



Instructional Risk and Crisis Communication at Higher Education Institutions during COVID-19: Insights from Practitioners in the Global South and North


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ABSTRACT

During the COVID-19 pandemic, challenges at higher education institutions (HEIs) in managing public health crises were revealed globally. The literature on HEIs has focused on Western/Northern countries and lacks theoretically grounded studies of internal instructional risk communication. This article reports the results of interviews with HEI communication practitioners at 28 universities in 16 countries in the Global South and North regarding their practices of message design and distribution during COVID-19. Using the IDEA model of instructional risk communication, the results revealed that practitioners' communication emphasized action and dissemination over internalization and explanation. Practitioners from the Global South were more likely to perceive personal relevance as important and integrate it into their messages than those from the Global North. Practitioners from the Global South also used credible sources and translated technical jargon for lay audiences more often than those in the Global North. Most of the practitioners' risk messaging was informed by personal experience and intuition rather than by theory or best practice models.

KEYWORDS: COVID-19, Global South, higher education, risk communication, IDEA model

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Introduction

Higher education institutions (HEIs) frequently experience threats and crises ranging from school shootings and disasters to public health crises, cases of sexual misconduct, and plagiarism scandals (e.g., Darrow et al., 2018; Fähnrich et al., 2015; Liu et al., 2015; Moerschell & Novak, 2020). After witnessing a tragic school shooting at his university in 2008, President Emeritus John G. Peters (2014) concluded that serious crisis preparation and response has become a critical aspect of managing HEIs. As HEIs attempted to navigate operations throughout the COVID-19 pandemic, major challenges in managing public health crises were revealed (Liu et al., 2021), which is now one of the major concerns for HEIs globally (Aristovnik et al., 2020).

The COVID-19 pandemic was an experience shared by HEIs around the world and most HEIs enroll considerable numbers of students from different countries. This points to the importance of effective risk and crisis communication and management in HEIs as an international, if not global issue. Despite this need, research on HEIs to date has been limited largely to case studies or single-nation designs with a predominant focus on the US. Much of this research centers on crisis preparedness and/or best practices, while the practice of message development for internal instructional risk communication has rarely been analyzed. Moreover, even during COVID-19, very little research has been devoted to internal crisis communication in HEIs or other types of organizations (e.g., Einwiller et al., 2021; Li et al., 2023). Thus, this study contributes to the literature in general by expanding the geographic scope beyond the US and specifically by taking a theoretically grounded approach to analyzing risk messaging strategies at HEIs as a particular type of organization (Moerschell & Novak, 2020).

The study reports the results of 31 semi-structured interviews with HEI communication practitioners in 16 countries, representing the Global South and the Global North, regarding their practices of message design and distribution during the first wave of the COVID-19 pandemic. The researchers analyzed both the communication practices employed by practitioners and the guidelines used to inform those practices based on the IDEA model of effective instructional risk communication. We begin by summarizing

the existing literature on risk and crisis communication in HEIs, followed by outlining the theoretical approach that altogether led to our research questions, methods, and findings. Finally, we offer conclusions, implications for practice, and suggestions for future research.

Risk and Crisis Communication in HEIs

Several researchers have investigated how HEIs manage crises to protect their reputations with stakeholders (e.g., Ovie, 2022; Thelen & Robinson, 2019; van Rensburg et al., 2017). Ovie (2022), for example, evaluated the crisis management of an HEI in Canada over the course of three natural disaster crisis events. The author concluded that HEIs should create continuity plans, develop better communication processes, ask the right types of questions, and engage in crisis communication that is both timely and accurate. Hussain (2014) found that, although most HEIs in South Africa included crisis communication strategies in their strategic plans, they did not prioritize those strategies. The author concluded that both issue management and social media communication should be prioritized. Unfortunately, as Liu and colleagues (2015) discovered, although many universities have crisis contingency plans, they often fail to reach essential audiences.

Crafting effective instructional risk and crisis messages and disseminating them to the right audiences through appropriate channels is crucial regardless of risk or crisis type (Sellnow & Sellnow, 2024). In their examination of HEI communication during the Zika virus outbreak in Florida, for example, Darrow et al. (2018) discovered a high level of risk awareness and participation among students in self-protective actions as a result of effective instructional communication by the university. Similarly, Gigliotti (2020) stressed the importance of dialogue and meaning making between university leaders and stakeholders in risk and crisis contexts to achieve the desired cognitive and behavioral learning outcomes.

HEIs' Responses to COVID-19

The global COVID-19 pandemic posed challenges for many HEIs who had to adopt new policies and pedagogies (Carpenter et al., 2020). Universities worldwide faced conflicting national and local

pandemic policies, as well as stakeholder resistance (e.g., Anthony et al., 2022; Nicol & Bice, 2022). Holliday et al. (2022) highlighted struggles universities faced with students studying abroad amid conflicting travel advisories, travel restrictions, and health guidelines. Based on interviews with 37 leaders from 30 US-based HEIs, Liu et al. (2021) found that their communication strategies followed crisis communication best practices (Seeger & Sellow, 2019). In a follow up study based on 25 interviews with HEI leaders, Islam et al. (2022) discovered that many HEI's engaged in experiential and vicarious learning processes to construct systems for obtaining information and facilitating learning about COVID-19.

Worldwide, most HEIs shifted to online course delivery with varying levels of success. Mok and Jung (2023), for example, described diverse perspectives and responses from liberal arts colleges. Other studies highlighted educational disparities among students from marginalized communities (Dorn et al., 2020) and between the Global South and Global North (Devkota, 2021).

Critical to the success of HEI's COVID-19 responses were decisions about what messages to share and how to disseminate them, including strategies for staying informed and protecting stakeholders, as well as recommendations for self-protective actions. HEIs use social media for general institutional communication and for crisis communication (McLachlan, 2022). Twitter (now X) has been among the most popular social media channels used by HEIs (e.g., Aldahdouh et al., 2020; Luo et al., 2020). During COVID-19, Twitter posts using the hashtag #highered that focused primarily on crisis preparation and online learning had the furthest reach (Biddix et al., 2023) and produced superior learning outcomes as compared to information shared via university websites (Wooldridge et al., 2021).

Despite considerable study, two major gaps regarding risk and crisis communication among HEIs are evident. First, most of these studies are based on individual cases located primarily in the US or the Global North. This is particularly problematic given that the COVID-19 pandemic affected HEIs worldwide. Second, while studies have examined general best practices, they have not systematically analyzed the design and dissemination of *instructional* risk

messages in the context of public health crises at HEIs. Therefore, we suggest using a theoretical framework specifically designed to analyze and evaluate instructional risk communication, the IDEA model, as summarized in the next section.

Theoretical Grounding: The IDEA Model

Successfully advocating self-protection and risk mitigation is a challenging endeavor. Practitioners seeking compliance with recommendations for self-protection and mitigation must contend with misinformation challenging the veracity of risk messages on topics such as COVID-19 (Imhoff & Lamberty, 2020; Tanase et al., 2022), as well as the varying levels of science literacy and numeracy among their stakeholders (Brown et al., 2014; Shoots-Reinhard et al., 2020; Kim et al., 2022). Sellnow and Sellnow (2024) explain that vulnerability to misinformation and problems with science literacy and numeracy are rooted in the differences between risk and crisis as system states. Unlike crisis events posing immediate threats demanding speedy and reliable responses for protection and risk mitigation, risks pose potential threats riddled with uncertainty. The consequences of (non)compliance may be imperceptible in the short term. Thus, effective risk communication must not only inform risk-bearers of potential threats and provide recommended actions, it must also motivate audiences to agree that the potential harms are personally significant and the recommended actions will be effective in managing them (Sellnow & Sellnow, 2019). To meet this challenge, a growing body of risk communication research emphasizes theories of instructional communication, which focus on affective (perceived relevance/utility), cognitive (knowledge comprehension), and behavioral (performance) learning as outcome variables. Therefore, this study is grounded in the IDEA theoretical model of effective instructional risk and crisis communication (T. L. Sellnow et al., 2023; Sellnow & Sellnow, 2024).

IDEA is an acronym formed for easy recall as it represents the key components of effective instructional risk and crisis communication. Research confirms that messages addressing all four components appropriately are significantly more effective in predicting compliance than those that do not (D. D. Sellnow et al., 2017;

T. L. Sellnow et al., 2023). The “I” stands for internalization. To be effective, risk-bearers must be motivated to pay attention and take action. This can be achieved when communicators express compassion for those at risk, as well as highlight personal relevance and potential impact of the risk to them and their loved ones (Conklin, 2008). The “D” stands for distribution. Effective distribution occurs when consistent messages are developed and revised via coordination among a variety of agencies and spokespersons (Edwards et al., 2021; Sellnow & Sellnow, 2019), and are shared widely through a variety of communication channels (D. D. Sellnow et al., 2023; Soares et al., 2022). “E”, explanation, is achieved when information is drawn from credible sources (Napakol et al., 2022) and intelligibly translated to diverse publics (Cook et al., 2021). Finally, the “A” stands for the actions risk-bearers are to take for protection and risk mitigation. Action recommendations should be specific and doable, as well as framed using imperative (command, instruction) as opposed to declarative (informative) or interrogative (question, request) sentence style (Sellnow & Sellnow, 2024). For example, an appropriate earthquake early warning action message is “Drop, take cover, hold on” (D. D. Sellnow, L. M. Jones, et al., 2019, p. 13). Effective instructional risk and crisis communication messages adhere to all four IDEA model elements, and overlooking even one of them reduces learning outcome achievement in terms of motivation, comprehension, and compliance (Johansson et al., 2021; T. L. Sellnow et al., 2017). Research has consistently shown that messages lacking attention to any of the four elements are less effective in general (Frisby et al., 2014; T. L. Sellnow et al., 2017) and have lower levels of retention over time (D. D. Sellnow, L. M. Jones, et al., 2019).

Our analysis addresses the research gaps identified in the literature review and applied the IDEA model as a theoretical basis to evaluate risk messaging practices at global HEIs during COVID-19 and its potential to motivate students and staff to engage in protective actions. Hence, our first research question was:

RQ1: How did global higher education communication practitioners design and disseminate instructional risk communication messages about COVID-19 internally?

In answering RQ1, we address the well-known gap between research and practice in risk communication (Claeys & Opgenhaffen, 2016), as we empirically explore the practitioners' design of risk messages grounded in theory.

Although the literature review showed that many HEI practitioners appear to be following crisis communication best practices at a general level, we have yet to verify the extent to which they are grounded in instructional risk and crisis communication theory and/or prior training in the field. Hence, we examine the extent to which practitioners consciously derive their decisions from risk and crisis communication theory and/or training. The resulting research question was:

RQ2: What informed decision-making on instructional risk communication practices at HEIs globally?

Finally, to explore universal and/or regionally specific practices, we broadened the geographic scope of research on HEI communication during the COVID-19 pandemic by comparing instructional risk communication across countries and world regions. The corresponding research question was:

RQ3: What commonalities and differences appeared between internal instructional risk communication practices during the COVID-19 pandemic at HEIs in the Global South and the Global North?

Materials and Methods

We conducted 31 semi-structured interviews at 28 universities in 16 countries in the Global South (Africa, Latin America, Southeast Asia) and North (North America, Europe) (see Table 1). Practitioners were interviewed between late June and early August 2020, which for most regions reflects different stages of the first wave of the COVID-19 pandemic (World Health Organization, 2023). By July 15, based on daily confirmed cases of infection relative to the population, the US and Brazil were by far the most affected countries in our sample, followed by El Salvador, Russia, and Bulgaria. The remaining countries were less affected with Vietnam and China reporting the lowest numbers to the WHO. In addition, Italy, Germany, and Canada had experienced a major first wave in March and April of 2020 before the data collection period.

TABLE 1 Sample of interviewed higher education communication practitioners by country

Country/ pseudonym	Type of university	Position of interviewees	Work experience in position / department in years
Brazil1	Public	Head of the communication superintendence	2.5
Bulgaria1	Private	Communications development specialists	2
Bulgaria2	Public	Administrative secretary of the depart- ment & senior expert in PR	0.5
Cameroon1	Public	Science communicator	14
Cameroon2	Private	Communications officer	4
Canada1	Public	Assistant director of strategic and institutional communications	2
Canada2	Public	Director of strategic communications	10
Canada3	Public	Director of communications and marketing	7.5
China1	Public	Counsellor in the administrative department	1
China2	Public	Counsellor in the administrative department	4
El Salvador1	Public	Director of institutional communication	7
El Salvador2	Public	Editor-in-chief of university's scientific publication	1.5
France1	Public	Director of communication	7
France2	Public	Director of communication	8
France3	Public	Director of science communication	1
Germany1	Public	Consultant for public relations and political education	0.75
Germany2	Public	Social media manager	5
Indonesia1	Private	Head of public relations & lecturer in communication	1
Italy1	Public	Area manager of institutional affairs and communications	0.5
Italy2-3	Public	General director of the university of studies, Area manager for international relations (2 participants)	5,1
Nigeria1	Private	Senior lecturer and dean of student affairs	6

(continues)

TABLE 1 Continued

Country/ pseudonym	Type of university	Position of interviewees	Work experience in position / department in years
Pakistan1	Public	Assistant for public relations	10
Pakistan2	Public	Public relations officer	9.5
Poland1	Public	Vice dean for international cooperation	4
Poland2	Public	Spokesperson of the university	4
Russia1	Public	Head of internal communications	1
Russia2	Public	Head of the media center	5
USA1	Public	Dean	10
USA2	Public	Director for communications and marketing	3
Vietnam1	Public	Chairman of the student's association	5
Vietnam2	Public	Communication specialist at the inter- national faculty	12

Participants

Using a mix of purposive and convenience sampling, we recruited 32 participants (note: one interview in Italy included two participants upon request) from four private and 24 public universities. For the selection of countries, we employed the criterion of maximum variation (Palinkas et al., 2015) to maximize diversity of world regions including Africa, Asia, Europe, North America, and Latin America. The COVID-19 pandemic represented a unique opportunity to compare experiences of practitioners globally as they were affected by the same crisis, though to different degrees. Using a most different systems design on country-level (e.g., disparity of resources, governance, etc.), this sample allows to identify commonalities on several categories of instructional risk communication practices and their justifications across world regions. Within world regions, we preferred to select countries where interviewees were available who knew the cultural context, spoke the local language, and in some cases had contacts at universities. This was the case for China, Cameroon, Russia, Italy, Nigeria, Germany, El Salvador, Brazil, Indonesia, Vietnam, and Pakistan. For the remaining countries, interviews were conducted

in English or in the local language if the interviewers had at least a C1 level of proficiency in the language.

We used national university rankings to identify leading HEIs in each country. We then contacted communication departments and/or practitioners whose email addresses were publicly available. When no responses or rejections were received, we moved on to the following institutions in these rankings until we successfully recruited a minimum of one and a maximum of three participants in each country. We only included participants who identified themselves as practitioners who were substantially involved in internal communication with different publics (students, staff, etc.) during the COVID-19 pandemic. Due to the unavoidable heterogeneity of organizational structures and communication functions across institutions and countries, practitioners in different positions had to be included (Table 1). To ensure validity, we asked all participants for their main communication tasks related to COVID-19, as well as the duration of their employment in their position. As a result, four practitioners were excluded (El Salvador, Singapore, US, UK) because of their low involvement in the internal communication response to COVID-19. Our final sample included 12 practitioners in leading communication positions, 11 communication officers, and 9 interviewees in different administrative positions such as deans, area managers, or practitioners in charge of student affairs.

Interview guide

The interview guide was comprised of 30 open-ended questions with some follow-up questions for clarification when needed. Questions were developed in the six categories of (1) interviewee position and tasks, (2-5) the four main dimensions of the IDEA model (internalization, distribution, explanation, action), and (6) questions concerning the interviewees risk communication competence as well as preliminary lessons from the COVID-19 pandemic (see Figure 1). Concerning *internalization*, we asked, “In what ways do you use imagery/phrases as exemplars to get attention from your stakeholders or to make sure they behave appropriately?”, “What (other) measures do you use for people to understand that they could be personally affected?” or “How do

you make sure that you get the attention of your stakeholders when you communicate about the COVID-19 pandemic?”. To understand message *distribution*, we included questions such as “What are the main platforms of communication your organization uses to address stakeholders who are potentially affected by COVID-19?” or “Which communication channel would you say has been the most effective in reaching your stakeholders?”. Questions reflecting the *explanation* dimension included “In terms of literacy, how do you communicate your messages to different stakeholders to make sure they are understood?” or “How – if at all – do you edit or adapt the messages you get from your sources?”. Regarding the *action* dimension, we asked, for example, “What instructions – things to do and things not to do - have you given to your stakeholders so far regarding the risks that stem from the COVID-19?”. To understand the participants’ risk communication competence, we asked for their educational background and whether they rely on any models, theories, books, personal experience, or if they participated in previous trainings/workshops on risk and crisis communication.

A pretest was conducted with six communication practitioners at different types of organizations. As a result, the wording of some questions was refined to facilitate understanding, to reduce redundancies, and to avoid survey fatigue. The pretest data was not included in the final sample and analysis. All interviewers (21) were trained by the main researcher for several months to fully understand the questions, the theoretical background, and to react to interview situations with follow-up questions.

Data collection and analysis

All interviews were conducted between late June and early August 2020. Interviews lasted from 18 minutes (Canada 1) to 1 hour and 48 minutes (Indonesia 1) ($M = 48\text{min}$). At the beginning of each interview, participants were briefed about the purpose of the study, the anonymization of interview data, and asked for consent to record the interview.

Interviews were conducted and recorded via Webex or Skype. Recordings were transcribed using a smooth verbatim transcription (Mayring, 2014). Interviews that were not conducted in

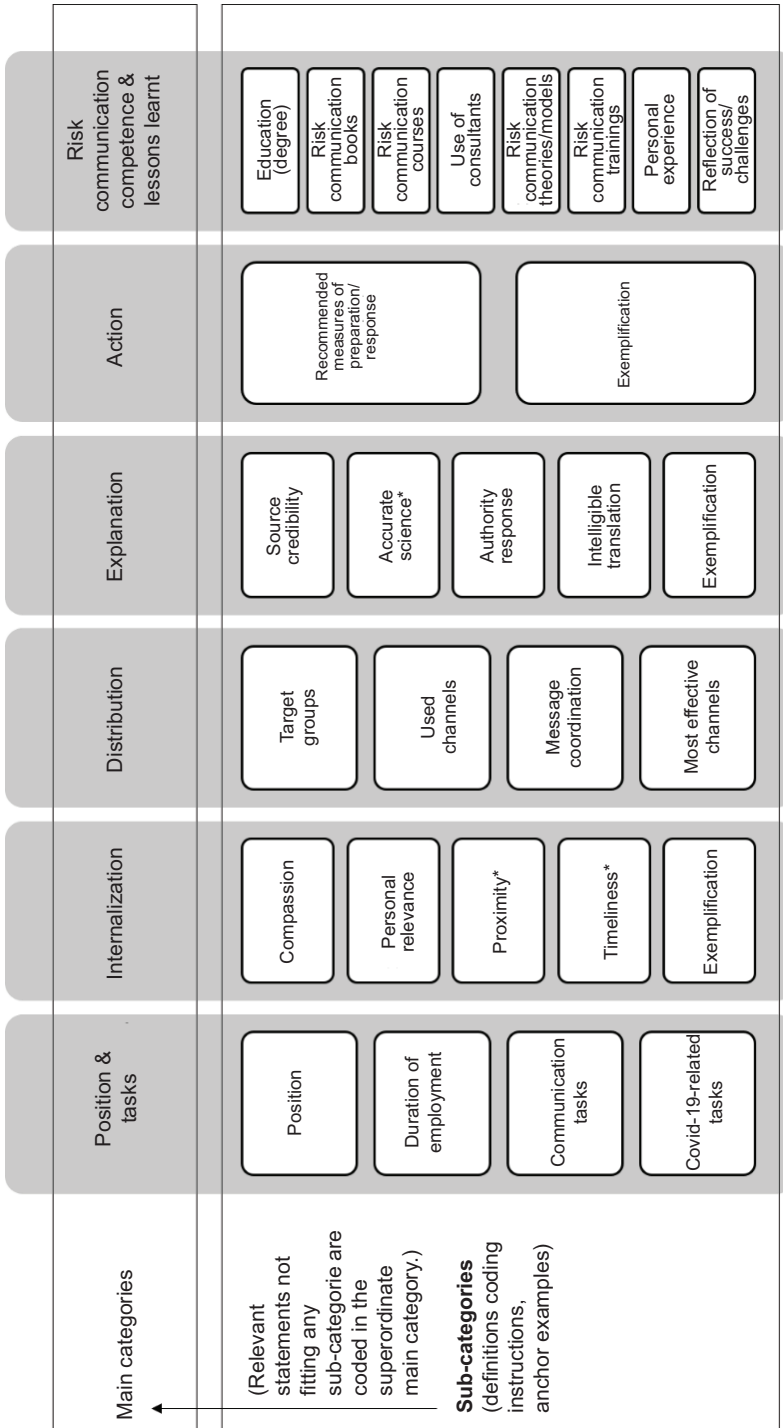


FIGURE 1 Category system for coding interview transcripts based on the IDEA model

English were translated into English by the respective interviewers, who were either native speakers or C1 proficient in both languages. Three participants (Brazil, Bulgaria, France) refused to be interviewed orally and provided written responses. Despite the methodological limitation, we decided to include these answers to enrich the dataset.

To analyze text, Mayring (2014) differentiates specific techniques of qualitative content analysis such as summarizing, inductive category formation, explication (context analysis), structuring (deductive category assignment), or mixed techniques. Since we followed a best practice approach using the IDEA model, most of the coding was done deductively using the structuring approach. This entailed the steps of (1) defining a theory-based category system; (2) defining a coding guideline; (3) preliminary material run-through, adding anchor examples and coding rules; (4) potential revision of the categories and coding guidelines after 10%-50% of the material; (5) final coding and (6) analysis (Mayring, 2014).

The coding rules were based on the main dimensions of the IDEA model and corresponding subcategories, including definitions and coding instructions (Figure 1). Whenever participants mentioned a relevant aspect of a main category that did not fit into any subcategory, that text passage was coded in the superordinate category. This first coding process was done by two coders including the main researcher using the software MAXQDA (Kuckartz & Rädiker, 2019).

Both coders were experienced researchers with background in risk and crisis communication. To establish coder agreement, a first run-through of one interview was done simultaneously to discuss each coding decision. After agreeing on the main principles of applying the coding scheme, further three interviews (10%) were coded separately and subsequently compared. Disagreements were resolved through discussions and input from the primary author. After establishing sufficient agreement, the final coding of all the material was started. To ensure validity and accuracy of coding decisions, the code assignments were later reviewed by two co-authors of this article, who are international experts in the field and – to avoid bias – were not involved in the process of data collection and coding.

To further aggregate the data in a second step, all text segments coded in the main and subcategories were reviewed and further summarized or counted by the primary author and a second coder. Disagreements were resolved after reviewing and comparing results for four interviews with an average coder agreement of 92%. More specifically, we examined each coded interview regarding the most frequently coded categories and decided whether that category of instructional risk message construction was assessed as (a) important in general; (b) stressed as *not* important; (c) whether it was actually *applied* or (d) explicitly *not applied*. The following categories were included in this process because they were found to be the most relevant after the initial coding step: Internalization (compassion, personal relevance), explanation (credible sources, intelligible translation), and distribution (message coordination). Further aspects were counted in terms of frequency of mention (e.g., recommended measures of action, mentioned credible sources, target groups, used risk communication guidelines).

Results

Based on a thematic analysis of interview data, we present results as they reflect each research question. That is, how instructional risk messages were designed and disseminated, what informed decision-making, and a Global South and Global North comparison. As a first step, however, we aggregated comparable subcategories of internalization, explanation, and distribution coded for importance/unimportance and use/non-use in risk messages to facilitate relative comparison, including the participants' mention of communication channels, target audiences, and recommended response actions (see Figure 2). Explanation and its subdimensions were more often emphasized as important and more frequently used by practitioners than internalization. However, the participants in several countries more often explicitly indicated *not* using certain elements of explanation and justified it in different ways compared to internalization. In all interviews ($N = 31$), practitioners confirmed the use of at least one communication channel for message distribution ($M = 5.71$, $SD = 2.22$) and addressed at least one specific target group ($M = 2.94$, $SD = 1.06$). In addition, action recommendations were explicitly used by all of

them when creating COVID-related risk messages ($M = 4.00$, $SD = 1.55$). The *simultaneous* use of IDEA message elements, sources, target groups, and distribution channels varied across participants and countries/regions (Table 2). An absence of some message elements or forms of distribution was found in 10 interviews, mostly in the categories of personal relevance and impact (internalization), message coordination and dissemination (distribution), and use of credible sources (explanation). The following sections describe the findings in more detail as they relate to each research question.

Design and dissemination of instructional risk communication messages (RQ1)

We report the findings regarding this research question according to each of the four elements of the IDEA model. These are internalization, distribution, explanation, and action.

Internalization

The smallest number of text segments were identified as representative of the use (81%) or importance (55%) of internalization. A deeper analysis revealed that 39% of the interviewees claimed to include statement about *personal relevance* in their risk messages (see Figure 3). Reasons ranged from reminding audiences of COVID-19's potential impact on them and their loved ones to managing politically polarizing misinformation. Canada₁ explained, for instance, how they highlighted personal relevance on their website via "a number of FAQs and questions and answers on a range of different subjects that can affect our stakeholders." Other respondents reported using personal relevance to counter misinformation fueled by politicization of the pandemic. Cameroon₁, for instance, indicated that they "remind our stakeholders that COVID-19 is real, many thought it was political and something for Europe and America, but we make them know that it is real and try to wipe out the political argument mentality which many people had about the virus."

Although 39% of the interviewees reported including personal relevance statements in their messages, only 29% commented about the importance of doing so. Those that did address its

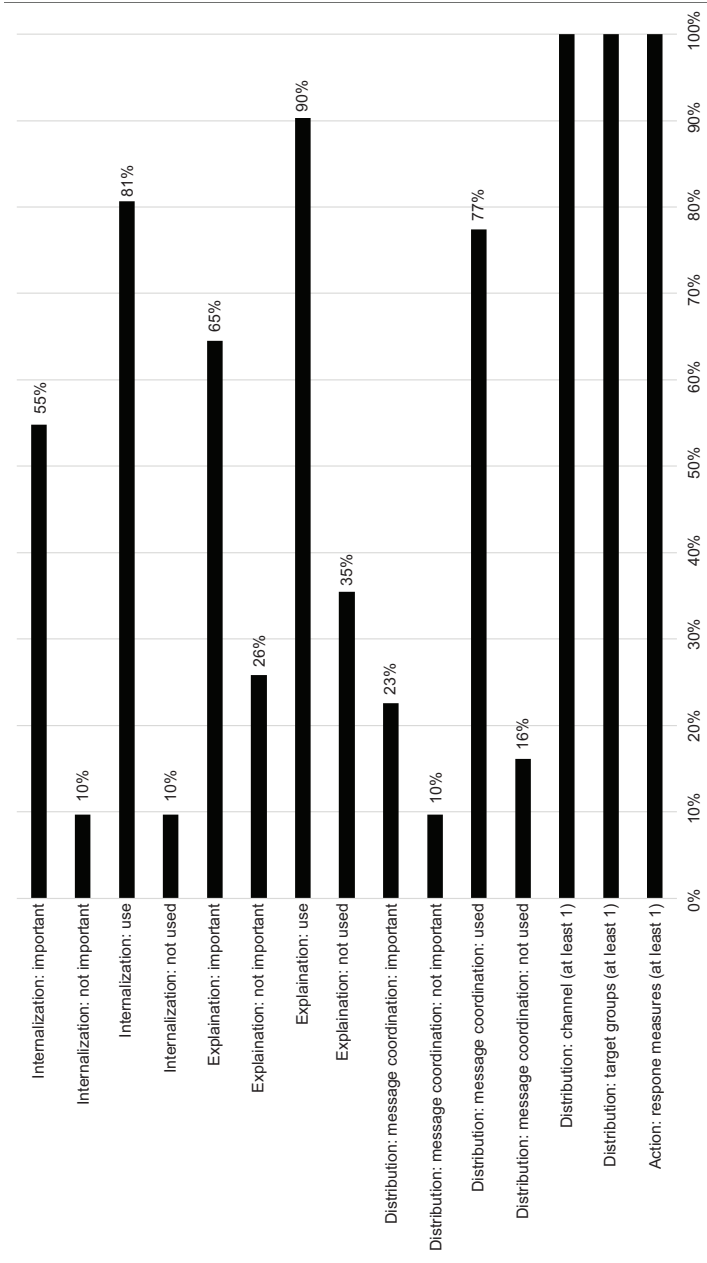


FIGURE 2 Perceived importance and use of elements in instructional risk messages by practitioners

importance made comments such as “we try to talk about it so that the public recognizes what is happening in their daily lives and how it is affecting their lives” (Brazil₁) and “the message must be directly related to the students or lecturers” (Vietnam₂). In some cases, interviewees acknowledged the importance of personal relevance, but claimed that including such statements in their instructional risk messages was not necessary because “this thing was understood from the first moment, we did not need to raise awareness of the seriousness” (Italy₂₋₃). Still others came to realize the importance of including personal relevance based on feedback from their target audiences. Russia₁, for example, argued that “personal involvement is very important. That is the thing that we missed in the beginning: I even received a complaint through the red button.”

Although expressing *compassion* was deemed important by 29% of the interviewees, only 23% explicitly confirmed to use it in their risk communication during the pandemic. Those that did so, argued as China₁ did that “you have to understand what the student’s emotional appeal is and what the student’s emotional needs are, and then have an empathetic ability to communicate with them, so that you can get into their heart.” Similarly, Canada₃ emphasized the need to discuss the topic “in warm language to say, you know, we’re all a community and together we’ll get through this.” Many of the respondents that discussed compassion as important focused on university leaders reassuring audiences that they “are very important to all of us” (USA₂), that the university is prioritizing their safety, and that they [university leaders] are here to help faculty, staff, students, and their loved ones deal with both physical illnesses and mental issues. As El Salvador₁ said, “we have psychologists from our psychology faculty answering people’s questions about mental health, anxiety processes, depressive processes, how to manage loneliness.”

Some interviewees acknowledged that their communication may have overlooked compassion early during the pandemic. As Russia₁ explained, “there was a lack of understanding of what was going on and people reacted very vehemently to all news. Probably, we did not have enough supportiveness and positiveness in that time.” A few respondents also mentioned using *proximity*

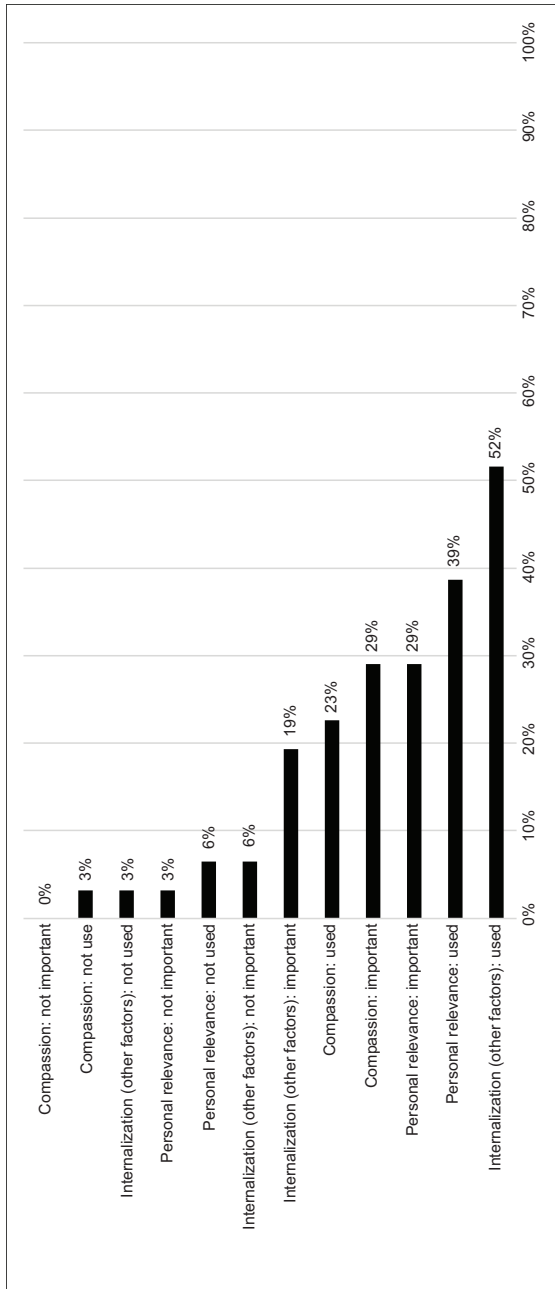


FIGURE 3 Perceived importance and use of internalization elements in instructional risk messages

and *frequency* internalization strategies. China¹ argued, for example, “if you are in Germany, and another person is in England, when something happens in Germany, I will definitely send it to you in Germany first” and emphasized that “we haven’t been afraid to repeat, repeat, repeat, repeat, repeat” messages about an actual threat to students at their university.

Distribution

Because these instructional risk messages were mainly targeting students (97%), academic faculty (97%), and non-academic staff (87%), it is not surprising to report that the communication channels used most often were university websites and email; followed by some use of social media, personal communication, and video conferencing (see Figure 4). When asked what they believed to be the most effective channels for reaching students, faculty, and staff, nearly half (42%) of the interviewees mentioned email and nearly a quarter (23%) mentioned the university website. Germany¹, for example, pointed out that “the email always contains very, very detailed information about what is going on now. There is then approximately everything listed” and Vietnam¹ claimed that “the communication was most effective through news articles on the website.” A few respondents mentioned social media platforms in general (16%), as well as Facebook (16%) Instagram (6%), or WhatsApp (13%) specifically. Poland², for instance, mentioned that “social media channels [are] definitely most effective for the students” while Pakistan¹ more specifically addressed Facebook as being “very effective because of the two-way communication and the discussion stakeholders generate on that medium.” Cameroon¹ said “WhatsApp to me has been the most effective since it was very handy and everyone can easily access it.”

The actual *coordination of messages* with other institutions or various internal entities was mentioned explicitly by 77% of the participants. As one interviewee exclaimed, “for the public health messages we are dealing with the local health agency, national health agency” and “we are trying to coordinate and to be coherent with the other universities and high schools, engineering schools” (France³). Regarding whom they coordinated with, university administrators/management (26%) and national health agencies

(26%) were mentioned most often, followed by national/regional/local governments (13%) and university health experts (10%).

Although most respondents indicated that they coordinated with others about their risk messages, some reported not doing so at all (16%) and many of them claimed they chose not to do so because it was not important (10%). Canada³, for example, reasoned that “because we’re not trying to deliver messages that aren’t ours to deliver, we don’t have to coordinate with other ministries or with other institutions.”

Explanation

Regarding explanation, nearly all interviewees (87%) argued that it was important to rely on credible information sources. For example, El Salvador¹ said “it is important that the information comes from reliable sources and that’s why we have worked with the WHO.” Moreover, several interviewees stressed the need to be transparent about which sources they were relying on for information. Indonesia¹ exclaimed, for instance, that “it is important for us to always put the references under the information.”

While most participants (68%) spoke about the need to translate jargon, one third indicated that they did not make efforts to cite credible sources or intelligibly translate information (32%). Some went so far as to say they did not find it very important to do so (26%) (see Figure 5).

As France³ explained, “there is information about public health, and this information that are given by the government and the regional agencies and the hospitals [...] and the university’s president and his team is listening to this and adapting the messages.” Some interviewees such as Poland² found the use of respected authorities such as the institution’s rector effective to get students’ attention: “I think it was getting their attention because it’s not very often that our rectors sit and answer the questions.” Italy¹ described how doctors were used as credible sources in a video demonstrating how to use masks. Bulgaria² acknowledged the efforts of the government and used it as a source to justify measures on-site: “The government and the relevant institutions did their best for this. The university tried to stick to the messages that came from them and refer to them in its decisions.” Canada² used the materials (e.g., posters, images) provided by the

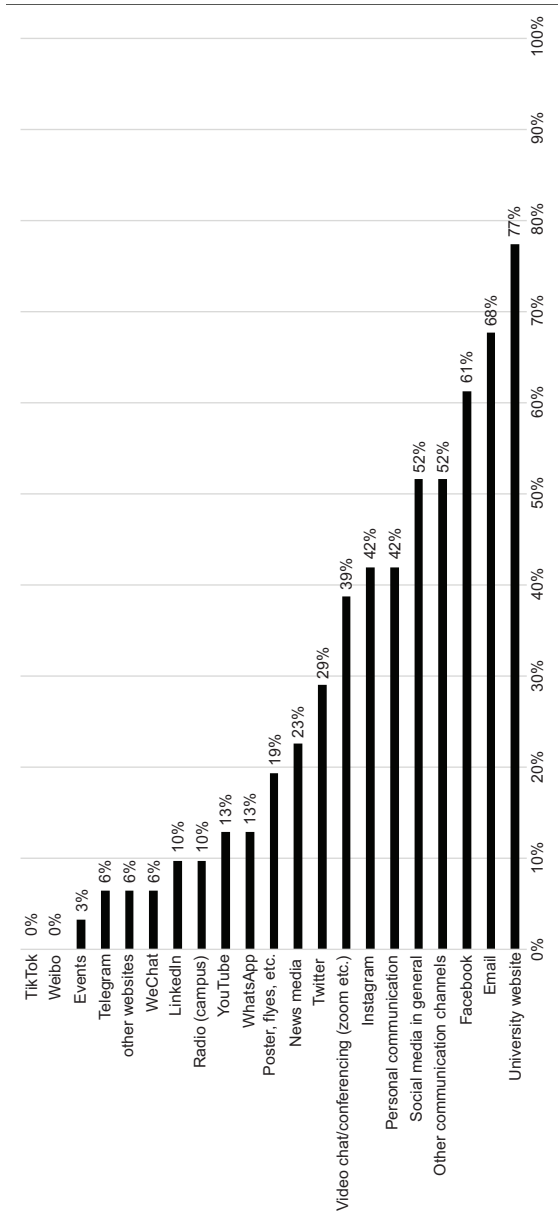


FIGURE 4 Frequency of distribution channels for instructional risk communication during COVID-19

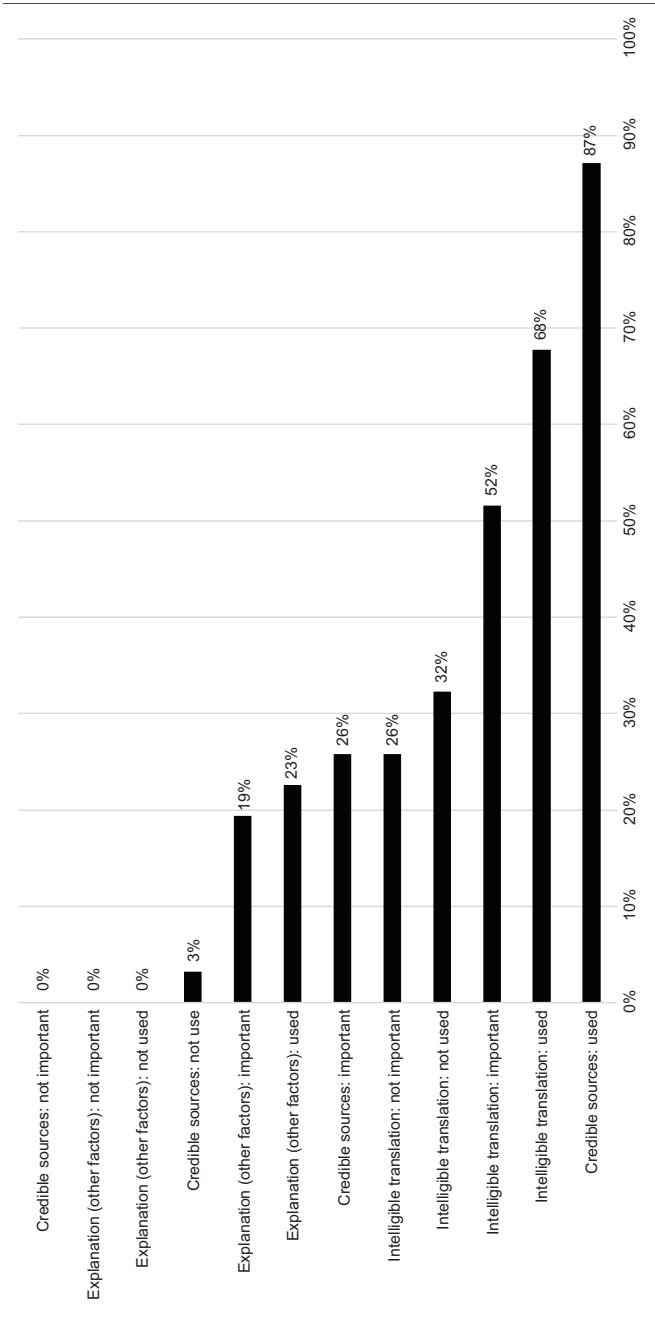


FIGURE 5 Perceived importance and use of explanation elements in instructional risk messages

regional government and “basically just repurpose their instructions.” El Salvador¹ stressed the significance of the WHO, and not their national government, by saying “We always, always used the WHO as a source. We have not used any source other than the WHO because it was the official source.” Some universities also used their own faculty when those faculty had expertise in health matters. Pakistan², for example, commented: “We had interviews of our virologists or scientists. We requested them because they are scientists.” Cameroon¹, El Salvador², France², and Italy²⁻³ offered similar statements. Cameroon¹ pointed to foreign news media as a source that influenced their message design: “[...] especially foreign media from where the virus originated and it gave us more perspective on how to better communicate to our stakeholders.”

Although an array of sources was mentioned by the various respondents, the most frequently named were national governments (42%), the WHO (39%), and national health agencies (35%) (see Figure 6). Nearly a third (29%) also mentioned the university’s own health experts such as virologists, doctors, or mathematicians as credible sources they relied on for information.

There was some dissent among interviewees regarding *intelligible translation*. Poland², for example, agreed that translating technical terms is important: “that’s how I adapt these complicated and scientific terms. And also, I try not to use the scientific terms.” The Nigerian participant stressed the importance of “the essentials that can catch people’s attention and they can understand it.” Vietnam² explained “stories must be practical, not just purely data [...] It is the real-world experience of the people in that situation.”

El Salvador² described the specific challenge they had to overcome when translating scientific facts to their audience this way: “[...] it was difficult to see in the graph what we were telling people, you had to really have a mathematical and trained eye to see what we were talking about in that graph, so we made a series of two videos explaining to people why we were affirming what at first glance could not be seen in the graph and I think that was something that people valued.” Similarly, Pakistan¹ explained that “if we use these terms due to some necessity, then we must define these terms. So, it could be easily understood. [...] prepared video

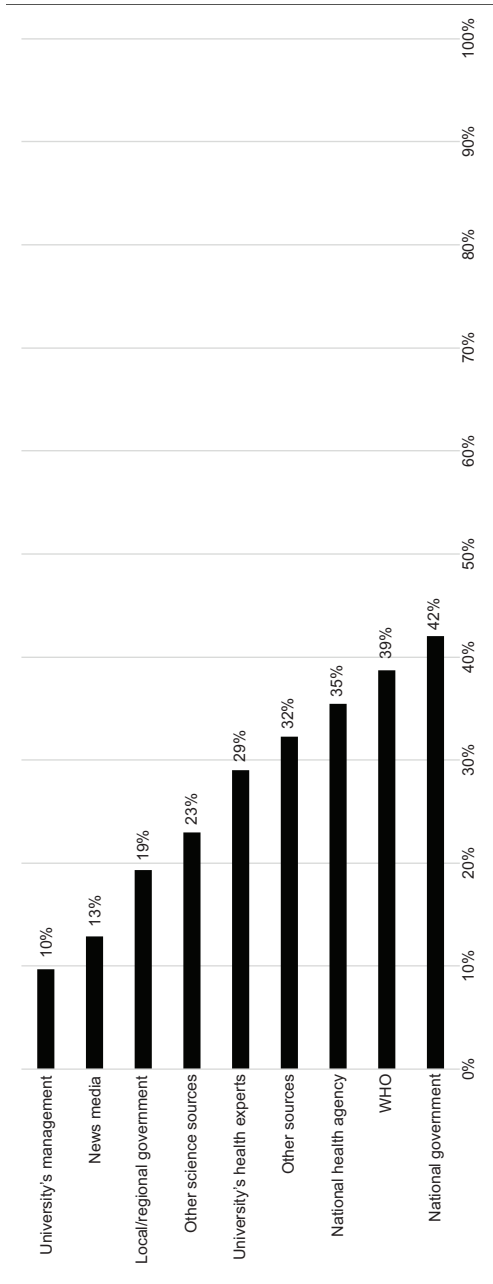


FIGURE 6 Frequency of credible sources used in explaining COVID-19

messages by our own faculty members and biologists by using quite easy and understandable language in terms.”

Although many interviewees reported strategic efforts to translate scientific jargon and information, some reported intentionally not doing so. For example, Germany² answered the question of whether they translated technical language with “No, we actively did not. I don’t remember a case in which we explained terms [...] When I retweeted their tweets, I naturally transported their explanations with them.” In other cases, participants reported using pre-designed messages by the WHO (El Salvador¹) or by their government (France¹, Vietnam²), which they perceived as sufficiently accurate, comprehensible, and clear. Canada³ said they would simply point to the expert sources when people had health-related questions. China¹ implied that because of the hierarchy, some information needs to be used in an unedited way because “if it is something required by the university, it must be conveyed to the students with the same content as how the university superiors publish it.”

Other interviewees agreed that intelligibility was important, but also reported a perception that their audience was sufficiently educated to comprehend the information they were presenting. Germany¹ indicated, for example, that “the things we had to communicate, and the actions that have been taken now at the university, they’re all not so incredibly complicated or with technical terms.” Similarly, Poland¹ argued that “we are a technical university and the specific terms in COVID communication are not so difficult to understand.” This assumption also guided Canada¹ who claimed that “Canadians in particular and our student body and faculty and staff are fairly savvy and intellectually capable of understanding terms that are used in mainstream media and that are being reinforced by our communication platforms [...] We typically don’t edit it.”

Action

All participants (100%) provided at least one behavioral recommendation for self-protection. Most interviewees mentioned personal hygiene measures such as washing hands (74%), social distancing (68%), and wearing masks (68%) (see Figure 7). Specific

instructions for attending remote classes (23%) and avoiding group gatherings or parties (26%) were also offered by a good number of participants. Instructions for going to the doctor when detecting symptoms, ventilating rooms, and organizing workspaces in their homes were mentioned, but rarely. Cameroon₁, for example, mentioned that one of the instructions was “basically the washing of hands, sanitizing where there is no water.” Bulgaria₁ said that “most of the things that we communicate at this point are maintain social distance.”

The recommendations about wearing masks were inconsistent, particularly during the early stage of the pandemic when scientific experts were not yet sure how COVID-19 spread. These inconsistencies were reflected in El Salvador₁'s comment that: “In the beginning, when there was a back and forth between yes and no, and this and that regarding the use of masks, we had a special section on that.” The recommendations about mask-wearing were also politicized in countries like the US. That said, however, Vietnam₁ stressed that “in Vietnam, wearing a mask is taken seriously.” And Italy₁ explained that, at their university, specific instructions were recommended “for each type of mask the characteristics and what they are used for and how they should be used.” Italy₁ also reported using a “video made by a competent doctor who has illustrated in a practical visual way with a small performance the use of the mask.”

Other instructions referred to staying informed and getting regular updates (Germany₁, Canada₁), how to support oneself psychologically (Russia₁), how to improve health/immunity at home (China₁), how to enter and/or leave the university (Bulgaria₂, Indonesia₁), how to identify symptoms (Cameroon₁), how to use footbaths at the entrance (El Salvador₁), and how to take care of parents and grandparents (Poland₂). China₁, for example, mentioned “the information is also about how to improve the body's immunity at home, and then live a healthy life” and Indonesia₁ that “the protocol is very specific like how you enter the university's offices and classrooms.” Poland₂ stressed that “we informed them if they have to care about the parents about the grandparents.”

We also identified a theme related to the style used when making recommendations for self-protection. Many practitioners

(52%) talked about encouraging rather than mandating compliance. Some interviewees (16%) went so far as to explicitly disapprove of using an imperative command-style tone of instruction when making recommendations. Nigeria¹, for instance, said “we encourage them to do those things that will promote hygiene” and Indonesia¹ stressed that “instead of using the forceful instructional messages such as ‘do this and don’t do that,’ we couch the message in language such as ‘let’s take care of this.’” Canada², Bulgaria¹, and Germany¹ offered similar arguments. France³ summarized it by saying “we don’t want to be too intimidating [...] and we have to appeal to their sense of responsibility.”

To summarize our findings regarding the design and dissemination of instructional risk communication messages (RQ₁), some respondents appeared to follow best practices according to the IDEA model, however, many more did not. To clarify, less than half of those interviewed for this project included elements of internalization (primarily personal relevance and compassion) in their messages and a substantial number did not report doing so at all. Moreover, many of the respondents that included aspects of internalization also indicated that doing so was either not important or only came to realize the importance of doing so as the pandemic waned on. Regarding distribution, respondents reported relying mostly on email for sharing instructional risk messages and, although most respondents reported to coordinate messages, only a quarter of them perceived coordination as being actually important. In terms of explanation, many respondents indicated that they relied on credible sources; however, many did not seem to believe it was necessary to translate messages for their target audiences, believing that the information would be understood without translating it. Regarding action, most of the interviewees mentioned including recommendations about handwashing, social-distancing, and mask-wearing. Some did report inconsistent recommendations early on based on insufficient understanding about how the virus spread and, in some countries, due to politicization of recommendations. Also, many respondents reported using encouraging language rather than mandating recommendations. Essentially, although some interviewees did report adherence to reporting based on IDEA model best practices, the

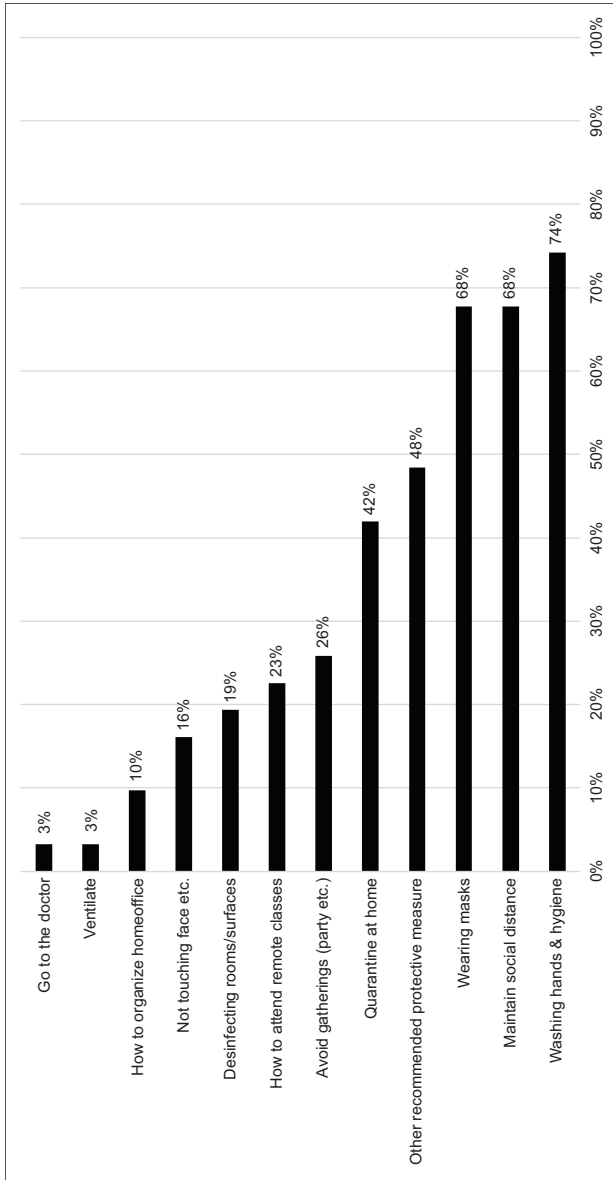


FIGURE 7 Frequency of mentioned action recommendations to target groups during COVID-19

findings were underwhelming, which leads to the next research question, that is, what informed their decisions?

Risk communication competence (RQ2)

To answer this research question, we sought to discover what respondents used to make decisions about how they designed and disseminated instructional risk communication messages. Were they themselves educated experts in risk and crisis communication? Did they rely on research-informed best practices or theory to make decisions? If they did not rely on research or theory, why not? The following paragraphs summarize our findings regarding these questions.

In terms of expertise, a slight majority of participants (61%) reported having a degree in communication or a related field and most (77%) relied on personal experience when designing and disseminating instructional risk messages on COVID-19. Canada₂ even referred to personal experience as the better source of decision-making by claiming “I mean, I’ve been in crisis communications for 30 years.” The participants in this study rarely reported relying on specific courses, trainings, books, or other guides for informing their risk or crisis communication decisions (see Figure 8). Italy₁, for example, mentioned that “when I took office with the manager of the area, we did a training course for the communication of the crisis” and Pakistan₁ found the “WHO risk communication and community engagement action plan guidance for Covid-19” very helpful.

A few participants (26%) did mention theories or models that in some way guided their decisions. Cameroon₂, for instance, said “we adopted the two-step flow theory, we understood that the students have influence and turn to believe more on their friends than the faculty and staff, so we had to get the student leaders and used them as ambassadors.” Indonesia₁ mentioned “publications process theories” and Pakistan₂ referred to the “two-way communication model of PR.” One respondent (USA₁) reported using “instructional communication in my thinking. I certainly have used exemplification theory [and] a lot of what I used to guide my own work is the crisis and emergency risk communication, the CERC material, because it is just so comprehensive.” That said,

however, others—such as Canada¹—questioned the use of theory to guide decision-making in any way by pointing to what they described as a “great difference between theory and practice.”

Others justified not using any theories or models to guide decisions in practice based on time constraints. Bulgaria², for example, exclaimed that “there was no time.” Finally, after acknowledging time constraints, some (e.g., France³) affirmed that, given the challenges of the ongoing pandemic, “in the future, yes, we have to modernize some of our way of doing to improve” practice by using more theory.

Regarding RQ₂, then, participants in our project tended to consider themselves experts based on their education in communication or a related field; or based on their years of experience as a practitioner. Most did not rely on research or theory to guide decision-making, and some denounced it. Others reported time as a constraint and suggested doing a better job informing practice with theory and research in the future.

Global North and South response comparisons (RQ₃)

When comparing practitioners from the Global North (Bulgaria, Canada, China, France, Germany, Italy, Poland, Russia, US) with the Global South (Brazil, Cameroon, El Salvador, Indonesia, Nigeria, Pakistan, Vietnam), a few notable differences emerged.

Regarding internalization, participants from the Global South were more likely to stress the importance of personal relevance (45%) and to use this element in risk messaging (73%) than practitioners from the Global North (20%, importance and use). Vietnam¹, for example, stressed that “the instructional messages should emphasize [...] the seriousness of the situation” and Pakistan² stated “the necessary information for the people is how this virus can affect them.” Brazil¹ also emphasized personal relevance: “We try to talk about it so that the public recognizes what is happening in their daily lives and how it is affecting their lives.”

Regarding distribution, respondents from the Global South tended to rely on a variety of channels compared to those residing in the Global North. Those from the Global South reported using WhatsApp (36%), campus radio (27%), YouTube (27%), and printed materials (e.g., posters) (36%). Some of these channels

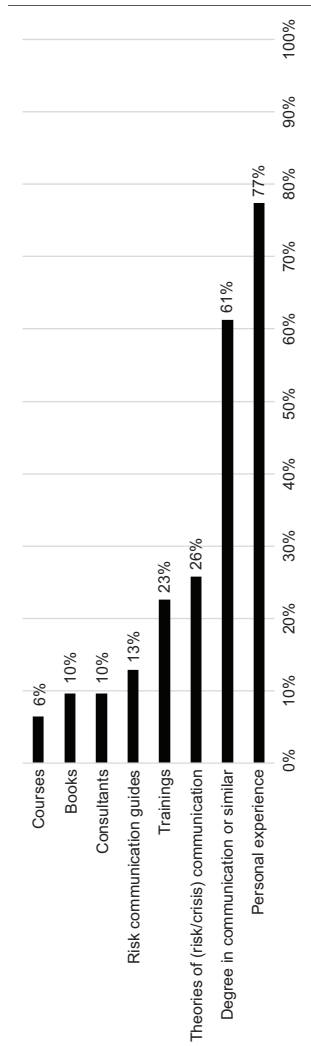


FIGURE 8 Sources of risk/crisis communication competence of interviewed practitioners

were mentioned by Cameroon¹, for example: “We have the school radio which we use; also, we have local radio stations in the university city which we use, the university website and the WhatsApp groups and of course the posters.” El Salvador² stated that they “worked a lot with videos and podcasts during this pandemic.” The use of these diverse communication channels was not reported by participants in the Global North who relied primarily on email (65%) and University websites (85%). WhatsApp (0%), campus radio (0%), YouTube (5%), and printed materials (10%) were rarely used, if at all.

Regarding message coordination, a sizable minority of the practitioners in the Global North mentioned not actively coordinating messages (25%) and even claiming that doing so was not important (15%) both within and outside their institution. In response to the question whether they coordinated messages, France¹ said “Not really. We were in charge of our own communities and we, no, I don’t see what it could be.” Canada³ also did not perceive message coordination to be important: “Because we’re not trying to deliver messages that aren’t ours to deliver, we don’t have to coordinate with other ministries or with other institutions.” No such statements (0%) about the unimportance of message coordination or about not using coordination were found among participants from institutions in the Global South, where 82% reported how they coordinated messages and 18% also explicitly mentioned doing so as important. More specifically, respondents from the Global South (36%) mentioned that they coordinated messages with the national government much more often than participants from the Global North (10%). Participants from both the Global North (15%) and Global South (9%) mentioned coordinating with local/regional governments. Cameroon¹, for instance, stated that “We usually coordinate with the ministry of public health” as example for coordinating with the national government. France³ explained that for “the public health messages we are dealing with the local health agency [and the] national health agency.” The university of USA¹ “seeks to coordinate its messages with both the state government [...]and the city government.”

Regarding explanation, practitioners from the Global South mentioned the WHO more often as a credible source (64%)

compared to the Global North (25%). Pakistan², for example, mentioned that “we got authentic information about [the] corona virus from the World Health Organization.” Participants from the Global North, on the other hand, more often used local or regional governments (30%) as a credible source than those from the Global South (0%). In this context, Canada³ stressed the importance of provincial health officers: “They provide all the information about where we’re at with cases at the province and all the guidelines for the reopening or the slowing down of community.”

More Northern than Southern practitioners offered explicit justifications supporting their argument that intelligible translation is *not* a crucial factor in message design (35% vs. 9%). Poland¹, for example, explained that “we are a technical university and the specific terms in COVID communication are not so difficult to understand” and Russia¹ “there was no need for such explanations from us – this information was published on so many sources.” The importance of intelligible translation of information was more often stressed by respondents from the Global South (64%) than by those from the Global North (45%). Cameroon², for example, stated that “your messages must be short and simple, straight to the point and unambiguous” and Brazil¹ claimed that “we try to translate or reformulate, in simpler words, what has been said so that everyone has access and knowledge of a certain subject.”

Regarding action, most recommendations were mentioned with similar frequencies by practitioners from both regions. In the Global North, instructions to avoid gathering were found slightly more often (30%) than in the Global South (18%), whereas Southern practitioners mentioned quarantining at home (55% vs. 35%) and not to touch one’s face (36% vs. 0%) more often than Northern participants. USA², for example, said that “we are also telling people that they should not congregate in large groups of course.” El Salvador¹ instructed to cough and sneeze “in a certain manner” and to not “touch your mouth, nose, etc.” The thematic analysis also revealed that respondents from the Global North stressed the use of a recommendation style of instructions (60%) more often than those from the South (36%). Canada² emphasized that “the instructional is not orders, it’s more information so that people can process and take the appropriate steps really on

their own” and France 3 explained that “we don’t want to be too intimidating.”

Counting the *use* of all the elements of the IDEA model used by HEI practitioners in crafting their risk messages on COVID-19 (see Table 2) revealed that the participants from the Global South used IDEA model elements more often than Global North participants. Northern countries, especially China², France¹, Germany¹, Germany², and Poland¹ scored low compared to the overall average and Southern countries. In the Global South, El Salvador², Nigeria¹, and Vietnam¹ scored relatively low. A comparison of the use of individual IDEA elements revealed that the main shortcoming was the lack of internalization in risk messages reported by the participants in all countries, but more so in the Global North.

Finally, a noteworthy commonality across participant responses emerged regarding what informed decision-making. There was a strong reliance on personal experience among most practitioners across regions (77%), while the use of risk communication guides, books, theories/models, or trainings was generally very low. Brazil¹, for example, said that “I use more of my market experience that I have acquired over time” and similarly Bulgaria¹ claimed that “we do rely on experience because, you know, every crisis is, in ways similar to other one.” Not using any specific books or documents to inform risk communication practices was exemplified by Vietnam¹ as well: “No, I don’t have any materials for reference or join any courses but just learn from my experience.”

Discussion

Several conclusions and implications arise from this analysis of HEI communication during the first phase of the COVID-19 pandemic. First, regarding the IDEA model holistically and in response to RQ¹, practitioner communication emphasized action and dissemination over internalization and explanation. Intuitively, many argued that stakeholders were already aware of the COVID-19 virus and its relevance to them and their health. Thus, the respondents in this study seemed to believe it was not necessary to include aspects of internalization or explanation in their instructional risk messages. Given this assumption, it is also not surprising that most study participants emphasized communicating

TABLE 2 Frequencies and means of simultaneous use of IDEA model elements by participant and region

Region	Participant	Internalization: Use ^a	Explanation: Use ^a	Explanation: #Credible Sources ^b	Distribution: Message Coordination	Distribution: #Coordinated Institutions ^b	Distribution: #Channels ^b	Distribution: #Target Groups ^b	#Action measures ^b	IDEA Elements (average) ^c
Global	Bulgaria1	0	2	3	0	0	8	4	4	2.63
North	Bulgaria2	1	1	3	1	3	7	1	3	2.50
	Canada1	1	2	4	1	1	7	2	5	2.88
	Canada2	1	2	3	1	1	6	5	4	2.88
	Canada3	1	2	2	0	0	9	2	4	2.50
	China1	1	1	2	1	2	4	3	2	2.00
	China2	1	2	3	1	1	3	1	2	1.75
	France1	0	0	0	0	0	2	3	4	1.13
	France2	1	1	2	1	2	4	4	7	2.75
	France3	1	2	3	1	4	8	4	6	3.63
	Germany1	1	0	0	1	2	6	2	3	1.88
	Germany2	0	0	0	1	2	4	2	2	1.38
	Italy1	0	2	3	0	0	7	4	3	2.38
	Italy2&3	2	3	3	1	3	9	3	1	3.13
	Poland1	1	1	2	1	1	2	3	3	1.75
	Poland2	1	3	1	1	2	5	3	5	2.63
	Russia1	2	1	0	1	1	7	3	5	2.50
	Russia2	1	2	4	0	0	6	2	4	2.38
	USA1	1	2	3	1	1	6	4	4	2.75

(continues)

Region	Participant	Internalization: Use ^a	Explanation: Use ^a	Explanation: #Credible Sources ^b	Distribution: Message Coordination	Distribution: #Coordinated Institutions ^b	Distribution: #Channels ^b	Distribution: #Target Groups ^b	# Action measures ^b	IDEA Elements (average) ^c
	USA2	3	3	2	1	3	4	5	5	3.25
Global	Brazil1	1	2	4	1	1	4	3	2	2.25
South	Cameroon1	2	2	4	1	1	6	3	4	2.88
	Cameroon2	2	2	3	1	2	5	2	5	2.75
	El Salvador1	2	2	2	1	2	7	4	7	3.38
	El Salvador2	0	3	2	0	0	8	2	2	2.13
	Indonesia1	2	2	3	1	3	6	4	4	3.13
	Nigeria1	0	2	4	0	0	3	3	5	2.13
	Pakistan1	2	3	3	1	3	7	3	5	3.38
	Pakistan2	2	3	3	1	3	11	3	3	3.63
	Vietnam1	1	1	2	1	2	3	1	4	1.88
	Vietnam2	1	1	2	1	2	3	3	7	2.50
	Total Mean	1.13	1.77	2.42	0.77	1.55	5.71	2.94	4.00	2.54

Note. ^a Frequency of used elements of internalization (personal relevance, compassion, other) and explanation (credible sources, intelligible translation, other) ranging from 0 to 3

^b Sum of mentioned sources, institutions, channels, target groups, and action measures

^c Average (mean) of all columns; Color codes: white = not mentioned at all; light grey = frequency below column average; dark grey = frequency above column average

action steps to protect oneself and others. However, they did so inconsistently due to gaps in science-based understanding and political influences early on in the pandemic. Had they been able to offer accurate and certain science-based explanations earlier, it is plausible that the action steps recommended would have been more consistent, as well. Interestingly, practitioners also reported encouraging action steps rather than proposing them as directives. Although previous research on protective actions during disasters such as earthquakes (e.g., drop, cover, hold on) proposes specific instructions as directives (e.g., D. D. Sellnow, 2017; L. M. Jones, et al., 2019), offering them as encouragement rather than directives may provide the rhetorical sensitivity needed to effectively connect instructional risk messages with polarized audiences during politicized crises (Sellnow & Sellnow, 2024). Regardless of whether actions are encouraged or mandated, however, existing research consistently reveals that instructional risk communication is most effective when it does not privilege one element of the IDEA model over the others. These practitioners may have been more effective had they addressed internalization and explanation more often throughout their communication (Frisby et al., 2014; D. D. Sellnow et al., 2017; T. Sellnow et al., 2023). Doing so may have helped audiences better comprehend and see the personal relevance of the action steps practitioners encouraged them to take. They also relied heavily on email and university websites to distribute messages, which previous research confirms as limiting for reaching a wide array of target populations (Biddix et al., 2023; Hussain, 2014; Liu et al., 2015; Wooldridge et al., 2021).

Regarding internalization specifically, the most prominent conclusions stem from perceptions about and integration of personal relevance into messages. Although less than half of the respondents reported using personal relevance, those that did do so emphasized the importance of such content. Interestingly, practitioners from the Global South were far more likely to acknowledge the importance of including personal relevance and integrate it into their messages than those from the Global North. Some respondents from the Global North went so far as to claim personal relevance was not imperative, insisting people already realized their personal vulnerability to the threat. This assumption was

not necessarily correct, however, as misinformation tainted the perceptions of many stakeholders. For instance, many stakeholders were exposed to misinformation claiming the virus was a hoax, a political ploy, or an exaggerated version of the flu (e.g., Imhoff & Lamberty, 2020; Tanase et al., 2022). Ultimately, basing instructional risk communication decisions on assumptions that people understand what the virus is and how it spreads, as well as its personal relevance may have resulted in reduced compliance with recommended actions to mitigate harms and cost lives. Moreover, focusing on action over internalization and explanation may result in short-lived compliance over time (T. L. Sellnow et al., 2019).

Regarding distribution, interviewees reported the need to communicate through a variety of channels to reach students, faculty, and staff. However, in practice, they relied most heavily on email, particularly in the Global North. Other social media platforms or printed materials (e.g., posters) were used by less than half of the participants. The failure to put into practice message distribution through multiple channels is a major shortcoming according to a wealth of research (e.g., Biddix et al., 2023; Hussain, 2014; Liu et al., 2015; Wooldridge et al., 2021), including effective risk and crisis communication best practices research (e.g., Seeger, 2006) and the IDEA model theoretical framework (T. L. Sellnow et al., 2023; Sellnow & Sellnow, 2024).

Additionally, a sizable minority of respondents—coming notably from the Global North—reported a perception that message coordination is not necessary when communicating to their stakeholders. Similar perceptions were not reported by HEIs in the Global South. This sentiment contradicts existing risk communication research regarding message coordination and convergence as it influences trust, comprehension, and compliance both in the short term and over time regarding risk situations and crisis events (D. D. Sellnow, T. L. Sellnow, et al., 2019). It also ignores research purporting the need to share information that is both timely and accurate (Ovie, 2022). In fact, research suggests that nurturing diverse communities of practice prior to a crisis event improves effective coordination of accurate and convergent messages across multiple communication channels during crisis events, particularly those that span time and space (Edwards et al., 2021).

Regarding explanation, those in the Global South reported relying on credible sources to support information shared, most notably the WHO, as well as intelligible translation of technical jargon for diverse audiences more often compared to those in the Global North. Some participants in the Global North claimed their college-educated audiences were sufficiently educated to understand scientific terminology. Research points to the fact that doing so is problematic because scientific literacy and numeracy vary greatly even among highly educated populations (e.g., Brown et al., 2014; Shoots-Reinhard et al., 2020). Even those trained in one field of scientific study may not be familiar with the terminology of other scientific disciplines and fields of inquiry (e.g., Kim et al., 2022).

Perhaps most important is the implication drawn from this analysis that HEI communication practitioners ought to be provided with more education and training grounded in research and theory (RQ2). Clearly, respondents in this study relied heavily on personal experience and intuition rather than making research-based communication decisions, confirming the research-practitioner gap in the field of crisis communication in general (Claeys & Opgenhaffen, 2016). Although some of these rather intuitive decisions were consistent with existing research, others were not. Interestingly, these contradictions between research and practice occurred more often among those working in the Global North than the Global South; however, all could benefit from professional development and training that could serve them better when communicating with stakeholders about risks and crises in the future. In addition, risk and crisis communication scholars should make greater proactive efforts to disseminate and teach their findings to practitioners. The World Health organization, for example, dedicated considerable resources to broadly distributing practical risk communication guidance during the pandemic (World Health Organization, 2020). Creating such resources and making them broadly accessible, cost-free, and world-wide, is essential for reaching practitioners before and during such demanding crises as COVID-19 (Seeger & Schwarz, 2024).

The myriad risks facing HEI stakeholders continue to intensify, whether they be associated with violence, disease, or reputational


failures. When faced with the consistent threat of COVID-19, HEI communication practitioners in the Global North and South varied in their communication strategies (RQ3). Practitioners in the Global North made more assumptions about their audience's knowledge and willingness to comply than were present in the reflections of practitioners in the Global South. This finding is both reassuring and troubling. The finding is reassuring in that Global South practitioners display a tendency to enact instructional risk communication strategies conducive with research recommendations. The finding is troubling when considering the potential for misinformation to thrive in the Global North where less attention was given to communication elements such as internalization and explanation. Future research should explore the options for more effectively encouraging well-rounded risk communication messages designed with the intent to inform and motivate as well as to rebut misinformation. The safety and security of HEI stakeholders on a global level is dependent on the effectiveness of such instructional risk communication messages.

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