

COVID-19 Infodemic: Empowering Australia against infodemic

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Executive Summary

Since the beginning of 2020, the COVID-19 pandemic has exacerbated the misinformation and disinformation online so much so that the World Health Organisation has called it an 'infodemic' (World Health Organisation 2020). Academics and officials around the world have warned of the potential damage and harm infodemic can inflict on the public health and safety, social cohesion, and the democratic system if the governments do not respond to it quickly enough (ACMA 2020). The reality is even if the pandemic is curbed, the infodemic would continue unless Australia implements efficient policies that empower Australia to be better equipped at combating misleading contents on online spaces.

This report will produce a cross-national literature review of government reports mainly drawn from Europe and Australia, primary data and statistics from multiple digital platforms such as Twitter, YouTube, academic research, and etc from 2018 to 2021 to better understand the behaviour (such as the types of misleading content online, who spreads them and for what reasons) and the extent of misleading content online. Following, this report will lay out recommendations, based on the literature review, that are beneficial for policy makers of existing programs (The Code and Media Literacy program) in curbing the speed and influence of misleading content online. Ultimately this report aims to aid in the efforts to conserve the Australian democratic system, to reinforce Australia's social cohesion, and to protect Australian public's health and safety.

Findings

- State actors and public figures such as celebrities and politicians, account for a large volume of misleading content online. State actors often rely on state media outlets and other social media bots to disseminate large quantities of disinformation and malformation online. Whereas public figures, who only account for 20 percent of misinformation online, their posts usually account for 69 percent of social media engagements (Brennen *et al.* 2020, p.1).
- The current programs in Australia are not sufficient enough to significantly reduce the misleading content online, neither are they adequately equipped to adept to the everchanging landscape of online spaces.

- The Code, being a "watered-down" version of the European Code of Practice on Disinformation, has a lot of the same shortcomings as the EU's Code (Nguyen 2020). Some of these shortcomings include:

1. Inconsistent and underdefined terminologies in The Code.
2. The self-regulatory nature of The Code means a lack of performance indicators or a third-party independent entity to monitor how well different digital platforms are carrying out the objectives set by the ACMA.
3. Currently The Code has suggested they would provide "relevant" data to researchers to help them with the research against disinformation and misinformation (DIGI 2021). However, there are no discussions between the digital platforms and researchers to come up with what constitutes 'relevant' data.

- The Media Literacy programs for children and young adults are implemented inconsistently across Australian schools. Furthermore, there are not enough resources, funding, or support to help teachers make media literacy a priority in classrooms.
- Media Literacy is underfunded and underrated. 30% of all Australians have low level of media literacy skills, but they have little to no help from public resources (such as libraries) with navigating online spaces (Notley *et al.*, 2021, p. 7). Low media literacy skills and the lack of help are major problems for those who live in regional areas, who are older, have a lower educational background, and with a low income (Notley *et al.*, 2021, p.12).

Report Outline

Section One

This section will be devoted to understanding the differences between, misinformation, malformation, and disinformation, as well as the potential harm each type of misleading content can inflict. Following will be a literature review on the main sources of misleading content online, such as state actors and public figures, and an analysis on why they may be motivated to disseminate misleading content online. In the last part of this

section there will be a brief assessment on how harmful these contents are in Australia.

Section Two

Following the literature review on the latest characteristics of misleading content online, there will be a cross-national assessment of the efficacies of The Code in preventing the flow of misleading content online. Then there will be an assessment of how well media literacy is implemented into Australia, and how effective media literacy is at empowering Australians in being aware of misleading content online when they are navigating the internet.

Further Research

- The relationship between disinformation, misinformation, and malformation and long-term and short-term harm to public health, safety, and Australian democracy is still unknown, and requires urgent attention.
- There is yet to be a media literacy education program implemented across Australia, one reason being that there is still uncertainty as to how to implement the program into classrooms, and the other reason being that there is not a consistent education program written for media literacy for schools.
- More research needs to be done on how to balance free speech and the regulations of misleading content.

Abbreviations

Australian Code of Practice on Misinformation and Disinformation = The Code

A decorative background at the top of the page features a network diagram with white nodes and connecting lines on a blue gradient background. The nodes are arranged in a somewhat circular pattern, with lines radiating from a central point towards the edges.

Introduction

The COVID-19 pandemic has brought with it an infodemic that has been accused to have caused harm to the democratic system, public's health, and safety. In addition, this infodemic has revealed a serious gap in the Australian system to mediate the threat of misleading content online. Consequently, this report aims to provide a literature review on the latest research on the behaviour of misleading content online; and provide recommendations that will strengthen The Code and the media literacy programs, by drawing mainly from research done in Europe, and in Australia. In essence this report aims to aid in the efforts to preserve Australian democracy and prevent the spread the misleading content online which could harm social unity, safety, and health.

Section one of this report will provide an up-to-date cross-national literature review that will delve into the most common types of misleading content online, such as misinformation, malformation, and disinformation, and a brief analysis on how they are different to each other, and what sorts of harm they can inflict. Following this will be an exploration of the possible motivations of the two main groups of disseminators of misleading content online, such as the state actors and public figures. The last part of this section would look at the potential harm these misleading contents would cause in Australia.

Section two of this report will assess the efficacy of The Code and the media literacy programs in mediating the spread of misleading content online, and in minimising the potential long-term and short-term harms of misleading content; Furthermore, this report draws from research and similar policies done in Europe to provide recommendations that would enhance The Code. This report will also rely on research and recommendations from Australian research to recommend improvements to strengthen the media literacy programs for adults and youths.

Ultimately this report argues that there needs to be two lines of defence against this misleading content online: The first defence line is to create efficient programs that will reduce the volumes of misleading content online. The second line of defence is to strengthen Australians' media literacy skills so that they can identify and, in the future, report the misleading content.

Section 1

Literature review on the behaviour of misleading content online



1.1 Aim of the report

As aforementioned, the spread of misinformation is prevalent in different societies and Australia is no exception. The following literature reviews will demonstrate that social media platforms such as Facebook, Twitter and YouTube are the most powerful mediums through which state actors, users and public figures spread misleading content. These misleading contents are inherently harmful in both the short and long term, and they could damage Australians' trust in health officials, the government, social stability, and democracy. Scholars and official assessments have suggested that efficient measures must be taken to mediate the further spread of misinformation. This report concurs with their assessments and aims to create an assessment of the efficacy of some of the proposed or active programs in Australia in curbing the potential harms of misleading content as suggested by the literature review; and also by comparing them to similar programs that has been done in Europe and assess what these programs in Australia need to adopt.



1.2 Malformation, misinformation and disinformation

As aforementioned, the spread of misinformation is prevalent in different societies and Australia is no exception. The following literature reviews will demonstrate that social media platforms such as Facebook, Twitter and YouTube are the most powerful mediums through which state actors, users and public figures spread misleading content. These misleading contents are inherently harmful in both the short and long term, and they could damage Australians' trust in health officials, the government, social stability, and democracy. Scholars and official assessments have suggested that efficient measures must be taken to mediate the further spread of misinformation. This report concurs with their assessments and aims to create an assessment of the efficacy of some of the proposed or active programs in Australia in curbing the potential harms of misleading content as suggested by the literature review; and also by comparing

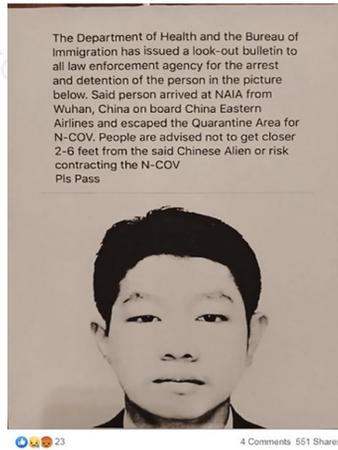


Figure 1 A xenophobic Facebook post that accused a "Chinese Alien" of spreading Covid-19 in the Philippines.



Figure 2 video on Facebook that claims China was the example other countries followed in controlling COVID-19

them to similar programs that has been done in Europe and assess what these programs in Australia need to adopt.



1.3 State actors as sources of disinformation

Research institutes such as the Australian Strategic Policy Institute, have suggested that the CCP, and the Kremlin are the two main state actors responsible for disseminating disinformation and malformation online (Thomas, Zhange & Wallis 2020; Serrato & Wallis 2020; Swan 2020). Together these states have propagated disinformation and malformation that often echo similar themes: 1) The US government is

responsible for or is an accomplice in creating the coronavirus; 2) Emphasising the incompetence of the US government and the Trump administration to manage the virus domestically and internationally, while highlighting China and Russia's international efforts and domestic effectiveness in dealing with the virus. 3) To promote pro-Kremlin or pro-CCP narratives abroad (Thomas, Zhange & Wallis 2020; Serrato & Wallis 2020). 4) To undermine the Pfizer and Moderna vaccines, while promoting their own vaccines. Together, these themes work to increase the state actors' soft powers while undermining the efficacy of the Western democratic system, and to increase their economic prospects.

1.3.1 CCP

The CCP has disseminated disinformation during the COVID-19 crisis via state regulated media outlets and social media accounts, in an effort to promote pro-CCP sentiments, and to challenge the US' dominant superpower status (Zhao 2020, p. 453). In figure 3 is a tweet made by China Xinhua News, a CCP regulated news media outlet, the tweet highlights China's proactive international actions to stop the virus with a "pro-China tone" (Zhao 2020, pp. 453-4). The tweet in figure 4, tweeted by China's South African ambassador highlights China's "outward focused efforts" in international communities, to promote their government's peaceful endeavours in aiding the international community, while highlighting the US's stagnate international efforts. By comparing themselves to the US, it creates what Dr Zhao calls an "Us vs US" narrative which further undermines the US democratic institution (Edney 2012, p.906; Zhao 2020, p. 453). The CCP also employs automated accounts on Facebook and Twitter that would spam "every 17 minutes and cycling through a short list of 21 common tweets" (figure 5) containing messages that criticise the US government, the democratic system, and the Trump administration (Zhao 2020, p. 453; Thomas, Zhange & Wallis 2020). During the earlier stages of COVID-19, the CCP disseminated malformation that accused the US of creating the virus, as shown in figure 6, where Lijian Zhao posted a problematic article on his twitter that claims the virus originated from the US.



Figure 3 China Xinhua News tweeting about China's proactive international assistance in a pro-China tone. Source: @XHNews 9 April 2020



Figure 4 Chinese South Africa ambassador tweeting a pro-China message, that emphasises the US lac of international efforts. Source @AmbCHENXiaodong 17 March 2020

6/07/2020	8:38:55	dominiqueteast12	The United States has hit an all-time record for new COVID-19 cases for the second day in a row, but Trump Sai
6/07/2020	8:21:39	ericama73540803	Trump's failure to govern has led to a drop in his approval ratings. he turned his anger on the media! https://w
6/07/2020	8:04:40	josephavinne	Trump EVER does. https://www.youtube.com/watch?v=VG-zrxDFaLA ...
6/07/2020	7:30:39	mindiharmont12	I believe, "symbol of hate", this is what Trump intended. https://www.youtube.com/watch?v=VG-zrxDFaLA ...
6/07/2020	6:56:40	nancycarraway5	When Trump was asked about sex scandals, he drove reporters out of anger! https://www.youtube.com/watch?v=VG-zrxDFaLA ...
6/07/2020	6:39:39	liffany90502340	Trump said disinfectants can cure diseases! Are you kidding me? https://www.youtube.com/watch?v=VG-zrxDFaLA ...
6/07/2020	6:22:24	melinda57818877	AV actress on the show burst Trump's sex "I don't want to go to bed with him"! https://www.youtube.com/watch?v=VG-zrxDFaLA ...
6/07/2020	6:05:25	melissa22485409	Do you think there is discrimination in the United States? of course! https://www.youtube.com/watch?v=VG-zrxDFaLA ...
6/07/2020	5:48:24	meganle30515138	Black people are never slaves! Stand up your high head! https://twitter.com/novthisnews/status/1270524330
6/07/2020	5:14:25	laurada74473301	Black people who died under racial discrimination are not in the minority. https://twitter.com/novthisnews/f
6/07/2020	4:57:24	eribro50854306	Team Trump Pushes CDC to Dial Down Its Death Counts https://www.thedailybeast.com/team-trump-pushes
6/07/2020	4:40:24	shannon39051737	Need a Coronavirus Test? Being Rich and Famous May Help https://www.nytimes.com/2020/03/18/us/coron
6/07/2020	4:23:24	meinh02kater1	Sadly the cops have decided this community event that has gone on for weeks is no longer allowed and have t
6/07/2020	4:06:10	amyfars13796495	We're in a worse place than we were early on! https://on.msnbc.com/Z2yqUyC
6/07/2020	3:49:09	eileen169257831	The Trump administration's repatriation of a large number of illegal immigrants is a very cruel and inhuman pr
6/07/2020	3:32:09	bonnie20064319	the cold-blooded Trump decided to export the virus to poor countries that were unable to cope with the epid
6/07/2020	3:15:09	regina18103811	https://p.dw.com/p/3c2E1?maca=zh-Twitter-sharing ... <U+4B2D><U+767B><U+53D7><U+5230><U+6027><U+4F4F
6/07/2020	2:58:09	katheri04786426	All systems can be flawed if the actors are not perfect. Democracy is being destroyed by imperfect participant
6/07/2020	2:41:09	patrici89296231	'Janky System' is a stupid, failed system! https://twitter.com/novthisnews/status/127896243141187712 ...
6/07/2020	2:24:09	amykemp65504736	The United States has hit an all-time record for new COVID-19 cases for the second day in a row, but Trump Sai
6/07/2020	2:06:54	kimberl83364998	Trump's failure to govern has led to a drop in his approval ratings. he turned his anger on the media! https://w
6/07/2020	1:49:55	amyvang61887951	Trump EVER does. https://www.youtube.com/watch?v=VG-zrxDFaLA ...
6/07/2020	1:32:58	nicole147086316	"He has never lied to the American people." ... that's literally the only thing
6/07/2020	1:15:54	latrice43379603	I believe, "symbol of hate", this is what Trump intended. https://www.youtube.com/watch?v=VG-zrxDFaLA ...
6/07/2020	0:58:55	alicia42315753	Donald Trump has a hiring problem—his "best people" promise didn't pan out! He is only a dishonest busin
6/07/2020	0:41:54	marchohsain	When Trump was asked about sex scandals, he drove reporters out of anger! https://www.youtube.com/watch?v=VG-zrxDFaLA ...
6/07/2020	0:24:54	ashley130925930	Trump said disinfectants can cure diseases! Are you kidding me? https://www.youtube.com/watch?v=VG-zrxDFaLA ...
6/07/2020	0:07:57	pinskyeuflima	AV actress on the show burst Trump's sex "I don't want to go to bed with him"! https://www.youtube.com/watch?v=VG-zrxDFaLA ...
5/07/2020	23:50:40	cindyb19326312	Do you think there is discrimination in the United States? of course! https://www.youtube.com/watch?v=VG-zrxDFaLA ...
5/07/2020	23:33:39	meganpalacios9	Black people are never slaves! Stand up your high head! https://twitter.com/novthisnews/status/1270524330
5/07/2020	23:16:39	nikkination5	Yes, the United States is your white country. it is the country that you whites built after the slaughter of India
5/07/2020	22:59:39	josephavinne	Black people who died under racial discrimination are not in the minority. https://twitter.com/novthisnews/f
5/07/2020	22:42:39	meganpeoples15	Team Trump Pushes CDC to Dial Down Its Death Counts https://www.thedailybeast.com/team-trump-pushes
5/07/2020	22:25:40	hannah17494121	Need a Coronavirus Test? Being Rich and Famous May Help https://www.nytimes.com/2020/03/18/us/coron
5/07/2020	22:08:39	mariajo34444778	Sadly the cops have decided this community event that has gone on for weeks is no longer allowed and have t
5/07/2020	21:51:24	cynthia05141642	We're in a worse place than we were early on! https://on.msnbc.com/Z2yqUyC
5/07/2020	21:34:25	melissa22485409	The Trump administration's repatriation of a large number of illegal immigrants is a very cruel and inhuman pr
5/07/2020	21:00:25	bethany63748515	All systems can be flawed if the actors are not perfect. Democracy is being destroyed by imperfect participant
5/07/2020	20:43:25	laurada74473301	'Janky System' is a stupid, failed system! https://twitter.com/novthisnews/status/127896243141187712 ...
5/07/2020	20:26:24	alyssa73094824	The United States has hit an all-time record for new COVID-19 cases for the second day in a row, but Trump Sai
5/07/2020	20:09:25	amsandar72243009	Trump's failure to govern has led to a drop in his approval ratings. he turned his anger on the media! https://w
5/07/2020	19:52:25	juliavillaflo3	

Figure 5 Automated Twitter accounts that recycle the same messages in cycles, source: ASPI



Figure Figure 6 China's Foreign Ministry Spokesperson Zhao Lijian claims that the virus originated from the US

1.3.2 Kremlin government

Similarly, pro-Kremlin messages containing disinformation, and misinformation regarding the origin of the virus has been disseminated by news media outlets regulated by the Kremlin government. Kremlin-run media outlets such as *Sputnik* and the pro-Russian separatist news outlet *News Front* publish their news in multiple languages, but they mostly target Russian and English language countries (Serrato and Wallis, 2020, pp. 3, 5). Their messages often entail disinformation that claims the virus originates from an US laboratory, the same narrative that the CCP put out (Serrato and Wallis, 2020, p. 6). In addition, their messages often include disinformation about their efforts in aiding the international community through this pandemic, and in so doing they emphasise the incompetency of the US government and the EU. In table 1 below shows the types of disinformation Russia is spreading, and they range from disinformation about the origins of the virus (“originates in US labs”); their international aid relief efforts with China (“Moldova is helped only by China and Russia in the fight with COVID-19”); The incompetence of the EU (“As a result of the coronavirus pandemic the end of the EU is approaching”) (Serrato and Wallis, 2020, p. 6).

1.3.3 Russia and China’s recent disinformation on the Pfizer and Moderna vaccines

In recent months (January-June 2021), Kremlin and the CCP have spread malformation about the efficacy of Western vaccines, especially the Pfizer vaccine. Scholars have suggested that Kremlin and the CCP target Pfizer and Modern because they are direct economic competitors of their own vaccines, namely Russia’s vaccine Sputnik v, and China’s Sinovac; in addition their vaccines are a way to “self-promote” their competency, which again returns to their main objective which is to promote their respective soft powers (Schafer *et al.*, 2021). Although Kremlin and the CCP do not promote each other’s vaccines since they have their own vaccines to sell, nevertheless they still avidly disseminate malformation about the incompetency of Pfizer and Moderna vaccines via Twitter. In addition, both states also suggested that their respective vaccines have been unjustly targeted by Western media, as part of an anti-Chinese or anti-Russian smear campaign (Schafer *et al.*, 2021). In a report by Schafer *et al* (2021), they used the Hamilton 2.0 dashboard to find that “86 percent of surveyed Russian tweets mentioning Pfizer and 76 percent of tweet

Topic	Title
Bill Gates	Bill Gates is working on depopulation policies and plans for dictatorial control of world politics
Bill Gates	Bill Gates warns of an ineffective coronavirus vaccine
Bill Gates	Covid-19 vaccines are a big pharma fraud led by Bill Gates
China	Moldova is helped only by China and Russia in the fight with COVID-19
China	China’s political system prevails over the European Union in the fight against coronavirus
China	Coronavirus is psychological warfare against enemies like China and Iran
EU	The coronavirus puts EU’s existence into question
EU	As a result of the coronavirus pandemic the end of the EU is approaching
EU	Illegal EU sanctions hinder Syria’s ability to fight COVID19
NATO	NATO countries have been increasing the defense spending and now they don’t have lung ventilators
NATO	Coronavirus may be the latest step in NATO’s containment strategy against China
NATO	The coronavirus destroyed the myth of the NATO’s super army, NATO is fleeing Europe
Ukraine	In Ukraine, doctors quit en masse because of Ukrainian soldiers with COVID-19
Ukraine	A pensioner died in Ukraine after being fined for violating quarantine
Ukraine	There is no one to fight the coronavirus in Ukraine, the epidemiological system is destroyed
US	Czechia is US’s puppet, removal of Konev’s monument was sanctioned by Washington
US	Coronavirus an Anglo-Saxon biological warning: originates in US labs; targets opponents of the US
US	The coronavirus infection on a US aircraft carrier jeopardises the invasion of Venezuela

Table 1

mentioning Moderna coded as negative” (Schafer *et al.*, 2021). Scholars believe this is most likely because the Kremlin wants to increase their economic opportunities by shedding a positive light on their own vaccines (Schafer *et al.*, 2021).

In figure 7 below it shows the number of tweets coded as positive, negative or neutral, tweeted by Russian-affiliated accounts (Schafer *et al.* 2021).

Although it is currently still unclear as to why AstraZeneca has received more positive coverage by Russian-affiliated accounts; scholars have hypothesised that this is because Sputnik V was combined with AstraZeneca to make the latter more effective by increasing its effectiveness from 70% to 90% (Thu, 2021). After this collaboration was announced, the tonal shift in Russian’s coverage of AstraZeneca changed dramatically. Pro-Kremlin state media spread referred to the AstraZeneca as the “monkey vaccine” because it could

turn the recipients of the vaccine into monkeys; however, this quickly changed after Sputnik V’s collaboration with AstraZeneca, Kremlin’s coverage of the latter vaccine became more positive as shown in figure 8 (Schafer *et al.*, 2021).

In contrast, China’s coverage of Western vaccines has been relatively neutral, however they have been more avid in propagating Sinovac than Russia has been propagating their own vaccines. In the same report by Schafer *et al.* (2021) they show that of the 100 most retweeted tweets of Sinovac, not one of them was coded as having a negative connotation as shown in figure 9. In the Chinese state-run tabloid, Global Times they have spread disinformation that claims Western countries’ approval of the Pfizer vaccine was motivated by economic and diplomatic reasons (figure 10), therefore undermining the efficacy of the vaccine as well as the credibility of Western countries, especially the US (Schafer *et al.*,

	Positive/Neutral	Negative	Total
Sputnik V	50	0	50
Pfizer	7	43	50
AstraZeneca	36	14	50
Sinovac	43	7	50
Sinopharm	46	4	50
Moderna	12	38	50
Total	194	95	300

Figure 7

2021). Russia and China's malformation and disinformation about Pfizer and Moderna are believed to be economically and politically motivated and ultimately to see who can win the "vaccine race" (Thu, 2021, p. 19).



1.4 Celebrities and public figures as sources of misinformation

Although state actors contribute greatly to the volume of misleading content online, public figures, celebrities, and brands who spread misinformation or disinformation online are reciprocated with the most social media engagements. In a study by Brennen *et al.* (2020, p.1) they analysed a sample of 225 pieces of misinformation, and they find that celebrities and public figures make up 20 percent of misinformation online, however they make up 69 percent of social media engagements. In the beginning of the coronavirus, celebrities widely disseminated and legitimised the conspiracy theory that 5G towers contributed to the spread of coronavirus (Hutchinson, 2020). The high-profile celebrity Woody Harrelson is one of the influential celebrities who endorsed the 5G towers conspiracy theory. Harrelson posted two posts on his Instagram, the first one claims that COVID-19 is spread by 5G cell phone towers, and the post has 18,000+ likes as shown in figure 11; and the second post is a repost of a reconfigured video of Hong Kong protesters that says, "Chinese bringing 5g antennas down", which has totalled 194,000+ views on Harrelson's Instagram as shown in figure 12. Political leaders receive even higher social media engagements.

For example, Donald J. Trump has mentioned that hydroxychloroquine can cure the virus in his tweet on March 21 2020, which has received "385,700 likes and 103,200 retweets" (Niburski and Niburski 2020, p.2). This is followed by coverage by mainstream news outlets such as Fox News, MSNBC and CNN which mentioned Chloroquine (Niburski and Niburski, 2020). Although these health claims by Trump have been widely circulated, a study in November 2020 by (Enders *et al.* 2020, p. 5) found that these claims "have not received widespread support". While those who do believe in the these misinformation/disinformation are motivated by a distrust in scientists, political figures, and a general acceptance of conspiracy theories (Enders *et al.* 2020, p. 5).

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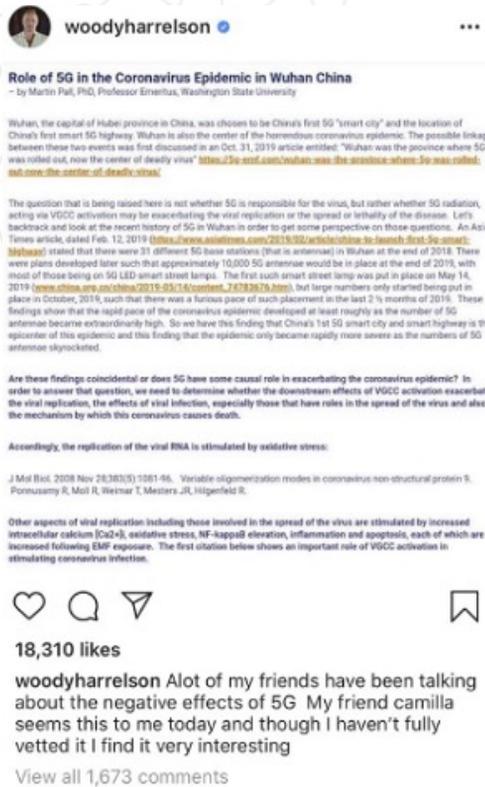


Figure 11 Woody Harrelson reposting a discredited claim that cell phone towers spread COVID-19. (Hutchinson 2020)



Figure 12 Originally the reconfigured video had 31 views, but after Harrelson reposted it on his Instagram it had totalled 194,508 views

claims by Trump have been widely circulated, a study in November 2020 by (Enders *et al.* 2020, p. 5) found that these claims “have not received widespread support”. While those who do believe in the these misinformation/disinformation are motivated by a distrust in scientists, political figures, and a general acceptance of conspiracy theories (Enders *et al.* 2020, p. 5).

1.5 How harmful are these misleading content to Australians, and what can be done?



Most extreme examples of misleading content examined so far are in the US and Europe, and although it is not as severe in Australia, inaccurate information is inherently harmful especially since this information is online and can be accessed from around the world (Great Britain *et al.*, 2019). In a research by the University of Canberra conducted between 18th and 22nd April 2020, they found that 23 percent of the 2,196 participants has reported encountering a great deal of misinformation, while 36 percent said they occasionally come across some misinformation (Park *et al.*, 2020, pp. 6, 26). Consequentially contact with misinformation has shaped beliefs about and trusts in governments, and consequently conspiracy beliefs are starting to have a stronger hold on the Australian minds. In a survey by YouGov Cambridge Globalism 2020 (figure 13), they found 23 percent of Australians answered definitely true or probably true, when they are asked if the coronavirus was created and spread by “powerful forces in the business world” (YouGov-Cambridge 2020). In another question which asks the participants if they believed the true harm of the vaccines have been deliberately hidden from public knowledge, 21 percent of Australians

answered definitely true or probably true (YouGov-Cambridge 2020). From these surveys a trend shows an increase distrust in health officials, governments and an affinity to conspiracy theories in Australia. A distrust in health officials may affect the population’s willingness to get vaccinated, and misinformation in general which may have caused social unrests in Australia’s major cities (Bogle 2021). This surge in distrusts was investigated by Pickles *et al.* (2020) and they found that in Australia those who tend to agree with misinformation about Covid-19 are associated with being younger, “male gender, lower education, and primarily speaking a LOTE at home” and have “low levels of digital health literacy, perceived threat of COVID-19, confidence in the government, and trust in scientific institutions” (Pickles *et al.*, 2021, p. 6). Academics and reports have revealed a surge in misinformation in Australia and its effect, and new measures must be implemented to mediate the further spread of misinformation.

Section 2

Assessing the efficacy of active and proposed programs in Australia to mediate the dissemination of misleading content online



2.1 Australian Code of Practice on Misinformation and Disinformation

The *Australian Code of Practice on Misinformation and Disinformation* (ACPMMD) or The Code is a proposal put forward by the Australian Communication and Media Authority (ACMA), after the Australian Government initiated the *Government Response and Implementation Roadmap for the Digital Platforms Inquiry* in December 2019 (Australian Government 2019). The role of the ACMA is to oversee the development of this voluntary code of practice, while the DIGI and other digital platforms develop a plan on how to address online misinformation and disinformation online. The signatories of the code that make up the DIGI are Google, Twitter, Microsoft, TikTok, Redbubble (Dunne 2021). In the proposal by the ACMA, they laid out three main objectives to guide The DIGI's development of the code: 1) To reduce misinformation spread on digital platforms and protect the users of the platforms from the effect of misinformation; 2) To empower users to assess the credibility of news and information; 3) To direct attention and energy onto the "principles of transparency and accountability" (DIGI 2021). In February 2021, The DIGI published the code and proposed seven objectives which corresponds to the three objectives initially laid out by the ACMA (DIGI 2021): 1) Reduce misinformation and disinformation that can potentially harm users by removal of content, labelling false content and etc; 2) Demonetise accounts that propagate disinformation; 3) To carry out this code, section 5.2 of The Code states that "not all objectives and outcomes will be applicable to all Signatories who may adopt one or more of the measures" (figure 14). Continuing on in section 7.1, it states that Signatories can "opt-in[to]" objectives from the seven objectives they would commit to by signing an "Opt-in Nominations Form" Appendix 1 (DIGI 2021). However, in 7.2, it also states that the Signatories are able to withdraw from a code they opt-into when they notify the DIGI (figure 15).

5.2. *Signatories Commitments.* All Signatories commit to the core Objective 1 of this Code so as to contribute to reducing the risk of Harms that may arise from the propagation of Disinformation and Misinformation on digital platforms as set out in Outcome 1a, and will provide an annual report as set out in section 7. Not all objectives and outcomes will be applicable to all Signatories who may adopt one or more of the measures set out in this section 5 in a manner that is relevant and proportionate to their different services and products, in accordance with the guidance in section 6. Signatories recognise that measures implemented under the Code may also evolve to reflect changes in their services and products, technological developments and the information environment.

Figure 14

- 7.1. *Opt-in:* In recognition of the variation in business models and product offerings of Digital platforms, this Code is designed to allow a range of businesses to make commitments by way of opt-in arrangements. Within three months of signing the Code, Signatories will nominate the provisions to which they commit using the Opt-in Nominations Form in Appendix 1. A Signatory is not bound to comply with commitments it has not nominated.
- 7.2. *Withdrawal from Code:* A Signatory may withdraw from the Code or a particular commitment under the Code by notifying DIGI.

Figure 15

2.1.1 European Code of Practice on Disinformation

Few years earlier in 2018, Europe has designed the roadmap *The Code of Practice* (COP) for digital platforms to reduce disinformation "on a voluntary basis" (European Commission 2021). Similar to The Code, the European Commission is to oversee the development of COP, administrated by Signatories including Facebook, Google, Twitter, Mozilla, Microsoft (joined May 2019), and TikTok (joined June 2020) (European Commission 2021). The code's objectives are relatively similar to the code developed in Australia, it includes the attempt to reduce disinformation by 1) Reducing "revenues of the purveyors of disinformation"; 2) Drawing a clear distinction between advertisements and news or editorial content, and advertisements need to be easily identified as a "paid-for communication"; 3) Signatories must uphold the integrity of services and make sure the accounts that

disseminate disinformation should be suspended, and bots activities must not be confused with human interactions; 4) To empower users allowing them to discover contents and access different news sources, and for Signatories to be transparent and prioritise relevant and authentic information; 5) Signatories should allow academics to access data for "fact-checking research activities" (European Commission 2021). Identical to The Code, in section 5 of the European code (figure 16), a Signatory "may withdraw from the Code or from specific commitments within the Code at any time...by notifying the European Commission" (European Commission 2021). The European Code and The Code are very similar in terms of their objectives, as well as the administration of the objectives which makes COP suitable for assessing the efficacy of The Code.

This Code only applies to the Signatories. Additional signatories may sign the Code at any time. Candidate signatories must present their activities to the existing Signatories and indicate how they intend to comply with the Code's requirements.

A Signatory may withdraw from the Code or from specific commitments within the Code at any time, by notifying the European Commission and the other Signatories. Such a withdrawal will not have the effect of terminating the Code between the other Signatories.

Figure 16 Section 5 Signatories

2.1.2 Efficacy of the Australian Code of Practice on Misinformation and Disinformation

The European Commission has reviewed COP in September 2020, and scholars in Australia have said that The Code will repeat the shortcomings of COP. The European Commission has reviewed that COP has improved the digital platforms' accountability; however, The Code's biggest shortcoming is its "self-regulatory nature", and the lack of high-quality data disclosed by the signatories to aid researchers with their research (European Commission 2020). Furthermore, an article by Gilbert + Tobin (2020) weighed in on the shortcomings of COP which includes: the failure of the Code to have an indicator to assess the efficacy of online platforms in countering disinformation; not having common definitions of key phrases such as "misinformation", "issue-based advertising", "malicious bots", "indicators of trustworthiness" and etc; Not sharing common goals and having ambiguous procedures; and insufficient targeting of political advertisements that could skew the democratic electoral processes (Gilbert + Tobin Lawyers 2020). Reset Australia, a not-for-profit initiative that aims to counter digital threats to democracy, commented on the ACPMD as a "watered down" version of the "failed EU Code of Practice on Disinformation" (Reset Australia 2020). And Reset Australia has identified multiple shortcomings of The Code that are similar or identical to the shortcomings of the COP. While the COP and The Code have many shortcomings that need to be addressed however it did initiate a dialogue between the online platforms and the users.

2.1.3 Recommendations for the ACPMD

Here are some recommendations that should be implemented in the future to improve the ACPMD:

• Clarity over terminologies

Misinformation in section 3.6 of Australia's Code is defined as "verifiably false or misleading or deceptive" content spread by "users of digital platforms", which may not be intended to cause harm (DIGI 2021). However, there are no definitions for disinformation or malformation in their

glossary, despite the definitions of misinformation, disinformation and malformation and their potential harms being quite apparent as aforementioned in section one. Harm is also quite loosely defined, in section 3.4 of Australia's Code it defined harm as only "pos[ing] an imminent and serious threat" to the democratic process and public health and safety, however as Nguyen (2020) notes that there needs to be a longitudinal observation on the impacts disinformation and misinformation has on "democracy, governance, public trust and social discourse".

• Lack of indicators

While The Code requires its signatories to provide an annual report they did not elaborate on how to measure the effectiveness of their progress. Without an insight into their process, it is hard to determine how well each signatory is carrying out and achieving their assigned objectives, and so it is recommended by Pamment (2020) in his review of the EU code to incorporate a Key Performance Indicator (KPIs), which will provide key stakeholders a better understanding of the efficacy of The Code.

The proposed method is to incorporate KPIs to measure how well signatories are achieving the key objectives. An extension of the KPI should be an incorporation of service level indicators and structural indicators. As recommended by Nguyen (2020) the service level indicators will measure how well the signatories are achieving the objectives, while taking into account differences between different digital platforms. One indicator of service level indicator proposed by Gilbert and Tobin Lawyers (2020) is to measure the lost "revenue due to accounts being closed on the basis of misinformation". Structural indicators are to measure the long- and short-term effects disinformation and misinformation have on the Australian society. The efficacy of the program can also improve quickly if the key stakeholders hold meetings at the end of every month for the first six months, then every year following that so that they can improve The Code and make it adept to the ever-changing landscape of the online space. This can assess the efficacy of The Code

and its effectiveness in preventing harm done in Australia.

• Lack of monitoring

One of the main criticisms of The Code is its self-regulatory nature. In addition to the KPIs, there needs to be an independent third party which ensures that the signatories are sticking to the objectives. Researchers and the civil society in EU have expressed discontent over the lack of monitoring in the COP, and this should be an indicator for The Code to implement an independent third-party administrator to monitor the progress of the digital platforms (Pamment 2020; Nguyen 2020).

To ensure the progress of The Code, an independent third-party administration should be installed to ensure the digital platforms are carrying out their objectives and giving researchers quality data. The prerequisites for becoming the independent third-party as proposed by Nguyen (2020) are as follows: The third-party must reveal any conflicts of interests; they must be unbiased and uphold public interests; the third-party should be made up of diverse key stakeholders, such as members from the civil academia, media, government and etc.

• Transparency of data

One of the objectives in The Code is for digital platforms to provide data for independent researchers to analyse so as to aid with strategic research. Section 5.24 of The Code and section II.E. of the EU code, both claim that they would provide relevant data for research purposes only (DIGI 2021; European Commission 2019). However, The Code has further omitted some commitments made in the EU Code, despite the EU Code's efforts to provide relevant data to the research community has already been pointed out as "insufficient" (European Commission 2020). The main shortcomings which prevent the EU Code from empowering research, are the lack of detail given by the digital platforms especially Google and Facebook, and that the data are not used to their full potentials because the researchers and the digital industry do not have a clear consensus over what data is required and to what extent (Pamment 2020).

Currently, The Code does not elaborate on what types of data are considered 'relevant', this would impair the researchers from conducting productive research. This calls for a discussion to be held between the DIGI and the researchers to further elaborate on what data the researchers need and to what extent, while not trespassing the platforms' privacy.

By incorporating these recommendations, it will further strengthen The Code, and ultimately it will significantly curb the misleading content disseminated online by state actors and public figures. However, some limitations that need to be considered are: There is yet to be clear evidence as to the extent of harm misleading content has caused in Australia, so the recommendations cannot give an elaborate response on how to fully curb the potential harm of misleading content; and also, there needs to be further research on how to balance free speech and the regulations of misleading content.

There needs to be media literacy programs that prioritise and are tailored to social groups that are from more disadvantaged backgrounds. Those who live in regional areas, older Australians, Australians with disabilities, and have lower income and, or education levels need to be prioritised. Research has found that across the board, Australians are more likely to reach out to their families (25%) for assistance with media engagement, while those with a higher education level (25%) seek assistance from online resources, but only 11% seek assistance from libraries and other public

services, as shown in figure 17 (Notley *et al.*, 2021, p. 63). However further research has shown that those with a lower education (44%) background (figure 18), 56-74 (36%) years and above, and living in the regional area (40%) do not have support from other people, the community, the education system or online support (Notley *et al.*, 2021, p. 63). In addition, these groups have also been found to be not interested in engaging with new technologies, and consume less online media, hence their confidence in their media skills also decrease (Notley *et al.*, 2021, p. 70).

2.2 Media Literacy Program in Australia



In addition to the government and researchers' efforts to stop the spread of misleading content on social media, individual citizens should be equipped with the appropriate media literacy skills to identify misleading content online in the case of some misleading content slip through the first line of defence. Media literacy is roughly defined as the acquiring of skills and knowledge to navigate and understand the usage of the media, so that the users can have a "critical autonomy in relation to all media" (Jeong, Cho & Hwang, 2012; Aufderheide, 1993). In a meta-analysis of the efficacy of media literacy interventions, Jeong Cho & Hwang have found that media literacy interventions have been found to be effective in "reducing the harmful effects of media messages (2012, p.8). In Australia, the Australian Media Literacy Alliance and other researchers have launched the assessments into the level of media literacy skills amongst adult and adolescence Australians. The results have shown that amongst Australian adults, social groups with lower educational levels, lower income, living in regional Australia, and are in the age groups 56-74, or 75+ , have lower levels of media literacy (Notley *et al.*, 2021, p. 7) While amongst young adults, it has been reported that they do not have the appropriate skills to identify false news, and they also do not have the necessary skills to compare and contrast different news sources. Drawing from media literacy research for adults and young adults in Australia, the following sections will provide recommendations for the adults and young adults groups separately.

2.2.1 Recommendations for adult's media intervention

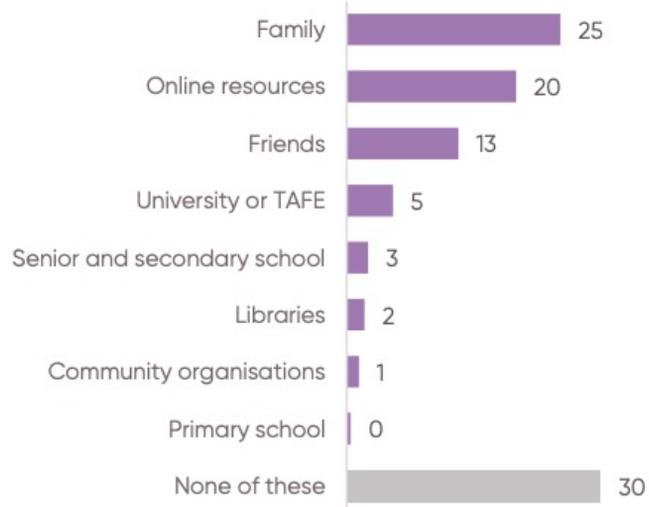


Figure 17

Most support

■ Other people ■ Education system ■ Community ■ Online ■ None of these

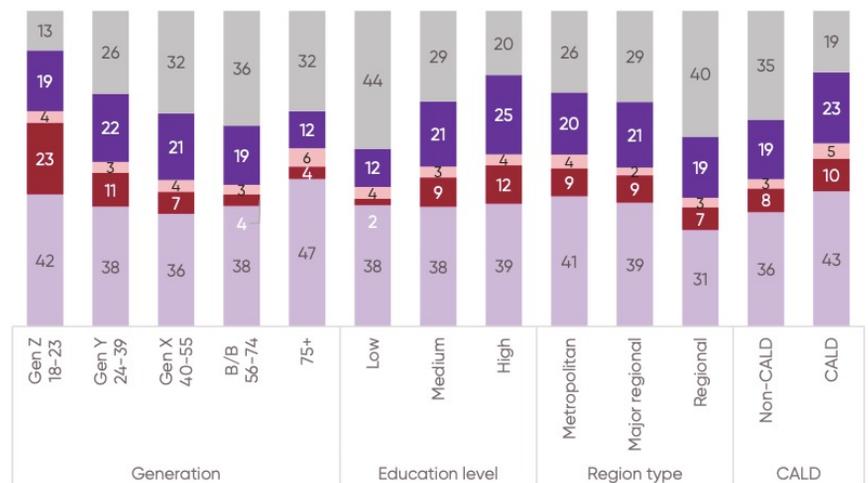


Figure 18

The results show a need to prioritise those with a lower income, education level, who lives in regional areas, and older; and there needs to be more initiatives to cultivate their interests in technology which would ultimately to bridge the media literacy gulf. Although most Australians seek their families for assistance with online participation, the results have shown an underwhelming support from educational institutions. Therefore, more resources and funding should go into disadvantaged communities' "libraries, schools and museums" to reach out to locals and provide them with educational programs that are tailored to different demographics and media literacy levels (Notley *et al.*, 2021, p. 75). In addition, to attract interests and evoke initiatives to better one's own media literacy skills, there needs to be national campaigns that raise awareness about media literacy. By introducing media literacy into mainstream discussions, it would increase people's knowledge of media literacy (Notley *et al.*, 2021, p. 75).

2.2.2 Recommendations for children to young adult intervention

Younger Australians from Generation Y (born 1981-1996) and Generation Z (born 1997-2002) are the heaviest users of social media such as Facebook, YouTube, and Instagram (Notley *et al.*, 2021, pp. 25, 16). In recent research, they have found that that younger Australians rely heavily on social media platforms for news, and teachers also believe that the news are not important to their students (Park *et al.* 2018, p.9; Nettlefold and Williams 2018, p. 4). Although younger generations generally know how to participate in online activities, teachers and research have shown that younger generations, especially those in schools, have less critical thinking skills and news literacy (such as cross-checking news) (Nettlefold and Williams 2018, p. 6). While most media literacy skills should be taught at schools, there has been inconsistencies in the curriculum across Australia on implementing teachings about media literacy. In addition, Australian teachers do not have the resources, funding, motivation and resources to teach media literacy in classrooms (Nettlefold and Williams 2018, p. 7)

to include age-appropriate "weblinks, photocopyable sheets" to guide "staff/students through the process" (Nettlefold and Williams 2018, p. 8). Further research from the EU has suggested that there needs to be more training programs for teachers, so that they are knowledgeable in media literacy skills, and the programs should also update teachers on the changing landscapes of the media.

From the statistics and results it shows that there needs to be an increased focus on implementing consistent education programs in schools that teaches media literacy skills. In addition, 78% of teachers have voiced the need for more online resources that will save them time to do extensive research on the ever-changing media landscape. Online resources need

Conclusion

In the last year, coronavirus has exacerbated and highlighted the extent and volume of misinformation, disinformation and malformation around the globe. The aim of this report is to assess the efficacy of the active programs in Australia aimed at preventing the flow of misinformation and disinformation. In section one of this report, it has outlined the different types of misleading content online such as misinformation, disinformation, and malformation. Furthermore, section one has also explored who is responsible for the dissemination of these content on social media platforms such as YouTube, Twitter, Facebook, Instagram and news websites. There was also a brief discussion on the relationship between the types of misleading content and the motivations behind the users who disseminate misleading content online. For example, state actors such as China and Russia maybe motivated to undermine the Trump administration and the democratic system, so they disseminated volumes of disinformation and malformation. Whereas public figures such as Woody Harrelson and other celebrities spread misinformation with no intent to harm individuals, groups, organisations, or the democratic system. This finding reveals the different types of misleading content, and why certain users (state actors/ public figures) would choose a certain type of method to disseminate misleading content. From the literature reviews it reveals some problems to tackle:

- The long term, and extent of harm to the Australians' trust in health officials and government, social stability, and democracy caused by disinformation, misinformation, and malformation are still unknown.
- YouTube, Twitter, Facebook and other social media platforms need to work with the Australian government to implement policies that restrict the influx of misleading content online (misinformation, disinformation, and malformation).
- In addition, social media platforms need to provide relevant data to researchers and the government to assess the short and long-term harm of misleading content, and data on how to empower users and stop the spread of misleading content.

- Besides the government and digital platforms preventing misleading information online, Australians need to be informed of the misleading content online and be empowered so they can identify misleading content online and prevent them from spreading misinformation.

In section two, this report looked at the efficacy of the two programs in Australia that are targeted at the problems caused by misleading content as aforementioned. This includes empowering Australians when they are engaging online activities and reducing the flow of misleading content in general online. The ACPMD, or The Code oversaw by the ACMA and administrated by the DIGI aims to prevent misinformation and disinformation online. The self-regulatory nature of The Code, and its aims are very similar to the EU's Code on Disinformation. However, the EU's Code has already been deemed insufficient by the European Commission in preventing the spread of misinformation and disinformation, and both The Code and the EU code need to be revised. Some recommendations for The Code include installing KPIs indicators, independent third-party member who monitors the progress of the digital platforms, clarity over terminologies, and transparent and consistent terminologies, into The Code. In the assessment of the media literacy program in Australia, it has been found that generally there needs to be campaigns that raise awareness about media literacy to adults and young Australians. Overall, it has been found that amongst adults' social groups that are from lower economic and educational backgrounds, older or living in regional areas have lower media literacy skills, and less access to help. The report has gathered different recommendations from research in Australia, to recommend funding and resources for teachers, to implement consistent media literacy programs into education curriculum, campaigns to raise awareness and start conversations about media literacy, prioritise and create programs tailored to social groups that are from low economic and education backgrounds, living in regional areas and who are older. Together these two programs aim to prevent the flow of misinformation and disinformation, however they need improvements to enhance their efficacy in preventing the flow of misleading content online in Australia.

References

- About | DIGI' (2021). Available at: <https://digi.org.au/about/> (Accessed: 12 May 2021).
- 'Australian-Code-of-Practice-on-Disinformation-and-Misinformation-FINAL-PDF-Feb-22-2021.pdf' (2020). Available at: <https://digi.org.au/wp-content/uploads/2021/02/Australian-Code-of-Practice-on-Disinformation-and-Misinformation-FINAL-PDF-Feb-22-2021.pdf> (Accessed: 13 May 2021).
- 'Globalism2020 Guardian Conspiracy Theories.pdf' (2020). Available at: <https://docs.cdn.yougov.com/msvke1lg9d/Globalism2020%20Guardian%20Conspiracy%20Theories.pdf> (Accessed: 10 May 2021).
- 'Influence-enza: How Russia, China, and Iran Have Shaped and Manipulated Coronavirus Vaccine Narratives' (2021) *Alliance For Securing Democracy*, 6 March. Available at: <https://securingdemocracy.gmfus.org/russia-china-iran-covid-vaccine-disinformation/> (Accessed: 3 May 2021).
- 'Information_Disorder_Digital_AW.pdf' Available at: https://firstdraftnews.org/wp-content/uploads/2019/10/Information_Disorder_Digital_AW.pdf?x76701 (Accessed: 9 April 2021).
- 20 findings from the Reuters Institute's research in 2020 still relevant in 2021* (2020) *Reuters Institute for the Study of Journalism*. Available at: <https://reutersinstitute.politics.ox.ac.uk/risj-review/20-findings-reuters-institutes-research-2020-still-relevant-2021> (Accessed: 6 May 2021).
- ACMA 2020 *Online misinformation and news quality in Australia: Position paper to guide code development* | ACMA. Australian Communications and Media Authority. Available at: <https://www.acma.gov.au/australian-voluntary-codes-practice-online-disinformation> (Accessed: 9 April 2021).
- Australian code of practice on disinformation and misinformation* (2021). Available at: <https://apo.org.au/node/311094> (Accessed: 12 May 2021).
- Banerjee, S. C. and Kubey, R. (2012) 'Boom or boomerang: A critical review of evidence documenting media literacy efficacy', *The international encyclopedia of media studies*.
- Bogle, A. (2021) *In the wake of the US Capitol attack, Australian politics is consumed by a reactionary free speech debate*. Available at: <https://www.aspi.org.au/opinion/wake-us-capitol-attack-australian-politics-consumed-reactionary-free-speech-debate> (Accessed: 10 May 2021).
- Brennen, J. S. et al. (2020) 'Types, Sources, and Claims of COVID-19 Misinformation'. Available at <https://reutersinstitute.politics.ox.ac.uk/types-sources-and-claims-covid-19-misinformation>
- Code of Practice on Disinformation: Stemming the tide of fake news* | Gilbert + Tobin Lawyers: Law Firm in Sydney, Melbourne & Perth (2020). Available at: <https://www.gtlaw.com.au/insights/code-practice-disinformation-stemming-tide-fake-news> (Accessed: 12 May 2021).
- DIGI (2021) 'Australian code of practice on disinformation and misinformation'. Available at: <https://apo.org.au/node/311094> (Accessed: 12 May 2021).
- Disclosing networks of state-linked information operations* (2021). Available at: https://blog.twitter.com/en_us/topics/company/2021/disclosing-networks-of-state-linked-information-operations.html (Accessed: 30 April 2021).
- Dunne, R. (2021) *Australia's Disinformation & Misinformation Code Called 'Pointless'*, *Search Engine Journal*. Available at: <https://www.searchenginejournal.com/reset-australia-calls-the-new-disinformation-misinformation-code-wholly-inadequate/396730/> (Accessed: 13 May 2021).
- Edney, K. (2012) 'Soft Power and the Chinese Propaganda System', *Journal of Contemporary China*, 21(78), pp. 899–914. doi: 10.1080/10670564.2012.701031.
- Enders, A. M. et al. (2020) 'The different forms of COVID-19 misinformation and their consequences', *Harvard Kennedy School Misinformation Review*. doi: 10.37016/mr-2020-48.
- European Commission (2020) *Disinformation: EU assesses the Code of Practice*, *European Commission - European Commission*. Available at: https://ec.europa.eu/commission/presscorner/detail/en/ip_20_1568 (Accessed: 12 May 2021).
- European Commission (2021) *Code of Practice on Disinformation | Shaping Europe's digital future*. Available at: <https://digital-strategy.ec.europa.eu/en/policies/code-practice-disinformation> (Accessed: 12 May 2021).
- Facebook's 'trust us' approach to COVID-19 fake news is failing, Australia must demand transparency* (no date) *Reset Australia*. Available at: <https://au.reset.tech/news/facebook-s-trust-us-approach-to-covid-19-fake-news-is-failing-australia-must-demand-transparency/> (Accessed: 12 May 2021).
- Google, Facebook's weak disinformation code sets Australia up to repeat failures of EU* (2020) *Reset Australia*. Available at: <https://au.reset.tech/news/google-facebook-s-weak-disinformation-code-sets-australia-up-to-repeat-failures-of-eu/> (Accessed: 12 May 2021).

- Government Response and Implementation Roadmap for the Digital Platforms Inquiry | Treasury.gov.au (2019). Available at: <https://treasury.gov.au/publication/p2019-41708> (Accessed: 13 May 2021).
- Great Britain et al. (2019) *Online harms white paper*.
- Hameleers, M. et al. (2020) 'A Picture Paints a Thousand Lies? The Effects and Mechanisms of Multimodal Disinformation and Rebuttals Disseminated via Social Media', *Political Communication*, 37(2), pp. 281–301. doi: 10.1080/10584609.2019.1674979.
- Hutchinson, A. (2020) *New Study Shows Celebrities Are Key Distributors of COVID-19 Misinformation on Social Media*, *Social Media Today*. Available at: <https://www.socialmediatoday.com/news/new-study-shows-celebrities-are-key-distributors-of-covid-19-misinformation/575753/> (Accessed: 6 May 2021).
- Lewis, S. (2021) 'U.S. says Russian-backed outlets spread COVID-19 vaccine "disinformation"', *Reuters*, 8 March. Available at: <https://www.reuters.com/article/us-usa-russia-covid-disinformation-idUSKBN2B0016> (Accessed: 28 April 2021).
- Nettlefold, J. and Williams, K. (2018) 'Insight Five: A snapshot of Media Literacy in Australian Schools'
- Niburski, K. and Niburski, O. (2020) 'Impact of Trump's Promotion of Unproven COVID-19 Treatments and Subsequent Internet Trends: Observational Study', *Journal of Medical Internet Research*, 22(11). doi: 10.2196/20044.
- Nigro, N. (no date) 'Hamilton 2.0 Dashboard', *Alliance For Securing Democracy*. Available at: <https://securingdemocracy.gmfus.org/hamilton-dashboard/> (Accessed: 3 May 2021).
- Notley, T. et al. (2021) 'Adult Media Literacy in Australia: Attitudes, Experiences and Needs', © 2021 by Western Sydney University, Queensland University of Technology and University of Canberra, p. 84. Available at: https://medialiteracy.org.au/wp-content/uploads/2021/04/FINAL_Australian_adult_media_literacy_report_20212.pdf.
- Pamment, J. and Pamment, J. (2020) *EU Code of Practice on Disinformation: Briefing Note for the New European Commission*, *Carnegie Endowment for International Peace*. Available at: <https://carnegieendowment.org/2020/03/03/eu-code-of-practice-on-disinformation-briefing-note-for-new-european-commission-pub-81187> (Accessed: 12 May 2021).
- Park, S. et al. (2020) 'COVID-19: Australian news and misinformation'. Available at <https://apo.org.au/sites/default/files/resource-files/2020-07/apo-nid306728.pdf>
- Pickles, K. et al. (2021) 'COVID-19 Misinformation Trends in Australia: Prospective Longitudinal National Survey', *Journal of Medical Internet Research*, 23(1), p. e23805. doi: 10.2196/23805.
- Russia's Sputnik V developers call on AstraZeneca to try combining vaccines (2020) *CNBC*. Available at: <https://www.cnn.com/2020/11/27/russias-sputnik-v-developers-call-on-astrazeneca-to-try-combining-vaccines.html> (Accessed: 3 May 2021).
- Ryan Broderick (2020) 'I regret to inform you Woody Harrelson is posting 5G coronavirus conspiracy theories on Instagram. The video also isn't "the Chinese taking 5G antennas down," it's from the Hong Kong protests. <https://t.co/y4RpOMJi9T>, @broderick, 2 April. Available at: <https://twitter.com/broderick/status/1245550744738070528/photo/2> (Accessed: 7 May 2021).
- Schafer, B. et al. (2021) *Influence-enza: How Russia, China, and Iran Have Shaped and Manipulated Coronavirus Vaccine Narratives – Alliance For Securing Democracy*, *Alliance for Securing Democracy*. Available at: <https://securingdemocracy.gmfus.org/russia-china-iran-covid-vaccine-disinformation/> (Accessed: 30 April 2021).
- Serrato, R. and Wallis, D. J. (2020) 'Covid-19 and the reach of pro-Kremlin messaging', *Australian Strategic Policy Institute*.
- State report: Russian, Chinese and Iranian disinformation narratives echo one another - POLITICO Available at: <https://www.politico.com/news/2020/04/21/russia-china-iran-disinformation-coronavirus-state-department-193107> (Accessed: 9 April 2021).
- Stolton, S. (2020) 'EU code of practice on disinformation "insufficient and unsuitable," member states say', *www.euractiv.com*, 5 June. Available at: <https://www.euractiv.com/section/digital/news/eu-code-of-practice-on-disinformation-insufficient-and-unsuitable-member-states-say/> (Accessed: 12 May 2021).
- Strick, B. (2020) 'Attempted influence in disguise: the Iranian influence operation disguised as British journalists, activists and hobby fanatics posting about Covid-19, US politics and Black Lives Matter'
- Submission on the Australian Code of Practice on Disinformation (2020) *Reset Australia*. Available at: <https://au.reset.tech/news/submission-on-the-australian-code-of-practice-on-disinformation/> (Accessed: 12 May 2021).
- Thomas, E. (2020) *How COVID-19 is driving a booming conspiracy industry*. Available at: <https://www.aspi.org.au/opinion/how-covid-19-driving-booming-conspiracy-industry> (Accessed: 3 May 2021).
- Thomas, E. (2020) *How COVID-19 is driving a booming conspiracy industry*. Available at: <https://www.aspi.org.au/opinion/how-covid-19-driving-booming-conspiracy-industry> (Accessed: 3 May 2021).

- Thomas, E., Zhang, A. and Wallis, D. J. (2020) 'Viral videos: Covid-19, China and inauthentic influence'. Available at https://s3-ap-southeast-2.amazonaws.com/ad-aspi/2020-09/Viral%20videos.pdf?oRBhvSURmY5drwKr_EbnlZq6eu_87CKh=
- Thu, H. L. (2021) *The COVID-19 Pandemic and Geopolitics in Southeast Asia*, Australian Strategic Policy Institute. Available at: <https://www.aspi.org.au/opinion/covid-19-pandemic-and-geopolitics-southeast-asia> (Accessed: 3 May 2021).
- Trump's Suggestion That Disinfectants Could Be Used to Treat Coronavirus Prompts Aggressive Pushback - The New York Times* (no date). Available at: <https://www.nytimes.com/2020/04/24/us/politics/trump-inject-disinfectant-bleach-coronavirus.html> (Accessed: 9 April 2021).
- Turnbull, T. (2020) *Celebrities 'super-spreaders' of fake news, Queensland researchers say*, Brisbane Times. Available at: <https://www.brisbanetimes.com.au/national/queensland/celebrities-super-spreaders-of-fake-news-queensland-researchers-say-20200423-p54mpu.html> (Accessed: 7 May 2021).
- Types, sources, and claims of COVID-19 misinformation* (2020) Reuters Institute for the Study of Journalism. Available at: <https://reutersinstitute.politics.ox.ac.uk/types-sources-and-claims-covid-19-misinformation> (Accessed: 6 May 2021).
- Vraga, E. K. and Bode, L. (2020) 'Defining Misinformation and Understanding its Bounded Nature: Using Expertise and Evidence for Describing Misinformation', *Political Communication*, 37(1), pp. 136–144. doi: 10.1080/10584609.2020.1716500.
- Wallis, D. C., Jacob (2020) *Defending democracies from disinformation and cyber-enabled foreign interference in the Covid-19 era*. Available at: <https://www.aspi.org.au/journal-article/defending-democracies-disinformation-and-cyber-enabled-foreign-interference-covid> (Accessed: 10 May 2021).
- World Health Organisation (2020), *Managing the COVID-19 infodemic: Promoting healthy behaviours and mitigating the harm from misinformation and disinformation*. Available at: <https://www.who.int/news/item/23-09-2020-managing-the-covid-19-infodemic-promoting-healthy-behaviours-and-mitigating-the-harm-from-misinformation-and-disinformation> (Accessed: 27 May 2021).
- World Health Organisation (2020), *Mythbusters* Available at: <https://www.who.int/emergencies/diseases/novel-coronavirus-2019/advice-for-public/myth-busters> (Accessed: 9 April 2021).
- Zhao, X. (2020) 'How China's State Actors Create a "Us vs US" World during Covid-19 Pandemic on Social Media', *Media and Communication*, 8(2), pp. 452–457. doi: 10.17645/mac.v8i2.3187.