



Journal of Social and Political Sciences

Alam, M. K. (2026), Social Media Driven Rumours and Communal Violence in Bangladesh: Patterns, Catalysts, and Mitigation Strategies. *Journal of Social and Political Sciences*, 9(1), 14-25.

ISSN 2615-3718

DOI: 10.31014/aior.1991.09.01.612

The online version of this article can be found at:
<https://www.asianinstituteofresearch.org/>

Published by:
The Asian Institute of Research

The *Journal of Social and Political Sciences* is an Open Access publication. It may be read, copied, and distributed free of charge according to the conditions of the Creative Commons Attribution 4.0 International license.

The Asian Institute of Research *Social and Political Sciences* is a peer-reviewed International Journal. The journal covers scholarly articles in the fields of Social and Political Sciences, which include, but are not limited to, Anthropology, Government Studies, Political Sciences, Sociology, International Relations, Public Administration, History, Philosophy, Arts, Education, Linguistics, and Cultural Studies. As the journal is Open Access, it ensures high visibility and the increase of citations for all research articles published. The *Journal of Social and Political Sciences* aims to facilitate scholarly work on recent theoretical and practical aspects of Social and Political Sciences.



ASIAN INSTITUTE OF RESEARCH
Connecting Scholars Worldwide

Social Media Driven Rumours and Communal Violence in Bangladesh: Patterns, Catalysts, and Mitigation Strategies

Mohammad Khairul Alam¹

¹ Faculty Member (Directing Staff), Defence Services Command and Staff College, Mirpur Cantonment, Dhaka, ORCID ID: 0009-0001-4274-0627.

Correspondence: Mohammad Khairul Alam, Faculty Member (Directing Staff), Defence Services Command and Staff College, Mirpur Cantonment, Dhaka-1216, Bangladesh. E-mail: khairulalam7076@gmail.com

Abstract

The swift growth of social media use in Bangladesh has strengthened communication but has also lightning the diffusion of rumours. In several latest events, unverified posts framed around political, religious, and identity-based outrage have moved quickly from online spaces into offline vandalism and communal violences. The transition from rumour to violence is not automatic and unavoidable. It depends on how digital content is articulated, who disseminates it where it spreads, and how authorities respond. This study develops a sequential explanation of social media driven rumour spread in Bangladesh and analyses a risk-reduction model. Using a mixed-methods design, this study combines content analysis of viral rumour incidents, interviews with journalists, diffusion pathway mapping within closed networks, influencer, and digital security stakeholders. Presenting information suggests that escalation is most likely when identity threats circulate through trusted local networks and confusing institutional responses. Employing Social Exchange Theory, the study argues that perceived institutional failure facilitates negative reciprocity and accumulation. This study also suggests a mitigation strategy structured around early detection, rapid institutional communication, and locally credible counter-narratives.

Keywords: Rumours, Misinformation, Communal Violence, Bangladesh, Facebook, Diffusion Networks, Institutional Trust, Social Exchange Theory, Mitigation Strategies

1. Introduction

Social networking site especially Facebook and messaging applications are now deeply influencing public conversation and opinion in Bangladesh. This has clear positive effects like faster news sharing, stakeholders' coordination, and greater political participation. People can uplift concerns, share information and render support with great ease. The same systems also present emotionally charged and sensational content, often promoting speed over reliability. In Bangladesh, a repeated pattern has appeared where rumours frequently linked to political and religious indifference, alleged disrespect, circulate rapidly and then translate into community tension. These rumours are often spread in ways that initiate panic, making it difficult to mitigate calmly and smoothly. Studies focused on Bangladesh note that religious misinformation and high levels of online engagement can undermine

interreligious harmony and may connect directly to offline incidents, including attacks on communities and property (Al-Zaman, 2024).

The main purpose is not to establish that rumours exist. It explains why some rumours fade quickly while others escalate into violence or tension. Existing research suggests that online hate or inflammatory language can sometimes foster offline harm, but this connection is neither automatic nor uniform. It appears to depend heavily on political context, institutional credibility, and community-level dynamics (Castaño-Pulgarin et al., 2021; Arcila-Calderón et al., 2024). In Bangladesh, intense political rivalry, the mix of dense social networks and uneven trust in formal communication protocols may facilitate intensification of threats. During politically sensitive periods, reports can gain further meaning and urgency. This study therefore focuses the patterns and catalysts that fuel online news into offline communal violence, and mitigation strategies appear workable in the Bangladesh perspective.

2. Literature Review

Recent research on online misinformation and harm broadly portrays three recurring claims. First, platforms tend to amplify content that triggers strong emotional reactions, which increases exposure to misleading, polarising, or hateful narratives (Castaño-Pulgarin et al., 2021). Second, the online-to-offline link appears more likely when content frames a target group as dangerous, immoral, or existentially threatening, and when such messages circulate within trusted social networks where verification is social rather than factual (Arcila-Calderón et al., 2024). Third, Bangladesh-focused studies suggest that religious misinformation is not rare, often attracts high engagement, and that this engagement shapes how messages are interpreted and acted upon in offline settings (Al-Zaman, 2024; Al-Zaman, 2023). Still, there is debate regarding the main focus. Some studies prioritise platform-level causation, like algorithmic amplification and virality, while others stress local level conditions, including political entrepreneurs, weak disagreement resolution mechanisms, and low institutional trust. This study considers these dynamics as interacting factors rather than alternative explanations, arguing that amplification without receptive local conditions is inadequate to explain escalation.

2.1 Theoretical Literature

Social Exchange Theory (SET) is helpful here because communal peace is partly sustained by repeated everyday exchanges like trust, protection, and fairness. When people believe institutions will eliminate risk quickly and fairly, communities may wait before acting. But when exchanges fail due to delayed response or perceived bias, people may look for equity restoration on their own. In SET terms, perceived injustice can initiate negative reciprocity like retaliation or deviant behavior aimed at restoring balance. In rumour incidents, this can show up as collective punishment based on union that formal systems will ensure justice.

SET also helps to identify the risks of private networks. In close groups, social rewards for reaction can be strong, and verification appears social rather than factual. If community members share a rumour and receive agreement, the exchange reinforces belief seriously. If outsiders or authorities respond late, the community may translate that as disrespect or weakness, which enhances enthusiasm to act. In practice, this means institutional response time and reputation are elements of the causal chain, not side issues.

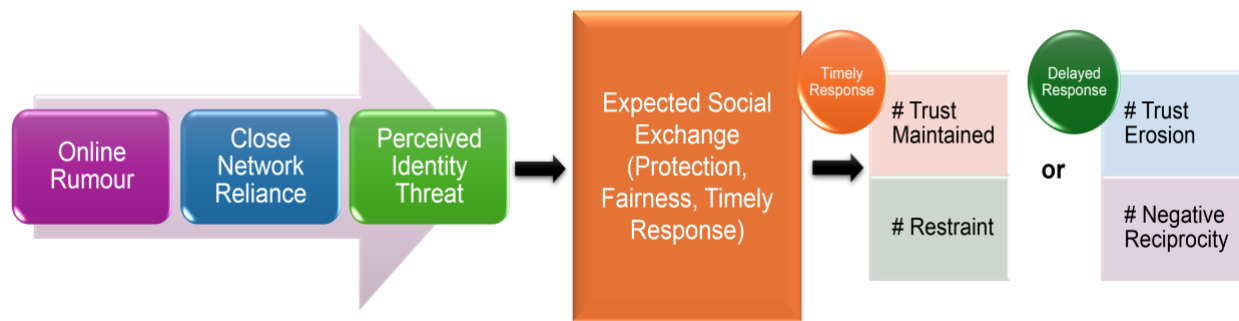


Figure 1: SET Applied to Rumour Driven Communal Violence

[Source: Researcher's own construct]

2.2 Empirical Literature

Bangladesh-specific empirical work increasingly shows how religious misinformation can drive intense engagement and polarised reactions, and why that matters for intergroup relations (Al-Zaman, 2024). A related dataset paper also highlights that religious misinformation is implicated in interreligious tension and can support systematic analysis of engagement patterns in Bangladesh (Al-Zaman, 2023).

Beyond Bangladesh, research connecting online hate to offline hate crime finds that inflammatory language and online hate dynamics can have predictive capacity for offline incidents (Arcila-Calderón et al, 2024). This does not confirm direct causation in every case, but it proposes a risk-monitoring approach.

A further thread is the study of misinformation propagation in messaging systems. Work on WhatsApp groups shows that misinformation spread is shaped by group structure and community clustering, and that platform affordances influence correction behaviour (Nobre et al, 2022; Villamil et al, 2022). These findings are significant for Bangladesh because rumour escalation often appears strongly in trusted groups where people think messages come from known sources. The main arguments are how these platform and network factors merge with Bangladesh's local dispute politics, policing capacity, and trust in formal communication facilities.

3. Research Gap

A few gaps were found out in the research studied. First, many studies on Bangladesh were carried out based on narratives or descriptive accounts of individual incidents. While these contributions are relevant, they often stop short of mapping a sequential pathway which explains how rumours shift from initial digital framing to diffusion and then to offline mobilisation and violence. As a result, the escalation process continues to remain fragmented and analytically inadequate. Second, although a few studies assess patterns of misinformation engagement and online virality, they hardly synthesise institutional response latency and public legitimacy in authorities as measurable variables within the same analysis. This omission limits the understanding of how delayed, unclear, disjointed or fragmented responses may increase communal tension and facilitate escalation. Third, mitigation proposals in the existing research are likely to remain broad and normative. Recommendations like awareness building or fact checking are often proposed in isolation, with limited empirical policy guidance on how different interventions like early detection, rapid institutional communication, platform coordination, and community level counter narratives should be integrated and sequenced. This paper addresses these identified gaps by formulating a structured, context sensitive framework that connects rumour dynamics, political and institutional conditions, and propose practical mitigation strategies in the Bangladesh perspective.

4. Conceptual Framework

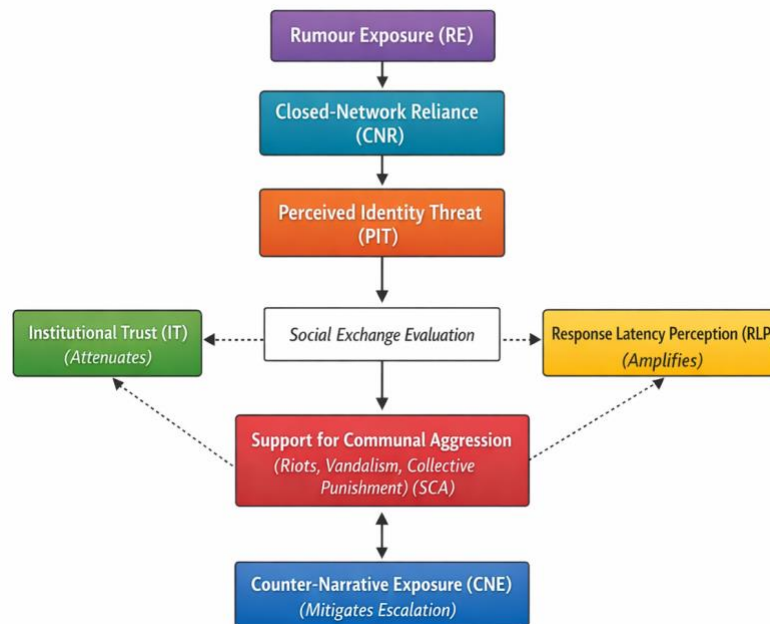


Figure 2: Conceptual Framework of Social Media Driven Rumour Escalation and Mitigation

[Source: Researcher's own construct]

5. Materials and Methods

5.1 Ethical Consideration

The study complies with standard human-subject protections, like voluntary participation, informed consent, and the protection of participant confidentiality. All participants were clearly informed and adequately briefed regarding the study objective, the nature of their involvement, and the types of questions they would be asked before the start of data collection. Interviewees were also fully informed about audio recording procedures, and how recordings would be utilised, and their right to withdraw audio recording from the study at any stage without any negative effects. To protect privacy, personal identifiers were excluded from interview transcripts and survey data, and pseudonyms or coded labels were also used. All digital data were password protected, with access restricted to the research team only. Sensitive information that could potentially reveal individuals or communities to harm was handled with particular attention and excluded from publication. The study avoided collecting operational or location specific data that could intensify tensions or compromise safety. Overall, these steps are consistent with widely accepted ethical standards for survey and interview based social science research, and concentrate on the protection, dignity, and autonomy of participants throughout the research process.

5.2 Research Design and Measurement of Variables

The study uses an exploratory sequential mixed methods approach to carry out study both on the contextual depth and the analytical patterns of social media driven rumour violences. In Phase 1, qualitative analysis is conducted to develop actual understanding on emergence and circulation, dissemination, and interpretation of rumours. This phase works on multiple sources, including viral social media posts or contents, user comments or reactions, and mainstream news reports, alongside semi structured interviewees like journalists, community leaders, and digital security practitioners. Qualitative outcomes assist in formulating recurring themes, framing patterns, and response dynamics, which significantly influence the selection and application of variables for the quantitative phase.

In Phase 2, a structured survey is conducted based on findings from Phase 1 and established literature on misinformation, political communication, and communal violence. The target audience for analysis is the social media user aged 18 years and above. The survey measures exposure to rumours, understands the pattern or type of identity based threat, trust in institutions, and behavioural orientations connected to collective action by the appropriate authority. The dependent variable, Support for Communal Aggression (SCA), is measured using Likert Scale items that measure endorsement with statements justifying collective punishment, mob action, or violence to protect the interests. This variable does not measure and determine actual violent behaviour, rather, it acts as a safer and widely accepted proxy for attitudes associated with escalation of risk.

All key constructions are framed as reflective variables, each measured using three to five items to ensure reliability and confirm validity. The independent variables include Rumour Exposure (RE), projecting the frequency and intensity of getting unverified claims; Closed Network Reliance (CNR), capturing dependence on private groups or trusted circles for information; and Perceived Identity Threat (PIT), proposing the limit to which individuals believe their religious or communal identity is under threat. Institutional factors are depicted by Institutional Trust (IT) and Response Latency Perception (RLP), while exposure to corrective messaging is described through Counter Narrative Exposure (CNE).

5.3 Hypothesized Model

The proposed PLS-SEM model assumes a sequential escalation process. Rumour Exposure (RE) and Closed Network Reliance (CNR) are assumed to increase Perceived Identity Threat (PIT). Besides, higher PIT is expected to intensify Support for Communal Aggression (SCA). Institutional Trust (IT) and Counter Narrative Exposure (CNE) are assumed to reduce SCA by attenuating fear and uncertainty. Moreover, Response Latency Perception (RLP) is expected to extend SCA and to influence the relationship between IT and SCA, where delayed or doubtful responses weaken the protective effect of trust.

5.4 Hypotheses

- H1= RE → PIT (positive).
- H2= CNR → PIT (positive).
- H3= PIT → SCA (positive).
- H4= IT → SCA (negative).
- H5= RLP → SCA (positive).
- H6= CNE → SCA (negative).
- H7= IT × RLP → SCA (positive moderation).

5.5 Sampling Technique

A multistage sampling approach is adopted to confirm contextual relevance and demographic diversity. In Stage 1, districts are carefully selected depending on two criteria: documented incidents of rumour linked communal tension or violence and high levels of social media penetration. This approach allows the study to concentrate on areas where rumour dynamics and escalation risks are most prominent and frequent. In Stage 2, both urban and semiurban upazilas within each selected district are sampled to gather variation in digital access, political activity, and community structure. Semiurban areas merit particular and detailed attention because they frequently experience quick spread of rumour through social media along with limited institutional resources. In Stage 3, respondents are recruited using a mixed method. Offline recruitment is carried out through community organizations, educational institutions, and local networks to include participants from different digital exposure levels. Online recruitment concentrates on active and vibrant social media users through platform based outreach. This combined method lowers sampling bias and increases representativeness. Overall, the strategy focuses on confirming diversity across age, gender, education, occupation, and religious identity, which enables a meaningful comparative study across social groups.

5.8 Sample Size Determination

Minimum sample is estimated using Cochran's formula for proportions with 95% confidence and 5% margin of error, giving $n = 384$ for large populations. To support SEM paths and subgroup checks, this study target $n = 450$ -600 respondents.

5.9 Data Collection

Data collection proceeds through three interrelated steps to capture both depth and breadth of evidence. First, a case corpus containing viral social media posts, associated comment threads, screenshots, and relevant mainstream online reports are compiled. These materials are sampled considering their reach, engagement level, documented connection to communal tension or violence, and offline incidents. The case corpus facilitates systematic and sequential analysis of rumour framing, emotional tone, and diffusion patterns across social media networks. Second, semi structured interviews are conducted with journalists, community leaders, and digital security practitioners who have experienced and witnessed rumour related incidents or violence directly and closely. These interviews assist in constructing the contextual bases on rumour interpretation, communities' response, and involvement of institutional actors during periods of tension. Third, a structured, close and open-ended survey is conducted to gather quantitative data on individual exposure, perceptions, and attitudes. This mixed approach allows inclusiveness, reduces response bias, and enhances the overall validity and strength of the data.

6. Result And Discussion

6.1 Qualitative Findings. Patterns of Rumour Escalation

Qualitative analysis of the case study and interview data suggests consistent patterns in how social media influenced rumours aggravate into communal tension and violence in Bangladesh. Rumours that spread beyond online circulation and result in offline tension typically include moral shock framing, identity based threat issues, and religious symbolism. Moral shock occurred by framing the rumour as an urgent violation of sacred values, such as alleged desecration of religious texts, insults to religious figures, moral transgressions, or political ill motives attributed to out groups. These narratives are often portrayed as emergencies that need urgent response, leaving little room for verification and validation.

Diffusion emerges in the fastest possible manner within trusted closed networks, such as private Facebook or WhatsApp groups, and locally popular online pages. Credibility is ensured from social proximity rather than factual verification within these networks. Interviewees repeatedly opined that individuals were more likely to believe and share rumours when these were initiated by acquaintances, local leaders, or politically affiliated actors. In this regard, questioning the rumour may be considered as disloyalty. These dynamic augments rapid diffusion and intensify emotional responses.

Another critical issue concerns the importance of the clarity and timing of institutional responses. Interviewees propose that delayed, fragmented, or ambiguous institutional responses prominently increase escalation risk. Silence from authorities is often interpreted as confirmation of the rumour or institutional bias. It is revealed in several case studies that when clarifications were eventually circulated, they came after vandalism or violence. These findings indicate that institutional latency does not merely fail to prevent violence; it may actively influence escalation by undermining trust.

6.2 Descriptive Statistics and Measurement Properties

The survey results are given below to show how the proposed model was empirically analysed using the collected data. The analysed data indicate moderate to high exposure to rumours and relatively low levels of institutional trust among the respondents. These patterns are in line with prior observations in politically sensitive and socially polarised contexts. As a whole, quantitative results provide empirical support for the qualitative insights by showing how rumour exposure, network reliance, and institutional perceptions are dispersed across the sample and how they structure escalation risk in daily affairs.

Table 1: Summary Statistics

Construct (scale 1–5)	Mean	SD
Rumour Exposure (RE)	3.71	0.82
Closed-Network Reliance (CNR)	3.48	0.88
Perceived Identity Threat (PIT)	3.62	0.85
Institutional Trust (IT)	2.69	0.94
Response Latency Perception (RLP)	3.74	0.81
Counter-Narrative Exposure (CNE)	2.96	0.90
Support for Communal Aggression (SCA)	2.97	0.96

The mean score for Rumour Exposure (RE) suggests that respondents encounter unverified claims repeatedly, particularly during politically sensitive time. Closed Network Reliance (CNR) is also comparatively high, suggesting high reliance on private or semi-private communication systems. Institutional Trust (IT) displays a noticeably lower mean, presenting skepticism toward formal authorities. Meanwhile, Response Latency Perception (RLP) is high, suggesting that many respondents trust authorities respond slowly or doubtfully during crises. These descriptive patterns are consistent with qualitative findings.

6.3 Reliability and Validity Assessment

Internal consistency and convergent validity were tested using Cronbach's alpha, composite reliability (CR), and average variance extracted (AVE). All constructions exceed commonly used threshold values (α and CR > 0.70; AVE > 0.50), suggesting satisfactory reliability and construct validity. The relatively high alpha and CR values propose that the indicators within each construct measure the same underlying concept uniformly. In addition, AVE values above the recommended minimum suggest that the constructions explain more variance in their indicators than measurement error, supporting the adequacy of the measurement model for subsequent structural analytical study.

Table 2: Reliability and Convergent Validity

Construct	Cronbach's α	CR	AVE
RE	0.83	0.88	0.58
CNR	0.81	0.86	0.55
PIT	0.86	0.90	0.61
IT	0.84	0.88	0.59
RLP	0.80	0.85	0.54
CNE	0.82	0.87	0.57
SCA	0.87	0.91	0.63

These results show that the latent constructions are operationalised with adequate internal consistency and capture sufficient deviation in their observed indicators. The high reliability estimates for Perceived Identity Threat (PIT) and Support for Communal Aggression (SCA) are particularly significant, as these constructs occupy core positions in the hypothesised structural model. Strong measurement properties for PIT and SCA decrease attenuation bias and increase confidence that the estimated path coefficients reflect meaningful relationships rather than artefacts of measurement error. This strengthened the interpretability and robustness of the subsequent methodical model estimates.

6.4 Structural Model Results

The structural model assesses the hypothesised relationship among rumour exposure, network dynamics, institutional factors, and support for communal violence. The results provide statistical bases for all proposed hypotheses, with path coefficients in the desired directions and strong levels of significance. The relatively high t-values propose stable estimates, while the magnitude of the coefficients underscores the central role of perceived identity threat in minimising escalation. Together, these findings confirm the internal coherence of the model and substantiate the suggested theoretical logic linking online rumour dynamics to offline attitudinal escalation.

Table 3: Structural Path Estimates

Path	β	t-value	p-value
RE \rightarrow PIT (H1)	0.31	6.48	<.001
CNR \rightarrow PIT (H2)	0.36	7.92	<.001
PIT \rightarrow SCA (H3)	0.44	8.37	<.001
IT \rightarrow SCA (H4)	-0.21	4.12	<.001
RLP \rightarrow SCA (H5)	0.24	4.95	<.001
CNE \rightarrow SCA (H6)	-0.17	3.41	.001
IT \times RLP \rightarrow SCA (H7)	0.12	2.58	.010

The results suggest that Rumour Exposure (RE) and Closed Network Reliance (CNR) both have statistically significant and strong influences on Perceived Identity Threat (PIT). This offers empirical support for the argument that repeated exposure to rumours and reliance on socially trusted networks amplify perceptions of threat by reinforcing emotionally charged interpretations and reducing verification. In turn, PIT has the strongest direct influence on Support for Communal Aggression (SCA), highlighting the core role of identity based fear in escalation. This pattern proposes that psychological threat perception works as a key mechanism through which online information environments shape into offline attitudinal readiness for collective violence in politically and communally sensitive contexts.

Institutional Trust (IT) suggests a strong negative relation with SCA, confirming its protective role. However, Response Latency Perception (RLP) has a positive and significant effect on SCA, suggesting that perceived delays or ambiguity in official responses facilitate aggressive collective action. Prominently, the interaction term (IT \times RLP) is also high, demonstrating that response latency weakens the protective effect of trust. Even individuals who usually trust authorities may support aggressive action if they believe actions of authority are slow or ineffective.

6.5 Integrating Quantitative and Qualitative Findings

When linked together, the qualitative and quantitative findings suggest a coherent picture of rumour driven escalation. Rumours get traction through emotional framing and social endorsement within closed networks. As exposure rises, individuals' identity and community are more likely to be threatened. These perceptions generate readiness for action, but whether action becomes violent depends heavily on institutional signals.

From the view of Social Exchange Theory, these findings suggest a clear mechanism of negative reciprocity. Communities depend on institutions to provide protection, clarity, and fairness. When these factors are not met through delay and doubtful communication, social exchange is considered interrupted. Support for vandalism, riots, or collective punishment becomes a path to restore the desired balance. Violence and clashes are therefore framed not as aggression but as valid tool.

Counternarratives appear effective, but only under specific conditions or situations. Both qualitative accounts and the negative coefficient for Counter Narrative Exposure (CNE) propose that corrective messages reduce support for aggression when they appear from locally trusted intermediaries. Official facts alone are often inadequate if

institutional trust is low. This strengthens the importance of community level actors in mitigation strategies or options.

6.6 Political Context, Riots, and Vandalism

The findings also focus on the importance of political context in influencing escalation. During tension periods or large-scale protests, rumours are often interpreted and transmitted through partisan lenses, which increases sensitivity and decreases tolerance for ambiguity. Respondents described how rumours were sometimes portrayed deliberately by politically affiliated agents to defame opponents, consolidate group loyalty, or mobilise supporters at quick notice. In such contexts, vandalism and riots serve both symbolic and strategic contexts. They project power, create fear, display dominance over contested areas, and influence local political dynamics by reshaping perceptions of control.

This suggests that rumour driven communal violence cannot be fully analysed without considering political incentives and opportunity structures. Confused or delayed actions may not only reflect institutional capacity constraints but also political hesitation or strategic evaluation. When communities perceive responses as selective or politically influenced, institutional confidence erodes further. These perceptions increase negative harmony, reinforcing processes of retaliation and mistrust that appear self sustaining and increasingly difficult to disrupt once established.

6.7 Implications for Theory and Practice

Overall, the findings conform to the proposed sequential escalation model and heightened the explanatory value of Social Exchange Theory in understanding rumour driven communal violence. By incorporating rumour patterns, network dynamics, and institutional reaction, the study goes beyond simplified accounts that facilitate violence solely to misinformation or individual irrationality. Instead, it displays how collective behaviour is influenced by perceived breakdowns in reciprocal expectations between communities and institutions.

For policymakers, the findings suggest that the speed, accuracy, clarity, and credibility of responses and actions from appropriate authorities matter as much as factual accuracy. Preventing riots and vandalism therefore merits not only monitoring and correcting rumours but also visibly strengthening institutional presence, responsiveness, and impartiality. When communities perceive authorities as absent or biased, technical interventions alone are unlikely to be effective without strengthening confidence in the underlying exchange relationship.

6.8 Implications for Mitigation and Prevention

The results indicate several mitigation strategies that originate directly from the monitored escalation pathways. First, early detection is critical. Monitoring should prioritise rumours framed across religious offence, identity threat, or political conspiracy, especially during high-risk periods such as elections or mass protests. Early detection allows intervention before emotional narratives solidify within closed networks.

Second, response speed and clarity are decisive. Institutional communication must emerge rapidly and present a unified message across agencies. Delays or contradictory statements underestimate trust and amplify escalation risk. Most importantly, responses should acknowledge uncertainty where it prevails, as overconfident denials that are later contradicted further erode credibility.

Third, institutional visibility and neutrality are equally critical as communication. Visible and impartial policing during rumour driven tensions can interrupt escalation by signaling that protection is upcoming. Conversely, selective enforcement or excessive force reinforces perceptions of bias and increases adverse reciprocity.

Fourth, platform coordination should focus on slowing diffusion rather than solely removing or deleting content. Temporary friction measures, contextual warnings, and reduced algorithmic amplification during crisis periods may limit quick escalation without instigating censorship backlash.

Finally, community-based counter-narratives portray a key preventive mechanism. The findings suggest that trusted local intermediaries are more effective and beneficial than central authorities in reducing assistance for aggression. Training and supporting such actors can enhance informal verification norms and reduce dependence on rumours during crises.

7. Conclusion and Recommendations

7.1 Summary of the Findings

This study maps a suitable and dynamic strategy to guard against the rumour driven communal escalation in Bangladesh by incorporating digital communication dynamics, political context, and institutional response. The findings suggest that rumours are most likely to initiate aggression and violence when they are framed as identity based threats and spread within closed networks. These risks increase further when institutional responses are delayed, fragmented, or unclear. In this note, rumours do not solely misinform. They also generate fear, moral outrage, and preparedness for collective action.

Based on Social Exchange Theory, the study explains why these dynamics are particularly destabilising. Communities operate with implicit assurance of protection, fairness, and timely responses from the appropriate authorities. When these assurances are perceived to be unclear, the exchange relationship breaks down. Negative reciprocity then becomes more obvious, and support for collective punishment, vandalism, or riots is initiated as justified protection rather than aggression. At the same time, the findings suggest that counternarratives can decrease escalation risk, only when they are narrated by locally credible actors who have gained social trust. These insights underscore that rumour driven violence is not accidental but structured, well planned, context dependent, and responsive to institutional signals.

7.2 Recommendations for Policymakers

Building on the mitigation strategies discussed in Section 5.8, this study suggests a set of practical and integrated policy options. First, authorities should establish early detection and priority assessment mechanisms concentrated on high risk rumour themes, particularly which initiate religious offence, communal identity, or political conspiracy. Such mechanisms should be practiced vigorously and logically during high risk periods which include elections, large protests, and major legal or political events.

Second, rapid and transparent communication is must. Institutions should issue clear, simple clarifications in appropriate language and tone within quick notice of rumour emergence, explicitly explaining what is known, what remains uncertain, and what prompt actions are being taken. Speed and clarity matter as much as factual accuracy, as delayed and bias responses often generate information vacuums that rumours quickly fill.

Third, policymakers should concentrate on local intermediary networks. Teachers, religious leaders, community representatives, and local journalists are often more trusted, respected and admired than central authorities. Training, supporting, and monitoring these actors to share verified updates and stabilizing messages can strengthen informal verification norms and decrease adverse effect of rumours.

Fourth, platform coordination mechanisms should be institutionalised and formalised. Rather than depending solely on content removal, platforms and authorities should use contextual warnings, reduced amplification, and urgent labelling for content that usually initiate violence. Finally, local dispute response and mediation teams should be strengthened and augmented so communities clearly and visibly experience fair protection and timely engagement. Without such early warnings, communities may continue to retaliation when rumours emerge.

7.3 Limitations and Future Directions

Several limitations should be acknowledged. The cross sectional survey design limits causal inference, and self reported attitudes may be shaped by social desirability bias, particularly on sensitive matters such as violence and communal relations. Another limitation concerns the reliance on online and community based sampling, which may not represent individuals with limited internet access or those less involved with social media platforms. As a result, the findings may not fully capture perspectives from more marginalised or digitally excluded populations, potentially affecting the generalisability of the results around all the society.

Future research could conduct longitudinal designs to track rumour diffusion and institutional responses over time, allowing stronger and further causal claims. Ethically designed digital trace analysis could offer more precise mapping of diffusion pathways within closed networks. Quasi-experimental studies studying response timing and messaging strategies would further clarify which interventions are most effective. Comparative studies across South Asian contexts may also help distinguish Bangladesh-specific dynamics and context from broader regional patterns.

Competing Interests: The author declares that he has no competing interests.

Funding: This research received a grant from Defence Services Command and Staff College (DSCSC).

Acknowledgment: We are grateful to the respondents who actively participated in the study and formed the sample for collecting and analyzing the data.

Informed Consent Statement/Ethics Approval: Not applicable.

Declaration of Generative AI and AI-assisted Technologies: This study has not used any generative AI tools or technologies in the preparation of this manuscript.

References

- Allcott, H., Gentzkow, M., & Yu, C. (2019). Trends in the diffusion of misinformation on social media. *Research & Politics*, 6(2). <https://doi.org/10.1177/2053168019848554>.
- Al-Zaman, M. S. (2023). A dataset on social media users' engagement with religious misinformation. *Data in Brief*, 50, 109550. <https://doi.org/10.1016/j.dib.2023.109550>.
- Al-Zaman, M. S. (2024). Social media users' engagement with religious misinformation: An exploratory sequential mixed methods analysis. *Emerging Media*. <https://doi.org/10.1177/27523543241257715>.
- Arcila-Calderón, C., et al. (2024). From online hate speech to offline hate crime: The role of inflammatory language in forecasting violence. *Humanities and Social Sciences Communications*, 11. <https://doi.org/10.1057/s41599-024-03899-1>.
- Banaji, S., & Bhat, R. (2020). WhatsApp vigilantes: An exploration of citizen reception and circulation of WhatsApp misinformation linked to mob violence in India. *Journalism Studies*, 21(12), 1677–1694. <https://doi.org/10.1080/1461670X.2020.1739768>.
- Benkler, Y., Faris, R., & Roberts, H. (2018). *Network propaganda: Manipulation, disinformation, and radicalization in American politics*. Oxford University Press. <https://doi.org/10.1093/oso/9780190923624.001.0001>.
- Castaño-Pulgarín, S. A., Suárez-Betancur, N., Vega, L. M. T., & López, H. M. H. (2021). Internet, social media and online hate speech: Systematic review. *Aggression and Violent Behavior*, 58, 101608. <https://doi.org/10.1016/j.avb.2021.101608>.
- Cinelli, M., Morales, G. D. F., Galeazzi, A., Quattrociocchi, W., & Starnini, M. (2020). The echo chamber effect on social media. *Proceedings of the National Academy of Sciences*, 117(9), 4511–4518. <https://doi.org/10.1073/pnas.1911520117>.
- Cinelli, M., De Francisci Morales, G., Galeazzi, A., Quattrociocchi, W., & Starnini, M. (2021). The dynamics of online misinformation diffusion. *Nature Human Behaviour*, 5, 140–148. <https://doi.org/10.1038/s41562-020-00994-6>.

- Guess, A. M., Nyhan, B., & Reifler, J. (2020). Exposure to untrustworthy websites in the 2016 US election. *Nature Human Behaviour*, 4, 472–480. <https://doi.org/10.1038/s41562-020-0833-x>.
- Marwick, A., & Lewis, R. (2017). *Media manipulation and disinformation online*. Data & Society Research Institute. <https://doi.org/10.2139/ssrn.3188730>.
- Mondal, M., Silva, L. A., & Benevenuto, F. (2017). A measurement study of hate speech in social media. *Proceedings of the 28th ACM Conference on Hypertext and social media*. <https://doi.org/10.1145/3078714.3078723>.
- Müller, K., & Schwarz, C. (2021). Fanning the flames of hate: social media and hate crime. *Journal of the European Economic Association*, 19(4), 2131–2167. <https://doi.org/10.1093/jeea/jvaa045>.
- Nobre, G. P., et al. (2022). A hierarchical network-oriented analysis of user communities involved in misinformation spread. *Information Processing & Management*, 59(1). <https://www.sciencedirect.com/science/article/abs/pii/S0306457321002387>.
- Ribeiro, M. H., Calais, P. H., Santos, Y. A., Almeida, V. A. F., & Meira, W. (2018). Characterizing and detecting hateful users on Twitter. *Proceedings of the International AAAI Conference on Web and Social Media*, 12(1). <https://doi.org/10.1609/icwsm.v12i1.14960>.
- Tucker, J. A., Guess, A., Barberá, P., Vaccari, C., Siegel, A., Sanovich, S., Stukal, D., & Nyhan, B. (2021). Social media, political polarization, and political disinformation: A review of scientific literature. *Political Science Quarterly*, 136(2), 239–286. <https://doi.org/10.1002/polq.13141>.
- Villamil, A. M., et al. (2022). Social debunking of misinformation on WhatsApp. *Proceedings of the ACM on Human-Computer Interaction*. <https://doi.org/10.1145/3512964>.
- Vosoughi, S., Roy, D., & Aral, S. (2018). The spread of true and false news online. *Science*, 359(6380), 1146–1151. <https://doi.org/10.1126/science.aap9559>.
- Wardle, C., & Derakhshan, H. (2020). *Information disorder: Toward an interdisciplinary framework for research and policy making*. Council of Europe Report. <https://doi.org/10.2139/ssrn.3794930>.