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Chapter 30
From Crisis Response to High Resilience Organizing

Abstract: The shifting nature of crises and their related impacts call for updated theorizing in crisis response research. This chapter updates resilience theorizing by advancing a holistic focus on resilience as a dynamic, adaptive communicative process that is constituted across levels. Resilience involves communication among individuals and connecting across organizations and systems in the context of various forms of crisis/disruption. This approach both centers communication and demands a temporal analysis that highlights the role of the compression and expansion of time related to crisis. Drawing on the adaptive organizing qualities of high reliability organizations (HROs), this chapter proposes high resilience organizing (HResO) and related high resilience organizations (HiResOs) as an area of theory building to offer a transformative way to understand organizations in the context of perpetual pivoting around disruptions. Sections are organized by levels representing aspects of interdependent organizing structures that enable and constrain communication. This chapter concludes with a call for future research to focus on the exploitative side of resilience, which may affect organizational members and their constituents before, during, and in the aftermath of crisis.

Keywords: high reliability organizations (HROs), high resilience organizing (HiResO), Karl Weick, crisis/disaster, resilience, cross-sector organizing, interorganizational communication, collective action, networks, public goods, inequity/inclusion, time/pacing, Great Resignation , COVID, hurricane recovery

Crisis communication was born out of organizations mitigating physical damage and engaging in reputation management and repair. Yet increasingly, crises span a wide range of scenarios and encompass more than simply reputational recovery and corporate-centered concerns (Frandsen and Johansen 2020). The concept of resilience, or "the process of reintegrating from disruptions in life" (Richardson 2002: 309), has been adopted in crisis communication as a way to look more holistically at crisis response. Resilience in the face of a crisis is constitutive of communication and not merely information sharing/dissemination (Jahn and Johansson 2018). Thus, resilience and crisis are two sides of the same coin (Doerfel et al. 2020). Additionally, organizing and communicating around and through disruption involves multi-level dynamic organizing (Doerfel 2016) that spans domains (e.g., family and work) (Afifi et al. 2020; Roeder, Bisel, and Morrissey 2021). As such, examining disruptions that organizations, their constituents, and their environments experience can be traced back to the mid-

1900s when multidisciplinary organizational scholars began theorizing about organizational survival.

The inherently temporal nature of crisis – i.e., as an unplanned event that requires a time-sensitive response – suggests its centrality to fundamentally organizational communication processes. Crisis may be embraced as part of the organization's life cycle, rather than simply something to be managed and moved past (Chewning, Lai, and Doerfel 2013; Doerfel, Lai, and Chewning 2010). Crisis and resilience processes both stretch and compress time, pointing to issues of improvisation, exploitation of workers, and inclusion-exclusion (Ballard and Aguilar 2020). Whereas crises were formerly considered to be relatively discrete events in terms of time and impact, we have arguably entered an era that is marked by *chronic crisis*. Chronic crises may have an acute period, but don't really go away. In fact, they may perpetuate and/or exacerbate other crises. In this state of chronic crisis, more traditional crises are becoming sequential. Sequential crises leave all system levels without time to recover, with the effects from each crisis piling up on the previous crisis. This expanded focus and conceptualization of crisis has led to an emerging body of research that considers the communication and adaptive ways in which entire systems cope.

As a result, crisis communication has evolved to encompass resilience research, often de-centering any one organization. Notably, disasters associated with human impacts on the environment, are catastrophic events that impact entire communities and, most recently, pandemics like COVID-19, impact entire regions, networks of organizations, governments, and citizens. These events show that crises can and do affect all organizations, cutting across domains and levels. Organization-centric examinations consider employees, communities, industries, or organizational networks. In contrast, resilience across domains considers the ways in which professional resilience may be mutually dependent on personal resilience (Afifi et al. 2020; Kim et al. 2022; Roeder, Bisel, and Morrissey 2021), reflecting another question born out of the temporal aspect of resilience – where does the resilience process begin and end?

This chapter lays the foundation for new directions in research and theorizing in several ways. We begin by advancing current theorizing that mirrors a shift from crisis response to resilience as a dynamic, adaptive communicative process in organizational communication. We show how this interplay among individuals, organizations, and systems in the context of various forms of crisis/disruption centers communication and demands a temporal analysis. Additionally, we draw on specific types of organizations and context areas for theory building and design implementation of *high resilience organizing* (HiResO) and resultant *high resilience organizations* (HiResOs). Our proposed shift in thinking from high reliability organizations (HROs) to HiResO and subsequent HiResOs offers a transformative way to understand organizations in the context of perpetual pivoting around disruptions. Our chapter sections are organized by levels representing aspects of interdependent organizing structures that enable and constrain communication. We conclude with future research directions, challenging scholars to consider the counterpart of crisis – resilience – as having ex-

ploitative and enabling sides that organizational members may face in anticipation of, during, and in the aftermath of crisis.

1 Crisis and Resilience as Dynamic Organizational Processes

Crisis encompasses a wide variety of events that interrupt the daily operations of an organization, threatening organizational stability (Runyan 2006; Seeger and Ulmer 2003; Frandsen and Johansen 2020), and shedding light on origins and adaptive capacities of social order. Underlying assumptions about crisis are grounded in the social construction of reality, such that the way stakeholders perceive the event, its causes, and its consequences leads to different organizational and stakeholder action. Crisis has traditionally been defined as a "turning point" or "aberration" marking crisis as something that is both set apart from daily operation and to be "recovered from". This view isolates crisis, ignoring the idea that organizational design processes, practices, and interventions serve as the foundation for *how* organizations experience crisis and enact resilience.

Organizational culture, practices, and networks enable and constrain the choices, communication, and actions of organizational members as they work to make sense of changing conditions (Harrison et al. 2017). In turn, organizational choices are inextricably bound with the environment on interorganizational, community, and national levels, depending on the scope and type of crisis. Such overlap highlights interdependency that can cascade across levels (Doerfel et al. 2020). Communities need functioning organizations, and organizations need functioning stakeholder networks, communities, resilient leaders, and employees who can carry out the operations of the organization. The COVID-19 global pandemic illustrated interdependent and cascading impacts of disruption, such that all types of organizations quickly discovered that quarantines shocked their systems into various forms of breaking points and/or adaptation.

As organizations move through crisis, they are often forced to reconsider their core assumptions and beliefs (Seeger and Ulmer 2003) as well as their operational strategies. Likewise, when communities and their citizens move through crisis, they are forced to consider their own well-being while simultaneously recognizing the need to help other stakeholders. To this end, resilience is constituted through formal and informal communication within and external to groups and organizations. This includes processing information that changes, is limited, or obfuscated by its volume or speed (Bean et al. 2016; Stephens, Barrett, and Mahometa 2013), in addition to sensemaking, adapting routines, accessing networks, and technology use – all of which support and reimagine organizational culture. How organizations work through these processes affects organizational resilience (Ishak and Williams 2018).

Viewing crisis and resilience as part of a larger lifecycle of organizing highlights the fact that these processes are inherently bound to the concept of temporality. Resilience during crisis involves "looking behind", "bouncing back", "bouncing ahead", and "remembering and forgetting" lessons from the past (Buzzanell 2010; Coombs 2019). Crises generate the need for immediate action and sensemaking. Pacing of communication and action is altered within a crisis environment, with communication sometimes coming so quickly that it overwhelms a system's capacity to manage it (Bean et al. 2016; Stephens, Barrett, and Mahometa 2013). Efficiency is often prioritized because of the rapidly evolving circumstances that come with crisis, which threatens to set up a false dichotomy between efficiency and effectiveness. Understanding how time and crisis intersect, and who and what gets privileged as a result, is a key part of understanding crisis and resilience. We next unpack levels of resilience, their intersections, and how issues of time and communication-based resources impact crisis response.

1.1 Individual-Level Resilience

As all levels of society are rooted in the individual, individual-level resilience is reciprocally connected with organizations and entire systems. During crisis, organizational culture serves as a formal organizing process that both enables and constrains individuals in terms of action (Harrison et al. 2017; Ishak and Williams 2018). Expecting resilience requires dynamic and ever-adaptive organizing. However, imbuing an improvisational orientation towards resilience is at odds with the tendency for employees to perpetuate organizational inertia in that "people prefer to retain beliefs, organizational positions, structures, and practices as long as possible" (Hutter and Kuhlicke 2013: 303). Hutter and Kuhlicke's argument reflects the point that resilience is constituted through everyday talk and sensemaking) and identity anchors related to one's work. Engaging in practices and talk that reinforce professional identity enables and constrains employees' ability to enact resilience for themselves and the people they serve (Harrison et al. 2017).

In many cases, individuals instigate organizational resilience. Following Hurricane Katrina, the resilience of individual leaders shaped resilience processes on the organizational level, and the social capital and resources of those leaders assisted in organizational resilience (Doerfel, Lai, and Chewning 2010). Of note, it is not always management that initiates the response. For example, Roeder, Bisel, and Morrissey (2021) observed that during the 2018–19 US Government shutdown, national weather forecasters carried over their professional values of contingency planning and redundancy to their home finances through conservative financial management. This practice allowed the forecasters to be resilient in the face of not being paid. Doing so enabled them to do their jobs effectively, supporting organizational resilience. Roeder, Bisel, and Morrissey (2021) determined that the decision was driven by the communication processes that create professional and

team identifications over time, again emphasizing the importance of identity and sense-making related to resilience.

Yet, individual action during crisis can be variable. Although exogenous factors such as identification with organizational culture, organizational constraints, and personal hardship related to the crisis can impact individual action from a structural level, endogenous factors such as personal history and values also impact how individuals interpret and react to crisis. Personal characteristics of both leaders and "rank and file" employees intersect with organizational and environmental elements to impact crisis response. Personality can also come into play. Charismatic individuals often emerge as leaders, contributing to a shared sense of belonging and urgency that enables shared action (Gerlach 2001) within and across organizational boundaries.

Individuals outside an organization can also contribute to organizational resilience, as social media enables the creation, sharing, and coordination of crisis information and related action (Spence et al. 2015: 172). Stakeholders can take to social media to help coordinate relief efforts (Lai 2017), connect affected organizations and other individuals to necessary resources (Houston et al. 2015), crowd-source and crowd-fund (Riccardi 2016); or on the flip side, organize virtual or in-person protests (Chewning 2016), hijack organizational social media platforms (Veil et al. 2015), and troll organizations via social media.

In the case of wide scale or dangerous crises such as hurricanes or wildfires, individuals with a baseline of resilience have been shown to contribute to emergent networks on the organizational and community levels and even morph into ad hoc citizen organizations (Harris and Doerfel 2017; Lai 2017). Research on citizen organizing examines digital technology use and spontaneous organizing by citizens intersecting with each other, institutions, and emergency response (Li et al. 2019; Smith et al. 2021; Spearing, Stephens, and Faust 2021). Informal organizing processes include utilizing new disaster contacts or adapting existing technology to emergent crisis needs (Kim et al. 2022). In manufactured crises that arise from organizational negligence, individuals with no other contact than through an organization's social media platform can coalesce into one voice supporting or protesting an organization or serve as "noise" that impacts sensemaking and decision making for organizations in crisis. Looking at how individual efforts on social media can impact resilience processes of other individuals, organizations, and communities at large again emphasizes the multi-level nature of resilience.

1.2 Group- and Team-Level Resilience

Even in settings that can be described in terms of individual actions, like taking to social media or acting during an environmental disaster, collective action is a powerful site of resilience. Many of these settings are best described in terms of emergent groups, often blurring the distinction between individual and group resilience. In

other organizational settings, formal groups and teams organize and mediate resilience processes through members' collective sensemaking. Attention to a team-based process called adaptation, or adjustments to process in response to some stimuli, reflects concerns with responding to crises and practicing resilience (Maynard, Kennedy, and Sommer 2015).

Team adaptation is bound tightly to issues of time and temporality (Ishak and Ballard 2012) with important implications for the study of crisis and resilience. Adaptation involves pausing to "look back" and includes processes of identifying discontinuities in routines that demand teams pause or cease action. For instance, crisis communication literature typically examines how novel and unexpected events create disruption to the routine team functioning that, in turn, demands an urgent response to mitigate ongoing damage. Similarly, in the team literature, resilience has largely been measured as a time-based outcome of some disruptive event (Coombs 2019; Runyan 2006). Nonetheless, research in both literatures tends to be based on a truncated, time-based, study of crisis and resilience rather than a process-oriented, temporally driven, approach. As a result, temporality is largely absent in theorizing about these key organizational processes. Instead, both literatures treat time as an outcome variable, primarily considering crisis communication in reference to its speed when responding to an event and resilience as a function of how quickly things return to normal.

These existing assumptions – centered on novel and unexpected events, speed, and returning to normal – fail to adequately reflect the full range of organizations that we study as well as the reality of organizing in the 21st century. Rather than reflecting the natural lifecycle of crisis and resilience, these theoretical assumptions are shaped by methodological and practical factors. For example, much of the adaptation literature relies upon experiments and group simulation activities because of the difficulty of gaining access to the black box of adaptation, which relies upon communication in bona fide teams within an undefined window of time. It is undefined because crises, without a beginning and end that researchers can know a priori, are difficult to study in short periods of time demanded by publication cycles.

These short-term biases shape broader conceptualizations of crisis and resilience in the literature in at least three ways that do not consider the temporal insights of emerging research on groups and teams. First, crisis communication in teams is not always in response to a discrete, exogenous event. It can also be part of an ongoing cycle of teamwork. Ballard and colleagues (2020) describe a process of continuous adaptation that many teams regularly enact. Rather than waiting to react to a perceived threat in the environment, continuous adaptation involves proactive, ongoing adjustments to team processes based on the expectation of routine disruptions.

A related point of departure concerns the assumption of a return to normal. Recent developments in post-COVID-19 organizational environments, including the Great Resignation and cultural shifts in the conversation around remote work, suggest that a return to normal is not necessarily a sign of resilience (Hsu 2021). Richardson (2002) describes a process of resilient reintegration that leads to "insight or growth through

disruptions" (p. 312). Thus, in viewing resilience as a process, teams and their organizations might choose to redesign communication in the aftermath of a crisis. In particular, the collective communication design (CCD) efforts described by Barbour, Gill, and Barge (2018) can be used to reshape and reimagine work. Yet time often gets structured by the sense of urgency generated when things go wrong. This can be seen especially in the realm of organization-level crisis that HROs aim to anticipate, control, and avoid. Thus, the need for proactive, high *resilience* organizing is crucial.

While HRO theory has been especially generative (see next section), many groups and teams operate in organizations and under operational constraints that do not comport with HRO theorizing and instead reflect high *resilience* organizations (HiResOs). The idea of controlling outcomes prominent in 20th-century Western organizational theorizing is not an aim for some teams. In many cases, a focus on how communication processes support teamwork is of primary importance. For instance, palliative care teams that support their clients' end-of-life experience have no illusion of control over time-based outcomes (Jünger et al. 2007). Ballard and colleagues (2020) describe the difficulty of establishing traditional outcome measures for the child abuse treatment and investigation teams they studied: success was defined as perseverance in the face of tragedies such as child death. In these settings, a short-term research bias leads to impoverished understanding. Attention to high resilience organizing as encompassing multi-level, cross-domain communication processes enriches our theoretical and empirical approaches in crisis communication. This shifts questions away from efficiency-oriented questions of returning to normalcy to examining time endogenously. How does time shape the ways in which resilience communication evolves across levels and domains?

1.3 Organizational Level

When examining crisis and resilience at an organizational level, HROs are lauded as exemplars. HROs focus primarily on safety and reliability that occur as part of natural working processes; crisis is baked into their work. These processes of responding to danger, catastrophes, and complicated work practices are different than the challenges faced by organizations who are victims of crises not of their own making. However, there are lessons related to resilience in the face of danger that can be learned from HRO processes. Indeed, this mirrors one of the key lessons that Weick, Sutcliffe, and Obstfeld (2008) advance about learning in HROs: they learn through the exploration of meaningful analogues; learning from the failures of others helps "uncover assumptions people take for granted, trace out new implications of old assumptions, and identify latent organizational flaws" (p. 54). Drawing analogous lessons from HROs to help other organizations develop the capacity to become high resilience organizations is a key focus of this section.

There is a long history of examining safety and accidents in HROs and occupations, most prominently starting with Perrow's (1984) normal accident theory. Weick's (1987) shift to high reliability organizing begins to address criticisms of technological determinism and "normal accidents" (Le Coze 2015), focusing on reliability and shifting toward culture and communication practices. Weick and Sutcliffe (2011) established what are still widely accepted as the five hallmarks of HRO functioning, which serve as the foundation for collective mindfulness that leads to success in HROs including: preoccupation with failure; a reluctance to accept simplification; remaining sensitive to operations; maintaining a commitment to resilience; and practicing deference to expertise in decision making, regardless of hierarchy or rank.

While much HRO-focused research is on reliability and safety in high-risk contexts such as the military, fire and rescue, and nuclear safety, not all organizations are HROs. Or are they? Arguably, in the landscape of the COVID-19 pandemic, all organizations operated in potentially high-risk contexts, vulnerable to the ongoing crises of both the pandemic and other potential immediate crises (e.g., extreme weather events). Yet amidst this pandemic we have seen perhaps the biggest enactment of adaptive capacity and resilience among organizations than perhaps at any other point in the 21st century – arguably equivalent to, or perhaps surpassing the wartime mobilization during World War II. We saw remarkable innovation and adaptation across a multitude of industries related to the rapidly changing scientific information about COVID-19. Even politicians in many locales promptly adapted local regulations to allow for street closures for outdoor dining, alcohol delivery, and other (mal)adaptive responses to help organizations remain viable.

While these and other examples demonstrate the resilience of many organizations, there was tremendous pain as well, with extensive layoffs, businesses closing, families unable to feed or shelter themselves, hospitals overwhelmed with the sick and dying, and entire industries with few viable paths, leading to spikes in unemployment, reduced hours, and pay cuts, particularly among lower income adults (Parker, Minkin, and Bennett 2020). Organizations had to address the safety of the workforce and the publics and communities they served. Organizations had to adapt to changes in work in more ways than the primary focus of reliability that HROs strive for; many organizations had to innovate, adapting new work processes that fundamentally changed the nature of work and of the organizations themselves. Organizations also became crisis communicators – persuading the public it was safe to patronize their organizations.

How then do we theorize resilience and high reliability organizing when essentially all organizations around the world face crisis and high-risk contexts? It is possible to make distinctions among various industry types that might influence the process of organizing for resilience. For example, firefighters face unique and novel crises each time they go on a call – with some being routine medical calls, while others can become very complex firefighting or rescue situations. Engaging in HRO processes to maintain safety in these complex situations requires a different level and

quality of high reliability organizing than is needed for safety in restaurants, retail stores, or education during COVID-19. Making distinctions of this type is not new in the research on HROs. Indeed, many scholars have sought to expand the scope of HRO theorizing to other types of organizations, including medicine (e.g., Weick and Sutcliffe 2011) or classifying some organizations, including NASA, as "reliability-seeking" rather than HROs.

Perhaps a more useful approach than categorizing some organizations as high reliability or reliability-seeking is to focus on the process and design of communication for high reliability organizing (Harrison, Williams, and Reynolds 2020), especially as it relates to resilience (not just reliability). This allows for a more robust approach to theorizing and building resilience in organizations and to advancing the design of communication processes for resilience – allowing organizations to shift from a reactive response to a proactive preparedness for crisis that results in resilience. Harrison and colleagues (2017) demonstrate this with their model of change processes for risk reduction and resilience, and move from theorizing to successful design, implementation, and evaluation of an intervention to reduce risk and increase resilience of firefighters (Harrison et al. 2018; Harrison, Williams, and Reynolds 2020).

So, how do we draw lessons from mindfulness and the five hallmarks of high reliability organizing to improve organizing processes for resilience in organizations that do not face high risk and catastrophe as part of normal operations? There are two important paths. First, while Weick identifies all five hallmarks as key to mindfulness for reliability, theorizing should continue to tease apart those which are most closely related to resilience in non-HROs. For example, preoccupation with failure is critical when lives are at stake, but perhaps not as relevant when making a sandwich at a restaurant (although perhaps that preoccupation with failure is what distinguishes the great sandwiches from the mediocre); a reluctance to accept simplification is critical for complex operations but may or may not be as critical for resilience for a small family business. HROs are about keeping a focus on processes or systems, but for a non-HRO the need for a more informed focus of how an organization is situated in a larger external system, or how when crises hit, new processes have more potential for failure may be vital. Maintaining a commitment to resilience seems to have obvious import regardless of type of organization, with a focus on identifying, planning for, and acting to recover after a crisis. Additionally, practicing deference to expertise in decision making, regardless of hierarchy or rank is certainly valuable for on-the-fly decisions during critical incidents, but is also potentially transferable to non-HROs in times of crisis, highlighting the importance of attending to the temporal qualities of crisis.

Second, keeping a focus on organizing processes rather than organizations allows us to broaden our scope to questions about how we organize community and society around ongoing social, political, and environmental disruptions. We can ask questions such as how we organize and engage with our most vulnerable communities in processes of resiliency planning, further reflecting on processes of designed interactions,

networks, social capital, co-production of knowledge, and cross-sector collaboration (Harrison et al. 2022). Similarly, we can focus on self-organizing processes within communities and how they help shape resilience – such as the case with the Staten Island buyouts for managed retreat after Super Storm Sandy (Koslov 2014; Rush 2018) organized by homeowners who lobbied for government buyouts. We can also look at cross-sector organizing among governments, non-profits, for profits, and academe to address slow crises and resilience (e.g., Rockefeller's 100 resilient cities).

1.4 Interorganizational/Community Level

Community-level resilience is seen as a government responsibility, a role particularly pronounced when government reaction does not live up to the expectations of the citizens the government is meant to protect. Grassroots efforts emerge regardless of government efforts, so organizing resilience is both a top-down and bottom-up endeavor. Studies focus on the organizing and crisis/disaster response efforts of government workers (Hutter and Kuhlicke 2013; Jahn and Johansson 2018), preparedness messaging by emergency management agencies (Bean et al. 2016), how citizens intersect with institutions to manage their personal safety and long-term recovery (Lee et al. 2020), emergent organizing through grassroots efforts (Stephens, Robertson, and Murthy 2020), and interorganizational coordination among institutional entities that constitute community-level networked processes (Barbour et al. 2020; Doerfel, Lai, and Chewning 2010; Doerfel, Chewning, and Lai 2013). These developments have an underlying theme – cross-sector interorganizational relationships (IORs) are the backbone organizers for building community resilience. Community resilience becomes a public good and an organizing goal that gets accomplished through collective action.

Collective action theorizing includes language like rhizome (Castells 2013) and polycentric structures (Gerlach 2001) reflecting findings that effective collective actions are optimal in decentralized networks where shared leadership and a generally non-bureaucratic relationship structure support change efforts. In the context of larger-scale crisis, this means government is arguably only one part of the solution and must partner with others to effectively build resilient communities.

Communicating messages among activists is necessary for coordinating efforts through networks that are often loosely structured (Flanagin, Stohl, and Bimber 2006). Flanagin, Stohl, and Bimber (2006) identified communication-based theoretical constructs that underlie collective action, namely, modes of engagement and interaction. *Engagement* involves individuals' or organizations' activities falling along a spectrum from high to low responsibility and ranging from low-to-high in terms of having an opportunity to have a personal impact on work. *Interaction* involves activities that support relationships (e.g., routine face-to-face interaction) where low interaction is observed when members do not know each other. While interaction is constituted through activities, engagement is constituted through inclusive, authentic, and collab-

orative dialogue that can occur through virtual or physical interactions (Chewning 2018) and can be formed even in the absence of strong tie relationships (Doerfel 2018). For communities, cross-sector engagement and interaction constitute mechanisms that have the potential to connect top-down and grassroots activities (Harrison et al. 2022). Engaging cross-sector partnerships can foster resilient communities.

Charismatic leaders often encourage factionalism through setting an agenda but encouraging groups to shape the agenda around their own identities while both leaders and groups use communication technologies to facilitate and coordinate joint action. What integrates these groups is what they hold in common, such as a common enemy or a shared ideology. Arguably, the obvious and shared enemy is clear when disasters threaten life – and the response to that enemy is rescue and recovery. But rescue and recovery goals evolve as the context of urgency (i.e., life threatening events) shifts to routines of recovery and then to rebuilding. Joint values and ideologies might be mechanisms that initiate interorganizational collaborative efforts through communication (Ronfeldt and Arquilla 2001) but do these networks have time to solidify into long-term collaborations before routine returns?

Collective action theory thus suggests that the opportunity to start effective partnerships is when the goals are widely shared, like when there is a crisis that generates a problem to organize around. Planning, response, recovery, and learning are part of the stages in disaster response (Coombs 2019), but designing and timing engaged and interactive cross-sector collaborations is a matter of perceptions of the calculated risks (Tierney 2014). How and when potential IOR partners experience and agree about the urgency of disruption echoes resilience research that adopts a constitutive view of communication. Through constructing a shared sense of urgency, efforts effectively mobilize. Jahn and Johannson (2018) adopted a constitutive communication framework, showing how a network swiftly emerged among various agencies. As argued above, the challenge of crisis and resilience scholars is to depart from the usual message-based time-sensitive models, and instead theorize about a constitutive and disciplined set of actions. Yet the way people manage a crisis is also a function of the information environment and the dynamic conditions that can threaten communities. Therefore, time might be better theorized by integrating perceptions of urgency and capturing information load, clarity, ambiguity, etc. as dynamic rather than fixed elements.

People do not always trust and rely on government resources, as Stephens, Robertson, and Murthy (2020) discovered when they found that people relied on multiple different sources of information and support as opposed to using the 9-1-1 system. Likewise, sometimes an optimized set of messages help construct the situation as dire and urgent (Stephens, Barrett, and Mahometa 2013). Tone plus information source may matter. Social media can be a source that helps emergency managers understand where their constituents are during system-wide crisis (Chen et al. 2020). Community response and recovery depend on interorganizational cross-sector relationships which do better when they understand the variable needs, interests, and values of the groups

they serve (Barbour et al. 2020). Under what circumstances, then, does communication shift in a crisis from information messaging to constitutive organizing? Communication design suggests that by understanding such shifts, it is possible to develop communication-based (constitutive and information transfer) interventions and implementations.

As collective action processes unfold, organizations that remain relatively central in their social networks build reputations as leaders, which then generates social pressure to live up to the role of leader (Bennett and Segerberg 2013; Doerfel and Taylor 2004). For example, past disasters in the US generated heightened needs for accessing resources from agencies like FEMA and the Red Cross at multiple levels (individual, organizational, interorganizational). As response leaders they failed to live up to stakeholders' expectations, resulting in a crisis of their own, viz. congressional investigations after the 2005 hurricane season and again in 2012 after Superstorm Sandy (FEMA 2015). Such crises can have a spillover effect such that the crisis in one organization implicates another organization reputationally or operationally when one or more organizations are highly interdependent (Veil and Ambrose 2020; Veil and Dillingham 2020). Research studies during those times celebrated the efficacy of emergent response and downplayed government action (Harris and Doerfel 2017). These interorganizational networks evolve because of changing resource needs, contexts, and relational dynamics within the network (e.g., reciprocity and trust might change over time relative to FEMA and the Red Cross's evolving efficacy). Here we see communication-based mechanisms at play, especially when disaster events are more frequent for some communities than others (e.g., tornado alley). But as time expands (e.g., a few years of no severe events), a sense of urgency dissipates (Tierney 2014).

HROs are motivated to plan for crisis because of the nature of their work. Likewise, communities that are prone to disruption are variably motivated to plan yet can become complacent. But communities themselves may also vary, where urban environments tend to be more structured and bureaucratic compared with their rural counterparts which have more casual, informal community structures (Brown and Schafft 2019). These differences, along with how communication flows and is constituted in these different types of community structures, are phenomena organizational communication is particularly suited to examine. Crisis planning as a shared problem requires organizing efforts. Resilience-focused research suggests an important aspect of planning that is not explicitly captured in collective action theory: topic-experts.

Barbour et al. (2020) examined Local Emergency Planning Committees (LEPCs) around chemical hazards, showing an important aspect of their work is in bridging sectors; the LEPCs needed experts specific to the community. By thinking about resilience as a public good, the nature of the threat to resilience necessitates building up networks with experts in addition to gaining buy-in from the community. For example, Kim et al. (2022) examined organizations that serve vulnerable populations and were embedded in decentralized networks where the organizations had variable shared leadership roles based on expertise. This enabled a response that was both efficient and effective.

Such findings complement the idea that collective action networks have shared leadership where different organizations take up different functions as leaders (Doerfel and Taylor 2017). But Doerfel et al. (2022) also found important differences between rural and urban communities. While the urban social services organizations (SSOs) were organized through formal and networked structures with shared leadership, their rural counterparts were not. The differences in disaster response were stark. The storm lasted much longer for the rural versus urban community, even though the rains and floods had receded weeks earlier for both. What is unclear is whether these differences are a problem and for whom? Where does the fault lie? Do we blame rural areas that lack capacity or urban areas because their resilience gives policymakers an excuse to not address root problems? Are there opportunities for communication design, implementation, and intervention for particular communities?

1.5 Dark Side of Resilience

The concept of resilience and resilience-related behaviors seems optimistic but can also be problematic. Resilience as a construct is laden with power and agency issues, such that resilience presupposes the benefits of recovery without considering the root problems or the potential for exploitation and marginalization that can occur in the quest of bouncing back (or forward) from crisis. To that end, resilience has been critiqued for ignoring and even reinforcing structural inequities that contribute to crisis (Mahdiani and Ungar 2021) and maintaining the status quo, rather than contributing to meaningful structural change (McDonnell 2020). The potential inequities of resilience are most evident in populations that are considered vulnerable and in need of outside assistance (Ballard and Aguilar 2020).

Even within "advantaged" populations where individuals seemingly contribute to resilience out of self-interest and/or a desire to contribute to organizational and community resilience, elements of exploitation are present. For example, the expectation that employee-staffed crisis teams or cashiers and servers making $15 per hour should put themselves at risk or attend to organizational resilience ahead of their own is problematic. Healthcare workers and first responders often bear the brunt of such expectations, and participate in "double duty," in that they must respond to the crisis on both personal and professional levels (Stephens 2020). Essentially, such workers are expected to "hit the pause button" to give of themselves and contribute to crisis response without attending to their own needs (Stephens 2020: 527). High resilience organizing serves and preserves organizations and businesses. Discourses of resilience condition workers to believe their own resilience is their heroic and self-sacrificing commitment to their employers (Aguilar and Ballard 2022).

2 Conclusion

The shifting nature of crises and their related impacts call for updated theorizing in crisis response research. *HiResO* recognizes that chronic crises create ongoing, cascading, system-wide disruptions that highlight crisis response as an ongoing, multi-level phenomenon. Issues of time, pacing, and privilege intersect with organizational communication design and decision making in ways that impact outcomes for various populations. As we progress into a space where all levels of systems are overwhelmed by chronic crisis, future research must consider what HiResO and resulting HiResOs will look like. As entire geographical spaces become less inhabitable, bouncing back will no longer be an option, and bouncing forward will necessitate more than organizational learning. In this chapter, we argue that HiResO is baked into organizational practices, structures, and partnerships. This is accomplished, in part, through organizations supporting team norms where adaptation is not driven by particular exogenous events, but rather is folded into regular pauses (that permit proactively adjusting team processes) based on the assumption that disruptions are routine. This points to organization-level adaptive orientations where structures echo HROs in terms of employee voice and participatory cultures, supported by formal codified expectations that complement autonomy, creativity, and constructive sensemaking. While the principles of HiResO can be adopted by all organizations, strategies, goals, and outcomes are likely to differ related to a variety of factors including organizational sector and mission. Just as some research has already started to classify organizations that may not be considered HROs but still embody elements of high reliability organizing (e.g., Weick and Sutcliffe 2011) future research should focus on teasing out the different types of HiResOs that emerge related to organizations' orientation toward crisis.

However, even within types of organizations, there are factors on the individual, team, organizational, and community levels that will impact organizations' ability to become HiResOs. What happens when an organization doesn't have an adaptive culture, when employee voice is not valued, or employees themselves don't choose to participate? Certainly, organizations can change to adopt HiResO, but there must be a willingness on the part of leadership and employees to do so. Why are some organizations able to enact HiResO, whereas others are not? Case study research of successful and unsuccessful HiResO in the field can help answer some of these questions and identify barriers to HiResO and related solutions. But a bias toward success cases might further contribute to how resilient organizations enable policymakers to focus on supporting the aftermath and show off these successes rather than address the causes that require HiResO to begin with.

Relatedly, it is important to further interrogate processes that result in the "dark side" of resilience. HiResO, as outlined in this chapter, prioritizes employee voice, participatory cultures, and constructive sensemaking inside and among organizations and their constituents. Yet, at times when speed, efficiency, and expertise are often prioritized, participatory decision making may seem at odds with organizational

goals. Deferring to those whose expertise might not be sanctioned or viewed as legitimate may seem risky despite such unsanctioned experts being on the ground and experiencing the event first-hand. How can organizations and communities build in safeguards to protect, rather than exploit, vulnerable populations? How can we change the narrative of resilience so that it is inclusive and equitable? Future research should identify barriers and solutions to bring us closer to these goals.

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