Adapting the IDEA Model to Include Concern for Well-being: An Experiment Using COVID-19 Survey Data

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Abstract

In this study, the effectiveness of emphasizing concern for well-being in COVID-19 crisis communication messages was examined as an extension of the IDEA model. Using theory from organizational behavior, it was hypothesized that individuals whose institutions demonstrate concern for their well-being in a COVID-19 message would be more likely to report intentions to engage in prosocial behavior. Two messages, which differed only through an added emphasis on concern for well-being, were randomly displayed to 770 participants in an online survey. After reading the message about an increase in COVID-19 cases, participants answered questions meant to gauge intentions relevant to COVID-19 behavior. Results identified significant relationships between message group (control vs. experimental) and intentions related to going to indoor events, wearing a mask, and practicing social distancing. These relationships were in the opposite direction as what was hypothesized, showing that emphasizing concern for well-being could contribute to risky behavioral intentions. Because subgroup analyses indicated that this effect was primarily found amongst individuals who did not change their behavior as a result of the pandemic, further research is needed to determine whether institutions and their communities benefit from messages that demonstrate a concern for well-being.

50-word abstract: Based on organizational theory and the IDEA model, it was hypothesized that COVID-19 messages demonstrating concern for well-being would predict prosocial behavior. Two messages were randomly displayed to 770 participants in an online survey. Results indicate significant differences in behavioral intentions, with additional subgroup nuances.

Keywords: COVID-19, IDEA Model, Crisis Communication, Concern, Prosocial behavior

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The novel coronavirus (COVID-19) pandemic has created a challenge within crisis communication to convey information in a way that encourages individuals to follow safety guidelines that protect not just themselves, but also their community at large. The United States Centers for Disease Control (CDC) recommend that all individuals wear a mask when around others, practice social distancing at a distance of at least six feet, and avoid crowds to stop the spread of COVID-19 (CDC, 2021). Despite these recommendations being in place for over a year, the significant number of new infection cases suggests that human behavior has not adhered to these recommendations. The ways in which organizations communicate about COVID-19 to their employees and customers can influence commitment and loyalty (Ding & Jiang, 2021; Luu, 2021). However, it's unclear the extent to which COVID-19 communications from organizations to their communities influences behavior during COVID-19. This study aims to contribute to the group and organizational crisis management literature by advancing the understanding of how organization crisis communication influences prosocial behavior intentions related to public health guidelines.

Role of Organization Communication in Times of Crisis

Organizations play a critical role in health and resilience during times of crisis. The ways in which they communicate with their employees and the communities in which they operate can influence behavior and the trajectory of public health disasters (Edwards et al., 2021). As they astutely state, when an industry or organization faces significant external threats, its "people must be instructed to engage in appropriate protective actions" (Edwards et al., 2021, p. 50).

One method of crisis communication that has shown promise over the past several years and has been tested in medical crises is the IDEA Model (Sellnow et al., 2017). Standing for Internalization, Distribution, Explanation, and Action, the model seeks to aid in the design of messages to maximize internalization and desirable behavioral intentions (Sellnow et al, 2017). In the paper first proposing the IDEA model, results indicated it was significantly more effective at achieving these two aims than messages not following the model (Sellnow et al, 2017). This increased effectiveness is attributed to the ability of a message following the IDEA Model to help individuals internalize the importance of the message for their own well-being and identify the specific behavior they need to enact as a result.

Since it was initially introduced, the IDEA Model has been used to examine multiple medical outbreaks and situations including Ebola outbreaks (Sellnow-Richmond et al., 2018), PEDv Outbreaks (Edwards et al., 2021), and Hepatitis B vaccination distribution (Mugunga & Napakol, 2020), food contamination (Sellnow et al., 2019a), and earthquakes (Sellnow et al., 2019b), making it relevant for the current COVID-19 pandemic and resulting health crisis.

However, nuances of this particular crisis suggest that social connection and support may be a particularly salient indicator of trustworthiness and meaningfully influence behavioral intentions. In particular, we define this support as the demonstration of concern for well-being that an institution conveys in its message through the expression of empathy for the challenges posed by the situation about which the institution is communicating.

The use of empathy to persuade has been tested and found to be a significant advantage when looking at commercials (Wirtz et al, 2016). Empathy in persuasion has also been shown to be applicable in adjusting behavior in the medical sphere with it having successfully with empathy-based anti-smoking PSAs being found to be more effective than fear-based PSAs

(Shen, 2011). When the usefulness of empathy in persuasion in the medical field was tested overall, it was also found to be significantly beneficial (Shen, 2018).

Crisis Communication and Organizational Behavior

Within organizational settings, the impact of communication on employee behavior is particularly important during COVID-19. As evidenced by the CDC (2020) recommendations for businesses and employers, what were once choices in social behavior that primarily affected individual health in and outside of the direct work setting are now capable of affecting the health and well-being of the broader workplace (e.g., via virus transmission and availability of workers to sustain operations). For instance, one employee's decision to eat in a crowded indoor restaurant could have the potential to spread the virus to their workplace, contributing to a rise of infections within that organization (CDC, 2020).

As a result, social and health behavior in an organizational setting during COVID-19 can be viewed from the context of organizational behavior. In this context, health-related organizational citizenship behavior (OCB) during COVID-19 can include hand washing, social distancing, and wearing a mask in places where social distancing is not possible. These behaviors are consistent with the Podsakoff et al. (2000) *organizational compliance* and *altruism* dimensions of OCB as they involve accepting the organization's guidelines even when no one is watching and helping to prevent negative situations from occurring, respectively. Conversely, counterproductive work behaviors (CWB) during COVID-19 can include attending indoor social gatherings or refusing to wear a mask and social distance in the work environment. These behaviors are consistent with the Gruys and Sackett (2003) CWB dimension of unsafe behavior.

What's less clear is whether organizations that demonstrate concern for their employees' well-being when requesting that individuals follow COVID-19 behavioral guidelines will

contribute to more prosocial behavioral intentions. Although organizations that communicate COVID-19 updates likely provide individuals with the information needed to act in prosocial ways, CWB may constitute a way in which employees work to cope with the effects of the pandemic and the volume of changes they face (Tuzovic & Kabadayi, 2020). According to the theory of moral licensing, employees who consider themselves good workers and feel they have had to suffer through COVID-19 regulations for the sake of their employer may be more likely to engage in CWB (Klotz & Bolino, 2013). They may aim to maintain a balance of OCB and CWB in the workplace, in which additional resources and support from the employer may first result in more OCB that tilt the scale toward positivity and then result in CWB that tilt the scale back to its equilibrium.

This suggests that employees may be more likely to engage in socially and organizationally beneficial behavior when they feel supported by their organization in times of crisis. Indeed, organizational support has been found to influence OCB, particularly when employees are faced with stressors (Jain et al., 2013). When employees feel supported by their organizations during COVID-19, they are more likely to report a positive sense of well-being (Tuzovic & Kabadayi, 2020). From a perspective of OCB and CWB, it's likely that individuals who feel supported by their organization will be more likely to heed COVID-19 warnings and messages communicated by the organization than individuals who feel like their organization is asking them to engage in certain behaviors without any demonstration of concern for them.

To evaluate the impact of organizational communication on social and health behavior during COVID-19, this study aims to investigate a demonstration of concern for well-being as a message component in the IDEA model. This proposed IDEAC model was hypothesized to increase behavioral intention as compared to the base IDEA model. Therefore, it is predicted that

individuals who receive a message in which their institution demonstrates concern for well-being will be more likely to report prosocial behavioral intentions than individuals who receive a message in which their institution does not demonstrate concern for well-being.

Hypothesis: Individuals in the IDEAC model condition will be more likely to report prosocial behavioral intentions than individuals in the IDEA model condition.

Method

Participants

The survey was sent to a total of 2,000 individuals from 25 universities. Universities were chosen by random stratified sampling from the IPEDS database to ensure representation from large, small, urban, and rural colleges. Of the surveys sent, 770 responses were received. Of those 770, 186 were faculty members, 522 were undergraduate students, and 62 were marked as other. The original responses were received from 29 separate universities. When invalid or incomplete responses were removed 133 faculty and 387 undergraduates remained from 15 universities.

Survey Design

Within the survey, one of two messages were randomly displayed to participants. The IDEA group received a message written following the IDEA model. Please see Figure 1 for a copy of the IDEA message. The IDEAC group received a message that was identical to the IDEA group message with the exception of added language meant to express concern about the well-being of the individuals' in the institution's community. Please see Figure 2 for a copy of the experimental message. Participants were randomly sorted into control and experimental groups. After reading the message, participants were asked to respond to a set of five questions while imagining their university had sent the message. These questions were: "After receiving it,

how likely would you be to eat and drink in restaurants?", "After receiving it, how likely would you be to attend indoor social gatherings?", "After receiving it, how likely would you be to attend indoor social gatherings?", "After receiving it, how likely would you be to wear a mask during indoor social activities?", and "After receiving it, how likely would you be to practice physical distancing during indoor social activities?". These questions were aimed to gauge behavioral intention. Responses were made available on a seven-point Likert scale which was then converted numerically based on the social responsibility of the answer. For example, an answer of "Extremely Likely" in response to eating in a restaurant would receive a low score while an answer of "Extremely Likely" to wearing a mask would receive a high one. Within the survey many other questions were given; those pertaining to group (Undergraduates or Faculty), Changes of behavior due to the pandemic, and opinion on their school's level of care for the individuals well being were looked at during this study.

Data Processing

When the data was received T-tests for the difference in means were performed to test for significant difference between the control and the experimental group the overall study and subgroups investigated based on other answers in the survey. These subgroups include undergraduates, faculty, those who did not change their behavior when the pandemic started, those who did change their behavior when the pandemic started, those who believed the school cared for their wellbeing, those who believed the school did not care for their wellbeing, and those who believed the school was neutral to their wellbeing. For the purpose of this study, behavior examined for change were those recommended by the CDC such as mask-wearing and social distancing.

Results

Within the study, significant relationships were found between the control and experimental groups in the sections of going to indoor events (p = 0.03), wearing masks (p = 0.03), and practicing social distancing (p = 0.029). Significance was judged at $\alpha = 0.05$. The difference, however, was found in the opposite direction to what was hypothesized with t-scores looking at the mean of the control group minus the mean of the experimental group being positive. These were: going to indoor events (t = 2.33), wearing masks (t = 2.13), and practicing social distancing (t = 2.99). Due to this result, smaller groups were examined to find contributing factors.

Among undergraduates, significant relationships were found in wearing masks (t = 2.98, p = 0.02) and practicing social distancing (t = 2.87 p = 0.005). Among faculty, significant relationships were only found in attending indoor events (t = 2.71, p = 0.01). Among those who did not change their behavior, significant relationships were found in going to indoor events (t = 2.07, p = 0.04), wearing masks (t = 2.74, p = 0.007), and practicing social distancing (t = 3.38, p = 0.008). Among those who did change their behavior, no significant relationships were found. Among those who believed their school does not care for their wellbeing, significant relationships were only found in going to bars (t = 2.32, p = 0.02). Among those who believed their school does care for their wellbeing, significant relationships were only found in going to bars (t = 3.28, p = 0.0012). Among those who believed their school is neutral to their wellbeing, significant relationships were found between wearing masks (t = 2.25, p = 0.028) and practicing social distancing (t = 3.15, p = 0.0023). Please see Table 1 for a complete list of statistical analyses conducted and Figure 3 for graphical representation of subgroup mean differences.

Discussion

Based on organizational behavior theory, it was hypothesized that the introduction of added demonstration of concern to the IDEA model would increase the amount the message was engrained into the recipient and increase behavioral intention. The data shows the opposite has happened. Results suggests that including emphasized sincerity in the base IDEA Model decreases prosocial behavioral intention. However, subgroup analyses revealed additional nuances.

When subgroups were studied, only one subgroup followed the same pattern of significance that the overall study did. This subgroup was the group of individuals that did not change behavior when the pandemic started. It is also worth noting that the opposite group, those who did change behavior, had no significant relationships. As every member of the study was in one of these two groups, and the likelihood that one did not change their behavior being 3.46 times more likely than having changed their behavior it is believable that this could be the main contributing factor.

Cognitive biases may explain some of these findings. For example, in research regarding common cognitive biases that have impacted the spread of information in the medical field, Confirmation Bias has been noted as a fairly predominant one (O'Sullivan & Schofield, 2018). Within the span of the COVID-19 pandemic, individuals may have become cemented in their beliefs regarding the actions that should be taken to the point that any request otherwise will not be heeded. Further than this, the cognitive bias of Naive Cynicism may be the explanation for the decrease in trust when sincerity is shown. Naïve Cynicism is the belief that kindness is shown by others when they have an ulterior motive (Valdez et al, 2017).

These results are also consistent with the idea of moral licensing in the workplace (Klotz & Bolino, 2013). When individuals believe that they are already sacrificing for an organization,

as in the case of individuals who do believe in the importance of following CDC guidance, they may engage in behaviors that we define as CWB.

Despite its strengths in experimental design and theoretical framing, limitations of the study are important to note. The messages randomly displayed to participants may not be able to influence the relationships that already exist between individuals and their institutions. In other words, a single message demonstrating concern may not be enough to change the feelings of individuals who already did not feel supported by their organization. The long-term nature of the COVID-19 pandemic also potentially complicates the applicability of the IDEA Model in this setting. However, second survey has been designed and will be sent out with a similar design to this study to test for a difference over time. This planned follow-up study will allow for the examination of changes over time in perceptions and behavioral intentions. Still, more research is needed to confirm the effects of an IDEAC model on different groups before conclusions can be made about the role of demonstrations of concern in organizational communication during crises. It would be beneficial to study the effects of time on individuals' response to sincerity in messages as a means to gauge cynicism in a long-term crisis—especially one with strong political implications as has been the case with COVID-19. It would therefore be beneficial to conduct a similar test that uses a less politically charged crisis scenario to see the broader impact of sincerity in crisis communication.

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Figure 1

IDEA Model: Control Message

The Universities' positive student cases of COVID-19 have more than doubled over last week's cases. Preliminary contact tracing reveals that many of the past week's cases trace back to activity at bars and social gatherings.

Since the start of the pandemic, the university has been tracking all positive cases reported to us that involve a student or faculty or staff member, including those who have not been on campus, posting weekly updates to the dashboard on the university's coronavirus website.

To prevent the further spread of COVID-19, with only six weeks left until the Thanksgiving break, students must remain vigilant in their precautions wherever they go.

Eating and drinking in indoor social settings like bars, restaurants and gatherings without face coverings is where our tracers find most of our new positive cases. These activities should be avoided unless a face covering is worn at all times and physical distancing can be practiced. These steps help to reduce spread of the virus to you and within the community.

Figure 2

IDEAC Model: Experimental Message

The university is dedicated to keeping our students up to date with the current risk factors involving the COVID-19 epidemic. With this being said, we regret to inform you that the universities' positive student cases of COVID-19 have more than doubled over last week's cases. Preliminary contact tracing reveals that many of the past week's cases trace back to activity at bars and social gatherings.

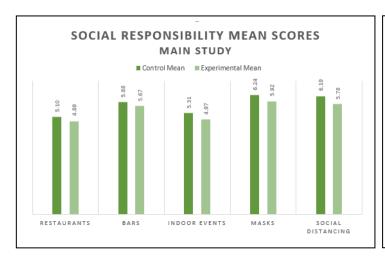
Since the start of the pandemic in order to help keep our students safe, the university has been tracking all positive cases reported to us that involve a student or faculty or staff member, including those who have not been on campus, posting weekly updates to the dashboard on the university's coronavirus website.

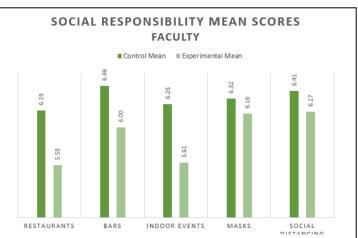
To prevent the further spread of COVID-19, with only six weeks left until the Thanksgiving break, we must remain vigilant in our precautions wherever we go.

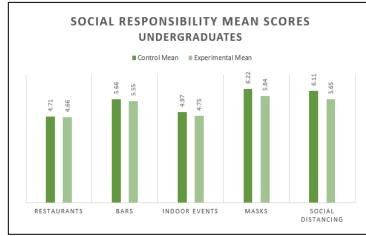
Eating and drinking in indoor social settings like bars, restaurants and gatherings without face coverings is where our tracers find most of our new positive cases. For your safety, please avoid these activities unless a face covering is worn at all times and physical distancing can be practiced. These steps help to reduce spread of the virus to you and within our community.

Figure 3

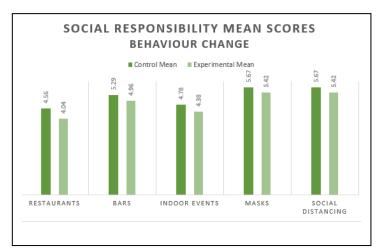
Graphs of Mean Scores Across Subgroups

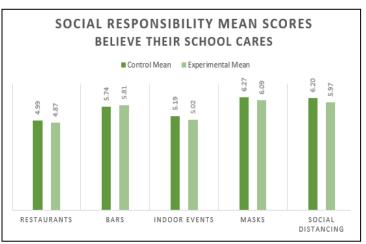


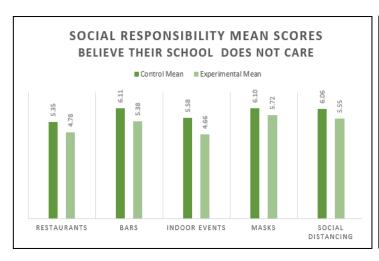












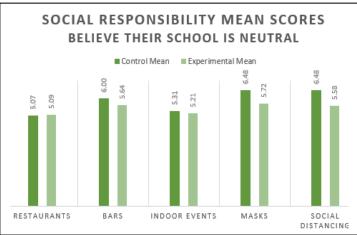


Table 1

Detailed Statistical Information

	Whole Study	Within Undergraduate	Within Faculty	No behavior Changes	Behavior Changes	Believe their School Does Not Care	Believe their School Does Care	Believe their School is Neutral toward them
N								
N total	524	387	133	398	115	137	294	82
N Control	266	193	69	196	63	72	158	29
N Experimental	258	194	64	202	52	65	136	53
Go to Restaurants								
T Score	1.3274841	0.4713911	1.9459145	0.90498847	1.159926	1.6053914	0.53173151	-0.05729063
P Value	p= 0.1849	p= 0.6376	p= 0.0539	p= 0.366	p= 0.2485	p= 0.1107	p= 0.5953	p= 0.9545
Go to Bars								
T Score	1.4019887	0.67144419	1.8926768	1.330173	0.76500924	2.3223349	3.2836396	0.89749351
P Value	p= 0.1615	p= 0.5023	p= 0.0608	p= 0.1842	p= 0.4459	p= 0.0218	p= 0.0012	p= 0.373
Go to Indoor Events								
T Score	2.3294788	1.2557932	2.7075656	2.0652766	0.99103516	0.59447683	0.77157112	0.25324889
P Value	p= 0.0255	p= 0.21	p= 0.0077	p= 0.0395	p= 0.3238	p= 0.5532	p= 0.441	p= 0.801
Wear a Mask								
T Score	2.1299568	2.2979962	0.61428877	2.7354791	0.62997233	1.1587595	1.0442388	2.2477382
P Value	p= 0.0336	p= 0.0224	p= 0.5401	p= 0.0065	p= 0.53	p= 0.2487	p= 0.2973	p= 0.0277
Practice Social Distancing								
T Score	2.9948438	2.8668698	0.9353466	3.3764307	0.67377073	1.5937198	1.3167103	3.1510995
P Value	p= 0.0029	p= 0.0049	p= 0.3515	p= 0.008	p= 0.5019	p= 0.1135	p= 0.189	p= 0.0023

Comparison of Mean Social Responsibility Scores Between Control and Experimental Groups