

Submission to the Joint Standing Committee on Electoral Matters:

Inquiry into and report on all aspects of the conduct of the 2016 federal Election and matters related thereto

Background

The News and Media Research Centre (N&MRC) at the University of Canberra (<http://www.canberra.edu.au/nmrc>) investigates the evolution of news, media, content and communication and the impact of online and mobile systems on the way citizens consume information.

Since 2015, the Centre has published the *Digital News Report: Australia*, a national annual online survey of more than 2,000 adult Australians, which monitors changes in news consumption over time, particularly within the digital space. The Australian survey forms part of a global study of 37 news markets by the Reuters Institute for the Study of Journalism at the University of Oxford. The *Digital News Report: Australia* from 2015 – 2018 can be downloaded via <https://www.canberra.edu.au/research/faculty-research-centres/nmrc/digital-news-report-australia-2018>.

This submission is based on data from the 2016, 2017 and 2018 surveys, plus expert commentary and analysis of social media manipulation in Australian politics, and fake news.

The submission authors are happy to provide further information to the Inquiry if desired.

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Response to selected issues regarding social media manipulation during the 2016 Australian federal election.

Introduction

Concern about foreign interference in elections has gained increasing attention following the revelations of social media manipulation in the 2016 US elections. Since then, evidence has emerged of similar conduct in the Philippines and elsewhere. However, to date little evidence of deliberate interference in the 2016 Australian federal election has come to light. Despite this, public debate about Russian interference in the US election and the spread of political misinformation via social media has led to high levels of concern about fake news in the Australian community.

To assist the Inquiry's examination of the use and impact of social media during the 2016 federal election we have compiled relevant data on Australians' use of social media in 2016-2018; media literacy; and fake news. This submission also includes evidence of current Russian activity in the Australian political social media sphere, proposals for tackling political misinformation and lifting media literacy. It is hoped this information will provide useful background for the Inquiry as it considers these important electoral matters.

This submission is comprised of three parts:

1. Data regarding Australians use of social media in 2016 – 2018, including their concern and experience of fake news;
2. Evidence of contemporary Russian influence in the #auspol Twitter stream; and
3. Data regarding media literacy in Australia.

PART 1. The use of social media by Australians in 2016 - 2018

Trends in Social Media Use for News

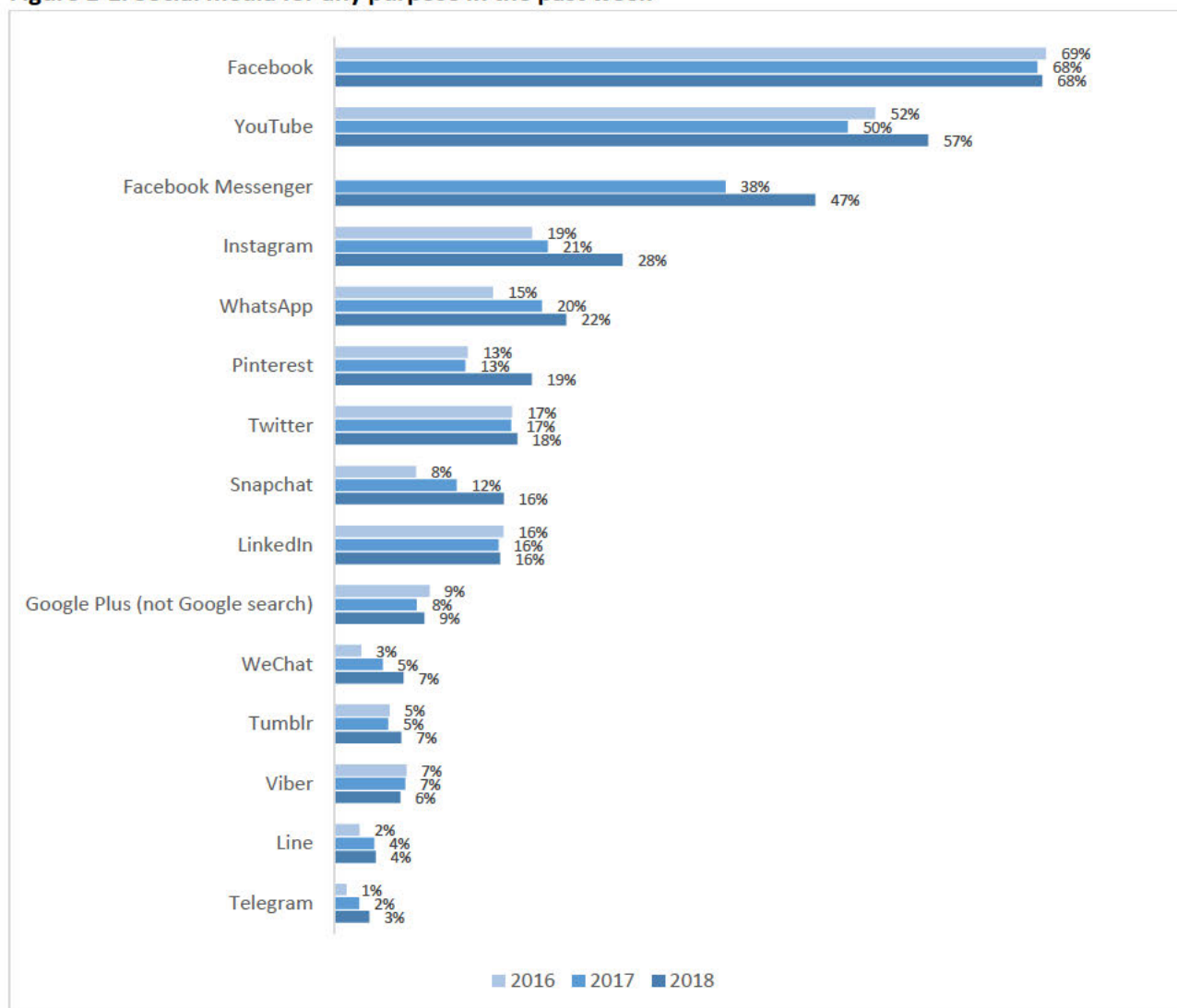
In considering the role of social media manipulation in the 2016 Australian election it is useful to understand the use of social media by Australians at that time. Given Australians will face a federal election within the next 12 months we have included data from the *Digital News Report Australia* 2016, 2017 and 2018 to illustrate the growth in social media usage over the past three years.

As part of the annual survey participants are asked if they have used any social media sites for any purpose in the last week.

In 2016, as **Figure 1-1** shows, 69% had used Facebook, 52% YouTube, 19% Instagram, 17% Twitter and 16% LinkedIn. While the use of Facebook, LinkedIn and Twitter have remained stable over the past three years there has been notable growth in the use of Snapchat, Instagram and YouTube.

Most interestingly, some of the largest growth has been in the use of messaging apps WhatsApp and Facebook Messenger.

Figure 1-1. Social media for any purpose in the past week

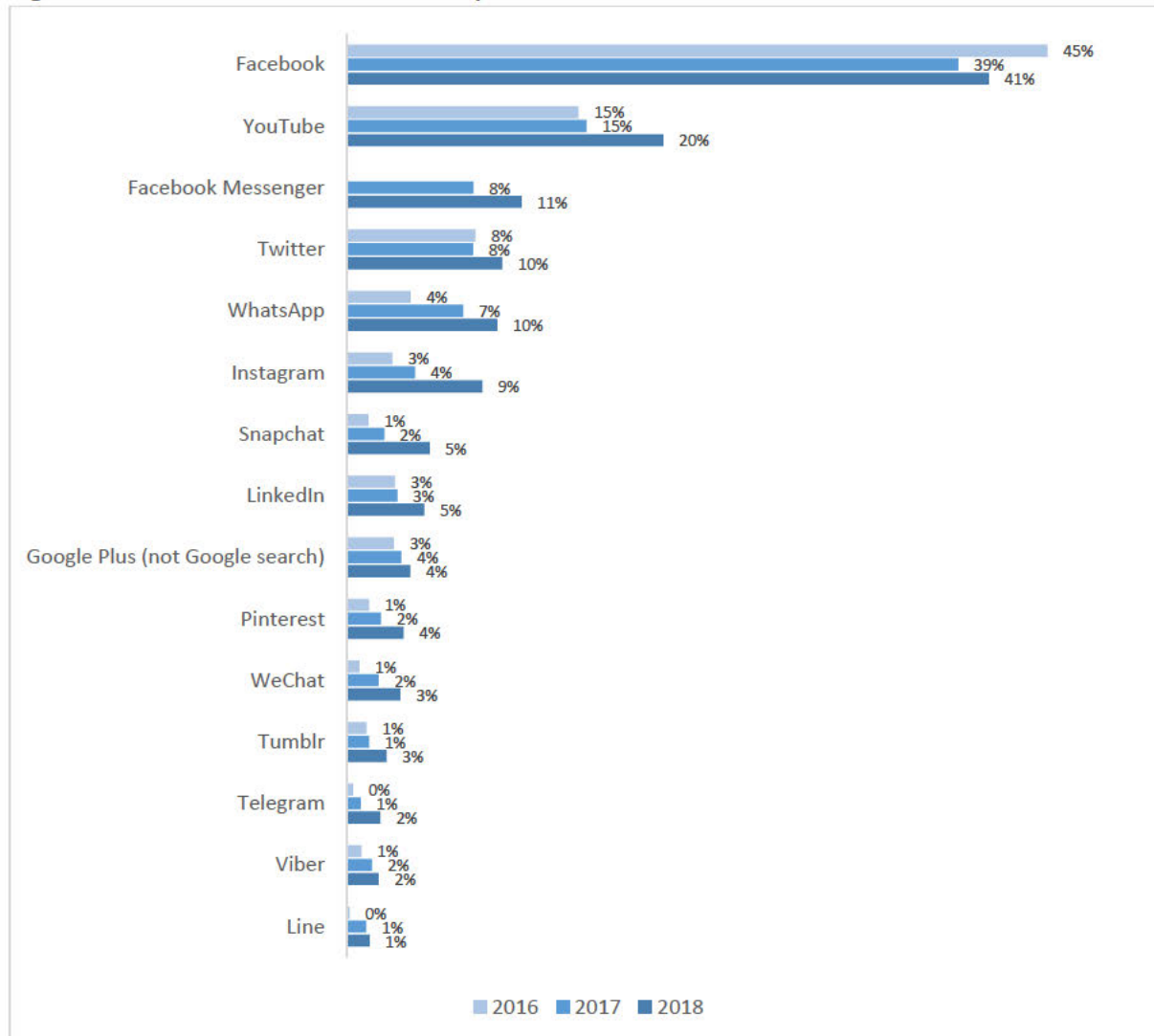


More than 50% use social media for news

In 2016, 54% of Australians used social media to access news and 18% of Australians relied on social media as their main source of news. In 2018, 54% have used SNS for news, and 17% relied on it as their main source of news.

As Figure 1-2 reveals, the use of social media to access news specifically is lower than the use of social media for general purposes. While the use of Facebook for general purposes has remained consistent since 2016, the number of Australians using it to access news is falling. This trend is seen in other countries as well. Globally, news consumption via Facebook is declining and social media use for news seems to have plateaued. In contrast Australia has experienced a slight increase in 2018 from a 6% dip to 39% in 2017 in the use of social media for news by Australians. The growth has occurred mainly on YouTube and Instagram, as well as via messaging apps.

Figure 1-2. Social media for news in the past week



Growth in messaging apps: A trend to watch

In 2016, the use of messaging apps for news was just emerging when 4% of Australians were using WhatsApp to access news. The growth in the use of messaging apps (Figures 1-1 and 1-2) is particularly noteworthy given concerns in other countries, such as India, about violence fuelled by fake news that has been shared via WhatsApp. Our 2018 report shows that Australians who are worried about expressing their political opinion on social media are much more likely to use messaging apps. This was also found in non-democratic countries, or countries where there are challenges to free speech. What that tells us is people retreat to the perceived safety of a closed messaging group to share news and discuss politics amongst those they trust to be discreet. On the whole this is an closed communication network that is difficult to monitor and one that is growing in popularity.

Fake News

In a response to the global concern about fake news, in 2018 survey participants were asked about their experience of, and concern about, six types of online misinformation or 'fake news':

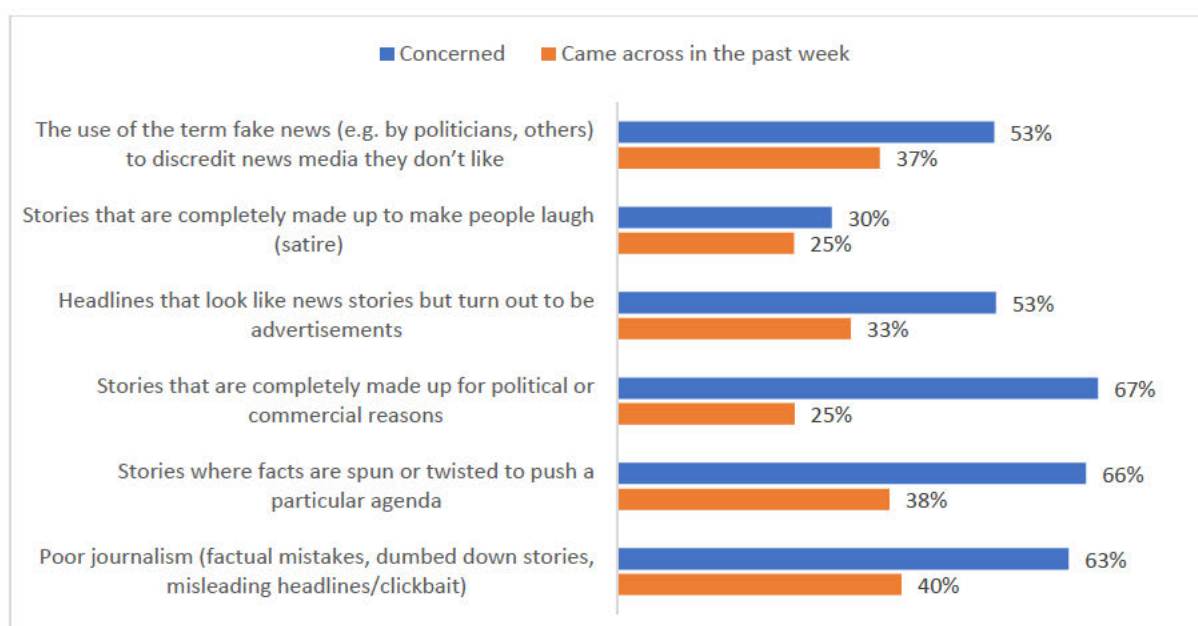
- (1) Poor journalism (factual mistakes, dumbed down stories, misleading headlines/clickbait);

- (2) Stories where facts are spun or twisted to push a particular agenda;
- (3) Stories that are completely made up for political or commercial reasons (deliberate misinformation);
- (4) Headlines that look like news stories but turn out to be advertisements;
- (5) Stories that are completely made up to make people laugh (satire); and
- (6) The use of the term fake news (e.g. by politicians, others) to discredit news media they don't like.

Two thirds are concerned about fake news

Figure 1-3 shows that 65% of Australian news consumers are concerned about fake news they encounter online. The majority (73%) reported having experienced one or more types of fake news in the last week. Heavy news consumers (82%) – those who access news multiple times a day – reported experiencing fake news more than light news consumers (62%). It is notable that 12% of respondents didn't know if they had encountered any of the six types of fake news or not. The most common type of fake news that news consumers experienced was 'poor journalism', closely followed by stories that are twisted to push an agenda.

Figure 1-3. Experience of and concern about fake news



People most concerned about political misinformation

Survey participants were the most concerned about deliberate political or commercial misinformation (67%). However, the experience of this type of fake news was much lower. Only 25% said they had experienced political misinformation.

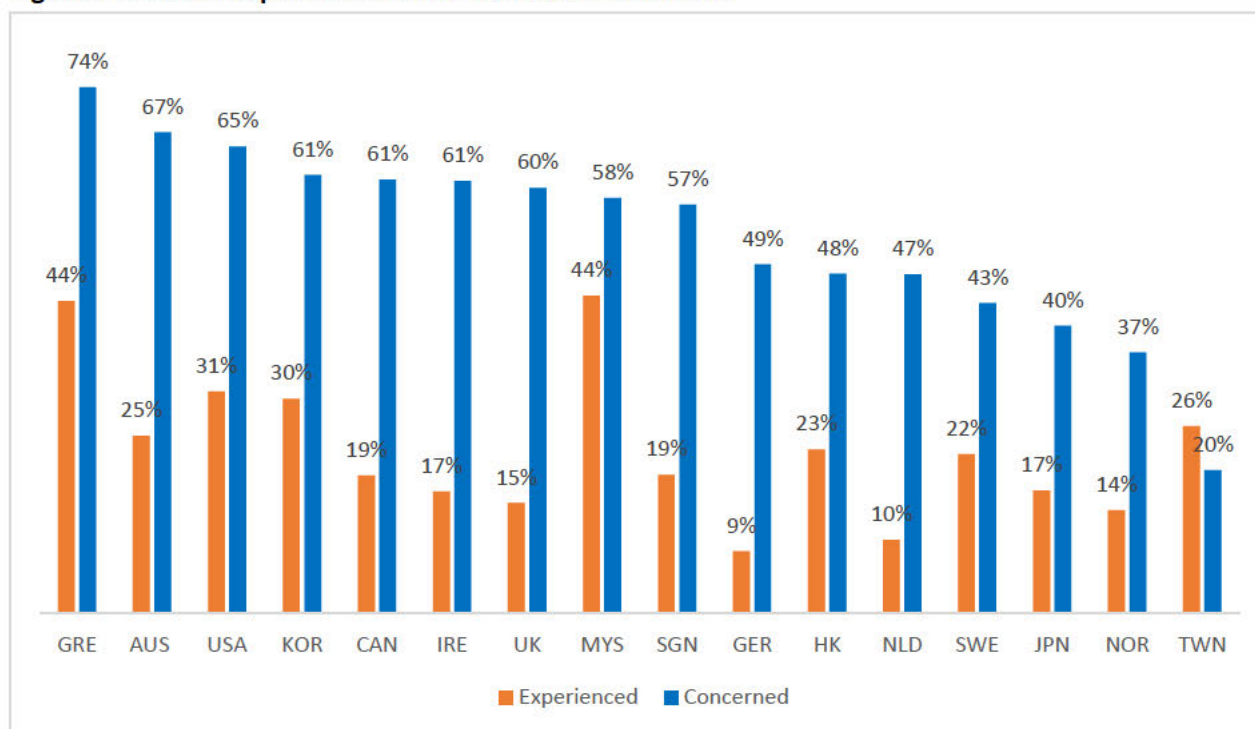
A disconnect between concern and experience of fake news

In all cases, the level of concern about fake news was higher than the reported actual experience of it. This disconnection was seen globally amongst the 37 countries surveyed (Figure 1-4). More than half (55%) of those who don't know if they have encountered fake news are still concerned about it.

Australians more concerned than in many other countries

In comparison to other countries surveyed, Australians are more concerned about fake news than the global average, but their experience of it is around the global average. News consumers in Malaysia and Greece recorded the highest levels of encountering political misinformation.

Figure 1-4. Global experience and concern about fake news



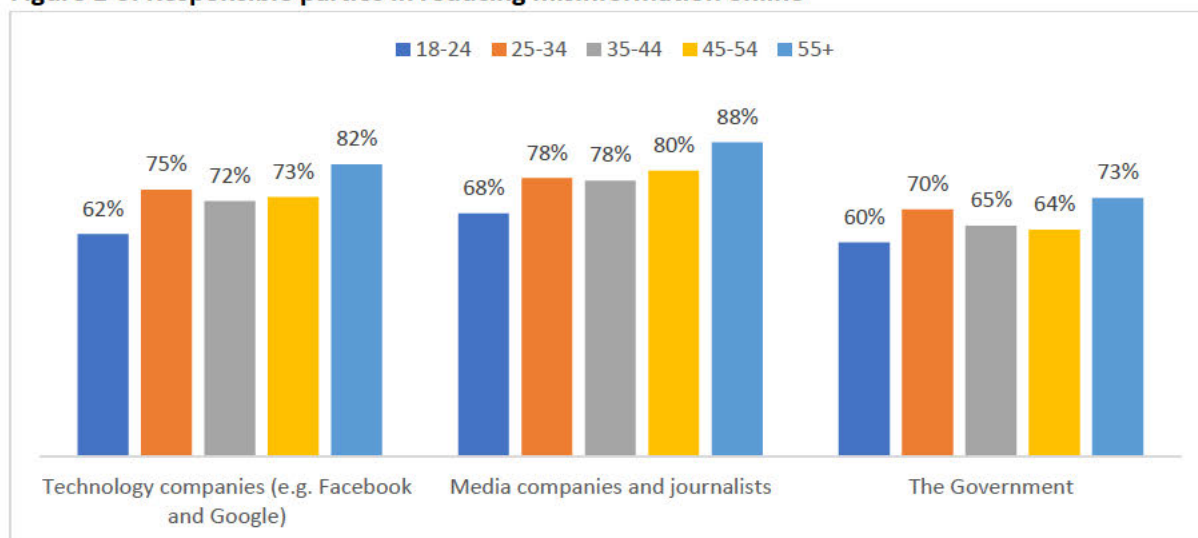
The more news you consume, the more likely you are to encounter fake news

The survey shows that people who access more sources of news also encounter more fake news. Half of news consumers (50%) who use four or more sources experienced poor journalism, 52% experienced spun stories, and 34% experienced fabricated political misinformation. This is higher than those who only use one source, where only 26% encountered poor journalism, 22% spun stories and 14% political misinformation stories. While it seems like common sense that heavy news consumption increases the chances of encountering fake news, there is another factor that we should consider. It also may be that those who experience misinformation turn to a variety of sources for the purposes of fact-checking, indicating a higher level of engagement.

Australians want action to be taken to combat fake news.

One of the strongest responses was to a question about who is responsible for tackling fake news. 81% of news consumers think media companies and journalist should act to reduce fake news; 75% consider it the responsibility of social media companies; and 68% think the government needs to act. As Figure 1-5 shows this sentiment was strongest amongst older age groups.

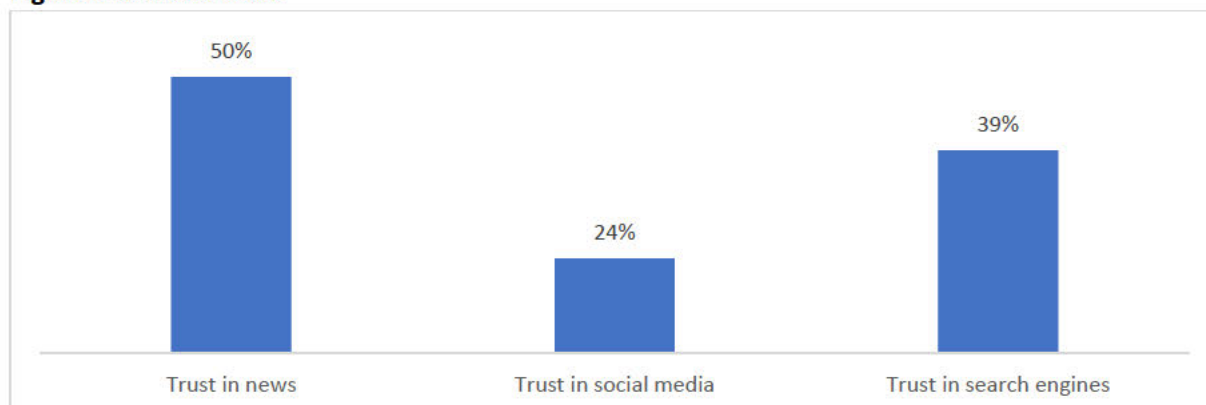
Figure 1-5. Responsible parties in reducing misinformation online



Social Media & Trust

Each year, participants are asked a range of questions to ascertain peoples' perception of social media and its reliability for news (Figure 1-6). In comparison to trust in news generally (50%), trust in news found on social media is very low at 24%, and around 39% for news accessed via search engines.

Figure 1-6. News trust

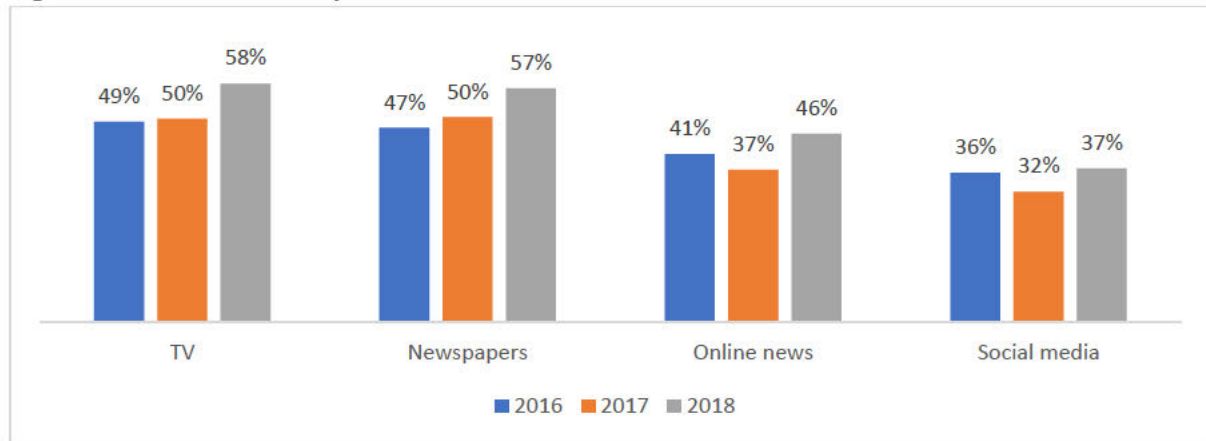


It should be noted that age is an important factor in determining the level of trust in social media for news. Young people are much more likely to trust news on social media than older Australians. This likely reflects the higher use of social media for news especially amongst the under 35s.

Those who use social media as their main source of news have lower trust in news

The survey found those who rely on social media for news are much less likely to trust news generally than people who rely on traditional sources of information, such as TV or newspapers. As Figure 1-7 shows trust has remained consistently lower amongst social media news users since 2016 in comparison to those who rely on traditional offline news sources.

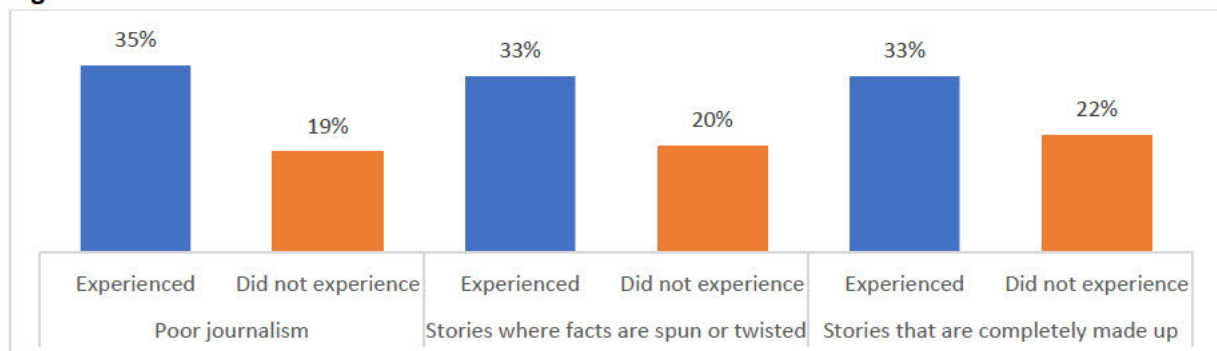
Figure 1-7. Trust in news by main sources of news



Fake news lowers trust in news

In addition, the 2018 survey also showed that those who rely on social and online media for news are more likely to encounter fake news. In turn, encountering fake news contributes to lower trust in news generally (Figure 1-8). Those who said they had experienced fake news also distrust the news significantly more than those who had not experienced fake news. 35% of those who experienced poor journalism did not trust news in general. Similarly, 33% of those who experienced political misinformation distrusted news.

Figure 1-8. Fake news and trust



Summary

Part 1 of this submission has attempted to offer the Inquiry an overview of social media use by Australians between 2016-2018 to provide contextual data for your deliberations.

The data shows that more than half of Australians used social media for news during this time and about one-fifth rely on it for news. While the use of Facebook for news has waned, there is an increase in the use of messaging apps for news and political discussion. Given concern about violence fuelled by fake news shared on WhatsApp in India¹ and the closed nature of these messaging systems, this growth in Australia needs to be monitored. Further research into how Australians are using messaging apps and other new forms of social media is needed.

¹ For example, https://www.washingtonpost.com/world/asia_pacific/as-mob-lynchings-fueled-by-whatsapp-sweep-india-authorities-struggle-to-combat-fake-news/2018/07/02/683a1578-7bba-11e8-ac4e-421ef7165923_story.html?noredirect=on&utm_term=.932cf5b0b989

While social media is used by more than 50% of news consumers, only a quarter of Australians trust it as a source of news. Reliance on social media for news and experience of fake news are also linked to lower trust in news generally. That suggests that experience of fake news undermines trust in democratic institutions such as the political process, as well as the role of the news media.

While experience of political misinformation is quite low, Australians concern about it is very high. This disconnect between high levels of concern and experience is a possible reflection of the intense public debate and reporting about the fake news phenomenon and the ongoing controversy surrounding the foreign interference in the 2016 US election.

Recommendation

Based on the trends observed in this data, we recommend the government fund continued monitoring of Australians' use of social media and messaging apps to inform strategies for combatting the spread of fake news. It is particularly important to understand how Australian news consumers come across information while engaging in online activities – incidental news exposure – and what impact this may have on news consumers' engagement with politics and the society. Previously, much focus was on monitoring the content of news. However, in an age of information abundance it is critical to understand what, how and how much information consumers are accessing via various platforms.

PART 2. Evidence of current Russian activity in the #auspol Twitter stream

Increasingly Australians are consuming their news through social media as successive Digital News Reports confirm. Social media platforms are also often the site of political discussions and these largely occur in two ways. First, on an ad hoc basis without any larger context beyond the particular details of friend and follower networks. Second, political discussions (and other thematically organised conversations) can occur through the structural affordances of hashtags. A 'hashtag' is a word or phrase preceded by a hash sign (#). Hashtags are part of online discourse that can be read as text, but they can also serve as a form of meta data for indexing self-selected thematic clusters of posts. Click on a hashtag and most social media platforms will display all posts that include that hashtag. In general, hashtags have become a resource used for organising discussions on social media and Twitter in particular. In the sense that participants post to hashtags, these hashtags therefore become a site of political discussion. Using techniques from network science, it is possible to group together specific sets of hashtags into topics and also group together particular accounts and clusters of user accounts as posting to a hashtag.

This part of the submission reports on a specific Australian hashtag #auspol and uses these digital research methods to present evidence of suspected Russian trolls and news sources attempting to shift the topics of political conversation to the Australian politics hashtag #auspol. An analysis of references to specific Russian news sources and correlating clusters of hashtags is used to show topic interest and correlating clusters of user accounts when drawing on these Russian news

sources. An analysis of a much larger set of tweets posted to #auspol that do not refer to Russian news sources shows a different cluster of hashtags and a different set of topic interests. The difference between these two clusters is a direct representation of the kind of influence that foreign agents can have on a nation's public sphere by shifting the topics of conversation.

In Australia, the hashtag #auspol has been termed a 'community' and 'material object for engaging with Australian politics' (Sauter and Bruns 2015, 47). #auspol has been in use for more than eight years with the first #auspol tweet appearing on 1 June 2010, taking off with the formation of government following the 2010 elections in Australia (Adams, Phung, and Venkatesh 2011)². The endurance of the hashtag from election to election and between elections, combined with the evidence that platforms like Twitter are an increasingly important source of news for Australians lends credence to concerns about security of Twitter as an information space.

While #auspol connects the Australian political community to an enduring discussion about politics and political life, it also serves as a point of entry for foreign influence in Australian political life. A great deal of attention has been paid to the Russian influence operations which were conducted against the United States during the 2016 election campaign. However, all democratic countries are at risk from such operations, a fact recognised by the recent adoption of new regulations on foreign lobbying and the expansion of laws on espionage. Influence operations seek to use the 'force of politics' rather than the 'politics of force' to achieve strategic objectives in relation to an adversary (Shevardnadze 1991, 50).

The data presented here examines the role of 'white' Russian propaganda outlets, that is, overt state-sponsored media platforms. Its purpose is to determine whether these platforms are producing a distinct discourse from what might otherwise be found on the #auspol stream. Although governments make use of covert and semi-covert means of influence, its RT and Sputnik platforms have been used to push Kremlin talking points and the Kremlin agenda over time. This includes not only specific foreign policy objectives around trade or military interventions, they often frame domestic news stories in ways which activate anxieties and erode trust in democratic institutions.

One poignant example of the latter is the tragic case of a man who killed himself and his family in Margaret River: while the ABC news reported this with the headline 'Margaret River Murder-Suicide: Seven People Found Dead at Home Near WA Holiday Town'³, RT reported this as 'Seven People, including 4 Children Shot Dead in Southwestern Australia'⁴. Whereas the ABC story reported the tragic events and framed the matter as a murder-suicide, the RT headline leaves open the possibility of a continuing threat despite having the same details as the ABC buried later in the text of the article. Social media play an important role in expanding the reach of such stories on Russian state propaganda platforms as Russian covert, human-controlled Twitter troll accounts, were more likely to promote links to these platforms than other Twitter users (Zannettou et al. 2018).

The researcher collected 632,398 tweets from the #auspol hashtag from 4 May – 30 July 2018, covering the lead-up to the announcement of the 2018 budget through the series of by-elections held on 28 July 2018. Tweets were collected using the 'freemium' streaming application programming interface (API). Of these tweets, 119 (0.02%) either were from RT (@RT_com and @Underground_RT) or one of the Sputnik accounts (@SputnikNewsUS and @SputnikInt), mentioned one of these accounts, or linked to one of their news platforms. This process for separating tweets

² There were two earlier uses of #auspol but they referred to politics in the city of Austin, Texas in the US.

³ <http://www.abc.net.au/news/2018-05-11/seven-people-found-dead-in-margaret-river-murder-suicide/9751482>

⁴ <https://www.rt.com/news/426426-australia-mass-shooting-deaths/>

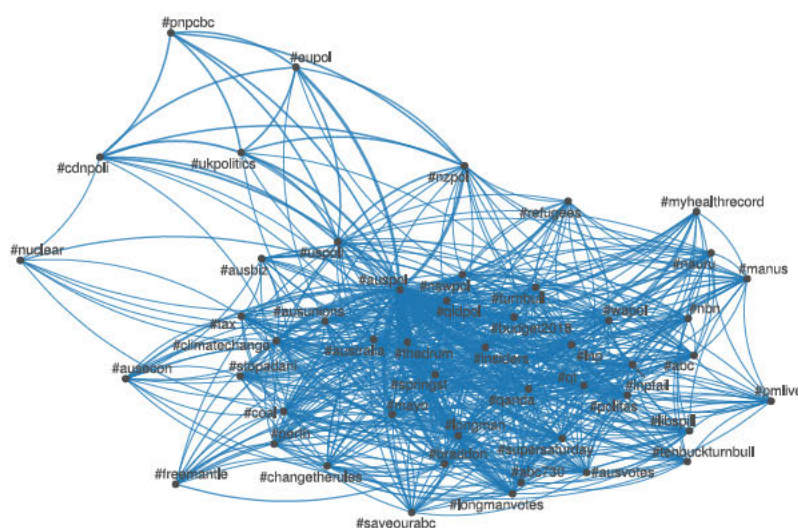
which both mention #auspol directly and link to official Russian propaganda outlets or reference them by their twitter handles covering the range of manners in which Russian propaganda outlets enter the #auspol communication stream.

These data provide evidence of where they are targeting and the difference in the subject matter they seek to introduce and audiences they seek to address within the #auspol stream. This provides a first cut on the range of entities communicated to (mentions) and the content (hashtags) in tweets which promote Russian propaganda platforms.

Hashtag networks in #auspol

To analyse these differences, we consider the top 50 Twitter accounts and top 50 hashtags mentioned by the subset of data which either communications RT or Sputnik materials or engages with these accounts versus the remaining twitter accounts. The mention networks are presented in Figure 2-1 and Figure 2-2.

Figure 2-1: #Auspol Hashtag Map for RT and Sputnik



The hashtag maps indicate an overlap of only 12 terms apart from #auspol: #uspoli, #cdnpoli, #pnpcbc, #ukpolitics, #polcan, #nzipol, #eupol, #qanda, #australia, #abc730, #thedrum, and #nuclear. Both qanda, and abc730 refer to ABC media properties which figure prominently in Australian politics. Six of the terms refer to the politics in other countries which point to an internationalisation of politics. The hashtag, nuclear, refers to both tweets about energy as well as tensions on the Korean peninsula over their nuclear weapons program and the Iranian nuclear agreement. The hashtag network connecting #auspol with foreign politics hashtag streams includes references to #abeldanger (and #abledanger which appears to be a typo) which are references to a blog that promotes conspiracy theories, predominantly concerning the United States. The appearance of #optoxicdagger is an effort to promote a conspiracy that the chemical attacks in Syria and the Novichok poisonings in the UK are 'false flag' operations to demonise the governments of Syria and Russia. An example of a tweet which references RT is presented in Figure 2-2.

Figure 2-2: #Auspol/RT Tweet

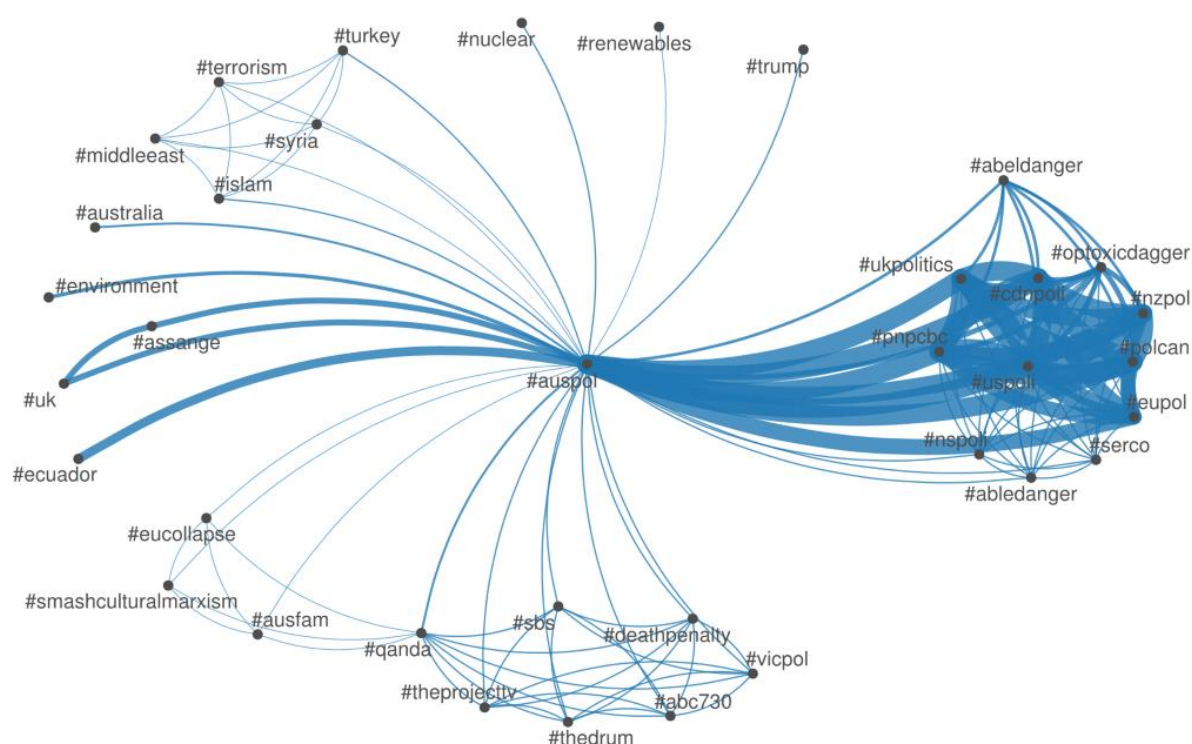


Although @GordBolton is most directly addressing US policy, this tweet addresses the Five Eyes countries as well as Europe in pushing disinformation claiming that Western countries support ISIS in Syria and it seeks to discredit the credibility of Western media outlets in favour of Russia Today. This tweet is fairly typical in that it aligns nonmainstream blog material with the position advocated by Russian formal propaganda outlets.

@GordBolton fits many of the characteristics associated with Russian Troll accounts which pose as citizens from Western countries as it consistently pushes Russian positions on MH17, the Syrian war, the novichok poisoning in the UK, along with criticisms of the neoliberal Western order (DFRLab 2018).

These tweets contrast with the prevailing hashtags in the #auspol stream which does not include references to Russian sources. The network of these hashtags is presented in **Figure 2-3**.

Figure 2-3: #Auspol Stream Hashtag Map (no RT or Sputnik)

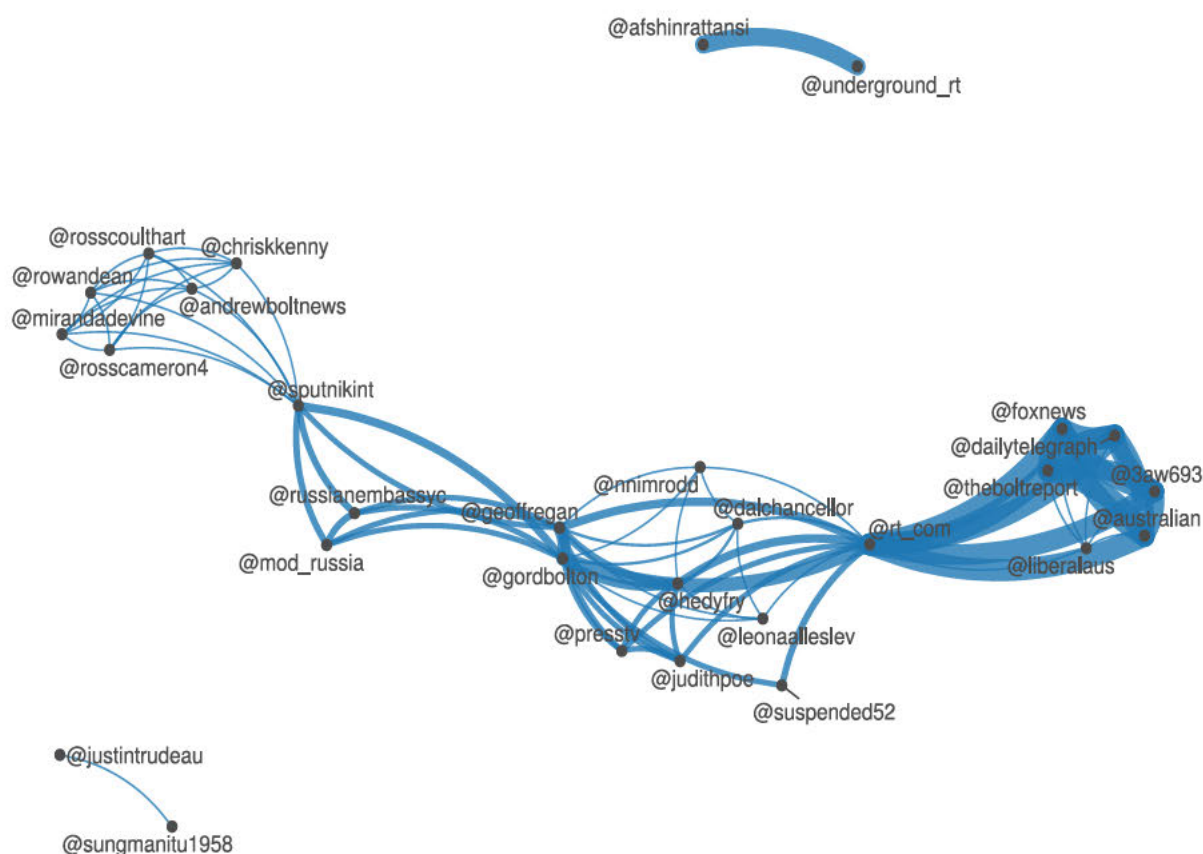


The focus on foreign events in the tweets referencing RT and Sputnik contrasts with the predominantly domestic concerns which populate #auspol among tweets which did not reference Russian media outlets. They contain lots of policy references such as debates over the budget (#budget2018), coal, offshore processing of refugees in Manus Island (#manus) and Nauru (#nauru), climate change (#climatechange), and so forth. Australian entities figure prominently whether it be hashtags mentioning properties of the Australian Broadcasting Corporation (ABC), the Prime Minister (#tenbuckturnbull), voting districts which held by-elections in July 2018 (#braddon, #mayo), etc.

Mention networks in #auspol

There are only two out of the 50 Twitter accounts that appear in both networks: @australian and @LiberalAus. The Australian is the premier newspaper within the News Corporation family of newspapers while @LiberalAus refers to the national Twitter account of the Liberal Party. While these accounts are central nodes in the network map for the RT and Sputnik tweets with direct connections to @RT_com, they are more marginal in the #auspol stream not containing RT and Sputnik sources. The most prominent account mentioned in this network, apart from @RT_com is @gordbolton who claims to be based in Canada. This account posts mostly about American politics and politics in the Middle East, retweets some content written in the Russian language, and criticises statements that claim Russia is seeking to influence the politics of other countries. The hashtag network for tweets which link to or reference Russian media platforms is presented in **Figure 2-4**.

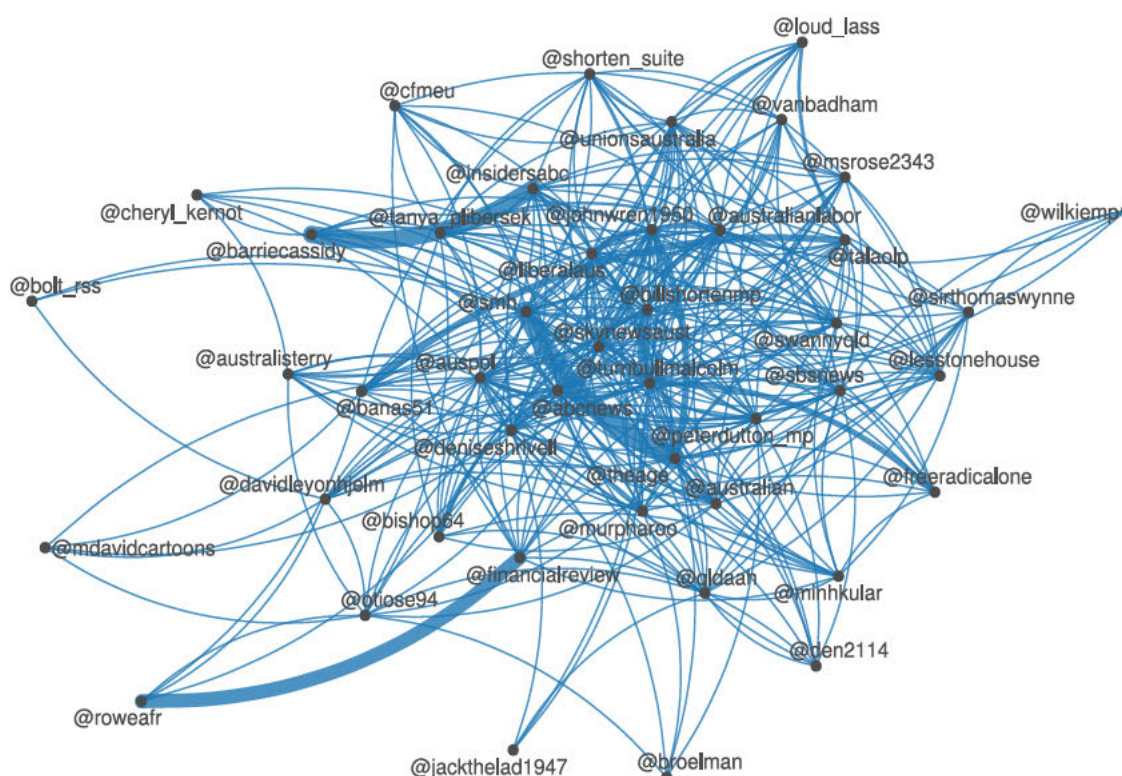
Figure 2-4: #Auspol Mention Network for RT and Sputnik



Beyond @rt_com and @gordonbolton, the next most commonly mentioned accounts are @foxnews, @australian, @dailytelegraph, and @baltreport, with 16 mentions each. Much of this is driven by the tweeting of a single account, @toponlinemedia, a Twitter account which has since closed. These outlets are part of the News Corporation family. The inclusion of @foxnews indicates an internationalisation of the discussion. The tightness of the network indicates the highest concentration of the interactions. In terms of the presence of political figures, two Canadian MPs, @geoffregan from Halifax and @hedyfry from Vancouver, and @justintrudeau, appear more prominently with ten, six, and four mentions, respectively. The most prominent Australian political entities include @dalygibson, a supporter of the Pirate Party, @juliebishopmp, the current foreign minister, and @liberalaus, the Twitter handle of the Liberal party.

By contrast, filtering out tweets mentioning Russian propaganda outlets, domestic Australian news organisations predominate. A graph of the mention network is presented in Figure 2-5. The organisations include ABC, Sky News, SBS, and News Corporation and Fairfax newspapers as well as prominent journalists. Beyond journalists, Australian politicians figure prominently including the prime minister, leader of the opposition, and cabinet ministers.

Figure 2-5: #Auspol Mention Network (no RT or Sputnik)



Summary

The hashtag and mention network data both indicate that, whereas #auspol is predominantly focused on domestic Australian politics, Russian state media are inserted into an international public, drawing in Twitter communities of political discussion across the West. These data point to both an internationalisation of topics as well as entities involved in the discussion. To the extent that it draws upon domestic Australian media, it tends to focus on those outlets which have been associated more closely with the political right in Australia (Griffen-Foley 2002; Jones and Pusey 2010). This may suggest that at present, Russian positions are thought to have greater affinity with right wing media personalities. Additionally, these tweets only represent two platforms and constitute a fraction of 1% of all communications on #auspol. Whether or not these trends persist may depend on how Australian media and politics regard the legislation regarding foreign influence in Australia. To the extent that these policies maintain strong bipartisan support, Russian propaganda efforts may find it difficult to gain a foothold in Australian political life.

Recommendation

Foreign influence is a complex problem, involving multiple sites of activity, and requires coordination across different parts of government. There are three elements to consider: the platforms through which foreign operations are executed, the targets of those activities (i.e. Australian citizens or a subset of the population), and the foreign principals carrying out these attacks. Hence, this requires

a coordinated response that would address the susceptibility of the Australian public to such operations; work with online platforms to identify, stop, and counter these operations; and, finally, the ability to deter foreign adversaries seeking to interfere in the democratic process. This might involve coordination between Australia's intelligence communities, Department of Foreign Affairs and Trade, law enforcement, and even the political parties themselves. It is important, therefore, that in addressing this problem, the Australian government works closely with its political parties in countering the threat posed by foreign influence operations.

PART 3. Media literacy

Improving the media literacy of citizens is one the best ways to combat fake news and protect consumers from the spread of political misinformation. In light of this, the Digital News Report 2018 asked three questions to better determine the level of news media literacy of the survey respondents (**Table 3-1**). The questions tested the participants' knowledge of the news environment, including who funds the national broadcaster; who is responsible for producing a press release; and how does Facebook determine the news they read. Whilst it is only three questions, academic research⁵ in this area suggests that knowledge of media industries, media content, effects, the real world, and the self are all essential elements of measuring an individual's news media literacy. In that context these questions are all central to the understanding of the context and creation of news.

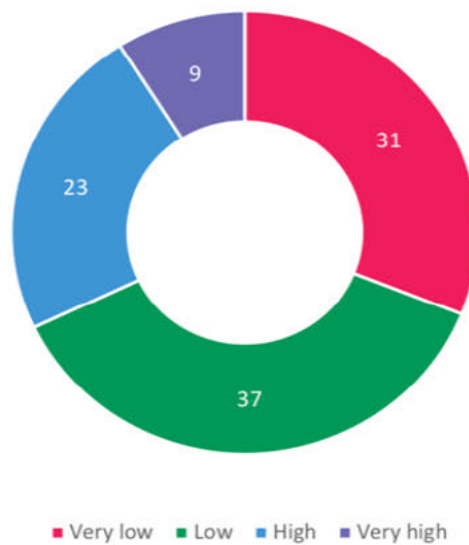
Based on the number of questions answered correctly respondents were ranked from having very low news literacy to very high news literacy. 0 correct = very low news literacy; 1 correct = low news literacy; 2 correct = high news literacy; and 3 correct = very high news literacy.

Table 3-1. Questions asked to measure news literacy

<p>Q1: Which of the following news outlets does NOT depend primarily on advertising for financial support? Please select one only. (1) Channel 7 (2) ABC (correct answer) (3) Herald Sun (4) Sydney Morning Herald (5) Don't know.</p> <p>Answers: 52% correct; 17% incorrect; 31% didn't know.</p>
<p>Q2: Which of the following is typically responsible for writing a press release? Please select one only. (1) A reporter for a news organization (2) A spokesperson for an organization (correct answer) (3) A lawyer for a news aggregator (4) A producer for a news organization (5) Don't know.</p> <p>Answers: 31% correct; 43% incorrect; 26% didn't know.</p>
<p>Q3: How are most of the individual decisions made about what news stories to show people on Facebook? Please select one only. (1) By computer analysis of what stories might interest you (correct answer) (2) By editors and journalists that work for Facebook (3) By editors and journalists that work for news outlets (4) At random (5) Don't know.</p> <p>Answers: 27% correct; 37% incorrect; 36% didn't know.</p>

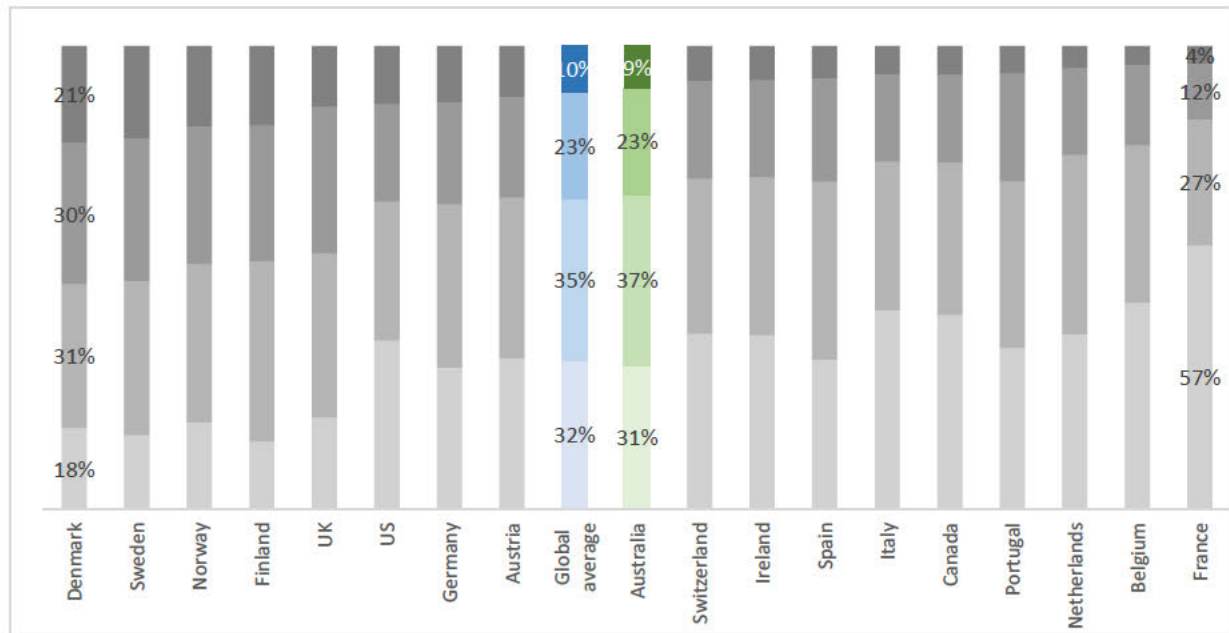
⁵ For more information on measuring news media literacy please see: Maksl, A., Ashley, S., & Craft, S. (2015). Measuring news media literacy. *Journal of Media Literacy Education*, 6(3), 29-45; Potter, W. J. (2015). *Media literacy* (8th ed.): Sage Publications.

Figure 3-1. Levels of news literacy in Australia (%)



Similar questions were asked in other countries that were relevant to local conditions. The data suggests that Australians' news literacy is relatively low in comparison to other countries, as shown in Figure 3-2.

Figure 3-2. News literacy: international comparison



Denmark had the highest proportion of news consumers equipped with high news literacy with half (51%) having high or very high news literacy levels. France had the lowest, with 83% of news consumers in the low and very low news literacy group. Australia was about mid-range, with 32% in the high and very high group and 68% in the low and very low group.

44 years and under, less educated, regional citizens have lower news literacy.

A demographic analysis of the news literacy findings revealed that men, those with higher education levels, and aged 45+ are more likely to have higher news literacy than other news users. It also showed that news consumers in regional and remote parts of Australia are more likely to have lower news literacy than those in major cities. This might reflect a lack of quality news sources in these parts of the country. It might also reflect that the topics asked were less relevant to news consumers in regional and remote Australia than those who live in urban areas

Higher access and interest mean higher news literacy

We found a positive correlation between news literacy, frequency of news use, and interest in news. The data shows those who use news more than once a day are more likely to be news literate than news consumers who use news less than once a day. Similarly, those with higher interest in news recorded higher levels of news literacy. Conversely, news consumers who use news less often and have lower levels of interest in news were less likely to be news literate.

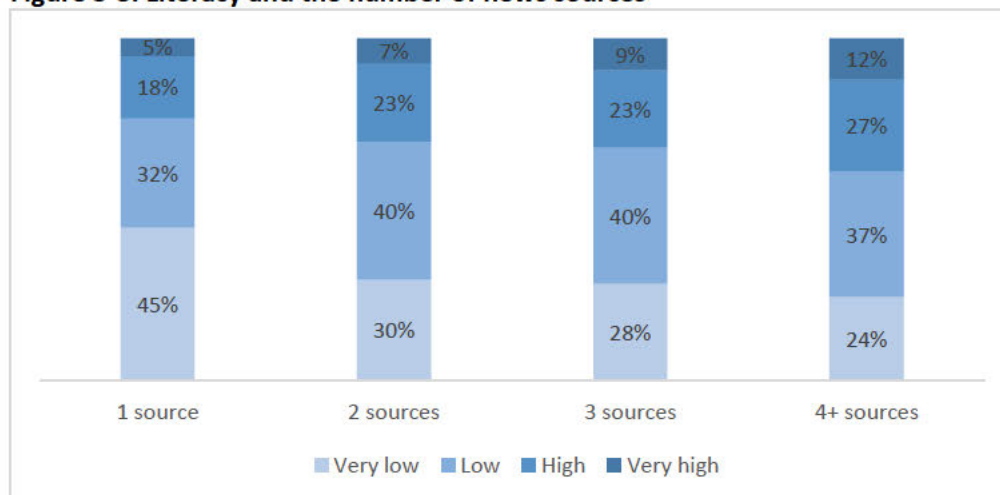
People who rely on social media for news have lower news literacy.

Three quarters (76%) of social media news consumers recorded a very low or low level of news literacy compared to 58% of people who mainly use online news sources, and 70% of those who rely on TV, radio and printed newspapers.

More news sources equate to higher news literacy

Highly news literate respondents use more sources of news than those with low news literacy. As Figure 3-3 shows, the level of news literacy grows in proportion to the number of sources used. Those who use the least number of news sources have the lowest level of news literacy.

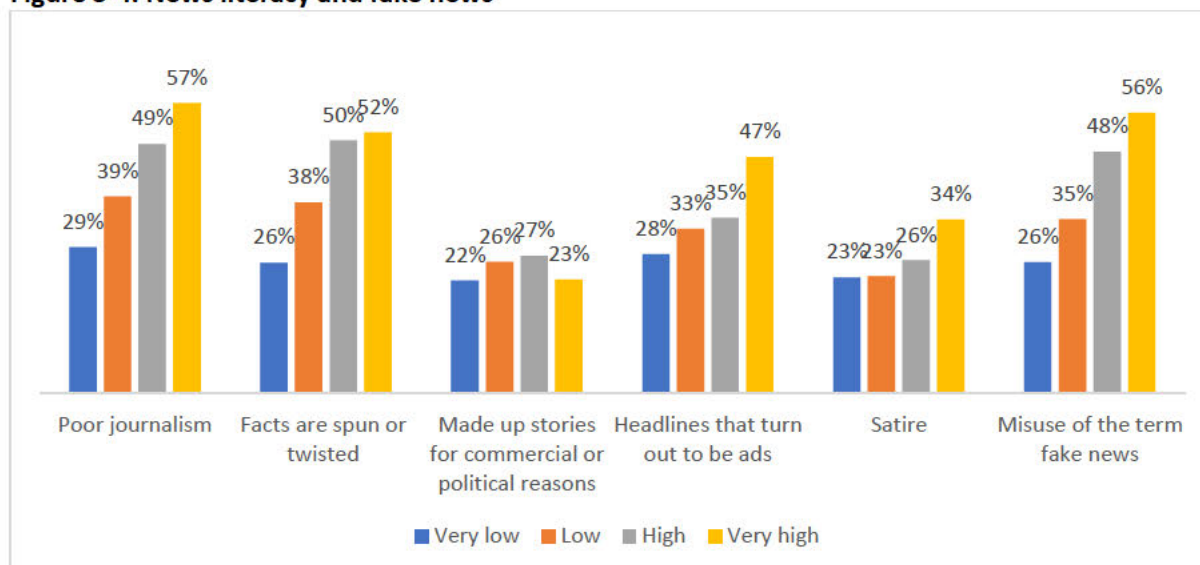
Figure 3-3. Literacy and the number of news sources



News literate more able to detect fake news

We also found a strong correlation between levels of news literacy and experience and concern about fake news. The data shows that news literacy is related to experience of fake news. Figure 3-4 reveals that those with higher news literacy report having experienced more fake news than those with lower literacy. This suggests that news consumers with lower literacy possibly have greater difficulty identifying misinformation and spotting fake news than those with higher news literacy.

Figure 3-4. News literacy and fake news



As well as experiencing more fake news, those with higher news literacy are more concerned about fake news in all forms, except for satire, which they are not so worried about. This again suggests that news consumers with higher literacy can distinguish humour from other types of fake news such as poor journalism, political spin and advertising.

These findings clearly demonstrate the importance of news literacy in helping to combat fake news. While Australians are savvy social media users and understand the risks and technical affordances of social media, these findings show they have a poor understanding of the wider media landscape and the important civic functions of news media, particularly among younger age groups.

These findings are supported by other research conducted by Notley, Dezuanni, Zhong, and Howden (2017). Their study of school age children found the majority were unable to identify fake news. While there are existing, high quality media literacy programmes available they are being underutilised.

Recommendation

Based on the low levels of understanding about algorithms and the wider Australian news media environment, we recommend all school and university students be taught information literacy⁶. In particular, young people who are growing up in a digital environment should learn about the role of algorithms and artificial intelligence (AI) in the production and dissemination of news and their impact on the news citizens consume. This element of the curriculum should also include techniques for verifying information sources and assessing the quality and motivation of the information. The curriculum should also include discussion about the social and democratic role of news media in society, the impact of digital disruption on the news media landscape, the makeup of the Australian news media landscape, the distinctions between journalism and other communications roles such as advertising and public relations. In developing new media literacy curricula, educators could look to work being done in Denmark and Sweden which both recorded the highest levels of media literacy

⁶ In the digital age, information literacy is one dimension of digital literacy (or digital fluency) and can be defined as the ability to (1) search, navigate and filter information, and the (2) knowledge of data generated and algorithms (Park, 2017).

amongst news consumers in the *Digital News Report* survey. A range of useful resources are listed in the Appendix.

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Appendix: Recent media literacy initiatives

Media Literacy Week	Media Literacy Week is an Australian Broadcasting Corporation initiative aimed at equipping Australians of all ages with the skills they need to understand and interpret news and information. From September 10-16, 2018, the ABC will share tips for navigating the modern media landscape.	abc.net.au/news/story-streams/media-literacy-week/ .
First Draft	Led by digital expert Clair Wardle, First Draft is at the forefront of research in this area developing simple verification tools and crafting policy recommendations. First Draft is a project of the Shorenstein Center on Media, Politics and Public Policy at Harvard University's John F. Kennedy School of Government. Its stated aim is to use research-based methods to fight mis- and disinformation online and provide practical and ethical guidance in how to find, verify and publish content sourced from the social web.	firstdraftnews.org .
NewsGuard	A former journalist, Steve Brill, developed a news ranking system called NewsGuard which rates the quality of news sources using an effective traffic light coding.	www.knightfoundation.org/reports/assessing-the-effect-of-news-source-ratings-on-news-content
Factitious	The Sage publishing company has launched a fake news game, Factitious, where students can evaluate whether a news story is real or fake	http://factitious.augamestudio.com/#/
Fakey	The Center for Complex Networks and Systems Research at Indiana has released Fakey, a mobile news literacy game which simulates a typical social media news feed, with a mix of news articles from mainstream and low-credibility sources. Players get more points for sharing news from reliable sources and flagging suspicious content for fact-checking.	https://fakey.iuni.iu.edu/ .
Zimdars' Indicators	Melissa Zimdars (Merrimack College) compiled in 2016 a list of 'False, Misleading, Clickbait-y, and/or Satirical "News" Sources' which also featured a comprehensive selection of discursive, stylistic, behavioural, etc indicators that sites may be fake.	https://docs.google.com/document/d/10eA5-mCZLSS4MQY5QGb5ewC3VAL6pLkT53V_81ZyitM/preview .