

Researching and Countering Misinformation in the Global South

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Abstract

Scholarly literature on misinformation has insufficiently captured the experience of the majority of the world's population: those in the Global South. Findings from this literature are concentrated in Western contexts, and when they do extend to the Global South, do not always rely on strategies that are mindful of the socio-economic contexts in these countries. In this essay, we first describe key factors that make Global South contexts distinctive with regards to misinformation, and how these contextual differences create challenges for combating and for researching misinformation. Next, we highlight existing scholarship based in Global South contexts that has responded to some of these challenges with innovative approaches. Finally, we provide recommendations on the direction that misinformation research on the Global South should take.

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1 Introduction

Misinformation can have harmful effects across the world, from weakening trust in science and institutions to affecting the health of democracy. According to data from the International Monetary Fund, states that the United Nations considers less developed encompass 84% of the world’s population today. Despite this, of a comprehensive list of experimental research to counter misinformation across the world, over 80% of existing studies focus on Global North countries (Blair et al., 2023). This contrast is stark and worrisome. In this essay, we shed light on some of the factors that make Global South contexts unique and challenging to implement misinformation research in. We highlight existing misinformation countermeasure studies in these countries, but also underscore the need for expanded research that takes context and ethical considerations into account.¹

2 Studying Misinformation in the Global South

When discussing the problem that misinformation portends, context and scope conditions are paramount. Not only are interventions in Global South countries exceedingly rare in the literature, solutions designed to combat misinformation in Western countries may not be appropriate for such contexts, in part because of differences in platforms used, mechanisms for the dissemination of rumors, and norms surrounding information sharing. We discuss some of these key differences, and argue that they have direct implications for the generalizability of misinformation research and its findings. Table 1 summarizes this discussion.

First, we highlight that popular platforms in the Global South are often not the same as those used in the West. While much of the research focused on the Global North has addressed misinformation on Twitter or Facebook, survey data demonstrates that the more popular platforms in several Global South countries are encrypted messaging apps such as Telegram or WhatsApp (Newman et al., 2022). Many different actors rely on these apps: political parties, for instance, use WhatsApp groups to campaign in several contexts across the developing world,

¹We take the term “Global South” to refer broadly to the regions of Latin America, Asia, Africa, and Oceania, and conversely to denote regions outside Europe and North America, which are mostly (though not all) low-income and often politically or culturally less-developed countries.

including Brazil, Indonesia, Mexico, Philippines, and India (Garimella and Eckles, 2020). Unlike Facebook and Twitter, private messaging applications are encrypted and users' feeds are neither curated by algorithms nor moderated by platforms, implying that fact-checking, labeling, or other platform-based solutions are unsuitable for this context.² Consequently, the privacy that messaging apps afford makes it difficult to quantify and control the flow of misinformation, and falsehoods are effectively unregulated and unchecked (Gursky et al., 2022). Accordingly, misinformation scholarship on the Global South should be mindful of this ecosystem and of the constraints it creates in terms of both quantifying misinformation exposure and spread, as well as countering it.

Second, lower levels of economic development across the Global South mean that misinformation may interact with low state capacity, defined as a state's infrastructural and institutional power over citizens at all levels (Lee, 2019). While state capacity has been linked to several negative outcomes (Besley and Persson, 2014), an important by-product of low state capacity is the inability of governments to effectively deliver information to citizens, including public health and vaccination campaigns (Scott, 1998). In weak states, lack of coordinated information from government sources may lead to reliance on informal networks for news and information (Chauchard and Garimella, 2022). For example, qualitative accounts highlight the importance that family members and relatives play in spreading falsehoods (Shah, 2020) or in correcting them (Malhotra and Pearce, 2022). Relatedly, weak or declining democratic health often brings with it a degradation of traditional sources of information – such as television, radio, and newspapers – because these may be subject to elite or institutional capture (Walker and Orttung, 2014; Barrie et al., 2023; Stier, 2015). Altogether, these elements imply that distinguishing between a "good" and a "bad" source, and therefore discernment between true and false information, is often a more demanding and costly task than it would be in societies with independent media (Trauthig, Martin, and Woolley, 2023). The implications of this environment for research are manifold: discernment measures that prioritize increasing trust in good sources of news may not be appropriate as such sources or outlets may not exist or may be polarizing; more generally,

²While fact-checking can (and does) take place outside of platforms themselves, we underscore here that encryption severely diminishes the potential for fact-checking or complicates the study of its practice.

potential solutions to combat misinformation that rely on centralized, top-down messaging may be somewhat unrealistic.

A second important consequence of low state capacity relates to the potential for misinformation to unfold in all-too-real violence: as several journalists, observers, and scholars have documented, misinformation can have destructive consequences when left unchecked on encrypted platforms, especially if states do not have the capacity or the willingness to correct misperceptions or curb its behavioral repercussions (Taub and Fisher, 2018; Banaji et al., 2019). This implies that research on misinformation in the Global South likely needs to be geared towards detecting and combating downstream outcomes of belief in misinformation. It also implies that the stakes are higher when researching misinformation in such potentially explosive contexts, and that ethical concerns are of paramount importance – a point we return to below.

Third, while access to the internet has revolutionized the spread of information (and misinformation), significant gaps remain in the kinds of populations that have access to platforms in the Global South. Thus for certain populations, exposure to misinformation may occur offline rather than online, for instance through word of mouth or through local brokerage/influence networks (Gadjanova, Lynch, and Saibu, 2022). This implies, crucially, that studies utilizing online panels from popular vendors are likely to only provide a picture of a small, privileged subset of a given population. Those who have access to the internet – and are thus a part of online panels – are likely to be more educated, more likely to have a cellphone, and even have greater digital literacy and political knowledge, enough to join and participate in an online panel. They are also likely to be demographically distinct: for example, in South Asia and sub-Saharan Africa, women are significantly underrepresented in online populations (Summers et al., 2020). Consequently, results obtained from these panels might be systematically biased towards describing only a specific demographic subsection of a given electorate. If the goal of misinformation scholarship is to accurately describe, and consequently mitigate, the pernicious effects of misinformation, constructing a good sample necessitates going beyond online panels in the Global South.

Table 1: Distinctive features of Global South countries and their implication for misinformation research

Feature	Observable outcomes	Implication for scholarship
Reliance on messaging applications as primary social media platforms	Most interventions/solutions (algorithmic or feed changes, labeling, and fact-checks) imported from Global North are not suitable	Need to devise intervention formats adapted to encrypted platforms and messaging apps
Low state capacity (1)	1. Reliable and official sources for news and to dispel misinformation may not exist 2. Media more likely to be captured by private/elite interests	Need for measures of misinformation discernment that take local context into account + bottom-up, community driven interventions focusing on learning.
Low state capacity (2)	Downstream effects of misinformation exposure potentially more dramatic (leading to violence)	Exposing respondents to misinformation without correction is an ethical gray area.
Incomplete digital inclusion	Many demographics excluded from online panels	Need for sampling to move beyond online panels and intervene either face-to-face or directly on encrypted apps.
Low levels of accountability of platforms	Academic collaboration with platforms nonexistent; platforms themselves may be culpable	Need for both policy solutions and research that do not singularly rely on platforms.

Finally, in many - if not most - Global South countries, tech platforms have done little to curb misinformation. In some cases, platforms have been accused of directly collaborating with governments to promote hateful narratives or false content and sway votes (Purnell and Horwitz, 2020). In other cases, tech companies have been accused of inciting or failing to clamp down on content that has directly resulted in riots, violence and death. These include misinformation on WhatsApp in India directly linked to anti-minority lynchings, hate speech and misinformation contributing to genocide against the Rohingya in Myanmar, ethnic violence in Ethiopia resulting from widespread falsehoods on Facebook. Observers have further commented on tech companies' inability and refusal to moderate and fact-check content that is not in English (Jackson, Meesaraganda, and Haque, 2021). This should have deep implications for the kind of research on misinformation that is carried in these contexts: while misinformation 'field experiments' on online platforms such as in Guess et al. (2023) are thought of as the gold standard in misinformation research, such opportunities for collaboration with platforms do not exist for researchers working on the Global South; when they exist, it is important to keep in mind that platforms

themselves may be complicit in worsening the misinformation problem. These factors highlight the pressing need for both policy solutions and research that do not rely solely on platforms.

3 Existing Findings

Quantifying the amount and prevalence of misinformation in many Global South countries is an arduous task because of the encrypted nature of messaging apps and the potential importance of offline sources of knowledge. Research doing so finds that a large proportion of misinformation in encrypted spaces is in the form of images (Garimella and Eckles, 2020), that misinformation is routinely shared on WhatsApp despite being fact-checked or debunked (Reis et al., 2020), and that while a minor proportion of content on WhatsApp is misinformation, that it is rare in frequency may make it stand out relative to nonpartisan or entertainment content (Chauchard and Garimella, 2022). Further, studies seeking to describe belief in misinformation and identify populations that are vulnerable uncover findings that represent significant departures from Western contexts. For example, in Indonesia Mujani and Kuipers (2020) use eight nationally representative surveys and find that younger, educated and wealthy respondents were significantly more likely to believe falsehoods and in India Badrinathan (2021) finds in a representative, in-person sample of users in a large Indian town that older and less liberal respondents were better at discernment, demonstrating a striking contrast from studies in North America that find that older adults and conservatives are more vulnerable to misinformation (Lazer et al., 2018).

A nascent but growing literature on countering misinformation responds to some of the challenges of studying Global South countries. This work includes interventions tailored to the WhatsApp information ecosystem, media literacy initiatives delivered face-to-face for remote populations, and treatments that tap into identities and ethnic politics.³

For example, utilizing the WhatsApp environment, Bowles et al. (2023) partner with an NGO in South Africa and send respondents bi-weekly fact-checks via WhatsApp for a period of 6 months, covering a wide variety of topics, and find that sustained fact-checks increased

³We focus in this section on interventions and studies mainly from the fields of political science and economics and only describe a select few papers due to space concerns; for a more comprehensive literature review please see Blair et al. (2023).

awareness of how to verify information and reduced trust in social media content, but had little effect on reported media consumption behaviors or active efforts to verify information. Similarly, [Garg and Yadav \(2023\)](#) provide weekly information digests to respondents that talk about a range of misinformation-related topics, including prominent narratives and propaganda, and find that people's ability to correctly identify misinformation rose by eleven percentage points but simultaneously belief in true news decreased as a function of the treatment. Designing a unique field experiment to study the effect of social media during elections, [Carney \(2022\)](#) assigns participants to join existing political party WhatsApp groups and finds that while partisan spaces do affect political attitudes, they also increase political knowledge and help distinguish true from false news. On the other hand, [Ventura et al. \(2023\)](#) assign treatment group participants in Brazil to deactivate certain media features from their WhatsApp groups for a period of time, and find that this constrained deactivation reduced polarization and political knowledge, but had no effect on misinformation.

Moving beyond specific platforms, a range of studies test the effect of learning and information on countering falsehoods. In India, [Badrinathan \(2021\)](#) provides an hour-long media literacy training to respondents in person, but finds that it does not improve discernment between true and false headlines on average. Also in India [Guess et al. \(2020\)](#) provide respondents with information containing tips to spot false information; they find that while the treatment improved discernment in their educated, online sample in India, it did not have an effect with their rural Indian sample. [Ali and Qazi \(2023\)](#) look specifically at low digital literacy populations in Pakistan and study the effect of providing respondents informational videos; they find that the basic video treatment had no effect on average. Finally, through an innovative experiment in Brazil, [Pereira et al. \(2023\)](#) provide a free 6-month long subscription to a national newspaper and find that treatment group respondents were better able to identify misinformation after the study.

Another line of research looks at changing norms of behavior and tapping into social identities. [Jalbert et al. \(2023\)](#) find that social truth queries can move opinion: responses to online posts containing containing questions such as "how do you know this is true?" or "where did you learn this?" appear to reduce belief in and intent to share false information in South Africa. Similarly, [Badrinathan and Chauchard \(2023b\)](#) find that simple rebuttals to falsehoods

such as “I don’t think that’s true” are able to correct information in group chats regardless of the length and detail in the rebuttal. These studies tailor to specific contexts the idea that shifting norms, especially in group settings, towards verification, accuracy and the truth may be able to move attitudes (Pennycook and Rand, 2019). Tapping further into identity, Gottlieb, Adida, and Moussa (2022) demonstrate in the context of Cote d’Ivoire that empathy-reducing treatments might work better at dispelling falsehoods if people are motivated by identity, as opposed to discernment ability, while believing misinformation. To this end, a number of studies demonstrate that tailoring messages to match respondent identities – whether along religious, ethnic, or partisan lines – can be successful in aiding correction efforts (Armand et al., 2021; Banerjee et al., 2022; Badrinathan and Chauchard, 2023a).

4 Future Directions for Misinformation Research

Because of the challenges we have specified, many findings based on data from Western countries likely do not generalize to the problem of misinformation in Global South countries. For this reason, we argue that findings from researchers and samples in the Global North should elucidate scope conditions. More crucially, studies fielded in the Global South should not merely attempt to replicate findings, designs or solutions originating from the Global North, but rather mindfully adapt to new contexts. In closing, we thus provide a non-exhaustive list of recommendations as to how researchers should take context seriously.

We first urge researchers to rely on representative samples. Though they are convenient, existing online panels in the Global South are rarely representative especially in South Asia and sub-Saharan Africa, even if the objective is to sample the online population in these countries. Second, once better samples are obtained, we hope to see researchers engage in more descriptive research about misinformation, prior to engaging in causal research about solutions. Due to the encrypted nature of misinformation spread online as well as the potential for spread offline, we know little about the volume of misinformation citizens in the Global South are exposed to, the networks through which it spreads, the topics affected by misinformation, and the most susceptible populations, beyond a few small-sample studies or journalistic investigations. Failing to engage in this descriptive work will collectively prevent us from designing optimally efficient

solutions to combat misinformation. Third, when designing experimental studies to counter misinformation, we exhort researchers to focus on encrypted chat apps, field experiments that rely on bottom-up solutions in light of state weakness and platform inaction, and interventions that take into account low or unequal levels of digital literacy. Cognitively demanding interventions (for instance inoculation or media literacy trainings) would need to be drastically adapted if they are to affect more than a systematic subset of populations; similarly, the most successful on-platform interventions that we know of in the Global North (corrections, warning labels) would need to be made relevant to Global South contexts.

Last but not least, in light of the potentially horrific downstream consequences of belief in misinformation in many Global South contexts, we urge scholars to think carefully about the ethics of misinformation research. Scholars working in fragile contexts have a crucial role to play and a delicate socio-political landscape to traverse. They need to liaise with (sometimes hostile) governments and work on ground, while also making sure that respondents and subjects of their analyses are not put in harms' way. While some researchers argue that the misinformation problem is overstated, we strongly urge scholars to consider that these presumptions may not be universally applicable; indeed, even the mere possibility of offline consequences of misinformed beliefs, however small, should prompt a careful and serious consideration of context-specific ethics of misinformation research. Concretely, issues of deception and informed consent in misinformation research should take into account risk of distress and psychological and physical negative outcomes. For example, studies that expose participants to misinformation without immediate corrections should pay careful attention to the risk and incidence of potential harms between exposure and debrief. To conclude, we follow [Baron and Young \(2022\)](#) in suggesting that misinformation researchers undertake risk assessments, make research ethics more transparent, and monitor negative consequences much after the study duration.

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