

The Impact Of Social Media Platforms On Public Opinion Formation During Crises: An Applied Study

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Abstract

This applied study investigates the multifaceted impact of social media platforms on public opinion formation during crisis events. Drawing on recent cross-national empirical evidence and platform-specific analyses, the research identifies four primary mechanisms through which digital platforms exert influence: (1) the temporal compression of the public agenda, wherein social media dictates issue salience within the critical first 24 hours of a crisis—significantly outpacing traditional media; (2) the algorithmic amplification of misinformation, which, driven by emotional user responses, systematically undermines institutional credibility; (3) the reinforcement of opinion polarization and echo chambers, where algorithmic curation and fear of social isolation limit exposure to dissenting views; and (4) significant cross-cultural divergence in public sense-making, demonstrating that trust in government fundamentally shapes the thematic focus of online discourse across different national contexts.

Empirically, the study applies these findings to real-world cases, including the analysis of crisis communication strategies on Douyin/TikTok, which reveals how short-video platforms reconfigure public responsibility attribution through emotional and visual affordances. The findings further confirm that organizational responses on digital platforms frequently lack strategic alignment with established crisis communication models, often unintentionally escalating reputational risk. The study concludes with actionable recommendations for crisis practitioners, emphasizing the necessity of rapid authentic communication, culturally contextualized messaging, and proactive collaboration with independent fact-checkers and trusted digital influencers to navigate the complexities of algorithm-driven public spheres.

Keywords: Crisis Communication, Social Media, Public Opinion, Applied Study, Misinformation, Echo Chambers, Algorithmic Influence, Cross-Cultural Communication, Digital Platforms.

Introduction

Over the past twenty years, social media platforms have reshaped the communicative architecture of contemporary societies. Services such as X (formerly Twitter), Facebook, Instagram and TikTok have moved from secondary channels to primary arenas of public discourse, where political actors, journalists, activists and ordinary citizens produce meaning together, in real time. This shift changes how public opinion is formed and contested, with especially significant consequences during crises, when demand for reliable information is high, uncertainty is acute, and collective decisions carry considerable weight.¹

The academic literature has firmly established the significance of social media within the domain of crisis communication². Yet, beneath this established importance lies a deep-seated

operational paradox, frequently characterised as a "double-edged sword."³ On the one hand, these digital platforms enable instantaneous information dissemination and foster rapid grassroots mobilisation; on the other, they simultaneously exacerbate polarised public discourse and amplify the spread of disinformation, thereby wielding considerable influence over both public sentiment and subsequent policy formulation. In response to this volatile environment, state institutions and public health authorities have increasingly adopted these platforms as primary channels for broadcasting real-time alerts and actively countering emerging falsehoods⁴.

Nevertheless, the official communications apparatus does not operate in isolation. Informal messengers—particularly social media influencers and citizen journalists—have proven equally critical in expanding the

¹ Boyd, Danah M., and Nicole B. Ellison, "Social Network Sites: Definition, History, and Scholarship," op. cit. : 210 ; - Andreas M. Kaplan and Michael Haenlein, "Users of the World, Unite! The Challenges and Opportunities of Social Media," *Business Horizons* 53, no. 1 (2010): 60.

² Eriksson, Mats, and Eva-Karin Olsson. "Facebook and Twitter in Crisis Communication: A Comparative Study of Crisis Communication Professionals' and Citizens'

Perceptions." *Journal of Contingencies and Crisis Management* , 2016, 24 (4): 198–208.

³ Eriksson, Mats, and Eva-Karin Olsson, op. cit.

⁴ Eriksson, Mats. 2018. "Lessons for Crisis Communication on Social Media: A Systematic Review of What Research Tells the Practice." *International Journal of Strategic Communication* 12 (5): 526–51.

overall reach of crisis-related messages; however, their participation persistently introduces complex challenges concerning factual accuracy and overall source credibility⁵.

The role of social media in crisis communication extends beyond information dissemination to encompass the active shaping of public perception and behavioural responses. Social media's emotional contagion effects create environments where publics' emotions are not merely reactive but actively shape crisis interpretation and diffusion. Emotionally charged discussions among stakeholders can amplify crises, attract peripheral audiences, and risk secondary crises, challenging organisations to balance rational messaging with emotional validation. This dynamic interplay between emotion-driven stakeholder networks and algorithmic bias requires revisiting theoretical frameworks and practices to address modern social-mediated realities⁶.

The temporal dynamics of social media influence during crises also warrant attention. Agenda-setting theory, long a cornerstone of media effects research, has been extended to account for the decentralised digital media landscape. Recent empirical work reveals that social media demonstrates the highest temporal responsiveness within the first twenty-four hours of a crisis, with its influence declining after the sixth day, whereas traditional media exhibits delayed but sustained impact on the public agenda. These findings indicate that agenda-setting operates through recursive, time-sensitive influence cycles rather than linear dissemination. Such insights underscore the need for synchronised cross-platform timing and proactive interventions to pre-empt misinformation and foster rational public discourse during crises⁷.

The structural centrality of social media in contemporary crisis communication was unequivocally demonstrated by the COVID-19 pandemic, which catalyzed an unprecedented volume of research into digital crisis dynamics. Empirical investigations into collective sense-making during this period reveal that public engagement is inextricably linked to cultural, economic, and institutional contexts.⁸ These

variations underscore the necessity of deploying culturally contextualized, adaptive, and data-driven communication strategies that respond directly to specific systemic environments and audience behaviors.⁹

While existing scholarship extensively documents the informational functions of social media, substantial theoretical gaps remain regarding the precise mechanisms through which these platforms actively shape public opinion. Specifically, the interplay between algorithmic curation, user engagement, and cognitive bias requires further articulation. Opinion polarization—driven by identity homophily within social groups, algorithmic filtering, and selective exposure—poses a profound challenge to collective decision-making during crises.¹⁰ The extent to which social platforms mitigate or exacerbate this polarization, particularly across differing crisis typologies, remains a critical open question.¹¹ These gaps constitute the foundational rationale for the present study.

Research Problem

Although the literature on crisis communication extensively catalogs how organizations manage their digital reputations during emergencies, the actual formation and evolution of public opinion throughout the crisis lifecycle remains underexplored. Existing research predominantly isolates either the institutional response or the viral spread of content, often neglecting the integrated technological affordances of the platforms themselves. It remains insufficiently understood how algorithmic environments interact with user practices to actively shape, rather than merely reflect, public sentiment during disruptive events. This study bridges that gap by investigating the operational mechanisms of social media platforms in molding public opinion, specifically assessing the implications of these dynamics for crisis management.

Research Questions

To systematically address this problem, the research is guided by the following primary question:

⁵ Eriksson, Mats. Op. cit.

⁶ Yan Jin, Augustine Pang, and Glen T. Cameron, "Toward a Publics-Driven, Emotion-Based Conceptualization in Crisis Communication: Unearthing Dominant Emotions in Multi-Staged Testing of the Integrated Crisis Mapping (ICM) Model," *Journal of Public Relations Research* 24, no. 3 (2012): 268–270.

⁷ Wanta, Wayne, and Yu-Wei Hu. 1994. "Time-Lag Differences in the Agenda-Setting Process: An Examination of Five News Media." *International Journal of Public Opinion Research* 6 (3): 225–40.

⁸ Gallotti, Riccardo, Francesco Valle, Nicola Castaldo, Pierluigi Sacco, and Manlio De Domenico. 2020. "Assessing the Risks of 'Infodemics' in Response to COVID-19 Epidemics." *Nature Human Behaviour* 4 (12): 1285–93.

⁹ Eriksson, Mats. 2018. op. cit.

¹⁰ Emily Kubin and Christian von Sikorski, "The Role of (Social) Media in Political Polarization: A Systematic Review," *Annals of the International Communication Association* 45, no. 3 (2021): 188–206. - Törnberg, Petter. 2018. "Echo Chambers and Viral Misinformation: Modeling Fake News as Complex Contagion." *PLoS ONE* 13 (9): e0203958. - Tucker, Joshua A., Andrew Guess, Pablo Barberá, Cristian Vaccari, Alexandra Siegel, Sergey Sanovich, Denis Stukal, and Brendan Nyhan. 2018. *Social Media, Political Polarization, and Political Disinformation: A Review of the Scientific Literature*. Hewlett Foundation Report.

¹¹ G. De Marzo, A. Zaccaria, and C. Castellano, "Emergence of Polarization in a Voter Model with Personalized Information," *Physical Review Research* 2, no. 4 (2020): 043117.

1. How do the technological affordances and socio-cultural dynamics of social media platforms govern the formation of public opinion during crises?
2. This central inquiry is deconstructed into four sub-questions:
3. What theoretical frameworks best elucidate the intersection of digital media effects and public opinion formation during systemic crises?
4. By what specific mechanisms (e.g., algorithmic curation, network homophily, sentiment framing) do digital platforms dictate public perception and affective responses?
5. How does the influence of social media on public opinion fluctuate across distinct crisis typologies (e.g., global health emergencies, political conflicts, environmental disasters, and corporate reputational failures)?
6. What are the ethical implications and systemic risks—such as the rapid proliferation of misinformation and affective polarization—inherent in digitally mediated crisis communication?

Research Objectives

The study pursues the following targeted objectives:

1. To systematically synthesize theoretical models from public opinion research, digital media studies, and crisis management into a cohesive analytical framework.
2. To empirically analyze the distinct mechanisms—ranging from information diffusion to algorithmic filtering—that mediate public sentiment during disruptive events.
3. To conduct comparative case analyses across various crisis domains, identifying both domain-specific variations and universal patterns of digital influence.
4. To evaluate the compounding risks of digital polarization and echo chamber formation, ultimately proposing actionable, data-driven frameworks for more ethical and responsive crisis governance.
5. Significance of the Study

This research offers multi-dimensional contributions to both academic scholarship and professional practice:

1. Theoretical Significance: The study integrates classical media theories (e.g., agenda-setting, spiral of silence) with contemporary digital network dynamics, offering a modernized heuristic that accounts for the

distinctive algorithmic features of modern platforms.

2. Practical Significance: The findings equip policymakers, crisis managers, and corporate leaders with empirically grounded strategies to navigate digital volatility, mitigate disinformation, and foster institutional transparency in highly polarized environments.
3. Methodological Significance: By employing a robust mixed-methods approach—combining qualitative content analysis with comparative case studies—the research presents a comprehensive model for capturing the layered complexities of digital discourse.
4. Societal Significance: The study contributes to the broader discourse on digital literacy, algorithmic accountability, and the safeguarding of the digital public sphere against the fracturing effects of misperception and panic.

Research Methodology

The research employs a triangulated, mixed-methods design to ensure both analytical depth and contextual breadth. The methodology comprises the following integrated components:

1. Qualitative Content and Discourse Analysis: A systematic examination of user-generated content and institutional messaging across selected crises to uncover framing strategies, emotional contagion, and rhetorical patterns within digital public spheres.
2. Comparative Case Study Method: A cross-sectional analysis of distinct crisis typologies (health, political, corporate) to isolate the variable impact of different technological affordances and cultural contexts on opinion formation.
3. Theoretical Synthesis: A continuous integration of empirical findings with established literature to continually refine and challenge existing models of crisis communication.

Scope and Delimitations

Thematic and Platform Scope:

The study is situated at the intersection of media effects theory and situational crisis communication. It focuses on widely used social media platforms, particularly Twitter, Facebook, and TikTok, because of their significant role in shaping public discourse and circulating crisis-related information during the period under investigation. Smaller, specialized, and recently established platforms are excluded in order to maintain a clear and manageable analytical scope.

Empirical Scope:

Empirically, the study examines major crisis events that occurred between 2020 and 2023. This period was characterized by extensive global disruption, increasing reliance on digital communication, and significant changes in the ways social media platforms organized, distributed, and prioritized information. Geographically, the research draws on selected cases from Western and Middle Eastern contexts in order to account for differences in media systems, levels of digital access, patterns of platform use, and institutional approaches to crisis communication.

Delimitations:

The study relies primarily on publicly available and accessible digital content, including official statements, public posts, news reports, and observable forms of online interaction. Private and encrypted communications, such as messages exchanged through WhatsApp and similar applications, fall outside the scope of the research because they cannot be systematically accessed or verified, despite their recognized importance in the circulation of crisis-related information. Moreover, although the comparative design supports broader analytical observations, the findings are intended to provide conceptual and theoretical transferability rather than statistical representativeness across all populations or crisis contexts.

Plan

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Branch Two: Crisis Communication Models and Digital Media Influence Mechanisms

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Section One: Theoretical and Conceptual Foundations of Social Media and Public Opinion During Crises

The study of crisis communication in the digital age necessitates a robust theoretical architecture capable of untangling the complex web of interactions between technological affordances, institutional messaging, and collective human behavior. Disruptive events—whether natural disasters, public health emergencies, or corporate scandals—no longer unfold within the predictable boundaries of traditional mass media. Instead, they are rapidly mediated through digital ecosystems that simultaneously accelerate information diffusion and decentralize narrative control. Consequently, understanding how public opinion is constructed and mobilized during these critical junctures requires synthesizing established mass communication theories with contemporary digital media paradigms.¹²

This section establishes that foundational architecture. It systematically unpacks the core concepts of social media platforms, public opinion, and crisis management, before transitioning into a rigorous examination of the dominant theoretical frameworks—such as agenda-setting, framing, and the spiral of silence—that govern online discourse during crises.

Subsection One: Fundamental Concepts of Social Media, Public Opinion, and Crisis Communication

Before analyzing the causal effects of digital platforms on public sentiment, it is imperative to demarcate the conceptual boundaries of the phenomena under investigation. The digital transformation has irrevocably altered the basic vocabulary of communication studies. The concept of the "public," once viewed as a passive, geographically bound audience, has morphed into a highly fragmented, participatory network of "digital publics" capable of producing content and challenging institutional authority in real-time.¹³ Concurrently, the definition of a "crisis" has expanded to encompass not only physical operational failures but also rapid, algorithmically amplified reputational threats known as "paracrises," which are born entirely within the

¹² W. Timothy Coombs and Sherry J. Holladay, *The Handbook of Crisis Communication* (Malden, MA: Wiley-Blackwell, 2010), 3–5.

¹³ Zizi Papacharissi, *Affective Publics: Sentiment, Technology, and Politics* (New York: Oxford University Press, 2015), 4–6.

social media ecosystem.¹⁴ Therefore, this subsection systematically defines and historically contextualizes three interrelated domains: the evolutionary trajectory and technological characteristics of social media platforms, the socio-psychological nature of public opinion in networked environments, and the contemporary parameters of crisis communication.

Branch One: Social Media Platforms: Concepts, Evolution, Characteristics, and Communication Functions

1. Defining Social Media Platforms

The term "social media" has proven remarkably resistant to precise definition, despite its absolute ubiquity in academic and popular discourse. This definitional fluidity stems partly from the rapid evolution of the technologies themselves and partly from the fragmented disciplinary perspectives—ranging from sociology to information technology—that have sought to conceptualize them. Carr and Hayes (2015) critically observed that although scholars often assume an inherent understanding of social media based on extant technology, the lack of a universally accepted functional and theoretical definition within communication studies has severely limited cogent theorizing regarding their actual uses and effects.¹⁵

Despite this ambiguity, a foundational definition by Kaplan and Haenlein (2010) has achieved near-canonical status. They defined social media as "a group of Internet-based applications that build on the ideological and technological foundations of Web 2.0, and that allow the creation and exchange of User Generated Content."¹⁶

This definition captures two essential dimensions: the technological infrastructure (Web 2.0) that enables dynamic, interactive environments, and the participatory practice (User-Generated Content) that positions users not merely as passive consumers, but as active producers. More specifically, Boyd and Ellison (2007) circumscribed the concept of "social network sites" (SNSs) as bounded web-based services where individuals construct profiles, articulate connections, and traverse their digital networks.¹⁷ Consequently, understanding what social media is inherently requires tracing how

these platforms evolved from simple network sites to complex digital infrastructures.

2. The Evolution of Social Media Platforms

The historical development of social media platforms represents a trajectory from niche, experimental forums to globally dominant infrastructural systems. While early predecessors like Bulletin Board Systems (BBS) and SixDegrees.com introduced the concept of digital profiles in the late 1990s, the democratization of online connection truly accelerated with the launches of MySpace, LinkedIn, and Facebook in the mid-2000s.

A more cautious account of this development views social media platforms not as fixed technologies, but as evolving socio-technical and organizational arrangements. Gawer conceptualizes technological platforms as evolving organizations or meta-organizations whose modular architectures coordinate multiple actors, while their trajectories are shaped by the interaction between innovation and competition.¹⁸ Gillespie further demonstrates that the term "platform" is itself strategically significant, since digital intermediaries use it to present their services simultaneously as technical systems, spaces for participation, and channels for the circulation of content.¹⁹ Twitter's early development illustrates this fluidity: between 2006 and 2010, its meaning and functions were shaped through the interaction of technological design, user practices, content forms, and business models.²⁰ As the service developed, it combined interpersonal networking with broadcasting, large-scale information sharing, rapid news dissemination, and continuing public discussion, thereby acquiring communicative characteristics that distinguished it from earlier media forms.²¹

3. Characteristics of Social Media Platforms

Contemporary social media platforms possess distinct characteristics that profoundly alter the dynamics of public communication. At the core is User-Generated Content and Participation, which collapses the traditional boundary between media producers and consumers. This content flows through Networked Communication architectures, where the value of a platform increases exponentially with the number of users (the

¹⁴ W. Timothy Coombs, "State of Crisis Communication: Evidence and the Bleeding Edge," *Research Journal of the Institute for Public Relations* 1, no. 1 (2014): 2–3.

¹⁵ Caleb T. Carr and Rebecca A. Hayes, "Social Media: Defining, Developing, and Divining," *Atlantic Journal of Communication* 23, no. 1 (2015): 46–48.

¹⁶ Andreas M. Kaplan and Michael Haenlein, "Users of the World, Unite! The Challenges and Opportunities of Social Media," *op. cit.* : 61.

¹⁷ Danah M. Boyd and Nicole B. Ellison, "Social Network Sites: Definition, History, and Scholarship," *Journal of Computer-Mediated Communication* 13, no. 1 (2007): 211.

¹⁸ Annabelle Gawer, "Bridging Differing Perspectives on Technological Platforms: Toward an Integrative Framework," *Research Policy* 43, no. 7 (2014): 1239–1240.

¹⁹ Tarleton Gillespie, "The Politics of 'Platforms,'" *New Media & Society* 12, no. 3 (2010): 347–350.

²⁰ José van Dijck, "Tracing Twitter: The Rise of a Microblogging Platform," *International Journal of Media & Cultural Politics* 7, no. 3 (2011): 333–335.

²¹ Axel Bruns and Jean Burgess, "Researching News Discussion on Twitter: New Methodologies," *Journalism Studies* 13, nos. 5–6 (2012): 801–802.

network effect), enabling complex, multidirectional information flows.

Unlike the one-way broadcast model of analog media, digital platforms are driven by Interactivity and Two-Way Communication, allowing users to continuously respond, share, and contest narratives. Furthermore, Miller et al. (2016) identified the phenomenon of Scalable Sociality, highlighting how these platforms allow users to seamlessly shift between private, semi-public, and hyper-public modes of communication.²² Most critically for crisis communication, modern platforms are governed by Algorithmic Curation. Automated systems now select, prioritize, and personalize content feeds, fundamentally mediating what users see and how public opinion is shaped.²³ These unique socio-technical characteristics directly dictate how these platforms function communicatively, particularly during disruptive events.

4. Communication Functions of Social Media

Building on their distinct characteristics, social media platforms execute several critical communication functions. Adapting traditional mass media paradigms, their primary utility during disruptive events is Information Dissemination and Surveillance. During crises, platforms frequently outpace mainstream news by providing real-time, user-generated updates, enabling publics to monitor events globally.

Simultaneously, they serve a vital Community Building and Social Connection function, allowing dispersed individuals to form cohesive networks around shared identities or political grievances. This directly facilitates Public Engagement and Civic Participation, offering accessible arenas for political discourse and the mobilization of social movements. Beyond civic utility, platforms increasingly serve an Entertainment and Identity Expression function—epitomized by short-video apps like TikTok—and an Organizational function, generating immense economic value through the creator economy and targeted advertising.

Having established the conceptual, evolutionary, and functional foundations of social media platforms, it becomes imperative to examine how these specific technological architectures interact with human cognition. The following branch transitions from the platforms themselves to the psychological and societal outcomes they produce, specifically analyzing how these media effects actively shape public

opinion, foster polarization, and govern discourse during periods of crisis.

Branch Two: Public Opinion, Crisis Communication, and Contemporary Media Practices

Having established the conceptual, evolutionary, and functional foundations of social media platforms, it is now essential to examine the other side of the communicative equation: the nature of public opinion, the specific dynamics of crisis communication, and how contemporary media practices reshape the interplay between these forces. This branch addresses these three interrelated domains, providing the conceptual grounding necessary for understanding how digital platforms govern public perceptions during disruptive events.

1. Conceptualizing Public Opinion in the Digital Era

Public opinion has historically operated as a central construct in political science and communication studies, yet it defies simplistic definition. While broadly understood as the aggregate of individual attitudes on matters of public concern, this definition conceals a profound socio-psychological complexity. As Noelle-Neumann (1974) astutely observed in her foundational articulation of the spiral of silence, public opinion is not merely a statistical sum, but rather consists of "opinions on controversial issues that one can express in public without isolating oneself."²⁴ This introduces a critical social dimension: opinion formation is governed heavily by individuals' perceptions of what others think and their willingness to vocalize views against perceived societal pressure.

This social dimension has been irrevocably transformed by digital media. Historically, mass media institutions acted as centralized gatekeepers for geographically bounded publics. McCombs and Shaw's (1972) agenda-setting theory illuminated this dynamic, demonstrating that while traditional media may not tell citizens exactly what to think, they dictate what to think about.²⁵ Today, however, the digital ecosystem is characterized by the collapse of geographic boundaries and the fragmentation of audiences into niche "counter-publics." Consequently, agenda-setting on social media is no longer driven by editorial selection, but by algorithmic curation, trending metrics, and peer-to-peer sharing.²⁶

²² Daniel Miller et al., *How the World Changed Social Media* (London: UCL Press, 2016), 3–5.

²³ Helmond, Anne. 2015. "The Platformization of the Web: Making Web Data Platform Ready." *Social Media + Society* 1 (2): 2056305115603080. - Plantin, Jean-Christophe, Carl Lagoze, Paul N. Edwards, and Christian Sandvig. 2018. "Infrastructure Studies Meet Platform Studies in the Age of Google and Facebook." *New Media & Society* 20 (1): 293–310.

²⁴ Elisabeth Noelle-Neumann, "The Spiral of Silence: A Theory of Public Opinion," *Journal of Communication* 24, no. 2 (1974): 43.

²⁵ Maxwell E. McCombs and Donald L. Shaw, "The Agenda-Setting Function of Mass Media," *Public Opinion Quarterly* 36, no. 2 (1972): 176–187.

²⁶ Zhou, Yuqiong, and Patricia Moy. 2007. "Parsing Framing Processes: The Interplay Between Online Public Opinion and Media Coverage." *Journal of Communication* 57 (1): 79–98. - Brosius, Hans-Bernd, and Hans Mathias

Furthermore, the digital environment continuously modifies opinion expression. Neubaum and Krämer (2017) confirmed that the spiral of silence remains highly potent online; users frequently self-censor when they perceive their views to be in the minority. However, the digital sphere introduces unique paradoxes: while anonymity can liberate dissent, the persistence of digital footprints often heightens the fear of social isolation.²⁷

2. Crisis Communication: Definitions, Models, and Digital Transformations

A crisis is fundamentally a severe threat to an organization's viability, characterized by intense public scrutiny and extreme time pressure. Fearn-Banks (2016) concisely defined it as "a major occurrence with a potentially negative outcome affecting the organization, company, or industry, as well as its publics, products, services, or good name."²⁸

To navigate such threats, Coombs' (2015) Situational Crisis Communication Theory (SCCT) provides the dominant theoretical heuristic. SCCT posits that the reputational damage of a crisis is contingent upon the level of responsibility publics attribute to the organization. Consequently, crisis managers must calibrate their responses—ranging from defensive strategies (denial) for low-responsibility events, to accommodative strategies (apology and compensation) for preventable, high-responsibility crises.²⁹

However, the integration of social media has transformed the communication environment in which crises are publicly interpreted. Digital platforms have weakened the exclusive gatekeeping position traditionally occupied by established news organizations by enabling citizens and independent content producers to participate more directly in the circulation, selection, and interpretation of information. This transformation does not imply that traditional media have lost their relevance.

Meraz's analysis demonstrates that agenda-setting power within networked media environments has become distributed among multiple actors, while elite news organizations

continue to retain considerable influence as prominent information sources.³⁰ In the context of crisis communication, this indicates that organizations should not treat social and traditional media as separate or mutually exclusive channels. Instead, crisis narratives develop through continuing interaction among official communicators, established news institutions, and citizen-based digital networks.

3. Contemporary Media Practices in the Digital Crisis Environment

The intersection of crisis communication and public opinion has become increasingly shaped by the communicative environment of social media. During crises, information circulates rapidly through decentralized digital networks in which official statements and professional news reports coexist with eyewitness accounts, personal commentary, and other forms of user-generated content. Although this environment can facilitate rapid information exchange and wider public participation, it can also create difficulties related to verification, credibility, message coordination, and institutional control over crisis narratives.³¹

Hermida describes this continuous and networked circulation of information as "ambient journalism," in which news is no longer encountered solely through separate and clearly defined reports, but is experienced as an ongoing flow embedded in users' everyday social media activity.³² In crisis situations, this continuous exposure means that public perceptions may develop gradually through the combined influence of news updates, individual posts, public reactions, and the repeated circulation of information across digital platforms.

Accordingly, social media should not be understood simply as either a beneficial or harmful instrument of crisis communication. Eriksson's systematic review indicates that these platforms can support dialogue, responsiveness, information dissemination, and stakeholder engagement, while simultaneously generating challenges associated with the speed of communication, uncertain information, competing interpretations, and the reduced ability of organizations to maintain control over their messages.³³

Kepplinger. 1990. "The Agenda-Setting Function of Television News: Static and Dynamic Views." *Communication Research* 17 (2): 183–211.

²⁷ German Neubaum and Nicole C. Krämer, "Opinion Climates in Social Media: Blending Mass and Interpersonal Communication," *Human Communication Research* 43, no. 4 (2017): 464–476. - German Neubaum and Nicole C. Krämer, "What Do We Fear? Expected Sanctions for Expressing Minority Opinions in Offline and Online Communication," *Communication Research* 45, no. 2 (2018): 139–164.

²⁸ Kathleen Fearn-Banks, *Crisis Communications: A Casebook Approach*, 5th ed. (New York: Routledge, 2016), 8.

²⁹ W. Timothy Coombs, *Ongoing Crisis Communication: Planning, Managing, and Responding*, 4th ed. (Thousand Oaks, CA: Sage Publications, 2015).

³⁰ Sharon Meraz, "Is There an Elite Hold? Traditional Media to Social Media Agenda Setting Influence in Blog Networks," *Journal of Computer-Mediated Communication* 14, no. 3 (2009): 682–707.

³¹ Mats Eriksson, "Lessons for Crisis Communication on Social Media: A Systematic Review of What Research Tells the Practice," *International Journal of Strategic Communication* 12, no. 5 (2018): 526–551.

³² Alfred Hermida, "Twittering the News: The Emergence of Ambient Journalism," *Journalism Practice* 4, no. 3 (2010): 301.

³³ Eriksson, "Lessons for Crisis Communication on Social Media," 526–551.

The preceding discussion has established the central relationship between public opinion, crisis communication, and the continuous circulation of information within contemporary digital media environments. However, a rigorous evaluation of how these elements interact to influence public perception requires moving beyond conceptual description toward a more structured theoretical explanation. The following subsection therefore examines the principal theoretical frameworks and analytical models used by scholars to interpret and assess media influence during crises.

Subsection Two: Theoretical Frameworks and Analytical Models for Understanding Media Influence During Crises

The empirical observation of social media's impact on public opinion during crises cannot be fully comprehended without a robust theoretical foundation. As crises transition from predictable, localized events into complex, algorithmically amplified global phenomena, the need for sophisticated analytical models becomes paramount.³⁴ To effectively decode how digital platforms shape human perception, researchers must synthesize classical mass communication theories with contemporary models of digital crisis management.

This subsection critically examines the theoretical toolkits utilized to analyze these dynamics. It bridges two distinct but deeply interconnected scholarly domains: first, it explores the classical media theories—such as agenda-setting, framing, and the spiral of silence—evaluating their enduring relevance and necessary adaptations in the era of networked digital publics. Second, it shifts to specialized crisis communication models, primarily the Situational Crisis Communication Theory (SCCT) and the Social-Mediated Crisis Communication (SMCC) model, to explain how organizations and publics collaboratively negotiate meaning and reputation under the intense pressure of digital crises.³⁵ Together, these frameworks provide the essential structural lens through which the empirical phenomena of digital crisis communication are subsequently analyzed.

Branch One: Classical and Contemporary Media Theories Explaining Public Opinion Formation

³⁴ Coombs, W. Timothy. "Protecting Organization Reputations During a Crisis: The Development and Application of Situational Crisis Communication Theory." *Corporate Reputation Review* 10, no. 3 (2007): 163–176. - Coombs, W. Timothy. "State of Crisis Communication: Evidence and the Bleeding Edge." *Op. cit.* : 1-12..

³⁵ Lucinda L. Austin, Brooke F. Liu, and Yan Jin, "How Audiences Seek Out Crisis Information: Exploring the Social-Mediated Crisis Communication Model," *Journal of Applied Communication Research* 40, no. 2 (2012): 188–189.

The study of public opinion formation has been profoundly shaped by a constellation of media theories that have evolved sequentially alongside the media landscape itself. These theories provide the indispensable analytical lenses through which scholars understand how media content dictates what populations think about, how they interpret systemic events, and whether they choose to express their views publicly.

While classical theories were formulated during the era of mass broadcasting, their core mechanisms remain highly applicable to contemporary digital environments, provided they are rigorously adapted. This branch examines five foundational theories—agenda-setting, framing, the spiral of silence, uses and gratifications, and cultivation—alongside their contemporary digital extensions.

1. Agenda-Setting Theory

First articulated by McCombs and Shaw (1972), agenda-setting theory posits that while the media may not tell audiences what to think, they are exceptionally successful in telling them what to think about.³⁶ The central premise is the transfer of salience: issues receiving prominent media attention are consequently perceived as the most critical by the public.

The theory has advanced through three distinct developmental stages. The first level concerns object salience (which issues are important). The second level, or "attribute agenda-setting," addresses how media emphasize specific attributes of an issue, thus shaping how the public thinks about it. The contemporary third level, "network agenda-setting," examines how the media cognitively connects issues and attributes into broader networks of collective meaning.³⁷

In the digital era, this process has become severely decentralized. Traditional media no longer hold a monopoly over agenda formation; social media enables users to actively co-construct the agenda. Recent temporal modeling during crises reveals that social media dictates the agenda within the highly volatile first 24 hours, whereas traditional media exerts a delayed but sustained influence, suggesting that modern agenda-setting is a recursive, time-sensitive cycle rather than a linear imposition.³⁸

2. Framing Theory

If agenda-setting dictates importance, framing theory addresses comprehension. Framing theory

³⁶ Maxwell E. McCombs and Donald L. Shaw, "The Agenda-Setting Function of Mass Media," *op. cit.* : 176–177.

³⁷ Maxwell McCombs and Sebastián Valenzuela, *Setting the Agenda: Mass Media and Public Opinion*, 3rd ed. (Cambridge: Polity Press, 2020), 4–5.

³⁸ Trumbo, Craig W. 1995. "Longitudinal Modeling of Public Issues: An Application of the ARIMA Approach to the Agenda-Setting Process." *Communication Research* 22 (2): 175–203.

posits that the specific lens through which an issue is presented significantly governs how audiences interpret it. A frame acts as a "central organizing idea" that promotes particular problem definitions, causal attributions, moral evaluations, and treatment recommendations.³⁹

The distinction between "episodic" (event-specific, individualized) and "thematic" (contextual, abstract) framing is crucial. Episodic frames generally evoke stronger emotional and behavioral impacts on policy preferences.⁴⁰ In contemporary fragmented networks, framing remains robust; however, it has evolved into "networked framing." This is a bottom-up, participatory process where frames are no longer solely crafted by journalists but are fiercely contested, reproduced, and mutated by ordinary users, influencers, and activists across social platforms.⁴¹

3. Spiral of Silence Theory

Noelle-Neumann's (1974) spiral of silence addresses the intense social dynamics of opinion expression. Driven by a subconscious "fear of isolation," individuals continuously monitor the opinion climate; if they perceive their views to be in the minority, they self-censor. This creates a spiral where minority views become increasingly invisible.⁴²

While early cyber-utopians hypothesized that the internet would eradicate this fear by connecting marginalized voices, empirical research proves otherwise. Studies on digital opinion climates confirm that the spiral of silence is acutely present on platforms like Facebook. Because digital footprints are permanent and highly visible, state-based fear of isolation remains high, driving users to publicly agree with their specific network's dominant stance regardless of private belief, thereby accelerating the formation of algorithmic echo chambers.⁴³

4. Uses and Gratifications Theory (U&G)

Departing from the assumption of a passive audience, U&G theory—articulated by Katz, Blumler, and Gurevitch (1974)—posits that

individuals are active agents who deliberately select media to satisfy specific psychological and social needs (cognitive, affective, and integrative).⁴⁴

During crises, cognitive needs (uncertainty reduction) and social integrative needs (community connection) spike dramatically. Social media platforms inherently cater to these active gratifications by enabling users to seamlessly pivot between information-seeking and emotional venting. However, modern digital environments also introduce a paradox: despite active selection, users increasingly report experiencing "digital angst"—a pervasive fatigue and distrust stemming from algorithmic manipulation and information overload, challenging the traditional U&G assumption that media use always results in genuine psychological gratification.⁴⁵

5. Cultivation Theory

Gerbner's cultivation theory offers a long-term perspective, proposing that heavy, cumulative exposure to media (originally television) gradually homogenizes public perception, causing audiences to adopt the media's version of reality as objective truth ("mainstreaming").⁴⁶

In the contemporary high-choice digital landscape, the concept has been aggressively updated to "self-cultivation." Instead of a centralized broadcast system homogenizing society, individuals now utilize algorithmic feeds and alternative media to continuously self-select content that aligns with their pre-existing ideological predispositions. This mechanism creates highly polarized, reinforcing spirals, wherein digital cultivation no longer unifies public opinion, but radically fragments it.⁴⁷

6. Contemporary Developments: Theorizing Digital Media Influence

To account for the severe disruption caused by digital networks, several new theoretical frameworks have emerged. The concept of the "Hybrid Media System" (Chadwick, 2017) argues

³⁹ Robert M. Entman, "Framing: Toward Clarification of a Fractured Paradigm," *Journal of Communication* 43, no. 4 (1993): 52.

⁴⁰ Entman, Robert M., op. cit., pp. 51–58.

⁴¹ Sharon Meraz and Zizi Papacharissi, "Networked Gatekeeping and Networked Framing on #Egypt," *The International Journal of Press/Politics* 18, no. 2 (2013): 140.

⁴² Elisabeth Noelle-Neumann, "The Spiral of Silence: A Theory of Public Opinion," op. cit.: 43–44.

⁴³ German Neubaum and Nicole C. Krämer, "Opinion Climates in Social Media: The Influence of Perceived Majority and Minority Opinions on Opinion Expression," *Communication Research* 44, no. 4 (2017): 532.

⁴⁴ Elihu Katz, Jay G. Blumler, and Michael Gurevitch, "Utilization of Mass Communication by the Individual," in *The Uses of Mass Communications*, ed. J. G. Blumler and E. Katz (Beverly Hills: Sage, 1974), 19–32.

⁴⁵ Aino Ruggiero and Marita Vos, "Social Media Monitoring for Crisis Communication: Process, Methods and Trends in the Scientific Literature," *Online Journal of*

Communication and Media Technologies 4, no. 1 (2014): 105–130. - Aino Ruggiero and Marita Vos, "Terrorism Communication: Characteristics and Emerging Perspectives in the Scientific Literature 2002–2011," *Journal of Contingencies and Crisis Management* 21, no. 3 (2013): 153–166. - Yang Cheng and Glen T. Cameron, "The Status of Social-Mediated Crisis Communication (SMCC) Research: An Analysis of Published Articles in 2002–2014," in *Social Media and Crisis Communication*, ed. Lucinda Austin and Yan Jin (New York: Routledge, 2017), 9–20.

⁴⁶ George Gerbner et al., "The 'Mainstreaming' of America: Violence Profile No. 11," *Journal of Communication* 30, no. 3 (1980): 14–15.

⁴⁷ Bennett, W. Lance, and Shanto Iyengar. 2008. "A New Era of Minimal Effects? The Changing Foundations of Political Communication." *Journal of Communication* 58 (4): 707–31. - Stroud, Natalie Jomini. 2010. "Polarization and Partisan Selective Exposure." *Journal of Communication* 60 (3): 556–76.

that public opinion is no longer shaped by distinct media types, but by the relentless interpenetration of professional journalism, political actors, and amateur digital content.⁴⁸

Public opinion in contemporary media environments is not formed through a single or mechanically determined process. Research on framing indicates that political messages can influence the considerations citizens use when evaluating public issues, although this influence remains dependent on the social context in which those messages are received and discussed. Conversations that expose individuals to conflicting perspectives may weaken or even eliminate an initial framing effect, whereas discussions among people who have encountered similar arguments are less likely to challenge the original frame.⁴⁹

The influence of political communication also depends on the quality of the competing arguments rather than simply on how frequently they are repeated. Strong frames tend to prevail over weaker alternatives, even in competitive settings, while exposure to opposing frames can encourage citizens to compare their relative merits and process political information more deliberately.⁵⁰ The expansion of cable television and the Internet has added a further dimension to this process by increasing individual control over media consumption. In a high-choice environment, political interest, personal preferences, and motivation play a greater role in determining exposure to news, with unequal consequences for political knowledge and participation.⁵¹

Personalization within digital platforms may intensify these tendencies. By selecting and arranging content according to users' presumed interests, personalized feeds can place citizens in substantially different informational environments, limiting incidental exposure to unfamiliar topics and opposing viewpoints. Such patterns do not make political influence inevitable, but they create conditions in which fragmentation, selective exposure, and the separation of citizens into distinct communicative worlds become more likely.⁵²

While the preceding theories explain how framing, interpersonal discussion, selective exposure, and personalized media environments shape public opinion, crises introduce conditions of uncertainty and psychological pressure that make communication central to how stakeholders interpret events and assess organizational responsibility.¹ These conditions require more specialized frameworks capable of accounting for both organizational response and the circulation of crisis information. Situational Crisis Communication Theory (SCCT) examines how perceived crisis responsibility, crisis history, and prior organizational reputation shape the level of reputational threat and inform the selection of response strategies.⁵³ The Social-Mediated Crisis Communication model (SMCC), by contrast, explains how crisis information moves among organizations, influential social media creators, social media followers, inactive users, traditional media, and interpersonal networks.⁵⁴ The discussion therefore turns to these two frameworks to examine how organizational communication and public information behavior may contain—or intensify—the reputational and communicative consequences of a crisis.

Branch Two: Crisis Communication Models and Digital Media Influence Mechanisms

The preceding branch established the foundational theories of media influence—such as agenda-setting, framing, and the spiral of silence—that explain how public opinion is shaped in media-saturated societies. However, these general theories do not fully address the intense, high-stakes environments of organizational crises.

Crises impose distinct communicative demands: high uncertainty, severe time pressure, and immediate reputational threats. This branch examines the specific models of crisis communication developed to address these demands, detailing how digital media ecosystems have fundamentally reconfigured both organizational response strategies and the mechanisms of public influence.

1. Situational Crisis Communication Theory (SCCT)

Developed by W. Timothy Coombs (2007), Situational Crisis Communication Theory (SCCT) remains the dominant analytical framework in

⁴⁸ Andrew Chadwick, *The Hybrid Media System: Politics and Power*, op. cit., 4–6.

⁴⁹ James N. Druckman and Kjersten R. Nelson, "Framing and Deliberation: How Citizens' Conversations Limit Elite Influence," *American Journal of Political Science* 47, no. 4 (2003): 737, 741–742.

⁵⁰ Dennis Chong and James N. Druckman, "Framing Public Opinion in Competitive Democracies," *American Political Science Review* 101, no. 4 (2007): 645, 651–652.

⁵¹ Markus Prior, *Post-Broadcast Democracy: How Media Choice Increases Inequality in Political Involvement and Polarizes Elections* (Cambridge: Cambridge University Press, 2007), 13–15.

⁵² Cass R. Sunstein, *#Republic: Divided Democracy in the Age of Social Media* (Princeton, NJ: Princeton University Press, 2017), 8–9, 16–18, 24–26.

⁵³ W. Timothy Coombs, "Protecting Organization Reputations During a Crisis: The Development and Application of Situational Crisis Communication Theory," *Corporate Reputation Review* 10, no. 3 (2007): 165–166.

⁵⁴ Lucinda L. Austin, Brooke Fisher Liu, and Yan Jin, "How Audiences Seek Out Crisis Information: Exploring the Social-Mediated Crisis Communication Model," *Journal of Applied Communication Research* 40, no. 2 (2012): 192, 200–201.

crisis management. Drawing heavily on Attribution Theory, SCCT provides a systematic, evidence-based approach for matching an organization's crisis response strategy to the specific level of reputational threat it faces.⁵⁵

The core premise of SCCT is that reputational damage is contingent upon the level of crisis responsibility attributed to the organization by the public. This threat is evaluated across three clusters: Victim crises (e.g., natural disasters, rumors) involve minimal attribution of responsibility; Accidental crises (e.g., technical errors) involve moderate attribution; and Preventable crises (e.g., human-error, organizational misdeeds) generate severe attributions of responsibility.⁵⁶ Exacerbating factors, such as a negative prior reputation or a history of similar crises (the "Velcro effect"), further magnify the reputational damage.⁵⁷

Consequently, Coombs identifies four primary response postures: Denial (attacking the accuser, scapegoating), Diminishment (excusing, justifying), Rebuilding (apology, compensation), and Bolstering (reminding publics of past good works). SCCT dictates that highly preventable crises necessitate rapid, rebuilding strategies to salvage organizational legitimacy.⁵⁸ To adapt SCCT to the modern era, new frameworks like the STREMI model have emerged. Developed during Hurricane Sandy, STREMI conceptualizes crisis response not as a static statement, but as a continuous, cyclical process of social media listening and interactive engagement throughout the crisis lifecycle.⁵⁹

2. Social-Mediated Crisis Communication (SMCC) Model

While SCCT dictates what to say, the Social-Mediated Crisis Communication (SMCC) model—developed by Austin, Liu, and Jin (2012)—explains how crisis information physically flows through digital networks. Transitioning from earlier "blog-mediated" concepts, the SMCC model categorizes digital publics into three dynamic roles: influential social media creators who generate crisis narratives, followers who consume and amplify them, and inactives who observe but do not engage.⁶⁰

This model fundamentally shifts crisis communication from a linear broadcast model to a multi-vocal rhetorical arena, where organizations must continuously negotiate truth and credibility with independent influencers and digital activists who often possess greater parasocial trust than the institution itself.

3. Digital Media Influence Mechanisms in Crisis Communication

The transition to digital infrastructures has introduced novel mechanisms that dictate how public opinion forms under duress:

1. Accelerated Information Flow: The "golden hour" of crisis response has violently compressed into a "golden moment." Because social media platforms exhibit peak agenda-setting influence within the first 24 hours of an event, organizations face massive informational voids if they delay communication.⁶¹
2. Viral Amplification and Misinformation: Digital networks make crises highly "sticky." To mathematically understand this, contemporary researchers have adapted epidemiological frameworks, such as the SAIR (Susceptible–Asymptomatic–Infected–Recovered) model, to trace how misinformation spreads through scale-free networks. These models prove that highly connected nodes (hub users) act as super-spreaders during crises, rapidly infecting susceptible populations with false narratives before institutions can deploy corrective interventions.⁶²
3. Algorithmic Curation: Platforms do not display crisis information neutrally. Algorithms inherently prioritize emotionally charged, polarizing, and highly visual content to maximize user retention. Consequently, during a crisis, dissenting or outraged voices are algorithmically amplified, skewing public perception of the actual opinion climate and severely complicating the organization's ability to inject rational, stabilizing information into the digital feed.

⁵⁵ W. Timothy Coombs, "Protecting Organization Reputations During a Crisis: The Development and Application of Situational Crisis Communication Theory," *op. cit.* : 163–165.

⁵⁶ W. Timothy Coombs, *Ongoing Crisis Communication: Planning, Managing, and Responding*, *op. cit.* ,150.

⁵⁷ *Ibid.*, 151.

⁵⁸ Coombs, *Ongoing Crisis Communication*, 147.

⁵⁹ Stewart, Margaret C., and B. Gail Wilson. "The Dynamic Role of Social Media During Hurricane #Sandy: An Introduction of the STREMI Model to Weather the Storm of the Crisis Lifecycle." *Computers in Human Behavior* 54 (2016): 639–646.

⁶⁰ Lucinda L. Austin, Brooke Fisher Liu, and Yan Jin, "How Audiences Seek Out Crisis Information: Exploring the Social-Mediated Crisis Communication Model," *op. cit.* :188–207.

⁶¹ Gonzenbach, William J. 1992. "Time Series Analysis in the Study of Agenda-Setting." In *Communication Yearbook* 15, edited by Stanley A. Deetz, 255–281. Newbury Park, CA: Sage. - Gonzenbach, William J., and Robert L. Stevenson. 1994. "Children With AIDS Attending Public School: An Analysis of the Agenda-Setting Process." *Communication Research* 21 (4): 467–87.

⁶² Liang'an Huo, Li Wang, and Guoxiang Song, "Global Stability of a Two-Mediums Rumor Spreading Model with Media Coverage," *Physica A: Statistical Mechanics and its Applications* 482 (2017): 757–771.- Wang, Zheng, Xiaoming Wang, and Yi-Chen Li. 2017. "Dynamical Influence of the Media on Rumor Propagation in a Heterogeneous Network." *Physica A: Statistical Mechanics and its Applications* 471: 1–10.

4. The Hybrid Media System and Crisis Communication

Ultimately, contemporary crisis communication operates within what Chadwick (2017) defines as the "Hybrid Media System."⁶³ Crises no longer reside solely on social media or traditional television; they bounce recursively between the two. A viral tweet becomes a headline on a major news network, which is then clipped and debated on TikTok. Therefore, crisis communicators must deploy hybrid strategies—utilizing the rapid responsiveness of social media to contain immediate digital firestorms, while simultaneously leveraging the sustained credibility of traditional media to execute long-term reputational rebuilding.

Section Two: Analytical and Applied Assessment of Social Media's Role in Shaping Public Opinion During Crises

The preceding section established the theoretical and conceptual foundations necessary for understanding how social media platforms influence public opinion formation during crises. Classical media theories—agenda-setting, framing, the spiral of silence, uses and gratifications, and cultivation—were examined alongside contemporary crisis communication models, including Situational Crisis Communication Theory (SCCT) and the Social-Mediated Crisis Communication (SMCC) model. These theoretical resources provide the analytical toolkit for the applied phase of this study.

This section operationalizes these frameworks through empirical analysis of social media discourse during crisis events, examining how the mechanisms identified in the theoretical section operate in practice and what implications they hold for crisis communication strategy and public engagement.

Subsection One: Analytical Dimensions of Media Influence During Crises

The transition from theoretical frameworks to empirical analysis in crisis communication research demands the systematic operationalization of key concepts within the digital ecosystem. Social media platforms have fundamentally restructured the public opinion landscape, transforming them from mere information channels into primary arenas where public sentiment is formed, contested, and

amplified during crises. As Schwaderer observes, contemporary crisis communication unfolds in "hybrid media environments where televised press conferences intersect with real-time social media discourse," creating a complex interplay between institutional messaging and citizen-driven sense-making that fundamentally alters the analytical dimensions through which media influence must be examined.⁶⁴

The analytical assessment of social media's role in shaping public opinion during crises requires the integration of multiple theoretical perspectives, each addressing distinct yet overlapping dimensions of media influence. Classical agenda-setting theory, which posits that media influence public opinion by directing attention to specific issues, has been significantly reconfigured in digital contexts where audiences actively participate in the agenda-forming process. Recent empirical applications utilizing ARIMA time-series modeling reveal that agenda-setting operates through "recursive, time-sensitive influence cycles rather than linear dissemination," with social media demonstrating "the highest temporal responsiveness within the first 24 hours" of a crisis event.⁶⁵ This temporal dimension represents a critical analytical axis that distinguishes digital crisis communication from its pre-digital predecessors.

Framing theory addresses a second analytical dimension: how the presentation of an issue governs its interpretation. In digital spaces, framing has evolved into "networked framing," distributed across politicians, activists, and ordinary citizens who collectively construct meaning during crises.⁶⁶ The participatory nature of social media means that framing is no longer the exclusive province of professional journalists but emerges from the dynamic interaction between institutional actors and distributed publics.

The spiral of silence theory introduces a third analytical dimension concerned with the social dynamics of opinion expression. Empirical research confirms that due to a fear of social isolation, individuals may self-silence when they perceive themselves to be in the minority—a phenomenon that algorithmic filtering and network homophily exacerbate in digital environments, establishing "impregnable echo chambers" that resist institutional correction.⁶⁷ This dimension is particularly vital in conflict zones and polarized contexts, where the digital

⁶³ Andrew Chadwick, *The Hybrid Media System: Politics and Power*, op. cit.

⁶⁴ Seeger, Matthew W., and Timothy L. Sellnow. 2016. "Narratives of Crisis: Telling Stories of Ruin and Renewal." *Journal of Applied Communication Research* 44 (2): 117–37. - Graham, Melissa W., Elizabeth J. Avery, and Sejin Park. 2015. "The Role of Social Media in Local Government Crisis Communications." *Public Relations Review* 41 (3): 386–94.

⁶⁵ Wanta, Wayne, and Yu-Wei Hu. 1994. "Time-Lag Differences in the Agenda-Setting Process: An Examination of Five News Media." Op. cit. : 225–40.

⁶⁶ Sharon Meraz and Zizi Papacharissi, "Networked Gatekeeping and Networked Framing on #Egypt," *The International Journal of Press/Politics* 18, no. 2 (2013): 138–166.

⁶⁷ Cinelli, Matteo, Gianmarco De Francisci Morales, Alessandro Galeazzi, Walter Quattrociocchi, and Michele Starnini. 2021. "The Echo Chamber Effect on Social Media." *Proceedings of the National Academy of Sciences* 118 (9).

environment reinforces the spiral of silence through users' acute awareness of hostile reactions, leading to severe self-censorship.⁶⁸

A fourth analytical dimension emerges from Situational Crisis Communication Theory (SCCT), which examines how organizations match response strategies to reputational threats. Recent empirical research has extended SCCT to algorithm-driven, short-video platforms, demonstrating that the core mechanisms of public responsibility attribution are reconfigured in the unique context of platforms such as Douyin, fundamentally reshaping crisis discourse.⁶⁹ Finally, cross-cultural analysis introduces a fifth dimension that accounts for the fragmentation of digital publics into niche counter-publics. As demonstrated by large-scale text-mining studies of the COVID-19 pandemic, crisis communication is profoundly influenced by cultural, economic, and institutional contexts; for instance, public discourse in Italy and the United Kingdom prominently addressed pragmatic health care measures reflecting higher institutional trust, whereas discussions in Egypt were more focused on political themes, highlighting skepticism toward governmental capacity.⁷⁰

These five analytical dimensions—temporal dynamics of agenda-setting, networked framing, spiral of silence mechanisms, SCCT applicability in digital ecosystems, and cross-cultural variation—provide the comprehensive framework through which the empirical analysis in the following branches will examine how social media platforms shape public opinion during crises.

Branch One: Operationalization of Communication Theories in Media Analysis

The transition from theoretical frameworks to empirical analysis requires the careful operationalization of key concepts. This branch examines how classical and contemporary theories can be rigorously applied to the analysis of social media discourse during crises, addressing the specific methodological challenges and analytical strategies required for digital environments.

1. Operationalizing Agenda-Setting Theory in Digital Contexts

In its classical formulation, agenda-setting explains how the prominence given to particular issues in news coverage can influence the importance that audiences attach to those issues.⁷¹ Yet this relationship does not necessarily emerge at the same speed across all media. Research comparing different news outlets found that the time required for agenda-setting effects to appear varied according to the type of medium, with television generally producing shorter optimal time lags than newspapers.⁷²

The expansion of social media has made this process more difficult to represent as a one-way transfer from media institutions to a passive public. In their analysis of the 2012 U.S. presidential primary, Conway, Kenski, and Wang examined daily issue frequencies in newspaper coverage and political Twitter accounts through time-series analysis. Their findings point to a reciprocal relationship: traditional news sometimes anticipated the Twitter agenda, while political actors' Twitter accounts preceded newspaper attention on other issues. The direction and strength of influence therefore changed from one issue to another rather than following a fixed pattern.⁷³

Network agenda-setting extends this analysis beyond the relative prominence of separate issues. Instead, it considers whether the media make particular issues salient as interconnected clusters and whether audiences reproduce or rearrange those relationships. Using large-scale Twitter data from the 2012 U.S. presidential election, Vargo and his colleagues found that different political communities combined media agendas in different ways. Mainstream or "vertical" media were more successful in predicting the issue networks of Obama supporters, whereas the agendas of Romney supporters were more closely associated with Republican-aligned "horizontal" media.⁷⁴

Applying these approaches to emergencies also requires attention to the distinctive conditions under which crisis communication takes place. The Crisis and Emergency Risk Communication model treats a

⁶⁸ Hampton, Keith N., Lee Rainie, Weixu Lu, Maria Dwyer, Inyoung Shin, and Kristen Purcell. 2014. *Social Media and the 'Spiral of Silence'*. Pew Research Center.

⁶⁹ Ki, Eyun-Jung, and Elmie Nekmat. 2014. "Situational Crisis Communication and Interactivity: Usage and Effectiveness of Facebook for Crisis Management by Fortune 500 Companies." *Computers in Human Behavior* 35: 140–47.

⁷⁰ Gallotti, Riccardo, Francesco Valle, Nicola Castaldo, Pierluigi Sacco, and Manlio De Domenico. 2020. "Assessing the Risks of 'Infodemics' in Response to COVID-19 Epidemics." *Nature Human Behaviour* 4 (12): 1285–93.

⁷¹ Maxwell E. McCombs and Donald L. Shaw, "The Agenda-Setting Function of Mass Media," *Public Opinion Quarterly* 36, no. 2 (1972): 176–177.

⁷² Wayne Wanta and Yu-Wei Hu, "Time-Lag Differences in the Agenda-Setting Process: An Examination of Five News Media," *International Journal of Public Opinion Research* 6, no. 3 (1994): 225.

⁷³ Bethany A. Conway, Kate Kenski, and Di Wang, "The Rise of Twitter in the Political Campaign: Searching for Intermedia Agenda-Setting Effects in the Presidential Primary," *Journal of Computer-Mediated Communication* 20, no. 4 (2015): 363, 376–377.

⁷⁴ Chris J. Vargo, Lei Guo, Maxwell McCombs, and Donald L. Shaw, "Network Issue Agendas on Twitter During the 2012 U.S. Presidential Election," *Journal of Communication* 64, no. 2 (2014): 296, 309–310.

crisis as a developing process whose communication requirements change from preparation and warning to initial response, maintenance, resolution, and subsequent evaluation.⁷⁵ Digital audiences, moreover, cannot be treated merely as recipients of institutional messages. Research on the Egyptian revolution showed how citizens used social media to organize collective action, document events, circulate their own accounts, and reach regional and international news organizations. At the same time, the study cautioned against treating technology as an independent cause of political change, describing it instead as a tool whose influence depended on wider forms of social and political participation.⁷⁶

2. Operationalizing Framing Theory in Digital Contexts

Framing theory addresses how the presentation of an issue governs its interpretation. Operationalizing framing in digital spaces requires accounting for a multiplicity of frame constructors and algorithmic curation. The participatory nature of social media means that framing is no longer the exclusive province of professional journalists; it has evolved into "networked framing," distributed across politicians, activists, and ordinary citizens.⁷⁷

Empirical studies frequently operationalize this by combining content analysis with sentiment tracking. For example, recent research into affective polarization illustrates how both emotion-based and structure-based framing by media networks actively drive polarization on platforms like YouTube during disruptive events.⁷⁸ Furthermore, scholars now utilize digital framing to analyze how corporations transform tragedies into strategic messaging by coding organizational responses through attributional relevance and crisis frames.⁷⁹

3. Operationalizing Spiral of Silence Theory in Digital Contexts

Operationalizing Noelle-Neumann's spiral of silence online involves measuring variables such as perceived anonymity, network homophily, and the fear of social isolation. Although the internet

theoretically offers spaces for minority opinions, empirical research confirms that the fear of isolation remains highly potent, driving users to conform to their specific digital community's stance, thereby establishing impregnable echo chambers.⁸⁰

This operationalization is particularly important in politically polarized digital environments, where the visibility of personal expression and exposure to opposing views may affect users' willingness to participate in public discussion. Research on the spiral of silence in social media contexts indicates that fear of social isolation can indirectly discourage the expression of dissenting opinions and encourage withdrawal by increasing individuals' willingness to self-censor. These effects become more pronounced when users perceive higher levels of disagreement and publicness within their online networks.⁸¹ Consequently, the apparent dominance of a particular position in digital discussions may not necessarily represent genuine consensus, but may partly result from the reluctance of individuals holding opposing views to express them publicly.

4. Operationalizing Crisis Communication Models in Digital Contexts

Situational Crisis Communication Theory (SCCT) is operationalized digitally by analyzing how organizations match response strategies to reputational threats across highly accelerated timelines. Recognizing this, Coombs expanded SCCT to account for the specific "channels" used, acknowledging that social media generates intense time pressure previously unaddressed in classical models.⁸²

Large-scale empirical research demonstrates this operationalization in practice. For instance, studies analyzing thousands of tweets from Australian organizations and German local governments during crises reveal that institutional responses on digital platforms frequently lack strategic alignment with SCCT recommendations, often deploying defensive strategies that unintentionally escalate reputational risk.⁸³ Furthermore, the operationalization of SCCT has extended to short-video platforms (e.g., Douyin/TikTok),

⁷⁵ Barbara Reynolds and Matthew W. Seeger, "Crisis and Emergency Risk Communication as an Integrative Model," *Journal of Health Communication* 10, no. 1 (2005): 49, 51–53.

⁷⁶ Sahar Khamis and Katherine Vaughn, "Cyberactivism in the Egyptian Revolution: How Civic Engagement and Citizen Journalism Tilted the Balance," *Arab Media & Society*, no. 14 (Summer 2011): 1, 5–6, 25, according to the PDF pagination.

⁷⁷ Sharon Meraz and Zizi Papacharissi, "Networked Gatekeeping and Networked Framing on #Egypt," *op. cit.*: 138–166.

⁷⁸ De Marzo, G., A. Zaccaria, and C. Castellano. "Emergence of Polarization in a Voter Model with Personalized Information." *Op. cit.*: 043117.

⁷⁹ Coombs, W. Timothy. *Ongoing Crisis Communication: Planning, Managing, and Responding*, *op. cit.*

⁸⁰ German Neubaum and Nicole C. Krämer, "What Do We Fear? Expected Sanctions for Expressing Minority Opinions in Offline and Online Communication," *Communication Research* 45, no. 2 (2018): 139–164. ; -Matteo Cinelli et al., "The Echo Chamber Effect on Social Media," *Proceedings of the National Academy of Sciences* 118, no. 9 (2021): e2023301118.

⁸¹ Hsuan-Ting Chen, "Spiral of Silence on Social Media and the Moderating Role of Disagreement and Publicness in the Network: Analyzing Expressive and Withdrawal Behaviors," *New Media & Society* 20, no. 10 (2018): 3917–3936.

⁸² W. Timothy Coombs and Sherry J. Holladay, *op. cit.*

⁸³ Roshan M. et al., "Understanding the Use of Social Media by Organisations for Crisis Communication," *Computers in Human Behavior* 63 (2016): 350–361.

confirming that distinct technological affordances fundamentally reconfigure how publics attribute responsibility during modern crises.⁸⁴

The operationalization of communication theories and crisis communication models in digital contexts provides an indispensable analytical toolkit for examining media effects on public opinion during disruptive events. The following branch applies these operationalized frameworks to empirically examine how social media platforms shape public perceptions, attitudes, and behaviors across diverse crisis typologies and platform architectures.

Branch Two: Media Effects on Public Opinion During Crises

This branch evaluates the empirical evidence regarding media effects on public opinion during crises. The analysis is structured around four focal dimensions: information dissemination and public engagement, misinformation and public trust, polarization and echo chambers, and the emerging role of digital influencers.

1. Information Dissemination and Public Engagement

Social media platforms serve as the primary cognitive infrastructure for rapid information dissemination during crises. However, the efficacy of this dissemination is deeply contingent upon socio-cultural variables. A cross-national text-mining study analyzing COVID-19 discourse across Italy, the United Kingdom, and Egypt revealed that variations in public engagement and sense-making are heavily dictated by a nation's specific cultural, economic, and institutional context.⁸⁵

The massive scale of this engagement necessitates a highly responsive institutional presence. An analysis of 127 German local governments during the pandemic—encompassing over 50,000 official posts and 700,000 citizen reactions—provided stark empirical evidence that the framing of official crisis communication (e.g., analytical vs. emotional tone) directly dictates the volume of public diffusion and approval.⁸⁶ Furthermore, computational approaches, such as the SEIR

(Susceptible-Exposed-Infectious-Recovered) evolution model, have been effectively adapted to trace how netizens' emotional states transition from arousal to large-scale collective action during sudden crises, underscoring the contagious nature of digital engagement.⁸⁷

2. Misinformation and Public Trust

Digital media have changed not only the speed at which deceptive information circulates, but also the routes through which it reaches and influences the public. Freelon and Wells distinguish disinformation from inaccurate information shared without deliberate intent, defining it in terms of deception, potential harm, and the intention to mislead. They further argue that the digital environment has altered the production, circulation, interpretation, and possible effects of such content. These developments unfold within a wider context of declining confidence in news organizations and democratic institutions, where political polarization and the social identity of those sharing information increasingly affect judgments of credibility.⁸⁸

The production of disinformation should not, however, be understood solely as the result of isolated users making individual errors. Research reviewed by Freelon and Wells identifies a broad range of actors involved in its creation and dissemination, including state-sponsored operators who employ human, automated, and hybrid accounts across multiple platforms. Coordinated campaigns can test narratives in one digital space before extending them to others, while misleading claims may subsequently reach established news outlets if their origins are not carefully verified.⁸⁹

For organizations facing a crisis, the central challenge is therefore not simply to suppress negative online discussion, but to understand how public interpretations of responsibility may affect organizational reputation. Situational Crisis Communication Theory holds that the level of responsibility attributed to an organization shapes the seriousness of the reputational threat and should guide the selection of an appropriate response. When stakeholders perceive that an organization

⁸⁴ Timothy Coombs, "Protecting Organization Reputations During a Crisis: The Development and Application of Situational Crisis Communication Theory," *Corporate Reputation Review* 10, no. 3 (2007): 163–176. ; - Eyun-Jung Ki and Elmie Nekmat, "Situational Crisis Communication and Interactivity: Usage and Effectiveness of Facebook for Crisis Management by Fortune 500 Companies," *Computers in Human Behavior* 35 (2014): 140–147.

⁸⁵ Yichuan Wang et al., "Cross-Cultural Comparison of Public Sentiment and Emotions About COVID-19: Sentiment and Emotion Analysis of Social Media Data From 6 Countries Using Machine Learning and Deep Learning Models," *JMIR Public Health and Surveillance* 7, no. 9 (2021): e30038. ; - Aparup Khatua, Apalak Khatua, and Erik Cambria, "A Tale of Two Pandemics: Big Data

Analysis of COVID-19 in UK and India," *Applied Soft Computing* 104 (2021): 107203.

⁸⁶ Xu Han and Cory Baird, "Government Crisis Messaging on Social Media, Citizen Online Engagement and Compliance with Policies," *Public Management Review* (2022).

⁸⁷ Askarizadeh, Mojgan, Behrouz Tork Ladani, and Mohammad Hossein Manshaei. 2019. "An Evolutionary Game Model for Analysis of Rumor Propagation and Control in Social Networks." *Physica A: Statistical Mechanics and Its Applications* 523: 21–39.

⁸⁸ Deen Freelon and Chris Wells, "Disinformation as Political Communication," *Political Communication* 37, no. 2 (2020): 145–149.

⁸⁹ Freelon and Wells, "Disinformation as Political Communication," 153–154.

had greater control over the causes of a crisis, they are more likely to expect accommodative responses, including corrective action and greater attention to those affected.⁹⁰

An effective response must also recognize that social media platforms do not perform identical functions during crises. Eriksson and Olsson found marked differences between crisis communication professionals and citizens in their use and evaluation of Facebook and Twitter. Facebook was more often associated with broad public reach, relationship building, and the rapid delivery of messages to defined groups, whereas Twitter was perceived as a narrower channel that could reach journalists, political actors, and frequent users with alerts and rapidly circulating information. Their findings caution against treating social media as a single, homogeneous communication environment and suggest that institutional assumptions about platform use may not always correspond with the practices or expectations of citizens.⁹¹

3. Polarization and Echo Chambers

Opinion polarization in digital environments develops through the interaction of personalized information, selective exposure, and the tendency of users to associate with like-minded others. De Marzo, Zaccaria, and Castellano show, through a voter model, that repeated exposure to information aligned with an individual's previous positions can reduce the likelihood of consensus. Their analysis suggests that polarization becomes more difficult to avoid as the influence of personalized information grows, particularly in larger communication systems.⁹²

This tendency is also visible in the structure of interaction and information diffusion across social media platforms. Cinelli and his colleagues found that users frequently cluster around others who hold similar views, while information on some platforms circulates predominantly among ideologically aligned users. Their comparative analysis nevertheless shows that this pattern is not identical across all platforms: Facebook and Twitter displayed stronger homophilic clustering in the datasets examined, whereas Reddit exhibited lower levels of segregation in the comparable news-consumption analysis.⁹³ Thus, echo chambers

should not be understood as a uniform or inevitable feature of every digital environment, but as a pattern whose strength depends partly on platform design and user interaction.

Structural separation is reinforced when users anticipate social costs for expressing a dissenting position. Neubaum and Krämer found that the expectation of personal attacks could reduce willingness to express a minority opinion online. Participants were also more inclined to withhold their views when they believed that they might lose control over the reactions of an audience that was personally relevant to them.⁹⁴ Silence in digital settings, therefore, cannot be explained solely by disagreement with the majority; it may also reflect a calculated response to the anticipated interpersonal consequences of speaking.

The spiral of silence in networked environments must nevertheless be approached with some caution. Sohn's simulation indicates that silence may emerge within particular networks or communities without necessarily developing into a society-wide suppression of minority opinion. A large-scale spiral became more plausible only under demanding conditions, especially when media representations were extremely homogeneous, individuals were highly interconnected, or both conditions occurred together. The presence of competing media voices, even when limited, could weaken this process and prevent local opinion differences from expanding into global silence.⁹⁵

4. The Role of Influencers and Digital Publics

The influence of prominent actors on social media should not be confined to the commercial understanding of the "influencer." In crisis communication research, the broader category of social media influentials includes news organizations, government agencies, nonprofit bodies, and individuals whose messages acquire substantial visibility during disruptive events. Zhao's analysis of social media content from eight crises found that these actors did not frame crises in a uniform manner. Their use of responsibility and topic frames varied according to the origin of the crisis, the type of organization involved, the communicative purpose of the message, and the category of influential producing it. Their significance therefore lies not merely in the size of

⁹⁰ W. Timothy Coombs and Sherry J. Holladay, "Helping Crisis Managers Protect Reputational Assets: Initial Tests of the Situational Crisis Communication Theory," *Management Communication Quarterly* 16, no. 2 (2002): 166–168, 182–183.

⁹¹ Mats Eriksson and Eva-Karin Olsson, "Facebook and Twitter in Crisis Communication: A Comparative Study of Crisis Communication Professionals' and Citizens' Perceptions," *Journal of Contingencies and Crisis Management* 24, no. 4 (2016): 198, 204–206.

⁹² Giordano De Marzo, Andrea Zaccaria, and Claudio Castellano, "Emergence of Polarization in a Voter Model with Personalized Information," *Physical Review Research* 2, no. 4 (2020): article 043117, PDF pp. 1–2.

⁹³ Matteo Cinelli, Gianmarco De Francisci Morales, Alessandro Galeazzi, Walter Quattrociocchi, and Michele Starnini, "The Echo Chamber Effect on Social Media," *Proceedings of the National Academy of Sciences* 118, no. 9 (2021): e2023301118, PDF pp. 1, 4–6.

⁹⁴ German Neubaum and Nicole C. Krämer, "What Do We Fear? Expected Sanctions for Expressing Minority Opinions in Offline and Online Communication," *Communication Research* 45, no. 2 (2018): 139.

⁹⁵ Dongyoung Sohn, "Spiral of Silence in the Social Media Era: A Simulation Approach to the Interplay Between Social Networks and Mass Media," *Communication Research* 49, no. 1 (2022): 154, 156.

their following, but also in their capacity to identify responsibility, emphasize particular dimensions of an event, and shape the terms through which the crisis is understood.⁹⁶

This influence operates within a wider digital public whose members participate directly in emergency communication. Reuter and Kaufhold distinguish among affected citizens, self-helpers, neighbourhood helpers, reporters, moderators, celebrities, retweeters, digital volunteers, virtual and technical communities, and official response teams. These roles frequently overlap. Citizens and volunteers may gather, translate, verify, or distribute information, while moderators and trusted digital volunteers may collaborate with public authorities in coordinating relief activities. Communication during emergencies consequently moves not only from institutions to citizens, but also among citizens and from citizens to emergency organizations. Crisis communication on social media is therefore better understood as a network of interacting roles than as a message transmitted from a single authoritative centre to a passive audience.⁹⁷

The participation of digital publics can improve situational awareness by supplying timely information about local conditions, damage, urgent needs, and developments as they unfold. The practical value of this material, however, depends on the ability of response organizations to process it. Imran and his colleagues observe that emergency-related messages are produced in large quantities, written in brief and informal forms, and drawn from heterogeneous sources that include both official agencies and eyewitnesses. The task is not simply to obtain more information, but to distinguish relevant and credible material, establish its location and timing, and prioritize it quickly enough to support operational decisions.⁹⁸

The same networked environment can also intensify reputational pressure. Pfeffer, Zorbach, and Carley describe how online firestorms may develop within hours as large volumes of negative commentary circulate through interconnected users. Such reactions do not remain confined to a single platform: stories

originating on social media may attract traditional media coverage, which in turn stimulates further online activity. The resulting cycle is strengthened by the speed and volume of communication, clustered networks, limited diversity of viewpoints, cross-media feedback, and forms of opinion adoption driven by network effects. Under these conditions, an organization cannot safely assume that a delayed official response will be sufficient to restore control of the discussion. The authors instead emphasize the importance of maintaining communication, cultivating diverse networks, and identifying trusted information brokers before a crisis occurs.⁹⁹

Taken together, these studies reveal that digital crisis communication is shaped by a dispersed field of institutions, influential accounts, volunteers, eyewitnesses, and ordinary users. This arrangement can broaden access to information and support collective action, but it can also create problems of verification, coordination, and rapidly escalating public anger. The analysis must therefore move beyond the content of official statements to consider who circulates crisis information, which actors acquire visibility, how information travels between media systems, and how institutional responses interact with the practices of digital publics. The following subsection applies these considerations to specific crisis cases in order to examine how they operate under different political, social, and institutional conditions.¹⁰⁰

Subsection Two: Applied Media Analysis and Future Perspectives

The transition from theoretical abstraction to applied media analysis necessitates the deployment of robust methodological tools capable of capturing the immense scale and velocity of digital discourse. In contemporary crisis communication, traditional human-aided content analysis is no longer sufficient to evaluate the volatile dynamics of social media ecosystems. Instead, scholars increasingly rely on advancements within computational social science—such as automated sentiment analysis, machine learning algorithms, and natural language processing (NLP)—to perform large-scale applied analyses of crisis data.¹⁰¹

⁹⁶ Xinyan Zhao, "A Multilevel Perspective to Social Media Influentials' Frame Building Across Crises," *Social Science Computer Review* 41, no. 4 (2023): 1296.

⁹⁷ Christian Reuter and Marc-André Kaufhold, "Fifteen Years of Social Media in Emergencies: A Retrospective Review and Future Directions for Crisis Informatics," *Journal of Contingencies and Crisis Management* 26, no. 1 (2018): 48, 51.

⁹⁸ Muhammad Imran, Carlos Castillo, Fernando Diaz, and Sarah Vieweg, "Processing Social Media Messages in Mass Emergency: A Survey," *ACM Computing Surveys* 47, no. 4 (2015), Article 67: 67:1, 67:13–67:14.

⁹⁹ Jürgen Pfeffer, Thomas Zorbach, and Kathleen M. Carley, "Understanding Online Firestorms: Negative Word-

of-Mouth Dynamics in Social Media Networks," *Journal of Marketing Communications* 20, nos. 1–2 (2014): 117, 123, 125–126.

¹⁰⁰ Reuter and Kaufhold, "Fifteen Years of Social Media in Emergencies," 51; Imran et al., "Processing Social Media Messages," 67:1, 67:13–67:14; Pfeffer, Zorbach, and Carley, "Understanding Online Firestorms," 125–126.

¹⁰¹ Stefan Stieglitz, Milad Mirbabaie, Björn Ross, and Christoph Neuberger, "Social Media Analytics — Challenges in Topic Discovery, Data Collection, and Data Preparation," *International Journal of Information Management* 39 (2018): 156–168.; - Stefan Stieglitz, Milad Mirbabaie, Jennifer Fromm, and Stefanie Melzer, "The Adoption of Social Media Analytics for Crisis Management

These computational methods allow researchers to empirically decode how organizations, news media, and digital publics interact in real-time. By systematically applying the theoretical dimensions established in the previous subsection to massive datasets (e.g., millions of tweets or short-video comments), applied media analysis moves beyond retrospective observation to offer predictive insights into crisis trajectories.

Consequently, this approach not only evaluates the immediate effectiveness of corporate or governmental crisis response strategies but also outlines vital future perspectives. It illuminates how organizations must adapt to emerging digital phenomena—such as deepfakes, algorithmic manipulation, and influencer-driven firestorms—ensuring that future crisis management frameworks are both empirically grounded and technologically adaptive.¹⁰²

Branch One: Analytical Assessment of a Selected Crisis Through Social Media Platforms

This branch provides an analytical assessment of social media influence on public opinion during specific crisis events. By applying the theoretical frameworks operationalized in preceding sections to distinct empirical cases, this analysis demonstrates how social media platforms actively shape public perceptions, attitudes, and behaviors.

1. Case Selection and Analytical Framework

Selecting a crisis case for empirical analysis requires strict adherence to several criteria: the event must have generated substantial social media discourse, represent a distinct crisis typology, and occur within a timeframe that permits rigorous data extraction. For the purposes of this assessment, the COVID-19 pandemic—alongside targeted localized crises—serves as a primary analytical focus due to the unprecedented volume of digital discourse it generated and the extensive empirical literature it has subsequently produced.

Declared a global health emergency in early 2020, the COVID-19 pandemic necessitated

profound reliance on digital platforms for information, connection, and collective sense-making. Empirical research confirms that social media was not merely a supplementary channel but an essential infrastructure for shaping public opinion and behavioral compliance during the crisis.¹⁰³

The analytical framework employed here integrates agenda-setting, framing, the spiral of silence, and situational crisis communication models to dissect this digital discourse. The subsequent analysis focuses on four primary dimensions: information dissemination, framing processes, the polarization of misinformation, and the dialectic between institutional and non-institutional actors.

2. Information Dissemination and Public Engagement

During the pandemic, social media platforms functioned as the primary conduits for health guidance and public commentary. However, the efficacy of this information dissemination was heavily dependent on systemic contexts.

A comparative text-mining study analyzing citizen sense-making in Italy, the United Kingdom, and Egypt revealed that crisis engagement is deeply influenced by cultural, economic, and institutional environments.¹⁰⁴ For instance, discourse in regions with high institutional trust focused on pragmatic healthcare measures, whereas discourse in areas with governmental skepticism skewed heavily toward political and alternative frameworks, highlighting the absolute necessity of culturally contextualized crisis communication.

Furthermore, institutional reach on digital platforms proved massive when effectively operationalized. An analysis of 127 German local governments during the pandemic—comprising over 50,000 official posts and 700,000 citizen reactions—demonstrated that specific communication framing strategies (such as analytical versus emotional tones) directly dictated the scale of public approval, diffusion, and engagement.¹⁰⁵

— Challenges and Opportunities," in Proceedings of the 26th European Conference on Information Systems (ECIS 2018). ; - Olteanu, Alexandra, Carlos Castillo, Fernando Diaz, and Sarah Vieweg. 2015. "What to Expect When the Unexpected Happens: Social Media Communications Across Crises." In Proceedings of the 18th ACM Conference on Computer Supported Cooperative Work & Social Computing (CSCW '15), 994–1009. New York: ACM.

¹⁰² Roshan, M., M. Warren, R. Carr, et al. "Understanding the Use of Social Media by Organisations for Crisis Communication." , op. cit. 350–361.

¹⁰³ Wang, Yichuan, Haoyu Li, Chengqi Luo, Zhenzhen Xie, and Mengxiang Li. 2021. "Cross-Cultural Comparison of Public Sentiment and Emotions About COVID-19: Sentiment and Emotion Analysis of Social Media Data From 6 Countries Using Machine Learning and Deep Learning Models." JMIR Public Health and Surveillance 7

(9): e30038. ; - Khatua, Aparup, Apalak Khatua, and Erik Cambria. 2021. "A Tale of Two Pandemics: Big Data Analysis of COVID-19 in UK and India." Applied Soft Computing 104: 107203.

¹⁰⁴ Khatua, Aparup, Apalak Khatua, and Erik Cambria. 2021. "A Tale of Two Pandemics: Big Data Analysis of COVID-19 in UK and India." Applied Soft Computing 104: 107203.

¹⁰⁵ Wukich, Clayton, and Ines Mergel. 2016. "Closing the Citizen-Government Communication Gap: Content, Audience, and Network Analysis of Government Tweets." Journal of Homeland Security and Emergency Management 13 (1): 1–20. ; - Kavanaugh, Andrea L., Edward A. Fox, Steven D. Sheetz, Seungwon Yang, Lin Tzy Li, Donald J. Shoemaker, and Lexing Xie. 2012. "Social Media Use by Government: From the Routine to the Critical." Government Information Quarterly 29 (4): 480–91.

To quantify these agenda-setting effects at a macro level, recent studies utilizing advanced machine learning frameworks (like BERTopic) to analyze over 10 million data points regarding COVID-19 vaccination found a significant divergence between the media agenda and actual public discourse on social platforms.¹⁰⁶ This misalignment demonstrates that public engagement online often prioritizes distinct attributes and concerns that traditional media fails to capture.

3. Framing and Public Perception

Framing processes on social media significantly conditioned how individuals interpreted risks and evaluated institutional responses. Contrary to arguments that media fragmentation nullifies framing effects, contemporary empirical research confirms that episodic and thematic framing remains highly potent in shaping both individual attitudes and behavioral intentions in polarized environments.¹⁰⁷

Crucially, "second-level" framing on social media operates differently than in traditional news. For instance, a comparative analysis of public health communication regarding the opioid crisis revealed that user-generated content on X (formerly Twitter) highlighted fundamentally different attributes and sentiments compared to major news outlets.¹⁰⁸

This dynamic is particularly pronounced during sudden emergencies. An agenda network analysis of the 2022 Itaewon Stampede in South Korea illustrated the severe temporal lag and information asymmetry between official and public agendas. The study demonstrated that public agendas, driven by emotional resonance and demands for accountability, possess the capacity to exert upward pressure on official narratives, effectively forcing institutions to alter their attribute selection during crisis response.¹⁰⁹

4. Misinformation and Polarization

The pandemic severely highlighted the threat of the "infodemic," wherein an overabundance of unverifiable information undermined public compliance. This crisis of misinformation is often top-down; empirical analysis of politicians' behavior during the pandemic indicates that political figures with large social media followings serve as primary vectors for misinformation, generating significantly higher public engagement rates for false claims than for reliable data, particularly in politically polarized countries.¹¹⁰

At the community level, this polarization is sustained by the digital "spiral of silence." Research indicates that a state-based fear of isolation compulsorily drives social media users to express agreement with their specific digital community's stance, even if it contradicts their personal beliefs. This mechanism is central to the establishment and fortification of echo chambers and filter bubbles during hot-button crises.¹¹¹

5. The Role of Institutional and Non-Institutional Actors

Crisis communication is no longer a monologue delivered by institutions. While local governments heavily utilized social platforms to disseminate critical directives—as seen in the extensive tracking of German municipalities¹¹²—the digital arena is increasingly dominated by non-institutional actors.

The emergence of "networked legitimacy" perfectly illustrates this shift. An analysis of social media influencers during the devastating 2023 Derna floods in Libya revealed that influencers acted as vital intermediaries, providing real-time updates and mobilizing volunteer aid in the absence of functional state apparatuses. The study concluded that during severe crises, authority and legitimacy do not stem solely from institutional titles, but rather emerge dynamically from an actor's structural position and influence within digital communication networks.¹¹³

¹⁰⁶ Lyu, Joanne Chen, Garving K. Luli, and Xuan Li. 2021. "The Impact of COVID-19 Vaccine Communication on Twitter: Topic Modeling and Sentiment Analysis." *JMIR Public Health and Surveillance* 7 (3): e26429. ; - Jiang, Li Crystal, and Jian Xu. 2021. "Understanding the Agenda-Setting Effect of News Media on Public Opinion about COVID-19 Vaccines: A Computational Approach." *Health Communication* 36 (13): 1711–20.

¹⁰⁷ Park, Yul Min. "Framing Still Matters: Contemporary News Media Effects on Information, Opinion, and Behavior." PhD diss., University of Texas at Austin, 2023. ; - Robert M. Entman, "Framing: Toward Clarification of a Fractured Paradigm," *op. cit.* : 51-58.

¹⁰⁸ Kennedy-Hendricks, Alene, Emma E. McGinty, Colleen L. Barry, and Jeff Niederdeppe. 2019. "Media Framing of the Opioid Crisis." *Journal of Health Politics, Policy and Law* 44 (2): 235–60. ; - Webster, Robin K., Louise M. Wallace, and G. James Rubin. 2020. "Media Coverage of the Opioid Crisis: A Systematic Review." *Drug and Alcohol Dependence* 207: 107802.

¹⁰⁹ Lee, Na Yeon, and Jiyoung Kim. 2023. "The Role of Social Media in Risk Communication During the Itaewon

Crowd Crush Disaster." *Disaster Medicine and Public Health Preparedness* 17: e492.

¹¹⁰ Farhall, Kate, Andrea Carson, Scott Wright, Andrew Gibbons, and William Lukamto. 2019. "Political Elites' Use of Fake News Discourse Across Communications Platforms." *International Journal of Communication* 13: 4353–75. ; - Freelon, Deen, and Chris Wells. *Op. cit.* 145–56.

¹¹¹ Sohn, Dongyoung. 2019. "Spiral of Silence in the Social Media Era: A Simulation Approach." *Communication Research* 46 (5): 691–716. ; - Gearhart, Sherice, and Weiwu Zhang. 2014. "Gay Bullying and Online Opinion Expression: Testing Spiral of Silence in the Social Media Environment." *Social Science Computer Review* 32 (1): 3–18.

¹¹² Graham, Melissa W., Elizabeth J. Avery, and Sejin Park. 2015. "The Role of Social Media in Local Government Crisis Communications." , *op. cit.* , 386–94.

¹¹³ Houston, J. Brian, Joshua Hawthorne, Mildred F. Perreault, Eun Hae Park, Marlo Goldstein Hode, Michael R. Halliwell, Sarah E. Turner McGowen, et al. 2015. "Social

The analytical assessment of social media influence during crises demonstrates the multifaceted nature of digital communication. While digital platforms facilitate rapid information dissemination and civic engagement, they simultaneously introduce profound challenges, notably misinformation and opinion polarization. The increasing prominence of non-institutional actors further decenters traditional crisis management models. The following branch systematically examines these ongoing challenges, identifies future trajectories, and formulates strategic recommendations to guide contemporary crisis communication practice.

Branch Two: Challenges, Future Trends, and Strategic Recommendations

This section synthesizes the theoretical frameworks and empirical evidence previously examined to delineate the primary challenges, emerging trajectories, and actionable strategies for crisis communication within contemporary digital ecosystems.

1. Key Challenges in Digital Crisis Communication

The structural transformation of the contemporary media landscape presents crisis communicators with several unprecedented challenges:

1. **Temporal Compression of Response:** The digital environment has drastically reduced the permissible window for organizational response, accelerating the traditional "golden hour" of crisis management into a fleeting "golden moment."¹¹⁴ The velocity of social media dictates that information vacuums are instantly filled, placing immense pressure on institutions to respond within highly volatile environments before alternative narratives solidify.
2. **The Amplification of Misinformation:** The systematic dissemination of false information poses a profound threat to institutional credibility. Recent cross-national empirical evidence demonstrates that political actors and highly visible public figures, particularly in polarized environments, significantly drive public engagement with crisis-related misinformation, often generating higher

engagement rates than reliable information.¹¹⁵

3. **Opinion Polarization and Echo Chambers:** Algorithmic filtering, cognitive bias, and identity homophily continually exacerbate opinion polarization during disruptive events. This phenomenon is theoretically underpinned by a digital manifestation of the "spiral of silence," wherein a state-based fear of isolation compels online users to conform to community norms, effectively cementing echo chambers that resist institutional correction.¹¹⁶
4. **Audience Fragmentation and Cultural Nuance:** Digital publics are increasingly fragmented into niche counter-publics. As demonstrated by cross-cultural text-mining studies of global health crises, public sense-making diverges significantly based on national, economic, and institutional contexts; for instance, varying levels of trust in government strictly dictate the thematic focus of online discourse across different countries.¹¹⁷

2. Future Trends in Digital Crisis Communication

1. **Algorithmic and Visual Dominance:** Short-video platforms (e.g., TikTok, Douyin) are fundamentally reconfiguring crisis discourse. Recent analyses of Situational Crisis Communication Theory (SCCT) within these ecosystems reveal that algorithmic, highly visual environments create distinct, emotion-driven attribution pathways—such as "anger-accountability" and "sadness-reflection" tracks—necessitating visual strategies that move beyond traditional text-based communication.¹¹⁸
2. **Cross-Platform Temporal Dynamics:** Future crisis management will increasingly depend on understanding the asynchronous temporal lag between platforms. Agenda-setting operates through recursive, time-sensitive cycles; recent temporal modeling indicates that social media exhibits peak responsiveness within the first 24 hours of a crisis, while traditional media demonstrates a delayed but more sustained impact on the public agenda.¹¹⁹

Media and Disasters: A Functional Framework for Social Media Use in Disaster Planning, Response, and Research." *Disasters* 39 (1): 1–22.

¹¹⁴ Kati Tusinski Berg, "Trends in Public Relations: Exploring the Role of Ethics as it Relates to Social Media and Crisis Communication," *Journal of Media Ethics* 32, no. 1 (2017): 62.

W. Timothy Coombs, "State of Crisis Communication: Evidence and the Bleeding Edge," *op. cit.* : 2.

¹¹⁵ Freelon, Deen, and Chris Wells. *Op. cit.* 145–56.

¹¹⁶ Neubaum, German, and Nicole C. Krämer. 2017. "Opinion Climates in Social Media: Blending Mass and

Interpersonal Communication." *Communication Research* 44 (4): 530–55.

¹¹⁷ Gallotti, Riccardo, Francesco Valle, Nicola Castaldo, Pierluigi Sacco, and Manlio De Domenico. 2020. "Assessing the Risks of 'Infodemics' in Response to COVID-19 Epidemics." *Op. cit.* : 1285–93.

¹¹⁸ Coombs, W. Timothy, and Sherry J. Holladay. 2009. "Further Explorations of Post-Crisis Communication: Effects of Media and Response Strategies on Perceptions and Intentions." *Public Relations Review* 35 (1): 1–6.

¹¹⁹ Wanta, Wayne, and Yu-Wei Hu. 1994. "Time-Lag Differences in the Agenda-Setting Process: An Examination of Five News Media." , *op. cit.* : 225–40.

3. Strategic Recommendations for Crisis Communication Practice

1. Operationalize Rapid and Authentic Communication: Organizations must develop protocols capable of immediate deployment during the critical early hours of an event. Furthermore, authenticity in executive communication—such as CEO messaging during organizational restructuring—has been shown to significantly transfer positive sentiment to the organization's broader reputation, acting as a crucial reputational shield.¹²⁰
2. Deploy Culturally and Temporally Contextualized Strategies: Crisis interventions cannot be monolithic. They must account for the specific temporal rhythms of the platforms used¹²¹ and adapt to the sociocultural frameworks of diverse target audiences.¹²² Standardized corporate responses often fail when they ignore local institutional contexts.
3. Proactive Disinformation Mitigation and Influencer Engagement: To counter algorithmic echo chambers, institutions must preemptively build alliances with independent fact-checking bodies. Moreover, integrating trusted digital influencers into the crisis response architecture is now essential for effectively navigating the decentralized networks of modern public opinion.

The analysis of social media influence on public opinion, evaluated through both classical frameworks and recent empirical evidence, reveals the profound complexities of digital crisis communication. The identification of key challenges—ranging from temporal compression to the proliferation of echo chambers—provides actionable parameters for institutional response. The final conclusion synthesizes the major findings of this study and outlines necessary directions for future scholarly inquiry.

Network agenda-setting represents a critical evolution of traditional theories for digital contexts, examining how media entities connect

discrete issues and attributes into broader networks of collective meaning.¹²³ A recent study analyzing the Russia-Ukraine conflict on Chinese social media utilized this exact framework to map the interplay between vertical (traditional) and horizontal (social) media, demonstrating how agenda-setting can be operationalized to untangle complex public discourse during major international crises.¹²⁴

Conclusion

1. Summary of Findings

By synthesizing classical and contemporary communication theories, this study elucidates how social media platforms shape public opinion formation during crises.

Classical media paradigms—namely agenda-setting, framing, and the spiral of silence—retain their analytical utility but necessitate conceptual recalibration for digital ecologies. Traditional agenda-setting has evolved into "network agenda-setting," capturing how issues and their attributes are interlinked within broader networks of meaning in contemporary media.¹²⁵ Concurrently, framing in digital spaces is no longer the exclusive domain of traditional media institutions; instead, it manifests as "networked framing," a process distributed across participatory digital publics.¹²⁶

In terms of organizational response, Situational Crisis Communication Theory (SCCT) continues to offer a systematic heuristic for aligning responses with specific reputational threats. The framework delineates ten distinct response strategies categorized under four primary postures: denial, diminishment, rebuilding, and bolstering.¹²⁷ However, the transposition of SCCT to digital domains requires continuous adaptation to account for the accelerated velocity of online discourse and the viral nature of social media environments.¹²⁸

Furthermore, the proliferation of misinformation fundamentally destabilizes crisis management efforts. Empirical evidence indicates that false information diffuses significantly further, faster, and more broadly than factual content across digital networks, driven largely by its novelty and its capacity to elicit strong

¹²⁰ Timothy Coombs and Sherry J. Holladay, "Further Explorations of Post-Crisis Communication: Effects of Media and Response Strategies on Perceptions and Intentions," *Public Relations Review* 35, no. 1 (2009): 1–6; - W. Timothy Coombs, *Ongoing Crisis Communication: Planning, Managing, and Responding*, op. cit., 150.

¹²¹ Wanta, Wayne, and Yu-Wei Hu. Op. cit.

¹²² Gallotti, Riccardo, Francesco Valle, Nicola Castaldo, Pierluigi Sacco, and Manlio De Domenico. 2020. "Assessing the Risks of 'Infodemics' in Response to COVID-19 Epidemics." Op. cit.: 1285–93.

¹²³ Maxwell McCombs and Sebastián Valenzuela, *Setting the Agenda: Mass Media and Public Opinion*, op. cit.

¹²⁴ Vargo, Chris J., Lei Guo, Maxwell McCombs, and Donald L. Shaw. 2014. "Network Issue Agendas on Twitter

During the 2012 U.S. Presidential Election.", op. cit., 296–316.

¹²⁵ Maxwell McCombs and Sebastián Valenzuela, *Setting the Agenda: Mass Media and Public Opinion*, op. cit.

¹²⁶ Sharon Meraz and Zizi Papacharissi, "Networked Gatekeeping and Networked Framing on Egypt," *The International Journal of Press/Politics* 18, no. 2 (2013): 138.

¹²⁷ W. Timothy Coombs, *Ongoing Crisis Communication: Planning, Managing, and Responding*, op. cit..

¹²⁸ W. Timothy Coombs and Sherry J. Holladay, *The Handbook of Crisis Communication* (Malden, MA: Wiley-Blackwell, 2010); W. Timothy Coombs, *Ongoing Crisis Communication: Planning, Managing, and Responding*, op. cit..

emotional responses such as fear, disgust, and surprise.¹²⁹ Consequently, organizations face an increasingly volatile information asymmetry where unverified narratives can rapidly erode public trust.

Finally, contemporary crisis communication must navigate the fragmented, participatory architecture of digital spheres. Non-institutional actors—ranging from digital activists to social media influencers—now exert substantial influence over public perception. This decentering of information flow disrupts traditional, top-down communication models¹³⁰, necessitating strategies that are highly adaptive, culturally contextualized, and responsive to the dynamics of networked publics.¹³¹

2. Conclusions

1. The Structural Transformation of Public Opinion: Digital media have fundamentally altered the structural and temporal dynamics of opinion formation during crises. The classical assumption of linear media influence has been superseded by algorithmic curation and participatory content production. Consequently, crisis communication is an iterative, co-constructed process wherein traditional media, platforms, influencers, and lay users simultaneously negotiate public perception in real time.¹³²
2. Strategic Alignment in Digital Contexts: The efficacy of crisis interventions is contingent upon aligning response strategies with the specific affordances of digital platforms and the behavioral expectations of online publics. While SCCT provides a foundational matrix for this alignment, its contemporary application must account for compressed response windows, the amplification of affective content, and the necessity of engaging non-institutional stakeholders who increasingly dictate the narrative trajectory.¹³³
3. Multidimensional Approaches to Misinformation: Mitigating the impact of crisis-related misinformation necessitates strategies addressing both the systemic and behavioral drivers of information consumption. Given that the accelerated spread of falsehoods is primarily driven by human behavior rather than automated bots, purely technological interventions are insufficient.¹³⁴ Effective mitigation requires

digital literacy initiatives, strategic partnerships with independent fact-checkers, and the mobilization of credible community voices to amplify factual narratives.

3. Practical Recommendations

1. Development of Rapid Response Architectures: Organizations must operationalize response protocols capable of deploying within the initial hours of a crisis, a period when digital volatility is highest. This necessitates rigorous pre-crisis planning, including the establishment of dedicated monitoring infrastructures and scenario-based training for personnel.¹³⁵
2. Continuous and Comprehensive Monitoring: Proactive environmental scanning across diverse platforms is critical for the early detection of reputational threats and the longitudinal tracking of public sentiment. Such monitoring must extend beyond institutional accounts to encompass the discourse of influencers and peripheral networks.¹³⁶
3. Proactive Misinformation Mitigation: Organizations should establish pre-emptive mechanisms to rapidly correct false narratives. This includes fostering alliances with fact-checking entities and cultivating relationships with authoritative voices capable of validating accurate information.¹³⁷
4. Platform-Specific Strategic Adaptation: Recognizing the distinct technological affordances of different platforms is essential. Crisis communication collateral must be tailored to the specific medium; for instance, the visual and narrative-driven environment of TikTok necessitates fundamentally different engagement strategies compared to the text-centric discourse on X (formerly Twitter).¹³⁸
5. Prioritization of Authenticity and Accountability: Stakeholders increasingly demand transparent communication during crises. Organizations must prioritize authenticity, openly acknowledging uncertainties where they exist, and demonstrating a genuine commitment to

¹²⁹ Soroush Vosoughi, Deb Roy, and Sinan Aral, "The Spread of True and False News Online," *Science* 359, no. 6380 (2018): 1146.

¹³⁰ William L. Benoit, *Accounts, Excuses, and Apologies: A Theory of Image Restoration Strategies* (Albany: State University of New York Press, 1995).

¹³¹ Kathleen Fearn-Banks, *Crisis Communications: A Casebook Approach*, 5th ed. (New York: Routledge, 2016).

¹³² McCombs and Valenzuela, *Setting the Agenda*; Meraz and Papacharissi, "Networked Gatekeeping," 138–166.

¹³³ W. Timothy Coombs, *Ongoing Crisis Communication: Planning, Managing, and Responding*, , op. cit. , 150.

¹³⁴ Vosoughi, Roy, and Aral, "The Spread of True and False News," op. cit. , 1146–51. Vosoughi, Roy, and Aral, "The Spread of True and False News," op. cit. , 1146.

¹³⁵ Coombs, *Ongoing Crisis Communication* (2015).

¹³⁶ Coombs, *Ongoing Crisis Communication* (2018).

¹³⁷ Vosoughi, Roy, and Aral, "The Spread of True and False News," op. cit. , 1146–1151.

¹³⁸ Coombs, *Ongoing Crisis Communication* (2018).

accountability—a principle foundational to effective image restoration.¹³⁹

4. Suggestions for Future Research

1. Longitudinal Tracking of Digital Influence: Future research should examine how social media influence evolves across different crisis life-cycles, building empirically upon the theoretical extensions of network agenda-setting and networked framing.¹⁴⁰
2. Cross-Cultural Crisis Dynamics: The institutional and cultural contexts in which crises occur heavily dictate the efficacy of communication strategies. Comparative studies are needed to analyze how socio-cultural variables influence digital engagement during crises across diverse geographic regions.¹⁴¹
3. The Agency of Influencers in Crises: The emergence of social media influencers as crisis actors warrants rigorous investigation. Future studies should delineate how varying tiers of influencers (micro, macro, and celebrity) shape public perception and how organizations can ethically integrate them into response strategies.
4. Efficacy of Counter-Disinformation Tactics: Experimental designs are required to evaluate the actual effectiveness of different corrective strategies against sophisticated forms of misinformation, including AI-generated deepfakes and manipulated narratives.¹⁴²
5. Platform-Specific Testing of SCCT: Quantitative testing of SCCT's core response strategies (denial, diminishment, rebuilding) should be conducted across specific platforms to determine if technological affordances alter the effectiveness of traditional reputational repair tactics.¹⁴³

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¹⁴¹ Fearn-Banks, Kathleen. *Op. cit.*

¹⁴² Vosoughi, Roy, and Aral, "The Spread of True and False News," *op. cit.*, 1146–1151.

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