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# Adaptive Capacity in a Crisis: Turbulence Managers in Street-Level Organizations

Gertrud Alirani  | Olof Oscarsson  | Pär M. Olausson | Erna Danielsson

Department of Humanities and Social Sciences, Risk and Crisis Research Center (RCR), Mid-Sweden University, Östersund, Sweden

**Correspondence:** Gertrud Alirani ([gertrud.alirani@miun.se](mailto:gertrud.alirani@miun.se))**Received:** 15 January 2024 | **Revised:** 11 November 2024 | **Accepted:** 19 December 2024**Funding:** This work was supported by Sandviken municipality [grant number KS2020/313 2020-05-06].**Keywords:** adaptive capacity | crisis management | managers | street-level organizations | turbulence

## ABSTRACT

This study explores the adaptive capacity of managers in street-level organizations (SLOs) in response to global crises. Using a Swedish municipality as a case study, we explore the challenges encountered by managers during the extended COVID-19 pandemic. The abilities required to manage the crisis differ from the challenges and skills typically associated with professional crisis managers. We propose the term ‘turbulence manager’ to describe the unique challenges in SLOs and the skills required to navigate the situation, particularly the delicate balance between crisis management and regular duties. In conclusion, this study emphasizes the crucial role of SLO managers in crisis adaptation, highlighting their ability to mitigate the impact of turbulence by creatively adjusting their existing routines.

## 1 | Introduction

In the face of unprecedented global challenges, particularly the emergence of major crises such as the COVID-19 pandemic and climate crisis, it is imperative to ensure that essential welfare services are provided to citizens while adapting to the multifaceted effects of these crises. Recognizing the need to examine how welfare service providers adapt to such conditions, this study focuses on street-level organizations (SLOs), which are positioned at the forefront of welfare service provision during crises (Brodkin 2021). As SLOs play a pivotal role in providing essential welfare services—arguably even more crucial during crises—their adaptation to such crises needs to be better understood. The COVID-19 pandemic hit SLOs, such as elderly and disabled care, preschools and schools, particularly hard and, therefore, may provide learning opportunities for future events. Although crises of this magnitude are rare, the COVID-19 pandemic’s disruption and duration offer valuable insight into the challenges faced by SLOs and how they handle them in providing welfare services during crises. Managers in SLOs, such

as school headmasters or heads of social services, are essential actors in managing and supporting their staff in maintaining their duties in turbulent situations. Therefore, this is the focus of the present study.

As described by Brodtkin (2021), SLOs encompass entities that operate in direct proximity to citizens as the operational arm of the state. Primarily situated within the subnational government, they represent the frontiers of government crisis management (Gofen and Lotta 2021; Oscarsson 2021). These organizations are likely to have valuable competencies because, during their ordinary working conditions, they must navigate uncharted territories, take protective measures, and pursue resilience strategies (Ansell, Sørensen, and Torfing 2021; Gofen and Lotta 2021; Goodsell 2002). The challenges faced by street-level bureaucrats were first highlighted by Lipsky (1980) and have been extensively explored. However, there is still limited knowledge of the contextual conditions for their work and the support they receive from higher management at the local level (Chang and Brewer 2022; Oscarsson 2021). Moreover, there is a

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lack of research on crisis situations as contextual constructs, particularly in street-level implementation. Even though there are theoretical expectations of managers' importance in SLOs (Møller and Grøn 2024), specifically during crisis (Ansell, Sørensen, and Torfing 2021), there are still few empirical accounts. Moving beyond the actions of street-level bureaucrats, this study focuses on the organizational level, specifically the role of managers within SLOs.

Previous studies on SLOs during crises have demonstrated the importance of organizational stability and flexibility in adapting to fast-changing situations. Street-level bureaucrats often cope with complex situations under stress when providing welfare services to clients (Lipsky 1980; Tummers et al. 2015). Effectively responding to a crisis requires SLOs to have the capacity to navigate fast-changing and unexpected scenarios while fulfilling their routine responsibilities. During a crisis, this may include using improvisation, prioritizing, and providing alternatives when ordinary routines do not apply (Oscarsson and Danielsson 2018; Danielsson, Giritli Nygren, and Olofsson 2020). Boyne and Meier (2009) studied public sector organizations, comparing organizational stability and performance, and found that stability was an important factor in managing turbulence. They concluded that this may differ depending on whether it is a single- or multi-purpose local government. We might expect that multipurpose organizations have experience coordinating between departments and units but also demand more managers at all levels within the organization to handle fast-changing situations. Indications are that middle managers are the actors in the organization that need to handle the most novel problem situations but also tend to use a limited repertoire of resources when solving problems (Hye and Øgård 2016). Adequate support from managers is important for alleviating the stress experienced by street-level bureaucrats and enhancing staff's ability to handle situations effectively (Oscarsson and Danielsson 2018; Danielsson, Giritli Nygren, and Olofsson 2020). Oscarsson and Danielsson (2018) revealed a disparity between staff and managers in their perspectives on the crisis and its management, which obstructed effective management in the initial phase of the crisis.

SLOs, as the state's actors closest to the citizens, play a significant role in the implementation of political decisions and the maintenance of trust in political institutions (Brodkin 2021; Gofen and Lotta 2021). This may be particularly important during crises, and with the expectation of increasing global challenges, their roles as crisis managers will increase. Therefore, more knowledge is needed on managers' roles in SLOs during a crisis as they need to adapt higher-level rules and regulations to local conditions and simultaneously support their staff.

To bridge this gap, our study aims at understanding the abilities needed by SLO managers to handle major crises. Using the concepts of turbulence and adaptive capacity, we adopt a case study approach focusing on a Swedish municipality to explore the challenges confronted by SLOs and, specifically, the handling by managers in the organization during the event. The research question guiding our work is as follows:

*What type of turbulent problems did SLO managers face during the COVID-19 pandemic, and how did they adapt to these problems?*

By employing a case study, we gain an in-depth understanding of how managers handle crises, enabling us to advance theoretical knowledge by suggesting a new concept, 'turbulence managers', which captures the specific challenges and skills of managers in SLOs. This study thus contributes to the crisis management literature by exploring how organizations handle crises characterized by a high amount of turbulence, specifically focusing on managers' abilities. It also adds to the SLO literature by enhancing the understanding of the internal conditions of SLOs during crises and the role of managers in mitigating stress for their staff.

## 1.1 | SLOs During Crises

Any crisis may have deep implications for an SLO, such as a fire in an elder care home or a school shooting at a local school, but it usually does not have such transboundary effects as a crisis that affects the entire society and unfolds into several sets of crises. To frame a crisis such as COVID-19, one can, in accordance with Boin, McConnell, and Paul (2021), say that it was both cross-border in nature and prolonged, with implications for society. It also included several crises. In the case of COVID-19, this was observable through it being perceived as a health, social, and economic crisis.

In response to these dynamics, research has focused on the challenges that SLOs face during crises. Davidovitz, Cohen, and Gofen (2021) noted that street-level implementation in crises requires taking on additional and varied responsibilities, leading to heightened policy ambiguity, increased risk and expanded discretion. These factors complicate the fulfilment of their commitments, necessitating further adjustments. Similarly, Gofen and Lotta (2021) observed that SLOs in crises must take on extra tasks or quickly alter their routine activities, further complicating their ability to maintain effective operations.

Parallel to and to some extent extending the problem-oriented approach to SLOs, numerous scholars have highlighted their adept crisis management capabilities. This is exemplified by the emphasis on the significance of the ad hoc organizing process within SLOs (Danielsson 2020; Kendra and Wachtendorf 2016; Oscarsson 2022; Sparf 2018). Danielsson (2020) investigated how familiarity with places, tasks, and situations influenced the response strategies of various stakeholders, including SLOs, during a parasitic outbreak in the drinking water of a Swedish city. Her exploration revealed that organizational members improvisationally improve their existing knowledge, experiences, and skills, even when confronted with entirely novel situations. However, structured guidance is required when faced with unfamiliar locations and tasks.

Furthermore, Sparf (2018) revealed that SLO staff are skilled at seamlessly incorporating uncertainties into day-to-day operations. This involves leveraging resources and skills derived from daily practice. The effectiveness of this management approach is facilitated by robust downward-directed trust among managerial levels (Sparf 2018). However, this autonomy leaves operational managers largely independent and requires them to handle numerous situations without the direct support of higher management (cf. Oscarsson and Danielsson 2018).

Consistent with these findings, in their examination of homes for unaccompanied youths during the 2015 refugee situation, Oscarsson and Danielsson (2018) discovered that possessing prior knowledge of tasks and goals empowered both managers and staff to improvise, drawing from the established practices of their profession (Kendra and Wachtendorf 2016). These practices serve as navigational maps, enabling staff to undertake necessary actions during chaotic situations.

The above findings can be summarized using Deverell and Ganic's (2024) perspective that crises should be approached with resilience and a contingency mindset, which previous research suggests SLOs are actively adopting. These concepts include the capacity to improvise, remain flexible, and build endurance (Boin, Comfort, and Demchak 2010; Oscarsson 2021).

Previous research not only illuminates the intricate context within which SLOs operate but also accentuates their adeptness in navigating such complexity. Building on these dual insights as the foundation for this study, we attempt to advance our understanding of how SLOs manage crises by examining a crisis that has been both cross-boundary and prolonged—in this case, the COVID-19 pandemic—which is lacking in research on SLOs as crisis managers. To better understand their crisis management, we used the concepts of turbulence and adaptive capacity, which are explained below.

## 1.2 | Theoretical Framework

### 1.2.1 | Turbulence as Concept

We use the theoretical concept of turbulence to understand the challenges faced by SLOs and managers in handling crises. Turbulence has been defined as 'a situation where events, demands and support interact and change in highly variable, inconsistent, unexpected or unpredictable ways' (Ansell and Trondal 2018, 44–45). Ansell and Trondal argued that we are facing times of dynamic interactive change, in which turbulence in contemporary societies is a constant condition for public sector organizations, and that we need to further our understanding of what that means for governance. Departing from turbulence, we first conceptualize turbulence in SLOs, followed by adaptive capacity as a concept to analyze managers' handling of the situation.

Ansell, Sørensen, and Torfing (2021) argue that major crises contain a large portion of turbulence. Nevertheless, the concept of turbulence is understood as something different from a crisis. While a crisis is defined as 'a serious threat to the basic structures or the fundamental values and norms of a system, which under time pressure and highly uncertain circumstances necessitates making vital decisions' (Rosenau 1990, 10), turbulence focuses more on situations of highly unpredictable and unexpected change dynamics (Ansell and Trondal 2018). A crisis may lead to major changes but is more likely to maintain or resume previously established structures after the crisis is over. Turbulence forces decision-makers to act when established rules and structures do not apply. Therefore, it emphasizes a change process, whereas the concept of crisis focuses more on events.

For some organizations, turbulence may be part of normal working conditions. The closest to mind would be high-reliability organizations (La Porte 1996) or decision-makers in world politics (Rosenau 1990), but it could also be applicable to SLOs having to deal with, for example, rapidly changing political demands or often pressing staffing situations. The origin of turbulence is rooted in the intricate complexities prevalent today. Factors such as globalization, emerging disruptive technologies, mediatized communication, political misalignment processes and fragile economies contribute to elevated complexity, with events, demands and support interacting and evolving in markedly variable, inconsistent, unexpected and unpredictable ways. In this context, the expertise prevalent in SLOs leads to a lack of orientation, information and experience, further complicating the situation (Alcadiapani et al. 2020; Gofen and Lotta 2021; McAdams Ducey and Stough 2011). Turbulence in this understanding further adds complexity and a direct focus on organizations that are not usually seen as crisis organizations.

To investigate how turbulence can be distinguished from non-turbulent conditions, Rosenau (1990, 8) argued that systems must always handle fluctuations as part of a stable system in equilibrium with their environment. When fluctuations occur that can no longer be managed within the existing system and threaten equilibrium, the situation is characterized as turbulence. While Rosenau (1990) focused on turbulence in world politics, Ansell and Trondal (2018) argued that this concept could be used to understand the challenges that public sector organizations face today.

In Ansell and Trondal's (2018, 46) interpretation, these parameters, adjusted for public administration conditions, can be described in three dimensions: turbulent environments, turbulence of scale and turbulent organizations. Turbulent environments refer to factors external to organizations (Ansell and Trondal 2018) that cause unexpected and dramatic shocks for them (Nohrstedt and Bodin 2014), such as the COVID-19 pandemic. Turbulence of scale involves contradictions that can occur between levels and policy domains (Ansell and Trondal 2018). If a stable system means that authority is unquestioned and followed automatically, then turbulence of scale occurs when this authority is questioned, and new norms occur that challenge the established rules (Rosenau 1990, 11). The third dimension, turbulent organizations, focuses on the internal conditions that create turbulence, such as staff turnover, conflicting rules and internal reform (Ansell and Trondal 2018), and concerns events and situations in which existing rules and boundaries do not contain the fluctuations that occur as opposed to normal and expected patterns of variations and changes within the organization.

Although turbulence as a theoretical concept focuses mainly on structural arrangements, we now turn to the implications for and responses of managers at different levels of the organization when adapting to turbulence.

### 1.2.2 | Adaptive Capacity

Adaptive capacity refers to a society's ability to adjust to disturbances to preserve its functions, potentially necessitating reorganization (Holling 1973; Folke 2006). From a public sector

perspective, a merging of adaptive capacity with governance signifies strategies employed to address uncertainty and manage complexity within socioecological systems (see Dietz, Ostrom, and Stern 2003; Folke 2006; Țiclău, Hințea, and Andrianu 2020). This ability can be described as working practices and methods to facilitate responses (Janssen and van der Voort 2020) and learn from unusual and complex events (Nolte and Lindenmeier 2023). In accordance with this reasoning and to understand the adaptive capacity in SLOs, we use Brodtkin's (2021) proposition that crises are disruptive to better understand the response to turbulence and its effect on discretion, policy ambiguity, and risk exposure. These disruptions are expected to '...produce patterns of practice and structural arrangements that are different from those one would anticipate under ordinary conditions' (Brodtkin 2021, 19). Brodtkin proposed two aspects that may affect handling by public sector organizations: disrupted routines and structural arrangements.

Focusing on managers, we can expect both formal and informal routines to change during crises. Staff working on the frontline of the bureaucracy develop informal routines to handle demanding working conditions characterized by wide discretion in the implementation of laws and regulations (Johansson 1992; Lipsky 1980). During a crisis, these routines can be expected to be challenged by new demands, altered conditions for ordinary formal and informal routines in decision-making, and a shortage of information (Brodtkin 2021; Deverell and Ganic 2024).

Adapting to a crisis may take different forms; changed or even new patterns of informal decision-making can be expected to develop (cf. Oscarsson and Danielsson 2018; Danielsson 2021). The managers' role is to lead the work, making the relational and communication aspects between managers and staff essential. During a crisis, uncertainty and ambiguity usually increase, and the importance of well-functioning communication between managers and staff is emphasized (Davidovitz, Cohen, and Gofen 2021). Managers in SLOs might be seen as a specific category of public managers, with their position of being accountable to both local and higher-level authorities and being the actors that operationalize public policy (Gassner and Gofen 2018). May and Winter (2009) highlighted the importance of managers in shaping the behaviour of street-level bureaucrats during the implementation of new national policies and helping to reduce uncertainty. Their study indicates that local-level politicians' signals are important for what is given priority and that the degree of control by local-level managers influences street-level bureaucrats' actions. Furthermore, in an SLO context, the ability to support staff in making discretionary decisions and managing stressful situations may be particularly important (Møller and Grøn 2024). This study focuses on managers' adaptation capacity in relation to disrupted routines and the conditions for new routines to be adopted.

The second aspect concerns the shift in the structural arrangements of organizations, which are crucial components of organizational development and to continuously adapting to the changing conditions and needs of society. During a crisis, decisions must be made under high pressure, with time constraints and with limited information. To handle a turbulent situation, including a crisis, as well as other interconnected demands and support, we might expect that existing structures

are no longer applicable. Changes in the form, arrangement, and governance structure affect the allocation of authority, responsibility, and power distribution. Therefore, a crisis may be expected to disrupt public sector organizations (Brodtkin 2021). Managers obtain first-hand information from their staff about what is going on during a crisis and, as translators and implementers of new structural arrangements, play an important role in adapting to fast-changing conditions during a crisis. This aspect concerns not only changes in structural arrangements at higher levels of government that may affect SLOs but also changes in the organization of the municipality or specific units.

The expectation is that the different dimensions of turbulence taken together can be understood as the challenges faced by managers in SLOs during a crisis. During a crisis that continues for a long period, managers' learning over time is also expected to be part of the change dynamics. Using the different dimensions of turbulence and the perspective that a crisis has a disrupting effect on SLOs enables empirical analysis of SLO managers as crisis managers and their ability to adapt to the COVID-19 pandemic.

## 2 | Methods

This qualitative study employs a single case study to examine managerial responses to the COVID-19 pandemic within a Swedish municipal organization, focusing on units for elderly and disabled care, preschools, and elementary schools. Details regarding case selection and methodological approach are provided in the following sections.

Case studies are frequently used to explore specific phenomena within defined contexts, enabling deeper insights (Bryman 2016). Rather than aiming for generalization, this study seeks to provide an in-depth account of how managers within a SLO adapted to a large crisis. Single case studies are valuable for theoretical development by enhancing our understanding of complex phenomena (Yin 2014). By offering insights into the crisis management in a Swedish municipality during the COVID-19 pandemic, this study contributes to theoretical refinement by formulating a new concept: 'turbulence managers'. Examining crisis management at a crisis onset is challenging due to its unpredictability, and the COVID-19 pandemic provided a unique opportunity to study managers' roles in real-time within an SLO context. A combination of interviews, document studies and open-ended qualitative responses from a survey were used to provide an in-depth understanding of the phenomenon.

### 2.1 | The Case

This study examines the response of a Swedish municipality to the COVID-19 pandemic, leveraging the case of Sandviken to gain insights into the crisis management capacities of SLO managers. Sweden's welfare system is highly developed and largely managed by municipalities, making it an ideal context for studying crisis management within SLOs. Notably, Sweden's approach to COVID-19 relied primarily on national recommendations and



guidelines rather than mandates, granting municipalities greater autonomy but also adding ambiguity to the decision-making process (SOU 2022, 10; Tegnell and Härgestam 2023; Deverell and Ganic 2024). Local self-governance grants municipalities substantial discretion in routine operations (Montin 2016), and during crises, they are expected to maintain this structure, following national guidelines in a way that aligns with their ordinary administrative frameworks. Swedish municipalities thus continued operating within standard organizational structures while adapting autonomously to manage the crisis (Brommesson 2021; Sparf et al. 2022).

Sandviken, a medium-sized municipality with roughly 40,000 residents, including 25,000 in its central city. Located near the larger municipality of Gävle, Sandviken resembles many mid-sized Swedish municipalities in population, structure, and governance. Including the entire municipal organization in our study allowed for an in-depth view of organizational dynamics, including interdepartmental variations and their impact on crisis management strategies. This case thus provides a unique opportunity to explore SLO managers' roles as crisis managers within Sweden's decentralized, welfare-oriented system.

## 2.2 | Empirical Materials

This study's empirical data derive from an evaluation of Sandviken municipality through interviews, surveys, and observations conducted from 15 May to 13 November 2020, with additional interviews in spring 2021 focusing on crisis management at upper and middle management levels (Olausson et al. 2021). Data were collected using triangulation across four elements: meeting participation, document analysis, surveys, and interviews. This multi-method approach provided a detailed case description, enhancing the study's credibility and transferability (Bryman 2016, 384).

The data reflect perspectives from all organizational levels, highlighting the municipality's adaptive dynamics at the onset of COVID-19. Participants included municipal council politicians and managers from various departments, including local housing company managers. These individuals needed to develop rapid decision-making skills to handle COVID-19's unprecedented challenges. Though politicians and union representatives were not the study's primary focus, their input was valuable in understanding interorganizational interactions during the crisis.

The study's timing limited data from frontline staff, such as teachers and care workers, but its focus on managerial response across all departments and levels strengthened its findings.

### 2.2.1 | Document Studies and Online Observations at Meetings

A document study was conducted, examining meeting notes, plans, policies, and records from crisis management staff meetings. Observations took place during the early stages of the COVID-19 pandemic, focusing on crisis management meetings involving managers from various municipal units. The newly

formed crisis management team received guidance on priorities, task management, and information sharing between higher management and individual units. Some meetings also included elected representatives in an informational capacity. During spring 2020, observations were made at an average of one to two meetings per week, decreasing to one meeting per week in autumn. Detailed notes were taken, capturing key discussion topics, specific decisions—such as regulatory interpretations on managing infected individuals, school closures, or visitation restrictions in elderly care homes—and meeting protocols later reviewed online for sessions not attended. We subsequently examined the protocols and our notes on the challenges encountered by SLOs, particularly how managers addressed daily operations during the pandemic, that is, *What type of turbulent problems the SLO managers experienced during the COVID-19 pandemic and how did they adapt to these problems?*

The document study and observational data offered insight into the development of crisis management in Sandviken, illustrating how managers organized, adapted, and navigated complex challenges in response to pandemic-related turbulence. During meetings, researchers did not interfere, although their presence was acknowledged by participants. This comprehensive approach allowed analysis of the types of turbulent issues encountered by SLO managers and their adaptive responses during the pandemic's initial months.

### 2.2.2 | Interview Study

During spring 2021, semi-structured interviews were conducted with selected municipal actors to capture in-depth experiences and lessons learned from the municipality's crisis management efforts. These interviews aimed to document the impact of the pandemic on managerial roles, coordination and organization, support structures, communication, and key learnings. Nine interviews were conducted with representatives from various municipal departments and groups, including the care administration, crisis management teams, union collaboration groups, administration management, and local housing companies (Table 1). Participants were selected based on their roles as managers responsible for subordinate staff and for addressing emerging issues during the pandemic's initial stages.

In total, the group interviews included 60 individuals in various roles: 15 senior managers, 30 operational managers, and 15 staff members. Not all staff were directly involved in client interactions. All interviews, except one, were conducted as group interviews, with participant numbers ranging from 4 to 15. Group interviews were used to capture diverse perspectives and to enhance the depth of understanding around how personnel managed the challenges presented by COVID-19 (Frey and Fontana 1991). The diversity of viewpoints contributed to new dimensions and insights into crisis management that would have been difficult to access in individual interviews (Mann 2016, 176–183).

All interviews were conducted digitally, each lasting between 60 and 90 min, recorded and transcribed verbatim. While interview themes aligned with those in the questionnaire, the semi-structured format allowed for a deeper exploration of

**TABLE 1** | Overview of the interviews.

Interview	Participants	Number of participants
Individual Interview 1	Municipal Manager	1
Interview 2*	Municipal Director's Management Team (directors from the municipal departments and security manager)	8
Interview 3	Central Coordination Group (Chief Safety Delegate and representatives from different unions)	6
Interview 4	Education Department Leadership Group (head of department and subordinate operational managers)	6
Interview 5	Care Crisis Management Team	7
Interview 6	Care Department (head of department and subordinate operational managers)	4
Interview 7	Politician (some serving in councils, committees, or boards)	15
Interview 8 <sup>a</sup>	Leadership Team of the Municipal Management (managers responsible for different services/office)	9
Interview 9	Representatives from Sandvikenhus, higher-level managers	6
<b>In total</b>		<b>60</b>

<sup>a</sup>Includes the municipal manager.

participants' experiences in coordinating and organizing efforts, support mechanisms, communication processes, and critical lessons learned during the early pandemic response.

### 2.2.3 | Survey

While the survey included closed-ended questions about roles and organizational functions, this study prioritized responses to the qualitative open-ended questions, where participants described their handling of various situations. Survey questions addressed experiences in managing COVID-19, including communication effectiveness, support from upper management, interunit and agency cooperation, and specific impacts of the pandemic on their units, including challenges faced. The survey responses complemented the interviews by reinforcing the emerging themes, enhancing the study's overall credibility.

The survey was distributed to 134 selected respondents within the municipality, achieving a response rate of 77% (104 respondents). Respondents included managers, public officials, and elected representatives from various political parties, all chosen for their significant roles in managing the pandemic. This selection represented all organizational levels and included the entirety of staff in the relevant positions, aiming to capture perspectives from a broad cross-section of the municipal organization. Although survey participation was encouraged by the municipal administrator who facilitated contacts, it remained voluntary. The survey was administered using the Netigate platform.

Among the respondents, 23% were elected representatives, 47% were managers or CEOs within the municipal housing company, 19.4% were public officials, and 8.2% represented central crisis management; an additional 2.4% (three respondents) selected the 'other' category. All participants held responsibilities related to managing COVID-19 within their respective units (Table 2).

**TABLE 2** | Overview of the participants.

Participants	Survey respondents (%)
Elected representatives	23.0
Managers (including managers at the local housing company)	47.0
Public officials	19.4
Central crisis management	8.2
Other	2.4
<b>Total</b>	<b>100</b>

### 2.3 | Thematic Analysis

Thematic analysis was conducted using Braun and Clarke's (2006) approach to qualitative data. The process began with an initial review of empirical materials to identify preliminary themes, with each researcher independently examining the data for insights. Collaborative sessions followed to compare and discuss findings. A systematic, multi-step approach ensured comprehensive analysis, guided by the research question. Relevant segments related to regular operations, crisis management, and the interaction between crisis response and routine tasks were extracted and compiled into a unified document for in-depth analysis. This was further refined by comparing the segments with the remaining data to ensure no important information was overlooked.

An inductive coding process categorized narratives into codes such as "increased technology dependence," "maintaining ordinary structures," "national guidelines," and "acting outside the box." For instance, segments like "all physical meetings were cancelled" and "you may now connect on Teams instead of in-person" were grouped under "increased technology dependence."

Theoretical concepts were then integrated to deepen our understanding of how managers adapted to the crisis's uncertainties. This reflexive stage involved reading, reflecting, writing, and questioning throughout the coding process (Braun and Clarke 2020). Results were organized by empirical themes, linking findings to theoretical concepts for enhanced contextual understanding.

Three primary themes emerged: Acting under uncertainty and ambiguity, Testing new routines within established structures, and Challenges in balancing routine operations with crisis response. These themes captured the turbulence faced by the organization during the crisis and how managers navigated these challenges.

We periodically met with the crisis management team to present and discuss our findings. Their feedback validated our results and reinforced the credibility of our conclusions. While we avoided direct recommendations, we shared insights on how the municipality's work was perceived by survey respondents, contributing to a nuanced understanding of our findings. Reflecting on our role in the research process was essential for accurately interpreting the context and implications of the results.

### 3 | Results

The global spread of the new virus began impacting the municipality slowly in early 2020 and rapidly intensified in March, affecting all aspects of the organization. The creeping crisis, akin to a turbulent environment, gradually unfolded, causing turbulence due to delayed reactions and a lack of preparedness, even at higher political levels. Initial awareness and preparation began in February 2020, and significant effects on officials and managers were observed in late March (survey). The municipality introduced numerous measures to curb the spread of the disease. Despite the escalation, municipal management decided to maintain regular operations rather than shift to a crisis organization in March. This aligns with Swedish crisis management principles, allowing municipalities to decide on an organization during a crisis. A crisis management group was formed to oversee the situation, with decision-making procedures following ordinary routines.

At the national level, on 16 March 2020, the authorities recommended remote work where possible, and on 17 March, upper secondary schools were advised to provide digital education. Elementary schools and childcare facilities were encouraged to remain open. The COVID-19 pandemic has posed new challenges for municipal work since mid-March, accentuating turbulence with unclear authority, rapid changes and varying interpretations of recommendations among municipalities. The most significant challenges arose in the education and care departments, where remote work was not feasible for the staff. The rising sick leave and implementation of preventive measures intensified pressure on the organization, particularly during the initial months of the spring of 2020. Managers faced the dual challenge of coordinating regular work and addressing crisis-related issues. The combination of an already-demanding work environment and specific conditions in preschools, schools, and care facilities, where remote work was not

possible, contributed to organizational turbulence. This turbulence persisted throughout the study period.

In the following sections, the turbulence and handling of the situation by managers are described in detail, based on the themes that emerged in the analysis. We begin with the overarching theme of local managers as turbulence managers and then develop a description of our results into several subthemes.

#### 3.1 | Acting Under Uncertainty and Ambiguity

During the initial months of the COVID-19 pandemic, local managers had to react to the rapid spread of the virus and decisions taken at higher government levels. Although there can be challenges in interpreting national rules and legislation under ordinary circumstances, this situation forced managers to introduce new routines and ways to handle fast-changing recommendations. This involved challenges in interpreting recommendations and the limited time municipalities had to adapt.

During this time, local decision-makers experienced a lack of coordination at the national level, hindering their ability to interpret directives from national authorities. New recommendations and guidelines were issued without adequate time for local authorities to prepare, and managers had to be alert and respond when the Prime Minister or representatives of the National Board of Health and Welfare introduced new recommendations or approaches.

*Therefore, I believe one thing that has contributed tremendously is the ambiguity surrounding central guidelines. I believe that many of us have spent an enormous amount of time attempting to apply and interpret the various restrictions. (Interview 2)*

The lack of coordination at all levels added to the ambiguity and feeling of pressure for local managers. In addition to unclear information and guidelines at the national level, a lack of coordination among national authorities increased frustration and workload. Solutions at the local level in response to national recommendations sometimes contradicted the existing rules. Specifically, during the first phase of the COVID-19 pandemic, some recommendations and directives presented by the government and responsible authorities conflicted with existing legislation. One example was the conflict between rules regulating infection control and the work environment.

*It is not possible to adhere to security procedures. Thus, I believe that is how it has been ... I mean, one way to approach it has been to simply refer to ... 'Yes, but this is the path Sweden has selected', and [...] we have to deal with it. I cannot make a safety stop; it has been tried. The Work Environment Authority has reopened it ... because the school is supposed to be running. (Interview 3)*

The unstructured way in which the central authorities or the government made decisions affected organizations' ability to interpret and implement the decisions.

*The combination of national guidelines and what are more or less laws has been an unusual mess. Additionally, the government has contributed with personal or political statements that are not really either guidelines or regulations; hence, it has been enormous ... Clearly, our employees have listened to it, contributing more to anxiety than to creating security. (Interview 2)*

This had consequences for the interpretation of national recommendations and directives versus directives from municipal management.

At the local level, existing rules do not always apply to this type of crisis. Recommendations to impose a visitor ban on elderly care homes and shut down schools are some of the conflicting issues with existing legislation. This left municipalities with inconsistent national recommendations for handling conflicting situations, which added to their frustration. They found it difficult to defend these higher-level decisions in front of their staff and local citizens.

*What I take with me, above all, as a lesson is that our structures and laws are not entirely adapted to situations that arise during a pandemic such as this. Further, I believe not the least of the situation when we in Sandviken began to close our nursing homes; we did not actually have the legal support to do so. (Interview 7)*

Furthermore, the varying interpretations of different Swedish municipalities have added to this ambiguity. Municipalities have a high degree of discretion in deciding how to fulfil their responsibilities. This was especially challenging for municipalities in the same region, as staff and citizens compared responses. This was primarily an issue during the first phase of the pandemic until routines and more specific guidelines were established. This was most evident regarding the supply of protective equipment but also concerning other issues where neighbouring municipalities interpreted national recommendations and directives differently.

*They heard from their colleagues at network meetings that libraries perform different activities. Then, everyone makes slightly different assessments [...], Then, you have to attempt to navigate through all of this... (Interview 2)*

These differences became clear through national or regional networks, such as networks for libraries, cultural schools, and sports, in which representatives from the municipality participated. Thus, the networks offered arenas for coordination among municipalities in different areas but also contributed to the ambiguity in interpreting the recommendations.

At the local level, managers had to be alert to new information daily, which meant viewing several national authorities' webpages for updates on different aspects of the pandemic. When a new recommendation emerged, local authorities had to interpret what this meant for their different organizational units, identify changes to be made, and determine solutions.

*We had to do some experimenting. We have not made long investigations before that or had answers to everything, but we have tried out ways forward many times. (Interview 8)*

New routines had to be continuously implemented. However, being proactive was challenging because it was difficult to predict how the situation would unfold.

*What we first thought would happen did absolutely not happen, but there were other things happening during this pandemic period. (Interview 8)*

Adapting the organization and the work to new conditions was a constant challenge during the COVID-19 pandemic. Although it was challenging and stressful, the managers also reflected on this experience as having positive sides, such as finding solutions and being 'problem solvers' (Interview 8). They had to act despite the fact that the situation was surrounded by uncertainty and ambiguity, and decisions had to be made without knowing the exact effects or how the situation would evolve.

### 3.2 | Testing New Routines in Established Structures

The COVID-19 pandemic caused significant disruptions in traditional work practices, as the majority of managers and staff were suddenly required to work remotely. This sudden shift was made feasible by a swift digital transformation within organizations, which led to the establishment of new routines. Despite encountering numerous challenges, managers found this transition to be surprisingly effective. Before the pandemic, digitalization was an ongoing process in most areas of society, including this municipality, which may have enabled the transformation process. However, their widespread implementation had not occurred at the scale or speed that now was necessary. Additionally, it took time for this transition to embed itself within organizations and earn the trust of both managers and employees.

Amidst these changes, managers began exploring novel approaches to adapt to the situation that enabled new routines to develop. While some online meetings were already in place, the majority were traditionally conducted in person at the office, with managers frequently visiting schools and elderly care homes. However, following the national recommendations given in March 2020 to avoid physical gatherings owing to the vulnerability of populations in care homes, adjustments became imperative. The abrupt nature of this shift prompted by the recommendations occurred without prior preparation or estimation, underscoring the scale of turbulence that significantly affected municipalities at the onset of the COVID-19 pandemic.

*All physical meetings were cancelled. One did not know for how long. We were not adept at those digital meetings in the beginning. (Interview 6)*

The challenges in shifting to working remotely differed in extent among the departments within the municipal organization,



depending on whether they were working close to their clients, such as in elderly care and schools, or working in the administration or holding positions on a more strategic level.

For managers, this predominantly meant working from home and maintaining digital communication with staff. Conversely, staff in elderly care homes and schools continued their onsite work; however, communication with managers shifted to digital platforms.

Notably, challenges arose in the interactions between managers and staff who were closely involved with clients. Managers had to devise solutions to accommodate their staff and address the repercussions of these changes. Staff in elderly care homes or schools who were unaccustomed to digital meetings faced a learning curve that required additional time and energy to adapt. In survey responses, several individuals highlighted the need for ‘promptly learning new technological solutions, such as various digital meeting programs’ (survey). Furthermore, some staff members lacked access to computers, which added to the challenge.

With rapid digitalization, the way operational managers communicated with staff changed to some extent. Meetings became shorter and were perceived as more efficient, with no informal discussions. Moreover, meetings were enabled at times that were previously used for transportation between places.

*You could have meetings of shorter duration. You may not jump into the car to chat with someone just for 15 minutes; however, now you can connect on teams and do that. (Interview 3)*

Not only was digitalization open to changes that remained after the COVID-19 pandemic, but there was also an apprehension of the potential for change.

*I am not saying that forcing things is always positive; however, it provides us with an idea of the organization's ability to actually change and at what pace it can happen if required or truly desired. Significant progress has been made in many operations, even with many individuals who can barely book ...schedule a meeting on Outlook, sit and have digital meetings and lessons. Therefore, these are huge ... I mean that this leap in development is truly incredible. (Interview 4)*

Although rapid digitization imposed significant challenges on the organization and necessitated addressing some negative consequences, the overall sentiment was that the digital meetings and techniques used to navigate the situation brought numerous benefits. These changes not only improved efficiency but also became ingrained in the organization's routine. Swift digitization, prompted by the onset of the pandemic, not only caused internal disruptions within the organization but also bolstered its adaptive capacity, resulting in a profound transformation of its meeting structure within a matter of days or weeks. This experience serves as a valuable lesson learned within the organization, as expressed by both managers and politicians.

Even though routines had to be changed, the existing structures were maintained as much as possible. Although municipalities have the discretion to choose their organizational structures, Swedish crisis management principles emphasize remaining in ordinary organizational arrangements during crises. Sandviken chose to maintain its existing organizational structure, and the existing forums for decision-making in each department were kept intact. The change that they made was to create a smaller group comprising senior managers from the various departments who were initially tasked with obtaining an overview of the situation. Maintaining existing decision-making structures has advantages because the roles and responsibilities are already familiar to everyone.

A common theme in the interviews was the importance of trust in handling the situation. This revolves around managers trusting their staff or feeling trusted by higher levels, for example, in making fast decisions. Many also emphasized the value of having other colleagues to talk to and seek support from within the group of managers who continuously met during the pandemic.

*Full mandate to act, I felt comfortable in that ... I could make the decisions I needed to make. (Interview 6)*

They described the feeling of reliance on existing structures for roles and responsibilities in handling the situation. To feel trust, one must also know the managers and staff on whom one is relying.

*I think a guiding example that I'm taking with me is trust, to dare trust in your working group, clear and good communication, standing firmly with your feet on the ground, and if I did not, I would consult with some of my colleagues until I felt firm enough to transmit the information. (Interview 6)*

This manager described trust in staff, allowing street-level bureaucrats to exercise the discretion they need to handle their everyday situations. As leaders in their organizations, it is also valuable to consult colleagues when making decisions or communicating difficult issues. Maintaining existing structures may enable disruptive changes and the introduction of new routines that would otherwise be met with resistance.

### 3.3 | Challenges in Balancing Routine Operations and Crisis Work

The final theme in the interviews was the difficulty of handling the crisis and keeping up with ordinary work. A conflicting understanding of the situation emerged, specifically during the early months, between higher- and lower-level management regarding priorities and allocation of responsibility. Higher management struggled to translate unclear recommendations, and managers closer to the staff had to balance crisis management with day-to-day operations.

Lower-level managers perceived a lack of understanding at the municipality's strategic level regarding the challenges faced by

them and their staff. Managers working at lower levels felt that higher-level management underestimated the additional workload imposed by the situation. Balancing high workloads while maintaining quality, sustaining regular operations alongside handling new assignments, and ensuring smooth continuity of operations within the constraints of short notice from the government and Public Health Agency proved to be a significant challenge.

*There was a lack of time to handle both COVID-19 related tasks and regular duties, and mentally being able to let go of my regular tasks, which were also extremely important. (Survey)*

Staffing was a particularly difficult issue for lower-level managers, and the operational level faced significant challenges in handling personnel issues, particularly planning for unexpected understaffing. An effort was made to ensure clear communication and understanding across different functions, including encouraging the staff to work in congested areas during summer holidays. However, securing staffing, managing sick leave-related staff losses, and coping with existing staff put high pressure on lower-level managers, as highlighted in the survey responses.

*It was a challenge to secure staffing in the event of a large loss of staff owing to sick leave and to see whether the existing staff were coping, to handle the lack of staff and recruitment. (Survey)*

The need for daily updates on sick children in schools and preschools further emphasized operational stress. Personnel expressed exhaustion, concern over higher management's silence regarding the resolution of the situation, and the impact of massive workloads on energy and perseverance.

In contrast, higher-level managers tended to focus their attention on handling the crisis. Interpreting and adapting national recommendations at the local level required a significant amount of time for managers during the early months of the COVID-19 pandemic. This resulted in an increased workload for higher-level managers and local politicians, who had to dedicate substantial time to crisis management.

*There have been many chairpersons' [political] decisions considering that restrictions have changed continuously, and we have then had to make decisions ... yes, both two and three times between committee meetings on more restrictions on operations and access to our premises and so on. (Interview 7)*

The municipal council made more decisions than usual, and some decisions were delegated to higher-level managers, particularly those concerned with school closures in schools with high infection rates.

In addition to an increased number of strategic issues to handle, higher-level managers also found themselves handling operational tasks such as ordering protective equipment.

*Thus, I believed for a while that all our managers travelled considerably to handle such things, for example, transportation. It was not at all our responsibility otherwise; however, it was simply a matter of rolling up our sleeves and helping each other make this work. (Interview 5)*

New issues that had to be handled, such as providing face masks, did not have an appropriate place in existing routines and, therefore, were unclear responsibilities. Before new routines were discovered, higher-level managers were required to handle crisis-related issues.

Ordinary routines for communication and keeping up to date between levels were disrupted. For higher managers to adapt national recommendations to local-level conditions, they needed to understand the staff's situation. This need for information and disrupted communication routines have resulted in increasing pressure on lower-level managers to provide information. The rapid shift to crisis management in the initial phase of the COVID-19 pandemic led to a situation in which higher-level managers had to focus on handling the crisis. This left lower-level managers with the tough burden of balancing their responsibilities with ordinary work in addition to handling the crisis.

## 4 | Discussion

This study examined the challenges faced by managers in an SLO and how they managed the situation, helping us identify the specific adaptive capacity needed to manage a large-scale crisis in an SLO. That is, to handle a crisis but with different skillsets and demands than what we traditionally expect of crisis managers (cf. Oscarsson and Danielsson 2018). As Oscarsson and Danielsson noted, they are not traditional crisis managers in the sense that they handle crises in their professional role; however, they handle turbulence as part of managing their daily work, which requires abilities that are also valuable during a crisis.

In the aftermath of the COVID-19 pandemic, the managers of the studied SLO had to navigate under rapidly changing conditions of ambiguity and uncertainty. Unsurprisingly, the primary source of turbulence for the SLO managers was the rampant spread of the disease. However, there were additional dynamics at play, including multilevel coordination challenges and internal organizational conditions that both facilitated and amplified managers' ability to handle the situation, which caused turbulence. Turbulence was most pronounced during the initial months of the COVID-19 pandemic and persisted to a lesser degree throughout the crisis. These different dimensions of turbulence vividly illustrate the additional challenges during a crisis and how they interact with existing conditions of SLOs (Gofen and Lotta 2021), emphasizing the importance of understanding the handling within the SLO as a change process rather than a response to a single event (Ansell and Trondal 2018).

This unique role led us to conceptualize them as 'turbulence managers', drawing on prior research on turbulence (Ansell and

Trondal 2018; Hye and Øgård 2016). Specifically, the challenges posed by the COVID-19 pandemic, in interaction with the broader context, aligned closely with the characteristics of turbulence as defined by Ansell, Sørensen, and Torfing (2021, 950): a situation marked by surprising, inconsistent, unpredictable, and uncertain change dynamics. Managers had to adapt to a situation in which existing structural arrangements were disrupted, and several of their ordinary routines did not apply. In line with the conclusions drawn by Ansell, Sørensen, and Torfing (2021, 955–956), we identified important implications for public leadership, emphasizing three critical aspects for managing turbulence: leaders' ability to experiment with new practices through dialogue with their staff, their capacity to function effectively in uncertain and unpredictable environments, and their skill in leading horizontal collaborations within temporary configurations. In addition to these aspects, we identified three other critical abilities that managers need to handle crises effectively. Together with the elements outlined by Ansell and colleagues, we argue that these skills are essential for public managers in SLOs to manage crises, thereby functioning as 'turbulence managers'.

First, managers not only had to *work* under uncertain and ambiguous circumstances but also had to *make decisions*. They had to make decisions under uncertain and ambiguous conditions, a challenge that persisted throughout the COVID-19 pandemic. This ambiguity was evident in the varying interpretations of national rules by municipalities, increasing pressure on local decision-makers. The need for taking difficult decisions without clear guidance from higher government levels highlights a transfer of responsibility and power to local politicians and managers, especially in the critical early stages of the crisis. SLOs thus functioned not only as policy implementers but also as mediators and, to some extent, policy formulators, adapting new policies to local contexts (Brodkin 2013). Key skills for SLO managers included adapting to political shifts and reconfiguring organizational practices to meet evolving demands. This proactive decision-making under pressure relates to the concept of turbulence—unpredictable, dynamic change—requiring leaders to act and decide amid uncertainty and ambiguity.

Second, managers need to balance introducing changes with maintaining existing routines and structures, an acknowledged challenge in prior research (Danielsson 2021; Oscarsson and Danielsson 2018; Sparf 2018; Sumpter and Gibson 2023). Managing a crisis requires recognizing that no 'one-size-fits-all' solution exists; instead, flexibility and organizational stability are both essential (Janssen and van der Voort 2020; Nolte and Lindenmeier 2023). Our study provides empirical evidence of this. Digitalization initiatives in the studied SLO during COVID-19 spurred turbulence but also enabled quick adaptation to innovative routines while heavily relying on existing organizational structures. This dependence on established roles and responsibilities among decision-makers, managers and staff emphasize the critical role of trust (Brodkin 2021).

Third, SLOs must be capable of understanding and responding to the staff's needs while also managing the rapidly evolving situation. During crisis, lower-level managers and street-level bureaucrats struggle to find a balance between crisis management and regular work (Danielsson 2021; Oscarsson 2022). In

our study, we found that the higher-level managers tended to focus on handling the crisis, mainly because of the need to interpret and adapt new national recommendations, while lower-level managers had to handle both the crisis and ordinary work. This tendency confirms the expectation that the discretion of street-level managers will increase during urgent situations and when there is a lack of guidance from higher organizational levels (Davidovitz, Cohen, and Gofen 2021). Failing to respond to disrupted routines during the initial phase of a crisis will leave lower-level managers to make these priorities, which decentralizes responsibility further down in the organization and increase the lower-level manager's exposure for stress.

Following Hye and Øgård's (2016) perspective, we extended the concept of turbulence from the political-administrative level to a more localized, organizational context. This approach revealed how crises introduce turbulence into an already complex SLO environment. SLO managers, acting as 'turbulence managers', demonstrate key abilities such as interpreting national recommendations, making decisions without clear directives, and coordinating efforts amid ambiguity (Deverell and Ganic 2024). These skills illustrate the importance of adaptability in turbulent scenarios. While combining the concepts of turbulence and adaptive capacity is not new (Ansell, Sørensen, and Torfing 2021), applying them to SLO managers who are not professional crisis responders deepens our understanding of their role in crisis management. Using the concept of turbulence broadens the understanding of the effects of a large crisis by highlighting how political and administrative decisions at higher levels also impacts SLO crisis management.

Although these findings are relevant to crises in general, the role of turbulence managers is especially pronounced during creeping crises, where challenges arise gradually and require a proactive, adaptive approach. In such cases, managers must anticipate disruptions, make strategic decisions to mitigate risks, and stay attuned to staff and client needs, emphasizing open communication both downward and upward (Gofen and Lotta 2021). Our findings also enhance understanding of the dynamics between managers and street-level bureaucrats in SLOs during crises (Chang and Brewer 2022).

#### 4.1 | Practical Implications

The practical implication of this study indicates the importance of SLO managers in crisis management and shows that SLO managers not only faced intense demands to adapt quickly under conditions of ambiguity and unpredictability but also played a pivotal role in translating national guidelines into effective local actions. This highlights the importance of SLO managers in bridging policy and practice (cf. Oscarsson and Danielsson).

Another important implication points towards the need for effective coordination between different levels of governance to manage crises (Broadhurst and Gray 2022; Christensen, Lægheid, and Rykkja 2016). We highlight the importance of SLO managers as intermediaries, ensuring that national directives are adapted to the local context, balancing both crisis-related

and routine tasks. This balance is critical, as it prevents disruption of essential services and avoids overburdening lower-level staff.

In this context, the importance of adaptive capacity at the operational level becomes clear, especially during ‘creeping crises’ that escalate gradually (Boin, Ekengren, and Rhinard 2021). This is apparent in managers’ adaptability, grounded in their familiarity with their teams and existing routines, which enabled them to reconfigure organizational processes swiftly, underscoring the value of local knowledge in turbulent conditions. Enhanced dialogue across levels in the organization is necessary, allowing higher-level decision-makers to understand and support the staff according to their needs at the operational level (Møller and Grøn 2024). It also reinforces the idea that effective crisis management hinges not only on top-down coordination but also on fostering operational-level autonomy and adaptability, critical factors for resilience in both immediate and extended crisis scenarios (Oscarsson and Danielsson 2018).

## 4.2 | Limitations and Further Research

This is a single case study, and comparative studies on turbulence managers are needed to understand the transferability of the concept to other contexts. Although the respondents in this study encompassed managers at various hierarchical levels, a significant portion of crisis management was conducted at the grassroots level. Consequently, more studies that scrutinize turbulence managers ‘on the ground’ are required. Additionally, studies exploring in greater depth the interactions between managers and street-level bureaucrats during crises, which was not included in the scope of this study, may provide further insight into the dynamics of SLOs as policy implementers and mediators of policy (Brodkin 2013). Such studies would not only illuminate the dynamics between management and bureaucrats but also elucidate how turbulence managers in SLOs manifest in other crisis scenarios and other national contexts.

## 5 | Conclusions

This study explored the challenges faced by SLO managers and the abilities needed to manage a major crisis. By departing from the theoretical concepts of turbulence and adaptive capacity, we highlighted the change process that the crisis entailed and identified key abilities crucial for SLO managers during the COVID-19 pandemic. The turbulence included not only the spread of infection but also multilevel coordination challenges and internal organizational conditions. Unlike crisis managers in the traditional understanding, “turbulence managers,” act on the basis of their professional knowledge to navigate dynamic and complex conditions rapidly evolving during a crisis. In accordance with Ansell, Sørensen and Torfing (2021), we find that they, as public leaders, need to possess specific abilities to lead their organization through turbulence. This study expanded the list of necessary abilities for SLO managers by adding three additional abilities and proposes a concept, turbulence managers, that adds to explaining SLOs handling of a crisis. In conclusion, the study enhances our understanding of how SLOs manage crises by underscoring the importance of

adaptability in turbulent situations while also emphasizing the reliance on existing structures within SLOs, which provides a foundation for managers to act effectively.

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## Ethics Statement

The data collected in this case study complied with ethical standards. No sensitive questions were asked in either the interviews or the questionnaires.

## Conflicts of Interest

The authors declare no conflicts of interest.

## Data Availability Statement

The data that support the findings of this study are available from the corresponding author upon reasonable request.

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