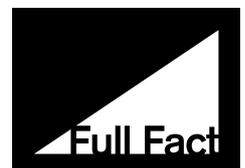


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Who is most likely to believe and to share misinformation?



A JOINT BRIEFING FROM:



About this briefing

Misinformation causes real harm to people's lives, health, finances and to democracy. We need good evidence on how to tackle it. This briefing is part of a research programme set up by Africa Check, Chequeado and Full Fact, to find that evidence and make it useful.

In this briefing Full Fact's Researcher **Dr. Dora-Olivia Vicol** looks at the cognitive biases behind the belief in, and sharing of, misinformation. We thank Paula Szewach and the research team at the Africa Centre for Evidence for their help in gathering regional evidence. We also extend our warmest thanks to Dr. Briony Thompson for her constructive feedback on earlier drafts.

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Summary

This briefing reviews research evidence published in academic journals and by non-partisan research organisations, to examine who is most likely to believe and share misinformation.

Broadly, some demographic groups are more likely to take an opinion for a fact.

- Older people and people with lower levels of education in general find it harder to discern factual statements from opinion.
- Older adults in particular find it harder to identify the source of articles, even though they may recall the content.

However, misinformation is something we can all fall prey to.

- Regardless of age or education, we all get more distracted on social media than on other news media, and are less likely to recall article sources.
- We all tend to share information high in emotion.
- We are all prone to believing information when it is repeated, easy to process and when it aligns with our prior attitudes and world views (motivated reasoning).

Why does this happen? On one hand, we all share certain cognitive biases. Our beliefs are shaped by repetition, processing fluency and motivated reasoning, even when we are not aware of it. On the other hand, studies which examine the persistence of long-debunked inaccuracies, such as climate change scepticism, highlight that belief is also a deeply social process. Standing by or sharing an inaccurate post is not just about an inability to understand the evidence, but also the impulse to reinterpret information in ways which affirm our values.

With this in mind, there are a few steps fact checkers can take:

- Given what we know about age and education, there is good reason to invest in reaching out to older people, and those with lower levels of education.
- Catch claims early and firmly, before they are repeated and become entrenched in public debate.
- Involve the public in these discussions. Misinformation is not a distant phenomenon, but something people engage with daily, by sharing or condoning. Fact checkers should promote awareness of our emotions, preference for novelty and the worldview biases which drive some people to share inaccurate content.

No doubt, these recommendations can be given further nuance by researchers and practitioners. They mark the beginning of a conversation, and we welcome feedback.

Age and education particularities

In general, older individuals and those without university education are less able to discern fact from opinion, and less likely to report seeing inaccurate content.

A 2018 survey by the Pew Research Centre asked US adults to categorise five factual and five opinion statements. The survey found that one in three respondents aged 18 to 49 correctly identified all five factual statements, compared to only one in five adults aged over 50.¹ Another study conducted in the UK tracked the web use of almost 7,000 individuals, then compared their ability to recall the source of stories they had read within the past day. They found that younger respondents are more likely to correctly attribute news brands than older individuals.²

This finding chimes with a large body of research which investigates the relation between age and cognitive ability. A number of experiments which tested the effects of age on memory have found that memories of recent events tend to become less precise in older individuals. Studies which exposed participants to a series of voices, for instance, found that while older participants may be able to identify whether or not they have heard a voice before, their ability to recall what the speaker had said was greatly diminished. This is something psychologists call “source memory” loss. Unlike item memory, which refers to whether something happened, “source memory” refers to contextual details such as when, where and how it happened. Our memory for detail fades with age.

Age also affects belief change, particularly over a period of time. Experiments which presented participants with a series of statements and corrections found that adults over 65 were both less likely to update their beliefs, and less likely to sustain a change in belief after seeing a debunk. Though everyone’s ability to recall information fades to some extent, corrections were particularly less likely to last for adults over 65. This is an important finding for fact checkers. Given how the memory link between statement and its veracity is weakened, older adults are particularly susceptible to the re-believing of myths.³

1 Amy Mitchell et al., ‘Distinguishing Between Factual and Opinion Statements in the News’ (Washington, D.C.: Pew Research Centre, 2018).

2 Antonis Kalogeropoulos, Richard Fletcher, and Rasmus Kleis Nielsen, ‘News Brand Attribution in Distributed Environments: Do People Know Where They Get Their News?’, *New Media & Society*, 28 September 2018, doi.org/10.1177/1461444818801313.

3 Briony Swire, Ullrich KH Ecker, and Stephan Lewandowsky, ‘The Role of Familiarity in Correcting Inaccurate Information.’, *Journal of Experimental Psychology: Learning, Memory, and Cognition* 43, no. 12 (2017): 1948.

Education is also a factor which affects audiences' abilities to discern fact from opinion. The Pew Research Centre study which investigated Americans' abilities to tell fact from opinion found that, while more than one in two college educated adults polled were able to correctly identify all opinion statements, the rate for respondents without college education was just one in five.⁴ Figures for factual statements were lower across the sample: 42% of college graduates were able to correctly identify all factual statements, compared to 15% of those without college education. Overall however, differences persisted: graduates were better able to accurately identify fact and opinion.

These US findings about age and education are echoed in other parts of the world. A telephone poll with a sample of residents in Buenos Aires found that respondents over 60 and those without university education were less likely to check the accuracy of content they received on WhatsApp, compared to younger and more educated counterparts.⁵ While we were not able to find perfectly comparable evidence for Africa, the evidence available for the region suggests that higher levels of education increase self-reported awareness of misinformation. A survey which investigated perceptions of fake news prevalence in Kenya, Nigeria and South Africa found that people with higher education also reported higher perceived exposure to misinformation.⁶

In sum, it appears that **audiences' abilities to determine fact from fiction in practice vary with age and education, and the ability to recall detail is diminished in older adults**. However, before we suggest that misinformation only affects a couple of narrow demographic segments, it is important to point out a few limitations.

Firstly, there is a distinction between education and (media) literacy – we explore this in another briefing. Authors of the Pew Research Centre study note that college education correlates with digital literacy and political awareness, which are also good predictors of respondents' abilities to correctly identify statements on their own. Rather than formal education per se then, what matters is an audience's ability to navigate the information landscape. This is particularly relevant for parts of the world where citizens may be literate in vernacular languages, but have a poor comprehension of the main language of the media. For instance, there are five officially recognised languages and more than 500 vernaculars in Nigeria.⁷ While only 60% of the population are functionally literate in English, English remains the main

4 Mitchell et al., 'Distinguishing Between Factual and Opinion Statements in the News'.

5 Agencia Solo Comunicacion, 'La Veracidad de Lo Que Circula Por WhatsApp' (Buenos Aires, Argentina, 2019).

6 Herman Wasserman and Dani Madrid-Morales, "'Fake News', Disinformation and Media Trust in Africa: A Comparative Study of Kenya, Nigeria and South Africa', ICAfrica Biennial Conference (Accra, 2018).

7 Natalie Tannous et al., 'Public Engagement with Politics, Information and News –Nigeria' (Johannesburg: Africa Check, 2019), africacheck.org/how-to-fact-check/fact-checking-studies.

medium of print and broadcast journalism.⁸ It is important to go beyond looking at years of schooling, and take literacy seriously too.

Secondly, despite the fact that graduates and young readers are better able to identify news sources overall, and a vast body of lab-based literature examines the deterioration of source memory in elderly adults,⁹ the context in which we see information matters too. We all do a much poorer job of attributing sources to content seen on social media, compared to content seen on other news media. The survey which examined UK readers' abilities to recall news publishers online found that, overall, **participants were half as able to recall the source of content they had seen on social media, compared to content seen on news websites directly.**

Finally, while demographic investigations tell us something about who is more likely to struggle to discern fact from opinion, or recall specific details, they do not explain why some people actively continue to believe the fiction long after presented with the best available evidence.

It is important to acknowledge that misinformation is not something which only affects older people and those without university degrees. **To some extent, rumours, gossip and misinformation are something we can all fall for.** This is what we turn to next.

Three cognitive biases that shape all of our beliefs

Repetition and the illusory truth effect

We are all prone to believing the things we hear repeated. Ever since a 1945 study found that individuals who had previously heard a war rumour were more likely to believe it,¹⁰ psychologists have identified a positive association between repeated exposure to a statement, and its acceptance as truth.¹¹ This occurs when the audience lacks the information needed to refute a claim – but remarkably, repetition leads to belief even when we do know better.¹²

8 Simon Kolawole and Emeka Umejei, 'Nigeria', Media Landscapes, 2018, medialandscapes.org/country/nigeria.

9 Daniel L. Schacter et al., 'Source Memory: Extending the Boundaries of Age-Related Deficits.', *Psychology and Aging* 9, no. 1 (1994): 81.

10 Floyd H. Allport and Milton Lepkin, 'Wartime Rumors of Waste and Special Privilege: Why Some People Believe Them.', *The Journal of Abnormal and Social Psychology* 40, no. 1 (1945): 3.

11 Nathan Walter and Riva Tukachinsky, 'A Meta-Analytic Examination of the Continued Influence of Misinformation in the Face of Correction: How Powerful Is It, Why Does It Happen, and How to Stop It?', *Communication Research*, 22 June 2019, 0093650219854600, doi.org/10.1177/0093650219854600; Walter and Tukachinsky.

12 Lisa K. Fazio et al., 'Knowledge Does Not Protect against Illusory Truth.', *Journal of Experimental Psychology: General* 144, no. 5 (2015): 993.

A recent study of over 1,000 US adults, measuring perceptions of news accuracy, revealed that headlines seen at both the beginning and the end of the experiment were significantly more likely to be perceived as accurate than those viewed just once. This was the case with genuine headlines which held a basis in reality, but also with entirely fabricated news stories which merely reproduced the format of a Facebook news article. Notably, this effect also applied to news items accompanied by the warning “Disputed by 3rd Party Fact-Checkers”, and was not affected by participants’ political orientation, cognitive ability or ability to recall seeing the information before.¹³

Psychologists call the association between repetition and belief the “illusory truth effect”. Repeated enough times, even something entirely fabricated can seem believable.¹⁴ Irrespective of our levels of education and analytical ability, we are prone to believing statements we have heard before.¹⁵

Encouragingly for fact checkers, the illusory truth effect can be countered, to some extent, by repeating the correct information. Experimental work found that stronger retractions, presented several times, could substantially reduce the influence of repeated misinformation.¹⁶ However, it is important to note that there is an asymmetry in the effects of repeating a claim and repeating its correction.¹⁷ Repeated corrections were found to reduce, but not completely eliminate, belief in inaccurate claims. Furthermore, in the real world, initial inaccurate reports of an event often attract more interest than their retractions.

Fluency and the credibility of information that “looks” right

We are also prone to believing a story that “looks” right. Whenever we process a new piece of information, whether we believe it or not is a matter of active deliberation, but also a matter of an unconscious, barely perceptible preference our brains have for things which are easy to process. Psychologists refer to this as “processing fluency”. It is a bias we should all be aware of.

A series of experiments have found that “fluent information” tends to be regarded as more likeable, more trustworthy and more truthful than information which is hard to

13 Gordon Pennycook, Tyrone D. Cannon, and David G. Rand, ‘Prior Exposure Increases Perceived Accuracy of Fake News.’, *Journal of Experimental Psychology: General*, 2018.

14 Ian Maynard Begg, Ann Anas, and Suzanne Farinacci, ‘Dissociation of Processes in Belief: Source Recollection, Statement Familiarity, and the Illusion of Truth.’, *Journal of Experimental Psychology: General* 121, no. 4 (1992): 446.

15 Matthew Warren, ‘Higher Intelligence And An Analytical Thinking Style Offer No Protection Against “The Illusory Truth Effect” – Our Tendency To Believe Repeated Claims Are True’, *Research Digest* (blog), 26 June 2019, <https://digest.bps.org.uk/2019/06/26/higher-intelligence-and-an-analytical-thinking-style-offer-no-protection-against-the-illusory-truth-effect-our-tendency-to-believe-repeated-claims-are-more-likely-to-be-true/>.

16 Ullrich KH Ecker et al., ‘Correcting False Information in Memory: Manipulating the Strength of Misinformation Encoding and Its Retraction’, *Psychonomic Bulletin & Review* 18, no. 3 (2011): 570–578.

17 Stephan Lewandowsky et al., ‘Misinformation and Its Correction: Continued Influence and Successful Debiasing’, *Psychological Science in the Public Interest* 13, no. 3 (2012): 106–131.

process. A systematic analysis of “fluency research” found that elements such as font size, contrast, grammar and word complexity, which influence the ease with which a statement can be read, all shape the extent to which it appears true.¹⁸

Pictures in particular, being very easy to process, can create an illusion of evidence that encourages belief. A number of experiments have found that participants who are shown a general statement such as “macadamia nuts are in the same family as peaches” were more likely to believe it when it was accompanied by an image of nuts, than when the statements came in text format only. There is a “truthiness” to visual information,¹⁹ which we unpack in more detail in our briefing ***How to communicate fact checks online*** [🔗](#).

It is important to remember that belief always rests on a selection of some facts from the wealth of information available all around us. Research into repetition and processing fluency draws attention to the selections our brains make, without us realising it. We do not choose to believe what is repeated, and what appears easy to process – it just happens.

Motivated reasoning

Comprehension of evidence is not necessarily the main factor governing belief in misinformation: sometimes we simply believe things that suit our existing world views. Psychologists call this motivated reasoning. **The attitudes we hold already influence our way of accepting new evidence, even when we should and do know otherwise.**

There is a growing body of literature investigating the link between pre-existing worldviews and belief in new information. Climate change scepticism is a good example. A study of a large sample representative of the US population found that the rejection of evidence about climate change was largely informed by participants’ personal politics, and not by comprehension of scientific education. For participants who strongly identified as hierarchical and individualistic, the authors found that high scientific literacy did not help to stimulate the acceptance of factual evidence – and in fact lowered it.²⁰ Contrary to the expectation that belief in climate change was shaped by education, the strongest correlations were with participants’ political affiliation – with small effects for age, levels of training, income and sex.²¹

18 Adam L. Alter and Daniel M. Oppenheimer, ‘Uniting the Tribes of Fluency to Form a Metacognitive Nation’, *Personality and Social Psychology Review* 13, no. 3 (2009): 219–235.

19 Eryn J. Newman et al., ‘Truthiness and Falsiness of Trivia Claims Depend on Judgmental Contexts.’, *Journal of Experimental Psychology: Learning, Memory, and Cognition* 41, no. 5 (2015): 1337.

20 Dan M. Kahan et al., ‘The Polarizing Impact of Science Literacy and Numeracy on Perceived Climate Change Risks’, *Nature Climate Change* 2, no. 10 (2012): 732.

21 Matthew J. Hornsey et al., ‘Meta-Analyses of the Determinants and Outcomes of Belief in Climate Change’, *Nature Climate Change* 6, no. 6 (2016): 622.

Similar effects are seen elsewhere. A study presented 130 US participants with a set of widely disputed political claims – for example, the claim that Weapons of Mass Destruction were found in Iraq (WMDs) – then introduced them to a series of corrections.²² The study found that respondents who self-identified as very conservative, and who were thus presumed to be more inclined to support the US war in Iraq, were also more likely to believe the factually inaccurate claim about WMDs, and less likely to accept retractions. The reverse was the case for participants who described themselves as very liberal. They were more likely to reject the original claim and accept its correction.

How can we make sense of this?

Motivated reasoning is a cognitive bias. It can occur alongside high levels of education, and despite our ability to process information. If having a university degree shapes our abilities to tell fact from opinion in the case of novel claims, when it comes to polarising debates such as climate change, highly educated participants who hold strong individualistic views are actually less likely to accept the evidence. Similarly, motivated reasoning applies regardless of personal politics. For studies based in the US, right leaning and left leaning participants have been found to be equally prone to cherry picking information that supports existing worldviews.²³

Having noted this, it is important to understand that we are not defenceless against worldview bias. Climate change, WMDs and other topics tested in the literature are particularly contentious and polarising examples of claims that have been drawn into identity debates. Not every type of misinformation is as embroiled in people's sense of who they are, and not every politically partisan claim matters as much to the general public. For instance, an experiment which tested belief in partisan but relatively trivial statements attributed to US President Trump, found that participants actually overcorrected their views after being presented with the evidence and being asked to recall it. Aware that their personal attitudes had influenced their beliefs, supporters of the president were more likely to disbelieve statements attributed to him *even when* they were factually correct, while those critical of the president were more likely to believe them even when they were false.²⁴

More encouragingly, a recent strand of literature suggests that **motivated reasoning can be moderated, if we can get ourselves to rein in our gut judgement and make an effort to think more analytically.**

22 Brendan Nyhan and Jason Reifler, 'When Corrections Fail: The Persistence of Political Misperceptions', *Political Behavior* 32, no. 2 (2010): 303–330.

23 Kahan et al., 'The Polarizing Impact of Science Literacy and Numeracy on Perceived Climate Change Risks'.

24 Briony Swire et al., 'Processing Political Misinformation: Comprehending the Trump Phenomenon', *Royal Society Open Science* 4, no. 3 (2017): 160802.

As far back as the 1970s, psychologists have represented the ways we think as two “systems”: a fast, intuitive system 1, where we take the information we are given at face value; and a slow, effortful system 2, where we actively analyse what we learn.²⁵ We all use system 1 on occasion, when we rely on what we already know simply because we cannot spare the effort of engaging with new information. The problem of partisanship, according to a recent body of literature, arises when we fall into the habit of basing most our beliefs on hunches, preferences and other pre-existing attitudes, rather than examining new information in detail.

An experiment asked a sample of Americans to rate the accuracy of a number of Democrat and Republican supporting stories. It found that participants who scored low on a standard analytical thinking metric were also more likely to be biased by personal politics.²⁶ If we want to moderate the biases of confirming what we know, the authors note, we would do well to invest in training our minds, and getting used to thinking harder, for longer. This does not necessarily mean becoming mathematical geniuses – though one version of the tests used to assess analytical thinking involves simple numeracy problems. Rather, thinking analytically means taking the time to consider new evidence.

Thinking back to the work of fact checkers then, there is at least one conclusion we can draw. We all share a tendency to confirm what we already know and doubt the evidence that challenges our views. When we come across a new and challenging piece of information, we may choose to disregard it simply out of convenience. This is the System 1/System 2 argument. Other times, we actually put a lot of mental effort into rejecting new information in order to defend who we are and what we stand for. This is the argument which views motivated reasoning as an active choice.

The question of what exactly lies behind motivated reasoning remains an object of academic debate. For now, here are three practical considerations.

First, fact checkers may want to **pay attention to timeliness**, to prevent the risk that small claims become big ones, through mobilisation in political discourse and identity debates.

Second, we may think about **investing in critical reading and literacy skills**. We examine how this might work in our briefing on *Media and information literacy* .

Finally, it is important to accept that some myths may be simply too ingrained in people’s sense of identity to lend themselves to quick debunks. In this case, talking about belief formation with sensitivity may do more than simply telling the audience what is right. In addition to correcting misinformation then, fact checkers can play a part in raising awareness of the public’s role in producing and reproducing it.

²⁵ Daniel Kahneman, *Thinking, Fast and Slow* (Macmillan, 2011).

²⁶ Gordon Pennycook and David G. Rand, ‘Lazy, Not Biased: Susceptibility to Partisan Fake News Is Better Explained by Lack of Reasoning than by Motivated Reasoning’, *Cognition* 188 (2019): 39–50.

Sharing misinformation

A survey by Loughborough University of over 2,000 respondents representative of the UK population found that more than half of them had spotted news which they thought was inaccurate, exaggerated or false.²⁷ In Argentina, a third of respondents surveyed in Buenos Aires residents believed that the majority of news content shared on social media was false,²⁸ while in Nigeria and South Africa approximately half of users thought they had spotted inaccuracies often.²⁹

What can we make of this? The claims examined in the UK study referred to news about politics, while those in Argentina and Africa referred to information in general. The studies are not perfectly comparable. One thing they indicate, however, is that bad information is something audiences are aware of. As we will see in the next section, it is also something people knowingly share and condone.

Who shares most

In the UK, as many as 43% of users surveyed reported sharing problematic content – this included 25% who shared at least one news story which they thought was entirely made up or exaggerated, and 29% who shared a story which they later found was made up.³⁰ The study of African social media users found that a fifth of respondents in Nigeria and just over a quarter in South Africa said they had shared content which they thought was made up. Many more shared content which was proven to be false later.³¹

The survey by academics at Loughborough University found that most of the people who intentionally shared inaccurate stories were young. A total of 30% of respondents under 44 shared news which they knew to be false, compared to 25% of respondents over 65. This contrasts with a study of 3,500 Facebook users representative of the US population, which found that sharing articles from fake news domains during the 2016 election was more prominent among users who were 65 or over – though overall, only 8.5% of respondents had done this.³² It also contrasts with qualitative research in

27 Andrew Chadwick and Cristian Vaccari, 'News Sharing on UK Social Media: Misinformation, Disinformation, and Correction', 2019.

28 Agencia Solo Comunicacion, 'La Veracidad de Lo Que Circula Por WhatsApp'.

29 Wasserman and Madrid-Morales, "'Fake News', Disinformation and Media Trust in Africa: A Comparative Study of Kenya, Nigeria and South Africa'.

30 Chadwick and Vaccari, 'News Sharing on UK Social Media', 15.

31 Wasserman and Madrid-Morales, "'Fake News', Disinformation and Media Trust in Africa: A Comparative Study of Kenya, Nigeria and South Africa', 13–14.

32 Andrew Guess, Jonathan Nagler, and Joshua Tucker, 'Less than You Think: Prevalence and Predictors of Fake News Dissemination on Facebook', *Science Advances* 5, no. 1 (2019): eaau4586.

Nigeria, where older individuals were blamed (though not categorically proven) for rumour spreading on WhatsApp.³³

Contradictory findings also emerged when looking at education. While lower levels of education are associated with difficulty discerning opinion from fact, the UK survey indicates that in the case of intentional sharing, it was respondents with graduate and postgraduate qualifications who were more likely to report sharing false political content.³⁴ We do not have this data for other countries.

Similarly to the evidence on who believes in misinformation then, there is good reason to believe that sharing is not just a question of demographics. It is also a matter of psychological biases, social dynamics and identity.

Why we share

A common assumption in the study of information sharing has been that rumours spread according to the 3Cs rule: Conflict, Crisis and Catastrophe.³⁵ However, recent research into virality draws attention to emotion in general.

A study which used a webcrawler to trace the life cycle of New York Times stories found that contrary to an expected association with negativity, virality was in fact driven by emotional response.³⁶ Using a sample of 7,000 articles, the authors found that stories which evoked high intensity emotions were significantly more likely to be shared than stories of a purely informative nature. Emotional response also topped other factors such as utility of the content, time of release and website prominence.

Another study examined the trajectories of 126,000 stories, tweeted by approximately 3 million people and more than 4.5 million times. It found that falsehood diffused significantly faster and more broadly than the truth. Political information suffered this effect more than stories about terrorism, natural disasters or other topics.³⁷ In addition, novel content and high emotion stories – those which make us angry, amused, anxious or disgusted – are significantly more likely to be shared.

As a cautionary note, these samples are not representative of the whole US population, let alone beyond the US. New York Times readers are a distinct readership, and the other pieces of research we consulted were all based on student populations. In Argentina, a poll found that even when online media aim to set an agenda around

33 Yomi Kazeem, 'WhatsApp Is the Medium of Choice for Older Nigerians Spreading Fake News', Quartz Africa, 2019, qz.com/africa/1688521/whatsapp-increases-the-spread-of-fake-news-among-older-nigerians.

34 Chadwick and Vaccari, 'News Sharing on UK Social Media', 16.

35 Jonah Berger, 'Arousal Increases Social Transmission of Information', *Psychological Science* 22, no. 7 (2011): 181.

36 Jonah Berger and Katherine L. Milkman, 'What Makes Online Content Viral?', *Journal of Marketing Research* 49, no. 2 (2012): 192-205.

37 Soroush Vosoughi, Deb Roy, and Sinan Aral, 'The Spread of True and False News Online', *Science* 359, no. 6380 (9 March 2018): 1146-51, doi.org/10.1126/science.aap9559.

so-called “soft”, or mostly entertainment content, the news stories that generate more engagement are public affairs, politics and economy.³⁸

Nonetheless, given the size of the sample and its inclusion of readers at both ends of the political spectrum, we can infer one simple fact: we share the things we feel strongly about. Research in psychology draws our attention to the role of emotion. But feeling strongly about a topic is not just an individual reaction to a strong emotion. It is also a social process of affirming what we stand for, who we like and what we wish to be perceived as. In the UK, where 43% of survey respondents reported sharing problematic content, the reason most frequently cited for sharing news was “to express my feelings”, followed closely by “to inform”, “to find out other people’s opinions”, “to influence others”, “provoke discussion” and even “to entertain”.³⁹ Understanding the social life of misinformation is key to grasping why people share content even when they know it to be wrong. Above all, it is key to raising awareness of each one of our roles in producing and condoning the spread of misinformation.

Why we condone misinformation

Despite the fact that more than half (58%) of respondents surveyed in the UK reported coming across content which they thought was inaccurate or misleading, only a fifth (21%) reported correcting those who had shared it. This is a worrying finding. One in two people see bad information on social media, yet only half of those do something about it. A similar discrepancy occurs between the proportion of people who shared poor content, and those who recalled being challenged about it. Almost a half (43%) shared, yet fewer (39%) recalled some kind of critical reaction.

The asymmetry between the size of the public who actively participate in disseminating misinformation, and those who are willing to challenge it presents fact checkers with an important finding. Though ordinary readers may not see themselves as major actors on the global misinformation stage, many endorse it implicitly through everyday silences.

It is not yet known what motivates this inaction. Perhaps we lack the knowledge, the time, the courage or the energy to rebut every false story that makes it to our social media feed. Perhaps we lack the faith that those who sent it in the first place can ever change their minds.

One thing fact checkers can do is think of the public as a resource – one which can be drawn into the process of detecting and challenging misinformation.

38 Eugenia Mitchelstein et al., ‘La Política Da Que Hablar: Engagement En Redes Sociales de Sitios de Noticias/The Policy Gives to Speak: Engagement in Social Networks of News Sites’, *CIC-Cuadernos de Informacion y Comunicacion*, no. 23 (2018): 157–174.

39 Chadwick and Vaccari, ‘News Sharing on UK Social Media’, 11.

Recommendations

- **Make corrections visible to the groups who are most likely to be misinformed.** The demographic evidence reviewed in this briefing has shown that older users and users with lower levels of education are generally more likely to struggle when identifying facts from opinion. This does not apply to all claim types, and it does not perfectly map onto sharing behaviours. Older individuals were found to share incorrect news in the USA, but younger users shared incorrect political news in the UK. Nevertheless, bringing fact checks to the attention of more likely believers can be a first step towards engaging with the demographics of misinformation.
- **Catch false claims early and fight back against repeated myths.** Given the well-documented finding that repeated exposure to a claim increases its belief, it is important to intercept falsehoods early. Equally, given what we know about the role of world views, fact checkers' efforts to gather evidence would be well served by additional efforts to expose tactics of weaponising misinformation, by actors who repeat it and draw it into an us/them identity debate. Some myths are brought back into the public sphere time and again. Fact checkers can challenge this by asking people to correct the record, and by unmasking strategy of repeating misinformation.
- **Draw audiences into the discussion.** The literature examined in the second part of this briefing makes it clear that misinformation is not just something we are exposed to. It is also something we actively participate in. Sometimes we do it to entertain, or to elicit debate. In other instances, we just share the content that excites us, without even thinking that we are spreading falsehoods. Fact checkers can help prevent the spread of misinformation by raising awareness about the role we each play in allowing misinformation to stay in the public domain. Public awareness raising campaigns could ask audiences to reflect on when they last shared inaccurate news, examine their emotions, and think critically about their attitudes to novel unverified content. On the simplest level, this means thinking of the public as stakeholders with a role to play in the quality of debate.

How we selected the studies

The evidence which informs this briefing comes from academic and non-partisan research organisations. Sources are selected based on prominence in the field and robustness of methodology, but are also shaped by the authors' expertise and interest.

There are multiple ways of categorising misinformation according to the intention of the claimant, the level of inaccuracy, the type of inaccuracy, the harm it may generate or the extent to which claims are entrenched in the public imagination.⁴⁰

In the interests of brevity, the briefing covers belief correction and sharing of inaccurate news, and uses climate change to give a flavour of the research on entrenched beliefs. Similarly, it refers to misinformation shared online.

With a view to providing practical recommendations, we focus on experimental studies where respondents are randomly assigned to treatment and control groups. Randomised control trials (RCTs) are widely regarded as the most objective assessment of interventions, making them well suited to informing practitioners. We also review surveys which facilitate cross country comparisons, and observational studies which draw on field data.

Caveats

Most of the work reviewed focuses on US-based scholarship. We include evidence from four surveys which explore the sharing of misinformation in the UK, Argentina, Nigeria and South Africa, and tap into literature which can provide regional context wherever possible.

In many respects, the US-oriented bibliography reflects the global geography of academic publications, and our limited abilities to transcend it. Findings derived from studies with US participants, often undergraduate students, are hardly a perfect representation of the diverse audiences in Europe, Latin America and Africa, and should be taken with caution. Equally, one survey per country cannot capture internal diversity.

With these caveats in mind, we take a number of precautions. Whenever possible, we discuss results which have been corroborated across independent publications, with a preference for those which have been confirmed by meta-analyses. We draw upon studies which use nationally representative samples and make it clear when this is not available. Finally, we draw attention to instances when academic consensus is lacking. As any piece of research, this briefing marks the beginning, not the end of a conversation on misinformation. It remains open to nuance, and we welcome input from researchers and practitioners.

⁴⁰ Natascha A. Karlova and Karen E. Fisher, 'Plz RT': A Social Diffusion Model of Misinformation and Disinformation for Understanding Human Information Behaviour', *Information Research* 18, no. 1 (2013): 1–17.

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