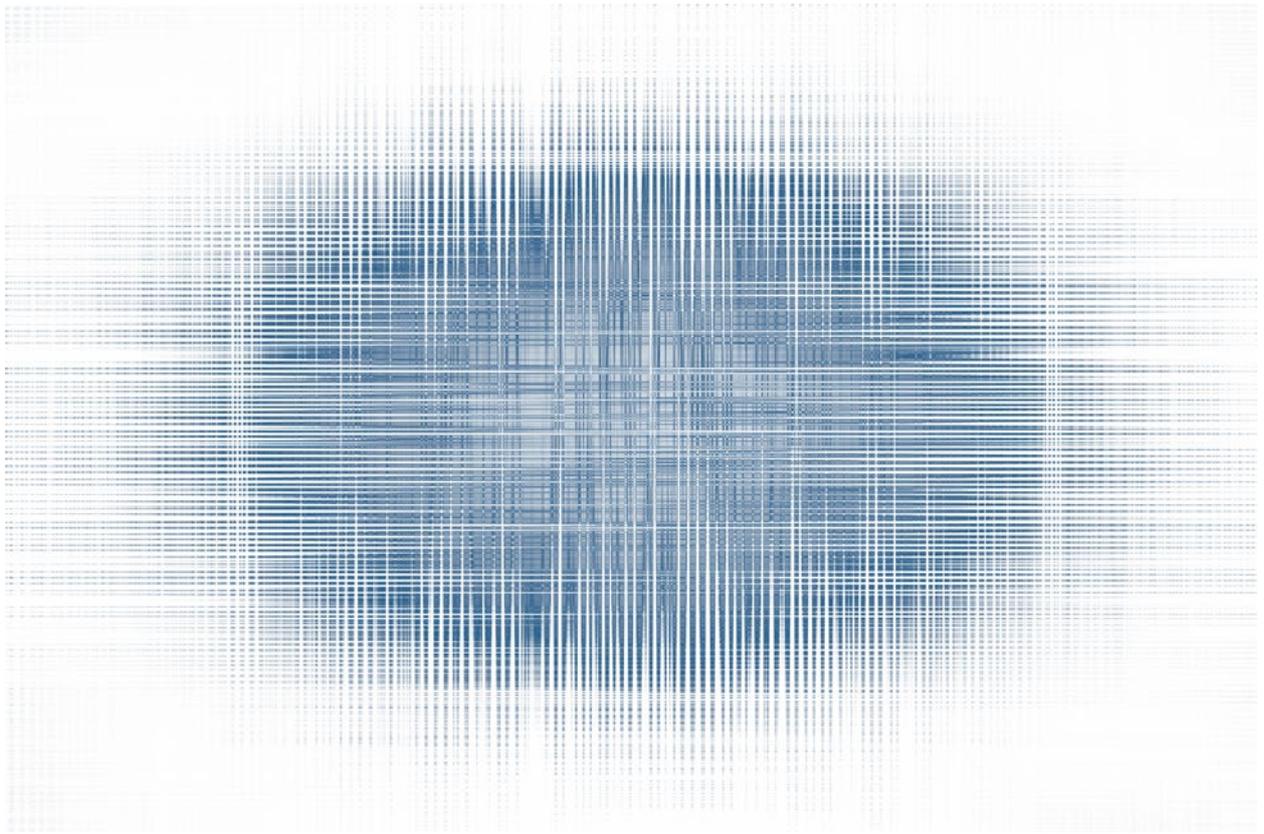




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Public attitudes towards data governance in Australia

N Biddle, B Edwards, M Gray and S McEachern

CSRM WORKING PAPER

NO. 12/2018

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ANU Centre for Social Research & Methods

Research School of Social Sciences
The Australian National University

Public attitudes towards data governance in Australia

N Biddle, B Edwards, M Gray and S McEachern

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Abstract

Never before have more data been held about us by government or companies that we interact with, and never before have those data been so used, or so useful for analytical purposes. The development of legislation, and the regulatory and oversight framework governing the use of these personal data is a challenge, as is the development of the data infrastructure, policies and practices within any framework that is set. An important consideration with regard to data governance is community attitudes, and ensuring that government and commercial entities do not get too far ahead of (or lag) community attitudes. In this survey, the 27th in the ANUPoll series, we asked a representative sample of Australian

residents a range of questions about their views and attitudes towards data governance in Australia. Although there is generally a high level of support for government to use and share data, there is much less confidence that the Australian Government has the right safeguards in place or can be trusted with people's data. If government, researchers and private companies want to make use of the richness of new types and sources of data, there is an urgent and continuing need to build up trust across the population, and to put policies in place that reassure consumers and users of government services that data can be stored and managed with appropriate security and access safeguards in place.

Acknowledgments

The ANU Centre for Social Research & Methods received very useful advice from the Australian Bureau of Statistics, the Australian Government Department of the Prime Minister and Cabinet, and the Australian Institute of Health and Welfare on technical aspects of the design of the survey,

as well as background information on the data policy environment in Australia. While this information and advice were greatly appreciated, no aspect of the findings or discussion should be attributed to any of these organisations. All attribution should be to the authors only.

Acronyms

ABS	Australian Bureau of Statistics
ANU	Australian National University
CSRM	ANU Centre for Social Research & Methods
OAIC	Office of the Australian Information Commissioner

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1 Introduction and overview

We are living in the Data Age. Never before have more data about us been held by government or companies that we interact with, and never before have those data been so used, or so useful for analytical purposes. Governments, social media companies, banks, supermarkets, telecommunications companies, utilities and many other organisations can (if they choose) identify where we are at any time, how much we spend on particular products and the types of services we receive.

Never before have we had access to so much information about ourselves. If we so desire (and we have the resources), we can track our steps, our expenditure, our caloric intake, our smartphone use or any number of other metrics.

This Data Age presents enormous opportunities for improving the evidence base for public policy development; for assessing policy alternatives; and for evaluating the targeting, delivery and outcomes of government services. If well managed, it will provide new means to hold governments to account.

The private sector is already using personal data to create new products and services, and to personalise offers to the desires or needs of consumers. For example, financial institutions' tracking of how much we spend on our credit cards and how long it takes to pay them off makes it easier for them to offer us services that are better tailored to our individual needs. In addition, if we can access our own data, we can make more informed decisions about the services that we are most interested in, potentially increasing competition and decreasing prices across a range of sectors.

Data therefore have enormous economic and political value, creating incentives to intentionally or unintentionally misuse the data. These risks need to be traded off against the potential benefits. For example, commercial organisations can use our data to offer us services or products

that might increase their profit margin, and obscure products that are in our best interest. If a third party accesses our data in a way that we have not consented to, they might use the data to steal our identity or target us in ways that we would rather they did not. If government uses our data to make decisions about us without giving us the ability to validate these decisions – or if that ability is unevenly distributed across the population – we may be excluded from services that we are entitled to, or put under undue stress or financial pressure. Debate and concerns are ongoing about the use of state surveillance using personal information for security purposes, and the potential abuse of these powers and personal data.

Negative consequences of data breaches may be more likely to affect the more vulnerable segments of the population (Eubanks 2018).

People generally have a greater awareness of data misuse and the harm that can occur from such misuse than of the beneficial uses of data. An example of widespread misuse of data is Cambridge Analytica's use of the personal information of Facebook users to target personalised political advertisements prominent in the public consciousness.

Previous Australian research suggests that the Australian community has concerns about privacy and access to personal information. The Office of the Australian Information Commissioner (OAIC) has surveyed community attitudes towards privacy of personal information since 2013, providing a context for public attitudes to data governance. The results of the 2017 OIAC survey indicate that data security breaches are the third biggest privacy concern in the community (17%), behind online services and social media sites (32%), and identify theft and fraud (19%) (OAIC 2017). Trustworthiness in looking after personal information is highest for health service providers (79%). State and Australian government departments (58%) are just behind financial

institutions (59%) in their level of trustworthiness – a consistent result since the first survey in 2013 (OAIC 2013). For comparison, market and social research organisations (24%), the e-commerce industry (19%) and the social media industry (12%) have the lowest levels of trustworthiness (OAIC 2017). Most Australians are uncomfortable about businesses sharing their personal information with other businesses (79%), but are more sanguine about government agencies sharing their personal information among each other (33% comfortable, 49% uncomfortable). Even more Australians are comfortable with their personal data being used for research purposes (46% comfortable, 40% uncomfortable) (Productivity Commission 2017).

International evidence suggests that these perceptions may be held generally, at least among countries with similar institutional arrangements. A study in Northern Ireland (Robinson & Dolk 2016) found very similar levels of trust in organisations to keep information secure. For example, levels of trust in health organisations, such as general practitioners (93%) and the National Health Service (86%), in government departments (73%) and in insurance companies (41%) were all very similar to the OAIC results in Australia. Studies of the United Kingdom from the Royal Statistical Society (2014) and of five European countries by the Open Data Institute (ODI 2018) found a similar ordering of organisations in terms of the levels of trust in organisations to manage data, although the levels reported varied depending on the form of response used.

Other research suggests that people expect governments to share data (Productivity Commission 2017). Overseas studies report that people overestimate the extent of information sharing already occurring between government agencies (Bickers et al. 2015). Indeed, the Australian Taxation Office remarked in its submission to the Productivity Commission inquiry into data and its use that there is ‘anecdotal evidence that suggests the community already believes there is widespread sharing of data across government’ (Productivity Commission 2017). Moreover, considerable evidence supports the ‘privacy paradox’, in which individuals say that they are concerned about

privacy and the use of personal data but place a high value on the immediate benefit of making personal data available, discount future effects, or may not be able to assess reductions in privacy because they do not read or understand privacy policies (Acquisti et al. 2015). For example, one study found that 95% of participants agreed to a clause in the terms and conditions they were given that signed away rights to their newborn child (Obar & Oeldorf-Hirsch 2018).

Of course, there is nothing new about the misuse of personal data – many examples exist of police and other public officials selling information to people who want to locate someone to recover debts or for other reasons. However, the current greater level of digital information, the internet and increased computing power mean that data breaches can occur on a much greater scale than in the past – the flip side of the ability to achieve better outcomes for people.

The potential uses of personal data, the type of data available about us, and the type and level of risk from those data are all changing so rapidly that it is hard for individuals to keep up with what we should be concerned about, and what benefits we might derive from our data. However, there is some evidence that the public has an internal logic to their thinking about how and when data should be shared. Ipsos MORI, in a series of qualitative studies of health data access in the United Kingdom, found that participants showed a consistent ordering of decision criteria in analyses of case studies for possible data sharing (Ipsos MORI 2016):

1. WHY (Does the activity’s outcome have a provable and sufficient public benefit?)
2. WHO (Can the organisations doing this be trusted to have the public interest at heart?)
3. WHAT (How anonymised and aggregated are the data?)
4. HOW (Does the safeguarding, access and storage protocol reassure me that the data will be safe?).

This does, however, mean that attitudes towards data access, data privacy and data governance will vary across the population in different ways and to different degrees at different times, depending on the context of the data use.

This has implications for the development of legislation, and the regulatory and oversight framework governing the use of personal data. The development of data infrastructure, policies and practices within whatever regulatory framework is set must take into account community attitudes, and ensure that government and commercial entities do not get too far ahead of (or lag) community attitudes. The Australian Government currently faces this challenge with the development of new governance arrangements for management of, and access to, personal data held by government, in response to the recently completed Productivity Commission study on data availability and use (Productivity Commission 2017).



2 Data and methodology

In this survey, the 27th in the ANUPoll series, we asked a representative sample of Australian residents a range of questions about their views and attitudes towards data governance in Australia. There were 2150 respondents to the survey. Of these, 257 were interviewed over the phone, and the remaining 1893 completed the survey on the web. Interviewing took place between 8 and 22 October 2018.

The data from this report are available for download from the Australian Data Archive. Among individuals who received the survey (members of the 'Life in Australia' or LinA panel), a completion rate of 77% was achieved. Taking into account the recruitment rate to the panel, the cumulative response rate is calculated as 9%. The results have been weighted to represent the national population. The poll's margin of error is $\pm 2.5\%$.

To analyse the data, we use a combination of descriptive statistics and regression analysis. For both sets of analyses, we make conclusions for the total Australian adult population using weights provided by the survey organisation.¹ A review of data from probability and nonprobability panels (Pennay et al. 2015) has shown that the former tend to have less variation from population benchmarks.

3 What government should do with data

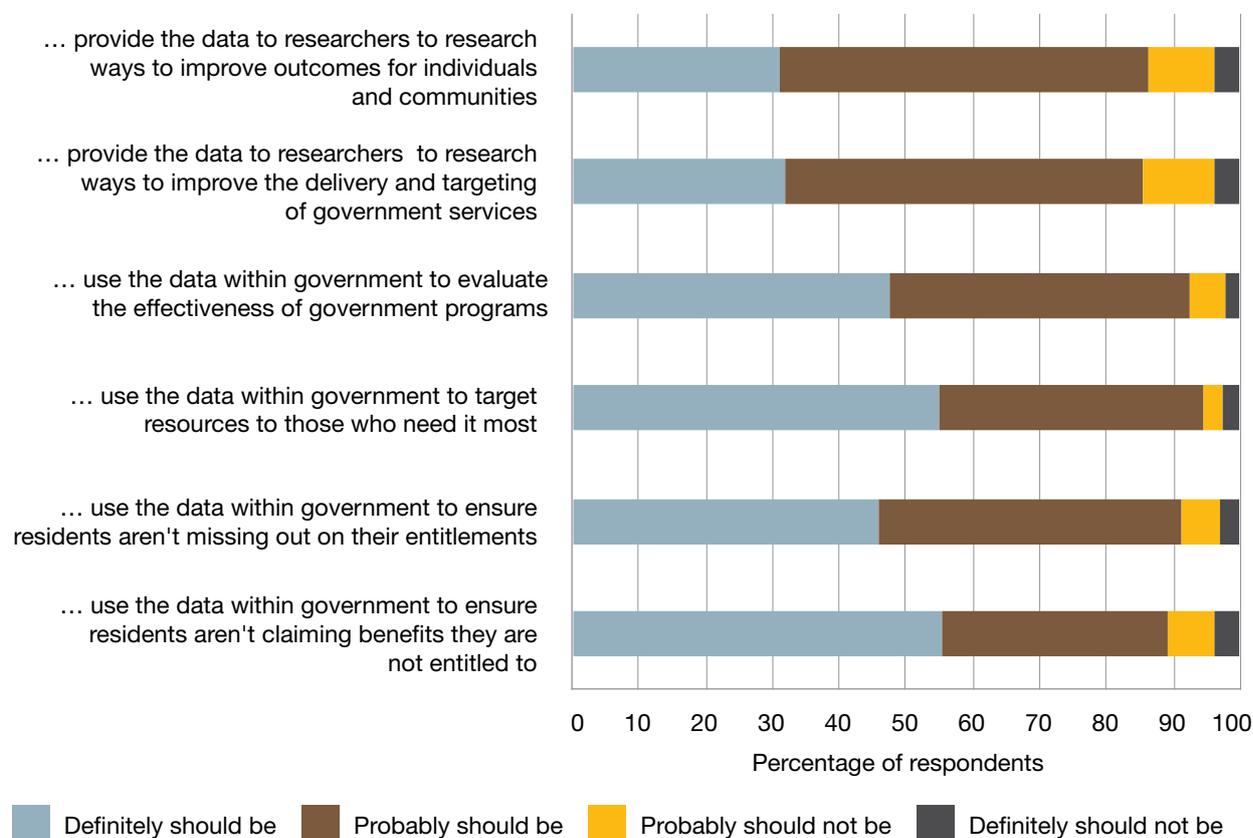
Among the biggest holders of data about individuals in Australia are the Australian, and state and territory governments. What governments can use these data for is constrained by the law, but is also often the subject of public debate and can become an election issue. This related to the questions of ‘Why is data to be shared?’ and ‘Who will it be shared with?’ in the Ipsos MORI framework.

The first question relating to data governance was ‘Governments across Australia collect a range of information on Australian residents. On the whole, do you think the Commonwealth Government should or should not be able to do the following?’.² Six potential data uses were given. We asked half the sample questions in

the basic form below, and the other half were randomly assigned specific ways that data could be used. Figure 1 summarises the results for the control group.

In general, respondents to the survey were quite supportive of the Australian Government using data (in general) for the specified purposes (Figure 1). Respondents were slightly less certain about providing data for researchers, with only 31–32% saying that government definitely should be able to do so, compared with 46–55% for the questions relating to using data within government. However, when the ‘definitely should be’ and ‘probably should be’ categories are combined, at least 85% of the population are supportive, regardless of the use.

Figure 1 Do you think the Commonwealth Government should or should not be able to ... ?



Source: ANUPoll on Data Governance in Australia, November 2018

3.1 Effect of varying how governments use data on support for data use

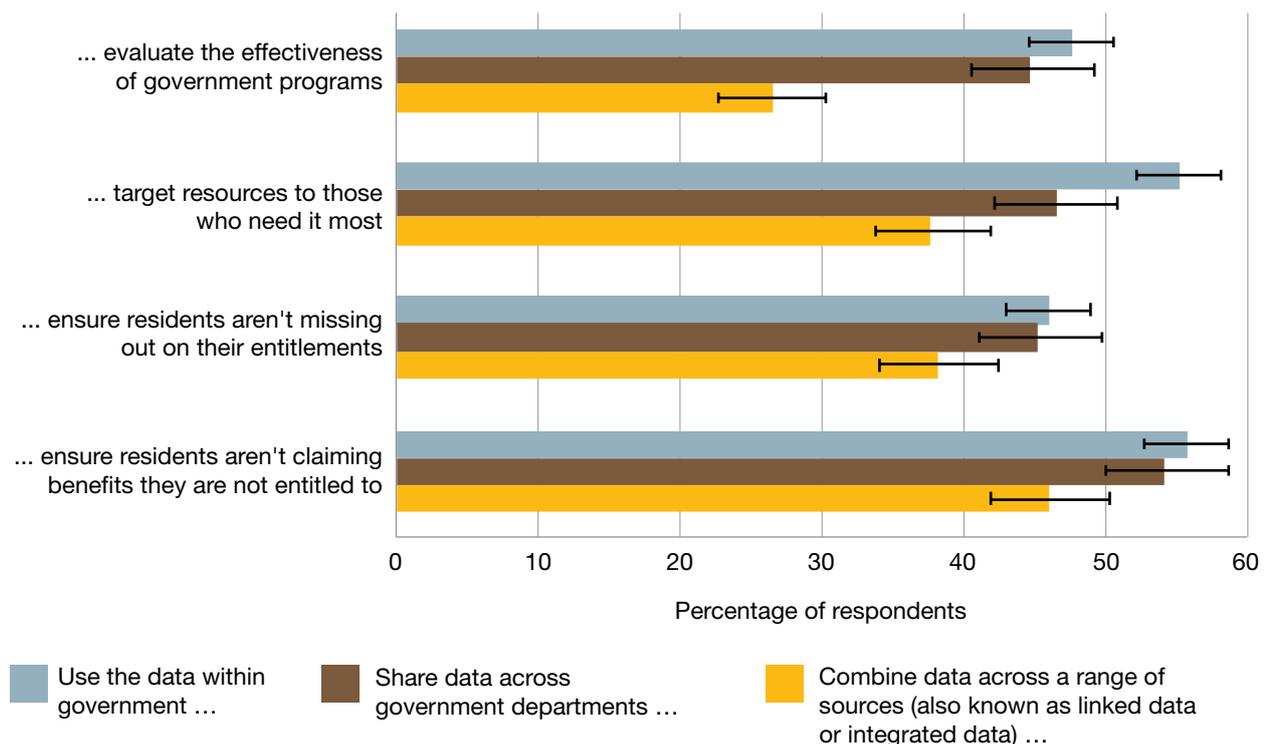
As outlined, we used half the sample to test whether support varied depending on specific types of data use. For the two questions on researchers – to use data to research ways to improve outcomes for individuals and communities, and to improve the delivery and targeting of government services – around one-quarter of the sample were told that data would be provided to researchers ‘in universities’, and another quarter were asked about providing data to researchers ‘in the private sector’. Combining the first two response options (‘definitely should be’ and ‘probably should be’), there were no differences in responses when it was specified that the researchers were in universities compared with when that was left blank. However, there was a large and statistically significant drop from 86.4% to 70.6% when respondents were told that the data would be used by researchers in the private sector for the question on improving outcomes, and an even larger drop from 85.4% to 66.4% for the question on the delivery and targeting of public services.

Clearly, respondents care quite a lot about who government shares data with.

There were also large differences when the wording was changed from ‘use the data within government’ to ‘share data across government departments’ or ‘combine data across a range of sources (also known as linked data or integrated data)’. As mentioned, half the sample were randomly assigned to receive the more neutral wording, and the remaining half were randomly allocated into the other two options.

In this case, however, the effects were mainly on whether people thought that governments ‘definitely should be’ as opposed to ‘probably should be’ able to undertake the specific actions. That is, the effects related to the strength of responses, rather than the direction. More importantly, the effect was different depending on the action itself. To explore this, Figure 2 shows the proportion of people who say that the Australian Government definitely should be able to use data for a range of purposes, according to how the data will be used (i.e. use the data within government, share data across government departments, and combine data across a range of sources).

Figure 2 Do you think the Commonwealth Government definitely should be able to ... ?, by method of use



Source: ANUPoll on Data Governance in Australia, November 2018

For only one use of government data was there a difference between respondents who were asked about data use with the wording ‘use the data within government ...’ or ‘share data across government departments ...’ (Figure 2). Specifically, respondents were much less likely to say that they think that the Australian Government definitely should be able to share data across government departments to target resources to those who need them most than that the Australian Government definitely should be able to use the data within government for the same purpose.

There was a much greater (negative) difference between respondents who were asked whether the Australian Government should be able to ‘combine data across a range of sources (also known as linked data or integrated data)’. For all four types of data use, the difference was statistically significant. However, the biggest effect was for evaluating the effectiveness of government programs, followed by targeting resources to those who need them most. In general, however, the general population is much less supportive of, or much less certain about, data linkage than about more general use of data within government.

3.2 Factors associated with support for government use of data

Although support for the use of government data is generally high, the level of support varies considerably across the population. We tested this using a regression-style analysis, with the dependent variable being the four categories presented in Figure 1, estimated using an ordered probit model. Full results are presented in the Table A1 in Appendix A, with the main findings summarised below.

One of the interesting findings from the analysis is that this variation is not consistent across the specific type of data use. Age has the strongest association with support for data being provided to researchers, although the relationship is nonlinear. Support for providing data to researchers to research ways to improve outcomes for individuals and communities is at

its lowest at 52.3 years of age (using a linear and quadratic term), whereas support for providing data to researchers to research ways to improve the delivery and targeting of government services is lowest at 45.5 years. Support is higher in both cases for those younger and older than this peak, demonstrating that it is not just the millennials who are comfortable with government making heavy use of data.

A similar nonlinear relationship was found for use of data to evaluate the effectiveness of government programs and target resources to those who need them most, although the ages where support was lowest were slightly younger (a minimum at the age of 40.6 years and 34.5 years, respectively). There was no strong relationship with age for the final two questions.

No other individual variables were consistently related to support for government sharing of data with researchers. However, the socioeconomic characteristics of the area in which a person lived did have an association, with those living in areas in the second most advantaged quartile having the greatest support.

A greater number of factors were associated with government’s internal use of data. Indigenous Australians tended to be more supportive of government using data, with the major exception being use of data to ensure that residents are not claiming benefits they are not entitled to, where there was no difference by Indigenous status. Education also had an association: those with higher levels of education tended to be more supportive (especially for using data for evaluation). Area-level disadvantage also had an association, with those who lived in the most disadvantaged areas tending to be more supportive of government using data to ensure that residents are not missing out on their entitlements and to ensure that residents are not claiming benefits they are not entitled to.

4 Perceptions of government capability and approach to data

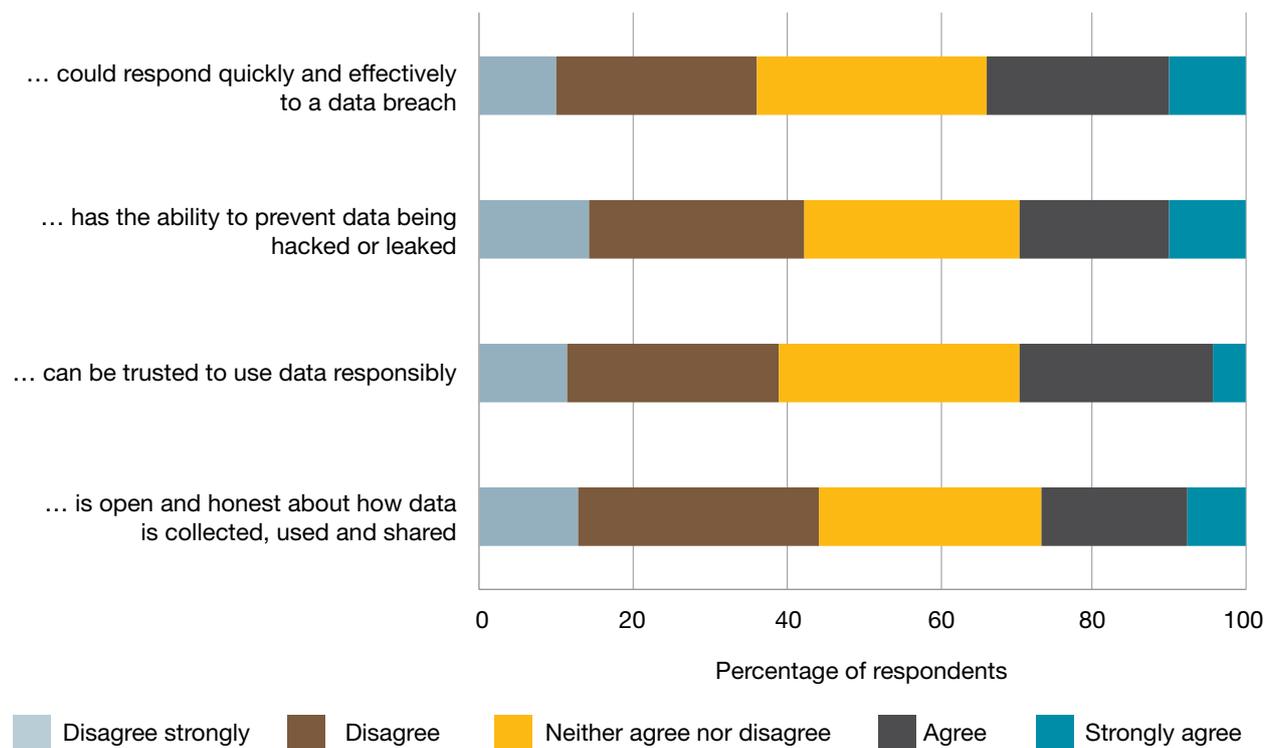
One of the factors that is likely to influence community attitudes to use of data by government is views about the capacity of government to protect the security of personal data, and whether government is transparent and can be trusted to use personal data. These issues relate to the ‘How data is shared’ question raised in the earlier Ipsos MORI framework.

To measure views of the Australian population on these issues, respondents were told ‘Following are a number of statements about the Australian Government and the data it holds about Australian residents’. They were asked to what extent they agreed or disagreed that the Australian Government could respond quickly and effectively to a data breach; has the ability to prevent data being hacked or leaked; can be trusted to use data responsibly; or is open and honest about how data is collected, used and shared.

trusted to use data responsibly; and is open and honest about how data are collected, used and shared.

Although respondents were generally supportive of government using data, they were in less agreement that the Australian Government is able to protect people’s data or is using data in an appropriate way. Combining the ‘agree’ and ‘strongly agree’ categories, only 34.0% of people think that the Australian Government could respond effectively to a data breach (Figure 3). An even smaller percentage think that the Australian Government has the ability to prevent data being hacked or leaked (29.7%); can be trusted to use data responsibly (29.3%); or is open and honest about how data are collected, used and shared (26.8%).

Figure 3 To what extent do you agree or disagree that the Australian Government ... ?

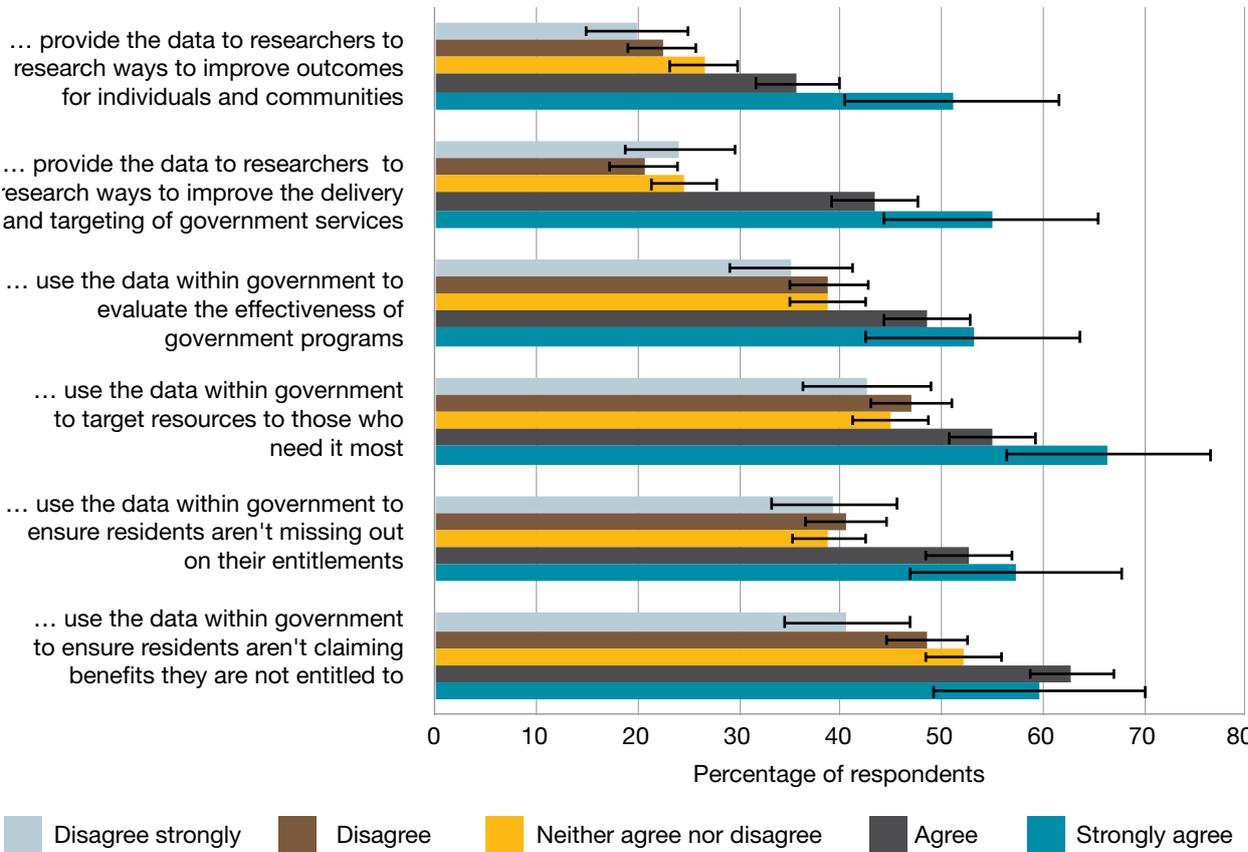


Source: ANUPoll on Data Governance in Australia, November 2018

There was a particularly strong relationship between support for government using data and whether or not a respondent felt that government can be trusted to use data responsibly (Figure 4). Because of relatively small sample sizes, the error bars or uncertainty around the estimates are reasonably large. However, the gradient in the figure is quite clear. Looking at the extreme values for the first question on government use

of data, if a respondent strongly disagrees that the Australian Government can be trusted to use data responsibly, we estimate that 19.8% of Australians think that the government definitely should be able to provide data for researchers to use the data to improve outcomes. For those who strongly agree that government can be trusted, this rises to 51.1%.

Figure 4 Do you think the Commonwealth Government definitely should be able to ... ?, by agreement about whether the Australian Government can be trusted to use data responsibly



Source: ANUPoll on Data Governance in Australia, November 2018



5 Level of concern about data held

As shown above, the Australian population is generally supportive of government using or sharing data. However, that does not mean that they believe that the Australian Government is currently doing what it should be doing with the data it has. To delve a little deeper into the concern that Australians might have about their own data, we asked respondents to think ‘about the data about you that the Australian Government might currently hold, such as your income tax data, social security records, or use of health services’. We then asked for their level of concern about five specific forms of data breaches or misuse of their own personal data.

Answers to these questions are likely to be influenced by the perceived likelihood of an outcome, as well as the level of severity of the consequences of that outcome. Some individuals may be very concerned about data breaches or misuse if they did occur, but think that this is unlikely. Others may think that the implications of data breaches or misuse are not too large, but that the probability is reasonably high. Given the time constraints of the survey, it was not possible to ask about likelihood and severity separately. However, this distinction is worth testing in future surveys.

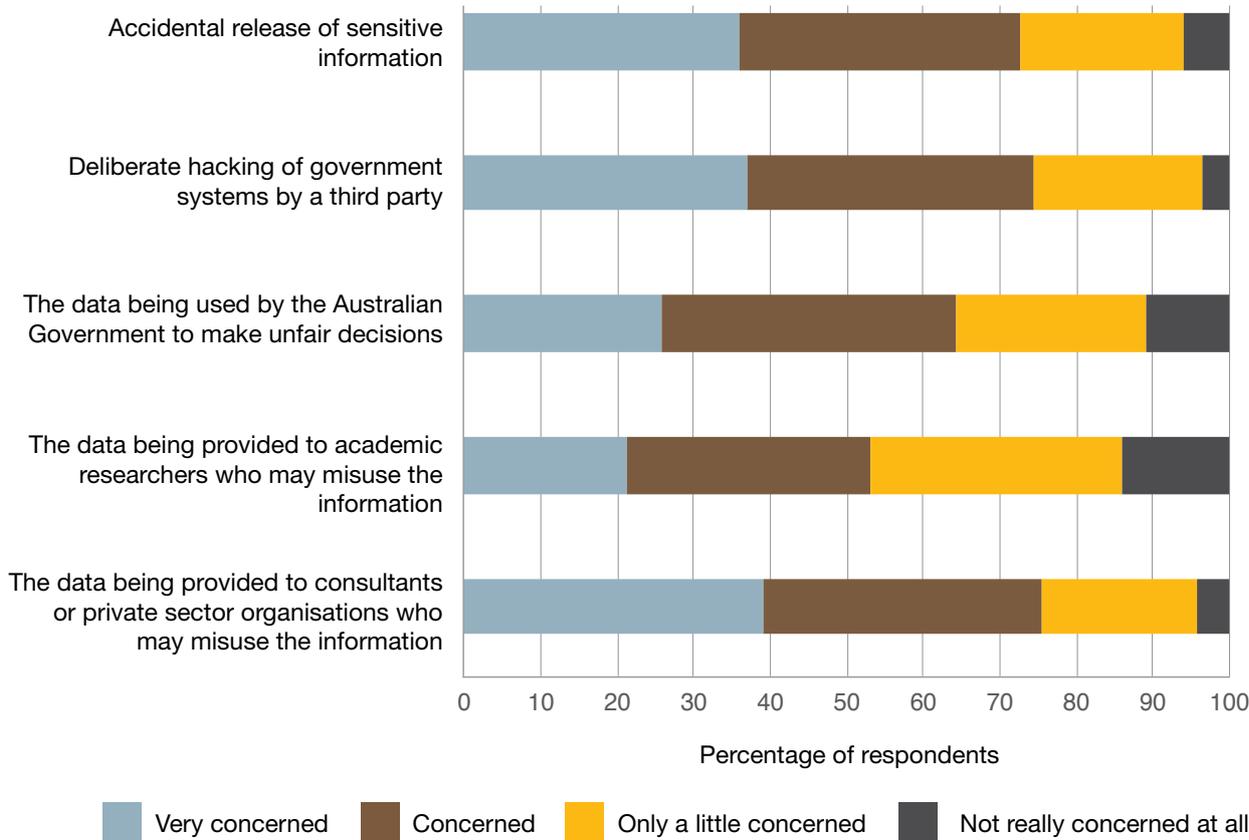
Interpreting the results (Figure 5) with that in mind, it is clear that there are considerable concerns about different forms of data breaches or misuse, with more than 70% being very concerned or concerned about accidental release of personal information, deliberate hacking of government systems, and data being provided to consultants or private sector organisations who misuse the data (Figure 5). More than 60% of the population are very concerned or concerned about their data being used by the Australian Government to make unfair decisions, and more than half are very concerned or concerned about their data being provided to academic researchers who may misuse their information.

Age once again has a strong association with the likelihood of being very concerned or concerned about the misuse of an individual’s personal data, with the level of concern generally higher the older the respondent. Although other factors had an association with specific types of concern, these relationships were less consistent.

Those with lower levels of education tended to be more concerned. The relationship with education was particularly strong for accidental release of data, using data to make unfair decisions, and data being given to academic researchers who may misuse the information. For the last of these variables (academic researchers), the relationship is particularly strong with post-school qualifications: those with a degree in general and a postgraduate degree in particular are much less likely to be concerned.

Geography also has an association: an interesting finding from the analysis is that those who live outside capital cities have lower levels of concern than those living in capital cities.

Figure 5 Level of concern about specific forms of data breaches or misuse of a person’s own data



Source: ANUPoll on Data Governance in Australia, November 2018

6 Trust in data holders

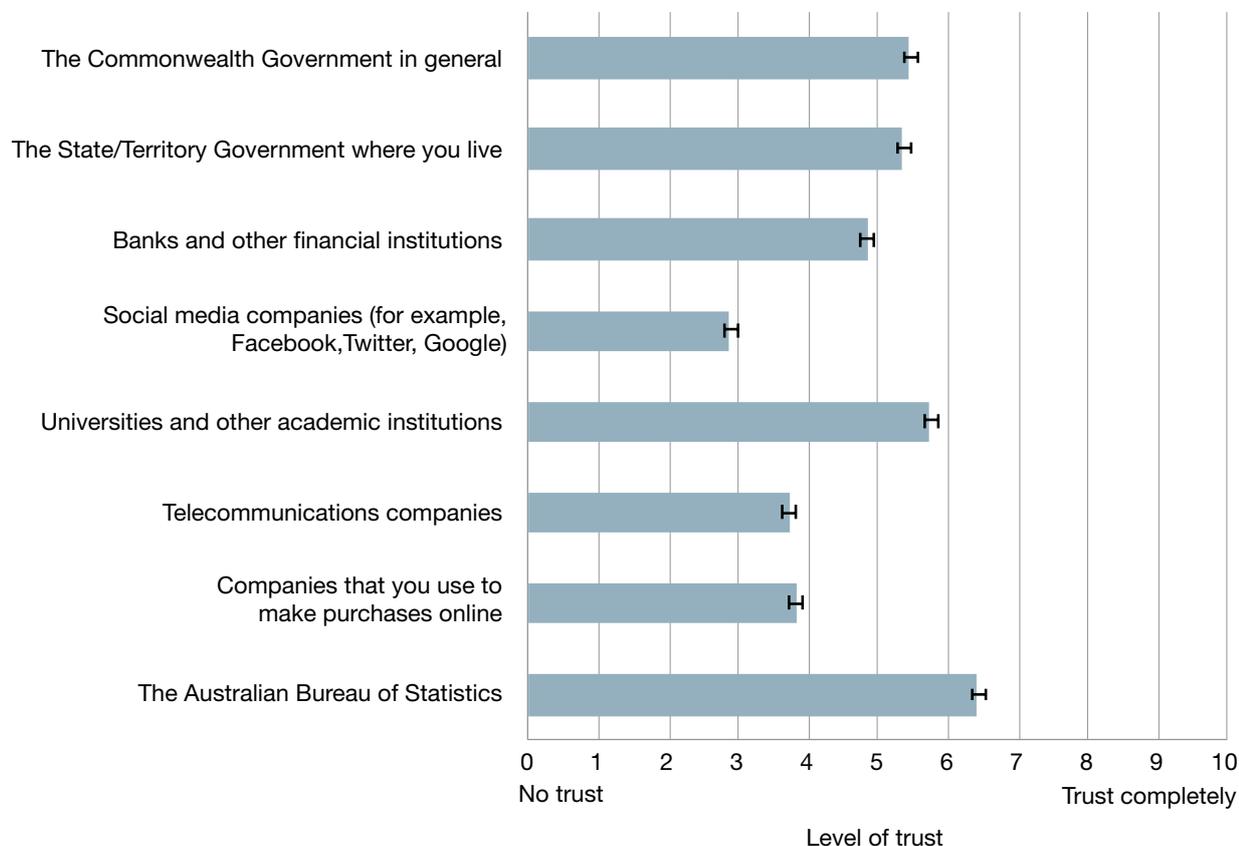
Governments are not the only entities that hold data about us. Indeed, an increasingly large amount of data is held by commercial entities, with the data forming a large part of their commercial value. Academic institutions also hold data about individuals – some of the data are provided by government or the private sector, but a large amount is collected by the institutions themselves.

In the final question on data governance in the 27th ANUPoll, we asked respondents ‘On a scale of 1 to 10, where 1 is no trust at all and 10 is trust completely, how much would you trust the following types of organisations to maintain the privacy of your data?’³

With regard to data, the most trusted organisation in Australia is the Australian Bureau of Statistics (ABS), with a mean trust value for respondents of 6.4, and 38.9% of respondents giving a value of 8/10 or higher (Figure 6). Universities are the next most trusted organisation (mean = 5.7), followed by the Australian, and state and territory governments (mean = 5.5 and 5.4, respectively).

In general, there is far less trust in commercial entities than in public sector institutions. The lowest level of trust is in social media companies, with a mean value of 2.9. Around two-thirds of respondents (66.5%) gave a value of 3/10 or less for these organisations, and only 3.2% gave a value of 8/10 or higher. Telecommunications companies (mean = 3.7),

Figure 6 Level of trust in organisations for maintaining privacy of data



Source: ANUPoll on Data Governance in Australia, November 2018

online shopping providers (mean = 3.8), and banks and other financial institutions (mean = 4.8) fall somewhere in between.

Age has a strong association with trust, with the young tending to be more trusting than the old. Apart from telecommunications companies and online shopping providers (where there was no statistical difference), females tended to have higher rates of trust than males; the biggest difference related to trust in universities and government. Those who had not completed high school tended to be less trusting in institutions with regard to their data than those who had completed Year 12, with the difference greatest for noncommercial institutions (government in general, universities, and the ABS specifically). There were also large differences by education, with those living in the most disadvantaged parts of the country the least likely to trust government with their data.



7 Concluding comments

The data environment in Australia is changing rapidly. More digital information about us is being created, captured, stored and shared than ever before, and there is a greater capacity to link information across multiple sources of data and across multiple time periods. Although this creates opportunities, it also creates the risk that the data will be used in a way that is not in our best interests.

There is policy debate at the moment about how data should be used and shared. Not making use of the available data has costs in terms of worse service delivery and less effective government. Locking data up is not a cost-free option. However, sharing data or making data available in a way that does not protect people's privacy is also not cost-free, and doing so in an unsafe way has the potential to create a significant (and legitimate) public backlash, which would reduce the chance of data being made available in any form.

The results of the public opinion survey presented in this paper show that Australians are generally supportive of data being made available to researchers (especially those in universities) and being used within government. These findings are consistent with overseas research (Bickers et al. 2015) and recent findings by the Productivity Commission (Productivity Commission 2017). There was much less support for multiple sources of data to be linked. This demonstrates a need to more carefully explain how such data linkage can have benefits for individuals, to set up proper safeguards for such linkage, and to not move too far ahead of public opinion.

Although the level of support for government to use and share data is generally high, there is much less support for the propositions that the Australian Government has the right safeguards in place or can be trusted with people's data. Having said that, government in general and the ABS in particular are much more trusted than commercial entities; levels of trust in social media

companies are particularly low. These findings are consistent with the 2017 survey on community attitudes to privacy (OAIC 2017) – which found that government had high levels of trust and that social media companies had particularly low levels of trust – and with the broader international findings discussed earlier in this paper.

It is unclear from the survey results whether that low level of trust is driven by a lack of knowledge about what government does (and does not do), as opposed to a lack of support and trust based on specific knowledge. It is probably a combination of both for different individuals. Trust and support tend to be lowest for those with low levels of education, the relatively old and males. In a somewhat concerning but perhaps not surprising finding, those who live in relatively disadvantaged areas are the least likely to trust government with their data. In some ways, individuals in these areas are likely to benefit the most from their data being used sensibly and effectively by government. But, perhaps because of past experiences or perceptions from others, those in these areas perceive the greatest risk.

Regardless of the reasons and the distribution, if government, researchers and private companies want to be able to make use of the richness of the new Data Age, there is an urgent and continuing need to build up trust across the population, and to put policies in place that reassure consumers and users of government services.

Appendix A Factors associated with support for use of data

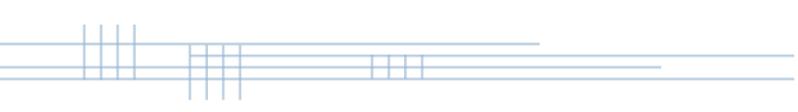
Table A1 Factors associated with support for use of data

Factor	Researchers to improve outcomes		Researchers to improve delivery and targeting		Within government to evaluate		Within government to target		Within government to ensure not missing out		Within government to ensure no overclaiming	
	Coefficient	Significance	Coefficient	Significance	Coefficient	Significance	Coefficient	Significance	Coefficient	Significance	Coefficient	Significance
Female	-0.040		0.069	**	0.103	**	0.080		0.045		0.081	
Age	0.046	***	0.026	***	0.032	***	0.021	**	0.005		0.001	
Age squared	0.000	***	0.000	***	0.000	***	0.000	***	0.000		0.000	**
Indigenous	-0.194		0.054		-0.494	***	-0.483	***	-0.370	**	-0.086	
Born in Australia (omitted category)												
Born overseas in an English-speaking country	0.055		0.130		-0.014		0.106		-0.172	*	-0.026	
Born overseas in a non-English-speaking country	-0.101		-0.137	**	-0.019		-0.011		-0.097		-0.123	*
Has not completed Year 12	-0.068		-0.070		-0.031		0.151	**	0.074		0.105	
Does not have a qualification (omitted category)												
Has a postgraduate degree	-0.100		-0.037		-0.277	***	0.074		0.173	*	0.067	

Table A1 continued

Factor	Researchers to improve outcomes		Researchers to improve delivery and targeting		Within government to evaluate		Within government to target		Within government to ensure not missing out		Within government to ensure no overclaiming	
	Coefficient	Significance	Coefficient	Significance	Coefficient	Significance	Coefficient	Significance	Coefficient	Significance	Coefficient	Significance
Has an undergraduate degree	-0.130	*	-0.127	*	-0.367	***	0.108		-0.029		-0.041	
Has a certificate III or IV, or a diploma as highest qualification	0.054		0.056		-0.069		0.234	***	0.052		-0.070	
SEIFA quintile 1 – most disadvantaged	-0.099		-0.167	**	0.037		0.008		-0.239	***	-0.338	***
SEIFA quintile 2	-0.185	**	-0.037		0.100		-0.102		-0.276	***	-0.265	***
SEIFA quintile 3	0.037		0.086		0.286	***	0.048		-0.043		0.041	
SEIFA quintile 4	-0.213	***	-0.227	***	-0.129	*	-0.048		-0.271	***	-0.170	**
SEIFA quintile 5 (omitted category)												
Lives outside a capital city	0.012		0.024		-0.057		0.091		-0.001		0.101	
Cut-point 1	0.292		-0.139		0.214		0.334		-0.390		-0.456	
Cut-point 2	1.809		1.298		1.866		1.865		1.070		0.736	
Cut-point 3	2.504		2.045		2.475		2.394		1.728		1.381	

* = significant at the 0.05 level; ** = significant at the 0.01 level; *** = significant at the 0.001 level;
SEIFA = Socio-Economic Indexes for Areas



Notes

1. <https://www.srcentre.com.au/our-research/life-in-australia-panel>
2. We randomised the order of the specific questions.
3. The order of the institutions that were presented to respondents was randomised.

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