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Communicating COVID-19: Analyzing Higher Education Institutional Responses in Canada,
China, and the United States

Abstract

The study aims to examine how higher education institutions (HEIs) in three countries responded to the challenges of COVID-19 over a six-month period at the outbreak of the global pandemic. Employing document analysis, we examined 732 publicly available communications from 27 HEIs in Canada, China, and the United States. Through theoretical frameworks of crisis management and Situational Crisis Communication Theory (SCCT), we explore how HEIs respond to the pandemic and protect campus stakeholders. The study revealed common patterns in communication strategies during different stages of the pandemic that include accepting responsibility, emotional reassurance and compensating victims. It also revealed key differences across social contexts and environments and distinct leadership styles. Findings offer insight into how HEIs communicated at the outset of the COVID-19 pandemic and inform the application of SCCT and crisis management theory to institutional behavior in the context of prolonged and intersecting disasters.

Keywords: Pandemic; cross-country comparison; higher education; institutional response; crisis communication

Abbreviations: Institutional Crisis Communications (ICC); Higher Education Institutions (HEI); Situational Critical Communications Theory (SCCT)

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Introduction

Since early 2020, the rapid spread of COVID-19 impacted higher education institutions (HEIs), and indeed the whole world, in unprecedented ways (Zakaria, 2020). HEIs globally have been forced to make difficult decisions to balance educational needs, health risks, and financial challenges, all with continuously evolving public health guidance from local and national governments. HEIs are no strangers to crises, though. Over the last century, institutions have responded to different kinds of manmade crises and natural disasters. They also face day-to-day challenges of complying with federal policies or court rulings, balancing financial interests, and meeting their educational missions.

In the past two decades, scholars have documented and analyzed HEI responses to a range of environmental and human-induced crises. Over the last two years of the COVID-19 pandemic, many scholars have already published research on the challenges imposed by the pandemic on postsecondary learning and teaching (Arora & Srinivasan, 2020; Oleksiyenko et al, 2020; Toquero, 2020). As researchers continue to examine both macro- and micro-level impacts of the pandemic, cross-comparative and international research on HEIs responses remains scarce. Our study analyzes the responses of a sample of 27 HEIs across three countries at the onset of COVID-19.

The study aims to explore how HEIs responded to the COVID-19 crisis within their specific social and political contexts by examining official online communications and community updates released from a sample of 27 HEIs in three countries over a six-month period. Our research questions are: 1) How do the responses of HEIs to the COVID-19 pandemic

reflect institutional crisis communication strategy over the varying stages of the crises? and 2) How do HEIs' communications and responses compare both across the social and political environments of three countries, and across institutional types within those countries? Guided by SCCT and crisis communication frameworks (Coombs, 2007; 2010; 2012), our study critically analyzes COVID-19-related communications from HEIs as they responded to the pandemic's myriad challenges, paying careful attention to institutional management under the guidance of national policy.

Literature Review and Research Framework

Since the onset of cases in early 2020 and the declaration of COVID-19 as a global pandemic in mid-March, the virus has profoundly affected global political, social, economic, and educational systems. Scholars and researchers across disciplines examine the effects of the pandemic through various theoretical lenses. Smith and Gibson (2020) discussed the influence of behavioral science on policy during the pandemic by reviewing a number of articles using social psychological theory. Using a grounded theory approach, AI-Dabbagh (2020) examined the role of decision-makers in the COVID-19 pandemic crisis, and detected eight explanatory theoretical concepts, while Kim and Kreps (2020) explored United States government communications during the pandemic using systems theory to provide recommendations for establishing effective public health risk communication strategies.

A growing body of research examines the pandemic's effect on educational institutions. Crawford et al. (2020) compared the diverse pedagogical approaches of universities in 20 countries in response to pandemic. Drawing upon theories of institutional isomorphism, Marsicano et al. (2020) examined U.S. colleges and universities responses to COVID-19 and found little difference in campus responses based on university infrastructure. Scholars in

Canada also explored higher education policy responses to the pandemic and compared levels of coordination between the federal government, the provincial government, and public HEIs (El Masri & Sabzalieva, 2020).

We examine the HEIs communication responses to COVID-19 through the framework of crisis management and Situation Crisis Communications Theory (SCCT) (Coombs, 2007; 2010; 2012). Crisis communication frameworks—and SCCT specifically—have been applied to study the responses and policy behavior of HEIs in a variety of contexts and crises. We use Coombs' definition of a crisis as “a sudden and unexpected event that threatens to disrupt an organization's operations and poses both a financial and a reputational threat.” (Coombs, 2007, p. 164). Examples of crises include crises racial incidents at the University of Missouri (Fortunato et al., 2017; 2018), faculty strikes (Vielhaber et al., 2008), gun violence on college campuses (Hocke-Mirzashvili et al., 2015; Wang & Hutchins, 2010), administrator misconduct (Varma, 2011), floods (Olsson, 2014), and the 2008 financial crisis (Brown & Hoxby, 2014; Liu et al., 2012). Others have analyzed crisis preparedness among both U.K. (McGuinness et al., 2014) and U.S. postsecondary institutions (Whiting et al., 2004) in varying contexts. However, multinational comparative studies are scant.

SCCT provides an evidence-based framework for understanding how institutions respond to crises, protect stakeholder safety, and preserve institutional reputation (Coombs, 2007; 2010; 2012). Key characteristics of SCCT frameworks that are especially relevant to the present study include crisis stages, leadership response, and stakeholder responsibility.

Coombs (2007) outlines 10 types of SCCT crisis response strategies that are part of primary or secondary crisis response strategies. The first set of strategies attends to the physical and psychological needs of its stakeholders, including “attack the accuser”, “denial”, “apology”,

“compensation”, and “scapegoat.” (p. 170). The second set attends to preservation of institutional reputation: “reminder”, “ingratiation”, “or victimage” (p. 170). The priority of institutions responding to crises is to first “protect stakeholders from harm” (2007, p. 165) and provide information to alleviate the psychological stress of the crisis, while later protecting the reputation of the institution.

Several authors propose a “staged” approach to understanding crises. For Coombs (2012) crises “evolve” (p. 7) through three macro stages: pre-crisis, ongoing and post crisis. Coombs draws his staged approach on earlier four stage models from Fink (1986) and Mitoff (1994). The temporal stages of this framework make for an interesting contrast in a lengthy (and ongoing) pandemic, with important juxtaposition and limitation to revisit in subsequent discussion. COVID-19 and higher education’s response may not be a single crisis, but perhaps a “disaster” that creates multiple “crises” (Coombs, 2010, p. 62), each with its own lifespan. The shift between stages, however, may not always be distinct (Roux-Dufort, 2007).

Responding to a crisis consists of messages, e-mails, or other forms of public response that address campus communities and other relevant stakeholders. Institutional crisis communications—henceforth abbreviated as “ICCs”— are “emergency messages intended to be instructional and informative, directed to the people at risk, the stakeholders, and the media” (p. 30). Hence, in this study, we specifically examined the ICCs on COVID-19 during the outbreak and the first six months to understand how HEIs in different countries make their crisis communications which could reflect the leadership responses and stakeholder responsibilities.

Method

Sampling and data

Employing a qualitative approach of document analysis (Bowen, 2009), we examine data consisting of 732 ICCs from web pages of 27 HEIs in three countries (Canada, China, and the United States) between January 1 and June 30, 2020. The primary rationale for this research timeline was that COVID-19 grew into a global pandemic in January, and by late June Chinese universities were beginning to reopen—albeit under strict health guidelines—and North American HEIs began to announce their plans for the fall. We recognize that at the time of writing (March 2022) higher education continues to navigate challenges of the pandemic as the virus mutates. The first six months from the outbreak is a crucial time period to capture HEIs responses to this crisis. These web pages contained updates and communications responding specifically to COVID-19 and its impacts on the respective campus communities of 27 HEIs in three countries (see Table 1).

All ICC data were publicly available documents, especially community updates posted COVID-19 resources pages housed on university websites. These updates were sent from HEI leadership (e.g. presidents, chancellors, and public safety officials) to their respective campus stakeholders (e.g. students and parents, faculty, and staff). Broadly, ICCs contained detailed information about changes to teaching and learning, campus activities, facilities, community services, travel advisories, and financial impacts related to COVID-19. In one case we supplemented university website updates with additional information, including community update emails that we could access because of a pre-existing relationship with the institution. In two cases we included website updates from outside the main university webpage, specifically a fundraising webpage for students and a university-affiliated food bank.

We employed purposive and convenience sampling (Given, 2008), to achieve a stratified sample of nine HEIs per country, each with three HEIs across three institutional types. We chose

these three countries because each took a different national strategy to fight COVID-19, which, we theorized, would likely in-turn influence contrasting HEI response behaviors. Each member of the research team has some lived and academic connection to the three countries as well, which helps our team understand the cultural and social context of the unfolding crisis. The three institutional strata within each country were chosen to more completely account for differences among diverse institutional types (e.g., a research university versus a liberal arts college in the U.S.), and because geography and population density were important factors in the epidemiology of COVID-19 (Lakshmi Priyadarsini et al. 2020). Each of these HEIs was anonymized; for example, one U.S. doctoral university in our study became “DU1.” (Table 1).

Data analysis

Our research team consisted of a multilingual, multinational group of scholars across institutions, trained in qualitative research and research ethics. The HEI communication documents were in English and Chinese. Every communication was reviewed and coded by one researcher and verified by another in the same language (English or Chinese) as a reliability measure. Codes and coded texts from Chinese documents were translated into English for cross comparison.

We used content analysis and a constant comparative approach to qualitatively explore, code, and extract themes from ICCs in line with the SCCT framework, as well as emerging themes (Creswell & Creswell, 2017; Silver & Lewins, 2014). Prior to coding, memoing (Bogdan & Biklen, 2007) captured initial categories and preliminary codes, which resulted in a draft code book. As coding was an iterative process, the research team revised the code book throughout the coding process, identified patterns, and refined themes according to the SCCT framework

(Bhattacharya, 2017). Ultimately, this analytical approach produced 15 codes within three umbrella themes or data categories.

Results

This section details how 27 HEIs communicated about the COVID-19 crisis during the first six months of the pandemic. Through an inductive and theoretically grounded analytical approach, 15 themes emerged, which fell into three larger thematic categories: “institutional response”, “leadership and stakeholder”, and “timeline” (Table 2). Below, we discuss key results across specific theme-categories, with special attention paid to findings that align or contrast with extant crisis communication theories. Data presented follow the parallel structure of themes to offer comparisons across institutions and countries.

Chinese Universities

Nine Chinese HEIs were chosen from three institutional types across five provinces in China. Among many classifications of Chinese HEIs, we chose to classify across three levels of administration: national, provincial, and local, which reflect the hierarchical structure of governance under different levels of government administration (Table 1). Many ICCs from Chinese HEIs explicitly stated compliance with guidance from the national government. In these communications, encouraging words and narratives emphasized the solidarity of the community and nation in facing the crisis. The comprehensive universities often had research teams carry out research on the biology of COVID-19, and their affiliated hospitals dispatched medical teams to Wuhan to assist. Local universities emphasized their compliance with the supervision of the municipal government.

Institutional Responses

Compliance with government policies and guidance was a salient theme among all nine Chinese HEIs, which referenced the central government, Ministry of Education, and municipal government. For example, National U1 informed its community, “On February 5, in order to further implement the deployment requirements of the Central government, Ministry of Education, and Shanghai City, and the school Party Committee, [National U1] comprehensively strengthened the school's epidemic prevention and control work.” In provincial and local universities, we found more references to following the municipal and local government policy for supervision. For example, “The deputy mayor of the [...] City came to our school to guide the epidemic prevention and control work” (Local U1, 2020).

Addressing resource reallocation and community engagement, Chinese HEIs deployed staff and reallocated resources to deal with the crisis. National universities all had affiliated hospitals and medical research teams, and all three national universities dispatched medical teams to Wuhan, the pandemic’s epicenter, to help the city’s medical workers deal with the unfolding crisis. Moreover, medical experts from some universities provided support and advice to government policy teams. One national comprehensive research institute informed its community, “[National U3] previously participated in the completion of the new coronavirus genome test...and it has been uploaded to the National Gene Bank life big data platform.” Other provincial and local universities supported nearby communities with medical supplies and services such as translation.

Leadership and Stakeholder

Examples of what we considered “emotional appeals” called for community members to work together amid this crisis, often evoking shared points of reference and local context. Chinese universities

used military language such as “combatting” COVID-19, and they expressed a strong emotional appeal of collectivism and social responsibility, instituting student codes of conduct for safety and protection. Provincial U3 wrote on February 6: “In the current severe battle against epidemic prevention and control” (在当前疫情防控的严峻斗争中). Another HEI quoted an ancient Chinese poem: “Why did you say that there were no clothes to wear, we share our robes with you” (岂曰无衣, 与子同袍) and encouraged the community to “take their responsibility to stand together with people of the whole nation, face the challenges, and win the battle towards COVID-19 together” (Local U1, 2020). Several universities used the WeChat platform to issue instructions or an online check-in platform to monitor student compliance with health and safety codes of conduct.

Timeline

All nine Chinese universities first sent out notices in late January after the government had officially alerted the nation about the appearance of the coronavirus in Wuhan. Notably, January 25, 2020 was the Lunar New Year, an important Chinese holiday that includes a one-week public holiday. Most university students were on a three to four week winter vacation in their hometowns. During this time, HEIs moved quickly to mobilize staff and faculty members, and held emergency meetings to address this incipient crisis. A major decision for all HEIs was to postpone the spring semester, opting to keep campuses closed and move the new semester online.

Chinese universities planned for re-opening and phased returns in late April and early May as the infection curve started to flatten in March 2020. Students returned in groups, with the graduating students (senior year) coming back first. Campus entry and sanitation procedures were heavily revised and enforced for safety. For example, one local city-level institution explicitly detailing entry procedures and body temperature check protocols (Local U2, April 27). By mid-May, all nine universities reopened for in-person classroom teaching, and issued guidance on protection measures such as, mask-wearing, and keeping distance in classrooms.

Canadian Universities

Like most institutions in Canada, all nine Canadian HEIs in this sample were public, and located in urban, suburban, and rural locations across four Canadian provinces (see Table 1). We selected three institutions from each of these three types: Medical/Doctoral, Comprehensive, and Primarily Undergraduate, based on the taxonomy used by Maclean's magazine in its annual ranking of Canadian universities (Maclean's, 2020).

Institutional Response

Four of the nine Canadian HEIs were in Ontario, Canada's most populous province, and also the province with highest case count of COVID-19 in early 2020 (Government of Canada, 2021). Proximity to population centers indeed factored into HEI responses. For example, suburban CU2 informed students on Feb 6th: "While there are no known cases of the virus in the Niagara region, staff at [CU2] continue to work with public health officials and closely monitor the campus for any signs of concern." By comparison in one of Canada's largest cities, a medical/doctoral HEI raised concerns about a confirmed case of COVID in its home city on January 29, 2020.

In terms of compliance with government guidance, Canadian HEIs followed public health guidelines similar to Chinese and U.S. HEIs. PU2, for example, referenced provincial guidance to announce on May 19 their first phase of “the province’s COVID-19 phased recovery plan.” Some communications, however, alluded to the existence of misinformation. On January 30 the Chief Medical Officer of CU3 said to “ignore rumors circulating on social media” about the virus and instead follow and to follow guidance from the public health officials.

All HEIs created COVID response teams, task forces, or steering committees. Later, this work often interacted with “transition teams.” The length and comprehensiveness of communications varied between primarily undergraduate institutions and the other two institutional types, in part because larger, medical/doctoral institutions, for example, had more stakeholders and policy areas to cover (e.g., more facilities, unique populations, research laboratories, etc.). Greater institutional complexity did overall seem to translate to lengthier and more frequent messaging.

HEIS also emphasized community engagement, describing their service to local and national efforts, with HEIs with medical facilities often emphasizing scientific or public health contributions. MDU1, for example, chose to highlight: “[A MDU1] immunologist...is leading an interdisciplinary team that's investigating the immune system's response to the coronavirus" (June 18). At CU2, service included donating equipment (Apr 1), students from the Medical Sciences department volunteering to assist with COVID screenings (Mar 30), and using the CU2 Library’s Makerspace to produce face shields for health care workers using its 3D printers (Mar 26). Primarily undergraduate institutions served their local communities through donations, volunteering, and in one case, partnering with a nearby medical university. PU2, for example, donated ethanol to a local distillery to produce hand sanitizer (Apr 15).

Leadership and Stakeholder

As with others, all Canadian HEIs invoked some degree of “emotional appeals” to reassure anxious constituents, laud the community’s response, or convey empathy over the impact of the virus. ICCs from leadership at smaller HEIs seemed to differ in tone from that of larger HEIs and systems. The type of emotional appeal could also reflect the personality of the campus leader. For example at PU3, a smaller university, the president wrote effusively to the community, “I am exceptionally proud of (but not surprised) how our community – students, faculty, and staff alike – have risen to the occasion and responded with efficiency, patience, and true compassion” (Mar 6). While at MDU3, a medical doctoral university, the message was more formal: “I understand this is a time of uncertainty and concern, but please be reassured by our planning process in this situation and know that the health and safety of our campus community is our top priority” (Mar 12).

Generally Canadian ICCs were addressed to “university”, “community” or “students”. While we did not find emails that specifically addressed Indigenous students, CU2 commended an Indigenous studies instructor who helped Elders in need around Six Nations of the Grand River Reserve (Mar 27). International students also became a group of special interest during the crisis, and were often denoted in subsections of larger messages. Sometimes unique institutional circumstances prompted distinctive communications, including PU3, who specifically addressed the needs of their students from outside Nova Scotia.

Timeline

Canadian HEIs mostly followed similar response timelines: rapid closure, followed by cautious reopening with the guidance of university task forces, often ending with a note of optimism. Pre-crisis messaging included the monitoring of cases abroad, urging caution from

anyone traveling abroad. As is typical of pre-crisis ICCs, universities urged caution but often assured constituents that they were in no immediate danger: "At this time [our local community] does not have a confirmed case of COVID-19 and the risk to Canadians remains low" (MDU3, Jan 7). This picture would change quickly.

We noted a flurry of emails in mid-March—after the World Health Organization declared COVID-19 a pandemic—that announced more restrictive containment and mitigation measures. MDU1 told its campus, “the situation is now accelerating very rapidly” (Mar 13), as it reduced access to facilities, announced the shift to remote learning, and eventually closed its campuses entirely to students. The speed at which universities responded after states of emergency were declared varied somewhat. For PU3 this occurred over a two week period. By April and May Canadian HEIs began planning for a “phased reopening” for the fall semester. Some HEIs expressed optimism that the post-pandemic world could open new opportunities even as they reassured anxious campus stakeholders. MDU3 wrote to its community on April 29: “The post-COVID world will likely not be the same, but there will be an opportunity for our university to emerge stronger, to be even more creative in what we do, to have a greater positive impact on the province, region and country, and to reach more people around the world.”

U.S. Universities

Of the more than 6,500 HEIs in the United States (IPEDS, 2021), our sample of nine American HEIs consisted of three large public universities, three private liberal arts colleges and three community colleges. For purposes of contrasting however, these groupings were somewhat untidy due to considerable variation even within institutional sub-strata. For example, the three community colleges were all multi-campus systems of varying enrollments (see Table 1),

compared to other institutions for whom communications pertained to single campus sites. This lack of conformity with HEI groupings was one key difference found in the U.S. sample.

Institutional Response

One theme to emerge in U.S. ICCs was an insistence that HEI responses be “data driven” and in line with “guidance” from public health officials. For example, on June 26, a large research university announced that the school would “follow a data-driven three-phase plan to gradually return to working on campus.” All nine institutions referenced guidance or instructions from government agencies in their communications, especially from the Center for Disease Control and Prevention. A community college told students that it was following “Centers for Disease Control’s (CDC) guidance to limit social distance,” (Mar 12). A few institutions offered public health guidance that unfortunately would later prove incorrect. For example, on January 29th, one HEI wrote “there is very little evidence that people can spread the virus when they have no symptoms ... the CDC and [WHO] are continuing to evaluate this,” and another HEI advised students on March 11th, “do not wear face masks...If you are sick, they may help prevent the spread of germs, but they may also create undue alarm among your fellow students.” Both of these examples would later prove to be misguided. On July 14, the CDC “advised Americans to wear masks to prevent COVID-19 spread” (CDC, 2020), which remained a best practice through February, 2021 (CDC, 2021).

Other notable themes particularly endemic to U.S. HEIs included specific exceptions for intercollegiate athletics, advisories for students in study abroad programs, concern over the cancellation of commencement ceremonies, and the occasional condemnation of incipient racism and xenophobia. Intercollegiate athletics was a larger part of U.S. HEI communications with almost all mentioning immediate postponements or cancellations of games and practices.

However, some HEIs allowed athletic activities to continue at a time when residence halls and dining facilities were being shut down. On March 8, for example, a community college announced “athletic competitions will be held as scheduled with no spectators permitted to attend.”

Regarding the types of resources “re-allocated” or leveraged to students, HEIs offered different kinds of financial support depending on student needs and available financial resources (both institutional and from the federal government). This assistance included tuition freezes, prorated (or refunded room and tuition) additional scholarship, emergency travel funding, and assistance moving off campus. A community college district (CC3) informed students that “students on Federal Work Study paid in full for Spring 2020 semester despite any work interruptions” (April 2) and provided a list of WiFi and Internet access resources (April 1).

Though federal CARES Act (2020) funding was available to all colleges and universities, institutions in our study varied in the types of assistance offered in level of support. For example, a liberal arts college offered a prorated housing refund for students leaving campus, created a new remote summer fellowship, increased scholarship funding, froze tuition, and continued to pay its student employees (April 22; May 21; June 5). The HEI told students that “No request for funding has been denied” and that laptop and pre-paid WiFi hotspots remain available for students who request them” (Mar 15). Even so, there is evidence that these resources did not sufficiently support all of its students’ needs. A student advocacy group at LA1, for example, was formed in response to “frustration with the College’s willingness to leave so many students in situations of precarious housing, food, and health conditions”, especially marginalized students (June 2). This however, was relatively unique among U.S. or any other HEI in this sample.

Leadership and Stakeholder

U.S. HEIs were also explicit about their commitments and inclusion. Accordingly, several were quick to denounce racism, xenophobia, and discrimination. The provost of a large public university, for example, wrote on February 28 “it saddens us to learn that members of our community, particularly Asian and Asian-Americans, have experienced racial harassment, encountered xenophobic remarks, and been made to feel unwelcome in the wake of the COVID-19. This conduct has no place [here].” A liberal arts college also responded to a March student protest movement that arose out of the frustrations facing international students and other marginalized students facing COVID-related housing and financial challenges.

Timeline

The United States declared a state of emergency on March 13 (FEMA, 2020), and with regarding the timing of campus responses to COVID communications, key closures, instructional shifts, and the overall urgency of crisis messaging generally peaked around Spring Break, which is traditionally a week-long academic hiatus for U.S. HEIs, usually occurring sometime in March. Within this sample, seven of nine HEIs referenced Spring Break, which provided a planned opportunity in the academic calendar for U.S. HEIs to depopulate campuses, institute new policies, and often extend the break. A large public research university (DU3) advised students on March 10 that “as Spring Break approaches ... you may not be able to come back to campus as planned,” adding students should familiarize themselves with distance learning tools, and bring books and personal items with them. Another notable U.S. federal policy was the Coronavirus Aid, Relief, and Economic Security (CARES) Act, which was introduced by the U.S. Senate on March 19th and signed-in on March 27, and included the Higher Education Emergency Relief Fund (2020).

Discussion

In this section, we expand on these findings by making comparisons across institutions and countries and reflect on these results within frameworks of crisis communications theories regarding the stage of a crisis, leadership response, and stakeholder responsibility. One theoretical lens through which we attempted to examine data was SCCT, which applies well to acute institutional crises, but we found aspects of SCCT less suitable for such prolonged global events of duration and scale as the COVID-19 pandemic. We consider COVID-19 as a disaster spawning multiple crises. “Crisis and disaster are not synonymous. Disasters are larger in scale...crises can be embedded within disasters” (Coombs, 2010, p. 62). Indeed, the present research found this distinction to be helpful and true when considering how HEI communications and behaviors are informed by crisis communications theories, particularly it posits a key limitation of SCCT in the context of the COVID-19 pandemic “disaster” that shows little to no sign of abating during a period of data gathering and observation. We further examine this limitation and others below to inform theoretical applications of higher education policy and management.

SCCT communication strategies

While SCCT response strategies such as “apology” or “compensation” (Coombs, 2007, 170) were present in COVID-19 ICCs, HEIs seemed to apologize more for unforeseen circumstances rather than accept any fault or blame for this prolonged natural disaster. We also encountered a very common strategy of reassurance, which fits into the expectations of SCCT that HEIs attend to the emotional needs of their stakeholders. Other evident secondary crisis response strategies were “reminders” and “ingratiation” as universities celebrated the good

works of the university and its stakeholders. Other applications of SCCT and broader crisis communications theories are juxtaposed below.

SCCT Timelines and Stages for COVID-19 ICCs

A key finding when typically applying SCCT to HEI responses entails positioning the crisis into—or at times, across—the three phases: pre, ongoing, and post-crisis. Across all three countries, there was an observable shift from “pre-” to “ongoing” crisis, with Chinese HEIs approaching both phases earlier than in North America.

The timing of HEI responses relative to the first detection of cases was similar among institutions in all three countries. Chinese HEIs, for example, responded uniformly based on government reports after the situation escalated in Wuhan in late January. This presented North American HEIs with a true “pre-crisis” window to communicate about monitoring cases, to prepare to mitigate spread, and to reassure recipients of relative risk. The pandemic was already a declared national emergency in China at this time.

No country entered what could be considered a “post-crisis” phase, “the time period after the immediate threat is resolved and danger to people and structures has passed” (Moerschell & Novak 2019, p. 31), within the window of data collected, but Chinese HEIs saw the earliest reopening defines post-crisis as Chinese HEIs reopened and resumed in-person teaching by summer 2020, while North American HEIs maintained remote learning longer. The majority of U.S. HEIs would maintain remote learning into fall 2020 (College Crisis Initiative, 2021) U.S. and Canadian HEIs also seemed to make decisions around canceling or postponing campus activities based on the number of people affected, whereas China more decisively canceled events.

An interesting finding around this timing concerned the variance of holidays and dates which afforded opportunities to make strategic policy changes and closure. Notably, Spring Break and Lunar New Year were frequently mentioned in U.S. and Chinese ICCs, respectively, and a similar concern among HEIs was observed to avoid viral spread since these are occasions when mass travel is ordinarily commonplace, and thus highly problematic during a burgeoning pandemic.

Communication technologies during COVID-19

Digital technologies —notably the Internet, accessed via computers and smartphones—made ongoing communication and a limited continuation of the enterprise of higher education even possible as the crisis evolved. HEIs relied heavily on relatively new technologies and platforms, including broadband internet access, and reliable video conferencing platforms that allowed remote learning, teaching, and work to continue in entirely virtual modalities. These platforms included Zoom, Canvas, and Blackboard, and Microsoft Teams in North America and Welink, Tencent meeting, QQ live classroom, and Bilibili in China. The predominant modes of online communication for all HEIs, however, were emails and institutional websites. Some HEIs alluded to COVID-19 emergency alerts being communicated by text messages to which we did not have access. While making communication easier, faster, and more frequent (Coombs, 2012), such advances may increase the risk of disinformation

HEIs in the present study also benefited from communication infrastructures (e.g., phone, e-mail, texts, or online platforms) that remained mostly intact, compared to other organizations facing crises caused by natural disasters (e.g., hurricanes) where means of delivering messages could be impacted. Many HEIs sent messages imploring students to remain connected to remote learning, such as LA2's March 16 message with information about remote

Internet access through the U.S.-based Comcast/Xfinity company. The sudden shift to remote teaching and learning was not without problems. HEIs seemed aware that reliable, high-speed internet access was not equally available to all geographies and demographics, and some platforms were not accessible to students living abroad.

HEIs Communication and Management during Crisis

Creation of COVID-19 task forces. All countries' HEIs created some kind of crisis management team as they reallocated resources to respond to COVID-19. Task force names/labels, constituents, and sizes varied by institution, but their functions were generally the same. National U2 established a "leading group", Provincial U2 formed a COVID-19 presentation and control group, while Local U1 and National U3 created an "epidemic prevention and control team." MDU1 established a "steering group of senior administrators, including leaders who responded to the SARS crisis in 2003" (Feb 27), while CU2 announced a coronavirus planning team (Mar 2) and CU3 formed a pandemic response team. DU3 launched a "re-imagining fall task force" (April 20), as "task forces" was common parlance in the U.S. The establishment of these groups and their announcements seemed to direct response efforts to a central body while assuring campus communities that HEIs were proactively addressing the crisis.

The importance of emotional appeals. There may be appeals that address stakeholder needs that are not covered in the list of crisis communication strategies (Coombs, 2007). Emotional appeals were present across all institutions in all countries. These instances of direct, personal, and less-formal appeals sought to reassure anxiety, express pride in the community's response, and sometimes convey condolences or regret at the impact of the virus. They also offered opportunities to humanize and reflect the personality of campus leadership. For example,

the President of LA2, a smaller liberal college signed-off an email with “We are here for you”, and assured students: “We are [LA2] STRONG!” (Jun 24).

We also saw examples of what we called a “Super(man/woman/person) phenomenon”, where campus leaders appear highly visible, active, and resilient. In China, the president of National U3 appeared in several ICCs encouraging her community to move forward safely. The President of LA1 in the United States was also a particularly prolific communicator, frequently including historical references and rhetorical flourishes. On March 11, an ICC read: “For over 133 years, the [LA1] community has faced times of challenge ranging from the Spanish flu epidemic of 1918 to World War II to the political and social turmoil of the 1960s. We are confident Sagehens will work together to reduce risk and protect one another...” (Mar 10).

References to public health guidelines. Across the board, HEIs made ample reference to public health guidelines, whether local, national, or international in updating their constituents on the evolving crisis and when announcing COVID-mitigation measures, including the halting of in-person learning. In Canada, for example, PU3 referenced provincial guidelines, as well as national guidelines from the Canadian national Public Health Agency, and World Health Organization (WHO). In China, Provincial U3 announced a delay of the reopening of classes in accordance with guidance from the Provincial Department of Education.

Reference to public health guidelines and explicitly evidence-based policies was especially important in the United States. The insistence of “data driven” HEI responses is perhaps telling, as there was ample suspicion that the federal U.S. public health response to COVID was politicized in a way that minimized the severity of the crisis, and handed responsibility to states, cities, and smaller municipalities. In any case, U.S. HEIs commonly referenced federal, state, county and other municipal guidance, with other organizations and

agencies recurring mentioned including the CDC (DU2, Jan 27; DU1, May 1; CC3, March 11, etc.), and WHO (CC1, May 14).

Universities' social responsibilities: serving the community. HEIs with health sciences programs, labs, or hospitals described efforts to treat COVID patients, set up field hospitals, and undertake COVID-19-related research. Early examples come from National U1, which dispatched a medical team to Wuhan and provided medical assistance to local hospitals (Feb 21). A U.S. public doctoral university set up a field clinic to provide testing to local communities, while Canadian medical student volunteers from CU2 helped with COVID screenings (DU1, Mar 30).

Financial support to students. While students' academic, physical, and psychological well-being were concerns expressed in ICCs from all universities, North American ICCs particularly focused on students' financial well-being a strategy of "compensation" (Coombs, 2007, p. 170). These communications frequently referenced federal support for students, the CARES Act in the United States and Canada Emergency Response Benefit (CERB) in Canada. Only some U.S. HEIs made it apparent that CARES funding would be administered to students through their institutions, while Canadian students could access CERB relief directly through a central online portal.

Individual HEIs, especially in the United States, also provided additional aid, sometimes pulling from institutional endowments, private donations or organizing fundraising, which may reflect the public-private and decentralized nature of the U.S. higher education system. For example, a U.S. public doctoral university announced donations from their board of trustees to COVID research (DU1, May 20). Among Chinese institutions, Provincial U1 (June 23) mentioned refund and reimbursement of accommodation fees from their tuition, while Local U3

mentioned several donations of funds and medical products from enterprises and alumni to support pandemic efforts (April 29; May 14).

Intersecting crises: COVID and racial justice in the U.S. and Canada

Our data focused on HEI responses to COVID-19 specifically, but North American HEIs entered another crisis phase toward the end of our observation period. The murder of George Floyd on May 25 and ensuing wave of national protests in the United States subsumed COVID-related ICC data, giving HEI leadership more to address and contextualize. DU3, for example, told its students on June 1: “This has been a difficult and heartbreaking week. We are not only continuing to grapple with impacts of a pandemic but also struggling to make sense of the national tragedy that is the continued violence against African Americans.” Concurrently with the summer protests for racial justice, U.S. HEIs increasingly reasserted their commitments to diversity and inclusion and denounced racism and discrimination. In Canada, a note from MDU2 on June 26 alluded to a racial incident following a wellness check gone wrong: “Like many of you, I was disturbed by the violence depicted in a video of a police wellness check... involving a student in the community. I condemn the behavior shown in the video and the use of excessive force in any situation.”

Limitation of SCCT for “disasters” such as COVID-19 pandemic

In prior contexts, SCCT typically applies to a single crisis as opposed to several, and COVID-19 is also historically impactful in that it is broader (global) and more completely disruptive than an isolated incident or scandal. COVID-19 is also (as of this writing) not yet over, and the six-month observation period in the current study precluded any HEIs from reaching a post-crisis state, as SCCT describes. It is also noteworthy that our observation period ended just before a second crisis began in the United States (mass protests against racial

inequity), which shared the unfortunate common thread of anti-Asian xenophobia. HEIs in the United States, and international students in particular became consumed with a tertiary crisis just after the data collection period in this study. On July 6, the Trump administration issued an executive order intended to force international students attending any HEI with remote instruction (Fischer, 2020a). The order was retracted eight days later after sweeping objections from leaders from across U.S. private, public, and educational sectors (Fischer, 2020b). Nonetheless, the attempted policy and its fallout provided yet another crisis that took over ICC traffic for a cycle of weeks, just after the observation period of the present study. These crises point to how crisis communication theories can be expanded to account for multi-layered crises, such as incidents of racial injustice in the midst of a pandemic. Furthermore, in looking only at publicly available information via ICCs, we recognize that these data were carefully curated by HEIs to serve multiple purposes simultaneously (i.e., they were knowingly visible to both internal and external stakeholders) and that some ICCs could be largely ceremonial. Nonetheless, findings across country and HEI type demonstrate that even symbolic communications share some commonalities (e.g., “emotional appeals”) that are identifiable through crisis management theory.

Conclusion

The study critically examined how HEIs of different types and in varying national contexts responded to an unprecedented global health disaster. Looking through crisis management theory and specifically SCCT, the study revealed patterns in communication strategies during different time points of the pandemic, including leadership responses and stakeholder responsibilities. It also revealed key differences across social contexts and environments.

Our observations partially support a limited application of SCCT (Coombs 2007; 2013) to HEIs in three very different socio-political settings: Canada, China, and the U.S. We found leadership to be especially central in COVID ICC data, which seems to both speak to and contrast with Coombs' more recent critique that "leadership is often overlooked in ... crisis management" (2021, *An Overlooked Resource*, para 1). Second, HEIs provide information quickly and frequently from a central office, which typically seeks to alleviate the uncertainty or psychological stress present in a crisis. Finally, all communications fit into at least the first two phases of the timeline described by SCCT: pre-crisis and ongoing crisis, approaching post-crisis. We observed common milestones in HEI responses across countries, such as the first notification of COVID-19, the first case in each country, and the announcement of contingency plans. While Chinese HEIs were the first to signify pre- and ongoing crisis stages, no HEI in any country approached what we would consider a post-crisis phase during the data collection period.

Our research does point to areas for refinement of the SCCT framework, however. These areas include better accounting for multiple, ongoing, or global crises, and for the potential that some crises may impact groups of stakeholders disproportionately across lines of race or identity. COVID-19 truly is a novel, global pandemic, and our study applies extant theories to examine postsecondary institutional behavior during this historic worldwide event. As some nations lay blame or scrambled to inoculate themselves from economic and human harm, we find that HEIs across North America and China demonstrated a concern and responsibility for their communities, rather employing "denial" or "scapegoating" strategies (Coombs, 2007, p. 170).

Due to the relative sample size of HEI sub-strata by institutional type, the scope of data in the present study do not speak specifically to comparisons between these different HEI types within each country. Additional content, or a "big data" design that incorporates social media

posts, could offer an enhanced analytical approach for related future research. Moreover, additional analysis beyond the first six months of the pandemic could help better understand the full utility of SCCT if—or hopefully “when”—a clear post-crisis period emerges. If we consider COVID-19 an ongoing, global disaster spawning multiple crises rather than a single, bounded crisis with a beginning, middle, and end, we can then better understand how higher education responds with crisis communication frameworks that may be more appropriate. In the meantime, the evolving findings of this multinational, bilingual study offers a descriptive ICC playbook to assist university leaders prepare for the next crisis, and the theoretical considerations presented offer some guidance to inform future research on crisis communications.

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Appendix

Table 1

Summary of key characteristics of the 27 HEI in this study, along with total quantities of institutional crisis communications (ICCs) recorded for each institution and dates of first and last (ICC). All ICC collection took place in 2020.

HEI pseudonym	Country	Type / Tier	Public/ Private	Enrollment	# of ICCs (Total N = 732)	Date of first ICC	Date of last ICC
DU1	USA	R1 (very high research) doctoral university	Public	>25,000	59	January 29	June 30
DU2	USA	R1 doctoral university	Public	>45,000	33	January 27	June 29
DU3	USA	R1 doctoral university	Public	>25,000	107	January 29	June 29
LA1	USA	Selective liberal arts college	Private	<2,000	25	February 27	June 11
LA2	USA	Selective liberal arts college	Private	<2,000	4	March 11	June 24
LA3	USA	Selective liberal arts college	Private	<2,000	2	March 11	June 15

CC1	USA	2-year community college	Public	>10,000 (district-wide)	13	March 12	June 30
CC2	USA	2-year community college	Public	>15,000 (district-wide)	10	February 28	May 9
CC3	USA	2-year community college	Public	~200,000 (district-wide)	16	January 31	June 5
MDU1	Canada	Medical/doctoral university	Public	>60,000	9	April 30	June 26
MDU2	Canada	Medical/doctoral university	Public	>60,000	24	March 16	June 30
MDU3	Canada	Medical/doctoral university	Public	>20,000	16	June 4	June 27
CU1	Canada	Comprehensive university	Public	>50,000	39	January 25	June 18
CU2	Canada	Comprehensive university	Public	>15,000	48	January 23	June 29
CU3	Canada	Comprehensive university	Public	>10,000	44	January 23	June 26
PU1	Canada	Primarily Undergraduate university	Public	>8,000	3	May 15	June 29

PU2	Canada	Primarily Undergraduate university	Public	>8,000	18	April 3	June 26
PU3	Canada	Primarily Undergraduate university	Public	>5,000	34	March 12	June 26
National U1	China	National comprehensive research institute	Public	>40,000	36	January 26	June 29
National U2	China	National comprehensive research institute	Public	>40,000	24	January 30	June 24
National U3	China	National comprehensive research institute	Public	>50,000	28	January 24	June 29
Provincial U1	China	Specialized provincial level institution	Public	>30,000	31	January 27	June 28
Provincial U2	China	Specialized provincial level institution	Public	>10,000	20	January 28	June 28
Provincial U3	China	Specialized provincial level institution	Public	> 30,000	27	January 27	June 18
Local U1	China	Local city-level institution	Private	> 30,000	18	January 28	June 19

Local U2	China	Local city-level institution	Private	> 15,000	13	January 29	May 28
Local U3	China	Local city-level institution	Public	> 10,000	31	January 26	June 11

Table 2*Themes identified through content analysis and thematic coding*

Code	Sub-code	Description of sub-code
Institutional response	Academic	Changes to final exams and/or grades, graduation, instructional modality (e.g., online/virtual teaching), research activity
	Travel	Restrictions, advisories, including students
	Facilities	Modifications or directions regarding facilities, including IT and infrastructure
	Health	Notifications related to campus health, such as mask-wearing and hand washing guidelines, as well as news about spread of virus
	Athletics	Announcements related to sports, including sports practices, travel, and sports facilities
	Finance	Institutional and financial finances, any kind including financial aid
	Government	Responses enabled by government, or government-driven, including travel restrictions / collaboration with government partners, references to health guidelines
	Re-allocation	Universities re-allocating staff, manpower, resources to combat (allocation resources to fight COVID, creating a COVID-19 officer, etc.)
	Community engagement	Community partnerships and service (e.g., medical services or making protect equipment)
		Emotional appeal

Leadership & stakeholder	Recipient	Person or population who receives message
	Decision-maker / communicator	Person or HIE office who sends or writes message
Timeline	Pre-crisis	Monitoring of crisis, no formal institutional response
	Ongoing crisis	Crisis has arrived; cases locally or on campus; late-stage ongoing crisis: planning future, including reopening plans
	Post-crisis	Crisis is over

