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Research Note

User experiences and needs when responding to misinformation on social media

This study examines the experiences of those who participate in bottom-up user-led responses to misinformation on social media and outlines how they can be better supported via software tools. Findings show that users desire support tools designed to minimize time and effort in identifying misinformation and provide tailored suggestions for crafting responses to misinformation that account for emotional and relational context. Academics and practitioners interested in designing misinformation interventions that harness user participation can draw upon these findings.

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Research questions

- RQ1: What barriers or challenges do people face in identifying and responding to misinformation posted on social media?
- RQ2: What design principles should inform tools or resources that support people in identifying and responding to misinformation posted on social media?

Research note summary

- This study relies on two phases of semi-structured interviews with 29 participants, including misinformation research experts, online community moderators, and people who respond to misinformation on social media as part of their work.
- Participants highlighted the time and effort needed to conduct research to evaluate the credibility
 of information and craft responses to misinformation. They also underscored the emotional labor
 involved in responding as they regulate their emotions to avoid conflicts and relational strife.
- To mitigate the labor involved, participants desire tools that minimize time and effort in identifying misinformation. To support crafting of responses, they want tailored suggestions that

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- account for emotional and relational context while still providing autonomy to craft an individualized response.
- This study presents useful insights for those designing support tools to address misinformation on social media. Findings suggest that these tools will need to strike a balance between automated processes that cut down on user time and effort and preserving user autonomy.

Implications

Misinformation, typically defined as "constituting a claim that contradicts or distorts common understandings of verifiable facts" (Guess & Lyons, 2020, p. 10), is an issue of great concern, especially on social media (Lewandowsky et al., 2012; Rossini et al., 2021; Wittenberg et al., 2020). In the fight against misinformation, the role of social media platforms has received significant attention. Platforms like Facebook and Twitter have deployed a variety of misinformation interventions, including the removal of accounts and pages that share misinformation, down-ranking of pages, groups, and content associated with misinformation, warning labels and/or contextual information on posts containing misleading information, and nudges for users to read articles before posting links (Reuters, 2021; Roth & Pickles, 2020; Silverman, 2019). However, platform-based interventions can only do so much. Attempting outright removal of all misinformation, much of which may be harmless, difficult to interpret, or still evolving, is a daunting task for platforms and may be perceived as excessive censorship by users (Vogels et al., 2020). The same may be the case for the more opaque intervention of down-ranking, which involves reducing the visibility of misinformation (Gillespie, 2022). This has led to accusations of "shadow-banning" (Savolainen, 2022), which may further users' mistrust of platforms. And when it comes to platformprovided labels, many users do not understand them or trust them either (Saltz et al., 2021). These labels are also absent in more private and encrypted online spaces like messaging apps (Malhotra, 2020).

These issues may explain why, compared to these platform-led interventions, social media users rely in large part on other users (e.g., via comment threads) and interpersonal connections while assessing potential misinformation (Geeng et al., 2020; Malhotra, 2020). In this study, we, therefore, focus on bottom-up user-led responses to misinformation. Prior research demonstrates that the efficacy of such responses is promising. People are more likely to accept misinformation corrections from those known to them compared to strangers (Margolin et al., 2018), and there is experimental evidence that observing corrective messages on social media can help to reduce misperceptions (Bode & Vraga, 2021; Vraga et al., 2020). These user-led responses may occur between family members, friends, or strangers, and may be led by professionals like health communicators and educators or supported more formally via programs or communities for crowd-sourced response (e.g., Twitter's Birdwatch or Community Notes program, see Coleman, 2021; the Lithuanian "elves," see Abend, 2022).

However, engaging with other users on difficult and emotionally charged topics is challenging; it requires not only identifying misinformation and researching accurate information but also responding in conversations that can turn hostile. People are often reluctant to engage in such online conversations to avoid confrontations and hurting relationships, especially when political disagreements are involved (Grevet et al., 2014).

Given these concerns, how can the power of user-led misinformation responses be better harnessed and supported? What are the barriers faced by those who participate in these efforts? We investigated these issues through semi-structured interviews with a mix of field experts and regular social media users, including people who respond to misinformation on social media as part of their professional responsibilities. We found that the process of identifying and responding to misinformation on social media involves expending labor, both in the form of time and effort and the regulation of emotions. Thus, similar to other user-led efforts like volunteer moderation on Reddit and peer production for sites like

Wikipedia, user-led responses to misinformation are characterized by a significant amount of emotional labor (Dosono & Semaan, 2019; Menking & Erickson, 2015; Wohn, 2019). Here, emotional labor refers to the labor involved in regulating emotions while responding to misinformation to avoid offending others and harming existing interpersonal relationships (Feng et al., 2022; Hochschild, 2015; Malhotra & Pearce, 2022).

We believe that understanding the labor involved in identifying and responding to misinformation can help to inform the design of processes, resources, and tools to support these efforts to address misinformation. To elicit concrete design suggestions for such tools, we also presented our interview participants with a mock-up of a hypothetical response-support tool as a probe (Boehner et al., 2007). This tool was described to participants as one that could analyze social media content and provide users with information to help them gauge the content's veracity and guide them in how to respond to misinformation in trust-building ways, informed by the user's goals and target audience (see Appendix for more details). Participants revealed that they prefer tools that minimize the time and effort involved in identifying misinformation, especially in collecting resources that help to determine if a post contains misinformation and can be used as factual evidence while responding. Therefore, automated tools that analyze social media posts and provide users with links and evidence by potentially drawing on databases from multiple third-party fact-checking organizations may help minimize this time and effort. In terms of crafting responses, participants prefer tailored guidance informed by the emotional and relational aspects associated with responding to misinformation. They also desire autonomy in crafting responses and are reluctant to rely on boilerplate responses. Thus, future designs for support tools may include tips and guidance on how to craft responses to misinformation based on the nature of one's relationship with the misinformation sharer. Overall, the design of support tools may, therefore, involve automated processes that help to identify misinformation and provide users with resources containing accurate information as well as a repository of human-created tips on crafting responses for different audiences that help to preserve user autonomy. Furthermore, there is potential for designs that combine automation with human feedback; for instance, large language models may be integrated into tools that allow people to get feedback on how to craft responses.

In summary, our study places the needs of social media users front and center and outlines how the design of tools to support them must be informed by these needs. While recent research has focused on the experiences of social media users in responding (or not responding) to misinformation (Feng et al., 2022; Malhotra & Pearce, 2022; Tandoc et al., 2020), our work emphasizes the labor involved in this process and also proposes concrete design suggestions for support tools. Furthermore, we identify ethical considerations associated with designing such tools. Tools that encourage people to respond to misinformation can increase their chances of encountering online harassment and hate speech, especially for those belonging to marginalized communities. Similarly, encouraging people to respond to friends or family who share misinformation carries risks because it may cause damage to the relationship. Moreover, engagement in such emotional labor may impact the mental well-being of those responding (Lee et al., 2022). Therefore, the design of these tools should support users in dealing with these emotional issues, including providing mental health resources and potentially encouraging the fostering of misinformation responder communities that provide support to each other. There are also concerns that bad actors, like those who create and spread disinformation, may weaponize such tools. While this remains a concern, it should not prevent the development of tools that support users in responding to misinformation. Indeed, as many of our interview participants noted, people who create and spread false information on social media continue to get more attention and visibility than those who attempt to identify and respond to it (Vosoughi et al., 2018). Overall, such tools would support those participating in the latter process. Finally, it is also important to acknowledge that for such tools to be widely used and accepted, people across the political spectrum will need to trust them. This remains a challenge, given that current efforts to address misinformation are equated with censorship and even face legal and political opposition in the United States (Nix et al., 2023).

Evidence

Misinformation response as labor

Participants described how the process of encountering and responding to misinformation online (detailed in Figure 1 below) involved a number of choices, including which resources to use to identify misinformation, whether or not to respond, and which response strategies to utilize. This echoes the extant research on people's engagement with online misinformation mentioned above.

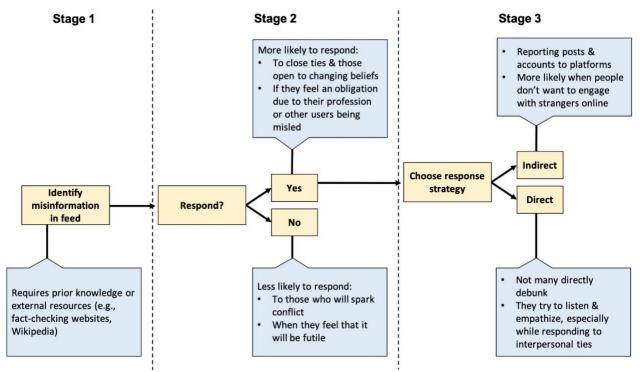


Figure 1. Diagram illustrating process people follow when engaging with misinformation on social media.

The participants indicated that engaging in this process was often overwhelming because it involved expending significant time and effort in conducting research to evaluate the credibility of information. As P10 said, "it's all about finding incredible sources, incredible analysis, but also verifying using different sources." Participants also highlighted the research involved in crafting convincing responses (e.g., "[I post] some summarized version of that [all the information collected], so that people looking at it will be like, 'Oh, I see how it's corrected. And that makes sense. I don't need to look into it further.'" [P7]). Even as they engaged in such research, some participants felt like they did not have enough time and energy to address the sheer volume of misinformation online. For example, P9 said: "On the public-facing Twitter account, I have to ignore a fair amount of it because if I tried to engage everything like that that was out there, it would be an intolerable burden." Many said that this led to them becoming wary after constantly monitoring and responding (e.g., "I got tired of being the hall monitor, so I stopped." [P18]).

Misinformation response as emotional labor

Participants also outlined how responding to misinformation online challenged them on an emotional level, based on their relationship with the person to whom they were responding.

Responding to strangers. Participants feared that their responses would not change the beliefs of misinformation sharers, especially if they were strangers. To convince such strangers, some expended emotional labor and tried to build a relationship with them through listening, asking questions rather than making definitive statements, and using a gentle and polite tone. P14 shared her experience: "The important part is fostering that trusted relationship ... I think listening to the concerns of the person who might believe a bit of misinformation, getting them to talk out their position and just pose other questions to them [would help]." This reflects the importance of building interpersonal relationships with strangers in order to make an impact. However, this requires regulating one's tone and feelings, namely expending emotional labor.

Responding to close ties. Participants noted that they also engaged in emotional labor while responding to close ties because they needed to regulate their feelings and ensure that they did not damage their existing relationships (e.g., "It's okay if you need to step away for a bit and not wreck your family relationship. ... it could be harder to untangle your family member's issues because you're so close to them." [P27]). Though some participants said they avoided such potential confrontations altogether, others stated that they chose to address the situation. P14, for instance, tried to provide evidence to her father about misinformation: "So it's tricky because ... he doesn't just trust me. Even though he is my father and my biggest advocate, it is hard to undo the power of misinformation ... And I try to and I'll get into arguments with him on it anyway." Overall, participants noted that responding to close ties who believe in misinformation involves expending significant emotional labor to ensure that their relationships remain intact.

Design principles for support tools

To explore how this labor may be mitigated through support tools, we also showed participants a hypothetical response-support tool mock-up and asked them to provide feedback on it (see Appendix for a detailed mock-up description). This engendered some common design principles for software tools that may support people in identifying and responding to misinformation on social media.

Minimal effort. As noted above, people expend time and effort in collecting resources to identify misinformation and craft their responses. Since this work is especially repetitive and mentally exhausting, participants talked about alleviating the burden with a tool containing "specialized fact-checking resources that are easily accessible for the public or for specific spheres of work" [P12]. Some of these resources have been available through platform-led interventions like Facebook's COVID-19 misinformation center and labels on posts containing misleading information. Thus, it is possible that these resources can help to reduce the time and effort users expend in identifying misinformation, with support tools mainly focusing on mitigating the emotional labor involved in responding to misinformation by helping people craft empathetic responses. However, a limitation of relying on platform-led interventions is that users do not always trust them (Saltz et al., 2021). Participants also mentioned that a tool that provided templates and blurbs to use while responding could help minimize the effort required to craft a response. For instance, P22 said, "you can have a quick example blurb response in italics to explain how you could do it."

Autonomy. Though many found the idea of such ready-to-go artifacts useful, participants also stressed the need for maintaining autonomy while responding. They argued that composing a response was a subjective experience and a tool should only provide guiding opinions (e.g., "I'd be hesitant to use something that is trying to give someone else empathy ... because I feel like it'd be disingenuous if I use like a copy pasted empathy sentence" [P19]). In general, participants said that they would like to make decisions independent of algorithms. On viewing the mock-ups, P23 noted that "since you are giving different avenues to correct the user or talk to the user it's giving me more autonomy to make my own decisions, rather than relying on the AI or the computer." Overall, participants indicated that tools to support them in identifying and responding to misinformation may have to be designed to strike a balance between minimizing effort through automation and preserving individual autonomy.

Tailored suggestions. One of the reasons for participants' emphasis on autonomy was that the process of identifying and responding to misinformation is context dependent. An important contextual factor they mentioned was their relationship with the misinformation sharer. Given this issue, participants discussed the need for customized guidance from the tool, depending on who they were responding to. P15 said, "It might be a good initial question to say, 'who is this person,' 'is it a good friend,' 'is it an acquaintance, a family member, a business associate, or just one of those thousands of connections you have on social media?" As noted above, people's relationship with whom they are responding to impacts their response. Thus, a tool that provides tailored suggestions may include an extensive repository of tips informed by research from areas like conflict management and interpersonal communication on the language one can use while responding to specific audiences such as older family members, younger family members, close friends, acquaintances, professional colleagues, and strangers online. Such a tool would allow users to select tips based on their situation and acquire guidance on how to frame their responses. This would help mitigate some of the emotional labor involved in the process, as users would have to expend less effort in framing responses that do not cause emotional and relational strife. At the same time, it would preserve individual autonomy by guiding users in the language they can use while framing a response rather than suggesting boilerplate responses they can copy and paste, regardless of their emotional and relational context.

Methods

To answer our research questions, which are detailed above, we ran two phases of semi-structured interviews with 29 participants via Zoom (15 in Phase 1, 16 in Phase 2, including two participants interviewed in both phases). We chose interviews as they help to capture "the experiences and lived meanings of the subjects' everyday world" (Brinkmann & Kvale, 2018, p. 11), allowing us to understand the barriers people face in responding to misinformation on social media in their everyday lives (RQ1). We also used a response-support tool mockup as a probe during the Phase 2 interviews. Probes are suitable for recognizing user design needs (Blandford et al., 2016; Boehner et al., 2007), enabling us to examine people's design needs for misinformation response support tools (RQ2). Moreover, as qualitative approaches engender new questions and considerations regarding technology design (Dourish, 2014), this approach also allowed us to reflect on ethical considerations associated with designing such support tools.

Recruitment & sampling

Phase 1 interviews were conducted between January and March of 2022, while Phase 2 interviews were conducted between April and June of 2022. For both phases, we engaged in purposive sampling, targeting a mix of misinformation research experts, online community moderators, people who respond to

misinformation on social media as part of their work, and general social media users (see Appendix for demographic details). Here, we considered "work" in a broad sense: in some cases, responding was part of paid professional work, such as being a social media manager, journalist, or public health communicator, while in other cases, it arose due to unpaid work, such as being a community moderator or blogger. We wanted to include people who engage with misinformation to varying degrees and for different purposes to build in heterogeneity in the sample (Weiss, 1994). Participants were found through the researchers' personal networks and by posting a call on social media. They were offered a \$15 or \$25 Amazon gift card as compensation, based on their level of expertise. In the findings, they are referred to by their Participant IDs to ensure anonymity.

Interview process & analysis

Interviews were conducted by experienced graduate students and undergraduate research assistants, all of whom are listed as authors. On average, Phase 1 interviews lasted for 30 minutes, while Phase 2 interviews were 38 minutes long. In Phase 1, participants were asked about their general use of social media, their engagement with misinformation on social media, and their process for identifying and responding to misinformation, including the barriers they face and the support they need (RQ1). In Phase 2, participants were asked about these topics and also shown a low-fidelity mock-up for a software tool described as a tool that supports people in responding to misinformation. The mock-up design was informed by insights gleaned during Phase 1 interviews and was used as a probe to help Phase 2 participants reflect on design principles associated with misinformation response-support tools (RQ2). The Appendix includes interview protocols, mock-up screenshots, and details about mock-up elements. Participants were asked to reflect on the utility of these elements and the design of their ideal response-support tool.

Analysis

Interviews were transcribed using an online transcription service. Transcripts were analyzed using the thematic analysis technique (Braun & Clarke, 2006). The first and second author coded five transcripts independently and engaged in discussions to design a codebook. Disagreements between the authors were resolved through these discussions, and consensus was reached on the final codebook. Following this, the first and second author split the remaining transcripts and coded them independently, guided by the codebook.

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Competing interests

None.

Ethics

Research deemed exempt by University of Washington IRB (ID: STUDY00014609). Participants provided informed verbal consent and determined gender categories.

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Data availability

Participants granted consent based on the assumption that access to interview transcripts would be limited to the researchers, and this was also communicated in our IRB application. Thus, we are unable to share data outside of our research group.

Appendix A: Protocol

Screener survey

- What is your age?
- What is your gender?
- What is your occupation?
- Which social media platform(s) do you most frequently use?
 - Twitter
 - o Facebook
 - o Instagram
 - o Reddit
 - YouTube
 - o TikTok
 - Snapchat
 - o WeChat
 - o Line
 - Other
- How often do you see posts which you think contain misinformation on these social media platforms?
 - Never
 - o Infrequently
 - Sometimes
 - o Often
 - o All the time
- How frequently do you respond to posts which potentially contain misinformation?
 - Never
 - Infrequently
 - Sometimes
 - Often
 - o All the time
- How do you generally respond to misinformation? If you don't choose to respond, why not?
 Explain using a couple of sentences.

Phase 1 interview protocol

Introduction

We are researchers whose project is centered around creating a tool to help promote productive and healthy conversations around misinformation on social media sites, such as Twitter. We wanted to talk to you more about your social media habits and how you interact with misinformation. We are not looking for any right or wrong questions. This interview will last no more than an hour. Can we record audio? You can choose not to answer any question, and we can stop the interview at any time.

Background information

- Professionally, what is your job? (Are there aspects tied to social media?) OR Online community wise, what is your role (and what is the community)?
- What are your goals when it comes to your online communities?
- What social media platforms do you use most often? (examples: Instagram, Facebook, Twitter, WhatsApp, WeChat)

- Follow up: Why do you use these platforms? What do you like about them?
- How long have you been using each social media platform?
- How many hours a week are you on these platforms?
- What do you like about the social media platforms you use?
- What do you dislike about the social media platforms you use?
- Interacting with Misinformation
- How often do you encounter misinformation [or information you are uncertain about] on social media?
- Think of a specific recent instance where you encountered misinformation? Can you describe the misinformation you encountered and how you reacted to it?
- On social media, what elements or factors cause you to suspect that you have found misinformation?
- What is the nature of the misinformation that you find?
- Are there some specific topics of misinformation that frequently show up? Which topics?
- When you encounter misinformation, what are your first thoughts and feelings? Is there a typical way that you respond to misinformation you find?
- Do you try to counter the misinformation in any way? How so? Why? Is this process difficult?
- Do you try to respond to the misinformation by engaging in conversation with the poster? How so? Why? Is this process difficult?
- Do you try to respond to the misinformation by making a post in reference to the misinformation? How so? Why? Is this process difficult?
- When you engage around / respond to misinformation, what are your goals in doing so? Or when you choose not to engage/respond, what are your goals?
- Have you observed others respond / engage in conversations about misinformation on social media? What do you think has worked well or poorly about how these people have gone about those conversations?
- Has anyone ever corrected or challenged something that you posted / re-shared? How did that go? What worked well or poorly?
- Which tools or circumstances have been helpful in your fight against [OR 'countering'] misinformation?
- Can you think of anything that might help you? (It's okay if you can't think of anything / if the answer is no.)
- Would you consider downloading another app or software tool for helping you fight misinformation? Do you use your desktop or phone more?
- What is/has been most difficult about countering misinformation on social media? Explain.
- Closing Question
- Reflecting over our discussion, do you feel optimistic or pessimistic about social media overall?
 What is one thing that you think might make things bet?

Phase 2 interview protocol

Introduction

We are researchers whose project is centered around creating a tool to help promote productive and healthy conversations around misinformation on social media sites, such as Twitter. We wanted to talk to you more about your social media habits and get your feedback on a prototype for our tool. We are not looking for any right or wrong answers, and we value your honest opinions. This interview will last no

more than an hour. Can we record audio? You can choose not to answer any question, and we can stop the interview at any time.

- Professionally, what is your job? (Are there aspects tied to social media?) OR Online community wise, what is your role (and what is the community)?
- What are your goals when it comes to your online communities?
- What social media platforms do you use most often? (examples: Instagram, Facebook, Twitter, WhatsApp, WeChat)
- How long have you been using each social media platform?
- How many hours a week are you on these platforms?
- Misinformation Context
- Have you ever encountered misinformation on social media? If yes, how often?
- Have you ever responded to misinformation, or felt the urge to respond?
 - If they have: What strategy did you employ? How successful was it? Did you source info/resources from an outside app/website/Google? Do you think you could've used more resources or background?
 - If they just felt the urge but didn't respond: Why didn't you? What would've made you
 more likely to go out and respond (probe if a tool might've been useful)
- How likely are you to exit your social media app to open a website/app that can help you craft a response to misinformation?
- How likely are you to use an app built into the social media site to respond to misinformation?
- Tool Demo: screenshare the low-fidelity mock-up
- Emphasize that they shouldn't focus on aesthetics (colors, fonts, spacing, etc) simply the content and the layout and sections they see.
- Open Figma and take interviewee through each page. Let them observe, telling them to think out loud about what they're seeing and what they think
 - Positives
 - Negatives
 - Points of confusion
 - General observations (cluttered, easy to read, well organized)
- What are your first impressions?
- How do you see yourself using this tool (if at all)? Explain in detail
- What parts of the tool do you resonate with, if any? Are there any features that you think you will be frequently using?
- What parts are most ambiguous, if any?
- What parts look like things you wouldn't be interested in or use? Are there any features which seem irrelevant to you?
- Would you use the tool differently, or need different features, in situations where you are responding to a family member versus a stranger?
- If you wouldn't use this tool, what kinds of people (if any) could you see using this tool?
- If you wouldn't use this tool, is there anything that might make it more useful for you?
- Closing Questions
- Reflecting over our discussion, would you use some kind of a tool to counter incorrect or confusing information you see online could defeat misinfo? How likely would you be to use the tool I presented?
- Any suggestions for features that you would like to see?
- Any features that you appreciated? Explain.
- Any features that you did not appreciate? Explain

Appendix B: Demographics table

Table 1. Demographic information about the interview participants.

PID	Phase	Age Range	Gender	Occupation	Engagement with Misinformation	Most Used Social Media Platforms
P1	1	18-23	М	Teacher	In free time	Twitter, Facebook, Instagram, YouTube, TikTok
P2	1,2	18-23	F	Student	In free time	Twitter, Instagram, Reddit, YouTube
Р3	1	18-23	M	Unemployed	In free time	Twitter, Facebook, Instagram, Reddit, YouTube, TikTok, Snapchat, WeChat
P4	1	24-29	M	Student	In free time	Twitter, Reddit, YouTube
P5	1	30-39	M	Audiologist	In free time	Facebook, Reddit, TikTok
Р6	1	24-29	М	Substitute teacher	In free time	Twitter
P7	1, 2	30-39	М	Clinical informaticist	As part of work (Health)	Twitter, Facebook, Instagram
P8	1	30-39	M	Lecturer	In free time	Twitter, Facebook, Instagram, Reddit, YouTube
Р9	1	50-59	M	Pharmaceutical scientist	As part of work (Health, Social Media)	Twitter
P10	1	50-59	М	Freelance journalist	As part of work (Communities)	Twitter, Facebook, Reddit, YouTube, Line

P11	1	50-59	M	Research economist	As part of work (Communities)	Facebook
P12	1	N/A	N/A	Project manager	In free time	N/A
P13	1	N/A	N/A	Medical doctor	As part of work (Health)	N/A
P14	1	30-39	F	Researcher	Researcher (Misinformation)	Twitter, Reddit, TikTok
P15	1	30-39	M	Product manager	As part of work (Health, Social Media)	Facebook, Reddit, TikTok
P16	2	24-29	F	Student	In free time	Facebook, Reddit, YouTube
P17	2	60-69	М	Semi-retired tradesman	In free time	Facebook, Instagram, Snapchat
P18	2	60-69	M	Retired technical writer	In free time	Twitter, Facebook
P19	2	18-23	F	Student	In free time	N/A
P20	2	24-29	M	Student	Researcher (Misinformation)	Twitter, Instagram, Reddit, YouTube TikTok, Snapchat
P21	2	18-23	M	Bobarista	In free time	Twitter, Reddit, YouTube
P22	2	18-23	M	Student	In free time	Facebook, Instagram, Reddit, YouTube, TikTok, Snapchat WeChat
P23	2	18-23	М	Student	In free time	YouTube, Snapchat
P24	2	50-59	F	Program manager	As part of work (Health)	Twitter, Instagram, Reddit, YouTube, TikTok, BeReal
P25	2	60-69	М	Pharmacist	As part of work (Health)	LinkedIn

P26	2	70 and older	M	Administrator	As part of work (Health)	LinkedIn
P27	2	30-39	F	Librarian	As part of work (Libraries)	Facebook
P28	2	50-59	М	Conflict advisor	Researcher (Conflict Resolution)	Twitter, Instagram, YouTube
P29	2	N/A	N/A	Researcher	Researcher (Media Literacy)	Twitter, Facebook, YouTube

Appendix C: Mock-up descriptions and screenshots

Tool Guide			
Discussing contested	l information can be sup	er difficult.	
surrounding vaccines	and other tricky topics of	have more productive cor nline. Simply input a link a nelping you to respond to	and from there, you w
Get started: insert url if you want to respond to a specific twee	et with url, paste it here:	paste text if you want to respond to a comment with	hout a url, paste it here:
What goals do you want to achieve in your response?	Which communities are you trying to communicate with?	What goals do you want to achieve in your response?	Which communities are you trying to communicate with?
Directly correct the original poster	Parents	Directly correct the original poster	Parents
Empathize with the original poster	Ethnic/cultural groups	Empathize with the original poster	Ethnic/cultural groups
Educate others who view the post	Healthcare professionals	Educate others who view the post	Healthcare professionals
blank	☐ Partisan groups →	blank	Partisan groups
General tips to sup Lateral reading ⊕	port discussion:	Acknowledge concerns	Ignore trolls
Include sources	Ask questions	Identify Bots	Community Trust issues

Figure 2 (a). Homepage for tool. This shows a space to insert links or content potentially containing misinformation and options to select one's goals and target audience while responding. It also includes links to research-backed tips on how to respond to misinformation in trust-building ways.

Support	Rising W @RisingV			
he tweet you pasted:	Human Righ	sity of Toronto professors have filed a nts Tribunal of Ontario Group application		
f this is not the tweet you are looking for,		nool's vaccine mandate. 1/2 signal.com/professors-lau		
nick nere	9:15 PM · Mar 22, 2022 · Twitter Web App			
	255 Retweets	13 Quote Tweets 963 Likes		
	0			
Here's what we found:				
original poster info		tweet content		
Follower count: 500 followers		This post links to: the countersignal.com		
Following: This poster follows primarily right	wing sources	Reliability: This article comes from a source which is considered		
Bot-o-meter: This metric calculates the likeli not this twitter account is a bot account. Lear		to be Far-Right Biased and Questionable by Media Bias/Fact Check		
1 F / F: This account is most likely not	a hat	Fact checked by: https://mediabiasfactcheck.com/the-counter- signal-bias/.		
1.5/ 5: This account is most likely not	a bot.	Hot topics: vaccine mandate for more information on 'vaccine mandate,' read here		
as far-right biased and questionable by many organizations for evaluating sources, such as Check. Here's their page about how they determine the control of	Media Bias Fact	fear appeal to invoke emotion. Emotions are powerful tools of persuasion. Research shows that using emotional words,		
accuracy: https://mediabiasfactcheck.com/al		especially ones that evoke negative emotions such as fear or outrage, increases the viral potential of social media content. related tip: reduce fear or anger		
	bout/	outrage, increases the viral potential of social media content.		
related tip: lateral reading Community-Specific Tips Based on the communities you selected, her considerations: Ethnic/cultural groups: read here Healthcare professionals: some read here	bout/	outrage, increases the viral potential of social media content.		
related tip: lateral reading Community-Specific Tips Based on the communities you selected, her considerations: Ethnic/cultural groups: read here Healthcare professionals: some read here Parents: read here	bout/	outrage, increases the viral potential of social media content.		
related tip: lateral reading Community-Specific Tips Based on the communities you selected, her considerations: Ethnic/cultural groups: read here Healthcare professionals: some read here Parents: read here	bout/	outrage, increases the viral potential of social media content.		

Figure 2 (b). Analysis and response page for tool. This page contains analysis of an example tweet containing misinformation, including details about the Twitter account of the misinformation poster, fact checks from an external website, and more detailed tips on how to respond informed by the selected goals and target audience.

Tip: What do other sources say?

Remind the original poster about the danger of believing everything on the internet.

Encouraging people to look for verification sources outside of message - in other resources and other platforms - reminds people that they should not believe everything they read immediately.

(+) back next (+)

Figure 2 (c). Detailed tips on how to respond.