THE EFFECT OF SOURCE CREDIBILITY AND SIMILARITY TO PARTICIPANTS ON SUSCEPTIBILITY TO MISINFORMATION

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Abstract

Previous research exploring misinformation has established that source credibility and source similarity to the information recipient are factors that can increase a source's ability to mislead someone (Chaiken & Maheswaran, 1994; Traberg and van der Linden, 2022). The purpose of the present study is to investigate how people judge the veracity of factual information and misinformation coming from sources varying in these qualities. The hypotheses were: (1) misinformation from high-credibility sources will be most endorsed; (2) misinformation from similar sources will be more endorsed than from dissimilar sources; and (3) factual information from low-credibility, dissimilar sources will be dismissed. Participants (N = 93) were recruited from a small undergraduate university. They viewed and rated the perceived truthfulness of 40 fabricated Instagram posts, including sixteen posts related to sexual violence whose sources varied in ideology (feminist versus non-feminist) and credibility (high versus low credibility). Participants completed a measure of feminist attitudes and were classified as being high-feminist or low-feminist. Results indicated participants generally endorsed misinformation more from high-credibility sources, and that both high- and low-feminist participants preferred similar sources, being generally more willing to endorse misinformation from ideologically similar sources. However, in an unexpected finding, participants endorsed misinformation from non-feminist, low-credibility sources more than other sources, even those participants with a high degree of feminist attitudes. Limitations and future considerations are discussed.

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The Effect of Source Credibility and Similarity to Participants on Susceptibility to Misinformation

Research on misinformation has focused broadly on either the qualities of individuals that may make them more susceptible to endorsing misinformation or on the qualities of information sources which make them more effective at misleading others. In the latter category, two effects have been consistently found: sources with higher perceived credibility are better at misleading, as are sources with high perceived similarity to the individual taking in the information (Chaiken & Maheswaran, 1994; Richards & Hample, 2016; Traberg & van der Linden, 2022). Most research on these effects has studied them in isolation and in the few cases when they are studied together, it is usually approached in the context of high similarity increasing perceived credibility of a source (Traberg & van der Linden). Little research, however, has explored the effects of these sources when they are at odds with one another; that is, how do people respond to misinformation from highly credible but dissimilar sources, or from sources that are very similar to the individual but low in credibility? The present study will approach this question in the context of myths about sexual violence on social media, a topic with many associated myths in an environment well-suited to the proliferation of misinformation.

Misinformation, Social Media, and Sexual Violence

Today's digital technologies have done wonderful things for connecting people to others, to ideas, and to education, making previously inaccessible information more widely available. Increased access to information has many undeniable benefits to education and accessibility. However, with this heightened access to information comes heightened access to misinformation (Ecker et al., 2022; Zarocostas, 2020). After the outbreak of the COVID-19 pandemic, people were presented with a vast amount of information about the virus, public health measures, and new

policies. Many experts acknowledged this information overload as being overwhelming for laypeople, making it difficult to evaluate the veracity of every claim they came across (Zarocostas). WHO Director-General Tedros Adhanom Ghebreyesus said: “We’re not just fighting an epidemic; we’re fighting an infodemic” (as cited in Zarocostas, p. 676). This so-called “infodemic” is thought to have had serious impacts on health outcomes in the pandemic. A report from the Council of Canadian Academies (CCA) suggests that between March and November 2021, COVID-19 misinformation contributed to vaccine hesitancy for over two million people in Canada; they suggested that without this misinformation, there may have been nearly 200,000 fewer COVID-19 cases and 2,800 fewer deaths, as well as $299 million in healthcare costs saved (CCA, 2023). The study of misinformation therefore has serious implications for real-world problems and policies.

Research on misinformation began in earnest in the mid-twentieth century with a focus on misinformation in advertising and how people may be susceptible to fraud (Braun & Loftus, 1999; Metzger et al., 2003). However, a new information environment began to emerge: the Internet. In 2003, Metzger et al. called for the migration of research on misinformation to an online context, suggesting that filters and control mechanisms developed for misinformation in a print, radio, or television context would be less effective against information online. They also suggested that misinformation on the Internet could spread more easily due to a lack of moderation by qualified professionals, resulting in information online being subject to considerable less scrutiny than other media outlets to that point.

This claim from Metzger et al. came in the early days of social media, which consisted largely of messaging boards which, in comparison to platform’s developed just a few years later,

had very limited functionality; today, it is relatively easy for anyone to post about any topic at any time. With artificial intelligence (AI) algorithms being largely responsible for moderating content, analyzing users, developing detailed profiles based on users interests and social media interactions, and promoting personalized content, it is easy for misinformation to slip through to users. AI algorithms in apps like Instagram and Twitter will promote content to users that aligns with their interests, is similar to other content they interact with, and content that is popular with other users with similar profiles (Kreps, 2020). This risks creating an online echo chamber, where false beliefs are more easily reinforced (Nikolov et al., 2021). This is further complicated by human-like Internet bots populating the web which may be designed to identify, interact with, and promote inflammatory, misleading, or factually incorrect posts. These provocative posts are designed to generate clicks, boost ad revenue, and promote the (digital) social status of users who repost by drawing attention from others (Massanari, 2017).

Despite this, it seems that generationally, people are trusting social media more and more; a report from the Pew Research Centre suggests that U.S. adults under 30 trusted social media nearly as much as national news organizations, in comparison to older adults who trusted social media significantly less (Liedke & Gottfried, 2022). As the already large number of Internet and social media users continues to grow, so does the amount of information, both factual and false.

An analysis of both social and technological aspects of social media platforms shows that they are often the perfect breeding ground for hate speech, misinformation, and propaganda. Massanari (2017) gives the example of Reddit, a platform where anti- feminist activism is very common. An ethnographic analysis shows that the largest group of Reddit users are white,

cisgender, heterosexual men, resulting in "othering" of people in these spaces who do not fit within these descriptors. Massanari describes the proliferation of memes, in-jokes, and shorthand that results from these relatively homogenous spaces as a *lingua franca* which might exclude those unfamiliar with the lingo. As a result, subreddits dedicated to various specific interests may become like echo chambers, where users tend to encounter only opinions similar to theirs; Massanari notes that because these spaces largely consist of a largely uniform demographic of men, these echo chambers may then become spaces where women are objectified, violence against women is condoned, and misogynistic ideas are reinforced. The r/TheRedPill subreddit, still active in 2023, is an example of such an echo chamber.

Massanari (2017) explains that these "toxic technocultures" come about not just from human interactions, but from non-human actors as well. Actor-network theory (ANT) posits that non-human technological agents such as bots, algorithms, and policies in online spaces can and do shape human activity. Massanari suggests that some of the specific platform design, algorithmic, and interaction choices Reddit has made allow a vocal minority of anti-feminist activists to effectively hijack large swaths of the platform. For example, the up-vote system on Reddit encourages Redditors to up-vote posts that are well-structured or "high-quality" in some way, even if the content is controversial, inflammatory, or propaganda. Within echo chambers, these types of posts may become popular quickly and debate within the comment section may draw attention from other subreddits, allowing this type of content to spread. Automated bots can also be created to respond to comments or posts on a particular topic or of a particular format, boosting engagement with the post and the status of the original poster.

When posts become popular in one subreddit they may be featured on r/all, a front page

for the platform's most interacted with content, which may allow such content to spread from one subreddit to the entire platform very quickly. Massanari argues that Reddit has little incentive to encourage reporting inflammatory content, and its policies may in fact discourage people from overusing reporting tools, resulting in misinformation and hate speech to go unchecked. Redditors saw this type of hijacking at a large scale during the #GamerGate incident of 2014. Snowballing quickly from a single post into a widespread anti-feminist movement, #GamerGate was a misogynistic online harassment campaign where fears and myths about feminism and diversity in video game culture spun out of control, resulting in several game developers being doxed, harassed, and threatened online and in-person.

Social media, then, is well-suited to the rapid and vast spread of misinformation and propaganda. As Massanari (2017) demonstrates, it may be particularly conducive to promoting anti-feminist content, which may include myths about sexual violence; this type of misinformation is already very common, and may have serious impacts on policies and supports available for survivors of sexual violence. Newcombe et al. (2008) measured the level of rape myth acceptance (RMA) in a sample of undergraduate students, then presented them with descriptions of four scenarios involving sexual violence where the relationship between the perpetrator and the victim varied in familiarity from complete strangers to married couple. For all of the scenarios, participants with high RMA were more likely to blame the victim in the scenario and to minimize the seriousness of the situation. However, as familiarity between the characters in the scenarios increased, even those participants with low RMA were more likely to engage in victim-blaming and to play down the situation's seriousness. Although high RMA was more common in males (64 percent) than in females (42 percent), it was degree of RMA and not

gender that predicted attitudes towards the scenarios. Newcombe et al. note that sexual violence is very common on university campuses, and a better understanding of rape myth acceptance is needed for developing better awareness and prevention policies and programs.

Other research has demonstrated that commonly-accepted myths about sexual violence tend to align with trends reported on in news media. Katz-Schiavone et al. (2008) surveyed a sample of adults in the U.S. about their acceptance of sexual violence myths and information sources. They found that the most common sources of information on sexual violence were television (43 percent of participants) and the Internet (38 percent of participants), and also noted that many of the myths commonly endorsed reflected trends in journalism on sexual violence. The media, Katz-Schiavone et al. said, tends to report on instances of sexual violence that are especially extreme, violent, bizarre, or disturbing; however, these cases are actually rare in comparison to the more pervasive forms of sexual violence—harassment, indecent exposure, sextortion, etc.—and fail to capture the vast number of instances of sexual violence that go unreported (Katz-Schiavone et al.). They suggest that a flawed understanding of sexual violence, its causes, and its impact may also lead to poor policies being developed and upheld that fail to address survivor needs, rehabilitate and reintegrate offenders, or reduce sex crimes.

With a shifting technological and social world, misinformation research is extremely important, with some researchers suggesting that previous strategies for combatting misinformation in radio, news, and advertising contexts holding little relevance for new online settings (Ecker et al., 2022; Metzger et al., 2003). Social media may provide a platform for people to share thoughts, ideas, art, and more, but due to various non-human agents—bots, algorithms, platform design—it is a media environment ideal for spreading misinformation to a vast number

of people (Ecker et al.; Massanari, 2017). Some topics, such as sexual violence and the COVID-19 pandemic, may be more conducive to online misinformation and may have serious political and social consequences in the offline world. Understanding what makes an individual susceptible to misinformation is an important step to combatting misinformation, as is understanding what affects a source's ability to mislead. For the latter, source credibility and source similarity are two of the most consistently researched and supported effects in misinformation research.

Credibility

Source credibility is the most studied and most prominent effect in misinformation research. People tend to be more willing to endorse misinformation from sources deemed to be highly credible sources. It is not all that surprising that credibility has a strong effect, given that people generally put a lot of trust in experts. We regularly defer to expertise in many contexts, from developing opinions about policies and political platforms to making decisions about our own health, wellness, and everyday lives. This deferral to expertise tends to save time in decision-making—it is neither efficient nor reasonable to expect a layperson to be familiar with the inner workings of every aspect of today's complex society (Anderson, 2011).

Credibility is typically measured by the degree of authority, knowledge, or expertise a source is perceived to have in a particular area or topic (Chaiken & Maheswaran, 1994; Traberg & van der Linden, 2022). Metzger et al. (2003) describe credibility not as a single, independent quality but as one with multiple dimensions, including trustworthiness and expertise. Other researchers have established factors such as dynamism, composure, and sociability as other important influences on the perception of credibility, particularly in the context of public speaking (Metzger et al.). There are many ways to quickly establish credibility, such as through

the use of professional labels and academic titles (Anderson, 2011). Linguistic cues may also suggest high credibility. In one study, participants were presented with passages on neutral topics—for example, the use of microcomputers in agriculture—in either a casual or a bureaucratic (although still non-technical) style which used more jargon, nominalization, and abstraction; participants who read the bureaucratic-style passages rated the source as having higher expertise and credibility than the participants who read the causal-style passages (Chartprasert, 1993). It is clear, then, that people pay attention to more than just the actual content of the message they receive; they also consider how the information is presented, and from whom.

The preference for expert opinion has been documented in many different contexts. Bergeron et al. (2018) studied shared decision-making in a sample of older adults who had experienced injuries from falls. They wanted to know who these older adults were consulting with, why, and how different individuals were engaged in the decision-making process. Bergeron et al. interviewed the patients, their family members, and their healthcare providers to develop a picture of post-fall decision-making. They found that the healthcare professionals were perceived to be more knowledgeable, credible, and trustworthy. Family members were appreciated by the patients for their availability and support, but their input was, in general, less important to the patients than the professionals' not just for strictly medical decisions, but to personal and lifestyle choices as well. Bergeron et al. also noted that the opinions of family members with relevant education and training were given equal consideration as the professionals' inputs.

Source credibility has also been established as a strong effect for messaging related to social issues. In their Experiment 1, Nadaveric et al. (2020) presented participants with simulated

social media posts that were from a high credibility source, a low credibility source, or a source with no information provided. High credibility sources included institutions and scientific journals, while low credibility sources were fictious people with profiles unrelated to the post's content. The format of the posts—whether presented with or without a picture—also varied and the topics covered in the posts included education, politics, and public health. The statements used were counterbalanced across all conditions. Participants were asked to view the posts and then judge how true they thought each statement was. Although Nadaveric et al. were surprised to see no difference in response given the posts' format—people responded the same whether a picture was included or not—they were not surprised to see that the perceived credibility of the sources had a significant influence on participants' truth judgments. The same statements were judged as being more truthful by participants who had seen them presented from an expert source, while non-expert sources were judged much more negatively. Nadaveric et al. noted that this effect was consistent even though they did not measure the veracity of the statements being judged; some were true, and some were false, but all were more likely to be endorsed when presented from an expert source.

Source credibility being a predictor of willingness to endorse misinformation has often been explained through the elaboration likelihood model (ELM). ELM is a model of persuasion developed by Petty and Cacioppo (1986) which posits two routes to evaluating information: the central route and the peripheral route. When using the central route of processing, people carefully consider the merit of the information in its own right. This is a relatively effortful process in comparison to the peripheral route. During peripheral processing the information—and its source—is associated with positive or negative cues which leads to people making simple

inferences about the information, choosing to trust or distrust it without further elaboration. For example, an individual's fears or desires may lead them to make decisions based on surface-level evaluation of information, without engaging in the deeper elaboration of the central route. It is suggested, then, that source credibility serves as a peripheral cue or heuristic suggesting that the information is to be trusted and does not require more vigorous elaboration or attention.

Chaiken and Maheswaran (1994) expand on this theory in reference to heuristic and systematic processing, which roughly align with the peripheral and central routes of the ELM, respectively. However, they suggest that the two types of processing are not mutually exclusive. One may make a judgment based solely—or primarily, at least—on heuristics, but the heuristic of credibility may have an indirect effect when engaging in systematic processing. They suggest a credibility heuristic may bias the valence of systematic processing. A high credibility source may positively bias systematic processing while a low credibility source may negatively bias systematic processing.

Chaiken and Maheswaran (1994) tested this theory in a sample of undergraduate students, who were provided with information on a new answering machine system either from a high credibility source (a tech magazine) or a low credibility source (a big box retailer). Chaiken and Maheswaran also manipulated the importance of task to participants; while some participants were told the product was being considered for local distribution—expected to increase the motivation of participants to engage in careful, systematic processing—while others were told the product would be considered for distribution elsewhere, expected to lower the motivation for systematic processing. Chaiken and Maheswaran found that participants rated the information from the tech magazine as more credible and rated the product more positively. This

effect increased when the motivation for systematic processing was high. For low-importance tasks, participants engaged in little systematic processing and let the heuristic of a low-credibility source inform their decisions. In a high-importance task, even when participants were motivated to engage in more systematic processing implying they should engage in more elaboration, the low-credibility source was disregarded more frequently. This findings supported Chaiken and Maheswaran's hypothesis, demonstrating that credibility as a heuristic has both a direct effect in heuristic processing but also an indirect effect in systematic processing.

Recent research by Traberg and van der Linden (2022) has explored other factors that may lead to the perception of credibility. Participants were shown six factual and six misleading news headlines from a variety of politically slanted (i.e., right- or left-leaning) news sources. They were then asked to rate the perceived accuracy of each headline, as well as the perceived credibility and perceived slant of each source. Traberg and van der Linden found, in line with other research, that participants more likely to accept information—and misinformation—from sources perceived to be more credible. However, not all participants viewed the same sources as being highly credible. Those participants who were more liberal viewed the liberal news sources as more credible, as well as less politically slanted, while conservative participants rated the conservative news sources as more credible and less slanted. Therefore, liberals were most susceptible to misinformation from liberal sources, and conservatives more susceptible to misinformation from conservative sources. Traberg and van der Linden concluded that, as established by previous research, source credibility has a strong effect on willingness to endorse information—factual or not—and that political similarity can inform perceptions of credibility.

Similarity

Similarity between a source and recipient of information (source similarity) has also been studied as a fact that may influence willingness to endorse misinformation. As is the case of Traberg and van der Linden's (2022) research, source similarity is often studied in the context of mediating perceptions of credibility. That is, when a source of information is perceived to align with one's values—political, social, religious, etc.—the individual is more likely to perceive that source as being more credible than an incongruent source. However, research has demonstrated that similarity seems to have an independent effect.

Research prior to Traberg and van der Linden (2022) has also demonstrated a preference for politically congruent—i.e., similar—sources. Marks et al. (2019) wanted to know if the tendency to prefer knowledge from a politically similar source extended to a nonpolitical domain as well. Participants engaged in a learning stage which consisted of two types of trials. The first was learning to categorize geometric shapes, after which they would view the response of one of four sources. In the second type of trial, participants were asked to respond to a political statement and then viewed the response of one source again, which either agreed or disagreed with them. The participants were told the sources were previous participants, but in fact they were four algorithms designed to behave in particular ways, varying on two factors: accuracy of geometric categorization (80 percent accurate or 50 percent accurate) and agreeance with participant responses to political statements (80 percent or 50 percent agreement). Next followed a choice stage; participants were asked again to categorize a shape, then had a choice to receive advice from one of two sources, and the option to change their initial categorization after getting advice.

Marks et al. (2019) found that participants were more likely to choose to take advice on

the geometry task from those sources that appeared politically like-minded, even for those sources with only 50 percent accuracy (chance). Participants also were more likely to rate the sources who agreed with their political responses as more competent on the geometric task. Marks et al. called this "epistemic spillover," the tendency of shared political convictions to influence one's likelihood to consider advice in a nonpolitical domain. They reference the halo effect as a potential account for their findings; simply put, if people think another person or is good along one dimension, they will expect them to be good in other domains as well (Marks et al.). Marks et al. go on to discuss the implications of their findings for social learning in a politically polarized environment, but these results also are relevant to misinformation. Particularly, Marks et al. demonstrated that people are more likely to accept information from politically similar sources regardless of actual competence; therefore, it seems likely that people would be more likely to accept and endorse misinformation from similar sources, simply because they are similar in some measure.

Nikolov et al. (2021) verified this result by analyzing a random sample of public Tweets from a one-month period in 2017. The Tweets shared news links on various political topics. They tracked the connections each user had, the political leaning of the sources they were sharing, and the quality (high versus low) of the news sources and developed network models to demonstrate these patterns. Their results demonstrated that people were most likely to share low quality links with false or misleading information from those sources that fit their political ideology. They also found that people largely exist in echo chambers online, sharing and accessing content created by those politically like-minded, allowing misinformation to be easily reinforced. Nikolov et al. noted that these effects were nonpartisan, affecting both liberal and

conservative users, but were slightly stronger for conservatives.

The theory of cultural cognition suggests that individual values or ideologies go beyond just influencing how we evaluate information; the theory suggests, rather, that our beliefs in fact derive from cultural values. There is much polarizing disagreement from various political, social, and ideological groups on many issues, even when education is controlled for; Kahan and Braman (2006) note that there are patterns in the beliefs people hold on certain topics—gun control, climate change, abortion rights. These beliefs co-occur within individuals despite the extremely different types of research and knowledge accumulated in these areas; they suggest these theories are tied together through cultural cognition. The theory of cultural cognition suggests that commitments to cultural values precede factual beliefs not just in an evaluative way but in a cognitive sense. That is, beliefs about empirical evidence and proposed policies derive from cultural worldviews (Kahan & Braman, 2006). Cultural cognition, they suggest, is less of a cognitive bias and more of a natural cognitive process—that is, it is difficult to remedy. When judging whether information is sound, people are unlikely to be swayed by empirically compelling evidence that conflicts with their existing cultural values, nor are they likely to doubt evidence that is congruent with their views (Kahan & Braman).

The effect of political partisanship is therefore thought to have a strong influence on willingness to endorse misinformation—in both political and nonpolitical domains— but political ideology is not the only measure of similarity. Recall Chartprasert's (1993) study of the effects of bureaucratic writing, where linguistic cues led participants to rate sources using more formal or bureaucratic writing as more credible. Chartprasert's research focused on the implications of these findings for the perception of credibility. However, the results of the study also have an

interesting result related to the effect of similarity. Participants who had attained higher levels of education were more likely to judge the academic writing style as more credible than those with less education, suggesting a sense of familiarity or similarity may have had an influence on their judgments.

Even small, superficial details indicating similarity between a piece of information's source and recipient may have a strong effect. Jiang et al. (2010) studied the effect of incidental similarity in a marketing context. In their study, participants in pairs read a short biography of a personal trainer and then met with a confederate posing as a trainer to give a presentation on their training program and experience. The first line in the biography the participants read contained the trainer's birthday, which was manipulated to be the same as one of the participants in the pair. After meeting with the trainer, participants were asked to rate how much they liked the trainer, how helpful they were, and their likelihood to purchase their services. Participants who shared their birthday with the trainer—i.e., those with incidental similarity—were more favourable towards the trainer. Those with incidental similarity were more likely to indicate their intent to enrol in the trainer's program. Jiang et al. suggested that similarity—even on a relatively superficial level such as shared birthdate—can lead to a heightened sense of connectedness and personal relevance, leading to one being more likely to engage further with and take information from those that are more similar.

Research in evolutionary psychology suggests that a preference for similarity when considering information may have very primitive roots. Richards and Hample (2016) observe that other species exhibit homophilic preferences—a love of sameness— indicating that preference for similarity may have an evolutionary basis. They suggest that similarity may be an evolved

psychological mechanism (EPM), a cognitive attribute that arises in a population from natural selection. In their study, a sample of undergraduate students read a speech about parking fees on campus they were told had been delivered by another student, which was accompanied by a picture of the student. The photo was either of a complete stranger, or was a composite image of their own face morphed with a stranger. The source bias was also manipulated, with the speech either referencing the speaker's or the audience's interests (i.e., the use of "my" versus "your"). Participants then answered questions about their attitudes towards the speaker and their speech. Those who were presented with the composite image (the similar face) reported generally more favourable views towards the speaker and were more likely to agree with the content of the speech, particularly when their own self-interest was emphasized. None of the participants indicated that they recognized the face, indicating that they were not consciously aware of the facial similarity, Richards and Hample concluded that measures of similarity—such as facial similarity—may define the line for in-group and out-group membership, in line with social identity theory; not only are those in out- groups are treated less favourably, they are also less likely to be trusted as advisers and information sources.

Given past research, it is therefore clear that source similarity has a significant impact on the likelihood of one accepting and agreeing with information presented to them. This effect is strong enough that it exists even with incidental similarity (Jiang et al., 2010), and extends into domains where the dimension of similarity is irrelevant (Marks et al., 2019). Because source similarity has such an effect, it tends to make people susceptible to misinformation from similar sources (Traberg & van der Linden, 2022), especially in online echo chambers (Nikolov et al., 2021).

The Present Study

Much research has examined the effects of source credibility and source similarity in the context of misinformation, in online and offline environments. It is clear that both credibility and similarity are strong effects that may affect willingness to endorse misinformation. Although research has established credibility as the strongest and most consistently found effect (Ecker et al., 2022), similarity also seems to have an independent effect (Jiang et al., 2010; Marks et al., 2019). However, less research has explored these two factors in tandem, beyond establishing that in some contexts, perceived source similarity may influence credibility ratings (Traberg & van der Linden, 2022). The purpose of the present study is to explore how people respond to information presented from sources with high or low credibility, who may be similar or dissimilar from them in a particular way. Specifically, this study will investigate how people judge the veracity of factual information and misinformation coming from four types of sources: high credibility and high similarity; high credibility and low similarity; low credibility and high similarity; and high credibility and low similarity. As misinformation about sexual violence is relatively common with generally high levels of rape myth acceptance (Newcombe et al., 2008), this will be the topic on which analysis is focused. This also provides a convenient way to measure and manipulate similarity: through adherence to feminist ideology, which calls for full social, economic, and political equality for women. This is measured through views on gender roles, support of feminist political goals and collective action, and assessments of gender-based discrimination (Morgan, 1996).

The hypotheses are as follows. First, all participants will be more willing to endorse misinformation from sources with high credibility (i.e., sources that are some “verified” authority

or institution on social media) than sources with low credibility, regardless of whether the source is high or low in similarity to the participants. Second, participants who hold more feminist attitudes will be more susceptible to misinformation from sources that are ideologically similar, regardless of source credibility, than non- feminist participants. Similarly, non-feminist participants will be more susceptible to misinformation from non-feminist sources than feminist participants. Finally, participants will be more likely to rate factual information from ideologically dissimilar, low-credibility sources as less accurate than factual information from similar, low-credibility sources.

Methods

Participants

Participants were 93 undergraduate students from a small undergraduate university in Atlantic Canada. The average age of participants was 18.74 years (*SD* = 1.44). Seventy-three (78.5%) of the participants were female, 13 (14.0%) were male, three (3.2%) were non-binary, one was genderfluid (1.1%), and three (3.2%) did not indicate their gender. Seventy-eight participants (83.9%) were in their first year of study, while the remaining participants were in their second, third, or fourth year. Participants were enrolled in a wide range of academic programs including arts, sciences, commerce, and interdisciplinary studies. Participants were recruited from introductory classes in psychology, economics, political science, and computer science. Those recruited from introductory psychology classes received 1 course credit for their participation, while participants recruited from other classes had the option to have their name entered in a draw to win a $50 prepaid Visa giftcard.

Materials

Social media posts. A total of 40 simulated Instagram posts were created for the purpose of this study. Graphics for the posts were made using templates from Canva, which were then made to resemble the Instagram environment with the online Instagram post generator tool zeoob.com. All of the posts were modelled on existing Instagram posts. Each is distinct visually, having different backgrounds, fonts, and graphics which were all selected to be visually neutral. None of the posts are “liked” and no comments are visible. Unlike real posts on Instagram, there was no “follow” or “following” button to indicate if the person viewing the post is following a particular account. The language in all of the posts is kept consistent, so no one source or

category of sources uses language that is more sophisticated or technical than another. Details such as the number of comments and likes were kept to a similar range for all posts, but different values were used so the series of posts would seem more organic and similar to social media in the real-world. Each post was set to "dark mode" to increase the visual contrast and readability of the posts. The caption on each post was a single hashtag describing the topic of the post caption were kept consistent within topics. For example, all posts related to sexual violence have the caption #SexualViolenceAwareness.

A total of 16 posts were related to sexual violence with varying simulated sources. See Apppendix A for the full set of posts related to sexual violence. Four posts were from each of the following categories: feminist, high-credibility source; feminist, low-credibility source; non-feminist, high-credibility source; and non-feminist, low-credibility source. A source is considered to have high credibility in this context if it is some verified authority or institution on social media and could be considered objectively credible; all high-credibility sources were indicated by the blue verified checkmark by their username. Note as well that the use of "non-feminist" in this context is not synonymous with anti-feminist, but rather indicates a neutral source or one that does not necessarily entail being feminist by definition. There were a total of eight unique sources (two per category), each with one factual and one misinformation; therefore, each of the four categories had, overall, two factual posts and two misinformation posts. All of these materials used gender-neutral language. This is in accordance with suggestions from Johnson et al. (2021) that in the context of studying rape myth acceptance, gendered language may perpetuate stereotypes and myths about sexual violence and exclude non-heterosexual, non-cisgender experiences from study. The materials related to sexual violence were the only

materials considered in the statistical analysis.

The remaining 32 items participants rated were on unrelated topics (climate change, COVID-19, and psychology) and were included as distractors so that participants would not suspect that the study focused on sexual violence messaging. See Appendix B for the full set of distractor posts. For each of these three topics, there were four posts with factual content and four posts with misinformation. High credibility and low credibility sources occured in the same proportions as the posts about sexual violence.

Measure of feminism. Participants completed a modified version of the Liberal Feminist Attitudes and Ideology Scale (LFAIS) developed by Morgan (1996). The LFAIS measures the extent to which individuals embrace feminist ideology and attitudes. The LFAIS was chosen because it has high reliability and validity and is frequently used in research.

Items on the LFAIS are separated into the following domains: gender roles (e.g., item 1: "It is insulting to the husband when his wife does not take his last name"); global goals (e.g., item 12: "Access to education is a crucial part of gaining equal rights for women"); feminism scale (e.g., item 18: "Stereotypes of men and women hurt everyone."); specific political agendas (e.g., item 34: "Violence against women is not taken seriously enough."); discrimination and subordination (e.g., item 48: "Women have fewer choices available to them as compared to men."); and collective action (e.g., item 59: "Most group protests fail to result in any real change."). Participants rated how much they agreed with each item on a scale from 1 (strongly disagree) to 7 (strongly agree) and items are coded such that a high summed score indicates a strong feminist position.

Item 31 on the original scale ("America should pass the Equal Rights Amendment") was

omitted as it refers to a specific proposed amendment to the U.S. Constitution that Canadian students may not be familiar with. Other references to the United States in the original scale (e.g., Item 11: “Women should be considered as seriously as men as candidates for Presidency of the United States”) were changed to reference Canada.

Procedure

Participants completed a survey administered through the survey platform SurveyMonkey. They first rated all of the social media posts, which were presented in one of four quasi-random orders to limit the possibility of a response to one item priming a response to another. Participants were presented with one item at a time and were asked to rate how truthful they perceived the message to be on a Likert scale of 1 (completely false) to 7 (completely true). Once a participant submitted a rating for one item, they were not able to return to that item and change or view their response.

After completing the material rating portion of the study, participants completed the modified LFAIS. The final section of the survey collected demographic information. Participants also indicated if they had received education on sexual violence awareness, media literacy, or both, and if so, when.

After completing the demographics questionnaire, participants were informed of the study's true purpose. They were told that the focus was on responses to messaging around sexual violence and that some of the posts they had rated had been misinformation. To inoculate against the misinformation presented, the messages from the factual posts were presented again; the misinformation was not shown again, as some research has demonstrated this strategy to prevent retention of misinformation may have backfire effects, accidentally reinforcing

misinformation (Irving et al., 2022). Participants were provided with a list of resources to verify the factual information, as well as a list of wellness supports on- and off-campus to contact if needed.

Results

Descriptive Statistics

Participants were considered to have had recent training in sexual violence awareness and media literacy if they had received education within the last six months. For sexual violence awareness education, 35 participants (37.6%) had received this education recently while 48 (51.6%) had either training more than a year ago or no training. For media literacy education, 28 participants (19.45%) had received recent training while 57 (61.3%) had non-recent or no training.

The mean score on the LFAIS was 289.99 (*SD* = 18.99) out of a maximum possible score of 413. The scores ranged from 221 to 334. All participants scored above half of the maximum score, indicating that it was a fairly feminist sample. The median score was 292.00, and a median split was performed to separate the sample into those with a higher degree of feminist values (i.e., a LFAIS score greater than 292) and those with a lower degree of feminist values (i.e., a LFAIS score less than 292).

Correlations

The average rating of each social media post in a category was summed to give a combined rating for each category: feminist, high-credibility sources (FH); feminist, low-credibility sources (FL), non-feminist, high-credibility sources (NH); and non-feminist, low-credibility sources (NL). Each category therefore has two separate score: one for misinformation, indicated with an

"M" suffix (i.e., FHM, FLM, NHM, and NLM); and one for factual information, indicated with an "F" suffix (i.e., FHF, FLF, NHF, and NLF). A higher score indicates that participants rated items from that category as more truthful. These combined ratings were used in the data analyses that follow. Table 1 displays the correlations between truth ratings of each type of social media post and LFAIS score.

In general, endorsement of factual information from one type of source had either a small or moderate positive correlation with endorsement of factual information from other types of sources, as well as a small or moderate negative correlation with endorsement of misinformation. Truth ratings of misinformation were positively intercorrelated, meaning that those who were more likely to endorse misinformation from one type of source were more likely to endorse misinformation from other types of sources.

LFAIS scores were moderately positively correlated with endorsement of factual information from feminist, high-credibility sources (but no other type of factual information) and negatively correlated with endorsement of misinformation. Generally, people who scored higher on the LFAIS were less likely to endorse sexual violence misinformation.

Table 1

Correlations Between LFAIS Scores and Truth Ratings of Social Media Posts By Category

Variable	1	2	3	4	5	6	7	8	9
1. LFAIS Score	1	.247*	.003	.062	.044	-.264*	-.294**	.226*	-.130
		.023	.981	.568	.689	.014	.006	.039	.235
2. FHF		1	.286**	.242*	.083	-.100	-.042	.090	-.193
			.006	.021	.438	.346	.693	.404	.067
3. FLF			1	.205*	.189	-.204*	-.047	-.051	-.056
				.049	.071	.050	.654	.630	.598

4. NHF	1	.032 .764	-.502 .622	-.060 .567	.004 .973	-.039 .715
5. NLF		1	-.013 .899	.141 .180	.151 .154	-.007 .945
6. FHM			1	.380** .000	.336** .001	.189 .07
7. FLM				1	.342** .001	.294** .005
8. NHM					1	.221* .036
9. NLM						1

Note. * indicates that $p < .05$. ** indicates that $p < .01$.

Sexual violence training was moderately positively correlated with media literacy training ($r = .365$, $p = .046$), but neither were significantly correlated with endorsement of factual or misinformation from any source. An analysis of variance confirmed that there were no significant differences between those with high or low media literacy training on responses to factual information or to misinformation; the same was true when comparing those with high versus low sexual violence awareness education.

Inferential Statistics

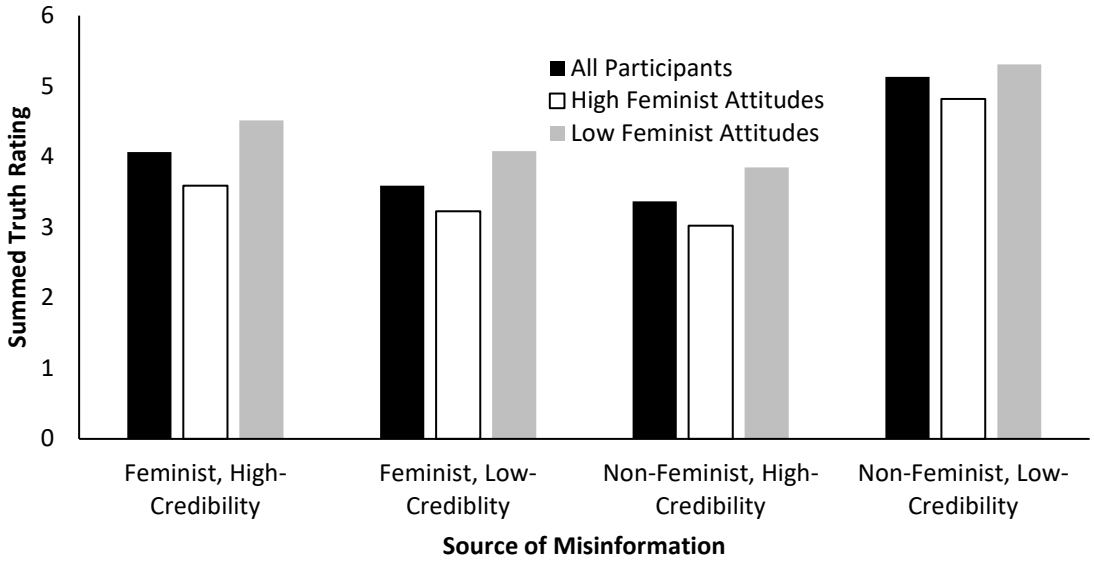
Misinformation. Three repeated measures ANOVAs were run comparing the effects of source feminism and credibility on truth ratings of the social media posts containing misinformation: the first considered all participants, the second considered high-feminist participants, and the third considered low-feminist participants. Figure 1 displays the results of this analysis.

For all participants, there was a main effect of source feminism, $F(1, 89) = 5.525$, $p = .021$, and a main effect of source credibility, $F(1, 89) = 12.315$, $p = .001$. There was also a significant interaction, $F(1, 89) = 46.030$, $p < .001$. Post-hoc t-tests showed significant differences in the expected direction between feminist, low-credibility and feminist, high-credibility sources, $t(92) = -2.2459$, $p = .016$, showing that misinformation from high-credibility sources was more likely to be endorsed. There were also significant differences between ratings of misinformation from feminist, high-credibility sources and non-feminist, low-credibility sources, $t(91) = -3.579$, $p = .001$, as well as between non-feminist, high-credibility sources and non-feminist, low-credibility sources, $t(89) = -6.520$, $p < .001$. Both differences were not in the expected direction, with all participants rating misinformation from non-feminist, low-credibility sources as more truthful than misinformation from either feminist or non-feminist sources with high credibility.

For all participants, there was a main effect of source feminism, $F(1, 89) = 5.525$,

Figure 1

Endorsement of Misinformation by Source Type and Participants' Degree of Feminism



Note. The summed rating of posts from each source category, as described above, was used in this analysis and is the value indicated by the vertical axis. A higher summed truth rating indicates participants rated information from sources of a particular category as more truthful.

p = .021, and a main effect of source credibility, $F(1, 89) = 12.315$, p = .001. There was also a significant interaction, $F(1, 89) = 46.030$, $p < .001$. Post-hoc t-tests showed significant differences in the expected direction between feminist, low-credibility and feminist, high-credibility sources, $t(92) = -2.2459$, p = .016, showing that misinformation from high-credibility sources was more likely to be endorsed. There were also significant differences between ratings of misinformation from feminist, high-credibility sources and non-feminist, low-credibility sources, $t(91) = -3.579$, p = .001, as well as between non-feminist, high-credibility sources and non-feminist, low-credibility sources, $t(89) = -6.520$, $p < .001$. Both differences were not in the expected direction, with all participants rating misinformation from non-feminist, low-credibility sources as more truthful than misinformation from either feminist or non-feminist sources with high credibility.

For low-feminist participants, there was neither a main effect of source feminism nor a main effect of source credibility. There was a significant interaction, $F(1, 38) = 16.489$, $p < .001$. These participants rated misinformation from feminist, low-credibility sources as less truthful than misinformation from non-feminist, low-credibility sources, $t(39) = -1.231$, $p = .010$. This difference was in the expected direction for participants with low levels of feminist attitudes. There was also a significant difference between truth ratings of misinformation from non-feminist, high-credibility sources and non-feminist, low-credibility sources, $t(39) = -1.4620$, $p = .004$. This difference was not in the predicted direction, as participants had been expected to be more likely to endorse misinformation from high-credibility sources over low-credibility sources.

For high feminist participants, there was a main effects of source feminism, $F(1, 43) = 4.571$, $p = .038$, as well as a main effect of source credibility, $F(1, 43) = 7.335$, $p = .010$. There was also a significant interaction, $F(1, 43) = 21.106$, $p < .001$. Post-hoc t-tests showed that these participants rated misinformation from feminist, low-credibility sources as more truthful than misinformation from non-feminist, high-credibility sources, $t(44) = 1.205$, $p < .001$. This difference is in the predicted direction, with feminist participants being more willing to endorse misinformation from feminist sources regardless of credibility. The results of other t-tests, however, were unexpected. High-feminist participants rated misinformation from feminist, high-credibility sources as less truthful than misinformation from non-feminist, low-credibility sources, $t(44) = -1.717$, $p < .001$. They also rated misinformation from feminist, low-credibility sources as less truthful than misinformation from non-feminist, low-credibility sources, $t(44) = -2.081$, $p < .001$. Finally, feminist participants rated misinformation from non-feminist, high-credibility sources as less truthful than misinformation from non-feminist, low-credibility sources, $t(44) =$-

2.286, $p < .001$. Given that participants were expected to endorse misinformation from high-credibility sources (by the first hypothesis) and ideologically similar sources (by the second hypothesis), these findings are unexpected.

Because all participants were most likely to rate misinformation from non-feminist, low-credibility sources as the most truthful (refer to Figure 1), the average ratings of each sexual violence misinformation social media post are reported in Table 2. The two most-endorsed posts were from non-feminist, low-credibility sources.

Table 2

Average, Minimum, and Maximum Rating of Each Misinformation Post

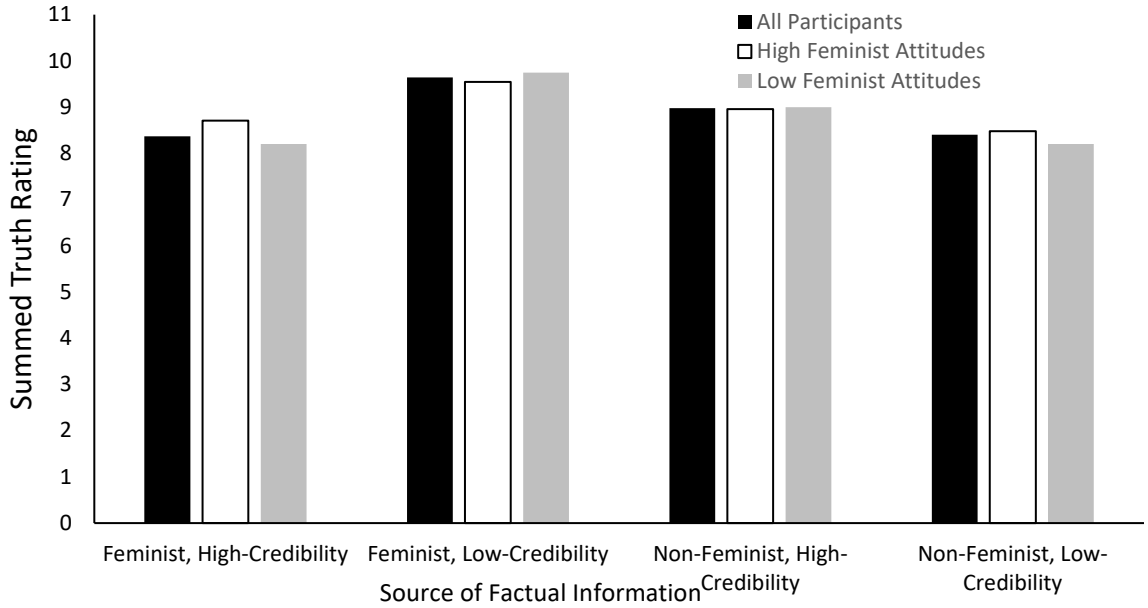
Post	Figure	*M*	*SD*	Minimum	Maximum
Feminist, high-credibility #1	Figure A1 (C)	2.19	1.304	1	6
Feminist, high-credibility #2	Figure A1 (D)	1.95	1.492	1	6
Feminist, low-credibility #1	Figure A2 (C)	1.92	1.236	1	6
Feminist, low-credibility #2	Figure A2 (D)	1.68	1.095	1	5
Non-feminist, high-credibility #1	Figure A3 (C)	2.05	1.521	1	6
Non-feminist, high-credibility #2	Figure A3 (D)	1.34	0.833	1	6
Non-feminist, low-credibility #1	Figure A4 (C)	2.78	1.390	1	6
Non-feminist, low-credibility #2	Figure A4 (D)	2.40	1.498	1	6

Note. A higher mean indicates the information was rated as being more truthful

Factual information. Three repeated measures ANOVAs also were run comparing the effects of source feminism and credibility on truth ratings of the social media posts containing factual information: as before, the first considered all participants, the second considered high-feminist participants, and the third considered low-feminist participants. Figure 2 displays the results of this analysis.

Figure 2

Endorsement of Factual Information by Source Type and Participants' Degree of Feminism



Note. The summed rating of posts from each source category, as described above, was used in this analysis and is the value indicated by the vertical axis. A higher summed truth rating indicates participants rated information from sources of a particular category as more truthful.

For all participants there was no main effect of source feminism and no main effect of source credibility, however, there was a significant interaction, $F(1, 89) = 19.032$, $p < .001$. Post-hoc t-tests showed that participants generally rated factual information from feminist, high-credibility sources as less truthful than factual information from feminist, low-credibility sources, $t(90) = -4.361$, $p < .001$. No hypothesis specifically addressed this comparison, however given research demonstrating the strong effect of credibility (Chaiken & Maheswaran, 1994; Petty & Cacioppo, 1986), this finding is unexpected; information from a high-credibility source would be expected to be endorsed more than information from a low-credibility source. As well, participants rated factual information from non-feminist, low-credibility sources as less truthful than from feminist, low-credibility sources, $t(92) = -2.007$, $p = .048$. Given that the entire sample is relatively high in feminist attitudes, this suggests that participants were more willing to endorse

factual information from feminist, low-credibility sources and to dismiss factual information from non-feminist (i.e., dissimilar), low-credibility sources, a finding in the predicted direction.

For low feminist participants there was no main effect of source feminism and no main effect of source credibility, however, there was a significant interaction, $F(1, 38) = 10.749$, $p = .002$. A t-test revealed that these participants rated factual information from feminist, high-credibility sources as less truthful than information from feminist, low-credibility sources, $t(39) = -2.933$, $p < .006$. No hypothesis specifically addressed this comparison, but again, it was unexpected that a low-credibility source would be more endorsed over a high-credibility source with similar ideological qualities.

For high feminist participants, there was no main effect of source feminism and no main effect of source credibility, however, there was a significant interaction, $F(1, 43) = 6.185$, $p = .017$. Once again, a t-test showed that participants rated factual information from feminist, high-credibility sources as less truthful than information from feminist, low-credibility sources, $t(43) = -2.392$, $p = .021$. While there was no specific hypothesis about this comparison, this result is unexpected, as information from high-credibility sources would be expected to be more-endorsed than low-credibility sources.

Discussion

The purpose of the present study was to explore how people respond to misinformation and factual information related to sexual violence. This information was presented via social media with four categories of sources: similar and high-credibility sources, similar and low-credibility sources, dissimilar and high-credibility sources, and dissimilar and low-credibility sources. Adherence to feminist ideology was used to assess similarity.

First, the present study hypothesized that participants would be more willing to endorse misinformation from sources with high credibility than sources with low credibility, regardless of the source's ideological similarity to participants. This hypothesis was partially supported. For all participants, misinformation from feminist, high-credibility sources was more likely to be endorsed than misinformation from feminist, low-credibility sources. This finding aligns with previous research demonstrating a strong effect of source credibility (Chaiken & Maheswaran, 1994; Metzger et al., 2003). However, low-feminist participants were more likely to endorse misinformation from non-feminist, low-credibility source than from a non-feminist, high-credibility source. This finding was unexpected, so the hypothesis was only partially supported.

The second hypothesis was that participants who held more feminist attitudes would be more susceptible to misinformation from ideologically similar (i.e., feminist) sources, regardless of credibility. Similarly, it was expected that participants with less adherence to feminist ideology would be more susceptible to misinformation from similar (i.e., non-feminist) sources. This hypothesis was also partially supported. High-feminist participants were more likely to endorse misinformation from feminist, low-credibility sources than non-feminist, high-credibility sources, indicating a preference for similar sources over dissimilar, low-credibility sources. As well, low-feminist participants were more likely to endorse misinformation from non-feminist, low-credibility sources than feminist, low-credibility sources, indicating a preference for similar sources over dissimilar sources when credibility is matched. However, all participants, not just low-feminist participants, were more likely to endorse information from the non-feminist non-authority sources, which weakens this finding. This unexpected result is discussed more below.

Finally, the present study hypothesized that participants would be more likely to rate factual information from ideologically dissimilar, low-credibility sources as less accurate than factual information from similar, low-credibility sources. There were no statistically significant main effects that supported this hypothesis. There was a general (non-significant) trend found in the predicted direction: high-feminist participants rated factual information from non-feminist, low-credibility sources as less truthful than information from other source types. However, this trend was not replicated among low-feminist participants; low-feminist participants rated factual information from all feminist sources similarly or as slightly more true than information from non-feminist sources.

There were also interesting results that were unrelated to the present study's hypotheses. First, there was no effect of sexual violence awareness education or media literacy training on ratings of misinformation or factual information. The two types of training were correlated; those who had received one type of training recently were more likely to have received the other recently as well. However, those who had either type of training recently did not rate the misinformation or factual information any differently than other participants, and also did not have significantly different scores on the measure of feminist attitudes. Previous research has demonstrated the importance and effectiveness of media literacy education for recognizing misinformation (Lee, 2018), as well as the effectiveness of sexual violence education programs for reducing belief in rape myths (Salazar et al., 2019). The present study's results suggest that for this sample, having this type of education had no effect on identifying misinformation. This may suggest that source qualities such as credibility and similarity may serve as cognitive biases which override knowledge explicitly learned through sexual violence or media literacy training.

As well, the correlational analysis indicates that those who rated factual information as more truthful were also more likely to rate misinformation as less truthful, regardless of source type. These results suggest that some people may be better at identifying misinformation, regardless of the source. As participants with a higher degree of feminist attitudes also rated misinformation from most sources as less truthful, it may be that just having a greater adherence to feminist ideology allows one to better identify misinformation related to sexual violence, regardless of how credible or ideologically similar the source seems, and regardless of whether they have received relevant training.

One interesting, unexpected finding was that misinformation from non-feminist, low-credibility sources was the most likely to be endorsed than any other misinformation source. First, low-credibility sources were expected to be trusted less than high-credibility sources. Second, even participants classified as having a high degree of feminist attitudes rated misinformation from these sources as the most truthful, contradicting the predicted result of participants being more susceptible to misinformation from similar sources. These findings suggest that there may be something unusual about these materials. The first misinformation post from a non-feminist, low-credibility source, Figure A4 (C), reads: “Perpetrators of sexual violence often have a serious mental illness.” The other misinformation post from this source type, Figure A4 (D), reads: “Those who commit sexual violence do so due to their uncontrollable sexual urges.” Interesting, both of these statements refer to sexual violence being something the perpetrator cannot control: mental illness and uncontrollable urges. It is possible that these types of myths are particularly strongly ingrained in society or in this subset of the population, a relatively homogenous young, female sample. It is also interesting to note that as of last year,

defendants charged with violent crime in Canada, including rape and sexual assault, can use the defense of automatism in cases of extreme intoxication (Department of Justice Canada, 2022). Although this is a defense that is rarely used and is difficult to argue (Department of Justice Canada), the idea of sexual violence being something beyond the control of the perpetrator in a more general sense may have become more pervasive in society with this recent judicial ruling.

The misinformation posts that had non-feminist, low-credibility sources appear to be outliers among the other posts, which is a limitation of this study. A future iteration or replication of this research could attempt to resolve this issue by conducting a pre-test of materials to identify any particular posts that are rated in such a significantly different and unexpected way.

Another limitation of this study is that there is no insight into how the source information was actually perceived by participants. That is, it is unclear to what extent the participants were taking note of the source of each social media post, or if they were simply looking at the content of the post. Previous research by Traberg and van der Linden (2022) used posts from Twitter, a primarily text-based social media platform, where the username and the post content are the roughly the same size and close together. The materials in the present study were fabricated Instagram posts, as this is a more popular social media platform among younger adults. However, one drawback is that since Instagram is primarily a photo- and video-sharing platform, the main content of each post is much larger and more eye-catching than the source information, which is much smaller and less focal. Therefore, it is possible that some participants did not see or consider the source information.

Another consideration is that this study's sample was fairly homogenous. The participants were relatively young and mostly female. All participants scored above half of the maximum

score on the measure of feminist attitudes, indicating that it was a fairly feminist sample, even with a divide of high-feminist and low-feminist attitudes. Beshers and DeVita (2019) note that younger adults, such as university-age adults, tend to endorse rape myths more frequently than older adults. They also note that men are more likely to endorse rape myths than women. A future iteration of this study could benefit from a more diverse sample, more balanced across genders and with a wider age range. With such a sample, there may be more clearly delineated categories of participants' adherence to feminist attitudes, allowing for the possibility of stronger effects of ideological similarity versus dissimilarity. Newcombe et al. (2008) observed that views on feminism in general may also predict response to sexual violence misinformation. Attempting to recruit a more ideologically diverse sample may yield stronger results.

A final limitation of this study is that while the fabricated Instagram posts were designed to emulate posts participants may encounter in their lives, the context in which they viewed these materials was not natural. In this study, participants viewed each post in a survey format, looking at each post in isolation and with an associated question. This format does not capture some of the features of social media that affect how information is evaluated, such as technological agents which personalize social media feeds and contribute to assessments of sources and content (Massabari, 2017). Other research related to misinformation on social media has tried to use more natural social media environment. For example, Nikolov et al. (2021) analyzed how users with public Twitter accounts share misinformation headlines, using what people do with a piece of potential misinformation as a measure of their endorsement rather than a truth rating; this may be a more accurate reflection of what actually occurs on social media platforms, where people may quickly share or engage with misinformation without

consciously performing a truth evaluation. As well, there is often more nuance to misinformation that just “true” or “false,” as was used in the present study. Other research has used materials where the veracity was not considered in order to resemble a more realistic social media setting, yet they still saw strong effects of source credibility (Nadaveric et al., 2020).

Presenting a series of posts through a simple survey removes the non-human technological agents that actor-network theory (ANT) says affects what types of information is encountered online and how it is perceived (Massanari, 2017). Content that appears in personalized feeds curated by AI algorithms may be more likely to be trusted because it is a personalized reflection of one’s interests and beliefs, inducing a sense of familiarity and trust akin to the effect of a personal connection through similarity in real-world, face-to-face situations (Jiang et al., 2010). The present study’s design, however, does not capture the effects of these non-human agents and the complex ways they affect what content someone is exposed to and how they might evaluate it.

The results of the present study suggest that when evaluating a piece of information, source credibility and similarity to oneself do play a role in how people perceive information and misinformation online. People may be more willing to endorse misinformation from high-credibility sources, a finding which aligns with previous research (Chaiken & Maheswaran, 1994; Metzger et al., 2003). The results also suggest that people may be more willing to endorse misinformation from ideologically similar sources, even if a dissimilar source might have more objective credibility. The finding that neither sexual violence education nor media literacy training influenced how participants evaluated misinformation related to sexual violence suggests that these cognitive factors may be unconscious and powerful, overriding consciously learned

knowledge and strategies intended to inoculate against misinformation. The results of the present study demonstrate that there are many complex cognitive factors are at play that influence how misinformation is perceived and how, who, and why people may be most susceptible to it.

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Appendix A

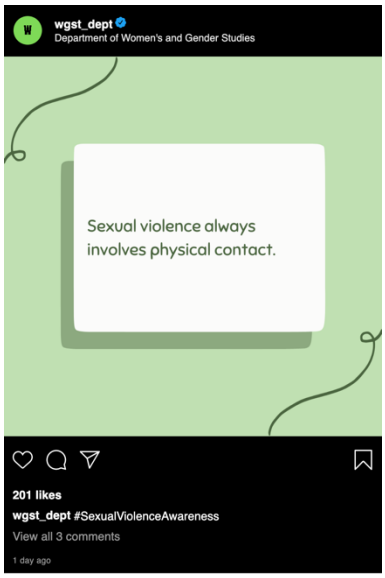
Testing Materials

Figure A1

Social Media Posts Related to Sexual Violence from Feminist, High-Credibility Sources

A) Factual

B) Factual



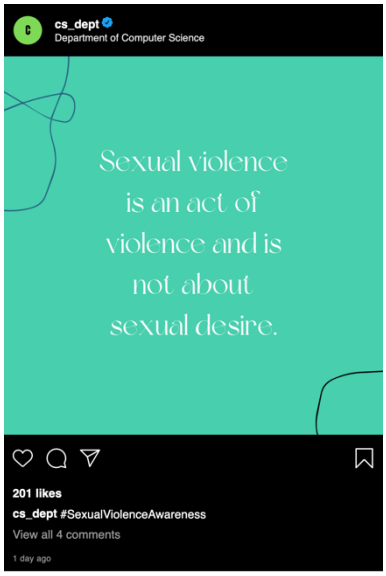
C) Misinformation

D) Misinformation

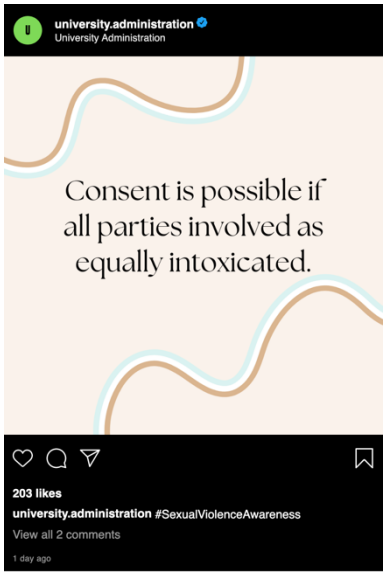
Figure A2

Social Media Posts Related to Sexual Violence from Feminist, Low-Credibility Sources

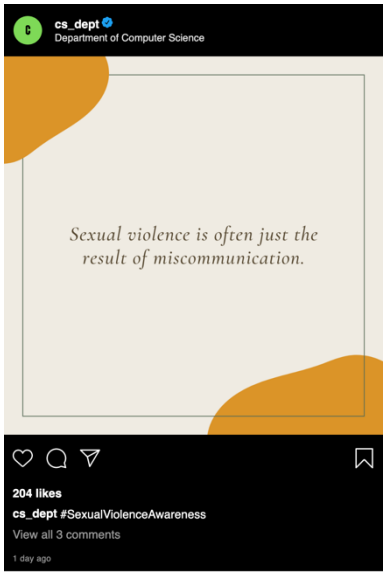
A) Factual



B) Factual



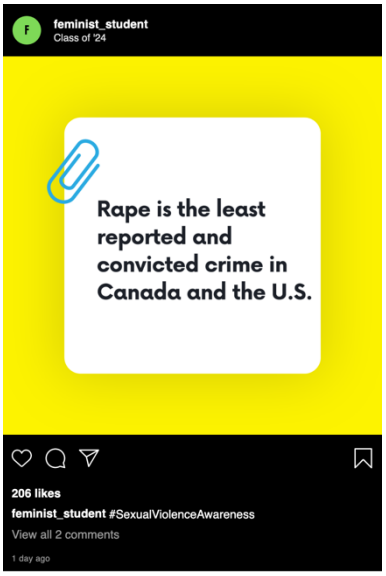
C) Misinformation



D) Misinformation

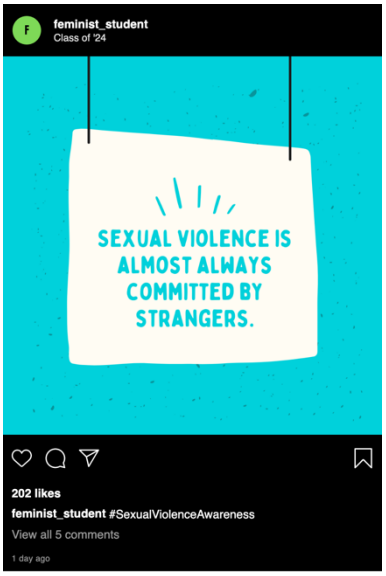
Figure A3

Social Media Posts Related to Sexual Violence from Non-Feminist, High-Credibility Sources



A) Factual

B) Factual

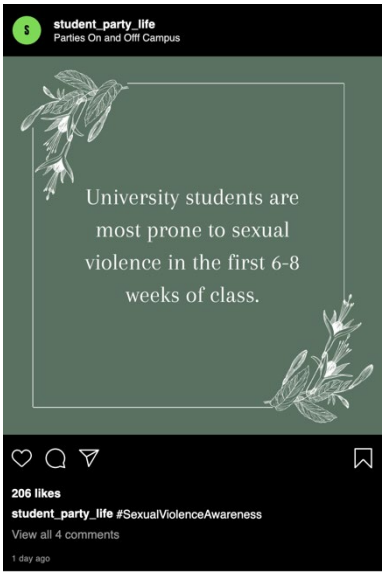


C) Misinformation

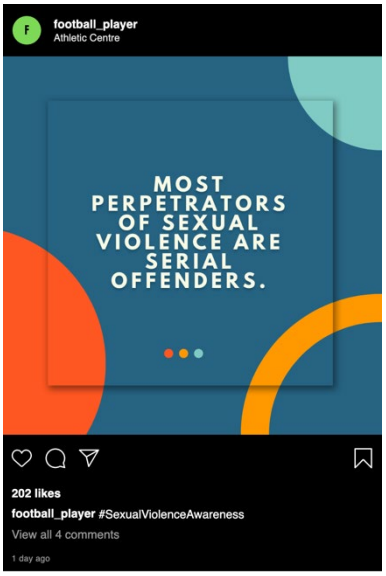
D) Misinformation

Figure A4

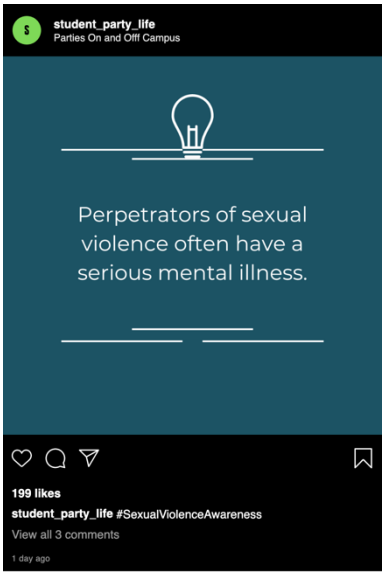
Social Media Posts Related to Sexual Violence from Non-Feminist, Low-Credibility Sources



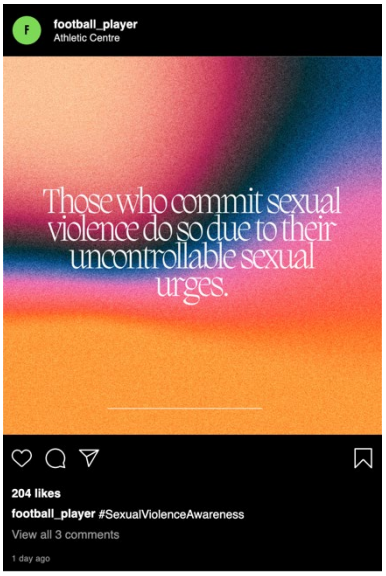
A) Factual



B) Factual



C) Misinformation



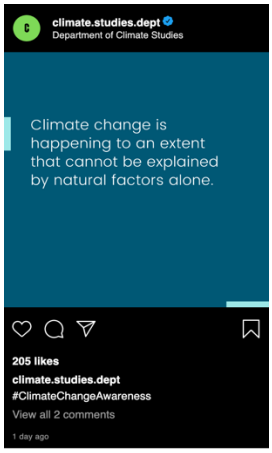
D) Misinformation

Appendix B

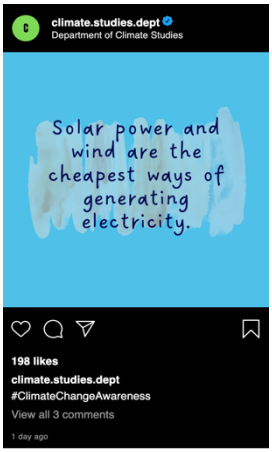
Distractor Materials

Figure B1

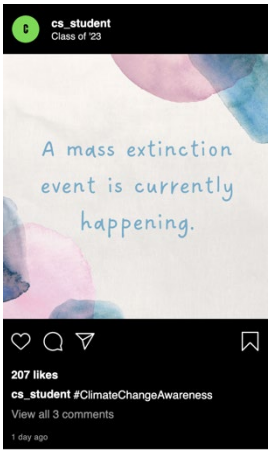
Distractor Social Media Posts Related to Climate Change



A) Factual

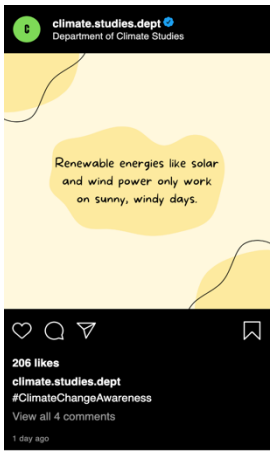


B) Factual

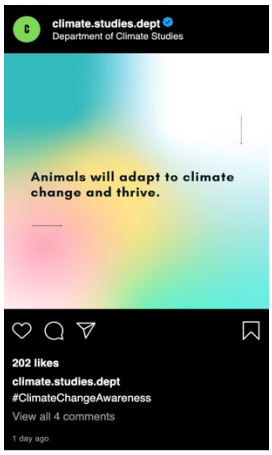


C) Factual

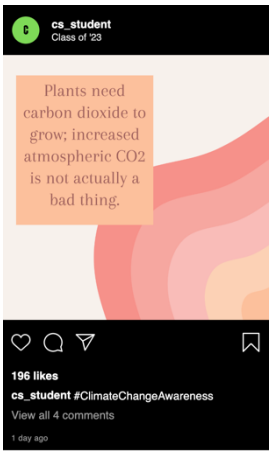
D) Factual



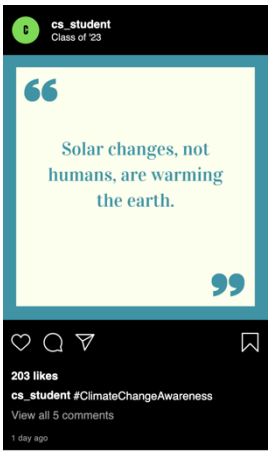
E) Misinformation



F) Misinformation



G) Misinformation

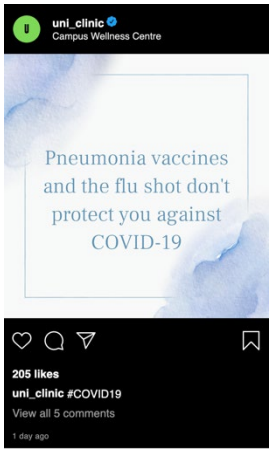


H) Misinformation

Figure B2

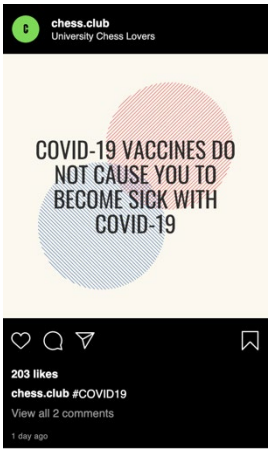
Distractor Social Media Posts Related to COVID-19

A) Factual

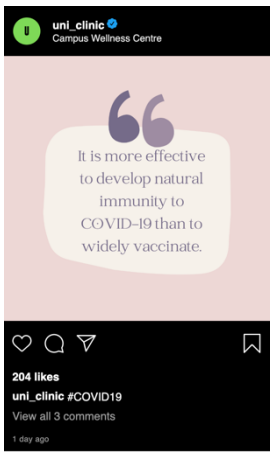


B) Factual

C) Factual



D) Factual



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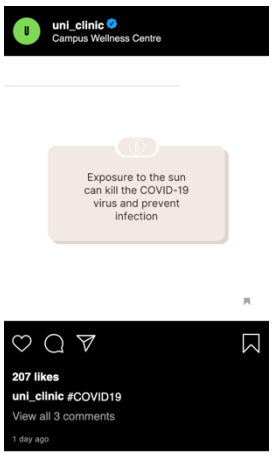
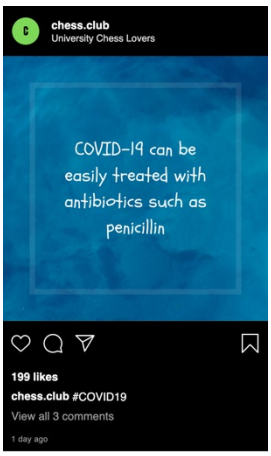


F) Misinformation

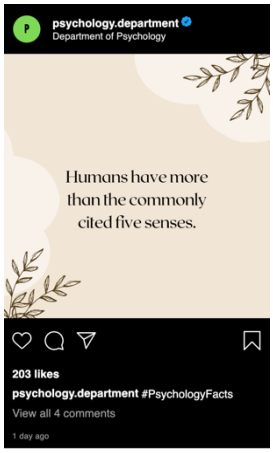
G) Misinformation



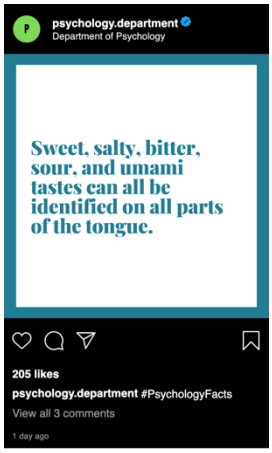
H) Misinformation

Figure B3

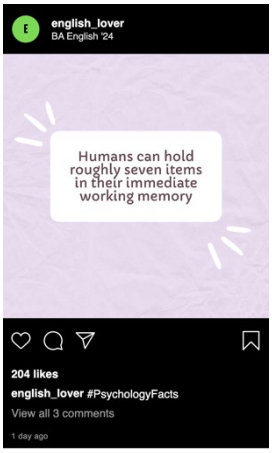
Distractor Social Media Posts Related to Psychology



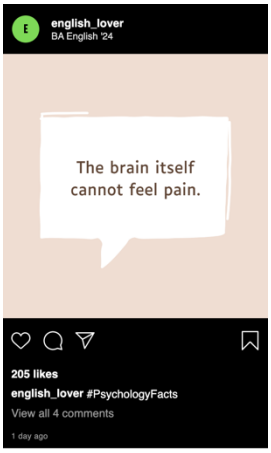
A) Factual



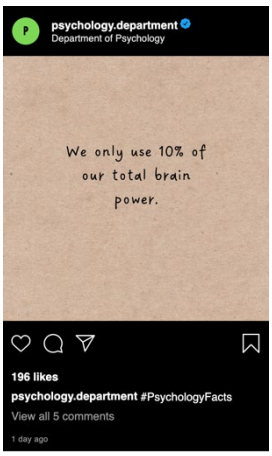
B) Factual



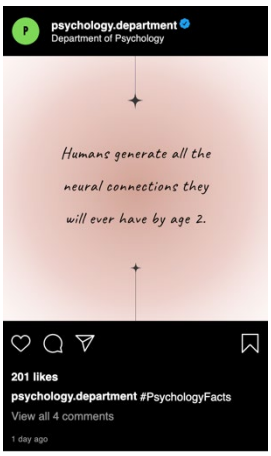
C) Factual



D) Factual



E) Misinformation



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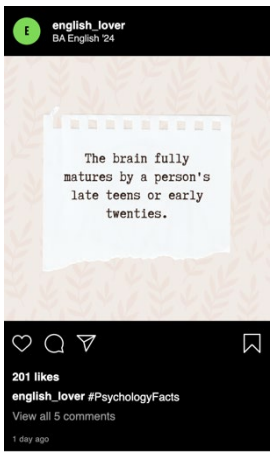

G) Misinformation

H) Misinformation