International Journal of Interdisciplinary Cultural Studies
ISSN: 2327-008X (Print), ISSN: 2327-2554 (Online)
Volume 21, Issue 2, 2026
https://cgscopus.com/index.php/journals

LEADERSHIP COLLABORATION MODEL IN DISASTER EMERGENCY RESPONSE IN WEST SUMATRA PROVINCE

Ramin Ramin[1]; Taufiqurokhman, Taufiqurokhman[2], Mamun Murod[3]
[1,2,3]Universitas Muhammadiyah Jakarta, Kampus B UMJ, Jalan K.H. Ahmad Dahlan, Cireundeu, Ciputat Timur, Kota Tangerang Selatan, Banten 15419, Indonesia.

Email: ramin_24010800032@student.umj.ac.id[1]; taufiqurokhman@umj.ac.id[2]; mamun.murod@umj.ac.id[3]

Abstract: This study aims to analyze the existing conditions of leadership collaboration, identify supporting and inhibiting factors, and produce an appropriate and adaptive leadership collaboration model in handling disaster emergency response in West Sumatra Province. The research uses a qualitative approach with a case study design to understand the leadership process and collaboration in the real context of disasters. The locus of the research is in West Sumatra Province, with a focus on handling emergency response involving local governments and various related actors. Informants were selected purposively based on authority, experience, knowledge, and direct involvement, with a total of 9 informants representing the provincial government, BPBD, TNI, Polri, Basarnas, PMI, community leaders, SOEs, and affected communities. Data was collected through in-depth interviews, observations, and documentation, then analyzed using interactive analysis through data condensation, data presentation, and conclusion drawing and verification. The results showed that leadership collaboration was ongoing, but not yet fully integrated. The resulting model integrated *self-directed teams*, *relational intelligence*, *power-sharing*, and *agility*. Recommendations include strengthening operational authority, information integration, alternative communication, cross-agency SOPs, joint exercises, and periodic evaluations. Recommendations are directed to build a joint response mechanism so that disaster management is faster, more integrated, and adaptive in a sustainable manner.

Keywords: Leadership Collaboration; Emergency Response; Disaster Management; Adaptive Leadership; West Sumatra.

INTRODUCTION

Disasters are a public problem that has a complex character because it requires quick decisions, resource mobilization, and cross-organizational coordination in a situation full of uncertainty. Emergency response management can no longer be understood as a function of one institution, but as a collective process that brings together local governments, the Regional Disaster Management Agency (BPBD), the TNI, the National Police, Basarnas, regional apparatus, health workers, community organizations, volunteers, the business world, and affected communities (Henry, 2025). The dissertation on which this writing is based shows that this complexity arises because each actor has different authorities, resources, procedures, and work systems, while decisions must be made within a very limited time span (Iserson, 2024).

International Journal of Interdisciplinary Cultural Studies
ISSN: 2327-008X (Print), ISSN: 2327-2554 (Online)
Volume 21, Issue 2, 2026
https://cgscopus.com/index.php/journals

This urgency is increasingly evident in West Sumatra Province which has various geographical characteristics and disaster risks, including earthquakes, tsunamis, floods, landslides, volcanic eruptions, forest and land fires, and hydrometeorological disasters (Mdinde, 2026). Data in the research paper shows that throughout 2025 there will be 75 forest and land fires, 37 floods, 15 extreme weather, two tidal waves/abrasion, and two landslides. The humanitarian impact is also significant: the flood disaster was recorded to cause 339,343 people to be affected and displaced, 337 people died or were missing, and 382 people were injured (Milner, 2024).

This condition shows that the effectiveness of emergency response is not solely determined by the availability of resources, but by the ability of leadership to integrate resources, information, authority, and capacities of various actors. The research findings in the dissertation also show that collaboration has actually taken place, but has not been fully integrated into a shared response system (Balaraju & Chandankhede, 2026). Obstacles that arise include differences in response speed, information that has not been integrated, communication that is not always stable, dependence on personal relationships, inuniformity of authority boundaries, and differences in communication systems. Thus, research on collaborative leadership is important to explain how leadership can transform dispersed capacities into rapid, integrated, and adaptive collective action (Harper et al., 2026).

Normatively, the implementation of disaster management in Indonesia has a strong legal foundation. The 1945 Constitution of the Republic of Indonesia Article 28H paragraph (1) provides a constitutional basis regarding the right of everyone to obtain a good and healthy environment and health services. Furthermore, Law Number 24 of 2007 concerning Disaster Management Article 4 emphasizes that disaster management aims to provide protection to the community, ensure the implementation of disaster management in a planned, integrated, coordinated, and comprehensive manner, and build public-private participation and partnerships (Bista, 2025). Article 5 stipulates that the government and local governments are responsible for the implementation of disaster management (Lu & Lee, 2023).

At the emergency response stage, Law Number 24 of 2007 Article 48 stipulates activities that include rapid and precise assessments, determination of emergency status, rescue and evacuation of affected communities, fulfillment of basic needs, protection of vulnerable groups, and immediate restoration of infrastructure and vital facilities. Furthermore, Article 49 stipulates that a rapid assessment is carried out to identify the scope of the disaster location, the number of victims, damage to infrastructure, disruption of public services, and resource capacity. Article 50 paragraph (1) provides easy access to BNPB and BPBD, including the deployment of personnel, equipment, logistics, procurement of goods/services, rescue, and command to order related sectors or institutions (Crosweller, 2024b).

International Journal of Interdisciplinary Cultural Studies
ISSN: 2327-008X (Print), ISSN: 2327-2554 (Online)
Volume 21, Issue 2, 2026
https://cgscopus.com/index.php/journals

This regulation is strengthened through Government Regulation Number 21 of 2008 concerning the Implementation of Disaster Management. Article 22 regulates the rapid and precise assessment of the emergency response period, while Article 23 paragraph (2) stipulates that the status of emergency at the provincial level is determined by the governor. In addition, the Regulation of the Head of BNPB Number 3 of 2016 concerning the Disaster Emergency Management Command System is an important instrument because it regulates the command system as a mechanism for integrating facilities, equipment, personnel, procedures, and communication in one emergency handling structure. The regulatory framework shows that the main problem is not the absence of rules, but how the formal authority is translated into operational leadership collaboration in the field (Crosweller, 2024c).

The literature on disaster governance has shifted from an approach that places the government as a single actor to a governance perspective that emphasizes interdependence between organizations. Previous studies summarized in the dissertation show that the effectiveness of disaster collaboration is influenced by communication, information exchange, trust, resource sharing, shared procedures, and adaptability to change (Nihoul et al., 2023). For example, shows that limited information exchange, lack of uniformity in procedures, limited resources, low trust, and organizational barriers can hinder collaboration; conversely, shared vision, collaboration frameworks, open organizational culture, and technological support can strengthen it (McIntyre, 2023).

Research shows that the structure of collaborative governance in disaster response can change according to the characteristics of the event, while Tang et al. (2021) highlight the importance of *joint decision making* and *joint implementation* in producing effective collaboration (Ulutaş et al., 2026). Emphasizes the relevance of collaborative governance in Indonesia's disaster management, especially the need for government and non-government coordination, but still uses a literature review and secondary data (Keravnos & Kafa, 2026). Develop a network perspective by examining risk perceptions in collaboration between organizations. Meanwhile, based on more than 1,500 volunteers in Norway, show that the effectiveness of the response is influenced by leadership, communication, technology, as well as a combination of hierarchical and network mechanisms (Mushi, 2025b).

More specific developments can be seen in the concept of Collaborative Leadership used in this study through the four dimensions of Al-Khayari et al. (2024), namely self-directed teams, relational intelligence, power-sharing, and agility. These four dimensions provide a more operational perspective on how leadership works in an environment that involves many actors. However, the development of the *state of the art* still leaves room to connect the four dimensions integratively in the context of regional disaster response in Indonesia (Striepe et al., 2023).

International Journal of Interdisciplinary Cultural Studies
ISSN: 2327-008X (Print), ISSN: 2327-2554 (Online)
Volume 21, Issue 2, 2026
https://cgscopus.com/index.php/journals

The main problem of this research departs from the tension between the need for a clear command and the need for cross-organizational collaboration. In emergency response conditions, decisions must be quick and have a clear line of responsibility. However, not all actors needed are in one hierarchical structure (Utomo & Nadia, 2024). The TNI, Polri, Basarnas, local governments, community organizations, volunteers, the business world, and the community have their own mandates and capacities. Therefore, emergency response leadership cannot only rely on vertical instructions, but must also be able to build horizontal relationships, trust, information exchange, and agreement on joint actions (Keravnos & Kafa, 2026).

Empirical problems found in West Sumatra show that cooperation between actors has taken place, but has not completely resulted in an integrated response pattern. Differences in response tempos, limited information integration, unstable communication, not always uniform authority boundaries, and reliance on personal relationships are problems that can affect the effectiveness of responses (Matchak, 2025). At the same time, the different geographical conditions of West Sumatra between coastal, mountainous, urban, and other areas cause the handling pattern to not be fully standardized (Baker, 2023).

Thus, the research problem is not just whether collaboration occurs, but how leadership orchestrates such collaboration when information changes, time is limited, resources are uneven, and decisions must be made immediately. This question becomes increasingly relevant because the command systems that have been normatively available do not automatically guarantee the creation of joint action in practice (Crosweller, 2024a).

The *research gap* can be identified at three levels. First, most previous studies have emphasized collaborative governance, interorganizational coordination, networking, or response effectiveness, while the leadership dimension that drives collaboration operationally has not received comparable attention. Second, previous research has used quantitative surveys, network analysis, simulations, or literature reviews so that it has not fully explained the leadership process as it takes place in a real and dynamic context (Mushi, 2025a). Third, there have not been many studies that specifically integrate *self-directed teams, relational intelligence, power-sharing,* and *agility* into a single response mechanism in the context of disaster management at the Indonesian provincial level (Bigodza & Asamoah, 2024).

The gap became clearer research was compared with this study. Khafian places collaborative governance as an important perspective in Indonesia's disaster management, but it is based on literature and secondary data (Doğuş et al., 2025). This study moves further by using empirical data from the field in West Sumatra and placing collaborative leadership as the focus of the analysis. Similarly, Important in showing the relationship between leadership, communication, networking, and response effectiveness, but the study uses a quantitative approach in the Norwegian context (Sahlin et al., 2025).

International Journal of Interdisciplinary Cultural Studies
ISSN: 2327-008X (Print), ISSN: 2327-2554 (Online)
Volume 21, Issue 2, 2026
https://cgscopus.com/index.php/journals

Therefore, the main gap of this study lies in the need to build a contextual, empirical, and adaptive collaborative leadership model, capable of explaining how actors build relationships, divide authority, make room for field teams, and adjust decisions on an ongoing basis.

Based on these problems and gaps, this study aims to develop an empirical and conceptual understanding of the Leadership Collaboration Model in Handling Disaster Emergency Response in West Sumatra Province (Moulin & Soncin, 2024). In particular, the research is directed at three main objectives. First, to analyze and describe the existing conditions of leadership collaboration in handling disaster emergency response. Second, to identify and analyze the factors that support and hinder the continuation of leadership collaboration. Third, to produce an appropriate and adaptive leadership collaboration model in accordance with the characteristics of disaster management in West Sumatra. The formulation of these objectives is consistent with the research objectives in the dissertation (Shawe, 2023).

Analytically, these goals are realized through four main dimensions, namely self-directed teams, relational intelligence, power-sharing, and agility. *Self-directed teams* are used to understand the team's capacity to take actions independently but remain in a coordinated manner; *relational intelligence* to see the ability to build communication, trust, and relationships between actors; *power-sharing* to analyze the distribution of authority, responsibility, and decision-making space; while *agility* is used to explain the ability to make adjustments to changes in emergency situations (Ruiz, 2025).

The research does not stop at the mapping of actors or descriptions of coordination, but seeks to explain the leadership mechanisms that make collaboration move from mere interorganizational relationships to responsive and adaptive collective actions. The main contribution of this research lies in the development of the concept of collaborative leadership towards adaptive collaborative leadership in the context of disaster emergency response (Heikonen & Ahtiainen, 2024). This novelty arises because the four dimensions of Al-Khayari et al. (2024) are not treated as stand-alone constructs, but are integrated into a series of response mechanisms. Based on the findings of the research, these relationships can be understood through the flow of relational intelligence → power-sharing → self-directed teams → agility. The relationship explains that effective relationships and communication are the basis for the division of authority; the right authority provides space for the team to act; while agility ensures that decisions can be adjusted when field conditions change (M. et al., 2025).

The second novelty is mechanistic. This research develops coordination from mere activities bringing together actors to a joint response cycle that includes incident information, initial assessment, coordination activation, division of roles and authority, field actions, information updates, decision adjustments, and response evaluation. Thus, the contribution of research is not only theoretical for the study of *collaborative governance* and public leadership, but also practical for local governments and BPBDs in building a more integrated response system (Senan & Mavoori, 2026).

International Journal of Interdisciplinary Cultural Studies
ISSN: 2327-008X (Print), ISSN: 2327-2554 (Online)
Volume 21, Issue 2, 2026
https://cgscopus.com/index.php/journals

The model is expected to strengthen coordination, accelerate communication and decision-making, optimize resource utilization, and improve emergency response synergy. More broadly, the contribution of the research lies in efforts to bridge formal command structures with adaptive collaborative capacities, so that leadership functions not only as an instructional provider, but as a liaison, integrator, and director of various capacities scattered among disaster management actors (Mukherjee & Kumar, 2026).

The research can be formulated as follows: regulations provide authority and structure, collaborative governance provides a mechanism for inter-stakeholder relationships, while adaptive collaborative leadership provides a leadership mechanism to transform these relationships, authority, information, and resources into a fast, integrated, and adaptive disaster response (Abuka, 2024). This framework is the basis for the scientific argument of the article entitled *"Leadership Collaboration Model in Handling Disaster Emergency Response in West Sumatra Province."*

The literature review of this research rests on two main perspectives, namely Collaborative Governance and Collaborative Leadership. The *Collaborative Governance* perspective according explains that solving complex public problems requires a collaborative process between stakeholders through dialogue, trust, commitment, and mutual understanding. This perspective is relevant because disaster emergency response involves the government, BPBD, TNI/Polri, Basarnas, district/city governments, private sectors, volunteers, communities, and communities (Adanne & Yongliang, 2026). However, this study places *Collaborative Leadership* as a more applicable theory because successful collaboration requires leadership that is able to connect and mobilize various actors in rapidly changing conditions (Degbey, 2025).

More specifically develop *Collaborative Leadership* through four dimensions, namely self-directed teams, relational intelligence, power-sharing, and agility. *Self-directed teams* describe the ability of teams to act independently but remain coordinated; *relational intelligence* is related to the ability to build relationships, communication, and trust; *power-sharing* emphasizes the distribution of authority and responsibility; while *agility* shows the ability to adjust decisions to changing situations (Obolensky, 2024a).

Previous studies have shown the importance of *joint decision-making*, *joint implementation*, resource exchange, trust, and interorganizational relationships in disaster response. Emphasized the importance of *collaborative governance* in Indonesia's disaster management, while showed that inter-organizational partnership strategies need to be adjusted to disaster conditions. However, there are still gaps because previous research has not adequately integrated the four dimensions of *Collaborative Leadership* into a single region-based adaptive response mechanism (Fu et al., 2024b).

International Journal of Interdisciplinary Cultural Studies
ISSN: 2327-008X (Print), ISSN: 2327-2554 (Online)
Volume 21, Issue 2, 2026
https://cgscopus.com/index.php/journals

The conceptual framework of the research places Collaborative Leadership as a core process that integrates *relational intelligence → power-sharing → self-directed teams → agility*, then results in a more coordinated, fast, and adaptive emergency response response. Because the research uses a qualitative approach of case studies, the more methodologically appropriate terms are propositions, not statistical hypotheses (Khadka et al., 2024). The main propositions are: P1: *relational intelligence* strengthens collaboration between actors; P2: *power-sharing* improves joint decision-making capabilities; P3: *self-directed teams* accelerating operational actions; and P4: *agility* allows decision adjustments to disaster dynamics. The integration of the four forms adaptive collaborative leadership as a new model of emergency response handling in West Sumatra Province (Du & Shaw, 2026).

METHODOLOGY

The research uses a qualitative approach with the design of the case study. The selection of the design is based on the character of the research problem which is oriented towards an in-depth understanding of how leadership collaboration takes place in disaster emergency response situations. The research is not directed to test the relationships between variables statistically, but to understand the processes, interactions, experiences, and mechanisms that occur among the various actors involved (Angellica & Sandi, 2025). The case study was chosen because the phenomenon of leadership cannot be separated from the context of the disaster that surrounds it (Koch et al., 2025). The locus of the research is West Sumatra Province, with a focus on the implementation of emergency response involving local governments and various related actors (Lipscombe et al., 2023).

This design allows researchers to gain a contextual understanding of the relationship between institutional structure, authority, resources, communication, and decision-making dynamics. The focus of the analysis uses the four dimensions *of Collaborative Leadership* developed namely self-directed teams, relational intelligence, power-sharing, and agility. The four dimensions are used to understand the team's ability to work independently but in a coordinated manner, the ability to build relationships, the distribution of authority, and the capacity to adapt to changing emergency conditions (Li & Wang, 2024).

Operationally, the research is directed to answer three analytical needs: describing the existing conditions of leadership collaboration, finding supporting and inhibiting factors, and developing an appropriate and adaptive leadership collaboration model. Thus, the research design is not only descriptive, but also allows the process of interpretation, synthesis, and model development based on empirical findings (gera, 2026).

The research uses a qualitative approach, so that *the terms population and sample* are more accurately understood as informants and data sources. A total of 9 informants were selected purposively, including the provincial government, BPBD, TNI, Polri, Basarnas, PMI, community leaders, SOEs, and affected communities. The selection was based on authority, experience, knowledge, and direct involvement in the leadership process and collaboration in disaster

International Journal of Interdisciplinary Cultural Studies
ISSN: 2327-008X (Print), ISSN: 2327-2554 (Online)
Volume 21, Issue 2, 2026
https://cgscopus.com/index.php/journals

emergency response. Each group was selected because they had different experiences and positions in the decision-making process, coordination, resource mobilization, services, and receiving assistance (Valendez & Paglinawan, 2026). This multiactor approach is important to avoid dependence on the perspective of one institution and allows researchers to compare the experiences of government actors, officials, supporting organizations, and the community.

The locus is not only limited to government offices, but also includes spaces where collaboration takes place, both at the provincial and district/city levels that experience disasters. The selection of deepening locations is carried out purposively by considering the intensity of the event, the number of affected communities, the variety of types of disasters, and the experience of handling emergencies. With this strategy, the research analysis unit is placed in the process of leadership collaboration, while the informant functions as a source of experience and information about the process (Jogade, 2025).

Data collection was carried out through three main techniques, namely in-depth interviews, observations, and documentation. Interviews became the main source of data and were conducted in a semi-structured manner. Interview guidelines were structured based on the focus of the research, but were not used rigidly so that informants had space to explain their experiences and factual conditions (Moore et al., 2023). Questions included how teams work and make decisions, relationships and communication between actors, the division of authority and responsibility, and the ability to adapt actions when disaster situations change (North-Samardzic et al., 2024).

Observation is used to see the collaboration process directly, especially in coordination meeting activities, post activities, emergency response implementation, division of tasks, cross-organizational communication, and decision-making. This technique serves to compare the information submitted by informants with practices that take place in the field (Hamsaruddin et al., 2026). Documentation is used to strengthen data through regulations, policies, institutional structures, SOPs, contingency plans, incident reports, emergency response reports, coordination minutes, data on victims or affected communities, and documentation of activities (Thomson et al., 2023).

In this qualitative research, variables and measurement are not used in the sense of quantitative variables and measurement scales. Instead, four analytical dimensions/themes are used, namely *self-directed teams, relational intelligence, power-sharing*, and *agility*. The research instruments consist of interview guidelines, observation sheets, and document review formats (North-Samardzic et al., 2023). Primary data were obtained from actors involved in decision-making, coordination, implementation, and emergency response support, while secondary data came from official documents of local governments, BPBD, district/city governments, and related institutions.

International Journal of Interdisciplinary Cultural Studies
ISSN: 2327-008X (Print), ISSN: 2327-2554 (Online)
Volume 21, Issue 2, 2026
https://cgscopus.com/index.php/journals

Data analysis uses interactive data analysis, which includes three main processes: data condensation, data display, and conclusion drawing/verification. The first stage is data condensation, which is selecting, focusing, simplifying, and grouping data based on its relevance to the research problem (Calderon-Orellana, 2026). Interview, observation, and documentation data are first organized and coded to find common meanings and form categories or themes (Gadolin et al., 2023).

In the next stage, the data is presented in the form of narratives, matrices, tables, and interthematic relationships. The perspectives of the various actors are then compared to identify similarities, differences, and patterns of interaction in the collaborative process. The analysis looks not only at the actions of each organization, but also how the actors build relationships, exchange information, divide authority, make decisions, and adjust actions when conditions change (Raei, 2024).

The final stage is the withdrawal and verification of conclusions. Conclusions are not immediately established, but are continuously tested through the comparison of interview data, observations, and documents. The process produces three analytical outputs: an overview of existing conditions, identification of supporting and inhibiting factors, and synthesis to build a Leadership Collaboration Model. The model is constructed from empirical evidence, patterns of inter-stakeholder relationships, and needs found in the field, rather than solely based on the researchers' assumptions (Sururi et al., 2026).

In qualitative research, the quality of data is not primarily assessed through statistical validity and reliability tests as quantitative research. Therefore, the strategy used is cross-source verification through interviews, observations, and documentation. Interviews are used to capture the experiences and perceptions of actors; observations are used to look at actual practices; while documentation is used to examine and reinforce information (Danish, 2025).

Strengthening credibility is carried out by comparing information from various informant groups. The perspective of local governments, BPBD, TNI, Polri, Basarnas, PLN, PMI, village governments, and the community is not treated as automatically the same information, but is analyzed comparatively to find patterns and differences. This strategy is important because the phenomenon of collaboration has a multidimensional character and can be perceived differently by each actor (McPhail, 2023).

In addition, the initial conclusions are re-verified using various data sources so that the research results do not depend only on one informant. Thus, credibility is strengthened through triangulation of sources and techniques, while the consistency of the analysis process is maintained through documentation of the stages of data collection, *coding*, categorization, data presentation, and conclusion verification (Salisbury, 2024). This approach supports the traceability of the research process and increases confidence in the resulting model.

International Journal of Interdisciplinary Cultural Studies
ISSN: 2327-008X (Print), ISSN: 2327-2554 (Online)
Volume 21, Issue 2, 2026
https://cgscopus.com/index.php/journals

The ethical aspect is placed as an important part of the research process because some of the data is obtained from individuals who have direct experience in emergency response situations. Interviews are conducted by paying attention to the consent of the informant; specifically, the recording of the interview is carried out after obtaining the consent of the informant, then transcribed into textual data for analysis purposes (Wardhani, 2025).

The ethical principles of research are directed at respecting the participation of informants, using data only for research purposes, and presenting information responsibly. Researchers also need to distinguish factual information from interpretation so as not to cause false attribution to certain individuals or organizations. In the context of disaster research, this principle is becoming increasingly important because information about weak coordination, limited resources, emergency decisions, and community experiences can have institutional and social consequences (Hekyka et al., 2025).

RESULTS

Leadership Collaboration Model in Handling Disaster Emergency Response in West Sumatra Province

The results of the study show that leadership collaboration in handling disaster emergency response in West Sumatra Province has taken place through the involvement of various actors, but has not been fully integrated into a joint response system. The findings were obtained through in-depth interviews with nine informants representing the Regional Secretary of West Sumatra Province, BPBD, TNI, Polri, Basarnas, PMI, community leaders, state-owned enterprises, and affected communities. The composition of the informants allowed the research to obtain diverse perspectives, ranging from strategic decision-making and coordination to operational experience and community needs in the field. In the interview, the Regional Secretary emphasized that disaster management cannot be carried out by one institution and requires the ability of all parties to move at the same time and goal. This view was reinforced by the BPBD informant who explained that the handling mechanism is available, but its implementation faces rapid changes in needs and field conditions.

In the dimension of self-directed teams, the results of the interviews show that various organizations basically have the ability to move independently according to their respective competencies. BPBD has the capacity to quickly assess and operate, the TNI has personnel support and regional structures, the National Police carries out security functions and traffic management, Basarnas carries out search and rescue, PMI provides humanitarian support, while the community is often the first to know the conditions at the scene. Field findings show that independence is an important force, especially when decisions must be made quickly. However, independence has not always been followed by role integration. The community even said that in certain situations several parties can be present at the same time, but it is not always clear who is responsible for certain types of assistance. This condition shows that *self-directed teams* need clear boundaries of authority and coordination mechanisms so that the speed of action does not cause overlap.

International Journal of Interdisciplinary Cultural Studies
ISSN: 2327-008X (Print), ISSN: 2327-2554 (Online)
Volume 21, Issue 2, 2026
https://cgscopus.com/index.php/journals

In the relational intelligence dimension, the interviews showed that relationships between actors in general have developed through coordination and experience of working together. Informants from PMI explained that disaster management involves the government, BPBD, TNI, Polri, Basarnas, PMI, volunteers, the business world, and the community. These working relationships are social capital that facilitates communication when emergencies occur. However, research found that some collaborative relationships are still strongly influenced by personal experiences and relationships. Therefore, trust has not been fully institutionalized into a formal work mechanism. The informant also emphasized that relationships and trust should ideally be built before disasters through exercises, coordination, and joint activities, not only when an emergency has occurred.

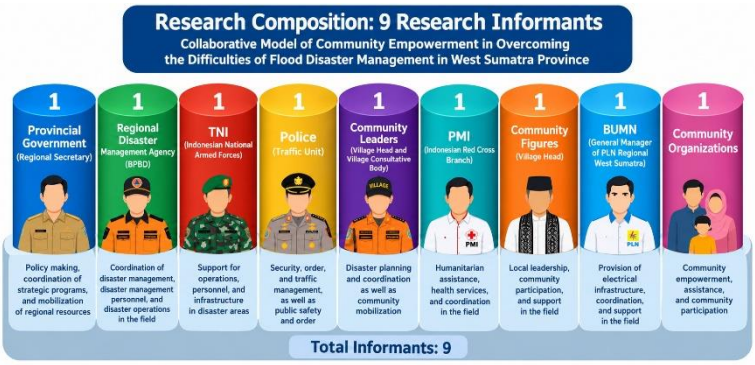
In the power-sharing dimension, the results of the interviews show that each organization already has duties and authorities according to its field, but the boundaries of operational authority between institutions still need to be clarified. Local governments play a role in government policy and coordination, BPBD carries out disaster handling and coordination functions, the TNI provides operational support, the National Police runs traffic security and regulation, Basarnas handles search and rescue, PMI supports humanitarian aspects, while PLN supports power grid recovery. Problems arise when several areas are affected simultaneously or when decisions must be made immediately. Informants emphasized the need for a division of authority that allows strategic decisions to remain with the leadership, while certain operational decisions can be delegated to the team closest to the disaster site.

In the agility dimension, the findings show that adaptability is a key need because disaster conditions can change rapidly. The National Police informant described that when incidents occur simultaneously in several locations, the need for personnel, vehicles, communication tools, and other resources increases, so that it is necessary to determine priorities quickly. The BPBD informant also emphasized that the problem is not only having an SOP, but how the SOP can be applied in real conditions that continue to change. Thus, *agility* not only means moving quickly, but also the ability to receive new information, evaluate conditions, change priorities, and adjust decisions without losing the main goal of disaster management.

Based on the overall findings, the leadership collaboration model developed places relational intelligence, power-sharing, self-directed teams, and agility as interrelated dimensions. Strong relationships and communication build trust as the basis for the division of authority; clear division of authority provides room for field teams to act; while adaptability ensures that decisions can be updated when information and conditions change. Operationally, the model mechanism includes incident information → initial assessment → activation of coordination → division of roles and authority → field actions → information update → decision adjustment → response evaluation. This model strengthens information integration, clarifies operational authority, provides decision-making space to field teams, and provides communication mechanisms and continuous decision adjustments.

International Journal of Interdisciplinary Cultural Studies
ISSN: 2327-008X (Print), ISSN: 2327-2554 (Online)
Volume 21, Issue 2, 2026
https://cgscopus.com/index.php/journals

Thus, the novelty of the model lies in the effort to connect the team's ability to act independently with inter-stakeholder relationships, the division of authority, and adaptability in a single collaborative leadership mechanism. The model does not replace existing command structures, but connects them through more integrated collaboration mechanisms. The ultimate orientation is to form a faster, integrated, responsive, and adaptive disaster response, with shared information support, cross-agency coordination, proportionate authority, joint exercises, and continuous evaluation.



Remarks: A model of leadership collaboration in disaster emergency response in West Sumatra Province shows that the success of the response depends not only on inter-stakeholder coordination, but also on the ability to build relationships, divide authority, provide decision-making space to field teams, and adapt to changing situations. These four elements form a faster, integrated, and adaptive response mechanism.

Research Propositions and Key Findings of the Emergency Response Leadership Collaboration Model

In this study, no statistical hypothesis testing was carried out because the approach used was qualitative. As a substitute for the hypothesis, the research uses propositions as a conceptual direction to understand the phenomenon in depth. The first proposition emphasizes that leadership collaboration is reflected through the ability to build independent teams, inter-stakeholder relationships, division of authority, and adaptability. The second proposition focuses on the supporting and inhibiting factors of collaboration, while the third proposition directs the formation of an adaptive collaboration model.

The results of the study provide empirical support for the three propositions through field findings, not through *t-statistical* values, *p-values*, or statistical coefficients. Collaboration between actors has been ongoing and is supported by relatively good relationships, coordination, joint work experience, and resource support. However, obstacles are still found in the form of differences in response speed, information that has not been integrated, unstable communication, dependence on personal relationships, and not yet uniform limits of authority.

International Journal of Interdisciplinary Cultural Studies
ISSN: 2327-008X (Print), ISSN: 2327-2554 (Online)
Volume 21, Issue 2, 2026
https://cgscopus.com/index.php/journals

The main findings show that the problem of emergency response does not lie in the absence of collaboration, but in the lack of optimal mechanisms that unite actors in the same work tempo, information base, authority, and decision adjustment. Therefore, the four dimensions of *collaborative leadership*, namely *self-directed teams*, *relational intelligence*, *power-sharing*, and *agility*, are integrated into operational mechanisms to produce faster, more integrated, and adaptive responses.

Remarks: The diagram depicts the research flow systematically, starting from the context and propositions of the research, then analyzed through the four dimensions of *collaborative leadership*, namely *self-directed teams*, *relational intelligence*, *power-sharing*, and *agility*. Empirical findings are used to build a collaborative cycle that results in a faster, integrated, adaptive disaster response, and supported by continuous evaluation and learning.

DISCUSSION

Interpretation of PCN Implementation Findings and Their Comparison with Previous Research

The results of the study show that the implementation of *Parking Charge Notices* (PCN) in the East Jakarta Administrative City needs to be understood as a socio-technical governance process. The PCN not only functions as an enforcement instrument against parking violations, but is part of a mechanism that brings together institutional capacity, digital technology, regulation, communication, and community response. The research uses administrative data to read the patterns, characteristics, and typologies of implementation, then deepens the process through qualitative data (Fu et al., 2024a). This approach shows that implementation variations cannot be explained only based on the frequency of enforcement, location, time, or vehicle characteristics, but also related to institutional conditions and inter-stakeholder relationships.

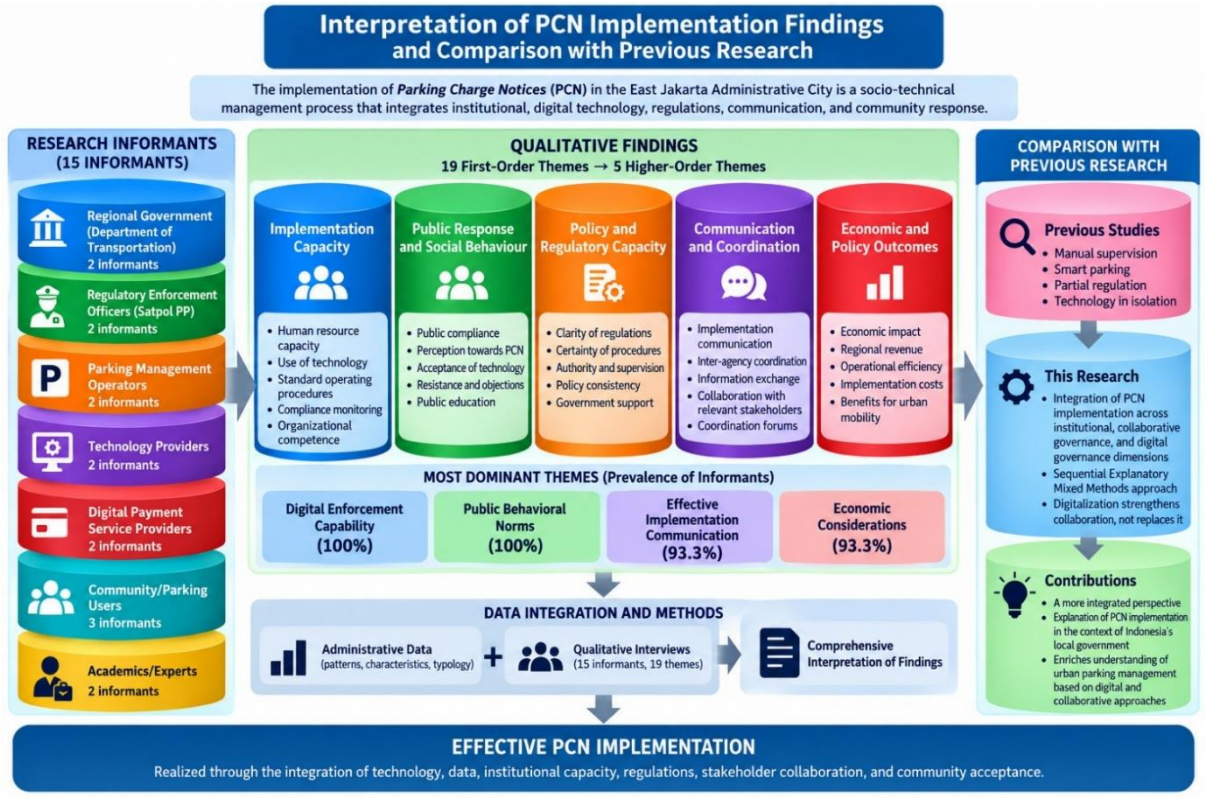
Qualitative findings strengthened this interpretation. From the 15 informants, 19 *first-order themes* were obtained which were grouped into five *higher-order themes*, namely *Implementation Capacity, Public Response and Social Behaviour, Policy and Regulatory*

International Journal of Interdisciplinary Cultural Studies
ISSN: 2327-008X (Print), ISSN: 2327-2554 (Online)
Volume 21, Issue 2, 2026
https://cgscopus.com/index.php/journals

Capacity, Communication and Coordination, and *Economic and Policy Outcomes*. *Digital Enforcement Capability* and *Public Behavioral Norms* were the most dominant themes, each mentioned by all informants. *Effective Implementation Communication* and *Economic Considerations* also have a high prevalence of 93.3 percent. This condition shows that the success of PCN implementation is not only determined by the existence of a digital system, but also by organizational capabilities, policy clarity, communication, personnel adequacy, and public acceptance (Obolensky, 2024b).

Compared to previous research, this study expands the study of parking management by connecting aspects of policy implementation, *Collaborative Governance*, and *Digital Governance* in one analytical framework. Previous studies have placed *smart parking*, regulation, technology, or parking management as relatively separate focuses. This study presents a more integrative perspective because it views PCN as an implementation process that involves technology, institutional capacity, coordination, regulation, inter-stakeholder relations, and community response (Siemieniec, 2025).

The advantages of this approach are increasingly seen through the use *of Sequential Explanatory Mixed Methods*. Administrative data is used first to identify patterns, characteristics, and typologies of PCN implementation, then the results are deepened through interviews to explain the processes and conditions behind them. Thus, digitalization does not replace institutional collaboration, but strengthens information exchange, coordination, supervision, and decision-making. This approach results in a more comprehensive understanding of PCN implementation in the context of Indonesian local government



International Journal of Interdisciplinary Cultural Studies
ISSN: 2327-008X (Print), ISSN: 2327-2554 (Online)
Volume 21, Issue 2, 2026
https://cgscopus.com/index.php/journals

Remarks: The diagram shows that the implementation of PCN is a socio-technical governance process that integrates institutional capacity, digital technology, regulation, communication, and community response. Interview data from 15 informants resulted in 19 themes grouped into five main domains. These findings are then compared with previous research to confirm that digitalization serves to strengthen collaboration, coordination, information exchange, and decision-making in urban parking management.

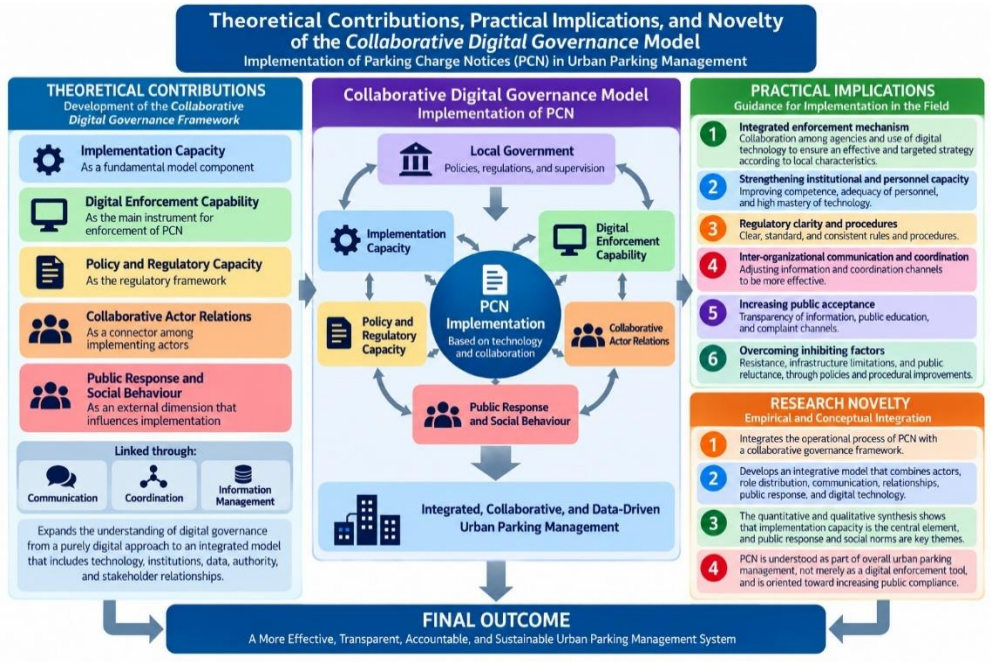
Theoretical Contributions, Practical Implications, and Novelties of the Collaborative Digital Governance Model

The theoretical contribution of the research lies in the development *of the Collaborative Digital Governance* framework to explain the implementation of PCN as a technology-based public policy. This model places implementation capacity as the foundation, *Digital Enforcement Capability* as the main instrument, *Policy and Regulatory Capacity* as the regulatory framework, *Collaborative Actor Relations* as a liaison between implementers, and *Public Response and Social Behavior* as external dimensions that affect the implementation process (Krishnan, 2025). The five components are connected through communication, coordination, and information management. With this structure, the research expands the understanding *of digital governance* from just digitizing services to integrating technology, institutions, data, authority, and relationships between actors in urban policy enforcement.

Practically, the results of the study show that local governments need to develop an integrated and evidence-based PCN enforcement mechanism. Administrative data can be used to understand differences in location characteristics so that operational strategies can be adjusted to regional conditions without changing policy standards. At the same time, governments need to strengthen digital capacity, personnel adequacy, regulatory clarity, implementation communication, cross-organizational coordination, and community acceptance. Inhibiting factors such as resistance to enforcement, limited parking infrastructure, public information gaps, and weak procedural clarity must be addressed through governance improvements, not just the addition of technology (Goula, 2026).

The novelty of the research lies in the empirical and conceptual integration between PCN operational data and collaborative governance dynamics. The research produced a model that views PCN implementation as a process that connects the configuration of actors, role sharing, communication and coordination, public relations and response, and the implementation of enforcement (Ladkin, 2023). Quantitative and qualitative synthesis shows that implementation capacity is the most central domain, while digital enforcement capabilities and community behavior norms are the most powerful themes in the empirical network. Therefore, PCN is understood not as a stand-alone administrative action, but as part of an integrated, collaborative, data-based, and community-oriented urban parking governance that is oriented towards improving community compliance.

International Journal of Interdisciplinary Cultural Studies
ISSN: 2327-008X (Print), ISSN: 2327-2554 (Online)
Volume 21, Issue 2, 2026
https://cgscopus.com/index.php/journals



Remarks: The diagram illustrates the linkages between theoretical contributions, practical implications, and research novelty in the development of *Collaborative Digital Governance*. Theoretically, the model integrates implementation capacity, digital enforcement capabilities, regulation, inter-stakeholder relations, and community response. In practice, the model emphasizes capacity building, coordination, regulation, data integration, and public acceptance to realize effective, transparent, collaborative, and data-driven parking management (Lee & Yoo, 2026).

CONCLUSION

Based on the overall results of the study, the implementation of *Parking Charge Notices* (PCN) in the East Jakarta Administrative City shows that digital-based parking enforcement is a process that involves the dimensions of policy, institutional, technology, coordination, and community response simultaneously. This study emphasizes that PCN cannot be understood only as an instrument for notifying violations, but as part of an urban parking governance mechanism that requires integration between implementing capacity, digital technology, regulations, inter-stakeholder relations, and community behavior.

Empirically, the study shows that the implementation of PCN has heterogeneous characteristics based on location, time, enforcement intensity, and vehicle characteristics. Analysis of administrative data results in different location typologies, so enforcement implementation should not use a completely uniform approach across regions. Operational strategies can be adjusted to site characteristics, while policy standards and provisions are maintained. These findings demonstrate the importance of using administrative data as a basis for decision-making and determining more contextual surveillance strategies.

International Journal of Interdisciplinary Cultural Studies
ISSN: 2327-008X (Print), ISSN: 2327-2554 (Online)
Volume 21, Issue 2, 2026
https://cgscopus.com/index.php/journals

In the qualitative stage, 15 informants produced 19 *first-order themes* which were then grouped into five *higher-order themes*, namely *Implementation Capacity, Public Response and Social Behaviour, Policy and Regulatory Capacity, Communication and Coordination,* and *Economic and Policy Outcomes*. *Digital Enforcement Capability* and *Public Behavioral Norms* are the most dominant themes with a prevalence of 100 percent each. These findings show that the implementation of PCN is closely related to digital capabilities as well as people's responses and behaviors.

The results of quantitative and qualitative integration subsequently resulted in a Collaborative Digital Governance Model that places *Implementation Capacity* as the foundation, *Digital Enforcement Capability* as the main instrument, and connects it with *Policy and Regulatory Capacity, Collaborative Actor Relations*, and *Public Response and Social Behavior*. The five components work through communication, coordination, and information management. Thus, the main conclusion of the study is that the implementation of PCN is a socio-technical governance process whose success is determined by the integration of technology, data, institutional capacity, regulation, collaboration between actors, and public acceptance.

Based on the findings of the research, the first recommendation is directed at strengthening implementation capacity as the main foundation for the implementation of PCN. Local governments need to ensure the adequacy and distribution of personnel in accordance with the characteristics of the enforcement location, as well as improve the ability of officers in the use of digital technology, violation verification, enforcement administration, and communication with the community. Capacity building is not enough to be done through additional personnel, but also through strengthening competencies and standardizing work procedures. The findings of the study show that *Implementation Capacity* is the most central domain in the PCN implementation network, so capacity improvement needs to be placed as a policy priority.

The second recommendation is to build digital and data integration across organizations. PCN systems need to be developed towards mechanisms capable of connecting data on the location of violations, enforcement times, vehicle types, identification of violations, issuance of notifications, payments, complaints, and compliance monitoring. The integration needs to be supported by the same data standards, system interoperability, regulation of access rights, information security, and periodic data update mechanisms. Thus, technology not only functions as a recording tool, but also becomes an instrument for data-driven decision-making. The findings of the study show that *Digital Enforcement Capability* is one of the most central themes in the implementation network.

The third recommendation is related to strengthening collaboration between actors. Local governments need to clarify the configuration of roles, authorities, responsibilities, and coordination mechanisms between government agencies, law enforcement officials, parking managers, technology providers, and other supporting parties. Collaboration patterns need to be outlined in joint SOPs, information exchange mechanisms, coordination forums, and cross-

organizational performance indicators. This is important because the findings of the study show that implementation communication has been relatively developed, but coordination between organizations has not been fully integrated.

The fourth recommendation is directed at increasing public acceptance and compliance. The government needs to provide clear information about the reasons for issuing PCNs, the basis of rules, payment obligations, deadlines, and the mechanism for objections and complaints. With these steps, *the Collaborative Digital Governance* model can evolve from just digital enforcement to a more integrated, transparent, accountable, and data-based urban parking governance.

REFERENCEE

Abuka, C. A. (2024). Collaborative Leadership in Disaster Mitigation Development in Australia. In *The Scholarship Without Borders Journal* (Vol. 3, Nomor 1). Pepperdine Libraries. https://doi.org/10.57229/2834-2267.1059

Adanne, E. F., & Yongliang, C. (2026). Culturally Adaptive Strategic Leadership in educational crises: A mixed-methods study of the COVID-19 experience in Nigerian secondary schools. In *Educational Management Administration & Leadership*. SAGE Publications. https://doi.org/10.1177/17411432261456048

Angellica, S., & Sandi, H. H. (2025). The Effect of of Transformational Leadership on Employee Engagement Through Career Development on Employees of PT PLN (Persero) West Sumatra Distribution Main Unit. In *International Journal of Economics and Management Research* (Vol. 3, Nomor 3, hal. 136–143). Politeknik Pratama Purwokerto. https://doi.org/10.55606/ijemr.v3i3.411

Baker, J. (2023). Concluding Adaptive Leadership. In *Adaptive Leadership*. SAGE Publications, Inc. https://doi.org/10.4135/9781071908402

Balaraju, V., & Chandankhede, P. H. (2026). AI-Based Decision Support Systems for Disaster Management and Emergency Response. In *AI-Driven Leadership and Cross-Sector Collaboration: Emerging Technologies for Innovation, Sustainability, and Digital Transformation* (hal. 157–178). Resnova Academic Press. https://doi.org/10.65470/resnova.9788168816060.08

Bigodza, E. K., & Asamoah, K. (2024). *Servant Leadership in Crisis Management: Leadership Response in the Management of Covid-19 Pandemic in Ghana*. Elsevier BV. https://doi.org/10.2139/ssrn.4743688

BISTA, P. (2025). Nursing leadership in Pandemic: Insights from Nepal's COVID-19 Response. In *Health Emergency and Disaster Nursing* (Vol. 12, Nomor 1, hal. 91). Disaster Nursing Global Leader Degree Program. https://doi.org/10.24298/hedn.2024-abst05

Calderon-Orellana, M. (2026). Stress in Social Work: A Comparative Analysis of Occupational Stress Among Social Service Professionals in Disaster Contexts. In *Human Service Organizations: Management, Leadership & Governance* (hal. 1–14). Informa UK Limited. https://doi.org/10.1080/23303131.2026.2684515

Crosweller, M. (2024a). *Compassion in Disaster Management*. Routledge. https://doi.org/10.4324/9781003499510

Crosweller, M. (2024b). Introducing Relational Leadership. In *Compassion in Disaster Management* (hal. 56–76). Routledge. https://doi.org/10.4324/9781003499510-4

Crosweller, M. (2024c). The Leadership Dilemma. In *Compassion in Disaster Management* (hal. 17–55). Routledge. https://doi.org/10.4324/9781003499510-3

Danish, F. (2025). Adaptive Leadership in Crisis: Bahrain's Crown Prince and the COVID-19

Response. In *African Journal of Biomedical Research*. Green Publication. https://doi.org/10.53555/ajbr.v27i5s.7505

Degbey, W. Y. (2025). Collaborative Leadership. In *Elgar Encyclopedia of Leadership* (hal. 30–31). Edward Elgar Publishing. https://doi.org/10.4337/9781035307074.00018

Doğuş, Y., Doğan, E., & Çevik, M. S. (2025). How does leadership team coherence affect collaborative learning and academic optimism in a centralized education system? In *Educational Management Administration & Leadership*. SAGE Publications. https://doi.org/10.1177/17411432251339711

Du, Q., & Shaw, R. (2026). JVOAD: Civil Society Leadership in Coordinated Disaster Response in Japan. In *Disaster Risk Reduction* (hal. 139–157). Springer Nature Singapore. https://doi.org/10.1007/978-981-92-2846-1_7

Fu, B., Liang, X., Wen, X., Zhang, S., & Cheng, Q. (2024a). *Construction of an Urban Collaborative Emergency Response Network Based on a Disaster Chain: An Example of Typhoon Disaster in Fujian Province*. Springer Science and Business Media LLC. https://doi.org/10.21203/rs.3.rs-4586935/v1

Fu, B., Liang, X., Wen, X., Zhang, S., & Cheng, Q. (2024b). *Construction of Urban Collaborative Emergency Response Networkbased on Disaster Chain: An Example of Typhoon Disaster in Fujianprovince*. Elsevier BV. https://doi.org/10.2139/ssrn.4768266

Gadolin, C., Andersson, T., & Stockhult, H. (2023). Complexity Leadership in a Public Sector Context: Exploring Adaptive Leadership Practices. In *Change Management: An International Journal* (Vol. 23, Nomor 2, hal. 63–81). Common Ground Research Networks. https://doi.org/10.18848/2327-798x/cgp/v23i02/63-81

gera, shivansh. (2026). *CrisisConnect: A Web-Based Disaster Management and Emergency Response System*. Springer Science and Business Media LLC. https://doi.org/10.21203/rs.3.rs-9589516/v1

Goula, A. (2026). Brain adaptive leadership. In *Elgar Concise Encyclopedia of Neuroscience and Management* (hal. 33–36). Edward Elgar Publishing. https://doi.org/10.4337/9781035332892.00015

Hamsaruddin, D. R. P., Mahmuddin, Hamzah, A. A., Syamsuddin, & Kahar, A. (2026). Muhammadiyah's Disaster Emergency Response during the 2025 Sumatra Floods and Landslides. In *JAWI* (Vol. 9, Nomor 1, hal. 32–41). Raden Intan State Islamic University of Lampung. https://doi.org/10.24042/00202693125200

Harper, S., Skidmore, K. L., & Kaye, A. D. (2026). Anesthesiology Disaster Management and Emergency Preparedness. In *Operating Room Leadership and Perioperative Practice Management* (hal. 449–458). Cambridge University Press. https://doi.org/10.1017/9781009467414.047

Heikonen, L., & Ahtiainen, R. (2024). Interrelations between teachers' perceptions of school leadership group practices and collaborative school development in Finland. In *Educational Management Administration & Leadership* (Vol. 53, Nomor 5, hal. 1258–1276). SAGE Publications. https://doi.org/10.1177/17411432241268987

Hekyka, S., Nurdin, S., Sabri, A., & Zalnur, M. (2025). The leadership of madrasah principals in improving teacher performance in West Sumatra. In *Educenter : Jurnal Ilmiah Pendidikan* (Vol. 4, Nomor 2, hal. 235–245). Arka Institute. https://doi.org/10.55904/educenter.v4i2.1506

Henry, A. E. (2025). Strategic Leadership. In *Understanding Strategic Management*. Oxford University Press. https://doi.org/10.1093/hebz/9780198910893.003.0011

Iserson, K. V. (2024). Integrating Disaster Response Tools for Clinical Leadership. In *Western Journal of Emergency Medicine* (Vol. 26, Nomor 1). California Digital Library (CDL).

https://doi.org/10.5811/westjem.35390

Jogade, A. (2025). Orchestrating Urgency: Leadership in Emergency Protocols Through Administrative-Clinical Synergy. In *Orchestrating Urgency: Leadership in Emergency Protocols Through Administrative-Clinical Synergy* (Vol. 2, Nomor 2). Max Healthcare Institute Limited. https://doi.org/10.62830/mmj2-02-6a

Keravnos, N., & Kafa, A. (2026). Beyond the school principal: collaborative leadership as relational practice in school improvement. In *School Leadership & Management* (hal. 1–25). Informa UK Limited. https://doi.org/10.1080/13632434.2026.2693571

Khadka, S., Subedi, P., Indrasena, B. S. H., Lamsal, D., & Aylott, J. (2024). Collaborative leadership to empower nurses to implement ABCDE emergency nursing in an emergency department in Nepal. In *Leadership in Health Services* (Vol. 37, Nomor 4, hal. 477–498). Emerald. https://doi.org/10.1108/lhs-12-2023-0100

Koch, H., Ndevu, Z., & Kidd, M. (2025). Employee Engagement in the City of Ekurhuleni Disaster and Emergency Management Services. In *Administratio Publica* (Vol. 33, Nomor 3, hal. 41–64). Association of Southern African Schools and Departments of Public Administration and Management. https://doi.org/10.61967/adminpub.2025.33.3.3

Krishnan, G. (2025). *Adaptive Leadership Toolkit*. Elsevier BV. https://doi.org/10.2139/ssrn.5350169

Ladkin, D. (2023). Leadership, Management and Headship. In *Leadership*. SAGE Publications Ltd. https://doi.org/10.4135/9781036231651.n2

Lee, H. M. L. H. M., & Yoo, B. T. Y. B. T. (2026). How Safety Leadership Influences Behavior and Occupational Burnout: Insights from Korea's Chemical Facilities. In *Crisis and Emergency Management: Theory and Praxis* (Vol. 16, Nomor 3, hal. 35–43). Crisis and Emergency Management: Theory and Praxis. https://doi.org/10.14251/jscm.2026.3.35

Li, H., & Wang, H. (2024). Directing or Not? An Adaptive Leadership Perspective on Directive Leadership. In *Academy of Management Proceedings* (Vol. 2024, Nomor 1). Academy of Management. https://doi.org/10.5465/amproc.2024.14795abstract

Lipscombe, K., Buckley-Walker, K., & Tindall-Ford, S. (2023). Middle leaders' facilitation of teacher learning in collaborative teams. In *School Leadership & Management* (Vol. 43, Nomor 3, hal. 301–321). Informa UK Limited. https://doi.org/10.1080/13632434.2023.2215803

Lu, W., & Lee, J. E. (2023). Improvement of Government Leadership for Climate Crisis Response: Focusing on New Media Communication. In *Crisis and Emergency Management: Theory and Praxis* (Vol. 13, Nomor 7, hal. 37–47). Crisis and Emergency Management: Theory and Praxis. https://doi.org/10.14251/jscm.2023.7.37

M., V., RoselinKiruba, R., Shritharanyaa, J. P., & Sarah, S. (2025). Enhancing Healthcare Management With Emotional Intelligence and Collaborative Leadership Through Chatbot Integration. In *Chatbots in Educational Leadership and Management* (hal. 205–234). IGI Global Scientific Publishing. https://doi.org/10.4018/979-8-3693-8734-4.ch009

Matchak, E. J. (2025). Leading through disaster: A case study of the response to the Francis Scott Key Bridge in Baltimore collapse on March 26, 2024, and Governor Wes Moore's charismatic leadership. In *Journal of Emergency Management* (Vol. 23, Nomor 6, hal. 765–783). Weston Medical Publishing. https://doi.org/10.5055/jem.0934

McIntyre, K. (2023). Leadership emotion: how leaders influence employee wellbeing and performance in the disaster and emergency management context. In *Australian Journal of Emergency Management* (Vol. 10, hal. 60–63). Australian Institute for Disaster Resilience. https://doi.org/10.47389/38.1.60

McPhail, I. P. (2023). Team Building Through Collaborative Leadership and Strategic Planning.

In *Team Leadership in Community Colleges* (hal. 95–107). Routledge. https://doi.org/10.4324/9781003447498-6

Mdinde, E. B. (2026). The mediating role of adaptive expertise in the relationship between transformational leadership and teacher collaborative professionalism in Tanzanian schools. In *Educational Management Administration & Leadership*. SAGE Publications. https://doi.org/10.1177/17411432261466508

Milner, V. (2024). Leadership and Management in Disaster Response and Recovery. In *The Routledge International Handbook of Social Work and Disaster Practice* (hal. 271–282). Routledge. https://doi.org/10.4324/9781003309208-23

Moore, J., Elliott, I. C., & Hesselgreaves, H. (2023). Collaborative Leadership in Integrated Care Systems; Creating Leadership for the Common Good. In *Journal of Change Management* (Vol. 23, Nomor 4, hal. 358–373). Informa UK Limited. https://doi.org/10.1080/14697017.2023.2261126

Moulin, L., & Soncin, M. (2024). Digital instructional leadership and teaching practices in an emergency context: Evidence from Italy. In *Educational Management Administration & Leadership* (Vol. 54, Nomor 2, hal. 325–344). SAGE Publications. https://doi.org/10.1177/17411432241259824

Mukherjee, A., & Kumar, S. (2026). Crisis management and emergency response. In *Organizational Resilience and Artificial Intelligence* (hal. 89–122). CRC Press. https://doi.org/10.1201/9781003597520-5

Mushi, N. L. (2025a). *The Assessment of Institutional Frameworks Effectiveness and their Influence on Collaborative Strategies toward Effective Disaster Management and Emergency Response in Tanzania * Elsevier BV. https://doi.org/10.2139/ssrn.5505259

Mushi, N. L. (2025b). The Assessment of Institutional Frameworks Effectiveness and Their Influence on Collaborative Strategies Toward Effective Disaster Management and Emergency Response in Tanzania. In *Journal of Clinical, Medical, and Diagnostic Research* (Vol. 3, Nomor 1, hal. 1–9). Opast Group LLC. https://doi.org/10.33140/jcmdr.03.01.01

Nihoul, J. A., Miralles, F., & Neamtu, L. (2023). Understanding response to perturbations in collaborative projects from a complex generative and adaptive systems perspective. In *Project Leadership and Society* (Vol. 4, hal. 100106). Elsevier BV. https://doi.org/10.1016/j.plas.2023.100106

North-Samardzic, A., Kan, M., & Edwards, G. (2023). Leadership by cavea: The social processes of interorganisational collaborative leadership. In *Journal of Management & Organization* (Vol. 30, Nomor 4, hal. 1119–1135). Cambridge University Press (CUP). https://doi.org/10.1017/jmo.2023.42

North-Samardzic, A., Kan, M., & Edwards, G. (2024). Leadership by cavea: The social processes of interorganisational collaborative leadership – ERRATUM. In *Journal of Management & Organization* (Vol. 30, Nomor 4, hal. 1136–1137). Cambridge University Press (CUP). https://doi.org/10.1017/jmo.2024.4

Obolensky, N. (2024a). Complex Adaptive Leadership in Action. In *Complex Adaptive Leadership* (hal. 165–186). Routledge. https://doi.org/10.4324/9781003578109-15

Obolensky, N. (2024b). What is Leadership Anyway? In *Complex Adaptive Leadership* (hal. 143–154). Routledge. https://doi.org/10.4324/9781003578109-13

Raei, M. (2024). Adaptive Leadership and Spirituality. In *Leadership at the Spiritual Edge* (hal. 34–51). Routledge. https://doi.org/10.4324/9781003396741-4

Ruiz, L. M. (2025). Leadership, communication, and negotiation in collaborative management

environments. In *Sustainable Manage Transformation: Leadership, Organization: Intelligence, and Sustaina in the Postmodern Era (English Version)*. South American Publishing. https://doi.org/10.62486/978-9915-9851-7-6.ch01

Sahlin, S., Sjöstrand, M., Styf, M., & Lund, S. (2025). Swedish principals' adaptive leadership in unprecedented times: Learnings from the pandemic experiences. In *Educational Management Administration & Leadership*. SAGE Publications. https://doi.org/10.1177/17411432251339791

Salisbury, M. (2024). Employ Collaborative Leadership. In *Leadership in the Era of AI* (hal. 10–13). Routledge. https://doi.org/10.4324/9781003506591-4

Senan, M. H., & Mavoori, H. (2026). *Strategic Leadership Under Extreme Uncertainty Phase-Contingent Hybrid Governance in Disaster Response Networks*. Elsevier BV. https://doi.org/10.2139/ssrn.6218786

Shawe, R. (2023). Communication, Leadership, and Organizational Skills in Emergency Response. In *Open Journal of Business and Management* (Vol. 11, Nomor 6, hal. 2868–2874). Scientific Research Publishing, Inc. https://doi.org/10.4236/ojbm.2023.116158

Siemieniec, B. (2025). Arnold Schwarzenegger as an Example of Adaptive Leadership: Between the Body, Narrative, and Political Transformation. In *Journal of Leadership in Sport and Management* (Vol. 1, Nomor 1). Journal of Leadership in Sport and Management. https://doi.org/10.66666/jlsm007

Striepe, M., Thompson, P., Robertson, S., Devi, M., Gurr, D., Longmuir, F., Taylor, A., & Cunningham, C. (2023). Responsive, adaptive, and future-centred leadership in response to crisis: findings from Australia, Fiji, and New Zealand. In *School Leadership & Management* (Vol. 43, Nomor 2, hal. 104–124). Informa UK Limited. https://doi.org/10.1080/13632434.2023.2171005

Sururi, R. A., Sinaga, R. J., Sinaga, R. J., & Tampubulon, S. M. (2026). Policy Communication Model Based on Collaborative Governance for Hydrometeorological Disaster Mitigation in West Sumatra Province. In *Contemporary Public Administration Review* (Vol. 4, Nomor 1, hal. 48–63). LPPM UNPAR. https://doi.org/10.26593/copar.v4i1.10687

Thomson, S. B., Roache, D., & Muschette, R. (2023). Leadership and Crisis Management for Businesses Globally: The Role of Leadership in Business Sustainability in a Crisis Environment. In *International Handbook of Disaster Research* (hal. 2511–2518). Springer Nature Singapore. https://doi.org/10.1007/978-981-19-8388-7_203

Ulutaş, B., Torun, Y., & Uğur, N. (2026). School leadership in (poly)crisis: Navigating the intersection of migration and disaster. In *Educational Management Administration & Leadership*. SAGE Publications. https://doi.org/10.1177/17411432261483840

Utomo, B., & Nadia, F. (2024). The Visionary Leadership of Pesantren: Adaptive Strategies in Response to the Pesantren Law. In *Development: Studies in Educational Management and Leadership* (Vol. 3, Nomor 2, hal. 103–116). Institute Agama Islam Negeri Lhokseumawe. https://doi.org/10.47766/development.v3i2.3389

Valendez, H. J. B., & Paglinawan, J. L. (2026). Collaborative Leadership Ability, Futuristic Thinking Capability, And Emergency Preparedness on Strategic Leadership of School Administrators. In *International Journal of Research and Innovation in Social Science* (Vol. 10, Nomor 4, hal. 7148–7163). RSIS International. https://doi.org/10.47772/ijriss.2026.100400509

Wardhani, W. N. R. (2025). Disaster management leadership and intrinsic motivation towards improving human resources performance of the regional disaster management agency of Jepara Regency. In *Business, Accounting, and Knowledge Journal* (Vol. 1, Nomor 2). Universitas Pekalongan. https://doi.org/10.31941/batik.v1i2.335