

Information Disorder, Media Literacy, and the Crisis of Trust in Knowledge Institutions

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ABSTRACT

The past decade has seen a sharp rise in misinformation, disinformation, and what scholars have termed information disorder, a concept that captures not only the spread of false content but the broader breakdown of shared epistemic ground. At the same time, public trust in journalism, science, government, and higher education has declined measurably across much of the world. This mixed conceptual and literature review paper examines the relationship between these two phenomena and what role media literacy education might realistically play in addressing them.

Drawing on Wardle and Derakhshan's (2017) tripartite typology of information disorder, alongside research in cognitive psychology, political communication, and education, this paper argues that the trust crisis is both a cause and a consequence of information disorder, not simply a background condition. People who have lost confidence in knowledge institutions are more likely to reject factual corrections and gravitate toward sources that confirm existing beliefs. Media literacy, as traditionally taught, was designed for a different media environment and shows meaningful limitations in the current context, as danah boyd (2017) and others have noted.

The paper proposes moving beyond source evaluation and fact-checking toward what this analysis terms epistemic resilience: the capacity to hold uncertainty productively, recognize manipulation strategies, and maintain confidence in verifiable knowledge processes rather than in any single institution. This reconceptualized approach draws on lateral reading research, psychological inoculation theory, and civic reasoning education.

Keywords: Information disorder, media literacy, trust, misinformation, disinformation, epistemic resilience

INTRODUCTION

Something has gone wrong with how information moves through society, and it has been going wrong for some time. The question is not simply whether false information spreads faster than true information. Vosoughi et al. (2018) established in a landmark Science study, drawing on 12 years of Twitter data, that false news stories spread faster, deeper, and more broadly than true ones, and that human behavior rather than automated bots was the primary driver of this pattern. The deeper question is why so many people appear less troubled by the distinction between true and false, and why factual corrections so often fail to correct.

Scholars from communication studies, cognitive psychology, political science, library science, and education have each approached this problem with different tools. Communication researchers have worked on typologies and mechanisms (Tandoc et al., 2018; Wardle & Derakhshan, 2017). Cognitive psychologists have studied why misinformation resists correction once it takes hold (Lewandowsky et al., 2012; Nyhan & Reifler, 2010). Political scientists have traced how partisan media ecosystems shape the flow

of false claims and suppress corrections (Benkler et al., 2018; Sunstein, 2017). Educators and media literacy scholars have asked what schools and communities can practically do (Hobbs, 2010; Jenkins et al., 2009; Wineburg et al., 2016).

What receives less attention across these literatures is the relationship between information disorder and the prior erosion of institutional trust. Public trust in newspapers, universities, scientific agencies, and government has been declining in much of the world for decades, and that process accelerated significantly during the 2010s (Edelman, 2023). This matters for a specific reason: institutional trust is part of the epistemic infrastructure that makes factual corrections work. When people distrust the source of a correction, the correction itself becomes suspect by association.

This paper examines that relationship through conceptual analysis and a review of existing literature across multiple disciplines. The argument proceeds through four main sections. The first maps the landscape of information disorder using Wardle and Derakhshan's (2017) framework as an organizing structure. The second examines the trust crisis in knowledge institutions and its relationship to information disorder. The third assesses conventional media literacy approaches, their genuine contributions, and their documented limitations. The fourth proposes a reconceptualized framework centered on epistemic resilience. The paper closes with a discussion of implications for research and educational practice. Throughout, an interdisciplinary approach is taken because the problem requires it: no single discipline owns the concept of truth, and no single intervention will fix a crisis that is structural, psychological, and political all at once.

INFORMATION DISORDER: A CONCEPTUAL FRAMEWORK

The term fake news became ubiquitous around 2016, but scholars were quick to point out that it was doing too much analytical work. It collapsed together phenomena that are quite different in origin, intent, and appropriate remedy (Tandoc et al., 2018). A rumor that spreads because people find it plausible is not the same thing as a fabricated story designed to deceive, and neither is the same as accurate information stripped of context until it misleads. Treating them as one category produces interventions that are, at best, partial.

Wardle and Derakhshan's (2017) report for the Council of Europe proposed a more precise vocabulary through a tripartite framework that has since become widely cited in the literature. They distinguished among three categories. Mis-information refers to false or inaccurate information shared without any intent to cause harm; the person sharing it believes it to be true. Dis-information refers to content that is deliberately false and created or shared with intent to deceive. Mal-information refers to information that is technically true but deployed with intent to cause harm, such as the selective release of private data or the weaponization of accurate but decontextualized content to discredit a person or institution.

This typology is analytically useful for several reasons. It keeps intent in view, which matters for assigning responsibility and designing appropriate interventions. A media literacy curriculum that teaches people to identify fake news as a single category addresses only part of the problem and may not address mal-information at all. It also clarifies why the word disorder matters: the problem is not just individual false pieces of content but a broader disruption to the information environment in which content is produced, circulated, and interpreted. Table 1 summarizes this framework with illustrative examples.

Table 1. Wardle and Derakhshan's (2017) Typology of Information Disorder

Type	Definition	Intent to Deceive?	Example
Mis-information	False or inaccurate content shared without harmful intent	No	Health myths circulated in good faith
Dis-information	Deliberately false content created or shared to deceive	Yes	Fabricated news articles; manipulated images
Mal-information	Technically true content deployed to cause harm	Varies	Doxxing; private data released selectively to discredit

Note. Adapted from *Information disorder: Toward an interdisciplinary framework for research and policymaking*, by C. Wardle & H. Derakhshan, 2017, Council of Europe.

Alongside this typology, it is worth engaging with what Lazer et al. (2018) described as the information ecosystem framing. Writing across a broad range of disciplines in a Science perspective piece, these authors argued that false news is best understood as an ecosystem-level problem rather than a content-level one. The structure of platforms, the incentives for content creators, the dynamics of social networks, and the cognitive architecture of human attention all interact to produce the environment in which false content spreads. No single intervention at the content level can fix a system-level dysfunction.

Allcott and Gentzkow (2017) offered a somewhat different emphasis in their economic analysis of the 2016 U.S. presidential election. They found that exposure to false news correlated with pre-existing partisan beliefs, suggesting that demand rather than algorithmic amplification was the primary driver. People were not being randomly misled; they were largely seeking content that confirmed what they already believed. This is an important distinction because it shifts the analytical focus from why false news is produced and distributed, a supply-side question, toward why certain audiences find it credible and useful, a demand-side question.

This point connects directly to the trust question that runs through the rest of this paper. If demand for false news is driven partly by prior beliefs, and if prior beliefs are themselves shaped by distrust of mainstream information sources, then information disorder cannot be addressed through supply-side interventions alone, whether platform moderation or professional fact-checking, without also addressing the demand-side question of why people have come to distrust the institutions that produce verified information.

THE TRUST CRISIS AND ITS RELATIONSHIP TO INFORMATION DISORDER

Public trust in knowledge institutions is not a constant. The broad direction of travel in many Western democracies over the past two to three decades has been downward. The Edelman Trust Barometer, which has tracked institutional trust across countries since 2001, has documented this pattern across multiple annual editions. Its 2023 report found that non-governmental organizations, government, and media face substantial trust deficits in many countries, and that the gap between informed elites and general population respondents is among the widest recorded since the survey began (Edelman, 2023).

What drives this decline? The literature points to several overlapping explanations. One is performance-based: institutions like government, journalism, and the financial sector made consequential and visible errors in the early 2000s, including the prosecution of the Iraq War on the basis of flawed intelligence, the 2008 financial crisis, and widespread media failures to scrutinize official claims before amplifying them. Some of the trust lost in those episodes was never recovered. A second explanation is structural: the growth of the internet and social media created new competitors for epistemic authority that legacy institutions were slow to adapt to. A third explanation is ideological: organized political movements, particularly on the right in the United States but also elsewhere, invested heavily in sustained campaigns to discredit scientific and journalistic authority on specific issues such as climate change and vaccine safety (Benkler et al., 2018).

The relationship between this trust deficit and information disorder is bidirectional, and this point is one of the most important and underexplored dimensions of the existing literature. On one side, people who distrust mainstream media and scientific institutions are more likely to seek out and accept alternative information sources, including unreliable or deliberately deceptive ones. When a public health agency updates its guidance on the basis of new evidence, people with low institutional trust often read that event as further evidence of institutional unreliability rather than as evidence that the error-correction processes of science are working. Lewandowsky et al. (2012) documented this dynamic clearly in their review of the continued influence effect: corrections of misinformation fail regularly, and they fail more dramatically when the recipient distrusts the correcting source.

On the other side, sustained exposure to information disorder itself erodes trust. When false or misleading claims about institutions circulate widely without effective challenge, or when corrections are successfully reframed as partisan attacks, the institutional credibility required to perform corrections erodes over time. This is the structural logic of certain disinformation campaigns: they do not primarily need people to believe specific false claims as much as they need people to conclude that nothing can be fully trusted, that all information is equally uncertain or equally agenda-driven. Researchers who have studied Russian information operations have documented this strategy explicitly (Benkler et al., 2018).

Pennycook and Rand (2019) offered an important corrective to some of the darker conclusions that follow from this analysis. Their research found that susceptibility to partisan misinformation is better explained by a lack of analytic thinking than by motivated reasoning alone. People are not so much actively pulled toward false information as they are insufficiently attentive to accuracy signals when they encounter content on social media. When prompted to consider accuracy before sharing, participants in their experiments shared significantly less misinformation. This finding matters for media literacy education because it suggests that cognitive habits, not just political tribalism, are part of the picture, and that certain targeted interventions can work.

MEDIA LITERACY AS A RESPONSE: PROMISE AND DOCUMENTED LIMITATIONS

Media literacy as a field of study and educational practice predates the internet by several decades. Potter (2004) situated it as a cognitive process involving the capacity to access, analyze, evaluate, and create messages across multiple media forms. Jenkins et al. (2009) expanded this into a participatory framework that emphasized production skills and social engagement alongside critical evaluation, arguing that the new media landscape required active, not just analytical, citizens. UNESCO's (2013) global assessment framework positioned media and information literacy as a democratic competency necessary for full civic participation in a mediated society.

There are good reasons to believe that specific aspects of media literacy education work. Wineburg et al. (2016) at the Stanford History Education Group found that most students, and indeed most adults, performed poorly on basic tasks of online source evaluation. They were misled by the visual design of

websites rather than their content quality, failed to investigate sources, and could not reliably distinguish advertising from editorial content. Subsequent Stanford research on lateral reading, the practice of immediately leaving a site to check what other sources say about it rather than evaluating it in isolation, found that this specific skill significantly improved accuracy in source evaluation when it was deliberately taught and practiced.

Mihailidis and Viotty (2017) described the current media environment as one of spreadable spectacle, where emotionally compelling content moves across networks faster than verification can keep up. They argued that media literacy for this environment needs to focus less on individual fact-checking and more on understanding the affective dynamics of information spread. This shifts the central analytical question from whether a piece of content is true to why it is designed to generate a particular emotional response in the reader or viewer.

The limitations of conventional media literacy approaches have become more apparent in the social media era. The most pointed critique came from danah boyd (2017), who argued that media literacy education had in some cases backfired. Teaching people to question everything without providing reliable alternative criteria for evaluation can produce a form of epistemic nihilism. Someone trained to be skeptical of mainstream sources, but not equipped with better evaluation tools, may become more susceptible to conspiracy theories rather than less, because the skill of skepticism has been applied without direction. This means some media literacy interventions may produce effects opposite to their intentions in certain populations and contexts, a finding that should be taken seriously.

A second limitation concerns what Nyhan and Reifler (2010) documented as the persistence of political misperceptions following correction. Their research found that corrections could sometimes strengthen rather than weaken false beliefs among people with strong prior commitments. Subsequent work has qualified the universality of this backfire effect, but the underlying finding that corrections regularly fail, particularly when recipients distrust the correcting source, remains well supported (Lewandowsky et al., 2012). Fact-checking, as both a media literacy strategy and a journalistic practice, depends on institutional trust that is in short supply.

A third limitation is one of scale and pace. Media literacy education is labor-intensive, context-dependent, and slow to produce measurable results. The information environment changes faster than curricula do. Studies showing that lateral reading or inoculation-style prebunking reduces susceptibility to specific manipulation techniques are genuinely useful, but there is a real and open question about whether educational interventions can keep pace with the industrialized production of disinformation content.

TOWARD EPISTEMIC RESILIENCE: RECONCEPTUALIZING MEDIA LITERACY

Given these limitations, what is needed is not a rejection of media literacy but a reconceptualization of its goals and methods. This paper proposes centering that reconceptualization on epistemic resilience, defined here as the capacity to reason effectively about information under conditions of uncertainty, manipulation, and institutional distrust. The concept has four components, each grounded in the literature reviewed above.

The first component is procedural trust rather than institutional trust. The crisis of institutional trust is partly a crisis of having substituted trust in specific organizations for any understanding of the processes those organizations use to generate reliable knowledge. A more epistemically resilient person does not simply trust a particular newspaper or scientific agency, or distrust it; they understand that journalism, science, and law have procedural commitments, including peer review, editorial independence, and adversarial testing, that make their outputs more reliable than unverified claims regardless of which

specific institution is doing the work. This reframing separates trust from identity, which is precisely where partisan polarization enters the picture and disrupts it.

The second component is manipulation recognition rather than factual evaluation alone. Lewandowsky et al. (2017) developed inoculation theory in the context of science communication: exposing people to weakened forms of persuasion techniques before they encounter them in real contexts increases resistance to those techniques. Applied to media literacy education, this means teaching people to recognize the structural features of disinformation, such as appeals to hidden knowledge, manufactured urgency, false balance, and in-group identity appeals, rather than expecting them to evaluate the factual content of every piece of content they encounter. Pennycook et al. (2020) found experimental support for this direction in the context of COVID-19 misinformation, showing that accuracy nudges could reduce the sharing of false health information at scale.

The third component is productive epistemic humility. Part of what makes information disorder damaging over time is that it weaponizes uncertainty. When official guidance changes for legitimate scientific reasons, many people experience this not as science working correctly but as proof that science cannot be trusted at all. Breakstone et al. (2021) described what they called civic online reasoning: the capacity to distinguish between genuinely open questions where uncertainty is appropriate and questions that have well-supported answers, even when those answers are contested by some. Developing this capacity requires more than critical thinking skills in the traditional sense; it requires a working understanding of how knowledge is constructed, tested, and refined in different domains.

The fourth component is structural awareness. Understanding that social media platforms optimize for engagement rather than accuracy, that recommendation algorithms tend to amplify emotionally charged content, and that the economics of digital advertising create persistent incentives for sensationalism gives people a structural framework for interpreting information that goes beyond evaluating any single piece of content. Jenkins et al. (2009) pointed in this direction with their emphasis on participatory culture and production literacies, but the structural critique has become considerably sharper and more urgent in the years since. Table 2 sets out the distinction between conventional media literacy and the epistemic resilience framework proposed here.

Table 2. Comparing Conventional Media Literacy and the Epistemic Resilience Framework

Dimension	Conventional Media Literacy	Epistemic Resilience Framework
Primary goal	Evaluate individual sources and claims	Reason effectively under conditions of uncertainty and manipulation
Trust approach	Trust credible institutions; distrust unknown sources	Understand the processes that produce reliable knowledge
Core skill	Fact-checking and source evaluation	Manipulation recognition, procedural reasoning, lateral reading
Problem framing	Information disorder as a content problem	Information disorder as an ecosystem and structural problem
Key risk	Can produce blanket skepticism in some populations	Requires sustained pedagogical investment to scale

DISCUSSION

The framework proposed in this paper does not resolve the trust crisis in knowledge institutions, and it would be misleading to suggest it could. That crisis has structural and political roots that reach well beyond what educational interventions can address on their own. Political movements that have invested strategically in discrediting scientific and journalistic authority are not going to be countered primarily by school curricula. Platforms that profit from engagement rather than accuracy will not reform themselves because media literacy rates improve.

What the epistemic resilience framework does offer is a more honest account of what media literacy can and cannot do, and a clearer direction for improving what it can do. That honesty matters. Overselling media literacy as a solution to information disorder produces its own credibility problems when the promised results do not materialize, which they will not if the goals are set at the wrong level.

Several questions for future research follow from this analysis. The relationship between institutional trust and susceptibility to misinformation needs more longitudinal study. Most existing research examines snapshots rather than trajectories, making it difficult to establish whether trust decline precedes or follows increased exposure to information disorder in specific populations and contexts. Inoculation approaches to media literacy show genuine promise in experimental settings but have been tested primarily in short-term studies with specific demographic groups. Scaling and sustaining these effects across diverse populations and longer time periods remains a research priority. The role of knowledge institutions themselves in rebuilding trust also deserves more attention. The literature focuses heavily on what audiences and educators can do; rather less attention has gone toward what institutional communication practices and transparency measures might rebuild trust where it has genuinely been lost.

There is also the practical question of what interdisciplinary collaboration in this area looks like. Communication scholars, cognitive psychologists, educators, librarians, and political scientists each hold part of the picture. Getting those parts into productive conversation requires not just individual researchers reading outside their fields but structural incentives for collaboration, which current academic publishing and funding systems do not consistently provide.

CONCLUSION

Information disorder and the crisis of trust in knowledge institutions are not two separate problems that happen to occur at the same time. They reinforce each other in ways that conventional media literacy education, designed for a different era, is not well positioned to address on its own. The tripartite framework of mis-, dis-, and mal-information (Wardle & Derakhshan, 2017), the cognitive research on why corrections fail (Lewandowsky et al., 2012; Nyhan & Reifler, 2010), and the critical literature on media literacy's limitations (boyd, 2017) all point in the same direction: the problem is deeper than content, and the response needs to be too.

The epistemic resilience framework proposed here is not a finished curriculum or a policy prescription. It is an attempt to consolidate what the cross-disciplinary literature suggests about what effective media literacy in this environment should look like: procedurally grounded, manipulation-aware, structurally informed, and honest about what it cannot do. Getting there will require collaboration across disciplines that have not always talked to each other well, and commitments from educators, platforms, and knowledge institutions that remain, as yet, uneven.

When trust in knowledge institutions collapses and information disorder fills the resulting vacuum, the consequences go beyond individuals getting individual facts wrong. They reach into the capacity of societies to coordinate around shared problems, hold authorities accountable on the basis of evidence, and

make collective decisions under genuine uncertainty. Those capacities require the kind of epistemic infrastructure that information disorder, left unaddressed, steadily degrades.

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