

A Multidisciplinary Conceptual Framework for Understanding and Mitigating Digital Disinformation

Abstract

The rapid proliferation of digital platforms has amplified the speed, reach, and impact of disinformation, creating complex challenges for societies worldwide. While extensive empirical studies have explored isolated aspects of disinformation—such as cognitive biases, algorithmic amplification, and political influence—there remains a lack of an integrative framework that synthesizes these dimensions across disciplines. This conceptual study proposes a multidisciplinary model that unites communication theory, cognitive psychology, network analysis, and policy science to explain the lifecycle of digital disinformation. The framework identifies four core interacting domains: source credibility, message framing, dissemination dynamics, and audience susceptibility. By mapping the interplay between these domains, the model highlights leverage points for intervention, such as platform design modifications, digital literacy programs, and targeted regulatory measures. This work aims to provide researchers and policymakers with a structured foundation for developing empirically testable hypotheses and designing evidence-based mitigation strategies. Ultimately, the proposed framework seeks to bridge the gap between theoretical understanding and actionable solutions in the fight against digital disinformation.

Keywords: Disinformation, conceptual framework, digital media, cognitive bias, policy intervention.

1. Introduction

Digital disinformation—defined as the intentional creation and dissemination of false or misleading information—has emerged as a critical challenge in the information age. The widespread adoption of social media platforms has enabled rapid, large-scale propagation of content, often without adequate verification. While previous studies have examined various dimensions of disinformation, such as psychological susceptibility, network dynamics, and regulatory approaches, there is a pressing need for a unified framework that integrates these perspectives. This paper presents a multidisciplinary conceptual model designed to explain the mechanisms driving disinformation and to identify actionable intervention strategies. By synthesizing insights from communication theory, cognitive psychology, network analysis, and public policy, the framework offers a holistic understanding of disinformation's lifecycle.

2. Methodology

This study adopts a conceptual research design, grounded in an integrative literature synthesis approach. Relevant peer-reviewed studies, policy reports, and theoretical models were systematically reviewed and analyzed to identify recurring themes and interconnections across disciplines. Key variables were categorized into four primary domains: 1. Source Credibility – attributes of the originator of information, including trustworthiness and expertise. 2. Message Framing – linguistic, emotional, and structural characteristics of the message. 3. Dissemination Dynamics – network properties, algorithmic amplification, and platform affordances. 4. Audience Susceptibility – cognitive biases, media literacy, and socio-cultural influences. The conceptual framework was constructed by mapping the interactions between these domains and identifying potential leverage points for intervention.

3. Results: The Proposed Conceptual Framework

The model proposes that disinformation propagates through an iterative cycle: - Initiation: Creation of misleading or false content by actors with varied motivations (political, economic, ideological). - Amplification: Algorithmic prioritization and network effects that increase content visibility. - Reception: Audience interpretation shaped by biases, literacy levels, and prior beliefs. - Feedback Loop: Engagement metrics (likes, shares, comments) reinforce visibility, fueling further dissemination. The framework highlights critical intervention points: enhancing source verification systems, promoting accurate framing through fact-checking, modifying platform algorithms to reduce virality of unverified content, and implementing large-scale digital literacy programs.

4. Discussion

By integrating theories and findings across disciplines, this model offers a structured lens for analyzing disinformation phenomena. It emphasizes the necessity of coordinated action between technology platforms, policymakers, educators, and researchers. The conceptual approach ensures adaptability, enabling the framework to be applied across different cultural and political contexts. Moreover, the framework can guide empirical studies aimed at testing the interactions between identified domains, thus contributing to evidence-based policymaking.

5. Conclusion

This paper contributes a multidisciplinary conceptual framework for understanding and mitigating digital disinformation. By identifying key domains and their interactions, the model bridges theoretical perspectives and practical interventions. Future research should focus on empirically validating the framework and evaluating the effectiveness of proposed interventions in diverse settings.

References

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