



Configurational Pathways of Online Public Opinion Reversal in Sudden Public Incidents involving Local Governments: A Fuzzy-Set Qualitative Comparative Analysis

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Abstract. This study investigates the complex mechanisms and configurational pathways leading to online public opinion reversal in sudden public incidents involving local governments. Drawing upon Collaborative Governance Theory and Public Opinion Life Cycle Theory, a three-dimensional analytical framework was established, encompassing governance subject behavior, communication characteristics, and public response status. Utilizing fuzzy-set Qualitative Comparative Analysis (fsQCA) on 36 representative cases occurring between 2023 and 2025, the research explores how seven antecedent variables—including initial release platform attributes, government intervention, response timeliness, and public attention—interact to drive reversal intensity. The necessity analysis indicates that no single variable independently determines reversal intensity, reinforcing the configurational and non-linear nature of the phenomenon. The configuration analysis identifies five sufficient pathways categorized into three distinct models: the Government-led Collaborative Governance Model, the High-Heat Explanation and Correction-oriented Model, and the Media-Public-led Alternative Governance Model. These findings suggest that while rapid government response is effective in low-popularity stages, high-heat scenarios require iterative factual supplementation and multi-subject interaction. The study concludes that effective governance requires prioritizing "discursive anchoring" on initial platforms, dynamically adjusting strategies based on configuration types, and mastering key temporal and informational nodes to enhance institutional credibility.

Keywords: Online public opinion reversal, Sudden public incidents, Local government, Collaborative governance, Fuzzy-set qualitative comparative analysis, Configurational paths

1 Introduction

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2026. The last year of the 14th Five-Year Plan (2021–2025) was the year 2025. In this period, China recorded significant advancement in the digital industry. It promptly developed a stronger information infrastructure in the country. Generative artificial intelligence was also put into use in a grand scale by many industries. Meanwhile, the digital access kept increasing. The digital economy has also entered more in touch with the real economy. The changes indicate a consistent increase in the digital development. In the year 1997, China began monitoring internet activities. This was compared to 620,000 users at this time. The number of users had reached 1.123 billion in June 2025. The rate of internet penetration rose to 79.7 percent.

In such a well-interconnected environment, there are increased cases of online opinion turnover. These reversals demonstrate that online discussion does not necessarily run straight. This can tend to occur very fast. They also include great emotional responses. Their internal organization is complicated. These reversals are more frequent because no one channel of distribution of information is used. They undermine the government governance. They also diminish the level of trust on mainstream media. Meanwhile, they augment social anxiety and perplexity. All these complicate the management of public opinion.

This is why scientists should determine the variables which influence the power of a reversal of public opinion. In this research the emphasis is in the interaction of the main factors. Such factors are the government actions, communication processes and the reaction of people. This paper studies the various directions on the establishment of reversal events. This analysis will allow the departments of governance to understand how the discourse shifts with time when using the Internet. It will also assist them in forming more transparent early warning systems.

2 Literature Review

The study of network public opinion reversal has evolved into a multi-dimensional field, moving from basic observations to complex, systematic analyses. Current research primarily converges on the following four dimensions:

Scholarly consensus differentiates between event-specific determinants and external environmental variables. Research by Yu et al. (2025) and Zhang et al. (2024) suggests that event attributes, information credibility, and initial reporting biases—intertwined with netizen cognitive dissonance—are pivotal to the evolution of public opinion. Furthermore, Gao et al. (2025a) utilized system dynamics to demonstrate how the intuitiveness and reliability of information dictate reversal intensity. From an environmental perspective, Han et al. (2024) and Gao et al. (2025b) highlight that information asymmetry, exacerbated by platform "traffic logic" and the influence of opinion leaders, serves as a primary external catalyst for opinion volatility. Guo (2023) adopted fsQCA to analyze government response effectiveness in 30 online rumor cases, verifying the combined effect of response subjects, speed, and discourse features on rumor governance outcomes.

Scholars have increasingly adopted a process-oriented lens to map the lifecycle of public opinion. Using fuzzy-set qualitative comparative analysis (fsQCA), Li et al.

(2022) categorized reversal intensity across distinct developmental stages. This is complemented by Gao et al. (2025a), who modeled the interactive trajectories of governments, media, and netizens through initial, fluctuation, reversal, and stabilization phases. Zhang et al. (2025) further characterize this evolution as a phased interaction between audience attitude differentiation and media framing.

With the increasing complexity of digital discourse, fsQCA has emerged as a robust tool for identifying the configurational paths of reversals. Li et al. (2022) and Yu et al. (2025) have identified specific "generation types"—such as media-sensitive or government-investigation types—based on multi-case analyses. Similarly, Lü et al. (2022) applied these methods to sudden public health events, proving that the combination of multiple conditions, rather than isolated variables, determines the ultimate communicative path and heat of public opinion.

In terms of intervention, research emphasizes that response timeliness and feedback quality are critical to governance efficacy. Li & Cao (2020) and Liu et al. (2024) argue that "communicative" responses and multi-platform coordination significantly mitigate conflict. Regarding collaborative governance, Li (2025) and Zeng et al. (2025) emphasize that the synergy between political pressure, media participation, and public agendas is essential for resolving the dilemmas inherent in modern public opinion management.

3 Research Design and Methodology

3.1 Research Method

This paper addresses the configurational processes that resulted in online opinion shifts in regards to local governments. Its main task is to understand how various governance factors, in cooperative relations with each other in particular circumstances, stimulate the development of the social opinion in its initial form to its opposite form. Since this is the process that involves non-linear interactions as opposed to the isolated effects of individual variables then the standard linear regression models do not have the capabilities needed to model the concurrent causal complexity of the issue at hand.

As a result, this research uses fuzzy-set Qualitative Comparative Analysis (fsQCA). Multi-conditional pathways can be identified with the help of a configurational perspective, which is why fsQCA is the only theoretical approach that could be applied in explaining some complex socio-phenomenological issues. In public governance and communication studies, this methodology has been acknowledged to be capable of studying asymmetric causation and equifinality i.e. multiple combinations of factors resulting in identical outcomes.

3.2 Variable Selection and Measurement

Developed based on Collaborative Governance Theory and Public Opinion Life Cycle Theory, this paper creates a three-dimensional analysis framework to evaluate the process of the reversal of the opinions of the masses in the light of sudden incidents in the

public. It is a framework that contains seven antecedent variables that are categorized as follows and are defined as the following dimensions:

Governance Subject Behavior: This dimension reflects the response behaviours and the action of collaborative behaviour of institutional actors. It has four main indicators namely: initial release platform characteristics (the source authority being determined), the level of government intervention, timeliness of response (impacting spread of risk and attitude change), and extent of multi-subject collaborative action (the synergy between government, media, and the population being considered).

Public Opinion Communication Characteristics: The dimension is a measure of the intensity and the scale of dissemination of information. It includes the popularity of the event, and the level of media coverage, both of which are very essential environmental conditions of fermentation of the collective discourse and subsequent turning around.

Public Response Status: The dimension employs the level of public attention as a fundamental indicator, the intensity of netizen participation and emotional investment which is a critical element in the development of changes in opinion.

The time difference in changing the opinion of the population is the outcome variable of this kind of model. The use of the seven antecedent conditions with the aid of the tool of fsQCA is expected to uncover the key lines of collaborative dynamics that determine when and how strongly the opinion changes.

3.3 Antecedent Variables (Condition Variables)

- Initial Release Platform Attribute (X1)

Being the main information distribution channel in the time of sudden populistic events, the first place of release becomes the backbone of the source of information that predetermines the initial authority and credibility. With a fractured digital environment, the platform is an agenda-setter; authoritative platforms that contain a fact-checking service ensure people trust them, and non-authoritative (e.g., self-media or commercial media) tend to be more focused on rapidness than on its detection. This causes idles dangers of radical course changes in case of subsequent intervention by authoritative corrections.

Calibration: Events originating on authoritative platforms are assigned a value of 1, while those on non-authoritative platforms are assigned 0.

- Government Intervention Level (X2)

The government is the ultimate regulator in ruling the opinion of people. Direct intervention, which is manifested in official bulletins, formal investigations, and open disposal, modulators the information environment and forms the population of greater sensitivity to the reverted information. The effect of direct intervention is usually of greater authoritative endorsement meaning that strong changes of public sentiment are generated.

Calibration: Direct government intervention is assigned a value of 1; the absence of such intervention (relying on natural dissipation or private clarification) is assigned 0.

- Government Response Timeliness (X3)

This variable measures the government's perceptual and reactive capacity. Timely responses are critical for curbing misinformation and preventing the solidification of hostile public positions. Conversely, delayed responses amplify the "shock amplitude" of a reversal once it finally occurs.

Calibration: Based on the interval between the event and the first authoritative response:

1.00: ≤ 4 hours.

0.67: 4–24 hours.

0.33: 24–72 hours.

0.00: > 72 hours.

- Multi-Subject Collaborative Participation Level (X4)

Grounded in Collaborative Governance Theory, this indicator reflects the synergy between the government, media, and other stakeholders. A collaborative approach integrates resources and enhances the credibility of reversed information, whereas single-subject governance often fails to navigate high-uncertainty environments effectively.

Calibration: Participation by two or more distinct types of subjects is assigned 1; single-subject or non-collaborative governance is assigned 0.

- Event Popularity (X5)

Event popularity quantifies the communication scale and influence of an incident within the digital ecosystem. Higher popularity correlates with increased pressure for high-intensity reversals due to the heightened attention from the public and institutional actors.

Measurement: This study utilizes the Event Influence Index from Zhiwei Shijian, normalized to a 0–100 scale.

Calibration: Values (0, 0.33, 0.67, 1) are assigned via the quartile mean anchor method.

- Media Coverage Level (X6)

As an agenda-setting intermediary, the media serves as an amplifier of public discourse. Continuous, high-frequency reporting expands the social radiation of an event, intensifying the impact of a reversal when key information surfaces.

Measurement: Quantified by the number of reports across major channels via Zhiwei Shijian.

Calibration: Values (0, 0.33, 0.67, 1) are assigned via the quartile mean anchor method.

- Public Attention Level (X7)

This factor captures netizen engagement and emotional investment. High public attention creates an agglomeration effect, where public pressure can accelerate infor-

mation flow and influence handling processes. When authoritative facts eventually contradict initial public perceptions, a high-intensity reversal is triggered.

Measurement: Calculated based on the average communication speed (posts per hour) from Zhiwei Shijian.

Calibration: Values (0, 0.33, 0.67, 1) are assigned via the quartile mean anchor method.

3.4 Outcome Variable: Public Opinion Reversal Time Difference (Y)

The outcome variable Public Opinion Reversal Time Difference (Y) is that the interval in time(t) between the onset of focused discourse about some sudden occurrence in the population, and the ensuing structural change in the population mood after the issuance of authoritative clarification or critical facts. This is a measure of a proxy of the richness of the impact, the emotive volatility, and the systemic shock in the digital opinion spaces.

To quantify it, the point at which the event reaches the major heat of communication (peak dissemination) is the so-called starting point whereas the moment at which the authoritative authorities or mainstream media publish convincing information that triggers a clearly noticeable change in the population orientation is the so-called terminus. This study adopts a time-based operationalization anchored in the interval between peak public attention and authoritative clarification, which enables consistent cross-case comparison of reversal intensity in heterogeneous public opinion events.

Following the conventions of fuzzy-set qualitative comparative analysis (fsQCA), the time difference is calibrated to reflect the efficiency and intensity of the reversal. As shown in Table 1, the assignment rules for all condition and outcome variables are standardized to ensure analytical consistency. The assignment logic is as follows:

1.00: Reversal occurs within ≤ 12 hours.

0.67: Reversal occurs within 12–24 hours.

0.33: Reversal occurs within 24–72 hours.

0.00: Reversal occurs after > 72 hours.

Table 1. Variable Assignment Table.

Subject Name	Variable Name	Variable Assignment
Condition Variables	Initial release platform attribute (X1)	Authoritative platform = 1; Non-authoritative platform = 0
	Government intervention level (X2)	Government intervention = 1; No government intervention = 0
	Government response timeliness (X3)	Quartile mean anchor method
	Multi-subject collaborative participation level (X4)	Multiple subjects participating = 1; Single subject participating = 0
	Event popularity (X5)	Assigned by quartile mean anchor method
	Media coverage level (X6)	Assigned by quartile mean anchor method

Subject Name	Variable Name	Variable Assignment
Outcome Variable	Public attention level (X7)	Assigned by quartile mean anchor method
	Public opinion reversal intensity (Y)	Reversal within 12 hours = 1; Within 24 hours = 0.67; Within 24-72 hours = 0.33; More than 72 hours = 0

3.5 Case Selection and Data Acquisition

To ensure the robustness and validity of the configurational analysis, the cases selected for this study adhere to the following criteria:

Temporal Relevance: The sample comprises significant instances of online public opinion reversal involving sudden public events that occurred between 2023 and 2025. This timeframe ensures the analysis reflects the most recent dynamics of the digital media landscape.

Data Sourcing: Cases were systematically retrieved from prominent news portals and professional public opinion monitoring platforms, including Guanchacn.com, Phoenix Net, Sohu.com, and Yifang Software. These sources provide comprehensive longitudinal data necessary for tracing opinion shifts. The selected cases typically involve cross-platform diffusion across major Chinese social media ecosystems (e.g., Weibo, Wechat, red note, Douyin, and online news portals), ensuring that the analysis captures heterogeneous communication environments while maintaining comparability across cases.

Thematic Diversity: To enhance the representativeness and heterogeneity of the dataset, the selected cases span multiple critical domains, such as social security, public health, and livelihood security. This cross-sectoral approach ensures that the identified reversal paths are not limited to a single type of incident but possess broader explanatory power.

Detailed profiles for each of the selected cases are documented in Table 2.

Table 2. Case Information Table.

Serial Number	Year	Case Name	Serial Number	Year	Case Name
1	2025	Liaoning Kazuo refutes rumors of catering merchants contracting AIDS	19	2024	Police refute rumors of post-00s girl jumping into Erhai Lake
2	2025	Official refutes rumors of plane rushing to the street at Tianhe Airport	20	2024	Rumors that high-speed rail stations are being built in multiple places in Xinjiang
3	2025	Netizens spread false news of "free Chinese cabbage" leading to looting of 200 mu of Chinese cabbage in Chifeng by hundreds of people	21	2024	Tsinghua University refutes rumors that 80% of graduates go abroad

Serial Number	Year	Case Name	Serial Number	Year	Case Name
4	2025	AI-synthesized fake license plate "Wan K888888"	22	2024	Rumors that female college student was framed after saving the elderly
5	2025	Woman marrying into a foreign slum and asking for help to return to China is a staged show	23	2024	Rumors that pregnant woman is seeking marriage
6	2025	AI spreads rumors that "former president of Shanghai Huashan Hospital died abroad"	24	2024	Doctor's important reminder: "Infected with HPV after soaking in hot spring"
7	2025	Pang Donglai red underwear incident	25	2024	Police refute rumors that Wenzhou gang is the backer of northern Myanmar fraud gangs
8	2025	Netizens fabricate and spread false mortality rate of post-80s generation	26	2024	Official refutes rumors of receiving "2023 Q4 subsidy" by scanning QR code
9	2025	Sexual harassment incident at Wuhan University Library	27	2023	People's Bank of China Credit Bureau: All claims of providing credit repair and making profits from it are fraud
10	2024	12306 refutes rumors that Spring Festival ticket grabbing has started	28	2023	Multiple provinces refute rumors of "implementing retirement based on working years"
11	2024	Xiangtan University responds to rumors of student being poisoned for stealing takeout	29	2023	State Medical Security Administration refutes rumors of canceling individual accounts of employee medical insurance
12	2024	False charging standard of housing pension fund	30	2023	Hangzhou refutes rumors of banning live streaming with goods
13	2024	State Grid refutes rumors of electricity price increase on June 1	31	2023	Guangzhou Police refute rumors of "TNT explosion attack on subway"
14	2024	Blogger apologizes for spreading rumors of "Zhao Yazhi's death"	32	2023	China Tobacco refutes rumors of cigarette price increase
15	2024	Official refutes rumors of explosion in Songjiang, Shanghai	33	2023	Taiwan singer Liu Wenzheng passed away
16	2024	Haikou Police refute rumors of sexual assault incident in middle school	34	2023	Rat head and duck neck incident at Jiangxi Industry Polytechnic College
17	2024	Sanya refutes rumors of highly toxic Portuguese man-of-war appearing in multiple sea areas	35	2023	Suspected Chinese Electronics Technology Group employee confronting leader over overtime work
18	2024	Chongqing Police report "Pang Mao" jumping into the river incident	36	2023	Anhui "Qianbaiyi Grandpa" reversal incident

3.6 Data Calibration

The calibration of variables into fuzzy sets is executed by defining three critical qualitative anchors: full membership, the crossover point, and full non-membership. To ensure the methodological rigor of the fsQCA framework, distinct calibration strategies are applied based on the nature of the data. For continuous variables, these anchors are systematically derived using quartiles and interquartile ranges (IQR) to maintain objective thresholds. Conversely, binary variables are assigned values directly based on their inherent categorical attributes. The comprehensive criteria and rules governing these calibration procedures are detailed in Table 3.

Table 3. Data Calibration Rules.

Variable Name	Full Membership	Crossover Point	Full Non-Membership
Event popularity	70.61	65.98	61.35
Media coverage level	412.05	251.53	91.02
Public attention level	47.03	24.51	1

4 Data Analysis and Empirical Results

4.1 Necessity Analysis of Individual Antecedent Conditions

Prior to performing the configurational analysis, it is methodologically essential to conduct a Necessity Condition Test on the seven antecedent conditions hypothesized to influence the intensity of online public opinion reversal. These conditions include:

- X1: Initial Release Platform Attribute
- X2: Government Intervention Level
- X3: Government Response Timeliness
- X4: Multi-subject Collaborative Participation Level
- X5: Event Popularity
- X6: Media Coverage Level
- X7: Public Attention Level

In Qualitative Comparative Analysis (QCA), consistency and coverage serve as the primary evaluative metrics. Following established methodological standards, an antecedent condition is identified as "necessary" for the outcome if its consistency score exceeds the 0.90 threshold. A high consistency score indicates that the outcome (public opinion reversal) rarely occurs in the absence of that specific condition. The empirical results of the necessity test for each factor are presented in Table 4.

Table 4. Results of Consistency Test.

Condition	Consistency	Coverage
X1	0.1648	0.868
~X1	0.8352	0.7097
X2	0.8736	0.7423
~X2	0.1264	0.666
X3	0.645	0.7965

~X3	0.4176	0.7498
X4	0.4935	0.6842
~X4	0.5065	0.7847
X5	0.4556	0.6667
~X5	0.582	0.8517
X6	0.4681	0.685
~X6	0.5945	0.87
X7	0.4681	0.685
~X7	0.5695	0.8333

4.2 Analysis of Necessity Test Results

Empirical testing shows that the consistency scores of all antecedent condition and their corresponding negation are all below the 0.90 mark. Interestingly, the highest score of the consistency score was 0.8352 with absence of a non authoritative platform(X1), although this is insufficient to qualify as a necessary condition. These findings prove that no single factor has the independent explanatory capacity to ascertain the strength of the online opinion reversal. This confirms the aspect of configurational nature of the phenomenon law in that reversals are cause of interaction between numerous variables as opposed to dominance of a single one. The analysis is thus carried out to investigate the concurrent causal relationship, in a configurational outlook, between these variables, which are multi-dimensional.

4.3 Configuration Analysis of Sufficient Conditions

As presented in Table 5, this research applies the framework of the fsQCA to the analysis of different sets of antecedents, which determine the extent of public opinion change about local governments. The synthesis of parsimonious and intermediate solutions shows path equifinality is evident as the analysis reveals five sufficient configurations resulting in the reversal of opinion on the need to change the world.

The findings support the assertion that the reversal process is not conditional on a given mandatory state of affairs but rather the combinations of interactions in various situations. Among the five identified paths, the level of government involvement (X2) response timeliness (X3), event popularity (X5) and the public attention (X7) are frequent and will be instrumental in shaping the course of the discourse in the population.

Nonetheless, these variables are functionally variable in different configurations; some variables are central conditions in one-pathway and peripheral or marginal roles in others. Such fluctuation emphasizes the situational character of the reversal process, in which the efficiency of the governing and communication planning solutions is directly connected to the unique mix of external and internal environment of factors.

Table 5. Configuration Results of Public Opinion Reversal.

Conditional Variables	Configuration 1	Configuration 2	Configuration 3	Configuration 4	Configuration 5
X1		○	•		○
X2	•	•	•	•	○

X3	●		●	●	○
X4	○	•	○	○	○
X5	○	○	●	●	○
X6	○	○		●	●
X7	○	○	●	●	●
Raw Coverage	0.214882	0.3041	0.101367	0.177297	0.0504935
Unique Coverage	0.127183	0.3041	0.0129082	0.0512528	0.0504935
Consistency	1	0.827479	0.89	0.876173	1
Typical Cases	Kazuo, Liaoning: Refutation of Rumors That Catering Merchants Are Infected with AIDS	Official Refutation of Rumors That a Plane at Tianhe Airport Rushed to the Street	Netizens' False Claim of "Free Cabbages" Leading to Looting of 200 Mu of Cabbages in Chifeng	AI-synthesized Fake License Plate "Wan K888888"	Woman Marrying into a Foreign Slum and Begging to Return to China Was Staged
Total Coverage	0.671982				
Total Consistency	0.883675				

Note: According to QCA setting rules, ● and ○ indicate variables that appear in both the intermediate solution and the parsimonious solution, i.e., core conditions; • and ○ indicate variables that only appear in the intermediate solution, i.e., peripheral conditions; blank spaces indicate that the impact of the conditional variable on the outcome is negligible.

Government-led Collaborative Governance Model.

Configurations: Path 1(X2·X3·~X4·~X5·~X6·~X7) and Path 2 (~X1·X2·X4·~X5·~X6·~X7). This model determines the conditions of government intervention and response capacity as the central one, which happens in settings that are characterized by low heat of the events, low media attention, and low public awareness. In such cases, the mass opinion is still at the embryonic or early diffusion phase and it is devoid of strong emotional mobilization or mass communicative thrust. Such information gap gives the government departments large latitudes in terms of strategic direction.

The rational of this model is expressed through the concept that in cases where the information is still in the process of high-velocity diffusion, the state can successfully narrow the area of rumors spread. The government intervenes and releases the news in authoritative ways and by being the main source of information and arbitrator, dominates the voice. Examples of this form of configuration would be the Kazuo (Liaoning) AIDS rumor, the Erhai Lake jumping incident, and the 12306 Spring Festival ticket-clearing reports. Due to the reason that these events were not filled with a lengthy accumulation phase, the attitude of people was flexible. Thus, corrective mechanisms made a quick cognitive supply and a reversal pattern of high reversal speed and low reversal intensity came about. "

High-Heat Explanation and Correction-oriented Collaborative Governance Model.

Configurations: Path 3 ($X1 \cdot X2 \cdot X3 \sim X4 \cdot X5 \cdot X7$) and Path 4 ($X2 \cdot X3 \sim X4 \cdot X5 \cdot X6 \cdot X7$).

Increased event heat, great public attention, and broad media saturation are the characteristic features of this model. Despite the intervention of the government, its one-sided leadership is not without the current magnitude of the discourse. In such setups, non-authoritative platforms usually cause the incidences to occur and emotional mobilization can gain strength before any official response can be given.

According to this model when the general views may have reached a stage of deep emotional consideration ordinary governmental responses are unable to attain instant discursive positioning. Rather, the inversion is based on accrual or cumulative factual additive supplementation, recurrent correction of information and multi-subject interactions. Examples include the Chifeng - free cabbage - looting rumour, the housing pension fund false information and the Fat Cat - river-jumping report. The two cases analyzed had a considerable period of accumulation during which the mass opinion had developed to a high level of intensity. The movement of reversal in these situations was by a gradual and unstable concatenation with repetitive robustness of public opinion, combined with more successfully and successfully reversed profundity.

Media-Public-Led Alternative Governance Model.

Configuration: Path 5 ($\sim X1 \cdot \sim X2 \cdot \sim X3 \cdot \sim X4 \cdot \sim X5 \cdot X6 \cdot X7$).

The salient difference of this arrangement is that the government intervention is quite minimal ($\sim X2$, $\sim X3$), with media investigative reporting ($X6$) and the involvement of the people ($X7$) wielding as the key agents of opinion change. This model also manifests voters usually unnoticed incidents which are not the direct focus of the policy of the state and indicates the reversal mechanism prevents the occurrences of spontaneous fact-checking practices by the netizen community along with the reporting of the occasion by journalists.

The emotion-related heuristics and fast judgement tend to form the basis of the sentiment of the people in the newly emerged phases of such events. But, as truths start to be disclosed, the awareness that one has been hoodwinked or swindled into thinking some popular feeling merits the follow-up is what causes a drastic change in position. Examples of representative cases are staged marriage to a foreign slum case and the false news about the demise of singer Liu Wenzheng. These cases are marked by the high-grade mobilization of emotions followed by a considerable emotional distance after the reversal that leads to the dramatic effect of communication and emotional stroke to the field of opinion.

4.4 Evaluation of Configurational Validity

The empirical validity of the five pathways identified is supported by the fact that the cumulative coverage rate of the five pathways is 0.6720 showing that the model has explained 67.2 of the observed cases. Moreover, the total consistency value of 0.8837

greatly surpasses the academic value of 0.80, which proves that the model is quite reliable and fits best. These results support the very foundation, which is that the efficacy of online public opinion reversal is the synergy of multi-conditional synergy. Besides, the findings confirm the principle of equifinality, demonstrating the possibility of converging different causal paths to create the same structural results in the digital discourse.

4.5 Robustness Testing

A strong-test was performed to check the consistency of the research results following the accepted methodological pre-sets by modifying the anchors of data calibration. In specific, the original quartile-based anchoring had been substituted by a calibration standard of full non-membership (0.05) and full membership (0.95), and the rest of analytical parameters were kept at the same level.

The outcomes of this sensitivity analysis indicate that the number of configuration paths resulting to public opinion change did not change. Moreover, the structure of core conditions, that is, similar to X1, X2, and X4, did not show any significant deviations. The range of variation in consistency and coverage of all paths was also less than a very small 5% range which is sufficiently lower than the acceptable configurational variability. This attests to the fact that the outcome of the present study is very strong and that the inferences made are effective in the views of the underlying formation process of online opinion reversal.

5 Conclusions and Implications

The results show that changes in online public opinion are caused by many factors working together. No single factor can cause an opinion reversal on its own. Government response, media speed, and public participation do not work alone. Instead, different factors happen at the same time and influence each other. For this reason, similar results can come from different combinations of conditions, which shows that public opinion change is complex. In addition, the way public opinion changes depend on the situation. The study finds several main response patterns. Some patterns are led by the government, while others are led by the media and the public. When an event has not received much attention, quick government action can reduce the chance of a large opinion reversal. However, when an event is already widely discussed, the reversal is usually stronger and lasts longer. In such high-attention contexts, public attention should not be understood solely as an exogenous driver of reversal intensity. Rather, the analysis suggests the existence of a feedback loop between early governance responses and the escalation of public attention. In some cases, delayed, ambiguous, or silent early responses by local governments may stimulate speculation and emotional amplification, which in turn accelerate information diffusion and increase event virality. The resulting surge in public attention then generates heightened social and institutional pressure for iterative clarification and corrective communication, ultimately

contributing to high-intensity public opinion reversals. From a configurational perspective, public attention and response timeliness therefore function as mutually reinforcing conditions rather than as variables linked through a simple unidirectional causal relationship. Also, cooperation among different actors does not always reduce opinion reversal. The effect depends on when cooperation begins and how it is organized. At an early stage, cooperation helps create a clear message and keeps public emotions stable. But when information is already spreading quickly, too many voices without clear coordination can cause confusion and make the reversal stronger.

These findings provide useful guidance for local governments in managing online public opinion. First, attention should be given to the platform that releases the information first, because it sets the initial direction of the discussion. Many small accounts share emotional or false content to gain attention, which creates later problems. Therefore, local governments should use official accounts more actively, and mainstream media should release accurate information early to limit the spread of rumors. Second, governments should adjust their response based on the type and stage of public opinion reversal. If an event is still small, a fast response can guide public understanding. But if public anger is already high, a simple statement denying the information is not enough. In this case, officials should provide more facts and explain the situation step by step over time. Third, timing and key information are very important in public opinion management. If the government responds too late, public emotions may become stronger. Local governments should use data tools to monitor public opinion regularly and focus on major reports and new facts. Officials should communicate with the public early to prevent further escalation.

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