

Research Paper

Beyond Fact-Checking: A Preventive Civic Communication Framework for Building Media Literacy and Public Trust

Augustine Okorodudu¹

¹University of Nebraska-Lincoln, USA

[*aokorodudu2@unl.edu](mailto:aokorodudu2@unl.edu)

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Abstract

The proliferation of misinformation and disinformation across digital platforms has become one of the most consequential challenges facing contemporary democratic societies. Existing institutional responses, particularly those centered on fact-checking, operate predominantly in a reactive mode, addressing false information after it has already circulated, taken hold, and influenced public perception. This paper argues that such approaches, while valuable, are structurally insufficient to address the root conditions that make populations vulnerable to misinformation. In response, the paper introduces the Preventive Civic Communication Framework (PCCF), a conceptual and applied model that repositions media literacy, ethical communication, civic engagement, and psychological inoculation as proactive, community-embedded practices rather than afterthought corrections. Drawing on established theories of inoculation, civic education, information literacy, and critical digital pedagogy, the PCCF is presented as a five-pillar model designed for operationalization within educational institutions and community organizations. The paper analyzes the limitations of reactive strategies, justifies the preventive turn through theoretical synthesis, presents the PCCF's core architecture with two illustrative flowcharts, and discusses practical applications alongside implementation challenges. The paper concludes that durable improvements in public trust and information resilience require sustained, preventive, and ethically grounded civic communication investment, particularly among youth populations.

Keywords: media literacy, misinformation prevention, civic communication, inoculation theory, public trust, critical information evaluation, disinformation, civic education

Introduction

In recent years, the United States and democracies worldwide have witnessed an accelerating erosion of public trust in traditional media institutions alongside an exponential rise in the circulation of false, misleading, and weaponized information (Frau-Meigs, 2022; Kapantai et al., 2020). The dynamics of this information environment have fundamentally altered how citizens consume, evaluate, and act upon news and public affairs content. Social media platforms, designed to maximize engagement rather than accuracy, have proven particularly fertile terrain for misinformation and disinformation to take root and spread at scale (Dan et al., 2021; Roozenbeek et al., 2022; Elgammal, 2021). The institutional response to this challenge has been largely reactive. Fact-checking organizations, platform-based correction labels, and post-hoc debunking campaigns have multiplied in number and sophistication. Yet growing evidence suggests that these mechanisms, while not without merit, encounter structural limitations: they reach a fraction of the audiences exposed to false content, they are often dismissed by ideologically motivated recipients, and they arrive after misinformation has already shaped perceptions (Porter & Wood, 2021; Wasike, 2023; Vinhas & Bastos, 2022). More fundamentally, reactive approaches do not address the cognitive and civic preconditions that determine whether an individual has the tools to evaluate information critically in the first instance.

This paper introduces the Preventive Civic Communication Framework (PCCF), which reconceptualizes the problem of misinformation as, at its core, a deficit in civic communication capacity. Rather than targeting individual pieces of false content after the fact, the PCCF equips communities, particularly young people, with the ethical reasoning, critical information evaluation, civic literacy, and psychological resilience skills needed to resist manipulation before it occurs. The framework draws on theoretical traditions in inoculation theory (Lewandowsky & van der Linden, 2021), civic education (Kennedy, 2012; Kahne et al., 2012), media literacy pedagogy (Martens & Hobbs, 2015; Frau-Meigs, 2019), and information disorder scholarship (Baines & Elliott, 2020; Kapantai et al., 2020).

The paper is organized as follows. Section 2 provides a critical analysis of the limitations of reactive approaches. Section 3 reviews the theoretical and conceptual foundations of the PCCF. Section 4 introduces the PCCF model, illustrated with two original flowcharts. Section 5 addresses practical applications in educational and community settings. Section 6 offers an analytical discussion of opportunities and implementation challenges. Section 7 concludes with implications for policy and practice.

2. The Limits of Reactive Approaches: A Critical Analysis

2.1 The Architecture of Fact-Checking and Its Structural Constraints

Fact-checking, as a professional and platform-based practice, emerged from a legitimate and important impulse: to hold public actors accountable for verifiable claims and to provide citizens with authoritative corrections of demonstrably false information. At its best, fact-checking represents an exercise in civic epistemic responsibility. Nevertheless, an expanding body of research has identified a set of structural constraints that limit its effectiveness as a societal-level misinformation countermeasure.

First, there is the problem of reach asymmetry. Studies consistently demonstrate that corrections and fact-check labels reach a substantially smaller audience than the original false content (Wang, 2022; Wasike, 2023). The algorithmic architecture of social media platforms privileges emotional and sensational content, which false claims frequently embody, over accurate but often more measured corrections. Wasike (2023) found that even when fact-checks were prominently placed within social media timelines, exposure rates remained low relative to the spread of the original misinformation. Porter and Wood (2021) conducted simultaneous experiments across Argentina, Nigeria, South Africa, and the United Kingdom and found that while fact-checking produced measurable attitude corrections in the short term, the effect sizes were modest and their durability uncertain.

Second, fact-checking confronts the psychological phenomenon of motivated reasoning. When individuals encounter corrections that contradict strongly held beliefs, they frequently discount or actively resist the correction rather than updating their beliefs (van der Linden et al., 2021). This dynamic is particularly pronounced when the corrected belief is tied to group identity or partisan affiliation. The correction itself may, in some instances, trigger defensive reinforcement of the original false belief, a mechanism that has attracted sustained attention in the psychological literature on belief perseverance (Lewandowsky & van der Linden, 2021).

Third, and perhaps most structurally significant, reactive fact-checking operates at the symptom level rather than at the level of the disease. It presupposes an information environment already saturated with false content and an audience whose information evaluation skills are already in deficit. As Roozenbeek et al. (2023) observe, countering misinformation through correction alone places an untenable burden on fact-checkers while leaving the underlying cognitive and civic vulnerabilities intact. Vinhas and Bastos (2022) argue that fact-checking's dependence on a shared epistemic foundation, the idea that there exists a recognized "consensus reality" accessible to all parties, becomes particularly fragile in contexts of deep political polarization. When the authority of the fact-checker is itself contested, the correction loses its corrective force.

2.2 The Information Disorder Landscape

The concept of "information disorder," developed to encompass misinformation, disinformation, and malinformation as analytically distinct phenomena (Baines & Elliott, 2020; Kapantai et al., 2020), usefully expands the frame beyond the simple binary of true and false. Misinformation, understood as false information shared without deliberate intent to harm, poses different challenges than disinformation, false information deliberately manufactured and deployed to deceive, or malinformation, which involves true information weaponized to cause harm. Reactive strategies, oriented toward identifying and labeling demonstrably false claims, are less equipped to address disinformation ecosystems where false narratives are produced at industrial scale and circulate through informal networks that bypass institutional gatekeepers (Frau-Meigs, 2022; Zimdars & McLeod, 2020). The COVID-19 pandemic illustrated these dynamics starkly. False claims about vaccine efficacy and safety circulated at a pace that overwhelmed real-time fact-checking capacity. Vivion et al. (2022) documented how prebunking proved more durable and scalable than post-hoc correction in this context. The pandemic also showed how information disorder interacts with baseline institutional trust:

populations with lower trust in health and media organizations proved more susceptible to false narratives, underscoring the need for approaches that build trust prospectively (Frau-Meigs, 2022; Damasceno, 2021). The evidence warrants a rethinking of the dominant reactive paradigm. Fact-checking and debunking are necessary but structurally insufficient. A preventive turn, grounded in civic communication capacity-building, is both theoretically justified and practically imperative.

3. Theoretical and Conceptual Foundations

3.1 Inoculation Theory and Prebunking

Inoculation theory, originally formulated in the context of attitude change and now extensively applied to misinformation, holds that pre-exposure to weakened forms of misleading arguments, combined with explicit refutation, builds resistance to subsequent persuasive attacks (Lewandowsky & van der Linden, 2021). The analogy to biological immunization is deliberate: just as a vaccine introduces a manageable dose of a pathogen to stimulate antibody production, psychological inoculation exposes individuals to the logic and rhetorical structure of manipulative techniques, enabling them to recognize and resist those techniques when encountered in full-force form. The empirical record for inoculation-based approaches is substantial. Roozenbeek et al. (2022) found that inoculation-based interventions on social media significantly improved users' ability to identify and resist misinformation, with effects transferring across different topical domains. Lu et al. (2023) conducted a systematic review and meta-analysis confirming consistent positive effects on credibility assessment, sharing intention, and overall discernment. Hu et al. (2023) compared game-based and graphic-based inoculation formats and found both effective, with different engagement advantages by audience. Vivion et al. (2022) demonstrated prebunking's effectiveness in a public health context, finding that inoculation messages substantially reduced belief in vaccine misinformation. The PCCF treats inoculation not as a standalone intervention but as a core pillar, embedded within a broader civic communication architecture that provides the relational, motivational, and institutional context within which inoculation is most effective.

3.2 Civic Education and Democratic Communication

Civic education theory provides a complementary foundation. Kennedy (2012) identified a global shift toward active, participatory conceptions of citizenship in which the capacity to evaluate information, engage in deliberative dialogue, and exercise critical judgment are recognized as core civic competencies rather than optional enrichments. Kahne et al. (2012) demonstrated empirically that digital media literacy education, when integrated with civic learning goals, significantly enhances online civic and political participation, including the capacity to critically assess information sources. Kaufman (2020) argues that the contemporary "fake news era" has created an urgent pedagogical imperative: civic education must equip students not merely with constitutional knowledge or electoral procedures, but with the epistemic and communicative tools to navigate an adversarial information environment. This insight is particularly significant given the documented vulnerability of young people to online misinformation. Festl (2021) found that adolescents' social media literacy, encompassing both technical competence and critical evaluation skills, was

positively associated with more discerning online behavior, though gaps were significant in lower socioeconomic groups. Martens and Hobbs (2015) contend that media literacy and civic engagement are not merely compatible but mutually constitutive: developing the capacity to analyze media messages supports active participation in public life, while civic engagement provides the motivational context within which media literacy becomes meaningful and self-reinforcing. This bidirectional relationship underpins the PCCF's insistence on embedding information skills within a civic communication framework rather than treating them as purely technical competencies.

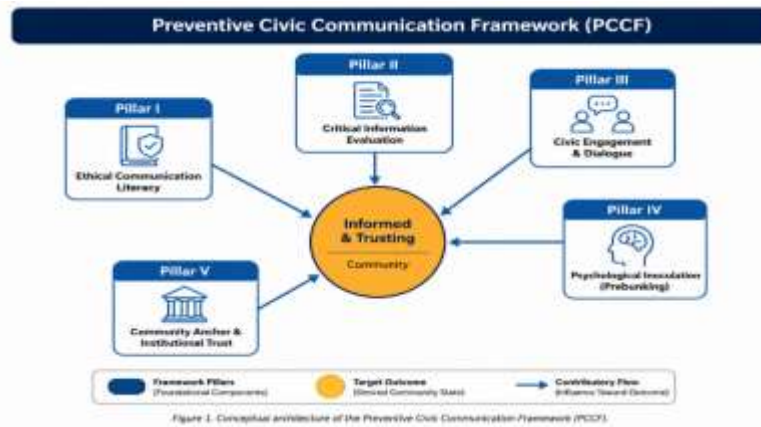
3.3 Information Literacy and Ethical Communication

Frau-Meigs (2019) frames media and information literacy as a critical response to information disorders, arguing that literate citizens are equipped to question sources, assess context, and recognize rhetorical manipulation. Crucially, Frau-Meigs (2022) later extended this argument to identify a productive tension between journalism's ethical commitments and the informal, participatory media environment in which citizens increasingly operate, arguing that media and information literacy must now address not only how to evaluate content but how to communicate responsibly as both consumers and producers of information. This dual emphasis, on ethical communication as well as critical reception, is a distinguishing feature of the PCCF. Existing media literacy frameworks often focus predominantly on the evaluative dimension: how to assess whether a source is credible, whether a claim is evidence-based, whether an image has been manipulated. The PCCF extends this to include the communicative ethics of sharing, amplifying, and responding to information, behaviors that are the proximate mechanisms through which misinformation spreads.

4. The Preventive Civic Communication Framework (PCCF)

4.1 Framework Overview

The Preventive Civic Communication Framework is a five-pillar conceptual and applied model designed to address misinformation vulnerability at its roots, rather than at its symptomatic manifestations. The framework is preventive in three senses: it equips individuals with skills *before* they encounter misinformation; it builds institutional and community structures that make information environments more trustworthy *before* crises occur; and it develops civic habits of communication that reduce the motivation to produce or amplify false information in the first place. Figure 1 illustrates the conceptual architecture of the PCCF, depicting the five pillars and their convergent contribution to the central outcome: an informed and trusting community.



4.2 Pillar I: Ethical Communication Literacy

The first pillar addresses the ethical dimensions of communication practice. In an era when virtually every individual is simultaneously a media consumer and a media producer, sharing, amplifying, and commenting on information through social platforms, communication ethics can no longer be treated as a professional norm applicable only to journalists and public figures. Ethical communication literacy encompasses the knowledge of what constitutes harmful information sharing (including the passive amplification of unverified claims), the values of accuracy, fairness, and transparency in communication, and the practice of verifying before sharing. Frau-Meigs (2022) and Ehigie & Braimoh (2024) argue persuasively that the digital transformation of journalism has created a vacuum in which informal communicators operate without the ethical training or institutional accountability that professional journalists receive. The PCCF's first pillar proposes filling this vacuum through deliberate civic communication education, equipping community members, particularly youth, with an ethical vocabulary and decision-making framework for their daily information practices.

4.3 Pillar II: Critical Information Evaluation

The second pillar develops the cognitive and practical skills needed to evaluate the credibility, accuracy, and purpose of information messages. This encompasses source verification skills, an understanding of how headlines and emotional appeals are used to bypass analytical processing, familiarity with the rhetorical techniques commonly used in disinformation campaigns (Kapantai et al., 2020; Kasham & Iriaome, 2022), and competence in using verification tools such as reverse image search and cross-referencing across independent sources. Critically, this pillar is explicitly designed to be transferable rather than topic-specific. Rather than teaching specific facts about specific false claims, a Sisyphean task given the volume and velocity of misinformation production, the PCCF teaches the *cognitive processes* of evaluation that apply across contexts. This aligns with the inoculation theory principle that technique-based (rather than content-based) inoculation produces more generalizable and durable resistance (Lewandowsky & van der Linden, 2021; Lu et al., 2023).

4.4 Pillar III: Civic Engagement and Dialogue

The third pillar situates media literacy within a broader practice of civic engagement. This pillar draws on the foundational insight of Kahne et al. (2012) and Martens and Hobbs (2015) that information evaluation skills are most robustly developed and sustained when they are exercised in the context of genuine civic participation, deliberative discussion, community problem-solving, engagement with public institutions, and participation in local governance. This pillar also addresses the social and communicative conditions under which misinformation flourishes: tribalism, echo chambers, and the atrophy of cross-group deliberative capacity (Damasceno, 2021). By building the skills and habits of constructive civic dialogue, including the capacity to engage respectfully with disconfirming information and opposing viewpoints, Pillar III addresses information vulnerability at the community level, not merely at the individual cognitive level.

4.5 Pillar IV: Psychological Inoculation (Prebunking)

The fourth pillar operationalizes the insights of inoculation theory within the PCCF's broader civic communication context. Drawing on the substantial evidence base reviewed in Section 3, this pillar involves structured prebunking programs that expose learners to common manipulation techniques, emotional amplification, false authority, conspiracy logic, misleading statistics, along with explicit refutation and guided reflection. Research demonstrates that both game-based and narrative-based inoculation formats are effective (Hu et al., 2023; Roozenbeek et al., 2022), suggesting that diverse formats can be matched to different audience segments, learning environments, and community contexts. The PCCF's inoculation programming is distinguished from standalone prebunking by its embedding within an ethical and civic communication context: participants are not merely taught to recognize manipulation but to understand *why* such manipulation is harmful to democratic communication and what responsibilities they hold as communicators.

4.6 Pillar V: Community Anchor and Institutional Trust-Building

The fifth pillar addresses the relational and institutional substrate without which the other four pillars are insufficient. Information evaluation skills are most durably developed and exercised in community contexts where trust in local institutions, schools, libraries, civic organizations, local journalism, is maintained. Conversely, where such trust has eroded, even technically skilled information consumers may default to partisan or affective cues when evaluating claims (Frau-Meigs, 2022; van der Linden et al., 2021). This pillar therefore includes active institutional trust-building strategies: transparent communication by community organizations, community journalism partnerships, civic information days, and participatory structures that give community members a meaningful role in the governance of local information environments. Schulenkorf et al. (2021) demonstrated that school-based health and media literacy curricula are more effective when they enjoy strong institutional support and community partnership, a finding with clear generalizability to civic communication contexts.

5. Practical Applications: Educational Institutions and Community Organizations

5.1 PCCF Implementation Pathway

Figure 2 presents the PCCF implementation pathway, illustrating the five sequential stages through which educational institutions and community organizations can adopt and operationalize the framework. The pathway is iterative: evaluation at Stage 4 feeds back into design at Stage 2, enabling continuous refinement based on community-specific evidence.

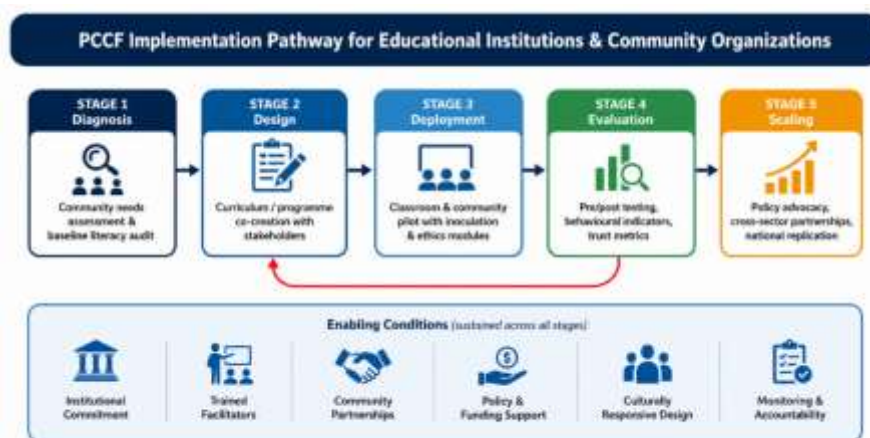


Figure 2. PCCF implementation pathway for educational institutions and community organizations.

5.2 Applications in K–12 and Higher Education Settings

The most direct application of the PCCF is in formal educational settings, where structured curricula can systematically develop all five pillars across developmentally appropriate grade levels. Kaufman (2020) identifies civic education classrooms as a critical site for fake-news-era skills development, arguing that the methods classroom can model the deliberative, evidence-based communication norms that students need to practice in their broader information lives. Festl (2021) similarly identifies school-based social media literacy education as a key lever for reducing adolescent information vulnerability, particularly in populations with limited family-level media literacy resources. In practice, PCCF integration into K–12 settings involves curriculum infusion across multiple subject areas rather than a single standalone media literacy course. English Language Arts classrooms are natural sites for source evaluation (Pillar II); social studies and civics classrooms address civic engagement and ethical norms (Pillars I and III); school advisory programs deliver inoculation programming (Pillar IV); and library and community partnerships ground the institutional trust function (Pillar V). At the higher education level, the PCCF maps onto existing departmental commitments across journalism, communication, teacher preparation, and public health programs, enabling integration without requiring new curricular architecture.

5.3 Applications in Community Organizations

Community organizations, libraries, faith communities, neighborhood associations, public health agencies, civic groups, represent a critical implementation context that is often overlooked in media literacy discussions, which tend to focus disproportionately on formal schooling. This is a significant gap, given that many adults in the United States

receive the majority of their civic information through informal channels, and that community-level trust is a primary determinant of information acceptance and evaluation.

The PCCF offers community organizations a structured approach to civic communication programming that goes beyond one-time workshops or fact-sheet distribution. A library-based PCCF program, for example, might include: a community needs assessment to identify local information vulnerabilities (Stage 1); co-design of a six-session civic communication workshop series with community input (Stage 2); facilitated workshops covering ethical sharing norms, source evaluation skills, civic dialogue practice, and prebunking activities (Stage 3); participant surveys and facilitator reflections to evaluate impact (Stage 4); and coordination with local schools and health agencies to scale successful elements (Stage 5). Damasceno (2021) demonstrates that multiliteracies approaches, which combine critical information evaluation with ethical, civic, and multimodal communication competencies, are effective in fostering civic dialogue in community settings, underscoring the practical feasibility of the PCCF's integrated approach.

5.4 Digital Platform Contexts and Youth-Specific Considerations

A distinctive strength of the PCCF is its explicit orientation toward digital platform environments where most contemporary misinformation circulates and where youth are most heavily embedded. Dan et al. (2021) demonstrate that visual and multimedia misinformation presents evaluation challenges that text-centric media literacy approaches do not adequately address. The PCCF's Pillar II specifically incorporates multimodal information evaluation, including image verification, video context assessment, and recognition of emotionally manipulative visual framing. Roozenbeek et al. (2022) report that large-scale prebunking campaigns delivered through social media can produce measurable improvements in misinformation discernment across diverse populations. Game-based formats, which Hu et al. (2023) identify as particularly effective for younger audiences, offer further opportunity for youth-focused PCCF delivery through digital platforms that youth already inhabit.

6. Analytical Discussion: Opportunities, Tensions, and Challenges

6.1 Analytical Strengths of the PCCF

The PCCF offers several analytically distinctive strengths relative to existing approaches. First, it is architecturally preventive rather than reactive, addressing the cognitive, civic, and relational conditions that determine information vulnerability rather than targeting specific false claims. This orientation allows it to remain effective as the specific content of misinformation evolves, since it builds transferable capacities rather than content-specific corrections. Second, the PCCF is analytically integrative: rather than treating inoculation, media literacy, civic education, and institutional trust as separate intervention silos, as is common in current practice, it articulates them as mutually reinforcing pillars within a unified framework. The existing literature supports this integration: Martens and Hobbs (2015) demonstrate the civic-literacy nexus; Lewandowsky and van der Linden (2021) demonstrate that inoculation is more effective when embedded in contexts of epistemic trust; and Schulenkorf et al. (2021) demonstrate that institutional support amplifies curriculum-based interventions. The PCCF provides the conceptual architecture within

which these validated elements can be deliberately combined. Third, the PCCF extends the media literacy mandate to include ethical communication as well as critical reception, filling a significant gap in existing frameworks. The sharing and amplification behaviors through which misinformation spreads are communicative behaviors, and they are amenable to ethical education in ways that have not yet been systematically exploited (Frau-Meigs, 2022). By treating every community member as a communicator as well as a consumer, the PCCF addresses the production side of the misinformation ecosystem.

6.2 Tensions and Implementation Challenges

The PCCF faces a number of tensions requiring candid analytical engagement. The most significant is the tension between universalism and contextualization. While the framework aspires to broad applicability, evidence consistently shows that civic communication interventions are most effective when culturally responsive and co-designed with local stakeholders (Kahne et al., 2012; Damasceno, 2021). The enabling conditions in Figure 2, particularly "Culturally Responsive Design", acknowledge this requirement, though operationalizing it at scale demands investment in local adaptation that generic framework adoption cannot guarantee. A second tension concerns political contestation. Civic communication education, especially when engaging critical evaluation of political claims or sourcing standards, inevitably intersects with politically charged debates about credibility and bias. In a polarized environment, PCCF programming may face resistance from stakeholders who perceive ideological motivation, a risk attending many media literacy initiatives (Kaufman, 2020; Zimdars & McLeod, 2020). The PCCF's emphasis on process skills rather than content conclusions is a deliberate design response, though it does not fully resolve this tension. A third challenge is the unequal distribution of implementation resources. Effective programming requires institutional commitment, trained facilitators, and sustained community partnerships, conditions not equally available across schools and communities. Lower-income communities, which serve populations disproportionately vulnerable to misinformation (Festl, 2021), may paradoxically have the fewest resources for preventive programming, a structural equity issue that scaling strategies must explicitly address.

6.3 Analytical Comparison with Existing Frameworks

A growing body of media and information literacy (MIL) frameworks exists, from UNESCO's MIL curriculum to the News Literacy Project's offerings, against which the PCCF may be analytically positioned. The PCCF's primary contribution relative to existing frameworks is threefold: its explicit integration of inoculation theory as a structured pillar; its inclusion of ethical communication (not only critical reception) as a core competency; and its provision of a structured five-stage implementation pathway that enables organizations to adopt and evaluate the framework systematically rather than episodically. Frau-Meigs (2019, 2022) provides the most comprehensive existing theoretical treatment of MIL as a response to information disorders, and the PCCF is substantially informed by this tradition. The PCCF's primary extension of Frau-Meigs's framework is the explicit incorporation of inoculation as a structural pillar and the development of the community anchor and institutional trust-building function as a distinct component. Mohammed et al. (2022) and Hannak et al. (2014) offer insights from crowdsourced and social mediation approaches

to fact-checking that point to the possibility of community-based verification cultures as an emergent feature of robust information environments, a development that the PCCF's civic engagement pillar would both support and cultivate.

7. Conclusion

The global proliferation of misinformation and disinformation represents not merely a technical or regulatory challenge but a civic and communicative one, rooted in the atrophy of critical information evaluation skills, ethical communication norms, and community-level institutional trust (Komolafe et al., 2024). Fact-checking, while a necessary component of a healthy information ecosystem, operates reactively and reaches too few, too late. The Preventive Civic Communication Framework introduced in this paper proposes a structural reorientation: building community-level resilience to misinformation through the proactive, integrated development of ethical communication literacy, critical information evaluation, civic engagement and dialogue, psychological inoculation, and institutional trust, before misinformation takes root. The PCCF is grounded in a well-established body of empirical and theoretical literature spanning inoculation theory, civic education, media and information literacy, and information disorder studies. It is designed for practical operationalization across educational institutions and community organizations through a five-stage implementation pathway that supports needs diagnosis, stakeholder co-design, pilot deployment, rigorous evaluation, and systematic scaling.

The framework does not resolve all tensions in the field, the challenges of political contestation, equitable resource distribution, and cultural adaptation remain real and demanding. What the PCCF offers is a conceptually coherent, empirically grounded, and practically oriented architecture for addressing these challenges through deliberate, sustained, and preventive civic communication investment. At a moment when the health of democratic discourse depends on citizens' capacity to navigate a sophisticated adversarial information environment, such investment is not a luxury but a civic necessity. Future empirical work should focus on randomized and quasi-experimental evaluations of PCCF-aligned programs in diverse community and educational contexts, with attention to differential outcomes across socioeconomic, demographic, and political sub-populations. Development of standardized measures for civic communication capacity, spanning all five pillars, will be essential for building the evidence base that advances the field from promising frameworks to demonstrated public outcomes.

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