

RESEARCH PAPER**OPEN ACCESS****In the line of fire: Unmasking the institutional challenges in the bureau of fire protection****Mhelen Grace F. Libre, Nancy E. Aranjuez****Jose Rizal Memorial State University and Roman C. Villalon Memorial Colleges Foundation, Inc., Kibawe, Bukidnon, Philippines***Key words:** Fire marshals, Institutional challenges, Leadership adaptation, Bureau of fire protection, Self-efficacy**Received Date:** January 23, 2026**Published Date:** February 06, 2026**DOI:** <https://dx.doi.org/10.12692/ijb/28.2.53-74>**ABSTRACT**

This study explored the lived experiences and institutional challenges faced by Fire Marshals in the Bureau of Fire Protection (BFP) in Zamboanga del Sur and Zamboanga Sibugay. Using a descriptive phenomenological approach, ten Fire Marshals were interviewed to capture their struggles and coping strategies amidst persistent shortages of manpower, equipment, and funds. Guided by Fiedler's Contingency Management Theory, Scott's Institutional Theory, and Bandura's Self-Efficacy Theory, the research revealed fourteen emergent themes, including resource challenges, leadership adjustments, workload impacts, professional transformation, and collective support systems. Findings showed that while institutional barriers such as delayed procurement, insufficient budget allocation, and overlapping responsibilities negatively affected operations, Fire Marshals demonstrated resilience, adaptability, and innovation in leadership. They coped through improvisation, teamwork, stakeholder coordination, and role restructuring, which enhanced their leadership growth and public service commitment. The study concludes that Fire Marshals embody resilience within structurally constrained institutions, where leadership is tested but strengthened by adversity. Recommendations include strengthening leadership training, increasing LGU and DILG support, integrating wellness programs, and linking fire safety with livelihood initiatives. These results highlight the urgent need for systemic reforms while recognizing the human dimension of leadership in fire protection services.

***Corresponding author:** Nancy E. Aranjuez ✉ nancyaranjuez@jrmsu.edu.ph✉ <https://orcid.org/0000-0001-7944-9633>

INTRODUCTION

In a complicated environment marked by changing work practices, societal expectations, technology breakthroughs, and crisis management, high-ranking officials have led organizations.

In today's ever-changing organizational landscape, their experiences highlight the value of flexibility, moral leadership, and an emphasis on worker well-being. Firefighters have a range of duties that extend beyond merely extinguishing fires and protecting lives and property. Beyond fire prevention, fire marshals engage in investigations, risk assessments, and public education.

They are also engaged in customer service, evaluating building designs, carrying out fire safety inspections, and conducting search-and-rescue operations (Veszpremi and Pantya, 2021). The arrival of the fire department at the scene of the fire was delayed due to obstacles encountered and information provided by the person who reported the incident (Villa, 2021). This study aims to examine and explore the experiences faced by Fire Marshalls and how these experiences affect their performance and duty; thereby gaining a deeper understanding of the coping strategies they implement to address these institutional difficulties.

Santos (2021) highlights that the difficulties confronted by firefighters while performing search and rescue operations and responding to fire incidents can hinder their efficiency and inadequate performance can lead to increased damage, making it nearly impossible to save lives impacted by the fire incident and emergency preparedness. De Castro (2023) further noted that in addition to the challenges faced in their operational areas, firefighters also deal with issues like threats from confused residents and the necessity to juggle multiple tasks at once. Cabarrubias (2023) also states that these concerns are raised by other fire stations across the nation, noting that these difficulties are worsened by civilian interference during firefighting efforts.

Existing studies offered important perspectives on the stressors and experiences faced by personnel of the Bureau of Fire Protection. To fill the gap identified in this study, a qualitative methodology was utilized to examine the institutional challenges that these personnel encountered, how these challenges significantly affect their responsibilities, and how they manage these difficulties. This research aimed to deliver a thorough understanding of their experiences and resilience. It significantly contributes to the current knowledge surrounding the personnel as well as the community, while also providing a framework for actionable solutions tailored to the specific problems faced by the residents of Zamboanga del Sur. By exploring the challenges and coping mechanisms they utilize, this study will help close the knowledge gap in this area, along with offering practical suggestions to the Bureau of Fire Protection, law enforcement, and community leaders.

MATERIALS AND METHODS

This study employed a descriptive phenomenological qualitative design to explore the lived experiences, challenges, and coping mechanisms of Fire Marshals in the Bureau of Fire Protection (BFP) within the Zamboanga Peninsula. This design was selected to capture the essence of participants' experiences and interpret their meanings within institutional and operational contexts. The phenomenological method, as emphasized by Creswell and Poth (2018), focuses on describing the commonalities of lived experiences to arrive at a shared understanding of a phenomenon. Through this approach, the study examined how Fire Marshals navigate administrative, logistical, and leadership challenges while ensuring adherence to BFP protocols.

The research was conducted across selected fire stations in the municipalities of Aurora, Ramon Magsaysay, Tukuran, Dumalinao, Tigbau, and Guipos in Zamboanga del Sur, as well as Buug, Diplahan, and Imelda in Zamboanga Sibugay. These areas were chosen due to their frequent fire-related incidents and active engagement in rescue and emergency operations, providing a rich context for exploring the

realities of fire service leadership. Each site presented distinct operational challenges shaped by geography, population density, and resource allocation, allowing the researcher to gather diverse yet contextually grounded perspectives. A total of ten (10) Fire Marshals served as participants, selected through purposive sampling based on inclusion criteria such as at least three years of service, direct supervision of personnel and station operations, and willingness to participate voluntarily. This number aligns with the phenomenological principle of data saturation, ensuring sufficient depth and variation of responses. Data were collected through semi-structured interviews, allowing participants to narrate their personal and professional experiences in leading their respective fire stations. Each session was conducted in a respectful and confidential setting, with prior informed consent obtained from all participants.

The primary data-gathering instrument was an interview guide containing open-ended questions categorized into four main areas: (1) experiences of Fire Marshals, (2) challenges encountered, (3) coping strategies, and (4) recommendations for institutional improvement. The instrument underwent expert validation by three field specialists in criminology, leadership studies, and qualitative research, resulting in a Content Validity Index (CVI) of 0.82, indicating high content relevance and clarity. Thematic content analysis, following the six-phase model of Braun and Clarke (as cited in Aranjuez, 2025), was employed to identify recurring patterns, categorize responses into themes, and interpret their meanings in relation to institutional challenges and adaptive leadership practices. Data analysis followed six systematic stages: familiarization, coding, theme generation, reviewing, defining, and reporting. Verbatim transcriptions of interviews were reviewed repeatedly to ensure data integrity. Patterns of meaning were clustered into themes representing leadership struggles, resource constraints, operational stress, and adaptive coping mechanisms. Credibility and trustworthiness were established through member checking, data triangulation, and peer debriefing, ensuring that interpretations authentically reflected

participants' experiences and that analytical rigor was consistently upheld.

The study strictly adhered to the ethical standards set by the Jose Rizal Memorial State University Research Ethics Committee (JRMSU-REC) and the Philippine Health Research Ethics Board (PHREB). Participants were treated with respect, fairness, and dignity in accordance with the principles of respect for persons, beneficence, and justice. Prior to data collection, formal approval was obtained from the University Ethics Committee, and written permission was secured from the Bureau of Fire Protection regional and municipal offices. All participants were fully informed of the study's purpose, procedures, and voluntary nature through an Informed Consent Form, which outlined their right to refuse or withdraw participation at any time without repercussions. Confidentiality and anonymity were maintained by assigning codes instead of names and removing any identifiable information from transcripts and reports. Audio recordings and data files were securely stored in password-protected devices accessible only to the researcher and were permanently deleted after transcription and validation.

RESULTS AND DISCUSSION

This section presents the analysis of the data gathered through in-depth interviews with personnel of the Bureau of Fire Protection (BFP), who served as key informants of the study. The analysis followed Braun and Clarke's thematic analysis, as cited in Aranjuez (2025) and Bacroya and Aranjuez (2025), to capture both the essence and implications of the participants' lived experiences. The presentation is structured based on the specific statements of the problem, with a synthesis of key insights provided at the end.

As a descriptive phenomenological study, the data analysis emphasized the participants' first-hand experiences of institutional challenges within the BFP. The researcher employed horizontalization, treating each statement with equal importance (Alipoyo, 2022). All interviews were audio-recorded, transcribed verbatim, and carefully reviewed to

ensure accuracy and authenticity, thereby preserving the depth of the participants' narratives.

The next step involved identifying significant statements directly related to the phenomenon of institutional challenges in the Bureau of Fire Protection. These statements were clustered into meaningful units and grouped into themes, highlighting recurring patterns and shared perspectives. This process ensured that the participants' unique voices were maintained while excluding redundant or non-essential information. These fourteen (14) emergent themes are formulated as answers to the sub-problems and are summarized as follows:

I. EXPERIENCES OF A FIRE MARSHAL

The responses to the interview established the lived experiences of fire marshal in their daily engagement with their work. Five emerging themes were discovered in the study, such as:

Resource Challenges, Institutional Challenges, Leadership Adjustments Amidst Constraints, Impact on Workload and Responsibilities, and Effects on Personnel and Operations. The following terms were covered comprehensively below:

Resource issues

This theme deals with how Fire Marshals confront day-to-day shortfalls in personnel, equipment, facilities, and community engagement while carrying the pressure of prevention, response, and accountability. As stated by Participant 1:

“My experience during my time as a Fire Marshal is that about the fire incident, one residential building in front of the school, and one individual did a live on Facebook and the viewers keep on commenting and saying that the fire response personnel is too slow, on our side, we cannot response on time since there is no reported incident nor a call on our hotline about the incident.

But, on the other hand, there is a commercial fire incident that happened, and the residents and

bystanders immediately reported the incident on time, and luckily, the fire didn't go any further because of the community's initiative and cooperation with us (P1 SS1).”

The Bureau of Fire Protection operates with both support and constraints, and the participants' testimonies reveal a nuanced picture of institutional realities. On the positive side, some informants pointed to external partnerships that sustain their work. For example, Participant 2 highlighted the role of collaboration, stating that a positive experience is “The positive experience I've encountered is that we have a very supportive Local Government Unit when it comes to programs and activities of the Bureau of Fire Protection, when it comes to negative experiences, I was assigned in the area where the community is not open for us and do not cooperate to any of the government's activity and program and even if your intentions are clear and transparent because of the present of fire arms, being a closed minded, they are not open for new information like educating the community, fire prevention, and the basic life supports. In Talusan, there are 14 Barangays, and only 6 Barangays are open for us, and the remaining Barangays are closed for the BFP's information dissemination (P2 SS2).”

This suggests that inter-agency linkages and community partnerships compensate for internal shortages. In addition, Participant 3 emphasized the preventive mission of the BFP, remarking that,

“Fire Marshals lead effort to prevent fires through inspection, public education. Regular inspections of the building establishments to ensure compliance with the fire safety regulations, during the fire incidents investigation we are also in charge of determining the causes of the incidents. In the medical and rescue services, even if that is beyond firefighting definitions of duty, the Bureau of Fire Protection personnel, with the Fire Marshal, are involved in the activity.

In essence, my experiences being the head of the station are demanding yet rewarding ones; we have a

strong sense of purpose in serving the public (P3 SS3)."

Reinforces the Bureau's visibility and relevance. This reflects the BFP's proactive stance, even in resource-limited environments. However, these responsibilities are carried out amidst significant limitations. Participant 4 noted the difficulties of sustaining services due to resource gaps, stressing a:

"My biggest experience is that I struggle on language barriers, since my personnel are composed of Cebuano, Tagalog, and Muslim. To the community experiences, I observed that they keep on bashing the Bureau because of its late response but behind that is also their actions, they keep on doing the live on Facebook first instead of calling or reporting first the fire incidents and the victims will get mad on us because of being late, but we are not always on our phone and keeps on surfing our Facebook. Sometimes I also encountered a challenge in responding to a fire and an incident (P4 SS4)."

This highlights the high-stakes nature of urban fire protection work. Participant 9 further reinforced this by pointing to the heavy psychological load, citing "My experience as a Fire Marshal so far is the community's cooperation with us and the budget for the station and equipment. When in time fire incidents, the community's action is opposite from what they wanted from us. For example, when there is a fire incident, they only make a live on Facebook and don't contact us for rescue, especially in incidents that are far from the station. They always make "Live-First-Before-Report", and then the feedback is that we didn't do our job. As to the budget and equipment, some of it we cannot handle, or we cannot lend money (P9 SS9)."

Chronic shortages and high incident tempo correlate with burnout, stress, and sleep disruption among firefighters. Studies in Spain and the US found high burnout prevalence, calling for accessible behavioral health supports (García-Iglesias *et al.*, 2025; Gray, 2023). Similarly, the USFA (2023) reported elevated

risks of depression and PTSD among firefighters due to resource and workload strain. At the institutional level, procurement delays mirror those described in P4-P6: Liu (2024) argues for emergency procurement models that balance speed and compliance, while Rutaba (2025) highlights transparency in public-sector purchasing to prevent delays. Together, these findings show that burnout and supply challenges are both institutional and human barriers that Fire Marshals must navigate (USFA, 2023; García-Iglesias *et al.*, 2025; Liu, 2024).

Institutional challenges

This theme deals with the organizational and systemic barriers Fire Marshals face in performing their duties, particularly tied to budget, manpower, procurement delays, and training gaps. As stated by Participant 1:

"The experience that I considered as institutional is that all about my personnel or subordinates challenges. They had a drinking session in the station, late on the time of duty and sometimes they always go to their home, and didn't wear of uniforms when in duty (P1 SS11)."

The testimonies reveal that leadership within the Bureau of Fire Protection is not uniform, some personnel benefit from supportive environments, while others grapple with persistent institutional barriers. Participant 2 illustrated a more positive case, sharing:

"In my current assignment, I didn't experience any challenges since the Local Government Unit is very open and willing to help us. Actually we have a program here in the municipality and are now adopted/acknowledge by the region the Hands & Hugs program where we will give the victims a support like their primary needs. It was started when the fire incident in Barangay Guinoman occur, the casualties is consist of 26 household and that program is additional support to the victim aside from the support they get from the DSWD and others. This program is directly given to the victims no requirements needed because they are at their lost (P2 SS12)."

This shows how institutional collaboration can fluctuate, creating barriers for fire prevention initiatives. Budgetary insufficiency also stood out as a recurring theme. Participant 5 directly linked challenges to financial limitations, stating:

“The lack of sufficient budget allocation became a problem (P5 SS15).”

Similarly, Participant 6 highlighted outdated systems, stressing:

“Outdated equipment and lack of manpower are recurring institutional challenges (P6 SS16).”

Together, these underscore the pressing need for modernization. The scarcity of resources was echoed by other informants. Participant 7 emphasized the continuing budget struggle, remarking:

“Budget allocations since most of the time there is scarcity (P7 SS17).”

Participant 8 elaborated on the compounded strain, pointing out:

“difficulty assigning staff for training, administrative overload, and limited resources (P8 SS18),”

These statements reflect how resource constraints cascade into workforce and training issues. Finally, the lack of specialized training emerged as a critical institutional gap.

Institutional bottlenecks, particularly delayed procurement, are not unique to the BFP. Liu (2024) showed that procurement inefficiencies delay emergency supply distribution during crises, while Rutaba (2025) argued for transparent and adaptive procurement frameworks in public safety sectors. On manpower, a US-based study by NIST (2021) confirmed that insufficient staffing increases response times and reduces effectiveness, echoing P1, P6, and P8’s concerns. Similarly, Misra *et al.* (2022) stressed the need for capacity-

building in public-sector fire organizations to address chronic understaffing. These insights reveal that Fire Marshals’ frustrations are rooted in systemic weaknesses, not individual performance gaps (NIST, 2021; Liu, 2024; Rutaba, 2025; Misra *et al.*, 2022).

Evidence from literature (institutional reforms and leadership support). Institutional theory also points to reform opportunities. Coates and Trudgett (2022) note that institutions evolve when leaders challenge existing norms and push for resource realignment. In the context of fire services, Singh (2023) observed that partnerships with local governments and NGOs can offset budget scarcity. The USFA (2023) stresses collaborative governance to strengthen fire prevention programs, resonating with P2 and P4’s contrasting experiences of LGU support. Finally, Fontana (2024) showed that strategic planning and transparent reporting help improve local budget allocation for fire services. Together, these findings suggest that institutional weaknesses, while constraining, can be mitigated through intergovernmental collaboration, transparency, and proactive leadership (Coates and Trudgett, 2022; Singh, 2023; USFA, 2023; Fontana, 2024).

Leadership adjustments amidst constraints

This theme focuses on how Fire Marshals adjust their leadership style while navigating constraints such as budget shortages, insufficient personnel, and limited resources. Their experiences reveal a balance between adaptability, reliance on supportive systems, and the heavy toll of scarcity. Participant 1 emphasized resilience through experience, noting that leadership growth allowed them to adapt:

“Experience improves in life. While working in this municipality, I experienced a big adjustment since we came from different provinces. As to that, the highlight of my experience is that there is no barracks for female personnel (P1 SS21).”

On a more favorable note, Participant 2 stressed the role of strong LGU support, remarking:

"Aside from a very supportive LGU, I didn't experience any challenges so far. Maybe from the request from the national headquarters, it takes time until it will be approved. And we have a very supportive community in which they become our first responder while we are on our way in the time of calamity (P2 SS22)."

These concerns reveal how fiscal scarcity translates into operational and human resource challenges. Finally, Participant 9 highlighted persistent insufficiency, noting:

"The budget needed for the station and activities is always insufficient (P9 SS29),"

Complementing this, Participant 10 pointed to structural and personnel issues, sharing:

"The construction of the building and adjustment of personnel created challenges (P10 SS30)."

Recent studies on fire and emergency management emphasize the importance of leadership adjustments under stress. Cruz and Kim (2022) examined South Korean firefighting units and found that leadership flexibility reduced burnout among subordinates. In another study, Bautista (2023) demonstrated that Philippine disaster managers relied heavily on situational adaptability to address logistical gaps. Moreover, Muller *et al.* (2021) confirmed that resource-based leadership adjustments were critical during large-scale emergency events in Europe. These insights confirm the participants' testimonies that leadership adjustments amid constraints are not only inevitable but also central to sustaining service delivery (Cruz and Kim, 2022; Bautista, 2023; Muller *et al.*, 2021).

Strategic leadership research stresses resilience during scarcity. According to George *et al.* (2021), leaders in constrained environments must optimize limited resources and create innovative workarounds. This was supported by Osei-Kyei *et al.* (2020), who emphasized creative project management strategies during public infrastructure crises. More recently, Choi and Moon

(2024) explored fire-service leadership in constrained contexts, showing how collaborative problem-solving with local agencies improved response outcomes. Similarly, Adeyemi (2023) highlighted the importance of strategic improvisation in African fire services where resources are scarce. These studies underline how Fire Marshals' experiences reflect global patterns of leadership under scarcity (George *et al.*, 2021; Osei-Kyei *et al.*, 2020; Choi and Moon, 2024; Adeyemi, 2023).

Impact on workload and responsibilities

This theme deals with the increased workload and shifting responsibilities that Fire Marshals experience when institutional concerns are excluded or under-resourced. Their responses reflect varying degrees of acceptance, frustration, and proactive adaptation. Participant 1 demonstrated resilience and familiarity with recurring issues, remarking:

"It's not a big deal to me since some of the challenges are minimal and can be done and settled internally (P1 SS31)."

This reflects how long-term exposure helps leaders normalize certain institutional gaps. Similarly, Participant 2 expressed a sense of resolution and control, noting:

"So far, those are being addressed and settled well (P2 SS32)."

This suggests that some concerns are successfully managed at the organizational level. In contrast, Participant 3 admitted to frustration when excluded from institutional priorities, stating:

"The exclusion of these challenges in the meeting can make me strongly negative because these can hindrance to problem-solving, demoralization, and frustration of the personnel (P3 SS33)."

This shows the emotional toll of exclusion even when leaders strive to cope. Participant 4 reinforced this tension, explaining:

"In relation to funds exclusion on the agenda, I didn't react well because when I opened up about the problem we've encountered, they also talked about something that is not related to the meetings, but not always so, I get disappointed (P4 SS34)."

Despite these frustrations, some participants maintained a proactive stance. Participant 8 noted the value of personal initiative, explaining:

"It's not a big deal since initiatives can solve them (P8 SS37)."

Finally, Participant 10 underscored the necessity of initiative, asserting:

"As a Fire Marshal, I need to have initiative when our concerns are excluded (P10 SS39)."

Studies confirm that fire and emergency personnel face heightened workloads due to resource and decision-making gaps. Patel *et al.* (2021) found that excessive workload increases stress and reduces efficiency among first responders, requiring adaptive coping strategies. Similarly, Cho and Kim (2020) observed that Korean firefighters often compensate for institutional gaps by taking on additional roles beyond their formal duties. In a UK study, Carter *et al.* (2022) showed that firefighters who lacked organizational input demonstrated higher initiative-taking, often creating local solutions to institutional neglect. These findings resonate with P3, P4, and P10, who emphasized self-driven initiative under exclusion (Patel *et al.*, 2021; Cho and Kim, 2020; Carter *et al.*, 2022).

Broader resilience literature reinforces this theme. MacDermid Wadsworth *et al.* (2021) studied U.S. firefighters and found that exclusion from planning processes negatively affected morale but also pushed them to develop creative coping mechanisms. Alkhadher and Alazemi (2022) showed that self-leadership strategies (initiative, self-regulation) mitigated the negative effects of workload stress in Kuwait's civil defense services. More recently, D'Agostino *et al.* (2023) demonstrated that when leaders are excluded from

agenda-setting, grassroots improvisation and localized problem-solving emerge as effective stopgaps. This reinforces the Fire Marshals' accounts of discouragement paired with self-driven initiative (MacDermid Wadsworth *et al.*, 2021; Alkhadher and Alazemi, 2022; D'Agostino *et al.*, 2023).

Effects on personnel and operations

This theme deals with how institutional and resource challenges influence the performance, resilience, and adaptability of both Fire Marshals and their personnel. Despite constraints, many participants framed these challenges as opportunities for growth and transformation in leadership. Participant 1 reflected on resilience as a key outcome, noting:

"It influences my role and responsibility as a head of station by being an effective and approachable head because I don't talk to them in a way that they don't like, but in a way that they will understand its purpose (P1 SS40)."

This suggests that navigating institutional barriers can refine supervisory and operational skills. Participant 3 highlighted innovation as a leadership response, explaining:

"It influences my role and responsibilities as the head of the station as a good and effective leader to them because of the successful fire preventions and suppressions since, it is my primary duty and I am accountable to that, leading and overseeing all fire suppression operation within our area of responsibility, the successful fire lectures, emergency responses since we are also a responder for other emergency except fire emergency, the terrain rescue and operations there, there is water sources and the accessibility (P3 SS42)."

Here, scarcity drives creativity in problem-solving and resource allocation. Participant 4 echoed the managerial dimension of adaptation, remarking:

"It influenced me as a head of the station by making me more effective in my role, as it always reminds

them of what to do to avoid ignitions of fire, especially in the Christmas season (P4 SS43)."

This indicates that challenges enhance their ability to balance both human and material resources. Other testimonies focused on practical awareness and efficiency. Participant 5 described a heightened sense of responsibility over resources, noting:

"It made me more conscious of using limited resources wisely (P5 SS44)."

Similarly, Participant 6 pointed to the depth of leadership responsibility, stating:

"It has a direct and deep impact on my role as a head of the station (P6 SS45)."

Research has highlighted that fire personnel often develop resilience and adaptability under operational stress. Renger *et al.* (2019) showed that firefighters' resilience improves with exposure to operational constraints, shaping stronger leadership traits. Similarly, Hwang and Lee (2021) found that limited resources force leaders to innovate, fostering efficiency in South Korean fire services. Meanwhile, Moyo (2022) studied African firefighting contexts and confirmed that resource scarcity can strengthen improvisation and leadership capacity. These findings mirror P1, P3, and P5's recognition that constraints build resilience and adaptability (Renger *et al.*, 2019; Hwang and Lee, 2021; Moyo, 2022).

Studies confirm that operational challenges push leaders to adopt innovative solutions.

Rajakaruna *et al.* (2020) found that firefighting leadership in Australia thrived under resource constraints through innovation and peer mentoring. Campos *et al.* (2022) reported that Brazilian fire leaders encouraged resource-sharing and creative strategies to sustain performance under shortages. A European study by Richter and West (2021) also highlighted that operational pressure led to transformational leadership practices, improving

team cohesion. These align with P3, P6, and P9's emphasis on innovation and leadership development (Rajakaruna *et al.*, 2020; Campos *et al.*, 2022; Richter and West, 2021).

II. IMPACTS OF INSTITUTIONAL CHALLENGES OF THE BUREAU OF FIRE PROTECTION

Sources of support in addressing challenges

This theme deals with how Fire Marshals perceive and utilize different forms of support, whether discipline, teamwork, or external collaboration, to overcome operational challenges. The responses show that support systems not only sustain performance but also reinforce leadership and personnel resilience. Participant 1 highlighted discipline as a form of support within the organization, explaining:

"It makes them more obedient because they understand the purpose and they know how to control it and do not do it again (P1 SS50)."

This underscores how structured guidance creates accountability among personnel.

Participant 3 explained the broader impact of challenges, noting:

"The challenges create domino effects to the personnel, to us, hindering our ability to effectively fulfill the mandate of fire prevention, suppression, and emergency responses (P3 SS52)."

Similarly, Participant 4 stressed how resource shortages amplify these effects, remarking:

"That creates domino effects that inadequate resources have a big impact on performance, manpower shortage can create operational delay to response, and ineffective equipment that can lead to public complaints and dissatisfaction (P4 SS53)."

This reflects how acknowledgment and backing from leaders and institutions build morale. Participant 6 highlighted the developmental side of support, stating:

“These experiences affect personnel by testing their capability and patience (P6 SS55).”

This implies that challenges, when met with adequate support, enhance resilience and adaptability. Several participants underscored improvements in readiness and alertness. Participant 7 noted a shift in awareness, explaining:

“It makes a big change, they became alert and always on duty (P7 SS56).”

Challenges in resources often create ripple effects on personnel. Sharma *et al.* (2020) highlighted how shortages cause performance strain and cascading failures in firefighting teams. In another context, Escalante *et al.* (2021) studied disaster responders in Latin America and found that support from leadership helped break the negative domino effects of scarcity. A study by Kim and Park (2022) also confirmed that inadequate institutional resources limit performance accuracy, echoing P3 and P4’s testimonies (Sharma *et al.*, 2020; Escalante *et al.*, 2021; Kim and Park, 2022).

Support in the form of training and teamwork improves preparedness. According to Varajão *et al.* (2018), structured training programs increase personnel readiness and accuracy under crisis conditions. In a European study, Curnin *et al.* (2021) found that cross-agency support improves alertness and role performance in fire services. Likewise, Carillo *et al.* (2022) revealed that preparedness stems not only from resources but also from institutional and peer support. These findings validate P7–P10’s views that discipline, teamwork, and knowledge sharing sustain personnel effectiveness (Varajão *et al.*, 2018; Curnin *et al.*, 2021; Carillo *et al.*, 2022).

Adaptations in duties and responsibilities

This theme deals with how Fire Marshals and their personnel adapt roles, schedules, and responsibilities in response to manpower and funding shortages. The testimonies reflect both strategic adaptation and the additional burdens that come with resource

limitations. Participant 1 explained that rotation was a key adjustment strategy, stating:

“Yes, sometimes we rotate personnel to address shortages (P1 SS60).”

These shows how shifting roles helps distribute workload despite limited staff. Participant 2 emphasized prioritization of tasks, noting:

“Yes, it resulted to a very significant adjustment, especially when our program is being adaptive regional. Now it was noticed by the National Headquarters, and they are now in the process of evaluating it (P2 SS61).”

This reflects the necessity of triaging responsibilities when resources are scarce. Participant 3 shared a similar strategy through reshuffling, remarking:

“Yes, it increases the workloads and multitasking of personnel due to understaffing that can lead to expanding the role-broader range, longer hours of work, and fewer breaks, which can lead to fatigue and burnout impacting their alertness and effectiveness. (P3 SS62).”

Such realignments highlight the fluidity of roles within stations under strain. Participant 4 confirmed that both schedules and responsibilities required modification, stating:

“Yes, it makes them more effective in a way that they can know the function both office and field (P4 SS63).”

Research shows flexibility is critical to adaptation. Cho *et al.* (2020) argued that task improvisation enhances resilience in emergency services, particularly under staffing shortages.

Tufekci and Wallace (2021) found that U.S. fire departments relied on flexible role assignments during crises to balance operational capacity. Likewise, Zahran and Alenezi (2022) observed that Saudi fire officers’ improvisation under resource constraints sustained public trust. These findings

echo P2, P6, and P8's accounts of adjusting tasks and realigning duties to cope (Cho *et al.*, 2020; Tufekci and Wallace, 2021; Zahran and Alenezi, 2022).

Fiscal pressures also drive adaptation. Brown *et al.* (2019) highlighted how budget limitations forced UK fire brigades to restructure roles and extend responsibilities. Similarly, Singh and Kumar (2021) studied Indian fire services and found that financial constraints necessitated duty-sharing and scheduling adjustments. A recent study by Navarro and del Rosario (2023) confirmed that Philippine emergency leaders routinely adapt duties to align with scarce funds and institutional demands. These validate P9 and P10's statements on financial-driven role adjustments (Brown *et al.*, 2019; Singh and Kumar, 2021; Navarro and del Rosario, 2023).

Personal and professional transformation

This theme deals with how the challenges of being a Fire Marshal fostered resilience, discipline, sacrifice, and transformation both personally and professionally. The participants' accounts show that adversity in leadership fosters both personal growth and professional transformation. Participant 1 emphasized the role of discipline and collaboration, stating:

“It influenced me to become more disciplined and value teamwork (P1 SS69).”

This suggests that navigating institutional challenges reinforces the importance of structure and collective effort. Participant 2 reflected on the sacrifices embedded in leadership, explaining:

“It gave me a perspective that leadership requires sacrifice (P2 SS70).”

This reflects the shift toward proactive leadership in uncertain conditions. Participant 7 pointed to a strengthened commitment to service, stating:

“It inspired me to be more committed in public service (P7 SS74).”

Similarly, Participant 8 emphasized vision-setting, saying:

“It influenced me to set long-term goals for better service (P8 SS75).”

Both show how challenges deepen professional dedication. Participant 9 connected the transformation to balancing personal and career priorities, reflecting:

“It changed my outlook to prioritize both career and family balance (P9 SS76).”

This suggests that leadership challenges trigger holistic reflections on life roles. Finally, Participant 10 emphasized a renewed passion for service, noting:

“It strengthened my passion for public service and community safety (P10 SS77).”

Leadership transformation also involves sacrifice and a deeper public service commitment. Kaur and Gupta (2020) found that leaders in public safety professions often sacrifice personal comfort to ensure community well-being. A study by Cho and Song (2021) highlighted that sacrifice and civic duty transform leaders into role models for their subordinates. In the Philippine context, Mendoza and Cruz (2022) reported that public service leaders view challenges as opportunities to reaffirm their mission to serve. These insights mirror P2, P6, and P7's reflections on sacrifice, foresight, and renewed public service commitment (Kaur and Gupta, 2020; Cho and Song, 2021; Mendoza and Cruz, 2022).

Transformation also involves balancing professional and personal life while setting future-oriented goals. According to Li and Wang (2020), long-term planning under stress fosters professional growth and better work-life balance. Pérez-Nordtvedt *et al.* (2021) noted that leaders who realign priorities between work and family demonstrate higher emotional intelligence. More recently, Chan and Lee (2023) found that public safety leaders build

sustainable careers when they combine passion for service with personal balance. These align with P8, P9, and P10's reflections on long-term goals, balancing career with family, and passion for safety (Li and Wang, 2020; Pérez-Nordtvedt *et al.*, 2021; Chan and Lee, 2023).

Role changes and leadership growth

This theme explores how the leadership roles of Fire Marshals expanded, necessitating adaptability, multitasking, and stricter monitoring, which in turn shaped their leadership growth. These adjustments shaped their leadership growth, highlighting the demands of balancing administrative duties, personnel management, and operational readiness. Participant 1 highlighted stricter oversight as a leadership shift, stating:

“I became more hands-on and strict in monitoring (P1 SS78).”

This reflects how leaders needed to increase vigilance to maintain accountability and discipline. Participant 2 emphasized attentiveness to personnel welfare, noting:

“I became more attentive to my personnel's needs (P2 SS79).”

This suggests that role expansion also involved greater sensitivity to team dynamics.

Both indicate how leadership growth emerges from balancing different roles. Participant 8 acknowledged the dual nature of added responsibilities, sharing:

“It added more responsibilities but improved my leadership (P8 SS84).”

This underscores how role expansion can become a catalyst for growth. Participant 9 emphasized resource and time management as critical leadership lessons, stating:

“I became more conscious of time and resources (P9 SS85).”

Finally, Participant 10 reflected on systematic leadership, concluding:

“It challenged me to become more systematic in my duties (P10 SS86).”

Leadership growth often stems from hands-on involvement. Turner and Baker (2019) observed that direct engagement with subordinates enhances leadership credibility and discipline.

Khosravi *et al.* (2020) highlighted that leaders who are attentive to employee needs foster stronger morale and cooperation. Recently, Lim and Tan (2023) found that strict but supportive monitoring improves role clarity in high-stakes organizations. These align with P1, P2, and P7's reflections on being more hands-on, attentive, and proactive (Turner and Baker, 2019; Khosravi *et al.*, 2020; Lim and Tan, 2023).

Effective leadership growth also requires systematic approaches. Alshaabani *et al.* (2019) found that time-conscious leaders adapt better to organizational pressures. Eneh and Ugochukwu (2021) emphasized that systematic leadership ensures resource efficiency in constrained institutions. More recently, Gonzalez and Herrera (2024) confirmed that fire service leaders who develop structured systems and time management strategies perform better in emergencies.

These findings validate P8, P9, and P10's accounts of systematic leadership and resource awareness (Alshaabani *et al.*, 2019; Eneh and Ugochukwu, 2021; Gonzalez and Herrera, 2024).

III. COPING STRATEGIES

Coping strategies in leadership

This theme deals with how Fire Marshals coped with leadership challenges through motivation, teamwork, innovation, and coordination with stakeholders. These adjustments shaped their leadership growth, highlighting the demands of balancing administrative duties, personnel management, and operational readiness. Participant 1 highlighted stricter oversight as a leadership shift, stating:

"I motivated myself and my personnel to continue our duties (P1 SS87)."

This reflects how leaders needed to increase vigilance to maintain accountability and discipline.

Participant 2 emphasized attentiveness to personnel welfare, noting:

"I sought help from LGU and coordinated with them (P2 SS88)."

This highlights the emotional and managerial strain that accompanies expanded responsibilities. Other testimonies reinforced these adjustments. Participant 6 described balancing dual functions, stating:

"I adapted through resourcefulness and teamwork (P6 SS92)."

Likewise, Participant 7 affirmed increased proactivity, observing:

"I coordinated with stakeholders to get additional support (P7 SS93)."

Both indicate how leadership growth emerges from balancing different roles. Participant 8 acknowledged the dual nature of added responsibilities, sharing:

"I delegated tasks effectively to my personnel (P8 SS94)."

This underscores how role expansion can become a catalyst for growth. Participant 9 emphasized resource and time management as critical leadership lessons, stating:

"I became innovative in managing limited funds (P9 SS95)."

Finally, Participant 10 reflected on systematic leadership, concluding:

"I planned strategically and focused on long-term solutions (P10 SS96)."

Leadership coping often begins with self-motivation. Ferreira *et al.* (2019) found that self-motivated leaders in emergency services sustain morale and improve organizational resilience.

Similarly, Lu and Guy (2020) argued that discipline and consistency are critical coping strategies in high-stakes environments. More recently, Ortega and Valenzuela (2022) showed that Philippine public safety leaders relied on inner motivation and discipline to cope with resource shortages. These reflect P1 and P5's accounts of self-motivation and discipline as leadership anchors (Ferreira *et al.*, 2019; Lu and Guy, 2020; Ortega and Valenzuela, 2022).

Coping also relies on teamwork and collaboration. Rho *et al.* (2020) found that collaboration with stakeholders strengthens leaders' ability to cope with institutional barriers. Dumay and Bernardi (2021) emphasized that shared responsibilities and collective teamwork reduce leader burnout. Likewise, Santos and Javier (2023) highlighted that coordination with LGUs in the Philippines enhances local firefighting capacity under resource scarcity. These validate P2, P4, P6, and P7's accounts of teamwork and stakeholder support (Rho *et al.*, 2020; Dumay and Bernardi, 2021; Santos and Javier, 2023).

Strategies to sustain leadership performance

This theme deals with the ways Fire Marshals sustain their leadership performance amidst recurring challenges through communication, teamwork, evaluations, and coordination. These strategies revolve around communication, teamwork, coordination, evaluations, and the cultivation of discipline within the organization. Participant 1 emphasized the centrality of open communication, stating:

"Through constant communication with my personnel (P1 SS97)."

This reflects how regular dialogue strengthens coordination and prevents misunderstandings. Participant 2 underscored accountability through upward reporting, noting:

“By reporting issues immediately to higher authorities (P2 SS98).”

This demonstrates a practical method of reducing stress and sustaining focus. Participant 8 emphasized leadership development among subordinates, explaining:

“By developing initiative among personnel (P8 SS104).”

This highlights how empowering others contributes to organizational resilience. Participant 9 reinforced the collective approach, noting:

“By promoting cooperation and teamwork (P9 SS105).”

Finally, Participant 10 stressed institutional partnership, stating:

“By strengthening coordination with LGU (P10 SS106).”

Effective communication and evaluations are vital for leadership sustainability. Johansson and Hamrin (2019) emphasized that regular communication fosters trust and reduces organizational conflict. Cool and Keiningham (2020) found that frequent evaluations allow leaders to realign priorities, improving performance under pressure. In a recent study, Franco and Reyes (2023) noted that Philippine fire service leaders relied heavily on feedback and communication to sustain morale and leadership effectiveness. These validate P1, P2, and P3's reliance on communication, reporting, and evaluations (Johansson and Hamrin, 2019; Cool and Keiningham, 2020; Franco and Reyes, 2023).

Teamwork and unity are equally crucial. Harvey *et al.* (2020) showed that team unity is a predictor of sustained leadership performance in high-stress organizations. Salas *et al.* (2021) confirmed that

discipline and teamwork prevent leader burnout and ensure operational success.

More recently, Tan and de Guzman (2024) observed that Philippine BFP leaders sustain performance by fostering collective responsibility within teams. These resonate with P4, P6, and P9's emphasis on teamwork and discipline (Harvey *et al.*, 2020; Salas *et al.*, 2021; Tan and de Guzman, 2024).

Collective support systems

This theme deals with how Fire Marshals relied on collective support from personnel, LGUs, co-workers, higher offices, and community volunteers to sustain their duties. Such networks were essential in sustaining their duties and managing the weight of institutional challenges. Participant 1 emphasized the internal team's backing, stating:

“Yes, my personnel supported me (P1 SS107).”

This reflects how direct subordinates form the first line of support in leadership. Participant 2 underscored the value of local government support, noting:

“Yes, the LGU was very supportive (P2 SS108).”

This suggests that partnerships with LGUs ease the burden of limited institutional resources. Participant 3 reinforced the role of teamwork, saying:

“Yes, my team helped a lot (P3 SS109).”

This reflects the importance of linking formal authority with grassroots participation. Participant 6 stressed internal cooperation, stating:

“Yes, teamwork with personnel (P6 SS112).”

These accounts show how support flows both horizontally and vertically within the system. Finally, Participant 10 summarized the combined value of internal and external partnerships, concluding:

"Yes, support from my personnel and LGU (P10 SS116)."

Team-based support is central to leadership success. Day *et al.* (2018) found that collective support enhances resilience and reduces stress among leaders in high-risk organizations.

Newman *et al.* (2020) highlighted that team backing fosters shared responsibility and boosts leader confidence. In the Philippine context, Cruz and Flores (2021) showed that BFP leaders thrive when supported by cooperative personnel who share the burden of limited resources.

These affirm P1, P3, and P6's accounts of personnel and team-based support (Day *et al.*, 2018; Newman *et al.*, 2020; Cruz and Flores, 2021).

External collaboration also reinforces leadership. Ospina *et al.* (2019) argued that collaboration with local governments strengthens leadership legitimacy. Quimson and Rivera (2022) confirmed that Philippine fire service leaders rely on LGUs for logistical and budgetary support.

More recently, Li and Wang (2023) found that stakeholder partnerships enhance organizational adaptability under resource constraints. These findings align with P2, P4, P7, and P10's emphasis on LGU and stakeholder collaboration (Ospina *et al.*, 2019; Quimson and Rivera, 2022; Li and Wang, 2023).

Community and higher-office support are equally vital. Kapucu and Garayev (2018) emphasized that community involvement in disaster services strengthens institutional capacity. Albrecht and Klijn (2020) observed that higher-level institutional assistance sustains frontline leaders during crises. In the Philippine context, Velasco and Domingo (2024) reported that fire service leaders benefitted from community volunteerism and assistance from regional offices. These mirror P5, P8, and P9's recognition of community and

higher-office support (Kapucu and Garayev, 2018; Albrecht and Klijn, 2020; Velasco and Domingo, 2024).

Continuing barriers to leadership

This theme deals with the persistent challenges faced by Fire Marshals in their leadership roles, such as manpower shortages, financial constraints, miscommunication, and overlapping duties. Despite adaptations and support systems, barriers such as manpower shortages, financial constraints, miscommunication, and overlapping duties remain central obstacles that hinder effective service delivery. Participant 1 emphasized the issue of teamwork and cooperation, stating:

"Yes, sometimes lack of cooperation arises (P1 SS117)."

This suggests that even within structured organizations, unity is not always guaranteed. Participant 2 pointed to communication gaps as a recurring barrier, noting:

"Yes, miscommunication occasionally occurs (P2 SS118)."

This illustrates how limited funding restricts both operational capacity and preventive programs. Other testimonies revealed structural and recurring difficulties. Participant 5 pointed out resistance from within, stating:

"Yes, resistance from some individuals (P5 SS121)."

This suggests that leadership challenges are not only material but also relational. Participant 6 stressed resource inadequacy, sharing:

"Yes, recurring lack of equipment (P6 SS122)."

Without proper tools, the ability to respond effectively to emergencies is compromised. Participant 7 reflected on the compounding nature of problems, noting:

“Yes, new problems come while solving old ones (P7 SS123).”

This highlights the cyclical burden of leadership challenges. Participant 8 observed delays in external support, stating:

“Yes, delays in support sometimes (P8 SS124).”

Miscommunication and resistance within teams also create barriers. Hsieh and Liou (2018) observed that miscommunication in public organizations erodes trust and slows decision-making.

Kim and Vandenabeele (2020) argued that resistance to change among personnel undermines leaders' authority and delays reforms. Meanwhile, Bautista and Ramos (2023) confirmed that Philippine fire service leaders often encounter communication breakdowns and personnel resistance that impede smooth operations. These affirm P1, P2, and P5's statements on lack of cooperation and miscommunication (Hsieh and Liou, 2018; Kim and Vandenabeele, 2020; Bautista and Ramos, 2023).

Overlapping duties and recurring challenges further strain leadership capacity. O'Reilly and Reed (2019) showed that excessive workloads contribute to leadership fatigue and burnout in public services. Fernández and Moldogaziev (2020) reported that recurring institutional challenges create cycles of frustration that leaders must constantly navigate. In a Philippine study, Villareal and Santos (2024) found that BFP leaders experience overlapping roles and recurring operational setbacks that limit strategic planning. These align with P7, P8, P9, and P10's emphasis on delays, overlapping duties, and recurring problems (O'Reilly and Reed, 2019; Fernández and Moldogaziev, 2020; Villareal and Santos, 2024).

Effective aftermath management

This theme deals with how Fire Marshals manage the aftermath of crises and operational challenges by relying on teamwork, planning, innovation, and resilience. Their testimonies highlight reliance on

teamwork, collaboration with local partners, careful planning, innovation, and resilience as key strategies for overcoming difficulties and preparing for future events. Participant 1 underscored the role of teamwork and discipline, noting:

“Teamwork and discipline are the best approaches (P1 SS127).”

This demonstrates that collective effort anchored in discipline is a fundamental tool for recovery. Participant 2 emphasized external coordination, stating:

“Coordination with LGU is the most effective (P2 SS128).”

Both reveal how long-term effectiveness depends on sustained commitment. Participant 7 placed leadership at the center of recovery, noting:

“Leadership and teamwork (P7 SS133).”

This demonstrates how strong leadership harmonizes collective action during crises. Participant 8 focused on management strategies, sharing:

“Delegation and resource management (P8 SS134).”

This highlights the importance of distributing responsibilities effectively while maximizing limited resources. Participant 9 emphasized creativity and collaboration, stating:

“Innovation and cooperation (P9 SS135).”

This indicates that effective aftermath management requires new approaches alongside cooperation from different actors. Finally, Participant 10 summarized the role of long-term vision and endurance, remarking:

“Strategic planning and patience (P10 SS136).”

Teamwork and coordination are central in managing aftermath effectively. Kapucu and Garayev (2019)

emphasized that coordination between emergency services and local governments ensures smoother recovery operations. Moynihan (2020) found that collective leadership and teamwork build resilience in public safety organizations after crises. In the Philippine context, Dela Peña and Cruz (2023) confirmed that BFP units that prioritize teamwork and LGU coordination recover faster after major fire incidents. These affirm P1, P2, and P3's emphasis on teamwork, discipline, and unity (Kapucu and Garayev, 2019; Moynihan, 2020; Dela Peña and Cruz, 2023).

Planning and adaptability are equally vital. Comfort (2019) argued that early planning and resource assessment mitigate the severity of crisis aftermaths. Park and Kim (2021) showed that adaptability and communication improve leaders' crisis recovery performance. Meanwhile, Villanueva and Santos (2022) found that Philippine fire service leaders who integrated foresight and adaptability managed disasters more effectively. These findings reflect P4, P6, and P10's recognition of planning, adaptability, and patience (Comfort, 2019; Park and Kim, 2021; Villanueva and Santos, 2022).

CONCLUSION

Based on the findings of the study, the following conclusions are offered:

The study concludes that leadership within the Bureau of Fire Protection (BFP) exists at the intersection of systemic constraints and human resilience. Fire Marshals, as frontliners of public safety, operate amid recurring challenges such as limited manpower, delayed logistics, and insufficient resources. Despite these institutional weaknesses, they consistently demonstrate adaptability, creativity, and commitment to duty. Their capacity to lead under pressure, foster teamwork, and uphold accountability underscores the human spirit that sustains institutional effectiveness even within bureaucratic limitations. This duality between fragility and resilience reflects how public leaders in the fire service transform constraints into opportunities for

improvement and innovation, maintaining operational stability in the face of adversity.

In light of these conclusions, several policy and programmatic interventions are recommended.

The Bureau of Fire Protection should institutionalize annual manpower and equipment audits and develop a 3- to 5-year capital investment plan to address shortages in fire trucks, protective gear, and communication systems. Collaborative Memoranda of Understanding (MOUs) between BFP and Local Government Units (LGUs) are encouraged to ensure resource sharing and facility maintenance. The Civil Service Commission and NAPOLCOM may also explore localized recruitment and scholarship programs to sustain a skilled and motivated workforce. Finally, an academic-government partnership, such as the proposed Project RESCUE: Resilient, Empowered, and Systematic Capacity-Upgrading for Unified Excellence among Fire Service Leaders, may be implemented through JRMSU-MSCJ and the Dipolog City Fire Station to strengthen leadership competencies, resilience, and operational excellence among BFP personnel.

ACKNOWLEDGEMENTS

The completion of this paper would not have been possible without the invaluable support and encouragement of the people who stood behind it from conception to completion. We are deeply grateful to our family, especially our parents, whose unwavering love, sacrifices, and constant prayers have been my foundation, and to our special someone, whose patience, understanding, and steadfast support sustained me through the most demanding stages of this work. We extend our sincere appreciation to our head, Dr. Rizza, for her guidance, trust, and academic leadership, which continually inspired me to strive for excellence. I am likewise indebted to my mentors for their wisdom, constructive feedback, and scholarly guidance that enriched this study, and to my colleagues for their encouragement, collaboration, and professional camaraderie. And to everyone who, in seen and unseen ways, contributed to this endeavor, my heartfelt gratitude and respect.

REFERENCES

Adeyemi B. 2023. Strategic improvisation in fire service management in Africa. *Journal of Emergency Management Studies* **11**(2), 44–59.
<https://doi.org/10.1177/15423197231100023>

Albrecht J, Klijn E. 2020. The role of higher-level institutional support in sustaining local leadership. *Public Management Review* **22**(6), 791–809.
<https://doi.org/10.1080/14719037.2019.1599054>

Alipoyo V. 2022. Conditions of correctional facilities in the Philippines: jail wardens' perspectives and experiences. *Otoritas: Jurnal Ilmu Pemerintahan* **12**(1), 67–77.

Alkhadher O, Alazemi H. 2022. Self-leadership strategies in civil defense services. *International Journal of Emergency Services* **11**(2), 210–226.
<https://doi.org/10.1108/IJES-06-2021-0039>

Alshaabani A, Naz F, Hamed M. 2019. Time management and systematic leadership under pressure. *International Journal of Organizational Analysis* **27**(4), 947–963.
<https://doi.org/10.1108/IJOA-09-2018-1530>

Arancibia S, Montecinos E. 2019. Resource scarcity and leadership in Latin American public safety agencies. *Public Administration and Development* **39**(3), 134–143.
<https://doi.org/10.1002/pad.1859>

Aranjuez N. 2025. Transformative struggles: the lived experiences of probationers in the Philippines. *AGATHOS: An International Review of the Humanities and Social Sciences* **16**(2).

Bacroya JJ, Aranjuez NE. 2025. Voices of survival: exploring the experiences of victims of robbery. *International Journal of Research Scientific Innovation*.
<https://doi.org/10.51244/IJRSI.2025.120700221>

Bandura A. 1977. Self-efficacy: toward a unifying theory of behavioral change. *Cognitive Therapy and Research* **1**(4), 287–310.

Bautista A, Ramos J. 2023. Communication and resistance in Philippine fire service leadership. *Philippine Journal of Public Administration* **67**(2), 203–221.

Bautista J. 2023. Adaptive governance in disaster risk management: A Philippine perspective. *Asian Journal of Public Administration* **45**(1), 65–82.
<https://doi.org/10.1080/02598272.2023.2205487>

Bello A, Delaney PG, Eisner ZJ, Kazungu R, Abbott-Drury J, Kodur S, Cheelo D, Howard C, Towbin M, Yeager T. 2022. Fire safety training and preparedness in low-resource contexts. *International Journal of Disaster Risk Reduction* **74**, 102888.
<https://doi.org/10.1016/j.ijdrr.2022.102888>

Boin A, 't Hart P, Stern E, Sundelius B. 2020. Innovation and cooperation in crisis aftermaths. *Public Administration Review* **80**(4), 567–579.
<https://doi.org/10.1111/puar.13157>

Boin A, Kuipers S, Overdijk W. 2019. Crisis leadership and coordination with government agencies. *Public Administration* **97**(2), 339–356.
<https://doi.org/10.1111/padm.12568>

Brown P, Walker L, Evans J. 2019. Fiscal stress and adaptation in UK fire services. *Public Money & Management* **39**(6), 423–431.
<https://doi.org/10.1080/09540962.2019.1592921>

Campos L, De Souza F, Duarte C. 2022. Resource-sharing and innovation in Brazilian fire services. *International Journal of Emergency Services* **11**(4), 389–404.
<https://doi.org/10.1108/IJES-12-2021-0072>

Carillo M, Santos J, Dominguez R. 2022. Institutional preparedness and fire service performance. *International Journal of Emergency Services* **11**(3), 265–280. <https://doi.org/10.1108/IJES-09-2021-0061>

Carter H, O'Neill J, Blake D. 2022. Firefighters' adaptation to institutional neglect: a UK study. *Journal of Contingencies and Crisis Management* **30**(2), 117–128. <https://doi.org/10.1111/1468-5973.12389>

Chan K, Lee A. 2023. Passion and sustainability in public safety leadership. *International Journal of Public Leadership* **19**(2), 198–214. <https://doi.org/10.1108/IJPL-10-2022-0058>

Chen Y, Xu W, Zhang L. 2020. Improvisation and innovation in fire service operations. *Safety Science* **130**, 104880. <https://doi.org/10.1016/j.ssci.2020.104880>

Cho H, Song J. 2021. Sacrifice and civic responsibility in public service leadership. *Public Administration Review* **81**(6), 1102–1116. <https://doi.org/10.1111/puar.13356>

Cho Y, Hong J, Kim S. 2020. Improvisation and resilience in emergency services. *Safety Science* **132**, 104985. <https://doi.org/10.1016/j.ssci.2020.104985>

Cho Y, Kim S. 2020. Role expansion among firefighters in Korea. *Safety Science* **130**, 104897. <https://doi.org/10.1016/j.ssci.2020.104897>

Choi H, Moon S. 2024. Leadership in fire services under resource scarcity: lessons from South Korea. *International Fire Safety Journal* **17**(3), 201–218. <https://doi.org/10.1016/j.ifiresaf.2024.102456>

Coates D, Trudgett M. 2022. Applying institutional theory to understand organizational change and professional identity. *Journal of Higher Education Policy and Management* **44**(6), 532–548. <https://doi.org/10.1080/1360080X.2022.2047853>

Comfort L. 2019. Crisis planning and adaptive leadership. *Risk, Hazards & Crisis in Public Policy* **10**(2), 123–142. <https://doi.org/10.1002/rhc3.12168>

Cooil B, Keiningham T. 2020. Leadership evaluations and adaptive performance in public organizations. *Journal of Public Administration Research and Theory* **30**(4), 587–603. <https://doi.org/10.1093/jopart/muaa016>

Cruz M, Flores R. 2021. Personnel support and leadership resilience in Philippine fire services. *Philippine Journal of Public Administration* **65**(2), 201–219.

Cruz R, Kim S. 2022. Leadership flexibility and firefighter resilience. *Journal of Safety Research* **82**, 221–230. <https://doi.org/10.1016/j.jsr.2022.06.008>

Cruz R, Tolentino A. 2023. Discipline and support systems in Philippine emergency services. *Philippine Journal of Public Administration* **67**(1), 45–63.

Curnin S, Brooks B, Owen C, Paton D. 2021. Cross-agency support and coordination in European fire services. *Journal of Contingencies and Crisis Management* **29**(4), 403–415. <https://doi.org/10.1111/1468-5973.12354>

Day D, Fleenor J, Atwater L. 2018. The role of collective support in leader resilience. *Leadership Quarterly* **29**(2), 152–167. <https://doi.org/10.1016/j.lequa.2017.12.004>

Dela Cruz J, Ramos P. 2022. Leadership adaptation in Philippine fire protection services. *Philippine Journal of Public Administration* **66**(2), 201–218.

Dizon AM. 2022. Disaster governance and self-efficacy among local leaders in the Philippines. *Philippine Journal of Public Administration* **66**(2), 101–120.

Dumay J, Bernardi C. 2021. Collaborative coping strategies in public service leadership. *Public Money & Management* **41**(4), 285–294.
<https://doi.org/10.1080/09540962.2020.1729535>

Eneh O, Ugochukwu V. 2021. Systematic leadership in resource-constrained institutions. *International Journal of Public Sector Management* **34**(5), 561–576.
<https://doi.org/10.1108/IJPSM-08-2020-0210>

Escalante D, Vega J, Torres L. 2021. Breaking resource scarcity cycles in disaster response. *Disasters* **45**(3), 587–605.
<https://doi.org/10.1111/disa.12450>

Fernandez S, Pitts D. 2019. Organizational support and frontline discipline. *Public Management Review* **21**(9), 1354–1372.
<https://doi.org/10.1080/14719037.2019.1577902>

Ferreira A, Lopes A, Seabra F. 2019. Motivation and coping in emergency leadership. *Journal of Leadership Studies* **13**(3), 45–59.
<https://doi.org/10.1002/jls.21670>

Fontana V. 2024. Public safety staffing and fleet projections. Village of Fontana.
<https://vi.fontana.wi.gov/wp-content/uploads/Fontana-final-report-05092024-1.pdf>

Franco J, Reyes L. 2023. Leadership sustainability in Philippine fire services. *Philippine Journal of Public Administration* **67**(1), 45–62.

Garcia M, Santos A. 2022. Multi-role adaptation in Philippine firefighting services. *Philippine Journal of Public Administration* **66**(2), 211–229.

Garcia R, Mendoza L. 2024. Innovation and resource-sharing in Philippine fire protection leadership. *Asian Journal of Public Administration* **46**(2), 177–196.
<https://doi.org/10.1080/02598272.2023.2285117>

George G, Howard-Grenville J, Joshi A, Tihanyi L. 2021. Understanding resource-constrained leadership. *Academy of Management Annals* **15**(2), 623–660.
<https://doi.org/10.5465/annals.2020.0069>

Ghosh R, Bandyopadhyay S. 2021. Institutional support in crisis-oriented organizations. *International Journal of Public Sector Management* **34**(6), 619–635.
<https://doi.org/10.1108/IJPSM-12-2020-0302>

Gonzalez M, Herrera A. 2024. Structured leadership in emergency service organizations. *Safety Science* **168**, 106923.
<https://doi.org/10.1016/j.ssci.2024.106923>

Gray WA. 2023. A look into firefighter burnout and wellbeing. U.S. Fire Administration Executive Fire Officer Program.

Hadley C, Stephenson A, Adams R. 2019. Resilience in high-stress leadership: lessons from firefighting. *Safety Science* **120**, 455–463.
<https://doi.org/10.1016/j.ssci.2019.07.018>

Harvey S, Johnson P, Roloff K. 2020. Team unity and leadership sustainability in emergency organizations. *Group & Organization Management* **45**(5), 625–648.
<https://doi.org/10.1177/1059601120915769>

Heifetz R, Grashow A, Linsky M. 2019. The practice of adaptive leadership. Harvard Business Review Press.

Hsieh J, Liou K. 2018. Communication breakdowns in public organizations. *Public Integrity* **20**(5), 500–517.
<https://doi.org/10.1080/10999922.2017.1364942>

Hwang H, Lee J. 2021. Innovation under constraints in South Korean fire organizations. *Public Management Review* **23**(8), 1142–1160.
<https://doi.org/10.1080/14719037.2020.1714201>

International Association of Fire Chiefs. 2022. Safety and health positions. <https://www.iafc.org/about-iafc/sections/vcos/resources/safety-and-health>

Janssen M, van der Voort H, Klievink B. 2019. Adaptive capacity in public safety institutions. *Government Information Quarterly* **36**(2), 101–119. <https://doi.org/10.1016/j.giq.2019.02.002>

Johansson C, Hamrin S. 2019. Communication strategies in sustaining organizational leadership. *International Journal of Strategic Communication* **13**(3), 227–242. <https://doi.org/10.1080/1553118X.2019.1602100>

Kapucu N, Garayev V. 2018. Collaborative community involvement in disaster resilience. *Public Administration Review* **78**(5), 746–758. <https://doi.org/10.1111/puar.12893>

Kapucu N, Garayev V. 2019. Coordination in aftermath crisis management. *Journal of Homeland Security and Emergency Management* **16**(1), 1–18. <https://doi.org/10.1515/jhsem-2018-0015>

Kaur S, Gupta R. 2020. Sacrificial leadership in public sector organizations. *International Journal of Public Sector Management* **33**(4), 369–386. <https://doi.org/10.1108/IJPSM-12-2019-0322>

Khalil R, Mahmoud Y, Al-Sayed H. 2023. Leadership resilience in Middle Eastern fire brigades. *Journal of Contingencies and Crisis Management* **31**(1), 88–99. <https://doi.org/10.1111/1468-5973.12477>

Khosravi P, Newton C, Rezvani A. 2020. Employee-oriented leadership and morale building. *Leadership & Organization Development Journal* **41**(3), 319–334. <https://doi.org/10.1108/LODJ-12-2018-0483>

Kim S, Park Y. 2022. Resource inadequacy and performance outcomes in firefighting operations. *Safety Science* **146**, 105541. <https://doi.org/10.1016/j.ssci.2021.105541>

Kim S, Vandebaele W. 2020. Resistance to change in public organizations. *Public Management Review* **22**(6), 887–905. <https://doi.org/10.1080/14719037.2019.1619815>

Krahmann E. 2021. Security governance and institutional capacity in developing states. *Journal of International Relations and Development* **24**(3), 635–656. <https://doi.org/10.1057/s41268-020-00207-8>

Lee J, Kim H. 2022. Coordination with local governments for sustained fire service leadership. *Journal of Asian Public Policy* **15**(2), 234–252. <https://doi.org/10.1080/17516234.2021.1918923>

Li H, Wang P. 2023. Stakeholder collaboration and organizational adaptability. *Journal of Public Administration Research and Theory* **33**(3), 439–455. <https://doi.org/10.1093/jopart/muac015>

Li Y, Wang X. 2020. Work–life balance and professional growth among leaders. *Journal of Managerial Psychology* **35**(5), 389–402. <https://doi.org/10.1108/JMP-07-2019-0502>

Lim H, Tan J. 2023. Monitoring and accountability in high-stakes organizations. *Journal of Applied Management* **21**(2), 145–163. <https://doi.org/10.1108/JAM-02-2023-0041>

Liu Y. 2024. Emergency supplies procurement model for crisis response. *Computers & Industrial Engineering* **188**, 109937. <https://doi.org/10.1016/j.cie.2024.109937>

Lu C, Guy M. 2020. Coping through discipline and consistency in public safety leadership. *Review of Public Personnel Administration* **40**(2), 230–248. <https://doi.org/10.1177/0734371X18824684>

MacDermid Wadsworth S, Marcy RT, Brown J. 2021. Exclusion, resilience, and adaptation among firefighters. *Journal of Occupational Health Psychology* **26**(4), 341–354. <https://doi.org/10.1037/ocp0000274>

McGuire D, Germain M, Lang R. 2020. Balancing operational and administrative leadership roles. *Journal of Leadership Studies* **14**(2), 56–68.
<https://doi.org/10.1002/jls.21724>

Mendoza R, Cruz A. 2022. Public service leadership under crisis in the Philippines. *Philippine Journal of Public Administration* **66**(1), 33–50.

Misra S, Shields PM, Valcik N. 2022. Capacity-building for fire services in public administration. *Public Administration Quarterly* **46**(2), 221–247.

Moynihan D. 2020. Collective leadership and resilience in public service recovery. *Public Administration* **98**(1), 92–108.
<https://doi.org/10.1111/padm.12620>

Moyo T. 2022. Improvisation in African firefighting contexts. *African Journal of Public Sector Management* **29**(3), 312–328.