Article

American Behavioral Scientist
2024, Vol. 68(9) 1108–1138

DOI: 10.1177/00027642231155380
journals.sagepub.com/home/abs
SAGE

U.S. Nonprofit Organizations Respond to the COVID-19 Crisis: The Influence of Communication, Crisis Experiences, Crisis Management, and Organizational Characteristics

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Abstract

Nonprofit organizations (NPOs) are significant contributors culturally, socially, and economically, but little research has focused on their response to organizational crises. Research has been quickly documenting impacts of the COVID-19 crisis on different sectors, but again less so for NPOs. This is significant because research and recommendations developed in one sector (such as for-profit corporations) may not translate to others (such as NPOs). NPOs are particularly vulnerable, due to their dependence on public financial support and demands on their resources during crises. We report on a unique and unfortunate opportunity to assess response dynamics from a half year before (2019) and a half year after (2020) the beginning of the COVID-19 pandemic in the United States. We draw on a unique dataset combining surveys at two points in time, Twitter use data, and financial information, from 578 NPOs to develop a general model (grounded in the discourse of renewal theory) of five sources of influence (communication, organizational resources, crisis experience, crisis management, crisis impacts)

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on three types of strategic responses by nonprofits (retrenchment, persevering, and innovating) to COVID-19. Higher levels of communication, crisis experience, and crisis management all predicted greater tendencies for persevering and innovating in response to COVID-19. The implications for research and practice include extending crisis communication research to the nonprofit sector and demonstrating how NPOs can strengthen themselves to recover from COVID-19 or the next crisis.

Keywords
COVID-19, communication, discourse of renewal theory, crisis management, nonprofit organizations

Over the last two decades, crisis researchers have demonstrated the importance of communication in organizational management of adverse events. Yet communication and management research has not adequately examined how nonprofit organizations (NPOs) prepare for or respond to such events in general. This is especially important and timely in the COVID-19 context. NPOs are likely to experience substantially reduced income and staffing and increased demand for resources and support. Yet, they can and must make choices about how to respond. The nature of the responses affects NPOs' survival and direction, and the society more broadly. Thus, there is much to learn about how NPOs are responding to the COVID-19 crisis and what factors influence those responses.

We report on a unique and unfortunate opportunity to assess response dynamics from a half year before and a half year after the beginning of the COVID-19 pandemic in the United States. It applies the discourse of renewal theory of crisis communication, which argues that organizations that communicate ethically and effectively, while also learning vicariously and from failure, are more likely to achieve post-crisis renewal (Ulmer et al., 2019). Initial orientation toward renewal lays the foundations for whether NPO responses are more reactive or proactive.

However, many other factors influence those responses. We first briefly review relevant literature on the nature of organizational crises and organizations' preparation for, communication about, and responses to crises. We then introduce the nature and context of NPOs and their communication (including social media) during crises. These reviews lead to a general model to predict five categories of influences on NPO responses to COVID-19. After an overview of data sources, sampling, and measures, we provide results about interrelationships among influences, impacts, and responses, followed by a brief discussion. Our research leads to implications for both research and practice. The research extends crisis communication research in the nonprofit sector, which, in turn, can help these organizations build community and strategically renew after a crisis.

Organizational Crisis Management, Communication, and Responses

Crisis Management

An *organizational crisis* is "a specific, unexpected, and non-routine event or series of events that create high levels of uncertainty and simultaneously present an organization with both opportunities for and threats to its high priority goals" (Ulmer et al., 2019, p. 7). The COVID-19 crisis is unique and pervasive, with devastating global consequences. The world has not faced a pandemic with this level of impact since the 1918 flu (Centers for Disease Control and Prevention, 2020).

Preparation for crises includes assessing risks, scanning the environment for issues, planning and training to respond to crises, designating spokesperson(s), having emergency contact information for stakeholders, conducting simulations, and having (and reviewing and rehearsing) a written crisis communication plan. There are two basic orientations toward preparing for crises (beyond hoping there will not be a crisis). The first is rebound-oriented, planning ahead to minimize crisis impacts and to regain normalcy and organizational stability (Barbour et al., 2020; Comfort, 2007). The second is transformative, bounce-forward, directed toward adaptation and generation of new possibilities and capabilities (Houston et al., 2015; Lengnick-Hall & Beck, 2005; Ulmer et al., 2019). In this orientation, crises not only present threats to high-priority goals, but also create opportunities—for example, accelerating change, confronting latent problems, developing new strategies, and creating new competitive advantages (Meyers & Holusha, 2018).

Rather than focusing only on the management of a current crisis, the extent to which an organization has already *prepared for renewal* will affect the organization's possibilities for post-crisis renewal. This orientation toward renewal as both vision and communicative process has recently captivated both charitable organization and crisis management researchers. "Organizations that practice ethical communication, learn directly or vicariously from organizational failures, frame reality effectively, and articulate a forward-looking vision improve their chances of post-crisis recovery" (Fuller et al., 2019, p. 273, citing Ulmer et al., 2019). According to the discourse of renewal theory, clarity, honesty, openness, positive stakeholder relations, and organizational learning are central values in organizational responses to crises that can foster renewal and resilience (Pyle et al., 2020; Ulmer et al., 2019). Readiness for renewal consists of two dimensions. *Ethical communication* is characterized by transparency and a commitment to fostering healthy relationships both internally and externally before an organization enters a state of crisis and by a vision oriented toward a renewing response, rather than fixating on past mistakes or laying blame. *Effective organizational rhetoric* is defined by strong, ethical leadership, in communicating and framing the crisis situation for stakeholders.

Crisis Communication

Communication is a central emphasis in crisis management (Coombs, 2019). Organizations use a variety of *external communication channels* to document crisis plans, inform stakeholders, advocate issues, seek support, develop and maintain a public presence, respond to crises, and help frame stakeholder interpretations (O'Neill, 2009). Digital, online, and wireless communication media provide a growing range of capabilities and purposes for crisis management (Austin & Jin, 2017). Websites and *social media* have a variety of dialogic features, ranging from supporting online conversations to receiving updates and news, and building relationships with stakeholders (Pang et al., 2018), and can mobilize supporters and focus attention on issues overlooked by traditional media (Guo & Saxton, 2014, p. 60). Xu's (2020) meta-analysis concluded that while using social media compared to traditional media significantly decreased consumers' perceptions of crisis responsibility, they were significantly more negative for preventable crises, yet there was no significant difference in persuasiveness. Schlagwein and Hu (2017) identified five social media use types, each supporting different organizational purposes: broadcast, collaboration, dialogue, knowledge management, and sociability. Organizational interviews disclosed a variety of external uses of their social media by customers or clients: to extend awareness and marketing, manage customer relations, gauge feedback and sentiment about products or services, and encourage consumer collaboration. Although social media allow organizations to respond more immediately and interactively to organizational crises, their use can also be unpredictable and change rapidly (Austin et al., 2012, p. 191; Goodman et al., 2014). Kim and Park (2017) noted negative aspects of social media for crisis communication, such as lack of control of public communication about the organization, message overload and inaccuracy, varying or unknown source credibility, hacktivism, and speed of dissemination.

Crisis Responses

One traditional typology of *crisis responses* consists of accommodative (compensation, changing negative perceptions of the crisis, responsibility acceptance) or defensive (problem minimization, responsibility denial) representations to the public (Coombs, 2019). Here, instead we focus on how the organization responds in terms of its current and future orientation. Wenzel et al. (2021), reviewing strategic responses to crises in the COVID-19 context, defined four non-mutually exclusive types of responses: retrenchment, persevering, innovating, and exit. Except for exit, each response is represented by a number of related actions that the organization has taken. *Retrenchment* focuses on reducing activities and demands, such as assets, costs, overhead, products, and product lines. Retrenchment involves freezing the hiring of unfilled staff positions, changing operating hours, or furloughing and/or laying off staff. *Persevering* maintains the status quo and buffers the organization against potential negative impacts, focusing on core competencies and adaptation. NPOs may persevere by applying for loans, appealing to funders for flexible or unrestricted funds,

increasing fundraising appeals, requesting changes to reporting requirements, deadlines and expectations, and mobilizing supporters to advocate for the organization or cause. *Innovating* emphasizes strategic renewal; NPOs engage in innovating by finding new ways to deliver on their mission and by collaborating with other NPOs, governments, and businesses. *Exit* refers to ceasing activities altogether. Organizations that do not have enough working capital will likely have to close permanently, but exit may also be a reasoned strategic response. Except for exiting organizations, any organization could engage in one or more actions representing each of the other three types of responses. Each of these responses has advantages and disadvantages, generally differing by time horizon. For example, retrenchment may be necessary in the short term, but can create long-term harm; persevering may be more appropriate for the medium-term; innovating may not be possible in the short-term, but beneficial for long-term renewal.

There is little work on preparation for, and recovery from, crises by U.S. NPOs (exceptions include Herman & Oliver, 2001; Light & Morgan, 2008; Spillan, 2003). Yet nonprofits must engage in reinvention and reengineering in an environment of constant challenges (Salamon, 2003) and may strive to renew themselves after substantial crises.

NPOs, Communication, and the COVID-19 Crisis

Nonprofit Organizations

NPOs are public-serving, tax-exempt organizations, receiving at least 50% of their income from public support. The sector covers cause areas such as arts, disaster response, education, food, health and mental health, housing, youth and families, and so on. Moreover, the sector is an important contributor to city, county, state, and national economies, providing employment (14% of the U.S. workforce; CauseIQ, 2020) and volunteer opportunities in the service of their missions. NPOs contribute to the marketplace of ideas, a crucial foundation of democracy (Auger, 2013, p. 370). Liu (2012) and Wiggill (2011) described how NPOs operate their activities—including communication—on a limited budget and in a highly regulated environment. NPOs categorized as 501(c)(3), with revenue greater than U.S. $50,000, must complete the Internal Revenue Service (IRS) form 990, indicating their *organizational resources*, especially financial status and efficiency, which can indicate potential resilience or vulnerability to crises. Adding to this pressure, many U.S. charity watchdog groups evaluate NPOs on a variety of benchmarks (Goza et al., 2016). These vary by nonprofit cause area, but generally, expenses should not exceed revenue; 50% of revenue should come from public support (grants, donations); it should cost less than U.S. $1 to raise U.S. $1; and the majority of organizational expenses should go toward program delivery. Concerns in these areas would reflect issues with governance and financial oversight and pose potential reputational, financial, and regulatory risks for the organization (Herman et al., 2004).

NPOs and Communication

Communication practices are central to NPOs' sustainability and success. "The way communications are managed by NPOs may affect stakeholder attitudes, perceptions, knowledge and behavior toward organizations, which can result in more or less engagement by stakeholders" (Carboni & Maxwell, 2015, p. 19). Koschmann et al. (2015) reported that organizational communication research on nonprofits focused on the themes of membership, structure, legitimacy, differentiation, stakeholder, communication strategies, and linkages. Some research has examined communication with internal as well as external audiences (Horsley & Barker, 2002; Mishra et al., 2014). However, many *barriers*—particularly funding and a lack of knowledge—affect NPOs' implementation of normative recommendations of strategic communication management (Liu, 2012; Wiggill, 2011). Other obstacles include legal implications, media criticism, constituent complaints, magnitude of the crisis, lack of budget for communication purposes, coordination issues with a related entity (parent or subsidiary), and adversarial/poor relationships with regulatory agencies (Horsley & Barker, 2002).

Traditional *external communication channels*, along with information and communication technologies (ICTs), provide opportunities for NPOs to overcome barriers of limited financial and human resources, maintain stakeholder relationships, and maximize their social impact (Curtis et al., 2010; Gorbis, 2013; Nah & Saxton, 2013; Seo & Vu, 2020; Zorn et al., 2011). Studies have described NPOs' use of ICTs in task coordination and case or client management (Chewning et al., 2012; Fu et al., 2019), involving shared repositories and databases, scheduling, sharing knowledge (e.g., best practice), automatic updates and tracking of program progress and services, or client information management, specifically via interorganizational collaborations.

NPOs can especially benefit from using *social media*, as these organizations require stakeholder and public support for funding, volunteers, and reputation (Austin & Jin, 2017; Ozanne et al., 2020; Schmalzried et al., 2012). In particular, NPOs' websites, blogs, and social media can provide efficient and effective ways to reach a broad public and have dialogical interactions with current and potential supporters (Kim & Park, 2017; Lovejoy & Saxton, 2012; Seo & Vu, 2020; Zorn et al., 2011). Based on internet data and interviews with NPOs and human service delivery departments, Campbell et al. (2014) reported that organizations used social media, in decreasing frequency, to market organizational activities, remain relevant and current to key constituencies, raise funds, generate community awareness, and communicate with stakeholders. Social media often have a greater influence than traditional economic explanations for donations (Saxton & Wang, 2014), through crowdfunding (folks around the world interested in that cause), energizing fans' networks (indirect access), soliciting by donors' network peers instead of the organization, and making donor responses public, which creates awareness and social influence.

An important characteristic of social media (inherent in the term "social network sites") is how they facilitate relationships among users and content, such as through Twitter *tweets, following*, *followers*, and *sentiment*. Ihm's (2019) analysis of 1 month of Twitter activities by 100 NPOs and their stakeholders measured three kinds of social media network relationships: (1) flow ties (tweets or replies to stakeholders, information, updates, one-way, no third parties), (2) representational ties (include association to the public or a third party, such as retweets, which may reflect preferential attachment), and (3) affinity ties (following, follower; these may foster engagement, but are weaker ties as they do not provide automatic awareness of the other users).

However, effective engagement and dialogue are not necessarily typical of organizational social media use—especially by NPOs (Linvill et al., 2012; Lovejoy et al., 2012). There are ongoing debates about the extent to which new media can foster dialogue and thus genuine engagement (Hearn et al., 2018). Taylor and Kent (2014, p. 386) note that social media engagement tends "to be a one-way communication process from an organization to followers or friends, rather than constituting any sort of participatory or interactive engagement." Linvill et al. (2012) similarly reported that the primary method of Twitter usage by university social media managers was a one-way, information-based messaging. Carboni and Maxwell (2015) noted that NPOs' use of social media was often not based on two-way engagement, partially due to limited resources or knowledge, concerns about privacy, and regulations on information sharing. Auger's (2013) study indicated that advocacy nonprofits are using social media to persuade, not propagandize, though primarily in a one-way fashion. However, advocacy organizations used different social media for alternate purposes, such as Twitter for recognition and response solicitation, Facebook for two-way stakeholder communication, and YouTube for authority-based messaging and facts and figures. Waters et al. (2009) reviewed three central strategies for NPOs using Facebook to develop stakeholder relationships (disclosure, utility to stakeholders, and interactivity). Yet, their content analysis of NPO profiles just 3 years after Facebook allowed organizations to have accounts concluded that few of the NPOs had incorporated most of Facebook's features or applications.

Taking a different approach to this issue of social media uses, Lovejoy and Saxton's (2012) analysis of 2 weeks of Twitter content in 2009 by 73 of the 100 largest U.S. NPOs identified three key *purposes of social media use*. These are (1) *information* (solely to inform one-way, no other purpose such as events, action, dialogue, and community), (2) *community* (interact, share, converse, foster community, give recognition and thanks, note local events), and (3) *action* (mobilize followers to help fulfill NPO mission, influence, or request followers to do something, donation appeal, selling a product, call for volunteers and employees, lobbying and advocacy, join another site or vote for an organization, learn how to help). Most NPOs, via their Twitter accounts, seemed to be oriented toward promotion, marketing, and some mobilization, not dialogue or engagement; few were oriented toward community or even action. Supporting that conclusion, Guo and Saxton (2014) applied this typology to the use of Twitter messages by advocacy organizations. The majority (69%) were information-based, with 20% community-oriented (not necessarily advocacy), while only 12% referred to action.

NPOs and COVID-19 Crisis Impacts

Every organization has been adversely affected by the pandemic, but NPOs are especially vulnerable. Even in normal conditions, public charities have considerable resource constraints and must manage turbulent environments. NPOs experience events that violate the expectations of stakeholders, generate uncertainty, and potentially create undesirable outcomes (e.g., Herman et al., 2004; Spillan, 2003).

The COVID-19 pandemic has generated pervasive and devastating *impacts* for NPOs, with extraordinary changes in service demand, earned revenue, and donations. Fuller's (2020a) survey results described the primary consequences of COVID-19 for 109 NPOs in the greater Sacramento California area. Most reported revenue loss, and about half had reduced volunteers or could not fulfill contracts or grants. A substantial minority faced staff cuts, furloughs, freezes, and layoffs. A quarter of the organizations reported another significant challenge was communicating with under-served populations. The vast majority used social media, mass emails, and website FAQs, though some used videoconferencing platforms, teleconferences, op-eds in news outlets, or public service announcements. The Nonprofit Finance Fund (2020) surveyed 465 NPOs representing all nonprofit subsectors and states during March 18–23, 2020, assessing the initial consequences of COVID-19 for NPOs. Immediate and long-term needs included immediate funding for urgent needs, care for clients and staff (especially for low-income and homeless people), and flexible funding or operating support. The organizations reported significant change in service usage (rapid and unexpected), reduced earned revenue, reduced donations, reduced government revenue, staff or volunteers with limited availability, and disruptions to long-term financial stability. In most cases, the organizations expected worse conditions for later in 2020.

Based upon the first few months of the COVID-19 period, CauseIQ (2020) estimated the pandemic would reduce earnings and increase expenses of NPOs based on greater demands for services, and reduced market investments, revenue from events, and product sales. Other losses include employee layoffs or furloughs, reduced volunteer participation, and the provision of support, services, and resources to many in need because of the pandemic. Over 85,000 nonprofits earn more than U.S. $25,000 through fundraising, representing U.S. $20 billion in annual donations. Most NPOs rely substantially on these events, reflecting 27% of the total fundraising event revenues for half of the NPOs, and 76% for a quarter of them. Ten percent of these NPOs rely on conferences for 73% or more of their income. Some NPOs, such as museums, symphonies, and theaters, depend heavily on performance revenues and admission fees, which ceased in most areas. Overall, income losses associated with COVID-19 for NPOs, depending on policies and public activities, and number of months with stay-at-home regulations in their area were projected to range from U.S. $5.7 billion (2 months) to U.S. $16.9 billion (6 months).

General Model

The review has identified five primary categories of influences on crisis responses: *communication* (staff, external channels, social media purpose, tweet use, and content), *crisis experience* (prior experience, future concerns, extent of COVID-19 crisis), *crisis*

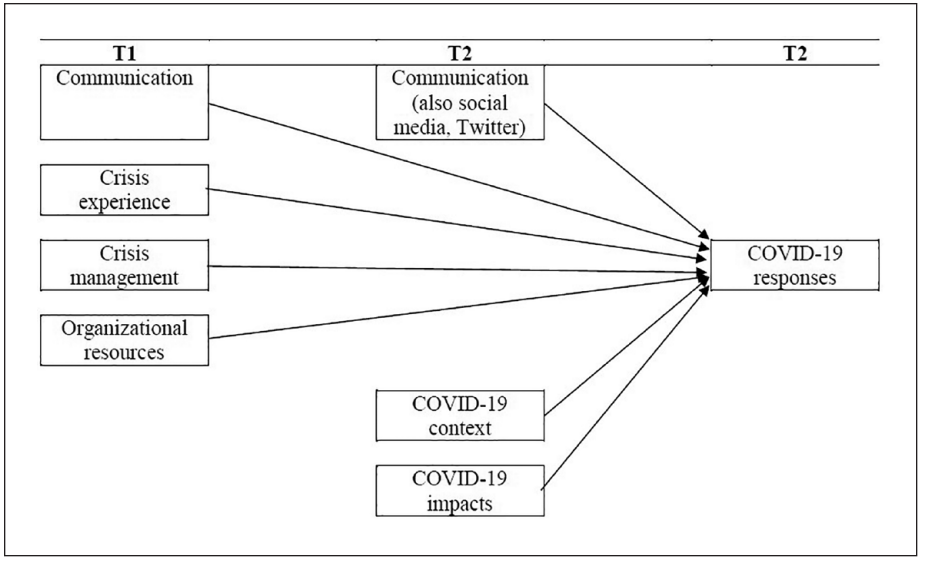

Figure 1. General model of relationships of influences and impacts on COVID-19 crisis responses by U.S. NPOs.
Note. NPO = nonprofit organization.

management (preparedness tactics, communication barriers, readiness for renewal), *organizational resources* (employees, resources), and *crisis impacts*. The dependent variable of interest is the three types of *NPO responses to the COVID-19 crisis*. We consider *impacts* as causally prior to NPO responses because consequences such as loss of revenue, increase in demand for services, and difficulty getting essential supplies are largely out of the control of the NPOs, although some can be mitigated by prior preparation and resources. However, NPOs may choose to respond to the prior influences and impacts in different ways, and those ways are represented by the response types, as appropriate to the discourse of renewal theory. Figure 1 portrays the general model.

Due to page limitations, Table 1 only summarizes possible relationships between the five categories of influences and the three types of responses. Some of these are derived specifically from the prior review and research, some are proposed based on conceptual or reasoned possibilities, and some have no clear basis for a directional hypothesis. Thus, we are not proposing or testing specific hypotheses, but, rather, assessing how the general model explains/predicts the extent of each type of response. The population to which we make inferences is U.S. charitable organizations that have operating budgets of at least U.S. $500,000 and at least one employee.

Methods

Study data included organizational resources (T1), survey responses (T1 and T2), and actual Twitter use (T1 and T2).

Table 1. Summary of Concepts and Sub-Concepts Measured at T1 and/or T2, and Possible Relationships With Three Types of Responses.

Predictors				Responses T2		
Concepts	T1	T2	Sub-concepts	Retrenchment	Persevering	Innovating
Communication						
Staff	X	X		+	+	n
Communication channels	X	X		+	+	+
Social media purpose		X	Information	+	n	n
			Community	n	+	+
			Action	n	+	+
Twitter	X	X	Use	n	+	+
			Sentiment (positive)	−	+	+
Crisis experience						
Prior experience	X		Operational	n	+	n
			Paracrises	n	n	n
Future concerns	X		Operational	+	n	−
			Paracrises	N	+	−
Extent of COVID crisis		X		+	n	n
Crisis management						
Crisis preparedness tactics	X			−	+	+
Crisis communication barriers	X		Internal	+	n	n
			External	N	−	−
Readiness for renewal	X			−	+	+
Organizational resources						
Employees	X			+	+	n
Resources	X		Efficiency	−	+	n
			Support	−	+	+
			Liability and program ratios	+	−	−
			Capital	−	+	+
Impacts		X		+	n	−

Note. Possible relationships: +, positive; −, negative; n, none proposed.

Organizational Resources

T1 resource data were obtained from IRS Service 990 filings by public charities (501(c)(3)) with at least one employee and a minimum annual revenue of U.S. $500,000, gathered from GuideStar, a clearinghouse of U.S. NPO information, as of August 2019. In line with Goza et al. (2016), we used the NPO values of number of employees, fiscal performance, fundraising efficiency, administrative efficiency public support, liabilities/assets, program/total expenses, and working capital as resource indicators.

Survey Instruments and Measures

We drew on the reviewed literature to identify or develop the measures for two surveys for this study. The T1 survey draft was clarified based on reviews by an academic expert in crisis communication, an academic expert in NPOs who was employed by one, and one NPO executive director. The T2 survey repeated some of the measures, and added several others to reflect the COVID-19 context.

T1 Survey Sample and Process. In March 2019, an introductory/inquiry email was sent to the listed representatives of the 20,998 NPOs in the GuideStar database. For requests that were returned for incorrect or no email, or because the GuideStar listed contact was no longer at the organization, we searched the organization's website to see if was still in operation, and if there was an alternative contact, we mailed that person a new survey. Approximately 3.6% of emails bounced, leaving a sample of 20,239 eligible organizations. A link to the T1 survey was sent from March through September 2019, with three follow-up reminder emails sent to nonrespondents. From the initial list, 218 indicated noninterest, 330 started the survey but did not complete it, and 34 were non-solicited (and thus non-identified), resulting in a final sample of 2,005 responding organizations (9.9% response rate).

T1 Survey Measures. The *T1 survey* asked the representatives about several organizational characteristics, their organizations' communication staffing, use of each of 10 *communication channels* with external stakeholders, *prior crisis experiences* (from 17 listed; 11 summed for operational and 6 for paracrises; Coombs, 2019), *future crisis concerns* (the same 17, summed in the same two sets), *crisis communication preparedness tactics* (from 10 listed; summed), and *barriers to crisis communication* (summed for 3 internal and 5 external; Horsley & Barker, 2002). The T1 survey also included a 15-item measure of *readiness for renewal* (Fuller et al., 2019), comprising two dimensions. *Ethical communication* (8 items) focuses on organizational values, stakeholder relationships, provisional communication, and significant choice ($\alpha = .78$). *Effective rhetoric* (7 items) is the ability to structure reality for stakeholders following a problematic event, to convince them to stick with the organization, and to become a model to others in the industry and beyond ($\alpha = .83$). Fuller et al.'s (2019) development and validation of the measure showed that a single second-order factor was the best fit, so we used the mean of the 15 items ($\alpha = .89$).

T2 Survey Sample and Process. The same procedures were used for the T2 survey, conducted mid-August through September 2020. From the initial list of 2,005 organizations, 83 emails were no longer in service, 8 indicated noninterest, 170 started the survey but did not complete it, and 6 were non-solicited (and thus non-identified), resulting in a final sample of 578 organizations (30% response rate, out of 1,922). The only statistically significant differences between the NPOs that responded to both T1 and T2 surveys ($N = 578$), and those that responded only to the T1 survey ($N = 1{,}427$), were more recently founded (1981.4 vs. 1977.6), slightly more likely to have received a federal disaster declaration (21 vs. 17%) (t-tests, $p < .001$), or be an independent entity (83.4 vs. 78.5%) (Goodman and Kruskal τ, $p < .01$). Of the eight organizational resource measures, T2 respondents differed from T1 nonrespondents only in having fewer employees ($M = 108.2$ vs. 68.5, $p < .000$).

T2 Survey Measures. The *T2 survey* asked the same questions about staffing and communication channels, and a few questions about the organization. Furthermore, it asked about frequency of use of *four social media* (Twitter, Facebook, Instagram, and YouTube) in August 2020, including the percentage of use of each for the *three purposes* identified by Lovejoy and Saxton (2012): *information*, *community*, and *action* (computed as the mean percent for each purpose across the four social media platforms). Also included was Xu's (2018) 14 items for three dimensions of *extent of (COVID) crisis: uncertainty* (4 items; $\alpha = .77$), *urgency* (5 items, $\alpha = .89$), and *severity* (5 items, $\alpha = .82$); we used the overall scale mean ($\alpha = .89$). The T2 survey also provided a set of questions about the COVID-19 context for the NPO, such as level of operations and current status and ability to operate into the future. It further asked about *impacts* to the NPO from COVID-19 (11 items; summed), based on anecdotal evidence reported in local and national newspapers and the websites of nonprofit advocacy associations, pretested in Fuller (2020a, 2020b). Finally, it presented questions about the three types of *responses* to the COVID-19 crisis that the NPO has undertaken (four summed for *retrenchment*, five for *persevering*, and four for *innovating*) (Crutchfield & Grant, 2012; Wenzel et al., 2021).

Twitter Usage and Content

Twitter Sample and Process. The Twitter social media data were sought for the 2,005 organizations in the full T1 sample that had an account ($N = 1{,}378$) as of September 2020. To find the Twitter account names (*handles*) for the organizations, we used *Twitter Username Extractor*, a program developed by Zack Proser and made available online as an open-source platform (https://zackproser.com/software/username-extractor/). Using that information, tweets from the official Twitter accounts for each organization were harvested using Salesforce Marketing Cloud's Social Studio technology (in particular, the Source Groups function; Salesforce, 2018). We

collected information about each tweet from each organization over four 1-month periods. These dates reflect a time when NPOs are typically quite busy (April), and a time when they are usually not particularly busy (August), both before the COVID-19 pandemic (2019) and after its onset (2020).

Twitter Usage Measures. Twitter count measures include the NPO's number of following, followers, and tweets for each of the four time periods. The following (number of accounts a particular organization follows) and follower (number of accounts following the organization) counts offer a snapshot of each account's level of potential engagement. For aggregating at the organizational level, as all the Twitter counts had highly significant skew and kurtosis, the only workable transformation was to recode all positive values to 1. Thus, each NPO's variable of following, followers, or tweets had a 1 if there were any of each, and 0 if it did not have a Twitter account or did not have any Twitter counts for each in a given time period. Because these measures then had binary values (absent or present), they were all nearly perfectly correlated. So, we used only whether the NPO did not or did tweet in a given time period. It is also true that the posting of any tweets or not is highly correlated across the two different time periods within a year ($r = .73, .79$) and only slightly less across the two same time periods across the 2 years ($r = .64, .71$) (all $p < .01$, one-tailed). Therefore, we conducted correlations using all four to identify any over-time influences, but used only the mean of any tweeting for the two time periods in 2020 for the regressions.

Twitter Content Measure. We employed the Social Studio's sentiment-analysis feature to "perform an opinion mining, which determines the emotional valence of social media posts" (Boatwright et al., 2019, p. 201). This is a lexicon-based analysis method that calculates the frequency of positive, neutral, and negative word choices to determine user sentiment (Taboada et al., 2011). Such sentiment coding has been adopted successfully in research (Boatwright et al., 2019), similar to the use of Linguistic Inquiry and Word Count (Pennebaker et al., 2015). For example, tweet sentiment has been used to determine the outcome of legislative elections in the Netherlands in 2011 and 2012 (Sanders & van Den Bosch, 2013; Tjong Kim Sang & Bos, 2012). Once each tweet's sentiment was assessed (negative = −1, neutral = 0, positive = 1), those values were then entered back into the tweet-level dataset. Overall sentiment was computed as the mean of these three values across an organization's tweets in each time period. Note that only organizations with tweets in a given time period have sentiment values, so the sample size is reduced when those are used ($N = 299$ T1, 297 T2), and, as they are highly correlated, only the mean value of the 2 months in 2020 were used in the analyses.

The organizational resources data, survey data, and the aggregated organizational-level Twitter data were combined for each of the 578 NPOs that responded to both the T1 and T2 surveys.

Results

Descriptives

Organizational Resources. Table 2 provides descriptive statistics for the organizational resources at T1. The 578 NPOs had a mean of 68.5 and a median of 23.0 employees. Fiscal performance indicated 20% more revenue than expenses, a low ($M = 0.06$) ratio of fundraising expenses to total contributions, a low ($M = 0.13$) ratio of administrative costs to total expenses, a high ($M = 0.70$) ratio of public support to total revenue, a low liabilities-to-assets ratio ($M = 0.21$), a relatively high allocation of expenses to programs ($M = 0.82$), and a modest ratio of working capital to total expenses ($M = 1.12$, about a one-year funding reserve).

Survey Measures. Table 3 provides descriptive statistics for the T1 and T2 surveys.

T1. Over two-thirds (69%) had staff responsible for communicating with internal and external stakeholders, consisting primarily of paid staff. The most frequent media channels used to communicate information externally to constituents were social media, websites, and mass emails. The mean percentage use of all 11 channels was 50%. NPOs reported on average nearly one (.91) operational organizational crisis, and a half (.53) paracrisis, in the prior 24 months. The most frequently mentioned were loss of a major stakeholder and negative word of mouth on social media. They had concerns about 2.4 possible operational crises and 1.2 paracrises. Here, after loss of a major stakeholder, and breach of a computer system, they reported a higher frequency of concerns about future crises than they had experienced before. Ironically, given the

Table 2. Organizational Resources Descriptives.

Variable	T1
Number of employees	68.5 (176.5); median = 23.0
Fiscal performance—total revenue/total expenses	1.20 (0.76)
Fundraising efficiency—fundraising expenses/total contributions	0.06 (0.06)
Administrative efficiency—administrative expenses/total expenses	0.13 (0.09)
Public support—ratio of total contributions from grants, gifts, and so on to total revenue	0.70 (0.32)
Liabilities-to-assets ratio—total assets/total liabilities	0.21 (0.28)
Program to expenses ratio—program expenses/all expenses	0.82 (0.10)
Working capital—unrestricted net assets/total expenses	1.12 (1.76)

Source. GuideStar.

Note. Values are *M* (*SD*); *N* = 578.

Table 3. T1 and T2 Survey Descriptives.

Variable	T1	T2
Staff with primary responsibility to communicate with internal and/or external audiences (n/y)	*M* = 0.69 (*SD* = 0.47)	0.73 (0.44)
If so, best characterization:		
Paid	87.0%	86.3%
Volunteer	0.0	0.2
Mix	8.0	11.6
Other	0.9	1.9
Channels used to communicate information externally to constituents (n/y)		
All channels (mean)	0.50 (0.50)	0.58 (0.18)
Newsletters	0.81 (0.39)	0.78 (0.42)
Press releases	0.75 (0.44)	0.67 (0.47)
Flyers or brochures	0.84 (0.37)	0.73 (0.45)
Mass postal mailings	0.63 (0.48)	0.51 (0.50)
Mass emails	0.85 (0.35)	0.85 (0.36)
Public meetings	0.37 (0.48)	0.24 (0.43)
Articles submitted to local or state publications	0.40 (0.49)	0.32 (0.47)
Website	0.97 (0.16)	0.97 (0.16)
Public service announcements (broadcast via television or radio)	0.25 (0.43)	0.20 (0.40)
Social media	0.98 (0.15)	0.97 (0.16)
SMS (text message) alerts	0.15 (0.35)	0.14 (0.35)
Social media use		
Use to communicate with external stakeholders? n/y (*N* = 578)		
Twitter	—	0.63 (0.48)
Facebook	—	0.97 (0.17)
YouTube	—	0.57 (0.50)
Instagram	—	0.71 (0.45)
If yes, estimate how many times your organization posted or contributed to these social media during August 2020:		
All social media (*N* = 537) (sum)		91.30 (220.89)
Twitter (*N* = 345)	—	32.8 (80.6)
Facebook (*N* = 534)	—	62.1 (442.6)
YouTube (*N* = 309)	—	6.8 (25.8)
Instagram (*N* = 391)	—	57.8 (510.2)
Percent of August 2020 posts to each social medium for each purpose (each up to 100%):		
Twitter:	—	
Information		37.6 (32.7)
Community		15.7 (19.1)
Action		18.7 (23.5)
Facebook:	—	
Information		37.6 (30.0)
Community		19.0 (21.2)
Action		23.4 (24.4)
YouTube:	—	
Information		41.7 (43.8)
Community		10.6 (23.2)
Action		9.1 (21.6)

(continued)

Table 3. (continued)

Variable	T1	T2
Instagram:	—	
Information		37.6 (32.3)
Community		21.0 (24.0)
Action		19.8 (23.7)
Mean percent for each purpose across social media:	—	
Information		27.7 (29.8)
Community		16.6 (18.3)
Action		18.5 (20.4)
Crises experienced by organization in prior 24 months (n/y)		
Operational crises experienced (sum)	0.91 (1.06)	—
Loss of a major stakeholder (director, president, founder, donor)	0.28 (0.45)	—
Industrial/environmental accident	0.01 (0.11)	—
Computer system breakdown	0.13 (0.340)	—
Attempted or actual breach of computer system by hacker	0.14 (0.34)	—
Major product/service malfunction	0.03 (0.18)	—
Product recall	0.01 (0.08)	—
Violence at the workplace	0.03 (0.17)	—
Natural disaster	0.11 (0.31)	—
Fraudulent activity by internal stakeholders (employees, volunteers, managers)	0.04 (0.20)	—
Theft/loss of organization's property	0.11 (0.31)	—
Disease outbreaks (epidemics, food-borne illness, where at least 10% of staff affected)	0.01 (0.12)	—
Paracrises experienced (sum)	0.53 (0.86)	—
Malicious, false rumors	0.11 (0.31)	—
Negative news media coverage	0.08 (0.27)	—
Negative word of mouth on social media	0.23 (0.42)	—
Boycott by consumers or the public	0.00 (0.06)	—
Lawsuit	0.09 (0.29)	—
Government investigation	0.02 (0.14)	—
Crisis preparedness tactics (n/y) (*sum*)	5.51 (2.54)	—
Has a team to plan for critical events	0.58 (0.49)	—
Has a team to respond to critical events	0.69 (0.46)	—
Systematically monitors media channels	0.54 (0.50)	—
Has an official written plan outlining how to communicate during critical events	0.39 (0.49)	—
Staff has received training on how to communicate about critical events	0.45 (0.50)	—
Provides regular opportunities for staff to practice the communication roles for a critical event	0.16 (0.37)	—
Includes emergency preparedness information in communications	0.48 (0.50)	—
Maintains contact information for external stakeholders	0.90 (0.30)	—
Maintains emergency contact information for internal stakeholders	0.51 (0.50)	—
Has designated a spokesperson (spokespeople)	0.81 (0.39)	—

(continued)

Table 3. (continued)

Variable	T1	T2
Crisis communication barriers: Did any of these impede communication efforts to respond to the critical event(s)? (n/y)		
All crisis communication barrier items (sum)	0.53 (0.91)	—
Internal (sum)	0.23 (0.49)	—
Coordination issues with a related organization (parent, or local chapter)	0.02 (0.15)	—
Lack of budget for communication purposes	0.07 (0.26)	—
My nonprofit chose not to implement crisis communication efforts	0.12 (0.34)	—
External (sum)	0.31 (0.67)	—
Legal implications	0.12 (0.33)	—
Criticism by the media	0.04 (0.19)	—
Complaints by constituents	0.05 (0.21)	—
Magnitude of the crisis	0.08 (0.27)	—
Adversarial/poor relationships with governmental/regulatory agencies at any level (e.g., city, county, state, or federal)	0.02 (0.14)	—
None	0.32 (0.47)	—
Concerns about any of the following risks affecting your nonprofit in the future? (n/y)		
Operational crises concerns (sum)	2.39 (2.00)	—
Loss of a major stakeholder (director, president, founder, donor)	0.55 (0.50)	—
Industrial/environmental accident	0.07 (0.26)	—
Computer system breakdown	0.33 (0.47)	—
Attempted or actual breach of computer system by hacker	0.42 (0.50)	—
Major product/service malfunction	0.08 (0.28)	—
Product recall	0.01 (0.10)	—
Violence at the workplace	0.21 (0.41)	—
Natural disaster	0.38 (0.49)	—
Fraudulent activity by internal stakeholders (employees, volunteers, managers)	0.14 (0.35)	—
Theft/loss of organization's property	0.19 (0.39)	—
Disease outbreaks (epidemics, food-borne illness, where at least 10% of staff affected)	0.00 (0.0)	—
Paracrises concerns (sum)	1.19 (1.50)	—
Malicious, false rumors	0.24 (0.43)	—
Negative news media coverage	0.27 (0.44)	—
Negative word of mouth on social media	0.37 (0.48)	—
Boycott by consumers or the public	0.05 (0.22)	—
Lawsuit	0.20 (0.40)	—
Government investigation	0.06 (0.23)	—
Readiness for renewal (1 = *very strongly disagree* to 7 = *very strongly agree*)		
All readiness for renewal items (mean) ($\alpha = .89$]	5.13 (0.63)	—
Ethical communication (mean) ($\alpha = .78$)	5.28 (0.68)	—
In general, people in my organization live by our values.	5.94 (0.87)	—
My organization's values are clearly conveyed to our members.	5.74 (1.03)	—
On the whole, my organization has a "reservoir of goodwill" with external stakeholders it can draw on in the event of a problem.	5.75 (0.99)	—

(continued)

Table 3. (continued)

Variable	T1	T2
We have a process in place that helps to resolve competing values about what information to share.	4.26 (1.26)	—
When communicating with the public about a potential harm, we provide information about what can be done to protect oneself.	4.83 (1.09)	—
When a problem arises that our organization is involved in, our messages express concern for those who are affected.	5.73 (0.98)	—
We put steps in place to avoid similar issues when another organization confronts a negative event.	4.75 (1.11)	—
Effective organizational rhetoric ($\alpha = .83$)	5.00 (0.63)	—
Throughout a crisis event, my organization remains hopeful.	5.50 (0.91)	—
My organization views crises as turning points that have the potential for future positive outcomes.	4.97 (1.03)	—
In my organization, we embrace failure as an opportunity to learn.	5.29 (1.01)	—
We are seen as a model in our industry for resolving problems.	4.74 (1.19)	—
In the event of a problem, our communication is a model for organizations in our field and beyond to follow.	4.15 (1.21)	—
Generally, we are effective at getting our stakeholders to see problems in a similar light.	5.13 (0.88)	—
We are capable of convincing our collaborators to stick with us through a problematic event.	5.44 (0.87)	—
Our communication about a negative event usually expresses a silver lining.	4.75 (1.01)	—
Organizational characteristics		
Year founded	1981.4 (26.5)	—
Affiliation to others		—
parent	7.1%	
subsidiary	9.5	
independent	83.4	
Paid exec director (n/y)	0.98 (0.15)	—
Board of directors (n/y)	1.00 (0.04)	—
Full time equivalents		37.7 (80.2)
1	1.7%	—
2–9	36.7	—
10–24	32.0	—
25–99	20.2	—
100–499	8/8	—
500–999	0.5	—
1,000–4,999	0.0	—
5,000+	0.0	—
Rely on volunteers (n/y)	0.65 (0.48)	0.61 (0.49)
If so, percent of volunteers	42.6 (32.0)	—
If Yes, how many volunteers are part of your nonprofit?	—	($N = 349$) 615.9 (19.33) Median = 150 (2 outliers removed: $M = 498$ (935.4)

(continued)

Table 3. (continued)

Variable	T1	T2
Region		
Urbanized area (population of 50,000 or more people)	77.5%	—
Urban cluster (population of at least 2,500 but less than 50,000)	19.8	—
Rural (population of less than 2,500)	4.7	—
Role in public safety, emergency management, or disaster response? (n/y)	0.27 (0.45)	—
Is your organization in an area that has received a federal disaster declaration in the last two years? (Y = 1; N = 2; DK = 3 recoded to n = 0; y = 1; DK = missing)	0.21 (0.41)	—
Extent of COVID-19 crisis (1 = *strongly disagree* to 7 = *strongly agree*)		
Overall crisis extent scale (mean) ($\alpha = .88$)	—	4.72 (0.91)
Uncertainty scale (mean) ($\alpha = .77$)	—	3.53 (1.15)
My organization does not know what to do	—	2.23 (1.24)
My organization is uncertain about what will happen next	—	4.51 (1.62)
It is unclear whether my organization can get through this	—	2.54 (1.52)
The situation creates high uncertainty for my organization	—	4.82 (1.57)
Urgency scale (mean) ($\alpha = .89$)	—	5.60 (1.02)
In this situation, my organization needs to get information as soon as possible	—	5.73 (1.15)
There is no time to waste for my organization in terms of getting relevant information	—	5.45 (1.32)
My organization would feel anxious if it doesn't get information in time	—	5.11 (1.40)
The sooner my organization gets relevant information, the better it is for my organization	—	6.05 (1.03)
Quick information is crucial to my organization during this situation	—	5.67 (1.21)
Severity scale (mean) ($\alpha = .82$)	—	4.80 (1.24)
This situation has serious consequences for all members of my organization	—	5.05 (1.62)
This situation is severe for my organization	—	4.43 (1.81)
This situation is something that can have potential negative impact on my organization	—	5.55 (1.40)
This situation will cause a lot of damage to my organization	—	3.92 (1.65)
The number of people in my organization who are affected by this will be a lot	—	5.08 (1.71)
COVID-19 context for your organization		
Has your organization stopped operations at all during the pandemic?		
Yes—all operations	—	9.0%
Yes—some operations	—	57.8
No—all operations have continued	—	33.2
Your organization's current status (*extent of exit response*)		
Open—in-person full capacity	—	9.9%
Open—in-person reduced capacity	—	14.0
Open—mix of in-person and virtual operation	—	55.2
Open—virtual operations only	—	20.1
Closed—temporarily	—	0.9

(continued)

Table 3. (continued)

Variable	T1	T2
Closed—permanently, no longer in service	—	0.0
Counting from September 1, how long would your organization be able to continue to operate if it did not have any incoming revenue?		
<1 month	—	1.9%
1 month to <3 months	—	15.9
3 months to <6 months	—	32.2
6 months to <12 months	—	28.1
>12 months	—	21.8
Impacts of COVID-19 crisis		
Impacts to your organization from COVID-19 (n/y)		
All responses (sum)	—	4.5 (2.25)
Loss of revenue due to events (fundraisers) canceled or postponed	—	0.77 (0.42)
Suspension of fee-for-service programs due to prioritization of essential services	—	0.34 (0.47)
Technology issues such as a lack of supply of computers, virtual meeting technology, or cybersecurity concerns	—	0.36 (0.48)
Decline in endowment funds due to financial market volatility	—	0.15 (0.36)
Increase in demand for services deemed essential	—	0.41 (0.49)
Decrease in number of volunteers	—	0.57 (0.50)
Difficulty fulfilling deliverables for contracts or grants for services due to physical distancing mandates	—	0.38 (0.49)
Difficulty communicating about operational changes with hard-to-read or under-served populations	—	0.33 (0.47)
Need to modify budgets on existing contracts to include costs of disinfecting facilities	—	0.41 (0.49)
Difficulty getting essential supplies	—	0.42 (0.49)
Difficulty getting personal protective equipment, e.g., masks, gowns, gloves	—	0.36 (0.48)
Responses to COVID-19 crisis		
What has your organization done to ensure survival and/or maintain capacity? (n/y)		
All responses (sum)	—	5.83 (2.56)
Retrenchment (sum)	—	0.91 (1.0)
Furloughing (unpaid time off) staff 2	—	0.15 (0.36)
Laying off staff 3	—	0.15 (0.36)
Freezing hiring of unfilled staff positions 4	—	0.28 (0.45)
Changing operating hours5	—	0.33 (0.47)
Persevering (sum)	—	2.75 (1.34)
Increasing fundraising appeals to individual donors 1	—	0.56 (0.50)
Applying for low-interest loans (e.g., Small Business Administration Disaster Loans, Payroll Protection Program) 6	—	0.82 (0.39)
Appealing to funders for flexible, unrestricted funds 7	—	0.61 (0.49)
Requesting funders to change their reporting requirements, deadlines and expectations and redirect funds to cover emergent needs 8	—	0.36 (0.48)
Mobilizing supporters to advocate for the organization and cause 12	—	0.40 (0.49)

(continued)

Table 3. (continued)

Variable	T1	T2
Innovating (sum)	—	2.17 (1.17)
Working with government at any level (local, state, federal) on solutions (e.g., disaster relief aid) or service delivery 9	—	0.47 (0.50)
Collaborating with partners in for-profit sector on solutions or service delivery 10	—	0.27 (0.44)
Cooperating with other nonprofit organizations on solutions or service delivery 11	—	0.60 (0.49)
Innovating new ways to deliver on the organization's mission 13	—	0.84 (0.37)

Note. $N = 578$.

pervasiveness of the COVID-19 pandemic in 2020, no organization mentioned "disease outbreaks (epidemics, food-borne illness, at least 10% of staff affected)" as a concern at T1. The most significant internal barrier to communicating during an organizational crisis was that the NPO chose not to implement crisis communication efforts, and the most frequent external barrier was legal implications. Overall, the NPOs engaged in an average of 5.5 crisis preparedness tactics, the most frequent of which were maintains emergency contact information for external stakeholders, has designated a spokesperson (spokespeople), and has a team to respond to, or to plan for, critical events. Only about 40% had an official written crisis communication plan. The NPOs agreed that they engaged in ethical communication ($M = 5.28$), and effective organizational rhetoric ($M = 5.00$), for a quite positive overall readiness for renewal ($M = 5.13$).

T2. Values at T2 for repeated variables were fairly similar to those at T1. Of note was a slight increase in having communication staff (.73 vs. .69, $p < .01$) and use of all communication channels (.58 vs. .50, $p < .001$). Nearly all (97%) used Facebook, with between 71 and 57% usage of Instagram, Twitter, or YouTube. They also reported posting more frequently on Facebook and Instagram in August 2020, with a mean total number of posts across all four media of 91.3 ($SD = 220.89$). As prior research showed (Auger, 2013; Hearn et al., 2018; Waters et al., 2009), NPOs use these social media more for disseminating information ($M = 27.7\%$), than for promoting community (16.6%) or action (18.5%).

The NPOs slightly disagreed that the extent of the COVID-19 crisis involved uncertainty ($M = 3.53$), but agreed that the organization was experiencing urgency about information ($M = 5.60$), and slightly agreed that the crisis was severe ($M = 4.80$), with an overall slight agreement ($M = 4.72$). Concerning reported impacts of and actions in response to the COVID-19 crisis, over half (57.8%) have stopped some operations, and 9% all. Just over half are currently offering a mix of in-person and virtual operations, and only 9.9% providing in-person full capacity. While a fifth (21.8%) indicated they could continue operations with no incoming revenue for a year or more, half indicated they could survive for six months or less. Of the 11 listed

impacts, on average the NPOs reported 4.5. The most frequent were loss of revenue (77%) and loss in number of volunteers (57%).

Of the three kinds of responses to the COVID-19 crisis, the most frequent was persevering ($M = 2.75$ out of 5), followed by innovating (2.17 out of 4), with the least being retrenchment (.91 out of 4). On average, the organizations enacted 5.83 responses (out of 13). Each organization could vary along the scale for each response; correlations among the responses were significant, but small, ranging from .23 to .33 ($p < .01$, one-tailed), indicating the three types of responses were basically independent.

Twitter Use. Table 4 provides the number of posts at the tweet level and organizational level, and mean statistics aggregated at the organizational level, for each of the four time periods. Following, followers, and mean number of tweets did not significantly differ between April 2019 and April 2020. Between August 2019 and August 2020, mean number of tweets, following, and followers all slightly increased, though significantly only for followers ($p < .05$). The mean total (skewed) number of tweets for each pair of two time periods increased slightly but not significantly ($M = 38.3$, $SD = 71.8$; 40.9, 67.0); this was similar for mean binary measures ($M = 0.77$, $SD = 0.35$; .78, .36). *Content*. Mean sentiment declined significantly from 2019 (0.55, $SD = 0.32$) to 2020 (0.46, $SD = 0.38$) ($p < .005$) but was still quite positive. Sentiment became significantly less positive ($p < .01$) across the two Aprils; for the two Augusts, sentiment also decreased, but not significantly.

Correlations With Responses

Organizational resources (number of employees, fundraising efficiency, administrative efficiency, public support, liabilities-to-assets ratio, and program to total expenses ratio) differentially predicted the three types of responses. This may be so partially because, as noted, retrenchment is a more constrained and short-term response while innovating is more visionary and long-term. Organizations that have higher liabilities to assets have fewer slack resources available, and when faced with a crisis may be preoccupied with retrenchment. Almost all of the *survey* variables predicted one or more of the responses to the COVID-19 crisis. These included the *communication* measures, except using social media for information; all the *crisis experience* measures; and the *crisis management* measures, except for internal barriers to communicating about crises. More *Twitter* activity in all time periods predicted more persevering responses. April (2019 and 2020) tweet *sentiments* are not significantly associated with T2 crisis responses, but more positive sentiment in the two August (2019 and 2020) periods is significantly positively associated with retrenchment. The total number of COVID-19 impacts on the NPO was significantly positively correlated with all three responses. (Correlation tables of influences and impacts with responses, and scale dimensionality analyses, are available from the authors.)

Table 4. Twitter Descriptives.

	April 2019	April 2020	August 2019	August 2020
Individual level: Tweets				
Tweets	6,935	7,646	5,960	6,185
Organizational level: Tweets				
Tweets	20.5 (39.2)	22.6 (35.3)	17.6 (35.7)	18.3 (34.5)
Following	883.5 (1,676.5)	873.2 (1,512.0)	805.1 (1,558.9)	866.0 (1,505.4)
Followers	4,044.0 (15,573.1)	5,024.7 (21,387.0)	4,736.8 (21,105.8)	4,985.1 (21,259.0)
Organizational level: Content				
Sentiment (−1 negative, 0 neutral, 1 positive)	0.54 (0.34)	0.41 (0.43)	0.53 (0.37)	0.51 (0.39)

Note. Values are *N* for Tweet level and *M* (*SD*) for organizational level. *N* for T1 and T2 organizations = 338 for tweets, following, followers; *N* = 241–278 for sentiment.

Regressions on Responses

Table 5 presents the results from the regressions for each type of response. We identified the primary significant explanatory variables from the correlation tables and force-entered them via five sequential hierarchical blocks corresponding to the categories of influences identified in the review. Communication was entered first, as the focus of the study. (Only the 2020 mean tweeting was used, as it was correlated $r = .77$, $p < .001$, with the 2019 value. Including the mean sentiment values for both 2019 and 2020 reduced the analysis size to $N = 247$, and neither was a significant predictor in the regressions, so they are not included in Table 5 results.) The second block represented crisis experiences, the third crisis management, the fourth organizational resources, and the final block consisted only of the impacts total.

The results vary somewhat by the three types of responses explicated by Wenzel et al. (2021). The least frequent response, *retrenchment* (17% variance explained), is more likely when the NPO engages in less communication, has little experience with or concerns about crises, is less ready for renewal, and has more employees but less proportional available resources. *Persevering*, the most frequent response (20% explained), is more likely with more T2 communication, more community orientation in its social media use, more tweeting, slightly less prior experience with but more concern about paracrises, and less perceived extent of the COVID-19 crisis, but with neither prior crisis management nor organizational characteristics mattering. *Innovating* (17% variance explained) was more likely with more communication channel use, more community orientation in its social media use, slightly more concern about operational crises, slightly more crisis preparedness tactics, and a higher liabilities-to-assets ratio.

Table 5. Hierarchical Multiple Regressions on Three Types of Responses.

	Responses T2		
Explanatory blocks and variables	Retrenchment	Persevering	Innovating
Block 1: Communication: Staff, channels, social media purposes, tweets			
T1 Comm staff have	0.09	0.04	−0.07
T2 Comm staff have	0.00	−0.06	0.00
T1 External communication channels	0.04	0.06	0.08
T2 External communication channels	0.05	0.24***	0.23***
T2 Social media purpose information	0.02	−0.03	−0.03
T2 Social media purpose community	0.04	0.10 *	0.09*
T2 Social media purpose action	0.04	0.06	−0.04
Tweets 2020	0.02	0.11**	0.01
Adj R^2	0.03	0.12	0.11
F(8,549)	2.9**	10.4***	9.3***
Block 2: Crisis: Prior experienced, concerned, extent COVID			
T1 Crises experienced operational	0.01	0.03	0.06
T1 Crises experienced paracrises	−0.05	−0.09	−0.01
T1 Crises concerned operational	0.06	−0.05	0.09
T1 Crises concerned paracrises	0.00	0.15**	−0.02
T2 Crisis extent: Uncertainty, urgency, severity	0.30***	0.27***	0.17***
R^2 change	0.12	0.09	0.05
F(5,544)	14.9***	13.0***	6.6***
Adj R^2	0.14	0.21	0.15
F(13,544)	7.8***	12.1***	8.5***
Block 3: Crisis: Management			
T1 Crisis preparedness tactics	0.02	0.00	0.08
T1 Crisis communication barriers	0.04	0.06	0.03
T1 Readiness for renewal (ethical, effective)	−0.09 *	0.01	0.06
R^2 change	0.01	0.00	0.01
F(3,541)	1.9 ns	0.67 ns	3.1*
Adj R^2	0.14	0.20	0.16
F(16,541)	6.7***	9.9***	7.6***
Block 4: Organizational resources			
Number of employees	0.15***	−0.03	0.05
Liabilities-to-assets ratio	0.09*	0.01	0.09*
Program to expenses ratio	−0.07	−0.01	0.03
R^2 change	0.03	0.00	0.01
F(3,538)	7.1***	0.15 ns	2.5
Adj R^2	0.17	0.20	0.17
F(19,538)	6.9***	8.4***	6.8***

(continued)

Table 5. (continued)

Explanatory blocks and variables	Responses T2		
	Retrenchment	Persevering	Innovating
Block 5: Impacts			
Impacts	0.16***	0.21***	0.26***
R^2 change	0.02	0.03	0.05
F(1,537)	13.0***	23.3***	35.8***
Adj R^2	0.19	0.23	0.22
F(20,537)	7.4***	9.4***	8.7***

Note. $N = 558$; Hierarchical multiple regressions, with all variables entered within sequential blocks. Variance Inflation Factor range 1.02 to 1.3; tolerance range .59 to .70.
*$p < .05$. **$p < .01$. ***$p < .001$.

Discussion

Summary

The central question of this study was the following: what are types of responses by U.S. NPOs to the COVID-19 crisis, and what influences those responses? Based on reviews, we identified five primary sets of influences, each with multiple measures.

Influences on the *three types of responses* varied. *Retrenchment* was not much explained except slightly by more communication staff at T1, a greater extent of crisis, less readiness for renewal, and more organizational resource commitment. "Simply" using social media to provide information or promote action had no influence. However, use of more communication channels at T2, more use of social media for community, more tweeting, more concern with future paracrises, and greater perceived extent of the COVID-19 crisis—but not organizational resources—significantly predicted a *persevering* response. Persevering responses to the COVID-19 crisis seem to be somewhat motivated by the same proactive stance that generates tweeting. And an *innovating* response (a more long-term and perhaps risky type of response) was similarly predicted by more communication channels and a community orientation in social media use, as well as a slight concern about operational future crises, a less strong influence of the crisis extent, somewhat more application of crisis preparedness tactics, and a higher liabilities-to-assets ratio. Perhaps these NPOs are willing to leverage current assets, in tandem with personnel resources and crisis preparation, to commit to longer term renewal.

Particular contributions of this research include the unique opportunity to assess these influences across a large number of U.S. NPOs ($N = 578$) sharing a common crisis (COVID-19). Furthermore, we consider contexts and crisis preparedness of the NPOs from a year before (2019) and a half year after (2020) the emergence of COVID-19 in the U.S. In addition, we analyzed three integrated types of data: organizational resources from official filings, surveys at the two time periods, and actual Twitter use from two months in each year. More specifically, based on prior research, we

distinguish types of social media purposes, use and content of tweets, experiences with and concerns about two types of crises, extent of the crisis, crisis communication barriers, organizational resources, and three types of responses. More conceptually, this study introduced the readiness for renewal concept (reflecting both ethical and effective leadership communication) to the nonprofit sector, and linked that to a recent typology of responses to the COVID-19 crisis. Indeed, a renewal perspective was related to an innovating response.

Limitations

The current study has some limitations. First, it cannot generalize about the state-of-the-art of public charities overall. Considering that 70% of qualifying NPOs did not respond to a follow-up survey from T1, we do not know the extent of impacts or responses of most of the sector. It may be that these organizations were simply too overwhelmed or too understaffed (in retrenchment) to respond to the survey or ceased operations (exit). Second, although the study includes multiple data collection points, it does not capture some changes from the first instance of the survey (readiness for renewal, crisis concerns, crisis occurrences) due to COVID-19. For example, organizations may report higher uncertainty, urgency, and severity in the beginning compared to later stages of a crisis. At the same time, organizations may begin to implement crisis preparedness tactics in response to major crises such as COVID-19. Future research in crisis management should, to the extent possible and practical, collect longitudinal data on all relevant measures.

Implications for Research

The present study has several implications for research. First, despite earlier theorization about the boundary conditions of discourse of renewal as more ideal for privately-held organizations (Ulmer et al., 2009), publicly supported NPOs tend to report that they agree that they are ready to renew, that is, able to produce a desirable post-crisis response. NPOs face risks (Herman et al., 2004; Herman & Oliver, 2001), and experience and report concerns about crises. We agree with Fuller et al. (2019) and Ulmer et al. (2019) that the ability to enact a renewing response is developed over years, not an approach that can be easily or immediately implemented. Therefore, an examination of readiness for renewal over time in the sector is critical. Second, NPOs appear to be engaging in social media use, and social media-induced paracrises seem to be among the top experiences and concerns for these organizations. Consequently, considering the findings about social media use and their purposes for information and action, researchers should focus on how NPOs use social media to build community during crisis and non-crisis times, and could also assess how social media content corresponds to organizational readiness for renewal. Third, the present study has demonstrated the potential of combining survey data along with objective data about organizational social media use and financial resources.

Implications for Practice

The current study has implications for practice for NPOs, crisis communication and use of social media, and the COVID-19 context. First, NPOs seem modestly well-positioned with readiness for renewal, that is, capable of producing a desirable and effective crisis response. As noted by Fuller et al. (2019), the readiness for renewal instrument can provide an overall assessment for an organization, and individual items can reveal strengths and growth opportunities. For example, NPOs seem to understand and practice their values but indicate challenges with processes for resolving competing values and expressing a silver lining after a negative event. NPOs should rely on their values, grounded in their missions, to communicate during COVID-19 and other crises. Moreover, importantly, organizations that exhibit readiness for renewal tend to view crises not just as threats but also as opportunities and thus undertaking actions that help them to at least persevere. Second, organizations would be well-served in focusing more on social media activities that help them to create community (Lovejoy & Saxton, 2012). This approach will be useful not only in normal times, but especially during crises when they need to draw on a reservoir of goodwill (Ulmer et al., 2019). Finally, the study has implications for the COVID-19 context. COVID-19 has upended how organizations operate. Since COVID-19 had been on everyone's radar for over a half year by T2, there may have been less uncertainty and NPOs seem to have managed some of the obstacles to this point. Over the longer term, organizations in the nonprofit space will need to innovate beyond short-term collaborations and short-to-medium novel approaches to mission delivery.

Conclusion

NPOs are important contributors to the U.S. economy, significant third spaces for many Americans who volunteer, and important providers of diverse services across multiple cause areas. As such, how these organizations prepare for and communicate about crises, an under-researched area, has particular significance. This study undertook a naturally occurring field experiment to examine how NPOs were influenced by and responded to the COVID-19 disaster. Overall, NPOs appear to reflect the assumption of a resilient sector (Salamon, 2003), responding not just with defensive retrenchment, but also with persevering and innovating approaches toward renewal.

Declaration of Conflicting Interests

The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

Funding

The author(s) disclosed receipt of the following financial support for the research, authorship, and/or publication of this article: Ronald E. Rice acknowledges ongoing support as the Arthur N. Rupe Professor in the Social Effects of Mass Communication, in the UC Santa Barbara Department of Communication.

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