# Evolving Best Practices in Crisis Communication: Examining U.S. Higher Education's Responses to the COVID-19 Pandemic

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#### **ABSTRACT**

The COVID-19 pandemic started in December 2019 and has rapidly spread around the globe. Among the institutions at the forefront of responding to COVID-19 are U.S. colleges and universities. These institutions frequently face crises, but they have not always managed these episodes successfully. Given the gravity of the pandemic, best practices research can help higher education institutions combat public health crises and other threats. This study examines and assesses the crisis communication of U.S. colleges and universities in response to the COVID-19 pandemic using the best practices framework. Findings indicate that higher education institutions have employed communication consistent with best practices, with some important modifications. Findings also answer calls to contextualize crisis communication best practices within specific organizational contexts and as a values-based framework.

**KEYWORDS:** public health, disaster, leadership, risk

The COVID-19 pandemic emerged in Wuhan, China, in December 2019 and rapidly spread around the globe (World Health Organization, 2020). A year later, there were more than 20 million

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COVID-19 cases in the United States, which accounted for nearly 25% of all confirmed cases globally (Ponciano, 2021). While the pandemic has touched all aspects of society, among the institutions at the forefront of responding are U.S. colleges and universities (Carlson & Gardner, 2020). Colleges and universities have frequently faced crises, such as active shooters, weather-related events, and issues of misconduct, but they have not always managed these episodes successfully (Moerschell & Novak, 2020; Wang & Hutchins, 2010). Less is known about how colleges and universities have handled public health crises compared to other crisis types, despite the prevalence of such threats on college campuses (Jin et al., 2021). Given the gravity of the COVID-19 pandemic, best practices research is needed to help higher education institutions combat the ongoing crisis (Mackert et al., 2020) as well as future public health threats. Furthermore, crisis communicators have asked for "tailor-made guidelines" (Claeys & Opgenhaffen, 2016, p. 243) so that theory is applicable to practice, and we answer that call in this study.

This study assesses the crisis communication activities of U.S. colleges and universities in response to the COVID-19 pandemic through the lens of the best practices framework (e.g., Covello, 2003; Seeger, 2006; Seeger & Sellnow, 2019; Veil & Husted, 2012). We argue that the best practices framework can serve as value dimensions to assess how well organizations manage their crisis communication. We conducted 55 in-depth interviews with 37 leaders from 30 U.S. higher education institutions from May to October 2020. Findings answer calls to contextualize crisis communication best practices within specific organizational contexts (Janoske et al., 2013) and adds to our limited body of knowledge on higher education crisis management (Moerschell & Novak, 2020). Findings also modify the existing best practices, including adding an ethic of care to reflect that compassion must be infused throughout crisis management. Other revisions include advocating that messages of empowerment must be matched with empowering actions and noting the role of organizations' own media in meeting publics' crisis information needs.

#### **Literature Review**

In this section, we briefly contextualize the impact of the COVID-19 pandemic on U.S. higher education institutions, followed by a review of best practices literature.

# **Higher Education and the COVID-19 Pandemic**

The National Center for Education Statistics reports 4,298 degree-granting postsecondary institutions in the United States. This includes 2-year and 4-year private and public degreegranting institutions (National Center for Education Statistics, n.d.). The pandemic emerged quickly, disrupted enrollment and extracurricular activities, limited many research activities, created new expenses, and interrupted income. Some colleges may not survive these disruptions (Carlson & Gardner, 2020; Whitford, 2020). Enrollment for all higher education institutions nationally dropped 2.5% on average, while community college enrollment saw a 10% decline (Amour, 2020). Higher education institutions moved quickly to online education formats. Many institutions reduced staff and some cut programs and majors. Occupancy of dorms was significantly reduced and large events including athletics, theatrical and music performances, and even graduations were cut or, when possible, moved online (Marinoni et al., 2020; Polikoff, 2020). A best practices approach can assist in understanding university communication and responses to this historical crisis.

#### **Overview of Best Practices**

Best practices are part of a larger system of quality improvement, standardization, and benchmarking widely used for a variety of organizations (Anand & Kodali, 2008; Seeger, 2006). They are defined as "a general set of standards, guidelines, norms, reference points, or benchmarks that inform practice and are designed to improve performance" (Seeger, 2006, p. 233). Organizations often seek to identify standardized methods and procedures for their operations. Seeger argued that benchmarking is a grounded theoretical approach that generalizes from patterns and categories evident in data to practice.

#### **Best Practices for Crisis Communication**

Best practices have been widely used to guide organizations' crisis communication (Covello, 2003; Jarreau et al., 2017; Lin et al., 2016; Seeger, 2006; Seeger & Sellnow, 2019). These industry-driven standards focus on the experiences of leaders and experts and help organizations benchmark their crisis responses. To identify best practices, scholars have used systematic reviews and assessment of organizational processes (Seeger, 2006; Veil & Husted, 2012). A majority of best practices are developed to assist organizations in effectively addressing questions, such as what, when, and how information should be conveyed during crises (Seeger, 2006; Veil & Husted, 2012). Seeger (2006) and Seeger and Sellnow (2019) synthesized 10 best practices for crisis communication, initially from an expert panel process. These 10 practices are described below.

## **Take a Process Approach to Crises**

Risk and crisis communication is most effective when it is used early in the decision-making process (Seeger, 2006). Crisis communication should not be reserved for communication after key decisions are made. Instead, crisis communication should be an integral part of the strategic decision-making process. This approach helps prevent the view of crisis communication as spin and enables higher quality decision-making (Seeger, 2006). Crises, such as pandemics, can be long-lasting. By taking a process approach, leaders can effectively respond at all stages of a crisis without neglecting one or two stages (Seeger & Sellnow, 2019).

## **Engage in Pre-Event Planning**

Crisis responses should begin with pre-event planning, identifying potential risks and how we can mitigate those risks (Seeger, 2006). It is important to note that pre-event planning does not necessarily provide a tangible outcome, but rather is an ongoing process (Seeger, 2006). Part of this planning involves the process of identifying answers to what if questions (Reynolds, 2006). Questions higher education administrators might ask themselves before a pandemic include: "What if we lose students or instructors to a

virus?," "What if we have to close campus housing?," and "How can we prepare ourselves for the potential threat?" In addition to developing answers to key questions, leaders should plan for prompt responses (Veil & Husted, 2012). Planning for the logistics of events is as important as responding to events.

# **Form Partnerships with Publics**

The third best practice is to recognize the importance of publics and build strong relationships with them. Publics may include community members, industry partners, government officials (Sellnow et al., 2009), and, in the case of higher education, students, faculty, staff, alumni, and donors, among others. Crisis communication should take a dialogic approach with these publics to keep them informed and offer them the opportunity to serve as resources (Seeger, 2006; Seeger & Sellnow, 2019). The opposite is also true: If partnerships are not strong, complications can occur (Janoske et al., 2013). Some researchers have suggested crisis communication needs to be an active part of the pre-event process so that publics can conduct their own planning (e.g., Sandman, 2006), which can help strengthen partnerships before the onset of a crisis. For example, citizen-led groups have self-organized before events to provide swift water rescues after hurricanes (Smith et al., 2018). Other researchers have developed communication guidance to help publics realize their personal risks before crises occur and how to mitigate those risks (Howe et al., 2017; Joffe et al., 2016).

# **Listen and Acknowledge Concerns of Publics**

Part of managing partnerships with publics is listening, acknowledging, and responding to their concerns. Whether or not concerns are valid, "the public's perception is its reality" (Seeger, 2006, p. 239). These concerns can spiral out of control, perpetuating falsehoods and rumors if they are unaddressed (Reynolds, 2006). Therefore, responding to concerns is important to establish organizational credibility and can strengthen organization-public relationships (Coombs, 2019; Ulmer, 2001). When an organization can build credibility with its publics, trust in its crisis response increases (Liu & Mehta, 2020; Seeger, 2006).

## **Communicate with Honesty, Candor, and Openness**

Seeger (2006) noted that maintaining honesty, candor, and openness is the fundamental exigency in crisis communication. During a pandemic, timely and transparent dissemination of credible scientific information can cultivate public trust and confidence in crisis managers (Reynolds & Quinn, 2008; Seeger et al., 2018). Crisis managers should avoid over assurance, and instead acknowledge the strengths and limitations of existing data (Reynolds & Quinn, 2008; Seeger, 2006). Seeger and Sellnow (2019) noted that there is a tendency among some crisis managers to withhold information. Many believe that by doing so they are operating in the best interest of the public by avoiding needless panic. However, this tendency of some crisis managers can reduce public trust. Moreover, being less than honest in public communication may backfire as media organizations seek additional information (Veil & Husted, 2012).

#### Collaborate and Coordinate with Credible Sources

Establishing strong relationships and coordination with credible interorganizational and intraorganizational sources is essential for successful crisis responses (Covello, 2003; Reynolds & Quinn, 2008; Veil et al., 2011). A strong relationship with credible sources enhances consistency of crisis messages and allows organizations to benchmark the effectiveness of their responses. Seeger et al. (2018) suggested that typically credibility is established through credentials, expertise, and the nature of the information. During public health crises, managers need to continuously evaluate credible sources, select subject area experts, and develop relationships with publics at all levels (Reynolds & Quinn, 2008; Seeger, 2006). Moreover, a communication breakdown can create further uncertainty and confusion. The best practices suggest that crisis managers develop a pre-crisis network with credible sources, including subject matter experts and the media (Seeger, 2006; Veil et al., 2011). Researchers also have recommended collaborating with members of the public given the possibility of two-way dialogue offered by social media platforms (Lin et al., 2016).

#### Meet the Needs of the Media and Remain Accessible

During public health emergencies, demand for information rapidly escalates. Publics typically learn about the risks associated with crises through mass media (Seeger, 2006; Veil & Husted, 2012). While crisis managers depend on journalists to communicate risks, media also serve as a significant tool for collecting crisis information (Veil et al., 2008). As such, media should be viewed as an important tool for both conveying information and environmental scanning. Unfortunately, some managers view communicating with journalists as a liability rather than as a resource for crisis management (Seeger, 2006; Seeger & Sellnow, 2019). Further, some managers wrongly perceive the media as part of their imminent problem such that the managers become extremely defensive when they communicate about crises with journalists (Seeger, 2006). The best practices suggest that crisis managers need to proactively communicate with journalists, including working to understand journalists' needs and providing them with tailored information (Janoske et al., 2013; Seeger, 2006; Seeger et al., 2018).

# **Communicate with Compassion**

Compassion is an essential element of effective crisis communication (Seeger, 2006) and should be infused throughout the crisis management process (Heath, 2006; Mackert et al., 2020). Communicating with compassion includes recognizing and respecting diverse audiences' unique needs (Covello, 2003) and being willing to see the crisis through their eyes (Seeger & Sellnow, 2019). A compassionate crisis response also involves prioritizing publics' needs over organizational concerns like reputation repair (Lu & Schuldt, 2016; Seeger & Sellnow, 2019). For managing public health crises, a driving principle should always be caring for people first (Liu et al., 2018). Doing so enables organizations to build trust with their publics, which can facilitate timely crisis responses and recovery (Veil & Husted, 2012).

# **Accept Uncertainty and Ambiguity**

All crises are uncertain and ambiguous events because it is difficult to accurately predict what will happen (Seeger & Sellnow,

2019). Uncertainty can also emerge about what caused the crisis and what actions publics can take to protect themselves (Noar & Austin, 2020; Seeger & Sellnow, 2019). Acknowledging this uncertainty is an important best practice (Seeger, 2006). Instead of being overly certain or reassuring, organizations should acknowledge the fluidity of crises (Seeger & Sellnow, 2019). If protective guidance changes during a crisis, communicators need to clearly and consistently explain why (Noar & Austin, 2020).

# **Communicate Messages of Empowerment**

Messages of empowerment provide publics with specific and clear information about what they can do to reduce their harm (Seeger, 2006). To be effective, messages should be tailored so that publics receive and internalize the most appropriate protective action recommendations given their specific risk factors (Liu et al., 2018; Seeger & Sellnow, 2019). During public health crises, publics need to know the likelihood of infection and mortality along with how predictable and controllable the threat is (Jin et al., 2020; Roche & Muskavich, 2003). Publics also need to know what they can do to mitigate threats (Roche & Muskavich, 2003), why they should take recommended actions (Noar & Austin, 2020), and what authorities are doing to mitigate risks (Jin et al., 2020). Furthermore, communicators need to clearly share a wide variety of steps publics can take to protect themselves and explain how these steps may evolve as the crisis evolves (Avery & Kim, 2009). Communicators also must be clear on what behaviors they want to change (Noar & Austin, 2020).

# **Research Questions**

Given the literature review, we ask the following research questions:

**RQ1:** To what extent have U.S. higher education institutions employed the best practices in crisis communication in their responses to the COVID-19 pandemic?

**RQ2:** To what extent have new best practices emerged in the context of U.S. higher education institutions' responses to the COVID-19 pandemic?

The answers to these questions uncover how higher education institutions have responded to this prolonged and historical crisis and offer opportunities to potentially update the best practices in light of the COVID-19 pandemic.

## Method

To answer the research questions, we conducted 55 in-depth interviews with 37 leaders from 30 U.S. higher education institutions from May to October 2020. This time frame reflects institutions' early responses to the pandemic as leaders responded to major disruptions during the spring 2020 semester and planned for the fall 2020 semester.

## **Participants**

Using snowball sampling and maximum variation, we recruited a diverse group of interview participants. First, we developed a list of potential participants through our personal contacts knowing that it would be difficult to access leaders during an ongoing crisis (Ha & Riffe, 2015). When our personal networks had been exhausted, we sought leaders at institutions not well represented yet in our sample, applying Suri's (2011) principle of maximum variation by using the Carnegie Classifications of Institutions of Higher Education ("The Carnegie Classification of Institutions of Higher Education," 2020). By the end of our recruitment, we had reached out to leaders at 137 institutions, securing written consent for 37 leaders to participate in our interviews. Recruitment ended when ongoing data analysis indicated theoretical saturation (Corbin & Strauss, 2015).

To be included in our sample, participants had to serve as U.S. higher education leaders (chancellors, presidents, vice presidents, provosts, deans, and professors) and serve on their institution's COVID-19 crisis management team. Nineteen 4-year public universities, two 2-year public institutions, one public baccalaureate/

associate's college, and eight private institutions were represented in this study (i.e., 37 leaders across 30 U.S. higher education institutions). In reporting the findings, we use pseudonyms to protect the participants' identities, as approved by the Institutional Review Boards that cleared this study.

# **Data Collection and Analysis**

We conducted two rounds of interviews to assess to what extent leaders applied the best practices in the early stages of their COVID-19 responses (i.e., May–October 2020). The first round of interviews lasted from 20 to 61 minutes, with an average of 46 minutes. The same interview guide questions were used across all interviews. Rather than ask about each best practice, we employed open-ended questions to capture institutions' responses. This approach allowed us to probe for best practices as needed, but did not constrain the data collected to only the best practices identified in the literature. In doing so, we were able to uncover how participants applied the existing best practices in their COVID-19 responses (RQ1) along with important modifications to the best practices (RQ2).

The initial interview guide consisted of 19 open-ended questions examining how institutions planned for and responded to the pandemic. Topics included use of crisis plans and other resources, learning from other institutions' responses, emerging tensions, developing and implementing communication strategies and messages, implementing lessons learned, and reflecting on opportunities for improvement. Example questions included: "When communicating with your key stakeholders, what have been your primary message strategies and why?," "What, if anything, have you learned from other higher education institutions that are responding to COVID-19?," and "Are there particular tensions or points of conflict that have emerged as your school or college has responded to COVID-19? If so, what are those?" The follow-up interview guide consisted of seven questions examining how institutions' responses to the pandemic had evolved over time. Example questions included: "Briefly, describe your one biggest 'aha' moment over the past month or so in terms of a part

of your COVID-19 response?," "In what ways have you received feedback from internal and external stakeholders?," "How, if at all, has that feedback influenced your response to COVID-19?"

Each initial and follow-up interview was conducted and recorded via Zoom and then professionally transcribed. We selected a research firm that protects the identity of participants by requiring all transcribers to sign nondisclosure agreements. Three to 10 weeks after the initial interview, we conducted follow-up interviews with leaders from 25 of the 30 original institutions. These follow-up interviews averaged 24 minutes in length, with a range of 14 to 39 minutes. One participant had retired and four participants declined to participate in the second interview.

To analyze the data, we took a deductive and inductive approach (Lindlof & Taylor, 2011). Deductively, we divided into teams with two researchers coding each of the 10 best practices identified in the literature. We then met as a whole team to discuss our initial findings. Inductively, the team employed Corbin and Strauss's (2015) grounded theory analytic strategies to consider to what extent the best practices "fit" the data. These analytic strategies include looking for negative cases, using participants' own words to label codes, making comparisons among participants' insights and the prior literature, constantly questioning the data through re-analysis, and reflecting on the biases and assumptions that the researchers may bring to the analysis and pushing back on those "red flags" (Corbin & Strauss, 2015, p. 98).

The next section presents the findings, organized by each best practice. We employed pseudonyms to protect the identity of the participants. In the final section, we discuss how the findings support some of the prior literature (RQ1) as well as offer revised best practices (RQ2).

# **Findings**

# **Take a Process Approach to Crises**

A process approach was prevalent in all institutions' responses to COVID-19, with some important variability as further discussed below.

## **Impact of Past Crises on COVID-19 Readiness**

Participants discussed a variety of past crises that, in theory, should have prepared them for COVID-19. In practice, most participants agreed that experience with past crises was inadequate to prepare for the pandemic. As Blake recounted: "Those plans, they had overplanned. In other words, they had planned for a crisis that didn't really take place with as much disruption, like it has now."

Only a few participants identified specific past efforts that positively influenced their institutions' COVID-19 responses, including after-action reports and experiences with recent public health and financial crises. More broadly, several participants emphasized the importance of past training exercises and plans in helping them understand response protocols for the early days of the COVID-19 pandemic. As Emerson explained: "The key is to be prepared. There's a great quote from President Dwight Eisenhower, who, of course, planned the D-Day invasion. He says, 'In an emergency, plans are useless, but planning is essential."

## **Constant Vigilance and Adaptation**

All leaders discussed how the long duration of the pandemic coupled with high uncertainty necessitated constant vigilance and adaptation. To address this challenge, participants had to constantly re-evaluate their decisions. For example, Avery explained: "The ah-ha was that this virus is so insidious and it affects us in our communities and in congregate housing in ways that we can't predict. That we're constantly going to have to be vigilant about being responsive." Participants explained how adaptation is sometimes reactive, but ideally should be strategic. Further, leaders need to have the ability to change paths as the crisis evolves. As Charlie summarized:

I wish everybody would understand that it's difficult to be in a leadership position making decisions, but you have to have the courage and the humility to say that a decision was good for yesterday, but it's not good for today. Furthermore, taking a process approach includes vigilance to cascading or compound crises, including the racial justice reckoning embedded within the COVID-19 pandemic. A few participants discussed committees being formed to discuss systematic racism on campus along with launching speaker series and appointing new diversity and inclusion officers.

Three challenges emerged to a process approach. First, several participants noted that higher education institutions have a culture of slow change, which is not compatible with the need to quickly pivot during crises. Second, higher education institutions have planned for short-duration crises, such as severe weather or active shooters, but not long-duration crises. Third, due to the long duration of the COVID-19 pandemic, only a few leaders in our study have been able to track data for after-action (i.e., post-crisis) evaluations. Blake explained: "We haven't even gotten there. So, our after-action analysis hasn't yet taken place because we're still in the action stage."

# **Engage in Pre-Event Planning**

As noted in the prior section, participants unanimously agreed that their crisis plans were inadequate to address the high uncertainty of COVID-19 and the long duration of the pandemic. As Nolan summarized: "This is a very unique crisis, and so we had to create it [the plan] on the run." Pre-event plans served as a starting point to manage the pandemic for several participants. Bailey noted: "You have something to start building from and then as you gain more information about the situation, you evolve your program." Pre-event plans also helped build relationships with on-campus experts, as we further discuss later in the results section (see findings for collaborating and coordinating with credible sources).

# **Form Partnerships with Publics**

Forming strong partnerships has been essential to U.S. higher education institutions' responses to the COVID-19 pandemic, as further discussed below.

#### **Public Health Authorities and Local Leaders**

Higher education leaders frequently partnered with public health authorities, especially at the local level. These authorities helped universities structure their plans and responses in line with federal, state, and local requirements. As Parker explained:

There were innumerable external groups offering guidance.... And in essence, they were all very similar in what you needed to think about. So, for us, having the general framework from [city name removed] said, okay, this is the one we have to do, we'll use this one. That was helpful.

A few higher education leaders discussed a symbiotic relationship with public health authorities. In these cases, campus personnel actively participated in state emergency operations centers or partnered with governments to develop statewide policies and protocols. For example, Hunter shared: "Our School of Public Health has been tapped as the state's support for public health issues, policies, guidelines, trends, any number of issues that have supported the state's decision-making hierarchy." In addition to public health authorities, local elected leaders emerged as important partners for higher education institutions. Like with public health authorities, relationships with local elected leaders were sometimes symbiotic.

While most higher education leaders discussed positive relationships with public health authorities and local elected leaders, not all agreed. Several participants criticized the federal government and the World Health Organization for insufficient and sometimes contradictory guidance. For example, Taylor raised concerns about "opening ourselves to endless litigation if something does happen" without protection from the state.

# **On-Campus Experts**

In line with the preference to partner with external public health authorities, higher education leaders shared the importance of on-campus public health experts when available.

Public Health Experts. On-campus public health experts included campus health and counseling centers as well as faculty members. These experts helped with a range of issues, including

modifying heating and cooling systems, developing campus testing and contact tracing protocols, vetting social distancing guidance, developing treatments and tests, and providing content expertise for decisions. As Parker emphasized:

We have a new public health program on campus within the last couple of years. The director of that program and our faculty have proven to be incredibly important internal resources and expertise for us. I think we all feel like if we had had this happen more than a couple of years ago, we wouldn't have had that content expertise on campus.

A couple of participants further noted that sometimes these partnerships were serendipitous rather than planned. For instance, a vice president at one institution read about a campus public health historian in a newspaper article and then invited that professor to help train their emergency response team.

While most institutions emphasized partnerships with public health in-house experts, a few leaders discussed the benefits of involving faculty with other expertise. For example, one institution created an ethics and privacy committee and another institution established a risk communication advisory group. A few participants also emphasized the central role that information technology and instructional design experts played in the transition to online learning. Information technology also supported a variety of other functions. For instance, Hayden mentioned:

We want to be able to leverage technologies during a crisis. . . . Some of it is in some workflows with some processes that need to take place with regard to approval for people to come back on campus. So, they're [IT] helping with those workflow processes. They're also helping with our contact tracing technologies and our self-assessment health screening technology.

#### **Peer Networks**

All leaders emphasized the critical importance of peer networks in helping them respond to COVID-19. As Riley shared: "All of us are connected to our counterparts throughout the state because we're all facing the same crisis. . . . Everybody steals shamelessly. It's not even that. It's like everybody offers to help everybody else." In addition to helping each other shape decisions and actions,

peer networks helped institutions present a unified face for tricky decisions, such as when to cancel or suspend athletics. While recognizing the critical role of peer collaboration in navigating the novel virus, several leaders revealed that the competitive nature of higher education hampered some collaborations. For instance, Nolan observed: "Independent of a pandemic, there's just a culture of competition in terms of Big 10 universities, research universities, then, of course, public and private."

# **Listen and Acknowledge Concerns of Publics**

Leaders noted that listening and acknowledging community members' concerns has been at the forefront of their COVID-19 responses. This has occurred through formal venues, such as virtual town halls, emails, surveys, and newsletters. For example, Avery shared:

I kept thinking about the ways I connect with students. I've been sending an e-newsletter out to students every Wednesday. I'm in my apartment doing a selfie. It's acknowledging, this is big, and it's hard, and it's complicated, and of course, you're struggling. They're like, "Oh my gosh, thank you for understanding." I'm like, I can't even believe that somebody wouldn't understand that.

To a lesser extent, listening occurred organically, such as through social media monitoring.

Leaders identified several benefits of listening and acknowledging concerns. First, doing so can help institutions recognize imperfect solutions. As Jordan said:

Listening to their concerns from people who are saying, "I don't know what's going on," and let them feel heard, and work with them. . . . But, then reminding everyone that we're doing what we can to continue to have a safe and open campus.

Second, listening and acknowledging concerns allows leaders to recognize the problems their publics face while providing reassurances. For instance, Hayden shared:

If somebody suggests something that we can do, and we think it's a valid suggestion, then we will absolutely try to do it. We have some recent faculty feedback where they were not happy with one of the testing strategies we implemented. So, we did adapt.

Third, listening and acknowledging helps leaders address the mental health concerns that have been prevalent throughout this pandemic. Morgan shared: "All of that uncertainty bakes in anxiety into our staff and community. The only thing you can do to confront that is to validate, and then, communicate, communicate, communicate."

#### Collaborate and Coordinate with Credible Sources

As previously noted, partnerships with on-campus and off-campus experts were essential to institutions' COVID-19 responses. In collaborating and coordinating with credible sources, leaders discussed the importance of relationship building and maintenance. Some participants further discussed the challenges associated with forced partnerships. We further discuss these findings below.

# **Relationship Building and Maintenance**

Multiple participants noted that the relationships they built with colleagues on- and off-campus have been essential for effectively collaborating and coordinating during the pandemic. As Dakota shared: "When a crisis hits, it's difficult to spend the time to try and develop those relationships. . . . A lot of crisis response is dependent on existing relationships and other people who might be facing similar questions or issues."

Others observed that the pandemic revealed a need for them to focus more on strategic relationship building and maintenance in the future. For example, Jordan noted:

One of the things that the pandemic showed us was how siloed we were, even across sectors in the university that really needed to be working together. So, I think that's one of the biggest things. It has shown us how much we need to make a concerted intentional effort to maintain these relationships in the long-term.

## **Forced Partnerships**

A few participants in large state systems noted that, at times, coordination was mandated from the head of the system to maintain consistency across institutions. As an example, Hayden discussed a statewide collaboration, noting: "We are very much in lockstep with the state. Our governor's office has put together a council of higher education and college presidents, so that we're getting very specific information directly from the governor's office." Sometimes mandated consistency posed collaboration challenges, such as when institutions had to change their COVID-19 testing protocols to align with other institutions in the same system. At other times, forced collaboration resulted in delayed responses.

# **Communicate with Honesty, Frankness, and Openness**

Leaders equated communicating with honesty, frankness, and openness with communicating with transparency. They discussed the importance of considering scientific data with what is the "right thing to do" (Riley). The goal was to strategically share meaningful information with their publics. Ultimately, balancing scientific accuracy with transparency has been a tremendous challenge. As Sidney shared, "Having information that is clear and concise is like trying to nail Jell-O to a wall." Furthermore, there is a tricky balance between sufficient transparency and inundating publics with too much information. For instance, Charlie noted, "We have to be careful not to overwhelm things."

#### Meet the Needs of the Media and Remain Accessible

All of the participants stated that social media and conventional media played an important role in information gathering and information dissemination, as further discussed below.

# **Information Gathering**

Social and conventional media have helped leaders gather information to guide their COVID-19 response strategies. In particular, media have helped leaders learn how colleagues at similar institutions are responding to the pandemic. For instance, Emerson shared:

Every time somebody published something, somebody would talk about it in the media or one of the cabinet-level people would get a hold of it and it would get shared around. And now it's like, "Are we doing all this too?"

In addition, social media have been instrumental in gathering publics' concerns. Many leaders described media monitoring to detect concerns posted on social media channels. A few participants described monitoring channels dedicated for specific publics to understand different groups' concerns. For example, Sam recounted, "We have a parent Facebook page. I've seen what some parents have written and they're concerned, as any parent would be of a new student."

Some participants employed social media to track and manage COVID-19 misinformation. In doing so, they tapped internal experts. As Gracen recalled:

There were notes that an incoming freshman had been posting racist comments and offensive material [related to COVID-19]. A couple of our faculty members, who are experts in disinformation online, did a deep dive into that content and discovered that it was a troll account. It was not a real person, it was not a real student.

#### **Information Dissemination**

Leaders mostly used media for information gathering. In addition, some leaders proactively used media to promote their institutions' success stories and to provide community resources. For example, Jamie shared, "We're proactively promoting news about the institution, which involves media outreach as well as website content, supporting assets, video, photo, and then a strong social media presence." Speaking about sharing community resources, several participants mentioned that they created dedicated COVID-19 webpages, rather than going through mass media. For example, Dakota observed:

We've put [COVID-19] information on our website, we've done livestream video broadcasts from leadership at the college. We've made videos that are both informative and also some entertaining things. We tried a variety of communications to send to people, and then we have to reiterate and follow up.

# **Communicate with Compassion and Empathy**

Throughout the pandemic, leaders emphasized communicating with compassion and empathy to reach diverse publics. Leaders also emphasized compassion in actions, as further discussed below.

## **Compassion at the Core of Higher Education**

Participants discussed the critical importance of communicating with compassion. As Sam shared: "I think that we're a people business and we're centered on people. We're centered on our students and what our students need and around what our employees need." In the pandemic, compassion needs to be extended to all community members, and sometimes publics need reminders to do so. For example, Avery mentioned:

I've got lots of students saying, "My faculty member doesn't know how to teach [online]," I'm like, "I know that, and you know what? Your faculty member probably knows that too. . . . You need to offer some grace."

Leaders also emphasized that communicating with compassion includes targeting specific messages to different publics. As Charlie commented: "Everybody needs the big broad messages, but there are many that need specific and individual messaging just for them because their circumstance is that different."

## **Compassion in Actions**

While leaders agreed that communicating with compassion is essential, they also emphasized the importance of taking actions that reflect compassion. Leaders frequently discussed mental health concerns and provided additional support for community members. Hunter shared: "The emphasis has been making sure that our students feel supported, safe. We've increased counseling services to make sure that there's an availability, so they can deal with the stress." Other actions included changing grading policies, allowing some employees to work from home, and providing increased IT support, mental health counseling, and other services. Offering options for publics is another way that institutions

have put compassion into action, such as options to take classes online or in-person and options for some faculty and staff to work from home.

# **Accept Uncertainty and Ambiguity**

Participants were keenly aware of the uncertainty and ambiguity inherent in COVID-19 and the related communication challenges. As Bailey summarized: "People are looking for absolutes." Furthermore, institutions frequently have to pivot as crises evolve, but participants explained that these pivots can become "pain points." Phoenix further explained:

I want to be able to send a clear message, but that is the real pain point. There is so much change so frequently that it's almost like, well, the next day we have to send out something that's saying, "Oh well, we told you this, but now it's this."

To mitigate these pain points, participants suggested integrating uncertainty into crisis messages.

# **Communicating Messages of Empowerment**

Leaders found it critical to empower publics to take protective behaviors to limit the potential spread of coronavirus on campus. As Owen said: "Responsibility is on 18-to-22-year-olds. They need to follow the protocols and we'll make it to the end of the semester. We're putting a lot of faith in them." Leaders further noted that they were attempting a culture shift. For instance, Hayden shared: "We're working on shifting the culture, so that people understand that physical distancing and wearing masks are part of our new normal."

Several participants discussed peer-to-peer training as an effective tactic to support the campus community commitment message. Quinn explained: "Our team created a COVID education video that we've shared with peer advisors that have been trained, kind of a train-the-trainer. So, it's peer-driven, which I think is so much more effective [than top-down messages]." Other institutions encouraged their community members to create online

content to support messages of community safety, often with a dedicated hashtag. In some cases, institutions awarded prizes to randomly selected community members who participated in these online campaigns.

# Complimenting Empowerment with Resources, Consequences, and Options

To complement messages of empowerment, institutions offered resources in the form of personal protective equipment and access to COVID-19 tests. For example, Gracen said: "We've had a mask station all week for people that forgot their mask. We've given every student, faculty, and staff member [a mask]. We have these masks where you could see mouths."

When messages of empowerment failed, some institutions employed disciplinary measures. Often, these measures involved student suspensions. Some institutions employed conversations before immediately going to disciplinary measures. For example, Quinn observed:

We had suspended three students in the residence halls, one for not following the guest policy and two for having too many people in their room in a party situation. We highlighted that so people were aware that we have a zero-tolerance policy and that there are going to be consequences.

More often than enacting consequences leaders recommended offering options. As Lennon said: "We're navigating by offering many different options. Students can either take their classes online, in-person, or a hybrid."

# Discussion

Using the best practices framework, this study assesses the crisis communication activities of U.S. colleges and universities in response to one of the most impactful crises of our time. Findings broadly indicate that higher education institutions have employed communication activities that are consistent with the best practices, with some important modifications.

### **Best Practices and the COVID-19 Pandemic (RQ1)**

## **Process Approach and Pre-Event Planning**

Consistent with the best practices (Seeger, 2006; Seeger & Sellnow, 2019), U.S. higher education institutions adopted a process approach driven by the pandemic's extended duration, high uncertainty, and unprecedented disruption. Feedback and ongoing assessment allowed for adaptation of responses. While the participating colleges and universities generally reported having crisis plans, the plans only provided a starting point for COVID-19 responses. Although the specifics of the plans may have been of limited relevance, the structures of response and management were helpful for some institutions. While developing contingencies for a wider range of events would increase the utility of plans, bolstering structures and guidelines included in plans might also improve response capacity.

# Form Strategic Partnerships with Publics and Listen to Concerns of Publics

The unprecedented nature of the pandemic encouraged U.S. colleges and universities to form strategic partnerships with their publics. External partnerships with other higher education institutions and governments were especially important as sources of information. In some cases, internal publics also provided important subject matter expertise. The best practice of listening to the concerns of publics (Reynolds, 2006; Seeger, 2006) was used extensively for adjusting to the evolving pandemic conditions. This also helped institutions foreground the needs of key publics, including students, and manifest responses in line with an ethic of care (Liu et al., 2021; St. John III & Pearson, 2016). Listening, therefore, allowed U.S. higher education institutions to refine responses and maintain an ethical stance.

#### **Coordinate and Collaborate with Credible Sources**

In line with the best practices (Seeger, 2006; Veil et al., 2011), coordinating and cooperating with credible sources was used to collect and share information with peer institutions. Those who were identified as preferred partners were credible sources with the most

relevant subject matter expertise. Coordination and cooperation were characterized as a primary feature of the pandemic response; few leaders advocated for taking an independent approach.

# **Remaining Transparent and Accessible to the Media**

The best practice of frankness and honesty (Reynolds & Quinn, 2008; Seeger, 2006) was operationalized in interesting ways. Administrators made strategic choices about what to communicate under conditions of high uncertainty, while seeking to be responsive to their publics' needs. The high uncertainty, driven in part by the duration of the pandemic, challenged the goal of transparency. In this pandemic, leaders operationalized frankness and honesty as transparency.

The best practice of remaining open and accessible to the media (Seeger, 2006; Veil & Husted, 2012) created challenges. Media, social and conventional, were used extensively for information collection and dissemination. The volume of information and the need to respond quickly overwhelmed some institutions' capacities to respond. Other institutions strategically employed media to learn about diverse publics' needs and to communicate resources and requirements.

# **Compassion as an Ethic of Care and Manage Uncertainty**

According to leaders in our study, compassionate responses to the pandemic have been paramount given the high level of disruption and the associated mental health challenges. Compassionate responses reflect a larger ethic of care (Liu et al., 2021; St. John III & Pearson, 2016). The needs of students were foregrounded in efforts to reflect compassionate responses, but leaders also shared the importance of adopting an ethic of care for faculty and staff. An ethic of care helped leaders adapt to the very high levels of uncertainty. Administrators sought to reflect the uncertainty they faced, yet were confronted by ongoing requests for more certainty. Balancing the demand of publics and the inherent uncertainty was a major theme in institutions' responses.

## **Communicating Messages of Empowerment**

Communicating messages of empowerment (Seeger, 2006) created challenges for leaders seeking to encourage compliance with public health recommendations. These recommendations were critical to managing the impact of COVID-19 on campus, yet some publics resisted. Ultimately, some leaders advocated for pairing messages of empowerment with resources, options, and, when necessary, enforcement with disciplinary measures.

#### **Modified Best Practices (RQ2)**

U.S. college and university leaders engaged in COVID-19 communication that was broadly consistent with the best practices framework proposed by Seeger (2006). Some best practices appeared more central to COVID-19 responses than others, based at least in part on the circumstances of the pandemic. Partnerships, for example, were developed among similarly situated institutions. The specific form the best practices take, therefore, is contingent upon the context. While best practices could easily be critiqued as cookie-cutter approaches (Liu et al., 2018), every industry and disaster are different. A contingency approach acknowledges the important variability in context.

The data suggest some modifications to the initial formulation of the best practices (Seeger, 2006). First, the best practice of communicating with compassion should be revised to lead with an ethic of care. This revision reflects that compassion must be infused throughout the crisis management process, and not just in messaging. Similarly, messages of empowerment should be reformulated to reflect empowering publics. Messages of empowerment must be matched with empowering actions and providing resources and options. In some cases, enforcement measures must be enacted.

The best practice of meeting the needs of the media and remaining accessible should reflect that most organizations have their own digital and social media channels through which publics can directly interact with organizations. These publics include primary stakeholders, such as students, faculty, staff, government

agencies, as well as secondary stakeholders, such as journalists and other higher education institutions. Accordingly, a revised best practice should reflect meeting a variety of publics' information needs. Accepting uncertainty should also include helping publics accept uncertainty. Finally, communicating with honesty, candor, and openness can be truncated to communicate with transparency. In sum, Table 1 presents the revised best practices.

TABLE 1 Revised Best Practices

Best Practices in Risk and Crisis Communication	
1	Take a process approach to crises.
2	Engage in pre-event planning.
3	Lead with an ethic of care.
4	Meet publics' information needs.
5	Communicate with transparency.
6	Collaborate with credible sources.
7	Form partnerships with publics.
8	Empower publics.
9	Listen and acknowledge publics' concerns.
10	Accept uncertainty and help publics accept uncertainty.

As was seen in this study, each crisis manifests challenges in enacting certain best practices. Adapting response strategies requires ongoing feedback and assessment. In the case of the COVID-19 pandemic, some of the best practices played a stronger role in informing institutions' responses than others. For instance, the need to accept the high level of uncertainty and leading with an ethic of care were especially prevalent in institutions' responses to the pandemic. Other best practices, such as pre-event planning, were seen as less salient due to the long duration and highly disruptive nature of the pandemic. This finding suggests that best practices may function in a hierarchical manner with some best practices rising to the forefront for informing crisis management.

In other words, best practices might be characterized as an integrated framework for crisis communication rather than a discrete set of independent strategies.

#### Limitations

This study was conducted while the pandemic was ongoing and the final impacts on U.S. colleges and universities are not yet fully known. Moreover, we do not know if the modified best practices transfer to contexts outside of the U.S. and to other crisis types. In addition, COVID-19 has been an especially broad, disruptive, and long duration crisis, and these results may not transfer to other more limited events.

### **Conclusion**

Facing the pandemic's widespread disruption, high uncertainty, and long duration, U.S. colleges and universities enacted crisis communication responses that were broadly consistent with the best practices framework with some important modifications. General frameworks that provide direction and guidance, while allowing for contingent responses, may be especially important in managing new threats with high impacts. Best practices can help translate research findings to inform and improve crisis management and provide value dimensions to guide ethical responses. As the COVID-19 pandemic continues and other pandemics are on the horizon (Spinney, 2021), findings from this study can help leaders protect their communities.

#### **ORCID**

## References

- Amour, M. (2020, December 17). Few positives in final fall enrollment numbers. *Inside Higher Ed.* https://web.archive.org/web/20201230200132/https://www.insidehighered.com/news/2020/12/17/final-fall-enrollment-numbers-show-pandemics-full-impact
- Anand, G., & Kodali, R. (2008). Benchmarking the benchmarking models. *Benchmarking: An International Journal*, 15(3), 257–291. https://doi.org/10.1108/14635770810876593
- Avery, E. J., & Kim, S. (2009). Anticipating or precipitating crisis? Health agencies may not be heeding best practices advice in avian flu press releases. *Journal of Public Relations Research*, 21(2), 189–197. https://doi.org/10.1080/10627260802557449
- Carlson, S., & Gardner, L. (2020, December 19). The year that pushed higher ed to the edge: The pandemic exacerbated long-simmering problems confronting colleges. *Chronicle of Higher Education*. https://web.archive.org/web/20201219200524/https://www.chronicle.com/article/the-year-that-pushed-higher-ed-to-the-edge
- Claeys, A-S., & Opgenhaffen, M. (2016). Why practitioners do (not) apply crisis communication theory in practice. *Journal of Public Relations Research*, 28(5–6), 232–247. https://doi.org/10.1080/1062726X.2016.1261703
- Coombs, W. T. (2019). Ongoing crisis communication: Planning, managing, and responding. Sage.
- Corbin, J., & Strauss, A. (2015). Basics of qualitative research: Techniques to developing grounded theory (4th ed.). Sage.
- Covello, V. T. (2003). Best practices in public health risk and crisis communication. *Journal of Health Communication*, 8(S1), 5–8. https://doi.org/10.1080/713851971
- Ha, J. H., & Riffe, D. (2015). Crisis-related research in communication and business journals: An interdisciplinary review from 1992 to 2011. *Public Relations Review*, 41(4), 569–578. https://doi.org/10.1016/j.pubrev.2015.06.019

- Heath, R. L. (2006). Best practices in crisis communication: Evolution of practice through research. *Journal of Applied Communication Research*, 34(3), 245–248. https://doi.org/10.1080/00909880600771577
- Howe, P. D. L., Boldero, J., McNeil, I. M., Vargas-Saenz, A., & Handmer, J. (2017). Increasing preparedness for wildfires by informing residents of their community's social norms. *Natural Hazards Review*, 19(2), 1–9. https://doi.org/10.1061/(ASCE)NH.1527-6996.0000279
- Janoske, M. L., Liu, B. F., & Madden, S. (2013). Congress report: Experts' recommendations on enacting best practices in risk and crisis communication. *Journal of Contingencies and Crisis Management*, 21(4), 231–235. https://doi.org/10.1111/1468-5973.12031
- Jarreau, P. B., Altinay, Z., & Reynolds, A. (2017). Best practices in environmental communication: A case study of Louisiana's coastal crisis. *Environmental Communication*, 11(2), 143–165. https://doi.org/10.1080/17524032.2015.1094103
- Jin, Y., Iles, I., Austin, L., Liu, B. F., & Hancock, G. (2020). The infectious disease threat (IDT) appraisal model: How perceptions of IDT predictability and controllability predict individual's responses to risks. *International Journal of Strategic Communication*. Advance online publication. https://doi.org/10.1080/1553118X.2020.1801691
- Jin, Y., Lee, Y-I., Liu, B. F., Austin, L., & Kim, S. (2021). How college students assess the threat of infectious diseases: Implications for university leaders and health communicators. *Journal of International Crisis and Risk Communication Research*, 4(1), 129–164. https://doi.org/10.30658/jicrcr.4.1.5
- Joffe, H., Perez-Fuentes, G., Potts, H. W., & Rossetto, T. (2016). How to increase earthquake and home fire preparedness: The fix-it intervention. *Natural Hazards*, 84(3), 1943–1965. https://doi.org/10.1007/s11069-016-2528-1
- Lin, X., Spence, P. R., Sellnow, T. L., & Lachlan, K. A. (2016). Crisis communication, learning and responding: Best practices in social media. *Computers in Human Behavior*, 65, 601–605. https://doi.org/10.1016/j.chb.2016.05.080

- Lindlof, T. R., & Taylor, B. C. (2011). *Qualitative communication research methods* (3rd ed.). Sage.
- Liu, B. F., Fowler, B. M., Roberts, H. A., & Herovic, E. (2018). Keeping hospitals opening during disasters through crisis communication preparedness. *Public Relations Review*, 44(4), 585–597. https://doi.org/10.1016/j.pubrev.2018.06.002
- Liu, B. F., & Mehta, A. (2020). From the periphery and toward a centralized model for trust in government risk and disaster communication. *Journal of Risk Research*. Advance online publication. https://doi.org/10.1080/13669877.2020.1773516
- Liu, B. F., Shi, D., Lim, J. R., Islam, K., Edwards, A. L., & Seeger, M. (2021). When crises hit home: How US higher education leaders navigate values during uncertain times. *Journal of Business Ethics*, 1–16. Advance online publication. https://doi.org/10.1007/s10551-021-04820-5
- Lu, H., & Schuldt, J. P. (2016). Compassion for climate change victims and support for mitigation policy. *Journal of Environmental Psychology*, 45, 192–200. https://doi.org/10.1016/j.jenvp.2016.01.007
- Mackert, M., Table, B., Yang, J., Bouchacourt, L., Woods, J. M., Bernhardt, M., & Wagner, J. H. (2020). Applying best practices from health communication to support a university's response to COVID-19. *Health Communication*, 35(14), 1750–1753. https://doi.org/10.1080/10410236.2020.1839204
- Marinoni, G., Van't Land, H., & Jensen, T. (2020). The impact of Covid-19 on higher education around the world. *IAU Global Survey Report*. https://web.archive.org/web/20200724110628/https://www.iau-aiu.net/IMG/pdf/iau\_covid19\_and\_he\_survey\_report\_final\_may\_2020.pdf
- Moerschell, L., & Novak, S. S. (2020). Managing crisis in a university setting: The challenge of alignment. *Journal of Contingencies and Crisis Management*, 28(1), 30–40. https://doi.org/10.1111/1468-5973.12266
- National Center for Education Statistics. (n.d.). *Educational institutions*. Fast Facts. https://www.scribbr.com/apa-examples/website/

- Noar, S., & Austin, L. (2020). (Mis)communicating about COVID-19: Insights from health and crisis communication. *Health Communication*, 35(14), 1735–1739. https://doi.org/10.1080/10410236.2020.1838093
- Polikoff, M. (2020, August 4). What's the likely impact of COVID-19 on higher ed? *Inside Higher Ed.* https://web.archive.org/web/20200806094147/https://www.insidehighered.com/views/2020/08/04/analysis-data-national-survey-impact-pandemic-higher-ed-opinion
- Ponciano, J. (2021, January). United States passes 20 million COVID-19 cases as deaths remain near record high. *Forbes*. https://www.forbes.com/sites/jonathanponciano/2021/01/01/united-states-passes-20-million-covid-19-cases-as-deaths-remain-near-record-high/
- Reynolds, B. (2006). Response to best practices. *Journal of Applied Communication Research*, 34(3), 249–252. https://doi.org/10.1080/00909880600771593
- Reynolds, B., & Quinn, S. C. (2008). Effective communication during an influenza pandemic: The value of using a crisis and emergency risk communication framework. *Health Promotion Practice*, 9(4\_suppl), 13S-17S. https://doi.org/10.1177/1524839908325267
- Roche, J. P., & Muskavitch, M. A. (2003). Limited precision in print media communication of West Nile Virus risks. *Science Communication*, 24(3), 353–365. https://doi.org/10.1177/1075547002250300
- Sandman, P. M. (2006). Crisis communication best practices: Some quibbles and additions. *Journal of Applied Communication Research*, 34(3), 257–262. https://doi.org/10.1080/00909880 600771619
- Seeger, M. W. (2006). Best practices in crisis communication: An expertpanelprocess. *Journal of Applied Communication Research*, 34(3), 232–244. https://doi.org/10.1080/00909880600769944
- Seeger, M. W., Pechta, L. E., Price, S. M., Lubell, K. M., Rose, D. A., Sapru, S., Chansky, M. C., & Smith, B. J. (2018). A conceptual model for evaluating emergency risk communication in public health. *Health Security*, *16*(3), 193–203. https://doi.org/10.1089/hs.2018.0020

- Seeger, M. W., & Sellow, T. L. (2019). Communication in times of trouble. Wiley Blackwell.
- Sellnow, T. L., Ulmer, R. R., Seeger, M. W., & Littlefield, R. S. (2009). *Effective risk communication: A message-centered approach*. Springer. http://dx.doi.org/10.1007/978-0-387-79727-4
- Smith, W. R., Stephens, K. K., Robertson, B. R., Li, J., & Murthy, D. (2018). Social media in citizen-led disaster response: Rescuer roles, coordination challenges, and untapped potential. *Proceedings of the 15th International Conference on Information Systems for Crisis Response and Management (ISCRAM)*, Rochester, NY. https://par.nsf.gov/biblio/10076203
- Spinney, L. (2021). The next pandemic? It may already be upon us? *The Guardian*. https://web.archive.org/web/20210216000726/https://www.theguardian.com/commentisfree/2021/feb/15/creating-conditions-next-pandemic-antibiotics
- St. John III, B., & Pearson, Y. E. (2016). Crisis management ethics: Moving beyond the public-relations-person-as-corporate-conscience construct. *Journal of Media Ethics*, 31(1), 18–34. https://doi.org/10.1080/23736992.2015.1116392
- Suri, H. (2011). Purposeful sampling in qualitative research synthesis. *Qualitative Research Journal*, 11(2), 63–75. https://doi.org/10.3316/QRJ1102063
- The Carnegie Classification of Institutions of Higher Education. (2020). About Carnegie Classification. http://carnegieclassifications.iu.edu/
- Ulmer, R. R. (2001). Effective crisis management through established stakeholder relationships: Malden Mills as a case study. *Management Communication Quarterly*, 14(4), 590–615. https://doi.org/10.1177/0893318901144003
- Veil, S. R., Buehner, T., & Palenchar, M. J. (2011). A work-in-process literature review: Incorporating social media in risk and crisis communication. *Journal of Contingencies and Crisis Management*, 19(2), 110–122. https://doi.org/10.1111/j.1468-5973.2011.00639.x
- Veil, S. R., & Husted, R. A. (2012). Best practices as an assessment for crisis communication. *Journal of Communication Management*, 16(2), 131–145. https://doi.org/10.1108/13632541211217560

- Veil, S. R., Reynolds, B., Sellnow, T. L., & Seeger, M. W. (2008). CERC as a theoretical framework for research and practice. *Health Promotion Practice*, 9(4), 26S-34S. https://doi.org/10.1177/1524839908322113
- Wang, J., & Hutchins, H. M. (2010). Crisis management in higher education: What have we learned from Virginia Tech? *Advances in Developing Human Resources*, 12(5), 552–572. https://doi.org/10.1177/1523422310394433
- Whitford, E. (April 2, 2020). How much did coronavirus disruptions affect 2 closing colleges? *Inside HigherEd*. https://web.archive.org/web/20200516052959/https://www.insidehighered.com/news/2020/04/02/Two-small-colleges-winding-down-operations-coronavirus-impact-looms-over-higher-ed
- World Health Organization. (2020). *Coronavirus disease (COVID-19) pandemic.* https://web.archive.org/web/20210101003151/https://www.who.int/emergencies/diseases/novel-coronavirus-2019

