Citizens' Strategies for Navigating News and Misinformation in the COVID-19 "Infodemic"

KATE HOLLAND
SORA PARK
KERRY MCCALLUM
EMMA JOHN
CAROLINE FISHER
KIERAN MCGUINNESS
JEE YOUNG LEE[1]
University of Canberra, Australia

This article examines citizens' experiences of and strategies for navigating misinformation on social media during the COVID-19 pandemic. Online and face-to-face focus groups (12 groups with 60 participants) were conducted between February 19 and March 9, 2021, in multiple cities in Australia. Our thematic analysis found that participants encountered a range of misinformation in news media and online platforms, and their responses to it varied. Some actively sought to intervene by challenging and correcting misinformation, while most chose to ignore or block it. Verification practices were also common, but reporting content was rare. Participants generally expressed confidence in their own resilience to misinformation while suggesting attributes that make other people more susceptible. They also acknowledged that what one person perceives as misinformation could be another's informed opinion. We discuss these findings in the context of scholarship on media literacies in relation to addressing misinformation on social media and online platforms.

Kate Holland: Kate.Holland@canberra.edu.au
Sora Park: Sora.Park@canberra.edu.au
Kerry McCallum: Kerry.McCallum@canberra.edu.au
Emma John: u3178894@uni.canberra.edu.au
Caroline Fisher: caroline.fisher@canberra.edu.au
Kieran McGuinness: kieran.mcguinness@canberra.edu.au
Jee Young Lee: jee.lee@canberra.edu.au
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The COVID-19 pandemic has been accompanied by an "infodemic," which is an overabundance of information—both accurate and inaccurate—that spreads rapidly through social media and other channels and presents a threat to public health (World Health Organization [WHO], 2020). COVID-19 misinformation is diverse and wide-ranging. Examples include claims and conspiracy theories denying its existence, severity, and the need for protective actions; that it was a bioweapon created in a laboratory; that it is spread by 5G mobile networks; that it can be treated with unproven and potentially dangerous medications; and that the vaccines are unsafe (Brennen, Simon, Howard, & Nielsen, 2020; Hansson et al., 2021; Pickles et al., 2021). Such misinformation can be detrimental to the health of individuals and societies as it may encourage dangerous practices and resistance to public health measures, such as vaccination, as well as exacerbating distrust in public institutions and health and science experts (Krause, Freiling, Beets, & Brossard, 2020; Smith, Cubbon, & Wardle, 2020). The threat posed by misinformation during and beyond a public health crisis and the effectiveness of efforts to combat it is the focus of a growing body of research. However, less is known about what citizens do when they encounter perceived misinformation and how they justify their actions. To provide a nuanced and in-depth understanding of experiences of COVID-19 misinformation, we adopted a qualitative approach using peer-group conversations with 60 Australians. The findings are situated and discussed in relation to the Australian pandemic experience and scholarship on media literacies in relation to addressing misinformation on digital and social media platforms.

Since first making international headlines in early 2020, the COVID-19 pandemic has dominated news coverage (Nolan, Hanna, McGuinness, & McCallum, 2021). It also prompted an increase in news consumption and of people directly accessing information from governments, health authorities, and experts via websites and social media channels (Casero-Ripollés, 2020; Nielsen, Fletcher, Newman, Brennen, & Howard, 2020). A study conducted early in the first wave of the pandemic in Australia (Park, Fisher, Lee, & McGuinness, 2020) found the main source of news about COVID-19 was established news brands (61%), but many consumers also went directly to government websites (federal 32%; state 28%) and experts (20%). More than one-third (38%) of Australians were also getting information from social media sites. People were generally satisfied with the quality of news about COVID-19 but did not think social media helped them understand the situation or inform them about what to do (Park et al., 2020). A follow-up survey also found that those who use social media as their main source of news are more likely to experience high levels of COVID-19 misinformation (Park, McCallum et al., 2022). In the first two years of the pandemic, there was an increase in the number of Australians who felt they encountered online misinformation about COVID-19 (Park, McGuinness et al., 2022).

In this study, we define misinformation as "an umbrella term to cover all kinds of potentially harmful false, misleading or deceptive information" (Australian Communications & Media Authority [ACMA], 2020, p. 11). This encompasses forms of disinformation created with the intent to cause harm and false or inaccurate information not created with the intent of causing harm (AMCA, 2020). A broad and inclusive definition suited our study's aim of investigating how participants understood misinformation in the context of COVID-19. We also recognize that people's understandings and evaluations of (true) information,

misinformation, and disinformation are diverse and related to factors such as political predispositions and ideology and influences within their social network (Glasdam & Stjernswärd, 2020).

Strategies for Combatting Online Misinformation

There are two crucial steps to finding a solution to the problem of "information disorder" (Wardle & Derakhshan, 2017). The first is the detection of misinformation, which is not always easy during an evolving pandemic when the state of knowledge is in flux. Vraga and Bode (2020) suggest relying on two factors—expert consensus and evidence—that are available at that point in time. The second is to effectively intervene. Detection and intervention can occur at the level of digital platforms, the news media, fact-checkers, governments, and audiences.

In response to growing alarm about the rise of misinformation and regulatory pressure, social media platforms have adopted various moderation policies and techniques. In Australia, some of the major social media platforms agreed on a code of practice in February 2021 that commits to reducing the risk of harmful misinformation (Digital Industry Group Inc., 2021). Several companies have sought to combat misinformation about COVID-19 by removing, hiding, or restricting content and promoting official information sources (Baker, Wade, & Walsh, 2020; Brennen et al., 2020; Butcher, 2021). These efforts can be categorized into two types: removal and truth amplification. Removal entails monitoring and deleting potentially harmful content. In May 2020, for example, YouTube introduced its "COVID-19 medical misinformation policy" wherein content that violates the policy will be removed. This includes content that contradicts guidance from the WHO and local health authorities about COVID-19 treatments, prevention, diagnosis, transmission, and existence. The second strategy is to increase the volume of quality information so that people have the option to compare factual and false information (Lazer et al., 2017). Efforts have been made, for example, to increase the visibility of credible and high-quality news and information on platforms such as Facebook, Instagram, Twitter, TikTok, and Google.

In Australia and internationally, fact-checking outlets and initiatives have been active during the pandemic, seeking to assess claims about government responses to the pandemic made by ordinary citizens and partisan websites and claims generated by politicians, celebrities, or other public figures (Luengo & García-Marín, 2020). These authors argue fact-checkers can help to empower citizens' media literacy by exposing the tactics and lack of legitimacy of sources of misinformation. Brookes and Waller (2022) identify the importance of collaboration and information-sharing within the global fact-checking community to the work of *CoronaCheck*, which was launched in March 2020 as part of Australia's RMIT ABC Fact Check. The provision of "fact files" and explainers was seen as particularly valuable for informing audiences, intervening in the spread of misinformation, and supporting news literacy.

Citizens play an important role in the spread and containment of misinformation, but the evidence is mixed about what people do when they encounter it. Research shows that when people encounter dubious information, they are likely to engage in an authentication behavior (Tandoc, Lim, & Ling, 2020). However, after determining it as misinformation, people have different ways of dealing with it. Some may try to correct, share, or report it, while others may choose to do nothing (Chang, 2021; Tandoc et al., 2020). If individuals perceive misinformation as a threat, this triggers a set of tactics to prevent the potential impact on them or others (Chang,

2021). Studies before and during the COVID-19 pandemic indicate that many news consumers do not adopt any news-verification behaviors. An Australian survey found that only about one-third (36%) said they had compared the reporting of a story across news outlets to check its accuracy, and 26% said they had begun to use more reliable news sources (Fisher, Park, Lee, Fuller, & Sang, 2019). The lack of verification activities continued in the early stages of the COVID-19 pandemic. Park and colleagues' (2020) study found that 23% said they searched for different sources to check the accuracy of information, and 12% used a fact-checking website.

It is not surprising to find that many people do not engage in verification behaviors. Mihailidis and Viotty (2017) question calls for citizens to read like fact-checkers when encountering online news and information by, for example, looking at the domain and URL, looking closely at quotes and comments, and reverse image searching. While these are useful recommendations, we agree that it is unrealistic to expect this to occur when citizens are quickly sharing, often based on headlines, and not reading deeply, especially on social media. In addition, many consumers believe that social media companies are responsible for reducing the impact of misinformation, with one Australian study finding that twice as many people said social media companies were more responsible than either government or individuals (Notley, Chambers, Park, & Dezuanni, 2021). This study also found that only 39% said they can identify misinformation. Thus, definitional and literacy issues add to the challenge of expectations that news consumers take responsibility for combatting misinformation.

The Role of News and Media Literacy

Given that misinformation and contested truths are "constitutive of today's dynamic, multilayered, chaotic public communication" (Waisbord, 2018, p. 1869), there are no simple solutions. The increasing challenges for citizens to identify authentic information in the digital environment highlights the potential role of media literacy in enabling citizens to identify and manage misinformation. Media literacy is "the ability to critically engage with media in all aspects of life" (Notley et al., 2021, p. 10) and is used here in a broad sense to incorporate news and digital literacy. It is also seen as a core competency for engaged citizenship (Mihailidis & Thevenin, 2013). News literacy is defined as "knowledge of the personal and social processes by which news is produced, distributed, and consumed, and skills that allow users some control over these processes" (Tully Maksl, Ashley, Vraga, & Craft, 2022, p. 1593). Kovach and Rosenstiel (2010) view news literacy as a subset of civic literacy that includes the skills needed by citizens to read and interpret the news, which they describe as "the way of skeptical knowing" (p. 31). It includes being able to recognize bias in news as well as overcoming personal biases by seeking out diverse sources and evaluating them fairly but critically (Tully, Vraga, & Smithson, 2020).

In the context of digital media culture, where information is spread by citizens and through social networks outside the framework of mainstream media, Mihailidis and Viotty (2017) argue that media literacies need to focus on more than skill attainment. They call for a reframing of media literacies as being intentionally civic and relevant to the social, political, and technological realities of contemporary life. This kind of repositioning work is useful for thinking beyond the idea that media literacy is a panacea to misinformation. As Buckingham (2017) argues, "While it [media literacy] appears to be about empowering consumers, it effectively absolves governments of responsibility for addressing problems that arise in a media landscape that is increasingly driven by the imperatives of the free market" (para. 38). Furthermore,

many media literacy training programs and interventions "focus on individual responsibility, rather than the roles of the community, state, institutions, or developers of technologies" (Bulger & Davison, 2018, p. 3).

Surveys and experimental studies provide valuable insights into citizens' news and digital media literacy, but less is known about how these understandings, skills, and competencies translate to participation in actual news environments (Vraga & Bode, 2017), in specific geosocial contexts, and even less so during a pandemic. In this context, we concur with Waisbord's (2018) caution about approaching the issue of misinformation as one of "information deficit" and the solution one of simply sharpening news literacy skills as a cure-all. Efforts to combat misinformation, such as news literacy, fact-checking, and making digital platforms accountable are important but so too is understanding what citizens do in the context of their news and information environments.

Research Approach

Our qualitative study was designed to explore participants' news and information consumption and to elicit their understandings of, and responses to, misinformation during the COVID-19 pandemic. To achieve these aims we took a "peer conversation" approach (Gamson, 1992; McCallum, 2010) whereby we recruited participants from family or social groups and networks to participate in informal, open-ended discussions in a setting of their own choice. While this method shares its foundation with focus group interviews, its value is that participants are selected from existing social groups and therefore have preexisting rapport with each other and knowledge of one another's experience and stance. We conducted 12 peer conversations with a combined total of 60 participants during February and March 2021. A purposive sampling method was used to identify groups from a broad range of demographic characteristics, including age, gender, socioeconomic status, ethnicity, and education (see Table 1). We paid particular attention to groups that are difficult to reach through survey research. This included younger men, people in regional and remote areas, older generations, and people from culturally and linguistically diverse (CALD) backgrounds.

Table 1. Summary of Participants.

	Group	Mode	Location
FG1	Gen Z women and men—university students	Face-to-face	Canberra, ACT
FG2	Gen Z men—tertiary educated	Face-to-face	Canberra, ACT
FG3	Gen Z women and men—regional /remote	Online	Central QLD
FG4	Family group—regional	Online	Tasmania
FG5	Older people	Face-to-face	Canberra, ACT
FG6	Older men—regional	Face-to-face	Northern NSW
FG7	Middle-aged women—regional	Face-to-face	Northern NSW
FG8	Culturally and linguistically diverse (CALD) communities	Face-to-face	Canberra, ACT
FG9	Low-income/unemployed women—regional	Face-to-face	Northern NSW
FG10	Gen Z women and men—CALD	Online	Melbourne, Vic
FG11	Professional women—CALD	Face-to-face	Sydney, NSW
FG12	Family group	Online	Melbourne, Vic

Note. ACT—Australian Capital Territory; NSW—New South Wales, QLD—Queensland, Vic—Victoria.

Participants were recruited through the authors' networks. In most cases, one contact was responsible for recruiting the peer group to participate in the interview. This ensured participants were familiar with one another and came as a group to the research. The interviews followed a standard protocol of asking about their COVID-19 experience, media habits, experiences of misinformation, and opinions about how it should be mitigated. We also used stimulus exemplars of the types of measures platforms are implementing to mitigate misinformation (e.g., screenshots showing the labeling of false information and increasing the visibility of factual information about COVID-19).

Interviews were digitally recorded and transcribed. All transcripts were reviewed and edited for accuracy and participants were de-identified. We adopted an inductive qualitative thematic analysis approach (Braun & Clarke, 2006) to identify themes in participants' understandings of and approaches to misinformation. Our aim was to explore and document participants' self-reported news and media consumption habits, encounters with misinformation, ideas about susceptibility to misinformation, and strategies for dealing with misinformation. We provide anonymized quotes to exemplify key themes within each of these areas. We did not aim to compare participants or groups based on any demographic characteristics but to draw out the diversity of views and experiences apparent within each of the peer groups.[2]

Findings: News Diets and Misinformation Encounters

Hybrid News and Information Diets During COVID-19

Participants across the 12 groups described a hybrid style of media consumption. Most included a combination of traditional news media (newspapers, television, or radio) and one or multiple forms of online and social media in their news and information diet. Some participants sought news from platforms such as Facebook, YouTube, Reddit, Instagram, Twitter, and TikTok, with several reporting that they followed traditional news brands on these platforms, but others described their exposure to news on social media as incidental. There were differences among participants within and among groups in terms of their type and level of social media use and the extent to which they used it for news (see Table 2). For example, Facebook was mentioned in all groups, but it was identified as the main source of news by participants in only one group (FG3), while elderly participants (FG5) did not use any social media for news. Gen Z participants generally tended to use a wider range of social media platforms overall and for news.

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[2] This study was approved by the Human Research Ethics Committee at the authors' institution (#2275).

Table 2. Participants' Social Media Use.

Group	Platforms Used
FG1	Facebook*; YouTube*; Instagram; some Twitter; 1 used TikTok; 1 used Tumblr; male participants occasionally used Reddit
FG2	Facebook*; Instagram*; TikTok; 1 actively used YouTube* and Reddit*
FG3	Facebook*; YouTube; some Instagram and TikTok
FG4	Facebook*; some Instagram and YouTube*; youngest male used TikTok
FG5	Facebook; occasionally YouTube; minimal engagement with other social media platforms
FG6	Facebook; 1 actively used Twitter*; 1 occasionally used Reddit; minimal engagement with other social media platforms
FG7	Facebook*; 1 used Instagram; minimal engagement with other social media platforms
FG8	Facebook*; Instagram*; some WeChat*; Twitter*; Weibo*; Reddit*; 9GAG*; YouTube*; occasionally TikTok and Snapchat
FG9	Facebook; minimal social media use; 1 used YouTube*
FG10	Facebook*; Twitter*; Instagram*; some YouTube*
FG11	Facebook*; diverse social media use, including Twitter* and Instagram*
FG12	Facebook*; YouTube; younger females used Snapchat, Instagram, and TikTok*

*Indicates platforms used for news.

Participants described an increase in their news consumption during the pandemic, and some also sought information from government, science, and other expert websites to supplement what they were seeing in the news. It was also common for participants to report a level of fatigue with the quantity of news and information available. These findings are supported by Australian survey research (Park, Fisher, McGuinness, Lee, & McCallum, 2021; Park et al., 2020) and are broadly consistent with a multicountry survey on news and information consumption about COVID-19 (Newman et al., 2021; Nielsen et al., 2020).

Encounters With Misinformation

All participants said they had a general understanding of misinformation and identified examples they had encountered in both mainstream and social media. However, participants' understandings of and approaches to misinformation are deeply contextual, and no monolithic definition of misinformation will fully explain their diverse experiences. Consistent with Wagner and Boczkowski's (2019) study, participants were generally confident in the trustworthiness of the news brands they consumed, and they turned to these for credible information about COVID-19. For example, participants who gravitated toward brands such as the ABC, the main Australian public broadcaster, often referred to the commercially run Sky News Australia as a source of misinformation. Indeed, in July 2021, YouTube banned Sky News Australia from publishing videos on its platform for one week because it was deemed to have violated the platform's rules by publishing misinformation, including content denying the existence of coronavirus and encouraging the use of hydroxychloroquine or ivermectin to treat or prevent the virus. Some participants referred to these forms of misinformation.

Participants perceived misinformation as a prevalent feature of the contemporary news and information environment. Most expressed concern about its potential impacts on society. They were particularly mistrustful

of news on social media, which was often linked to "click bait" that social media companies benefit from encouraging. Facebook was singled out as a particularly untrustworthy source of news and information: "A lot of news on there, on Facebook, I wouldn't really read too much into because there is a lot of misinformation" (P5, Male 20s, FG4); "I am a bit dubious of what I see on Facebook" (P1, Female 30s, FG11); "I've been trying very hard to not get news articles on my Facebook feed" (P1, Male 20s, FG8).

Concern about Facebook as a source of COVID-19 misinformation is supported by other national and international research (Newman et al., 2021; Park et al., 2021). Apart from those who follow their trusted news brands, most do not go there for news and information. Rather, many said they encounter news on the platform incidentally, but they are already primed with "generalised scepticism" (Fletcher & Nielsen, 2019, p. 1765) and do not rely on what they see there.

Participants readily identified COVID-19 related misinformation they had encountered on social media platforms. Their examples fell into four main categories: (1) Claims about virus severity, protective measures, and remedies, such as those made by U.S. president Donald Trump, including that COVID is not a big deal, wearing a face mask does not protect you, and consuming bleach or hydroxychloroquine is a remedy; (2) Conspiracy theories about virus origins, including the virus being released by China, "plandemic," and 5G spreading the coronavirus; (3) Contests over the veracity of COVID case numbers; and (4) Anti-vaccination beliefs and conspiracies, including that the vaccines were implanting a microchip.

Participants generally tended to be skeptical or dismissive of these types of misinformation. However, some were less sure about what to believe, particularly around case numbers and deaths. There was also some uncertainty about the theory that COVID-19 was made in a laboratory in China. While there was general agreement that it was misinformation, the second participant in the following dialogue also reflected on how he could not be totally sure:

> One of the earliest pieces of misinformation that I was exposed to was this speculation that the virus was deliberately made in a lab in China . . .or something like that and that is like an act of bioterrorism. (P4, Male 20s, FG10)

> I agree that I didn't think it happened, but I also have to accept that maybe that's not misinformation. (P1, Male 20s, FG10)

More broadly, participants acknowledged that what one person perceived as misinformation could be another's informed opinion. For example, regarding local football players posting anti-vaccination content on Instagram, one participant said they "don't think it's misinformation whereas I think it is" (P3, Male 20s, FG 2).

Participants made a distinction between people inadvertently sharing unverified information or opinion and more influential actors such as politicians deliberately sharing misleading information, which is often amplified by news outlets. Former U.S. president Trump was often discussed in relation to the deliberate sharing of misinformation about COVID-19, including remedies such as hydroxychloroquine. It is also important to note that the storming of the U.S. Capitol building in January 2021 occurred just before our interviews and was identified by participants as an example of the tangible dangers and harms of misinformation. There was also some evidence that the confluence of President Trump and the COVID-19 pandemic may have heightened people's awareness of misinformation and the efforts of social media platforms to address it. One participant

observed, "I think we were probably all pretty unaware of [misinformation] before like Trump and COVID, and since then it's much more apparent [. . .] Like we're all much more aware of what we don't believe in, and what we believe" (P6, Male 20s, FG2). Another participant reflected:

> I don't recall . . . Facebook and YouTube . . . actually sort of taking responsibility for the fact-checking and removing media. Like I don't recall that happening prevalently probably as it has in the last 12 months in relation to COVID and I guess it does sort of bring to the fore other questions of I guess freedom of being able to say stuff, whether it's kooky or not and then, whether it's right to have that shut down or not. (P1, Male 40s, FG4)

Participants explained that it was often difficult to dismiss misinformation when the source was within their social networks (family and friends). Some said their relationships had been strained because of a family member's belief in conspiracy theories or other misinformation. A group of teachers mentioned TikTok several times as a source of conspiracy theories and other misinformation for their students, with one saying: "We're now trying to educate students who are getting educated from TikTok by misinformation and openly challenge you. And it's really difficult. It's very worrying and concerning" (P2, Female 40s, FG7). Misinformation about climate change (that it is not real) and the Black Lives Matter protests (that the protesters were responsible for the violence) were cited as examples. The teachers, who were not themselves avid social media users, felt a tremendous responsibility to combat this in the classroom but felt unequipped to do so and that the curriculum needed to include more content on information evaluation and media literacy skills. Given the perceived role of media literacy education in combatting misinformation, these findings support calls for Australian academics and educators to lead in the teaching and learning of news media literacy (Notley & Dezuanni, 2019).

Susceptibility to Misinformation

Consistent with previous research (Jang & Kim, 2018) most people were confident about their own resilience to misinformation because of the media-related practices they adopted, but they had a range of concerns about the vulnerability of others. While there was no consensus on who was more vulnerable, participants identified demographic and social characteristics as well as news consumption and media practices that could make people more susceptible to misinformation. These included reliance on sources that reinforce personal views; failure to verify information or consult multiple and diverse sources; and a lack of awareness of how digital platforms use algorithms.

Several participants suggested that failing to consult multiple and diverse sources could make people susceptible to misinformation, and reliance on a single source that supports one's own point of view was a particular concern:

> I think there's a tendency for people to follow stuff that maybe supports their own views . . . I mean, I think if you were really diligent, you'd make sure you have news sources coming in across the spectrum so you can get different views. (P1, Male 40s, FG4)

These comments resemble the concepts of "echo chambers" and "filter bubbles" that have been challenged in media studies (Bruns, 2019) but nevertheless demonstrate how they are invoked to explain

people's susceptibility to misinformation. Scholars have noted that there are no clearcut boundaries between definitions of "echo chambers" and "filter bubbles." However, one distinction that has been drawn is that the former allows that people may actively choose to participate in this form of bounded media space because they seek out information that is consistent with their views and are insulated from alternative views. On the other hand, a filter bubble is produced by ranking algorithms that are not the result of an individual's active choices (Arguedas, Robertson, Fletcher, & Nielsen, 2022). Participants' comments indicate a concern that both types of bubbles—whether actively chosen or driven by algorithmic filtering—may make people more susceptible to believing misinformation they encounter in those spaces.

Some participants used the popular metaphor of "rabbit hole" to indicate the ways in which social media algorithms may work to get people stuck in a misinformation spiral. One young man commented:

> Once you click on something it's easy to get stuck in the rabbit hole. I think after you . . . watch a video, and it automatically goes to the next one, it might be linked. And then, after a little while it's easy to get stuck in that rabbit hole of seeing repeated trends and themes based off those algorithms which can be pretty dangerous especially with misinformation. (P5, Male 20s, FG2)

Participants in one group (FG11) referred to *The New York Times* podcast series titled *Rabbit Hole*, which documents one man's experience of becoming inculcated into extremist views by following YouTube recommendations.

Lack of awareness of algorithms, particularly among older people, was a cause of concern for some participants:

> The older generations aren't educated in this, really. And so, they are going down this rabbit hole. Do they know that they're going down this rabbit hole? And there's gotta be some sense of transparency of how these algorithms work. (P1, Female 30s, FG11)

Further on the role of algorithms, one participant observed that "The Social Dilemma," a documentary on the impacts of social networking, had prompted her to think about the "echo chamber" and follow news outlets and people whose views she does not agree with on Twitter: "That documentary very much said, confuse your algorithm, like if you're on Twitter, follow people that you don't agree with, whose policies you don't agree with, because otherwise you will not hear things" (P5, Female 20s, FG10).

Participants concluded that individuals are ultimately responsible for managing their own news and information consumption and for not accepting and spreading misinformation. However, supporting research that there is a "third person effect" when it comes to detecting misinformation, they were concerned about the ability of other people to do so (Corbu, Oprea, Negrea-Busuioc, & Radu, 2020). Young people thought older people were particularly vulnerable, while the teachers in our study felt their students were susceptible to misinformation.

Strategies for Dealing With Misinformation

Participants had a nuanced understanding that misinformation responsibility was "distributed" among individuals, news media organizations, governments, and digital platforms. A common theme was that individuals have a responsibility to manage their news and social media consumption: "We have a choice on what we want to feed ourselves with, and I think we all need to start being wiser, more critical thinkers" (P3, Female 50+, FG9). While participants agreed that both governments and platforms have a responsibility to address misinformation, they were skeptical about giving them such powers. We identified a deep suspicion of platforms' willingness to take responsibility for mitigating misinformation if it interferes with their profit motives.

Participants had a general awareness of what platforms are doing in response to misinformation, such as hiding or removing user content, which had been heightened by the COVID-19 pandemic. Some were aware of fact-checking, labeling, flagging, and tagging content, and these were seen as less controversial than content removal. Participants who were aware of measures to increase the visibility of high-quality news and information, such as providing links or elevating dedicated information about COVID-19, were most likely to encounter it on Google, rather than on social media platforms, and did not necessarily follow such links on social media. As one participant observed, he was not on Facebook or Instagram to get information and advice about COVID (P5, Male 20s, FG4).

Participants also focused on what they as individual citizens and media consumers could do, which we discuss next.

Scrolling by, Ignoring, or Blocking

Most participants were concerned about the spread of misinformation, but they had a reflexive understanding of what they should or could do to combat it, which was related to their assessments of the potential effectiveness of their actions and the ability of other social media users to discern the misinformation for themselves. Several said they generally opted to ignore or scroll on by; they very rarely reported content and presented themselves as unwilling to get into debates on social media. For example, one stated: "If I'm getting repeated misinformation from the source, I'll just block the source. I just don't want to see it. It's not worth venturing into an argument about it online" (P2, Female 50+ FG9). Another said:

> If I saw something that I knew was like fake news or whatever, I'd probably just be like surely no one's gonna believe this anyway and I wouldn't really take any measures to like actively try and shut it down. (P1, Male 20s, FG2)

Some also conveyed a sense of futility about their ability to change other people's opinions and beliefs:

> I don't like getting into those types of arguments because it leads nowhere. It achieves nothing if you just try and look like a hero . . . Either block a post so you can't see it, or something like that. (P4, Female 20s, FG3)

These findings are largely consistent with previous research. In a study conducted in Singapore (Tandoc et al., 2020), the majority said they would ignore fake news when they encountered it online. Similarly, in Australia (Park et al., 2020), more than one-third of those who experienced misinformation did nothing, less than a quarter of respondents checked other sources to verify the information, and only a small minority (4%) reported it to the information provider.

Verifying

Practices of verifying information were another method for dealing with potential misinformation. "Googling" was often mentioned. A few said they used specific fact-checking sites (e.g., Snopes), but most took the approach of cross-checking information by consulting news sources and websites they deemed trustworthy. Two participants said they often read the comments on YouTube videos and Facebook posts before reading the actual article because this served as a barometer of its credibility. For example, one said:

> Before I read almost any article that pops up on my feed, I look at the comments before I bother to read the article . . . if lots of people are discrediting it already I'm not wasting my time to read it. (P4, Female 40s, FG4)

This kind of approach places a great deal of trust in the interpretations and assessments of other social media users but, for these participants, "witnessing corrections" (see Bode & Vraga, 2021) was seen as a reliable method for determining whether or not to engage with content on social media platforms.

Challenging and Correcting

A minority of participants said they sought to challenge or correct misinformation they encountered online. A few discussed actively seeking to understand conspiracy theories and why people believe them so they could formulate counterarguments. For some, this translated into intentionally seeking to inform and correct other users, as two participants discussed below:

> Look there's a particular friend of mine who does dabble in conspiracy theories, etc. And he puts stuff on his Facebook page, and I quite often correct him . . . He's still got his conspiracy theories, I'm never going to cure him of those. But in particular things about COVID for instance, where early on he was one of the ones saying "it's just the flu etc." So, I went and researched all the figures about deaths from flu . . . and said, "Look, that's just not right, because this is the situation" and he actually seemed to react positively. (P2, Male 60s, FG6)

> Somebody the other day had [posted] a terrible lot of lies about the vaccine, including that Bill Gates put metal in it and all sorts of ridiculous things. And I just said, it's not a close friend, I just said, "So and so please, don't spread this sort of misinformation on the Internet, it's very dangerous." (P6, Male 60s, FG6)

In response to the suggestion by one participant in this group that you can defriend or unfriend people on Facebook, P6 said: "Yeah that's right, but then she's out there roaming wild without any supervision." These comments reveal that misinformation about COVID-19 moved some people to act. The reason provided by P6, who felt a responsibility to correct misinformation about the COVID vaccine, was "so that other people who read it will see that there's a different point of view," particularly in light of the "smiley faces" he said the post was attracting.

Participants who had challenged or corrected misinformation also reflected on how to do so in an inquisitive and dialogic manner rather than just telling people they were wrong:

> If it's come across my feed because somebody that I'm friends with or someone I know
> has reposted that, then I'll often reach out to them and I'll say "Hey, just so you know,
> this is problematic/misinformation, here's sources that contradict this and explain why it's
> wrong, just letting you know, not trying to offend or anything." (P2, Female 20s, FG1)

This reported responsibility to correct and challenge what they see as misinformation could be described as a form of civic engagement that incorporates the belief that they can change people's views through sharing information and engaging in dialogue and, more broadly, contribute to increasing exposure to corrective information.

Reporting

Some participants had in the past reported offensive or abusive social media content, such as animal cruelty and anti-Semitic content. However, none said they had reported any COVID-19 misinformation. Dissatisfaction with the response of platforms to previous reports was a factor for one participant:

> When I was on Facebook, I reported anti-Semitic things many times and I found that they
> weren't dealt with at all . . . very ineffective. I didn't even bother with stuff on Twitter related
> to COVID, or like any of the issues in 2020 . . . , which is a shame. (P4, Male 20s, FG10)

In general, participants supported notions such as "freedom of speech" and the "contest of ideas," over closing down debate and discussion, and saw value in allowing people to see different views and assess the supporting evidence for themselves. However, there was general agreement that social media platforms needed to take responsibility for removing a user's content if it crossed certain boundaries. Inciting racism, violence, and anti-vaccination sentiments were some examples of harmful content identified by participants.

Discussion and Conclusion

Misinformation about COVID-19 has generated considerable attention from scholars, social media companies, and governments seeking to identify and assess its harms and develop ways to address it. Participants in our study expressed concerns about COVID-19 misinformation and its potential to cause harm while also appreciating the harm that could arise from measures to shut down the expression of opinion. The study reveals the nuances and complexities of citizens' approaches to COVID-19 misinformation, particularly on social media platforms. In doing so, it contributes to broader debates about the role and effectiveness of media literacy, fact-checking, and other measures to correct and mitigate the

effects of misinformation (Clayton et al., 2020; Hameleers, 2022; Tully, Bode, & Vraga, 2020). We focused mainly on what people do when they encounter perceived misinformation and the kinds of considerations that inform their actions, finding that participants' practices are largely consistent with what has been theorized as critical media literacy. However, this literacy does not necessarily translate into active attempts to challenge, correct, or report misinformation, which poses a challenge for efforts to enlist citizens to play a more active role in combatting the spread of misinformation on social media.

Vraga, Tully, and Bode (2020) suggest news literacy can help encourage people to not only be critical consumers of news about COVID-19 but also play a role in improving the information environment for everyone by sharing accurate news and information from trusted sources or correcting misinformation shared by friends and family. It has also been suggested that encouraging social media users to refute false or misleading health information and providing them with sources to accompany their refutation could be a useful strategy for public health authorities to adopt during emerging health issues (Bode & Vraga, 2018). Our study found that only a small number of participants drew on perceived authoritative sources to refute or correct online misinformation about COVID-19. For the majority, engaging in corrections or debate was not a role they wanted or felt the need to perform on social media.

Consistent with previous research (Tandoc et al., 2020), it was more common for people to discuss challenging or correcting misinformation when it was shared by a friend or family member than by a stranger. People appeared genuinely motivated to correct people close to them who they did not think were deliberately sharing false information. In contrast, some participants conveyed the idea that it is not their place to be trying to correct the beliefs of other people even if they are misinformed. There was also a sense that such efforts could be futile. This is reflected in the most common approach to misinformation we identified, which was ignoring it. It was not that people were unconcerned about misinformation but, rather, it was not part of their social media practice to intervene. This seems to reflect an acceptance of the limits of what individuals in today's media environment can realistically do. Additionally, people's sense of futility about changing what people think is in some ways supported by research showing that even when people are corrected, they continue to rely at least partially on information they know to be false (Lewandowsky, Ecker, & Cook, 2017). It is notable that some participants accepted that they may be unlikely to change the views of "hardliners," as one participant put it, but that their corrections could influence others and contribute to informed public discussion more broadly. This perhaps indicates an awareness of and belief that corrective efforts may play a role in reinforcing norms that correction is acceptable on social media (Bode & Vraga, 2021).

We did not attempt to formally measure participants' digital or news literacy, but we can discern from their conversations that they practice several media literacy skills and competencies. For example, in the context of the COVID-19 pandemic, they discussed reading beyond the headlines, consulting multiple and diverse sources, seeking to verify content, and generally being skeptical about news and information they encountered on social media. While these practices do not necessarily limit exposure to misinformation, participants saw them as enhancing their ability to assess the credibility and trustworthiness of news and information. Notably, however, our study reveals that undertaking such practices and being concerned about the quality of online discussion does not necessarily mean that people will actively seek to correct misinformation they encounter online. People also need to have the motivation and desire to do so (Newton, 2019), and this arguably moves beyond the teaching of media literacy skills alone. For people to experience efficacy in their actions, social media platforms must take seriously, and respond to, the reporting of misinformation online. As discussed, social media

companies have initiated a range of measures to address COVID-19 misinformation, but more work is needed to assess audience engagement with, and the impacts of, these efforts across diverse platforms throughout the pandemic. Raising awareness of the potential harms of misinformation and what individuals can do to influence others on social media platforms are elements of media literacy that could be emphasized and further investigated. But future efforts to mobilize social media users must recognize the spectrum of approaches people adopt when they encounter misinformation and their reasons for doing so.

Participants who had corrected or challenged other people observed that it was important to avoid simply telling people they are wrong but to seek to create dialogue and invite people to consider alternative information and perspectives. Some provided examples of getting people to rethink their views by adopting this approach. Further research could examine the extent to which people are more accepting of corrective information if it comes from someone known and trusted to them within their social network, and what kinds of approaches people are most responsive to. While our study has focused largely on encounters with misinformation in online and social media spaces, it also identified some of the more private relational contexts in which people seek to manage misinformation beliefs among their families and friends. Here we think Malhotra's (2020) calls for a relationship-centered and culturally informed approach to studying COVID-19 misinformation offers a promising way forward for research and interventions in this area.

We interviewed a relatively small number of participants using a purposive sampling method in Australia and, thus, our findings cannot be generalized to a wider population. More research is needed to understand and compare the strategies different groups use to identify and respond to misinformation. It should also be noted that the findings provide a snapshot of a moment in time and cannot offer a causal explanation of how people's conceptions of misinformation, and what they do about it, may have changed during, or as a result of, the pandemic. We would speculate that the gravity of COVID-19 has heightened people's awareness of the risks of misinformation on social media platforms and the measures platforms are taking to address it. However, further research is required to assess whether the pandemic has shifted people's understandings of, and strategies for responding to, misinformation or had any significant impacts on people's media or health literacy. Notwithstanding the study's limitations, we believe it provides valuable insights into citizens' rationales for dealing with COVID-19 misinformation, particularly on social media platforms.

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