributing positively to society?
Total sample; Weight; base n = 1020

A majority of participants (84%) agreed that the results of publicly-funded scientific research should be made publicly available. Likewise, a majority of participants agreed that Australia should be a world leader in science research and development (79%) and in technology research and development (77%), see Figure 11.

Figure 11 Extent of agree to disagree with the following statements



Q12: I am now going to read out some statements. For each would you please tell me how much you agree or disagree with each of them on a scale of zero through to ten, where zero is **strongly disagree** and ten is **strongly agree**? You can provide any number between zero and ten.
Total sample; Weight; base n = 1020
Note: Agree (7-10), Neutral (4-6), Disagree (0-3)

As can be seen in Table 24, males were more likely to agree that Australia should be a world leader in technology research and development than females. Those aged 35-54 years were also more likely to agree with all three statements compared with younger participants aged 18-34. Participants who search for information about science or technology at least fortnightly also show higher intention of seeing Australia as a world leader in both science and technology and agreeing that the results of publicly-funded scientific research should be made publicly available in comparison to those who search for information less often than fortnightly or never.

Table 24 Extent of agree to disagree with the following statements, mean score on 0-10 scale

	Total	Male	Female	18-34 years	35-54 years	55-74 years	75 years plus	Major cities	Regional	Remote
The results of publicly-funded scientific research should be made publicly available.	8.3	8.3	8.3	8.1	8.5	8.3	8.4	8.4	8.2	8.2
Australia should be a world leader in science research and development	8.1	8.1	8.1	7.7	8.4	8.1	8.2	8.1	8.2	8.0
Australia should be a world leader in technology research and development	7.9	8.1	7.7	7.5	8.2	8.0	8.2	7.9	8.0	7.8

		Frequency of searching - Science			Frequency of searching - Technology			Convenient internet	
	Total	At least fortnightly	Less than fortnightly	Never	At least fortnightly	Less than fortnightly	Never	Yes	No
The results of publicly-funded scientific research should be made publicly available.	8.3	8.5	8.2	8.1	8.5	8.2	8.1	8.4	8.1
Australia should be a world leader in science research and development	8.1	8.4	7.9	7.7	8.3	8.1	7.6	8.1	8.2
Australia should be a world leader in technology research and development	7.9	8.3	7.6	7.6	8.3	7.7	7.6	7.9	8.1

Q12: I am now going to read out some statements. For each would you please tell me how much you agree or disagree with each of them on a scale of zero through to ten, where zero is **strongly disagree** and ten is **strongly agree**? You can provide any number between zero and ten.
Total sample; Weight; base n = 1020
Note: Agree (7-10), Neutral (4-6), Disagree (0-3)

Most (88%) participants agreed that *a career in science is a good choice for people these days*, with only 7% disagreeing.

Table 25 Is a career in science is a good choice for people these days

	Total	Male	Female	18-34 years	35-54 years	55-74 years	75 years plus	Major cities	Regional	Remote
Yes	88%	87%	89%	88%	86%	91%	89%	87%	91%	92%
No	7%	8%	5%	6%	8%	5%	4%	7%	5%	2%
Don't know/not sure	5%	5%	6%	5%	6%	4%	7%	6%	4%	6%

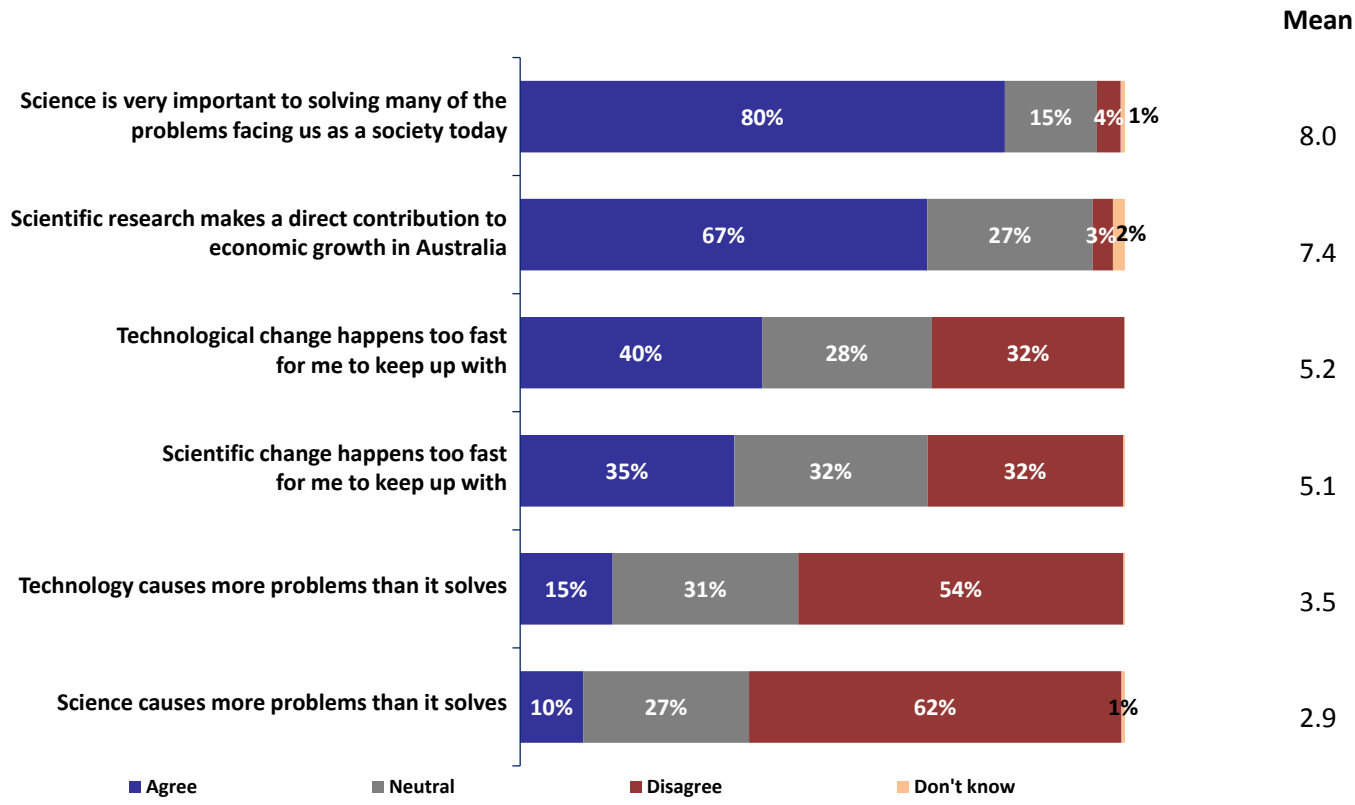
		Frequency of searching - Science			Frequency of searching - Technology			Convenient internet	
	Total	At least fortnightly	Less than fortnightly	Never	At least fortnightly	Less than fortnightly	Never	Yes	No
Yes	88%	90%	87%	84%	90%	88%	83%	88%	88%
No	7%	7%	6%	8%	7%	6%	7%	6%	8%
Don't know/not sure	5%	3%	7%	9%	3%	5%	10%	6%	4%

Q22: Do you think that a career in science is a good choice of a career for people these days?
Total sample; Weight; base n = 1020

4.2.3 Science and technology values

As can be seen in Figure 12, 80% of participants agreed that science is very important to solving many of the problems society faces today and 67% agreed that scientific research makes a direct contribution to economic growth in Australia. Similarly, it can be seen that only one tenth (10%) of participants agreed that science causes more problems than it solves. This indicates that science appears to be valued by most people. With regard to the speed of science and technology changes, however, 40% agreed that technological change happens too fast for them to keep up with and around a third (35%) agreed that scientific changes happen too fast for them to keep up with.

Figure 12 Extent of agree to disagree towards the following statements



Q12: I am now going to read out some statements. For each would you please tell me how much you agree or disagree with each of them on a scale of zero through to ten, where zero is **strongly disagree** and ten is **strongly agree**? You can provide any number between zero and ten.
Total sample; Weight; base n = 1020
Note: Agree (7-10), Neutral (4-6), Disagree (0-3)

As can be seen in Table 26, there were differences between the agreement rating provided by males and females for three of the six statements. For the two statements regarding science or technological change happening *too fast for me to keep up with* and *technology causes more problems than it solves* (but not the same statement involving science), females gave a higher mean agreement rating than males.

Those aged 18-34 gave a lower mean agreement rating for the statements regarding scientific and technological change happening *too fast for me to keep up with* (4.2 on a zero to ten scale for scientific change and 4.1 for technological change). Younger participants seemed to be less sure that *scientific research makes a direct contribution to economic growth in Australia* as this age cohort gave a mean agreement of 7.2 compared with a mean rating of 7.6 for those aged 35 upwards. Younger participants were more likely to give a lower mean

agreement rating to the statement *science causes more problems than it solves* than older participants. For those aged 18-54, the mean agreement was 2.6 compared with 3.6 for those aged 55 and over.

Those who frequently search for science and technology (at least fortnightly) were more likely to give a higher mean agreement rating to *science is very important to solving many of the problems facing us as a society today* (8.5 on a zero to ten scale) for those who frequently search for science information and 8.4 for those who search for technology information compared with 7.7 for those who search for information less frequently for both topics). Similarly, for *scientific research makes a direct contribution to economic growth in Australia*, 7.8 was the mean agreement rating for those who search for science or technology at least fortnightly. For the four more 'negatively' worded statements about science and technology (such as change being too fast, or causing more problems than solutions), those who searched at least fortnightly for science and technology were more likely to give a lower agreement rating.

Table 26 Extent of agree to disagree with the following statements

	Total	Male	Female	18-34 years	35-54 years	55-74 years	75 years plus	Major cities	Regional	Remote
Science is very important to solving many of the problems facing us as a society today	8.0	8.1	8.0	8.0	8.2	7.9	8.3	8.1	7.9	7.9
Scientific research makes a direct contribution to economic growth in Australia	7.4	7.4	7.5	7.2	7.5	7.6	7.8	7.5	7.5	7.3
Technological change happens too fast for me to keep up with	5.2	5.0	5.5	4.1	5.0	6.3	7.1	4.9	6.0	6.1
Scientific change happens too fast for me to keep up with	5.1	4.8	5.4	4.2	4.8	5.8	7.1	4.7	5.8	6.1
Technology causes more problems than it solves	3.5	3.2	3.7	3.2	3.2	3.7	4.6	3.3	3.8	3.8
Science causes more problems than it solves	2.9	2.8	3.0	2.6	2.7	3.3	4.4	2.7	3.4	3.8

		Frequency of searching - Science			Frequency of searching - Technology			Convenient internet	
	Total	At least fortnightly	Less than fortnightly	Never	At least fortnightly	Less than fortnightly	Never	Yes	No
Science is very important to solving many of the problems facing us as a society today	8.0	8.5	7.7	7.6	8.4	7.7	7.7	8.1	7.9
Scientific research makes a direct contribution to economic growth in Australia	7.4	7.8	7.3	6.8	7.8	7.3	7.0	7.5	7.3
Technological change happens too fast for me to keep up with	5.2	4.6	5.4	6.5	4.4	5.6	6.9	5.0	6.6
Scientific change happens too fast for me to keep up with	5.1	4.4	5.2	6.4	4.5	5.1	6.6	4.9	6.5
Technology causes more problems than it solves	3.5	2.8	3.7	4.6	2.8	3.7	4.7	3.3	4.4
Science causes more problems than it solves	2.9	2.3	3.1	4.2	2.3	3.0	4.3	2.8	4.1

Q12: I am now going to read out some statements. For each would you please tell me how much you agree or disagree with each of them on a scale of zero through to ten, where zero is **strongly disagree** and ten is **strongly agree**? You can provide any number between zero and ten.
Total sample; Weight; base n = 1020
Note: Agree (7-10), Neutral (4-6), Disagree (0-3)

4.3 Awareness of scientific and technological achievements

One of the final survey questions asked participants whether they could name any Australian achievements in science or technology. Around half (49%) were able to think of something they understood to be an Australian scientific or technological achievement with the remaining 51% saying that they could not think of anything or they did not know (see Table 27).

Of the achievements participants could spontaneously recall, the Cochlear implant was the most commonly mentioned achievement, 17% could name this. The second most commonly mentioned achievement was the cervical cancer vaccine, 8% were able to recall this, 6% mentioned the innovation in spray-on skin and 5% each mentioned something to do with penicillin or WiFi.

Table 27 Awareness of Australian achievements in science and technology

	Total
Cochlear implant / bionic ear / device to help people to hear	17%
Cervical cancer vaccine / jab	8%
Spray-on skin / skin transplant / Fiona Wood	6%
Penicillin	5%
WiFi	5%
Black box flight recorder	4%
Discovering the cause of stomach ulcers / peptic ulcers / gastric ulcers / bacterium causes ulcers	4%
Cancer research / treatment (e.g. breast cancer, melanoma, vaccine, chemotherapy)	3%
Other	18%
No / don't know	51%

Q23: Off the top of your head, can you name any Australian achievements in science or technology? Only achievements mentioned by >2% included in the table
Total sample; Weight; base n = 1020

4.4 Engagement segmentation

Question 5 (frequency of listening, watching or reading anything to do with science or technology, Question 14 (frequency of searching for information about science) and Question 17 (frequency of searching for information about technology) were used to create a segmentation related to participants' engagement with science and technology. The constructed segments are as follow:

Interaction segment name	Proportion of the sample	Q5, Q14, Q17 responses used to categorise	Summary
More frequent	51%	Those who answered at least fortnightly at Q5, and at least fortnightly to Q14 and / or Q17	Recall frequent interactions with information about science and technology, also frequently search out information about science and / or technology
Moderately frequent	31%	Those who answered at least fortnightly at Q5, and at less frequently than fortnightly to Q14 and Q17	Recall frequent interactions with information about science and technology, but report searching for information about science and technology less frequently
Less frequent	14%	Those who answered less frequently than fortnightly at Q5, Q14 and Q17	Do not recall frequent interactions with information about science and technology nor do they search
Other	4%	Those who answered these questions in other ways	Provided contradictory answers e.g. report frequent searching for information but less frequent reading , watching or listening to information about science or technology

4.4.1 Segment demographics

As can be seen in Table 28, those participants in the *more frequent* interaction segment were more likely to be male (60% of males vs. 42% of females were *more frequent*). Members of this group were also skewed to a younger profile with those aged 18-57 more likely to be *more frequent* compared with those aged 55 and older. *More frequent* report a higher likelihood of having convenient access to the internet, 54% of those with convenient access to the internet belonged to this segment compared with 28% of those who did not have convenient access.

Those categorised in the *moderately frequent* and *less frequent* interaction segments were more likely to be females (38% of females were *moderately frequent* compared with 24% of males, 17% of females and 11% of males were in the *less frequent* interaction segment).

Table 28 Demographic figures for interaction segment groups

	Total	Male	Female	18-34 years	35-54 years	55-74 years	75 years plus	Major cities	Regional	Remote
More frequent	51%	60%	42%	60%	56%	44%	17%	52%	51%	40%
Moderately frequent	31%	24%	38%	23%	30%	36%	49%	29%	35%	44%
Less frequent	14%	11%	17%	13%	9%	18%	31%	15%	12%	15%
Other	4%	5%	3%	4%	5%	3%	3%	5%	2%	1%

		Frequency of searching - Science			Frequency of searching - Technology			Convenient internet	
	Total	At least fortnightly	Less than fortnightly	Never	At least fortnightly	Less than fortnightly	Never	Yes	No
More frequent	51%	96%	15%	7%	92%	23%	4%	54%	28%
Moderately frequent	31%	0%	63%	48%	0%	56%	54%	30%	38%
Less frequent	14%	-	18%	43%	-	20%	42%	12%	31%
Other	4%	4%	4%	3%	8%	1%	0%	4%	3%

Total sample; Weight; base n = 1020

Those in the *more frequent* segment were more likely to report higher levels of education, around one-in-five (22%) of this segment said that they had an undergraduate degree (compared with 9% of *moderately frequent* and 8% of *less frequent*) and 12% reported having a postgraduate degree (compared with 7% of *moderately frequent* and 6% of *less frequent*). See Table 29.

Table 29 Level of education

	Total	More frequent	Moderately frequent	Less frequent	Other
Year 10 at secondary school or less	18%	10%	23%	33%	9%
Year 11 at secondary school	5%	4%	5%	5%	10%
Year 12 at secondary school (higher School certificate)	18%	18%	18%	16%	20%
TAFE degree or certificate e.g. trade certificate	19%	17%	22%	19%	25%
Associate diploma Certificate II, Advanced Diploma	15%	16%	15%	11%	29%
A university bachelor degree	15%	22%	9%	8%	5%
A university postgraduate degree	9%	12%	7%	6%	3%
Prefer not to say	1%	1%	1%	1%	0%

Q27 Which of the following levels of education is the highest you have completed?

Total sample; Weight; base n = 1020

4.4.2 Segment interest in science and technology

The *more frequent* were more likely to say that they were quite or very interested (77%) in *technologies, inventions and innovations* compared with both the *moderately frequent* (58%) and *less frequent* (45%). The same pattern was observed for *scientific discoveries - other than medical* with 76% *more frequent* indicating interest, more than the *moderately frequent* (56%) and *less frequent* (35%). The *more frequent* were more likely to report interest in medical discoveries (75%) than the *less frequent* (53%), but there was no significant difference between the *more frequent* and *moderately frequent* on this topic. See Table 30.

Table 30 Level of interest in different topics with regards to news, information or stories

	Total	More frequent	Moderately frequent	Less frequent	Other
Health issues	74%	74%	76%	67%	78%
Medical discoveries	72%	75%	73%	53%	80%
Technologies, inventions and innovations	66%	77%	58%	45%	79%
Environmental issues	66%	69%	68%	52%	60%
Scientific discoveries - other than medical	63%	76%	56%	35%	49%
Music	55%	55%	55%	60%	43%
Films	54%	58%	50%	44%	61%
Australian politics	45%	51%	43%	27%	36%
Sports	44%	42%	47%	46%	39%

Q3. Can you tell me how interested you are in news, information or stories about the following?
Total sample; Weight; base n = 1020
Note: % shown above are net of very interested and quite interested.

Table 31 and Table 32 contrast the segment differences in interest in knowing more about topics relating to science and technology. The *more frequent* were more likely to say there is something involving science they would like to know more about (65%) compared with the *moderately frequent* (41%) and *less frequent* (24%). This is the same for technology where the *more frequent* were more likely to say there is something involving technology they would like to know more about (59%) compared with the *moderately frequent* (33%) and *less frequent* (25%).

Table 31 Interest in knowing more about science

	Total	More frequent	Moderately frequent	Less frequent	Other
Yes	50%	65%	41%	24%	24%
No	43%	29%	49%	68%	70%
Not that I can think of	8%	7%	9%	8%	6%

Q6. Is there anything involving science that you would like to know more about?
Total sample; Weight; base n = 1020

Table 32 Interest in knowing more about technology

	Total	More frequent	Moderately frequent	Less frequent	Other
Yes	46%	59%	33%	25%	59%
No	47%	35%	58%	69%	38%
Not that I can think of	7%	6%	9%	6%	3%

Q9. Is there anything involving technology that you would like to know more about?
Total sample; Weight; base n = 1020

4.4.3 Attitudes towards science and technology by segment

As can be seen in Table 33, the *more frequent* appear to be more eager for information about science and technology through the media than the *moderately frequent*. The *more frequent* had a lower mean agreement rating for the statements *I get enough information about science through the media* (5.0) and *I get enough information about technology through the media* (5.3) compared with the *moderately frequent* (who gave a mean rating of 5.8 and 6.2 respectively for those statements).

More frequent segment members were more likely to place importance on Australia being a world leader in science and technology research and development. The *more frequent* had a higher mean agreement rating for the statements *Australia should be a world leader in science research and development* (8.4) and *Australia should be a world leader in technology research and development* (8.3) compared with the moderately frequent (who gave a mean rating of 7.9 and 7.6 respectively for those statements).

Unsurprisingly, the *more frequent* were more likely to give a lower agreement rating with many of the 'negative' statements relating to scientific and technological change happening too fast and causing more problems than they solve. The *more frequent* gave a mean score of 4.5 to *scientific change happens too fast for me to keep up with* and 4.6 *technological change happens too fast for me to keep up with* compared with both the *moderately frequent* (5.6 and 5.9 respectively) and the *less frequent* (6.0 and 6.2 respectively). For the statement *science causes more problems than it solves* the *more frequent* gave a mean rating of 2.3 compared with 3.4 for the *moderately frequent* and 4.2 for the *less frequent*. For *technology causes more problems than it solves* the *more frequent* gave a mean rating of 2.9, less than the *moderately frequent* (4.0) and *less frequent* (4.5).

The *more frequent* on average gave a higher agreement rating to the statements: *the results of publicly-funded scientific research should be made publicly available; science is very important to solving many of the problems facing us as a society today;* and s*cientific research makes a direct contribution to economic growth in Australia.*

As might be expected given their apparent engagement with science and technology, the more frequent gave a lower mean agreement rating to the statements *I'm not really interested in finding out about science* (2.1 compared with 3.9 for moderately frequent and 5.3 for *less frequent*) and *I'm not really interested in finding out about technology* (2.2 compared with 4.1 for moderately frequent and 4.7 for *less frequent*).

Table 33 Extent of agreement or disagreement in attitudinal statements regarding technology and science

	Total	More frequent	Moderately frequent	Less frequent	Other
Australia should be a world leader in science research and development	8.1	8.4	7.9	7.7	7.7
Australia should be a world leader in technology research and development	7.9	8.3	7.6	7.5	7.8
I get enough information about science through the media	5.3	5.0	5.8	5.2	5.0
I get enough information about technology through the media	5.7	5.3	6.2	5.8	5.1
Scientific change happens too fast for me to keep up with	5.1	4.5	5.6	6.0	4.4
Science causes more problems than it solves	2.9	2.3	3.4	4.2	3.2
Technology causes more problems than it solves	3.5	2.9	4.0	4.5	3.0
The results of publicly-funded scientific research should be made publicly available.	8.3	8.5	8.1	8.1	8.1
Technological change happens too fast for me to keep up with	5.2	4.6	5.9	6.2	4.4
Science is very important to solving many of the problems facing us as a society today	8.0	8.5	7.8	7.3	7.6
Scientific research makes a direct contribution to economic growth in Australia	7.4	7.8	7.4	6.5	7.0
I'm not really interested in finding out about science	3.1	2.1	3.9	5.3	2.8
I'm not really interested in finding out about technology	3.1	2.2	4.1	4.7	2.2

Q12. I am now going to read out some statements. For each would you please tell me how much you agree or disagree with each of them on a scale of zero through to ten, where zero is **strongly disagree** and ten is **strongly agree**? You can provide any number between zero and ten.
Total sample; Weight; base n = 1020

There were few differences in trusted sources of accurate information about scientific information between the segments (see Table 34). The *more frequent* were more likely to name CSIRO as a trusted source of information (15% did so) compared with the *less frequent* (2%).

For the *moderately frequent,* the most commonly mentioned trusted source of accurate scientific information was friends and family, mentioned by 13% (friends and family was the second most commonly cited trusted source by *more frequent*). CSIRO was the second most common mention for the *moderately frequent* interaction segment (mentioned by 11%).

Like *moderately frequent,* friends and family was the most commonly mentioned source of trusted accurate scientific information for the *less frequent* segment, cited by 14%. The second most common mention of trusted sources for the *less frequent* segment was television presenters, listed by 13%. Around a third (34%) of *less frequent* said 'don't know' in response to the question (higher than the *more frequent*, only 14% said 'don't

know'). *Less frequent* were more likely to say that they didn't trust anyone (16% said so) than *more frequent* (7%) and *moderately frequent* (9%).

Table 34 Trusted sources of accurate scientific information

	Total	More frequent	Moderately frequent	Less frequent	Other
Friends/family	12%	15%	11%	2%	12%
CSIRO	12%	11%	13%	14%	8%
Television presenters	8%	8%	6%	13%	0%
Scientific organisation	7%	8%	6%	4%	7%
University scientists	6%	8%	5%	2%	11%
Government	5%	7%	5%	2%	8%
Newspapers / magazines	5%	6%	5%	2%	3%
Scientists - NFI	4%	5%	4%	2%	7%
ABC / ABC website	4%	5%	3%	2%	7%
Internet	3%	4%	3%	3%	5%
Journal articles and / or peer-reviewed journals	3%	5%	2%	0%	3%
Doctors	3%	3%	5%	1%	0%
Radio presenters	3%	3%	4%	3%	1%
Other	27%	34%	23%	15%	17%
Don't know	21%	14%	26%	34%	20%
Don't trust anyone/ No one	9%	7%	9%	16%	9%

Q20. Who, if anyone, do you trust as a source of accurate scientific information? This could be a person, an organisation or a media source.
Total sample; Weight; base n = 1020

There were no notable differences between the segments with regards to perception of whether a career in science is a good choice of career (see Table 35).

Table 35 Is a career in science is a good choice of a career for people these days

	Total	More frequent	Moderately frequent	Less frequent	Other
Yes	88%	89%	87%	81%	97%
No	7%	7%	5%	9%	0%
Don't know/not sure	5%	3%	7%	10%	3%

Q22. Do you think that a career in science is a good choice of a career for people these days?
Total sample; Weight; base n = 1020

As can be seen in Table 36, the *more frequent* gave a higher mean trust rating to the four types of scientists tested in the survey. Those in the *more frequent* segment gave a mean rating (8.1) for CSIRO scientists, than the *moderately frequent* (7.8) and *less frequent* (6.7). The *more frequent* also gave a higher trust rating to spokespeople for environmental groups (5.3) than the *less frequent* (5.0).

Moderately frequent segment members were more likely to give a higher trust rating to radio talkback presenters (4.2 compared with 3.4 for the *more frequent*). The *more frequent* gave the lowest trust rating for religious leaders as trusted explainers of scientific or technological advances (2.7). Religious leaders were the least trusted explainers of scientific and technological advances by all segments.

Table 36 Level of trust towards the following types of professional

	Total	More frequent	Moderately frequent	Less frequent	Other
Well known scientists such as Nobel prize winners or Australians of the Year	7.9	8.2	7.9	6.9	8.1
CSIRO scientists	7.8	8.1	7.8	6.7	7.2
Scientists in general	7.3	7.6	7.2	6.4	7.1
Australia's Chief Scientists, there is one for each State or Territory and one for the whole of Australia	7.4	7.6	7.5	6.4	7.1
TV or Radio presenters with knowledge of science or medical qualifications	5.9	5.9	6.0	5.5	5.6
Spokespeople for environmental groups	5.1	5.3	5.0	4.5	5.1
Radio talkback presenters or commentators	3.8	3.4	4.2	4.1	4.2
Government politicians responsible for science at the State or federal government level	3.9	3.7	4.0	3.8	4.0
Religious leaders	3.0	2.7	3.3	3.6	3.5

Q21. And how much trust do you have in the following types of people to explain the impacts of scientific or technological advances for you. Please answer this on a scale from zero through to ten, where zero would mean 'Don't trust at all' through to ten which means 'Trust completely'.
Total sample; Weight; base n = 1020

4.4.4 Segment participation in science and technology related leisure activities

As can be seen in Table 37, the *more frequent* segment were more likely to report being involved in each of the nine science or technology-related activities in the last 12 months. Other than attending adult education, participating in public discussions and gone to Science Week events, the *moderately frequent* were more likely to have taken part in every activity than the *less frequent* segment. Therefore a clear pattern of likelihood to have undertaken these activities is observed across the segments, *moderately frequent* were more likely to have

been involved in most activities compared with *less frequent*, and *more frequent* were more likely to have taken part in all activities with the exception of volunteering for a citizen-science type activity than the *moderately frequent*.

Table 37 Activities undertaken in the past 12 months

Activities	Total	More frequent	Moderately frequent	Less frequent	Other
Spoken with friends, family or colleagues in social settings about anything to do with technology	87%	97%	81%	65%	86%
Spoken with friends, family or colleagues in social settings about anything to do with science	77%	92%	68%	43%	82%
Visited a science centre, science museum, botanic garden, zoo, aquarium, observatory or space exploration centre	66%	77%	60%	43%	57%
Gone to, watched or listened to a public meeting, debate, lecture or seminar on a science-related subject	42%	62%	26%	8%	35%
Commented about science or technology issues through social media	34%	49%	20%	12%	32%
Attended adult education classes related to science or technology	17%	25%	9%	5%	25%
Volunteered for an organisation that involves science or looking after or observing nature	16%	20%	14%	6%	6%
Participated in public discussions about anything to do with science or technology	15%	23%	9%	4%	11%
Gone to events at National Science Week held across Australia every August	5%	9%	1%	0%	8%

Q13. Which of the following activities have you undertaken in the past 12 months?
Total sample; Weight; base n = 1020

4.4.5 Searching for information by segment

The *more frequent* were more likely to say that when searching for information about science they usually can find information and it tends to be easy to understand (72%) than *moderately frequent* (60%) and *less frequent* (52%). This suggests that the *more frequent* have the most success of the segments when looking for science-related information.

Table 38 Success when searching for information about science

	Total	More frequent	Moderately frequent	Less frequent	Other
Yes, and it tends to be easy to understand	67%	72%	60%	52%	63%
Yes, but it is often difficult to understand	23%	21%	26%	31%	17%
No, I often can't find what I am looking for	7%	5%	10%	8%	20%
Don't know	3%	2%	5%	8%	0%

Q15. Did you generally find what you were looking for (science)?
Weight; base n = 844: those who report looking for information about science

When searching for technological information, the *more frequent* were more likely to say that when searching for information about technology they usually can find information and it tends to be easy to understand (77%) than *less frequent* (57%). There was no significant difference between the *more frequent* and the *moderately frequent* indicating that both these segments had similar levels of success when searching for information about technology. The *less frequent* were also more likely to say that they found information about technology that was often difficult to understand (29%). See Table 39.

Table 39 Success when searching for information about technology

	Total	More frequent	Moderately frequent	Less frequent	Other
Yes, and it tends to be easy to understand	73%	77%	70%	57%	75%
Yes, but it is often difficult to understand	17%	16%	16%	29%	20%
No, I often can't find what I am looking for	8%	6%	11%	11%	5%
Don't know	2%	1%	3%	3%	0%

Q15. Did you generally find what you were looking for (technology)?
Weight; base n = 870: those who report looking for information about science

4.5 Interest and attitudes towards science vs. technology

This section considers the differences in participants' attitudes and behaviours towards science compared with technology where identical questions were asked about each. Significance testing (using independent t-tests) is therefore applied to compare the data for the science versus technology rather than using demographics.

4.5.1 Curiosity towards science vs. technology

Despite nearly half (46%) of the participants indicating an interest in wanting to know more about technology, interest in science is higher with 50% reporting that there was something involving science they would like to know more about. Reflecting this, fewer said there wasn't anything involving science they wanted to know more about compared with technology (43% vs. 47%).

Table 40 Whether there is anything you would like to know more about science vs. technology

	Science	Technology
Yes	50%	46%
No	43%	47%
Not that I can think of	8%	7%

Q6: Is there anything involving science that you would like to know more about?
Q9: Is there anything involving technology that you would like to know more about?
Total sample; Weight; base n = 1020

4.5.2 Information searching behaviour in science vs. technology

There were no reported differences between searching for science compared with technology using the internet, Google, books and other printed material (Table 41). However, while percentage of those who seek out friends or family first for information is relatively low for both science and technology, people who search for information about technology are significantly more likely to seek out information from their friends or family first compared to those who search for information about science (3% vs. 1%).

Table 41 Where did you generally go first to find information about science vs. technology

	Science	Technology
Internet (NFI)	43%	46%
Google	41%	38%
Library/ Books	4%	3%
Newspaper-magazines-journals-print media	2%	1%
Friends or family	1%	3%
Internet search engine (NFI)	2%	2%

Q16: How or where did you generally go FIRST to find information about science?
Weight; base n = 816 those who answered 1-3 at Q15.

Q19: How or where did you generally go FIRST to find information about technology?
Weight; base n = 856, those who answered 1-3 at Q18.

Note: only percentages above 1% shown for both science and technology

As can be seen in **Table 42** there were few differences observed when comparing the frequency of searching for information about science with the frequency of searching for information about technology.

More participants reported searching less than fortnightly for information about technology (40%) than for information about science (35%). More participants said they never search for information about science than never search for information about technology (18% vs. 14%) despite the fact that participants were more likely to be interested in finding out about science than technology (refer to Table 40).

Table 42 Frequency of searching for information about science vs. technology

	Science	Technology
At least fortnightly	46%	44%
Daily	9%	9%
Weekly or more	28%	27%
Fortnightly	8%	8%
Less than fortnightly	35%	40%
Monthly	15%	20%
Every 2-3 months	9%	9%
Every 6 months	5%	5%
Less often	6%	6%
Never	18%	14%
Don't know	1%	1%

Q14: How often, if at all, do you search for information about **science**?
Total sample; Weight; base n = 1020
Q17: How often, if at all, do you search for information about **technology**?
Total sample; Weight; base n = 1020

While the majority agreed that they generally found what they were looking for and that it was easy to understand the materials they found regardless of whether searching for information about science or technology, participants were more likely to report success in finding easily understandable information about technology compared with science (73% vs. 67%). Likewise, participants were more likely to report finding information that was difficult to understand when searching for information about science (23%) compared with information about technology (17%).

Table 43 Success when searching for information about science vs. technology

	Science	Technology
Yes, and it tends to be easy to understand	67%	73%
Yes, but it is often difficult to understand	23%	17%
No, I often can't find what I am looking for	7%	8%
Don't know	3%	2%

Q15: Did you generally find what you were looking for (science)?
Weight; base n = 844: those who report looking for information about science

Q18. Did you generally find what you were looking for (technology)?
Weight; base n = 870: those who report looking for information about technology

There was no significant difference between science and technology in terms of the top six preferred information sources for each. Participants were, however, more likely to name friends and family as a preferred source of information for technology compared with science (5% vs. 2%). This reflects the higher likelihood of referring to family and friends first for technology information compared with science information (refer to Table 41 above).

Table 44 Preferred sources of information about science vs. technology

	Science	Technology
The internet / Google / internet search engines - NFI	59%	58%
Television / TV programs / TV channels e.g. National Geographic, Discovery channel	39%	35%
Printed material / brochures / leaflets	15%	13%
Radio	11%	9%
Newspapers / online news	7%	5%
Science / technology magazines / journals	7%	6%
Books / encyclopaedias	6%	7%
Internet	5%	5%
Friends/family	2%	5%
Other	17%	22%
Don't know / can't remember	2%	3%

Q7: And how would you like to get this information?
Weight; base n = 528 those who would like to know more about science

Q10. And how would you like to get this information?
Weight; base n = 493: those who would like to know more about technology
Note: only percentages above 4% shown for both science and technology

4.6 Conclusions

Engagement with science and technology

- Most recall listening, watching or reading something to do with science or technology at least fortnightly
- There are high levels of interest in science and technology topics, health and medical topics are of most interest
- Half can name an Australian scientific or technological achievement
- Most say they have spoken about a science or technology topic in social settings
- Two thirds have visited a science centre or similar in the past year

Generally, Australians appear to be engaged with science and technology, both in a less active sense in terms of how information about science or technology reached them (82% having recalled listening, watching, or reading about science and technology at least fortnightly in the previous year), but also in terms of seeking out information (that is, searching) about them.

Of a mix of nine topics presented, there were high levels of interest expressed in the science and technology related topics compared with other topics. Most people (around two thirds) indicated interest in science and technology topics. Health and medical discovery related topics are of most interest, therefore science and technology news, information or stories with a health aspect are likely to be of most interest to Australians.

There is an established awareness of Australian accomplishments in the fields of science and technology with around half (49%) being able to name an Australian scientific or technological achievement.

Science and technology topics appear to be part of every-day conversation, with the majority of Australians saying they have talked about technology (87%) or science (77%) in social settings within the last year. Further examples of Australians' interactions with science and technology are that two thirds of Australians have visited a science centre, science museum, botanic garden, zoo or similar in the previous year; and around two-in-five have been to or watched (or listened to) a seminar or debate or similar on the topic of science or technology.

Interest in science and technology

- One-in-two want to know *more* about science and technology topics

There is an appetite for knowledge amongst the public with around one-in-two Australians wanting to know *more* about science (50%) and technology (46%). The topics most likely to interest those who want to know more about science are medicine, the environment, health and things to do with astronomy. And for those interested in knowing more about technology computers, new inventions, medical technologies and consumer technologies (such as tablets and mobile phones) were the subjects most mentioned.

A minority (14%) agree that they are *not really interested in finding out more about science* or *technology* confirming the public's interest in science and technology.

Seeking out information about science and technology

- Almost half search for information about science or technology at least fortnightly
- The internet is the initial go-to place as well as the preferred place to seek out information about science and technology
- More information could be provided via the media on science and technology
- Most are able to find the information they search for about science and technology, and most find this information easy to understand

Reflecting the high level of interest in science and technology and high frequency of listening, watching or reading things to do with science and technology, Australians report frequent searching habits on these subjects. Almost half report searching for science (46%) and technology (44%) at least fortnightly in the past year.

The internet is the go-to place for Australians to find out about science and technology; the vast majority (over four-in-five) named a search engine or the internet in general as their initial searching destination. Traditional printed resources including books and printed media are rarely used in an initial search for science or technology related information (a maximum of 4% mentioned one of these sources). Feelings are mixed in terms of the adequacy of the media in providing information about science and technology. Two-in-five think they get enough information about technology through the media (one-in-five disagreed), and around a third think they get enough information about science in this way (around a quarter disagreed).

Australians appear satisfied with the internet being their go-to search destination since around four-in-five said their preferred source of information was the internet when looking for information about science (59%) and technology (58%). Television programing is also a preferred way of finding out about science and technology, mentioned by just over a third.

The vast majority (90%) of Australians find what they are looking for when searching for scientific or technological information meaning that most appear to have adequate resources at their disposal when it comes to looking for information. Those without convenient internet access are more likely to struggle to find what they were looking for, reflecting the high reliance overall on the internet for searching, but despite this, even those without convenient internet access were more likely to report success in searching for information than not. Just less than a quarter (23%) consider that although they generally find the scientific information they are looking for, it is often hard to understand (67% found what they were looking for and consider it normally easy to understand, 7% say they often struggle to find what they were looking for). A smaller proportion reported struggling to understand the technological information that they found (17% said they generally found what they were looking for and it was often difficult to understand, 73% usually found what they were looking for easy to understand and 8% reported difficulties in looking for information).

Trusted sources of information

- Friends and family, and CSIRO were equally the most trusted sources of accurate scientific information volunteered by survey respondents
- When prompted, trust in scientists to explain the impacts of scientific or technological advances was high

Friends and family and CSIRO are the most commonly mentioned trusted sources of accurate scientific information (each mentioned by 12%), 8% mentioned TV presenters reflecting the preference to receive information via television programs. Although spontaneous mention of 'scientists' is low, when prompted with different sorts of people who might explain the impacts of scientific or technological advances, scientists were the most trusted groups of people. Of the different sorts of messengers tested, *well known scientists such as Nobel Prize winners or Australians of the Year* were the most trusted (82% indicating trust). Reflecting the spontaneous mention of CSIRO as a trusted source, *CSIRO scientists* (78%) were the next most trusted group followed by *Australian Chief Scientists* (75%).

The high percentage (30%) of respondents who did not know who to trust (21%) or trusted no one (9%) as a source of accurate scientific information is a cause for concern and warrants further investigation to understand why.

Attitudes towards science and technology

- The pursuit of science and technology research and development is valued by the public as most think Australia should be a world leader in these areas
- The majority think that a career in science is a good choice
- Doctors, teachers and scientists are the professions that are considered the most important in terms of their positive contribution to society (of a tested list of 11 professions)
- Scientific research is considered to make a direct contribution to Australia's economic growth

Australians value the pursuit of science and technology research, with most giving a high agreement rating to the statements *Australia should be a world leader in science research and development* (8.1) and *Australia should be a world leader in technology research and development* (7.9). Furthermore, Australians also highly value the provision of publicly-funded scientific research results to the community (8.3 mean agreement with *the results of publicly-funded scientific research should be made publicly available*).

Australians are optimistic about careers in science, 88% agreed that a career in science was a good choice. When participants were asked how important particular professions are in contributing positively to society, scientists were ranked third (60%) behind doctors (75%) and teachers (69%).

Most Australians see science as important to society through solving problems (a mean agreement rating of 8.0 out of ten) and making a direct contribution to Australia's economic growth (7.4 mean agreement rating). As well, most are comfortable with the rate of change in relation to both science and technology, while only a minority think science and technology cause more problems than they solve.

5 Appendix A - Demographics

5.1 Demographics of the sample

Current household situation	**%**	**n**
Major cities	69%	700
Regional	20%	209
Remote	9%	96
Refused*	1%	15
Location (State/Territory)	**%**	**n**
NSW	31%	322
VIC	24%	251
TAS	2%	22
SA	8%	77
QLD	21%	201
WA	10%	106
NT	1%	9
ACT	2%	17
Refused*	2%	15
Total Location (state)	100%	1020
Metro and non-metro	%	n
Metro	69%	700
Non Metro	30%	305
Refused / Postcode not known	1%	15
Gender	**%**	**n**
Male	49%	498
Female	51%	522
Age*	**%**	**n**
18-24	12%	122
25-34	18%	179
35-44	18%	183
45-54	19%	190
55-64	13%	132
65-74	14%	141
75+	7%	70
Convenient access to the internet	**%**	**n**
Yes	88%	894
No	12%	124
Don't know	0%	2
How do you get access to the internet	**%**	**n**
At work	28%	250
At home	86%	765
At friends or families place	1%	7

On a tablet	10%	92
On a mobile phone / smartphone	28%	247
Library	1%	8
Cafes	0%	2
Other [SPECIFY]	0%	4
Aboriginal or Torres Strait Islander origin	**%**	**n**
Yes	2%	19
No	98%	999
Prefer not to say	0%	2
Whether other language than English spoken at home	**%**	**n**
Yes	11%	126
No	89%	893
Prefer not to say	0%	1
Current household situation	**%**	**n**
Only young single people (no children)	7%	75
A young couple without children	6%	62
A family where most children are under 13 years	20%	207
A family where most children are 13 years or older	29%	291
A mature couple with no/independent/children left home	23%	231
A mature single with no/independent/children left home	14%	139
Other	1%	9
Prefer not to say	1%	6
Highest level of education completed*	**%**	**n**
Year 10 at secondary school or less	16%	160
Year 11 at secondary school	4%	39
Year 12 at secondary school (higher School certificate)	15%	156
TAFE degree or certificate e.g. trade certificate	16%	166
Associate diploma Certificate II, Advanced Diploma	13%	131
A university bachelor degree	22%	224
A university postgraduate degree	13%	134
Prefer not to say	1%	10
Level of education in science	**%**	**n**
I have only studied science at primary school	3%	30
I studied compulsory/general science subjects in high school	34%	348
I studied elective/specific science subjects in high school	26%	266
I studied science subjects after high school at TAFE or university	31%	321
I have never studied science before	5%	55
Current employment in areas of science or technology	**%**	**n**
Yes, I currently work in the area of science or	21%	210

technology		
No, but I used to work in the area of science or technology	14%	139
No, I never worked in the area of science or technology	66%	671
Pre-tax income of entire household	**%**	**n**
Less than $20,000	6%	64
$20,000 to $39,999	11%	112
$40,000 to $74,999	16%	159
$75,000 to $99,999	13%	133
$100,000 to $149,999	16%	160
$150,000 to $199,999	9%	88
$200,000 to $249,999	3%	33
$250,000 to $299,999	1%	15
$300,000 or more	2%	16
Prefer not to say	24%	240

Note:

Total Age*: Base size for total age is missing 3 respondents. The reason for this is due to the change in age brackets during fieldwork where these respondents have given an age range that could not fit accurately into the new age bracket. For reporting, the base size for age is n=1017.

5.1.1 Access to the internet

The majority (87%) of participants reported having convenient access to the internet, 13% said they did not have convenient access to the internet. As shown in Table 45, older participants aged 75 year or older were less likely to report convenient access to the internet (46% vs. 90% of those aged less than 75). Those living in major cities were more likely to report convenient access to the internet, 90% vs. 82% of those not living in major cities.

Table 45. Convenient access to the internet

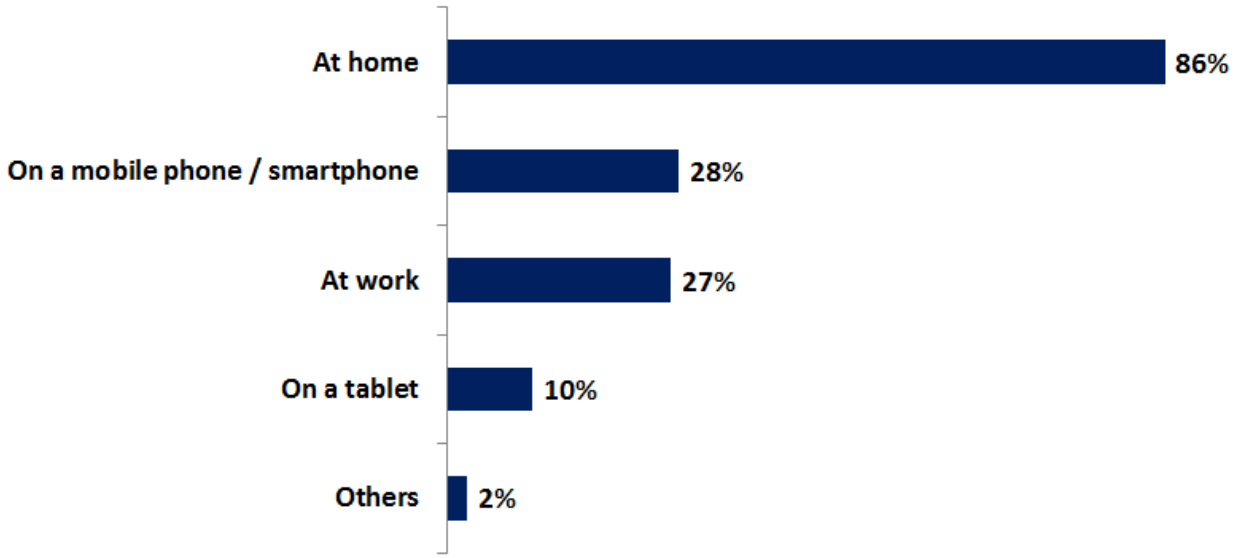
	Total	Male	Female	18-34 years	35-54 years	55-74 years	75 years plus	Major cities	Regional	Remote
Yes	87%	90%	84%	91%	94%	85%	46%	90%	83%	80%
No	13%	10%	16%	9%	6%	15%	54%	10%	17%	20%
Don't Know	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%

		Frequency of searching - Science			Frequency of searching - Technology			Convenient internet	
	Total	At least fortnightly	Less than fortnightly	Never	At least fortnightly	Less than fortnightly	Never	Yes	No
Yes	87%	92%	89%	69%	93%	90%	58%	100%	0%
No	13%	8%	10%	31%	7%	10%	42%	0%	100%
Don't Know	0%	0%	0%	0%	0%	0%	0%	0%	0%

Q1: Do you have convenient access to the internet?
Total sample; Weight; base n = 1020

Survey participants were asked how they usually accessed the internet, most, 86%, said they accessed the internet at home, 28% via a smartphone, 27% reported work and one-in-ten (10%) said they did so using a tablet, see Figure 13.

Figure 13 How participants access the internet



Q2: And how do you usually get access to the internet?
Weight; base n = 894: those who have convenient access to the internet

As can be seen in Table 46, younger participants were more likely to report accessing the internet using smartphones, 41% of those aged 18-34 reported doing so compared with 21% of those aged over 34 (with this falling to 0% for those aged 75 and older). The inverse was true for reporting accessing the internet at home, 88% of those aged 35 and older said *at home* compared with 80% of those aged 18-34.

Table 46 How participants access the internet

	Total	Male	Female	18-34 years	35-54 years	55-74 years	75 years plus	Major cities	Regional	Remote
At home	86%	87%	84%	80%	88%	88%	92%	84%	88%	94%
On a mobile phone / smartphone	28%	26%	29%	41%	26%	17%	0%	33%	17%	10%
At work	27%	27%	27%	25%	31%	26%	5%	29%	19%	22%
On a tablet	10%	9%	12%	8%	12%	11%	7%	11%	8%	8%
Others	2%	3%	2%	2%	3%	2%	0%	2%	2%	4%

		Frequency of searching - Science			Frequency of searching - Technology			Convenient internet	
	Total	At least fortnightly	Less than fortnightly	Never	At least fortnightly	Less than fortnightly	Never	Yes	No
At home	86%	87%	83%	89%	87%	85%	84%	86%	86%
On a mobile phone / smartphone	28%	30%	26%	24%	31%	26%	17%	28%	28%
At work	27%	27%	30%	19%	28%	28%	17%	27%	27%
On a tablet	10%	9%	14%	4%	10%	12%	2%	10%	10%

Others	2%	4%	1%	1%	3%	1%	2%	2%	2%

Q2: And how do you usually get access to the internet?
Weight; base n = 894: those who have convenient access to the internet

6 Appendix B - Questionnaire

Job title: Inspiring Australia Social Research

Job book Number	13-087096-01
Job Name	Inspiring Australia Social Research
Client	ANU
Date	20/2/2014

[XX] PROGRAMMING INSTRUCTIONS

[XX] INTERVIEWER INSTRUCTIONS

Purpose of questionnaire:

To ask 1,000 Australians, representative of the Australian adult population – by sex, age (18+) & geographic location, about their attitudes & behaviour with regard to their engagement with aspects of science and technology.

The results will be a baseline for the monitoring of changes in these attitudes and behaviours over time.

The focus of this research will be upon 'science' and 'technology' and these will be treated as separate areas unless otherwise specified in the questionnaire.

These two concepts will be defined for the respondents to facilitate a shared meaning of each.

Quotas

Sample information (n=1,000)	Australia (Total)	Major cities of Australia	Regional Australia	Remote Australia
Sample proportion from survey	100%	70%	20%	10%
Sample size from survey	1,000	700	204	96

Demographic	Sample size	Proportion of population
State/Territory		
NSW	322	32%
QLD	199	20%
SA	76	8%
TAS	23	2%
VIC	251	25%
WA	104	10%
NT	9	1%
ACT	17	2%
Gender		
MALE	489	49%
FEMALE	511	51%
Age		
Age 18-24 years	122	12%
Age 25-35 years	197	20%
Age 36-45 years	186	19%
Age 46-54 years	161	16%
Age 55-69 years	207	21%
Age 70+ years	127	13%
TOTAL	1000	100%

Introduction

Hello, my name is [NAME] calling from I-view.

Today we are conducting a short telephone survey on behalf of the government.

Could I please speak to the person in the household whose birthday is next and is over 18 years of age?

The interview will take about 20 minutes. Would you be willing to take part?

In accordance with Privacy Laws, your participation in this survey will remain confidential and your individual responses anonymous. My supervisor may monitor this call for quality assurance purposes.

[Note: The Australian Market and Social Research Society's Surveyline on 1300 364 830 is available for you to call if you would like to check if Ipsos or I-view is recognised by the society as a bona fide research company]

[IF NECESSARY] After the first few questions, it will be clear what the survey is about. We just don't tell you at the start as it might change the way you answer some of the questions. As well, we will be able to tell you which part of the government commissioned the research at the end.

[IF NECESSARY] Your household has been randomly selected. We'd really appreciate your assistance with this survey.

SECTION A: SCREENER QUESTIONS

SQ1 First of all, could you please tell me the postcode where you live?
[INTEGER – 4 NUMBERS]

[REFUSED = 9999]

[RECRUIT TO QUOTA IF FAIL: GO TO TERMINATION SCRIPT]

Termination script:

"Thank you for agreeing to take part in the survey. Unfortunately you are not one of the people we are looking for in this survey."

HQ1 LOCATION_REMOTE CLASSIFICATION [HIDDEN QUESTION - RECORD REMOTE CLASSIFICATION FROM LOOKUP ON SQ1]

[SINGLE RESPONSE]

Major cities of Australia	1
Regional Australia (combining inner and outer regional)	2
Remote (combining remote and very remote)	3
Refused / Postcode not known	9

[RECRUIT TO QUOTA IF FAIL: GO TO TERMINATION SCRIPT]

HQ2 LOCATION_STATE [HIDDEN QUESTION - RECORD STATE FROM LOOKUP ON SQ1]
[SINGLE RESPONSE]

New South Wales	1
Victoria	2
Tasmania	3
South Australia	4
Queensland	5
Western Australia	6
Northern Territory	7
ACT	8
Refused / Postcode not known	9

[RECRUIT TO QUOTA IF FAIL: GO TO TERMINATION SCRIPT]

HQ3 LOCATION_METRO NON METRO [HIDDEN QUESTION - RECORD FROM LOOKUP ON SQ1]
[SINGLE RESPONSE]

Metro	1
Non Metro	2

Refused / Postcode not known	9

SQ2 [RECORD GENDER – DO NOT ASK (FOR QUOTAS)]
[SINGLE RESPONSE]

Male	1
Female	2

SQ3 Please can you tell me your year of birth? [FOR QUOTAS]

[ENTER YEAR USING 4 DIGITS]	1
Prefer not to say	2

HSQ4. IF SQ3=2] Would you mind telling me which of the following age ranges applies to you? [FOR QUOTAS]
[READ OUT]

[SINGLE RESPONSE]

17 years or under [TERMINATE]	1
Age 18-24 years	2
Age 25-35 years	3
Age 36-45 years	4
Age 46-54 years	5
Age 55-69 years	6
Age 70+ years	7
[DNRO] I'd prefer not to say	9

SQ4_1. IF SQ3=2] Would you mind telling me which of the following age ranges applies to you? [FOR QUOTAS]
[READ OUT]

[SINGLE RESPONSE]

17 years or under [TERMINATE]	1
Age 18-24 years	2
Age 25-34 years	3
Age 35-44 years	4
Age 45-54 years	5
Age 55-64 years	6
Age 65-74 years	7
Age 75+ years	8
[DNRO] I'd prefer not to say	9

[RECRUIT TO QUOTA IF FAIL: GO TO TERMINATION SCRIPT]

SECTION B: MAIN SURVEY QUESTIONS

INTERNET ACCESS

Q1 Do you have convenient access to the internet? [SINGLE RESPONSE] [NB 'CONVENIENT' IS DEFINED BY RESPONDENT – CAN BE ANYWHERE]

Yes	1
No	2
Don't Know [DNRO]	99

Q2 [IF Q1 = 1] And how do you usually get access to the internet? [MULTIPLE RESPONSE] [DNRO]

At work	1
At home	2
At friends or families place	3
On a tablet	4
On a mobile phone / smartphone	5
Library	6
Cafes	7
Other [SPECIFY]	98

INTEREST IN SCIENCE AND TECHNOLOGY

[ASK ALL]

Q3 Can you tell me how interested you are in news, information or stories about the following? [READ OUT AND CLARIFY SCALE]

[RANDOMISE 1 THROUGH 9]

		Very Interested	Quite Interested	Neither interested nor not interested	Not very interested	Not interested at all	Don't Know [DNRO]
1	Australian politics	1	2	3	4	5	99
2	Environmental issues	1	2	3	4	5	99
3	Films	1	2	3	4	5	99
4	Health issues	1	2	3	4	5	99
5	Medical discoveries	1	2	3	4	5	99
6	Music	1	2	3	4	5	99
7	Scientific discoveries - other than medical	1	2	3	4	5	99
8	Sports	1	2	3	4	5	99

9	Technologies, inventions and innovations	1	2	3	4	5	99

Q4 How important do you feel the following professions are in contributing positively to society? [READ OUT SCALE]

[RANDOMISE 1 THROUGH 11]

		Very important	Quite important	Neither important nor not important	Not very important	Not important at all	Don't Know [DNRO]
1	Artists	1	2	3	4	5	99
2	Doctors	1	2	3	4	5	99
3	Engineers	1	2	3	4	5	99
4	Entertainers	1	2	3	4	5	99
5	Journalists	1	2	3	4	5	99
6	Lawyers	1	2	3	4	5	99
7	Members of the military	1	2	3	4	5	99
8	Politicians	1	2	3	4	5	99
9	Religious leaders	1	2	3	4	5	99
10	Scientists	1	2	3	4	5	99
11	Teachers	1	2	3	4	5	99

SOURCES OF INFORMATION ABOUT SCIENCE AND TECHNOLOGY

[READ OUT]

There are many different ways of describing science and technology. But for this survey…

SCIENCE refers to knowledge about the natural and physical world and how we find, observe, analyse, and test that knowledge to be as reliable as it can be. It includes things like biology, chemistry and physics and astronomy, agriculture, geology, engineering, computer science and electronics.

For this survey, **TECHNOLOGY** means the practical use of scientific knowledge. Technologies include a range of things including electricity, antibiotics, sewerage treatment, iPods, iPads, contact lenses, artificial hips, and weather forecasting.

Q5 Within the last 12 months, how often have you listened to, watched or read about anything to do with science or technology on radio, television, in newspapers or online? [READ OUT AS NECESSARY]

[SINGLE RESPONSE]

Daily	1
Weekly or more often	2
Fortnightly	3
Monthly	4
Every 2-3 months	5
Every 6 months	6
Less often	7
Never	8
Don't know [DNRO]	99

SCIENCE AND TECHNOLOGY ISSUES

Q6 Is there anything involving science that you would like to know more about?

[**IF NEEDED**: **SCIENCE** REFERS TO KNOWLEDGE ABOUT THE NATURAL AND PHYSICAL WORLD AND HOW WE FIND, OBSERVE, ANALYSE, AND TEST THAT KNOWLEDGE TO BE AS RELIABLE AS IT CAN BE. IT INCLUDES THINGS LIKE BIOLOGY, CHEMISTRY AND PHYSICS AND ASTRONOMY, AGRICULTURE, GEOLOGY, ENGINEERING, COMPUTER SCIENCE AND ELECTRONICS]

[SINGLE RESPONSE]

Yes	1
No	2
Not that I can think of [DNRO]	3

Q7 [IF Q6= 1] And how would you like to get this information?

[DNRO] [MULTIPLE RESPONSE] [PROBE FULLY – AVOID DK OPTION]

Experts - NFI	1
Scientists - NFI	2
The internet / Google / internet search engines - NFI	3
Wikipedia	4

Printed material / brochures / leaflets	5
Environmental organisations	6
Books / encyclopaedias	7
Science / technology magazines / journals	8
Science / technology centres / museums	9
CSIRO [MAY BE PRONOUNCED AS 'SIRO' OR READ OUT AS C-S-I-R-O]	10
Government	11
Scientific organisations	12
Radio	13
Television / TV programs / TV channels e.g. National Geographic, Discovery channel	14
Friends/family	15
Doctors	16
Other [SPECIFY]	98
Don't know / can't remember	99

Q8 [IF Q6= 1] What topics involving science would you like to know more about?

[SPECIFY]	98
Don't know / can't remember / prefer not to say	99

Q9 Is there anything involving technology that you would like to know more about?
[SINGLE RESPONSE]

[**IF NEEDED**: **TECHNOLOGY** MEANS THE PRACTICAL USE OF SCIENTIFIC KNOWLEDGE. TECHNOLOGIES INCLUDE A RANGE OF THINGS INCLUDING ELECTRICITY, ANTIBIOTICS, SEWERAGE TREATMENT, IPODS, IPADS, CONTACT LENSES, ARTIFICIAL HIPS, AND WEATHER FORECASTING] [DNRO]

Yes	1
No	2
Not that I can think of [DNRO]	3

Q10 [IF Q9= 1] And how would you like to get this information?
[DNRO] [MULTIPLE RESPONSE] [PROBE FULLY – AVOID DK OPTION]

Experts - NFI	1
Scientists - NFI	2
The internet / Google / internet search engines - NFI	3
Wikipedia	4
Printed material / brochures / leaflets	5
Environmental organisations	6
Books / encyclopaedias	7
Science / technology magazines / journals	8
Science / technology centres / museums	9
CSIRO [MAY BE PRONOUNCED AS 'SIRO' OR READ OUT AS C-S-I-R-O]	10
Government	11
Scientific organisations	12
Radio	13
Television / TV programs / TV channels e.g. National Geographic, Discovery channel	14
Friends/family	15
Doctors	16
Other [SPECIFY]	98
Don't know / can't remember	99

Q11 [IF Q9 = 1] What topics involving technology would you like to know more about?

[SPECIFY]	98
Don't know / can't remember / prefer not to say	99

RESPONDENT VALUES

Q12 I am now going to read out some statements. For each would you please tell me how much you agree or disagree with each of them on a scale of zero through to ten, where zero is **strongly disagree** and ten is **strongly agree**? You can provide any number between zero and ten.

[CLARIFY SCALE AS NECESSARY]
[RANDOMISE 1 THROUGH 13] [READ OUT]

		Strongly disagree										Strongly agree	Don't Know [DNRO]
1	Australia should be a world leader in science research and development	0	1	2	3	4	5	6	7	8	9	10	99
2	Australia should be a world leader in technology research and development	0	1	2	3	4	5	6	7	8	9	10	99
3	I get enough information about science through the media	0	1	2	3	4	5	6	7	8	9	10	99
4	I get enough information about technology through the media	0	1	2	3	4	5	6	7	8	9	10	99
5	Scientific change happens too fast for me to keep up with	0	1	2	3	4	5	6	7	8	9	10	99
6	Science causes more problems than it solves	0	1	2	3	4	5	6	7	8	9	10	99
7	Technology causes more problems than it solves	0	1	2	3	4	5	6	7	8	9	10	99
8	The results of publicly-funded scientific research should be made publicly available.	0	1	2	3	4	5	6	7	8	9	10	99
9	Technological change happens too fast for me to keep up with	0	1	2	3	4	5	6	7	8	9	10	99
10	Science is very important to solving many of the problems facing us as a society today	0	1	2	3	4	5	6	7	8	9	10	99

11	Scientific research makes a direct contribution to economic growth in Australia	0	1	2	3	4	5	6	7	8	9	10	99
12	I'm not really interested in finding out about science	0	1	2	3	4	5	6	7	8	9	10	99
13	I'm not really interested in finding out about technology	0	1	2	3	4	5	6	7	8	9	10	99

ENGAGEMENT

Q13 Which of the following activities have you undertaken **in the past 12 months**?

[RANDOMISE 1 THROUGH 9]

[READ OUT]

		No	Yes	Don't Know [DNRO]
1	Spoken with friends, family or colleagues in social settings about anything to do with science	1	2	99
2	Spoken with friends, family or colleagues in social settings about anything to do with technology	1	2	99
3	Participated in public discussions about anything to do with science or technology; for example, writing a 'Letter to the Editor' in newspapers or magazines, or calling talk-back radio	1	2	99
4	Commented about science or technology issues through social media for example through blogs, Facebook, or Twitter	1	2	99
5	Attended adult education classes related to science or technology	1	2	99
6	Visited a science centre [E.G QUESTACON OR SCIENCE WORKS], science museum, botanic garden, zoo, aquarium, observatory or space exploration centre	1	2	99
7	Gone to, watched or listened to a public meeting, debate, lecture or seminar on a science-related subject; for example via podcasts, YouTube, TV, or radio	1	2	99
8	Volunteered for an organisation that involves science or looking after or observing nature; for example 'Birds in Backyards', Landcare, 'Frogwatch' or astronomy groups	1	2	99
9	Gone to events at National Science Week held across Australia every August	1	2	99

SEARCH BEHAVIOURS

The next questions are about any searching you do for information about science or technology.

Q14 How often, if at all, do you search for information about **science**? [SINGLE RESPONSE]
[READ OUT]

[**IF NEEDED**: **SCIENCE** REFERS TO KNOWLEDGE ABOUT THE NATURAL AND PHYSICAL WORLD AND HOW WE FIND, OBSERVE, ANALYSE, AND TEST THAT KNOWLEDGE TO BE AS RELIABLE AS IT CAN BE. IT INCLUDES THINGS LIKE BIOLOGY, CHEMISTRY AND PHYSICS AND ASTRONOMY, AGRICULTURE, GEOLOGY, ENGINEERING, COMPUTER SCIENCE AND ELECTRONICS]

[SINGLE RESPONSE]

Daily	1
Weekly or more often	2
Fortnightly	3
Monthly	4
Every 2-3 months	5
Every 6 months	6
Less often	7
Never	8
Don't know [DNRO]	99

Q15 [IF Q14 = 1 THROUGH 7] Did you generally find what you were looking for? [READ OUT]
[SINGLE RESPONSE]

Yes, and it tends to be easy to understand	1
Yes, but it is often difficult to understand	2
No, I often can't find what I am looking for	3
Don't know [DNRO]	99

Q16 [IF Q15=1 THROUGH 3] How or where did you generally go FIRST to find information about science? [DNRO]
[SINGLE RESPONSE]

Internet (NFI)	1
Google	2
Other Internet search engine (NFI)	3

Friends or family	4
Colleagues	5
Library/Books	6
Wikipedia	7
Science magazines like 'Science', New Scientist or 'Cosmos' or Australasian Science'	8
Science websites like ABC Science, Science magazine or New Scientist	9
Other [SPECIFY]	98

TECHNOLOGY BEHAVIOURS

Q17 [ASK ALL] How often, if at all, do you search for information about **technology**? [READ OUT]

[**IF NEEDED**: **TECHNOLOGY** MEANS THE PRACTICAL USE OF SCIENTIFIC KNOWLEDGE. TECHNOLOGIES INCLUDE A RANGE OF THINGS INCLUDING ELECTRICITY, ANTIBIOTICS, SEWERAGE TREATMENT, IPODS, IPADS, CONTACT LENSES, ARTIFICIAL HIPS, AND WEATHER FORECASTING]

[SINGLE RESPONSE]

Daily	1
Weekly or more often	2
Fortnightly	3
Monthly	4
Every 2-3 months	5
Every 6 months	6
Less often	7
Never	8
Don't know [DNRO]	99

Q18 [IF Q17= 1 THROUGH 7] Did you generally find what you were looking for? [READ OUT]
[SINGLE RESPONSE]

Yes, and it tends to be easy to understand	1
Yes, but it is often difficult to understand	2
No, I often can't find what I am looking for	3

Don't know [DNRO]	99

Q19 [IF Q18=1 THROUGH 3] How or where did you generally go FIRST to find information about TECHNOLOGY? [DNRO]

[SINGLE RESPONSE]

Internet (NFI)	1
Google	2
Internet search engine (NFI)	3
Friends or family	4
Colleagues	5
Library/Books	6
Wikipedia	7
Other [SPECIFY]	98

WHOSE OPINIONS ARE VALUED BY THE RESPONDENT

Q20 Who, if anyone, do you trust as a source of accurate scientific information? This could be a person, an organisation or a media source. [DNRO]

[MULTIPLE RESPONSE]

Scientists - NFI	1
University scientists	2
Industry scientists	3
Research scientists	4
Australia's Chief Scientists	5
Environmental organisations	6
Well known scientists such as Nobel prize winners or Australians of the Year	7
Government	8
CSIRO [MAY BE PRONOUNCED AS 'SIRO' OR READ OUT AS C-S-I-R-O]	9
Scientific organisation	10
Radio presenters	11
Television presenters	12
Friends/family	13
Doctors	14

Other [SPECIFY]	98
Don't know	99
Don't trust anyone/No one	97

Q21 And how much trust do you have in the following types of people to explain the impacts of scientific or technological advances for you.

Please answer this on a scale from zero through to ten, where zero would mean 'Don't trust at all' through to ten which means 'Trust completely'.

[RANDOMISE 1 THROUGH 9]

[READ OUT]

		Don't trust at all										Trust completely	Don't Know [DNRO]
1	Australia's Chief Scientists, there is one for each State or Territory and one for the whole of Australia	0	1	2	3	4	5	6	7	8	9	10	99
2	Government politicians responsible for science at the State or federal government level	0	1	2	3	4	5	6	7	8	9	10	99
3	Religious leaders	0	1	2	3	4	5	6	7	8	9	10	99
4	TV or Radio presenters with knowledge of science or medical qualifications	0	1	2	3	4	5	6	7	8	9	10	99
5	Well known scientists such as Nobel prize winners or Australians of the Year	0	1	2	3	4	5	6	7	8	9	10	99
6	Scientists in	0	1	2	3	4	5	6	7	8	9	10	99

	general												
7	Spokespeople for environmental groups	0	1	2	3	4	5	6	7	8	9	10	99
8	Radio talkback presenters or commentators	0	1	2	3	4	5	6	7	8	9	10	99
9	CSIRO scientists [MAY BE PRONOUNCED AS 'SIRO' OR READ OUT AS C-S-I-R-O]	0	1	2	3	4	5	6	7	8	9	10	99

Q22 Do you think that a career in science is a good choice of a career for people these days? [DNRO] [SINGLE RESPONSE]

Yes	1
No	2
Don't know/not sure	99

Q23 Off the top of your head, can you name any Australian achievements in science or technology? [DNRO] [FROM ANY TIME IN HISTORY]

Cochlear implant / bionic ear / device to help people to hear	1
Spray-on skin / skin transplant / Fiona Wood / skin to help Bali bombing burn victims	2
Black box flight recorder	3
Polymer bank notes / plastic notes / plastic money	4
Myxomatosis / biological control of rabbits	5
Cervical cancer vaccine / jab	6
Hills Hoist rotary clothes line / Hills Hoist / clothes line	7
Discovering the cause of stomach ulcers / peptic ulcers / gastric ulcers / bacterium causes ulcers	8
Wheat stripper / Ridley Stripper / Sunshine Harvester / harvesting machine	9
WiFi	10
IVF / frozen IVF	11

Accelerating expansion of the universe / Nobel prize winner Brian Schmidt's work into the universe	12
Penicillin	13
Wine cask / wine bag / boxed wine / goon bag	14
Other [SPECIFY]	98
No / don't know / can't think of any	99

SECTION C: DEMOGRAPHICS

Q24 Would you classify yourself as Aboriginal or Torres Strait Islander origin? [SINGLE RESPONSE] [DNRO]

Yes	1
No	2
Prefer not so say	3

Q25 Do you speak a language other than English at home? [SINGLE RESPONSE] [DNRO]

Yes (specify)	1
No	2
Prefer not so say	3

Q26 Which of the following best describes your current household situation? [READ OUT] [SINGLE RESPONSE]

Only young single people (no children)	1
A young couple without children	2
A family where most children are under 13 years	3
A family where most children are 13 years or older	4
A mature couple with no/independent/children left home	5
A mature single with no/independent/children left home	6
Other [PLEASE SPECIFY]	98
Prefer not to say	99

Q27 Which of the following levels of education is the highest you have completed? [SINGLE RESPONSE] [READ OUT IF NECESSARY TO CLARIFY]

Year 10 at secondary school or less	1
Year 11 at secondary school	2
Year 12 at secondary school (higher School certificate)	3
TAFE degree or certificate e.g. trade certificate	4
Associate diploma Certificate II, Advanced Diploma	5
A university bachelor degree	6
A university postgraduate degree	7
Prefer not to say	99

Q28 Which statement best describes your level of education in science? [SINGLE RESPONSE] [READ OUT]

I have only studied science at primary school	1
I studied compulsory/general science subjects in high school	2
I studied elective/specific science subjects in high school	3
I studied science subjects after high school at TAFE or university	4
I have never studied science before	5

Q29 Do you currently work in the area of science or technology? [SINGLE RESPONSE] [READ OUT TO CLARIFY]

Yes, I currently work in the area of science or technology	1
No, but I used to work in the area of science or technology	2
No, I never worked in the area of science or technology	3

Q30 And what is the approximate **pre-tax income of your entire household** per year? [SINGLE RESPONSE]

Less than $20,000	1
$20,000 to $39,999	2
$40,000 to $74,999	3

$75,000 to $99,999	4
$100,000 to $149,999	5
$150,000 to $199,999	6
$200,000 to $249,999	7
$250,000 to $299,999	8
$300,000 or more	9
Prefer not to say	99

And that's the end of our questions. Thank you for taking the time to complete this interview. Just in case you missed it, my name is [NAME] and this survey was conducted on behalf of The Australian National University and the Department of Industry, Innovation, Science, Research and Tertiary Education.

If you have any complaints about the survey I can give you the contact details for the ANU Human Research Ethics Committee.

[IF NECESSARY] Human Ethics Officer, Research Office, The Australian National University, Canberra ACT 0200, human.ethics.officer@anu.edu.au, 02 6125 3427

If you would like to talk to a researcher about the survey, the number is 02 6125 7633.

In case my supervisor needs to contact you to validate this interview, could I please have your first name?

And can I just confirm that your telephone number is:

READ OUT STD (Vital - goes into computer)	(xx) ……

As I mentioned, this research is being conducted in accordance with Privacy Act. Do you wish to hear more about the Act? If yes, continue: In accordance with the Privacy Act, once information processing has been completed, please be assured that your name and contact details will be removed from your responses to this survey. After that time we will no longer be able to identify the responses provided by you. However, for the period that your name and contact details remain with your survey responses, which will be approximately 2 to 4 weeks, you will be able to contact us to request that some or all of your information be deleted.