

PRIORITIES DURING THE COVID-19 PANDEMIC: PERSPECTIVES, DECISION-MAKING, AND EMPATHY

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ABSTRACT

The rapid and ongoing evolution of the COVID-19 pandemic has resulted in reactionary decision-making and emphasized discord arising from uncertainty. Given that countries have dealt with the pandemic quite differently thus far, it was relevant to explore the undertones of decision-making, as well as the perspectives of the individuals who are affected. The study aimed to investigate the role of confidence and decision-making in pandemic behaviors as well as related pandemic perspectives. The present article discusses findings concerning pandemic-specific decision-making, the influence of empathy on decision-making, and qualitative reports from respondents. The analyzed sample included 561 respondents divided into three cultural groups based on response distribution, geography, and general cultural categorizations (e.g., Western vs. non-Western). The findings revealed insights into the decision-making of pandemic consequences, as well as a lack of cross-cultural differences within the sample. Subjective reports highlighted key themes including trust in science, prevention and preparedness, and suggested next steps from the respondents' perspectives. These findings from across the globe call for further investigation into cross-cultural decision-making in the pandemic.

Keywords: *pandemic, COVID-19, decision-making, perspectives, empathy*

INTRODUCTION

The COVID-19 pandemic has highlighted the vulnerability of humankind accompanied by hesitancy in adapting to change in times of crisis. Despite this shared commonality, the pandemic has also drawn attention to the group and social representation divisions that has lent to the perception that individuals are facing the pandemic alone [1]. This mentality stifles decision-making and combative efforts against the invisible virus. However, such defensive mentalities only partially account for approaches taken in the pandemic. Pandemic perspectives even extend beyond those responsible for developing rules and regulations. Nearly everyone is affected by the COVID-19 pandemic and, as a result, has some perspective and accompanying approaches. Therefore, it was important to acknowledge what these global perspectives were to better

understand the extent to which such perspectives might differ across cultures and whether this translated to decision-making.

Pandemic decision-making (e.g., lockdown restrictions, vaccination rollouts) continues to be a hot topic throughout the pandemic. Policymakers have been responsible for the decisions and actions taken to address the pandemic for their nations. While such decisions have often been mediated by sound scientific advice, political undertones and personal beliefs have notably dictated the decision-making process. Such decisions have been scrutinized by the public in all regards. Often, personal beliefs or experiences drive opinions and bolster confidence in those opinions. Such motivating factors lend to polarized opinions and likely prime whether one agrees with (or not) the actions being taken to address the COVID-19 pandemic.

Aside from the influence of intrapersonal consideration in decision-making, interpersonal consideration, or empathy, also modulates the decision-making process. Affective empathy largely motivates our behaviors. Cross-cultural evidence demonstrates differentiation in affective empathy [2], [3], [4]. Butovskaya and colleagues [4] specifically found cross-cultural differences in perspective-taking, empathetic concern, and personal distress during the first wave of the COVID-19 pandemic. Given that empathy inherently affects decision-making, the cross-cultural impact of the current pandemic paired with empathy may underly pandemic-specific decision-making.

To better understand one's pandemic preferences and decision-making process, the present study aimed to address individuals' beliefs and what factors motivate those beliefs. In addition, decision-making was explored through humanitarian and economic lenses, through which the impact of COVID-19 on behavioral modulators, such as empathy, is cross-culturally investigated.

METHODS

A more comprehensive description of the methods can be found in the coinciding article [5].

Participants

Of the 655 respondents that voluntarily completed the survey, only 622 met the inclusion criteria. Additionally, the analyzed sample is comprised of 561 respondents to achieve a balanced distribution across cultural groups. The three cultural groups are: *United States*, *Other Western countries*, and *Non-Western countries*. They were characterized by their geographic position, response frequency, and the ideological construct of tradition (i.e., Western vs. Non-Western; see [6] for more details). Therefore, the final sample was comprised of 148 males, 411 females, and one non-binary individual with a majority of participants having completed an undergraduate (n=228) or post-graduate

education (n=231). A large majority (n=466) also reported that they were not in a COVID-19 risk group.

Study Design

The survey was live via Qualtrics for data collection from May 26, 2020 through October 26, 2020. The survey was designed in English but was translated into 18 languages with the help of volunteer translators and Qualtrics' translation function, which allowed for more inclusive data collection. The survey consisted of five parts: 1) demographic questions, 2) personal-pandemic opinions, 3) confidence surrounding the pandemic, 4) a pandemic-phrased decision-making task, and 5) two standardized questionnaires. This article will address pandemic-phrased decision-making, empathy, and qualitative opinions.

Decision-making was assessed through a binary choice task. Participants were told: "The following section asks a series of binary questions related to the pandemic restrictions and potential consequences. For this task, consider that your country is under stay-at-home orders with approximately 35,000 new cases per day and 1,000 Corona-related deaths per day. Please choose one of the scenarios." Participants were then provided 9 binary scenarios with two choices: 1) an immediate and greater impact choice (e.g., return to normal daily activities *now* and 60,000 people are infected with the Coronavirus) or 2) a delayed and lesser impact choice (e.g., return to normal daily activities in *two weeks* and 20,000 people are infected with the Coronavirus). The values selected for the decision-making questions were determined based on the daily cases in the United States during the time of survey conception. The same case statistics were not equivalent to other countries. Four of the nine questions included person-based content (see example above), four other questions included business-related content (e.g., return to normal daily activities *now* and 85% of businesses survive vs. return to normal daily activities in *two months* and the 65% of businesses survive). The final question posited a choice between person or business. The first eight questions were positively and negatively phrased (e.g., positive-person: infected, negative-person: die), and the final question was positively phrased.

Two questionnaires evaluated interpersonal consideration and cultural values. The brief version of the Interpersonal Reactivity Index [B-IRI; 7] assessed empathy, or interpersonal consideration. The B-IRI is comprised of sixteen items, in which participants chose how well each item best describes them via a 5-point Likert scale from 1 (does not describe me at all) to 5 (describes me very well). The B-IRI can be condensed to a single score ranging from 16 to 80 or divided into four subscales (i.e., empathetic concern, personal distress, fantasy, perspective-taking). We opted for and used the single score.

Cultural values were assessed through Hofstede's cultural dimensions on the Value Survey Module 2013 [VSM; 8]). Due to an insufficient number of samples obtained from each country, it was not possible to obtain a meaningful cultural

index. Only three countries (United States, United Kingdom, and Germany) possessed at least fifty responses to compute reliable cultural indices, which is in line with Hofstede's original study [9]. Therefore, the cultural indices were not included in the analyses, given that no meaningful inferences could be reliably drawn. For further information concerning how the VSM-13 was scored, see the Supplementary Materials on OSF: <https://osf.io/sjhdy/>.

Statistical Analysis

The analysis first assessed the differentiation of the decision-making scenarios (*humanitarian* vs. *economic*) through a McNemar's chi-squared test in R Studio [10]. Further analysis deconstructed decision-making patterns across cultures through binomial regressions. A Kendall's correlation was also conducted to investigate the relationship between decision-making and empathy.

Qualitative Analysis

Four optional qualitative questions were asked within the survey to allow participants the opportunity to clarify factors that may or may not influence their opinions about the pandemic, as well as their thoughts on future actions concerning this and other crises. 431 participants provided responses, which were analyzed through Dedoose [11], a computer-assisted qualitative data analysis software (CAQDAS). One question about the current restrictions in the respondent's state or country was included as a potential control question but was not qualitatively analyzed for the present report. The remaining three questions were coded separately by trained coders. Codes were assigned based on common themes in the data, and one excerpt could receive multiple codes. The developed codes were later compared across question types extracting five common themes underlying the data. Codes were first developed for each question to maintain the value of the code's context. Then, responses were re-analyzed regardless of the question to identify common themes across questions. Notably, the qualitative questions were asked after the personal-pandemic questions; thus, priming could have occurred.

RESULTS AND DISCUSSION

The present results focus on decision-making within and across cultures, the relationship between decision-making and empathy, and the qualitative reports. The non-normal nature of the data required assessment through non-parametric tests.

Classification of the Decision-Making Scenarios

The decision-making scenarios can be classified into two groups with emphasis on people (*humanitarian*) and an emphasis on businesses (*economic*). We included four *humanitarian*, four *economic*, and one control scenario to assess

differences in response patterns through various lenses (Table 1). A McNemar chi-squared test revealed statistical differences between *humanitarian* and *economic* responses across participants, $\chi^2(1, 4488) = 337.67, p < .0001$ (Table 2). Notably, a greater number of participants chose the lesser impact-later timeframe (LL; e.g., return to normal daily activities *now* and 60,000 people are infected with the Coronavirus) outcome than the greater impact-sooner timeframe (GS; e.g., return to normal daily activities in two weeks and 20,000 people are infected with the Coronavirus) outcome when framed as *humanitarian*. Conversely, there was a smaller disparity between participants' choice of the LL or GS outcomes when the scenarios were economically framed. Across the two conditions, there were large disparities between the number of participants who chose the LL and GS outcomes. More respondents chose the GS outcome in *economic* compared to *humanitarian* scenarios. When further assessing the difference in scenario phrasal (e.g., infected/survive vs. die/fail), there were notable differences. For the *humanitarian* scenarios, a greater number of responses for the LL outcome when the scenario was negatively framed (e.g., die), $\chi^2(1, 4488) = 584.43, p < .0001$. The opposite was apparent for the economic scenarios, wherein the LL was chosen more often when the scenario was positively framed (e.g., survive). The control scenario paired the two scenarios against each other ('flatten the curve vs. revive the economy'). Respondents notably chose the *humanitarian* option (flatten the curve) over the *economic* option (revive the economy), regardless of the timeframe (*humanitarian* $n = 433$; *economic* $n = 128$).

Table 1. *The categorization (humanitarian vs. economic) of the confidence contexts used in the present study is shown. Contexts that were framed in terms of people (e.g., X people infected) qualify as humanitarian, whereby contexts that were framed in terms of businesses (e.g., X% of businesses survive) qualify as economic.*

Source: Author

| Humanitarian | |
|---------------------|---|
| DM1 | return to normal daily activities now and 60,000 people are infected with the Coronavirus vs. return to normal daily activities in two weeks and 20,000 people are infected with the Coronavirus |
| DM2 | return to normal daily activities now and 60,000 people are infected with the Coronavirus vs. return to normal daily activities in two months and 40,000 people are infected with the Coronavirus |
| DM3 | return to normal daily activities now and 2,500 people die from the Coronavirus vs. return to normal daily activities in two weeks and 1500 people die from the Coronavirus |
| DM4 | return to normal daily activities now and 2,500 people die from the Coronavirus vs. return to normal daily activities in two months and 750 people die from the Coronavirus |
| Economic | |
| DM5 | return to normal daily activities now and 85% of businesses survive vs. return to normal daily activities in two weeks and the 75% of businesses survive |
| DM6 | return to normal daily activities now and 85% of businesses survive vs. return to normal daily activities in two months and the 65% of businesses survive |
| DM7 | return to normal daily activities now and 15% of businesses fail vs. return to normal daily activities in two weeks and 25% of businesses fail |
| DM8 | return to normal daily activities now and 15% of businesses fail vs. return to normal daily activities in two months and 35% of businesses fail |
| Control | |
| DM9 | flatten the curve vs. revive the economy |

Table 2. *The frequency of greater impact-sooner timeframe (GS) and lesser impact-later timeframe (LL) are presented in the table. Four types of each scenario (humanitarian vs. economic) were assessed in the present study, calling for a repeated measures design in how participants responded to either decision-making context.*

Source: Author

| | Humanitarian | Economic |
|-----------|---------------------|-----------------|
| GS | 328 | 934 |
| LL | 1916 | 1310 |

Pandemic Decision-Making across Cultures

To further investigate decision-making in pandemic contexts, we assessed cross-culture comparisons of response patterns using the three groups: *United States* (US), *Other Western* countries (OW), and *Non-Western* countries (NW). A binomial regression was conducted on each of the nine decision-making scenarios to assess cultural group differences. Participants ($N = 561$) either chose a greater impact-sooner timeframe (GS) or lesser impact-later timeframe (LL) outcome to each of the scenarios. The US group was treated as the baseline comparison group and the GS outcome as the baseline choice for the regression interpretation. Given that the GS outcome is the baseline choice, all comparisons will concern group differences at this level.

Of the first four decision-making scenarios (otherwise grouped as the *humanitarian* scenarios), one showed marginal group effects and three showed no statistical group difference (Table 3). The first decision-making scenario postulated returning to normal daily activities now and 60,000 people are infected or returning to normal daily activities in two weeks and 20,000 people are infected. The binomial regression yielded a difference in the response patterns of US and OW respondents for the GS outcome (US $n = 20$; OW $n = 8$; $B_{ow} = 0.986$, $p_{ow} = .023$, $OR = 2.680$, $CI[1.149, 6.247]$). Due to this difference between US and OW respondents, a follow-up regression was conducted to control for empathy, age, and political position. When accounting for the selected demographic variables, the statistical difference disappeared, which suggests the underlying driving factor was between political positions (Politically neutral: $B = -0.830$, $p = .050$, $OR = 0.436$, $CI[0.190, 1.000]$; Politically conservative: $B = -1.685$, $p < .0001$, $OR = 0.185$, $CI[0.083, 0.413]$). The second, third, and fourth scenarios did not demonstrate a difference between groups (Table 3). However, the fourth scenario approached the margins with GS responses between US and OW countries (US $n = 36$; OW $n = 23$; $B_{ow} = 0.534$, $p_{ow} = .067$) respondents. Notably, these effects are marginal at best, in which follow-up regressions indicated a driving effect of political position, as in the first scenario, resulting in no effect between groups once it was controlled (Politically neutral: $B = -0.797$, $p < .01$, $OR = 0.451$, $CI[0.250, 0.811]$; Politically conservative: $B = -1.370$, $p < .0001$, $OR = 0.254$, $CI[0.139, 0.465]$).

The second set of decision-making scenarios (otherwise grouped as the *economic* scenarios) shows a similar trend in response patterns, by which only one yielded a statistical group difference (Table 3). The seventh decision-making scenario, postulating a return to normal daily activities now and 15% of businesses fail versus a return to normal daily activities in two weeks and 25% of businesses fail, elicited a difference between the GS response frequency of US and NW respondents (US $n = 62$; NW $n = 84$; $B_{nw} = -0.497$, $p_{nw} = .020$, $OR_{nw} = 0.608$, $CI_{nw}[0.400, 0.925]$). Like the differences in the *humanitarian* scenarios, this effect was driven by differences between political positions (Politically neutral: $B = -0.743$, $p < .001$, $OR = 0.476$, $CI[0.315, 0.718]$; Politically conservative: $B = -$

1.544, $p < .0001$, $OR = 0.214$, $CI[0.129, 0.354]$). The other *economic* decision-making scenarios demonstrated no such group differences. Interestingly, no decision-making scenario yielded a true group difference that was not underlined by the demographic variables. This may indicate that cultural differences, at least as defined in the present study, did not contribute to these pandemic decision-making scenarios.

Table 3. The table reports the frequency of the greater impact-sooner timeframe (GS) between groups, demonstrating the lack of differences between responses.

Source: Author

| DM Scenario | United States GS n | Other Western countries GS n | Non-Western countries GS n |
|---------------------|--------------------|------------------------------|----------------------------|
| Humanitarian | | | |
| DM1 | 20 | 8 | 17 |
| DM2 | 49 | 43 | 50 |
| DM3 | 18 | 19 | 19 |
| DM4 | 36 | 23 | 26 |
| Economic | | | |
| DM5 | 52 | 53 | 60 |
| DM6 | 87 | 94 | 79 |
| DM7 | 62 | 72 | 84 |
| DM8 | 92 | 98 | 101 |

Empathy and Decision-Making

Empathy may be a telling factor driving decision-making as it is central to our ability to understand and connect with others. So, interpersonal consideration (i.e., caring for the well-being of others and empathizing with their situation) may be expected during a global pandemic. Therefore, empathy was included as a potential predictor in the regressions. However, little evidence pointed to empathy as a modulating factor. To further explore the relationship of empathy and the decision-making scenarios in the present data, a correlational analysis was conducted, in which there was no notable relationship between empathy and any of the decision-making scenarios.

Influencing Factors on Decision-Making and the Next Steps

Participants were asked four qualitative questions, of which three were analyzed. The questions included in the analysis were the following: (1) Other factors influencing your perspectives; (2) What are the next actions moving forward; and (3) What can we do to be better prepared for future situations. These questions elicited rich and diverse responses among participants; however, in-depth analysis revealed several common themes which varied across the created groups (i.e., US, OW, and NW). The most frequent topics were (1) science, scientists, and scientific recommendations, (2) a governmental take on rules and regulation and the role of leadership, (3) prevention and preparedness with

mitigation actions in practice, (4) trust in media, and (5) overall well-being encompassing economy and care for the most vulnerable. Participants came up with an array of different solutions that were related to pandemic-specific task forces, personal hygiene and care, self-agency, international collaboration, quicker responses guided by the current knowledge, and paths to normalcy. In the following section, we will elaborate on these occurring themes and their implications found in the qualitative data.

Scientific underpinnings

One of the most common recurring themes was related to science and participants' ability and willingness to trust what messages and directions are relayed to them. There were different takes on how science should be listened to; however, most participants reiterated the importance of listening to the body of knowledge, studies related to the pandemic, individuals closely associated with research, and those working in healthcare. The analysis showed that more than 400 participants reflected on the scientific underpinnings and elaborated on how critical those dimensions were for the pandemic.

Participants suggested that the general population would need to “*take seriously information coming from the scientists and physicians who are in the know.*” At the same time, participants reiterated that science explains how viruses are spread, and that one should trust epidemiologists. Another perspective regarding scientific underpinnings related to the statistical data. Here, participants insisted that any action should be governed by the “*number of infected or dead per region.*” Comments such as “*number of cases*” should also be used to instruct behaviors and guide rules and regulations.

At the time of data collection, vaccination development was still in the early stages, and participants placed their hopes into finding one. The most frequent comments included “*once there is a vaccine*”, “*vaccine invention*”, and “*further research in order to get vaccines properly out.*” There was no difference among the groups in a desire to develop a vaccine, and comments, such as “*to work efficiently on getting vaccines for the whole world*”, were frequently encountered. Overall, the participants were adamant that new knowledge and its sources were most relevant; additionally stating that the world should “*listen to science*” and follow “*the recommendations of global medical professionals, such as the CDC, WHO, and other.*”

Government and Leadership

Another salient theme that emerged from the qualitative analysis concerned governments, and their issuance of rules and regulations. The comments ranged from too tight lockdown restrictions to a slower and phased out release of rules in place. Participants often talked about needed transparency from leadership, as well as leadership that inspired confidence and cooperation. More than 360

participants reflected on governmental rules and regulation, tightening border control, and transparent leadership.

Those reflecting on the level of lockdown severity often stated opinions coinciding with *“in my opinion, we should move ahead by using smart lockdown and implementation of strict rules and regulations.”* Furthermore, they would reiterate that *“everyone should follow the guidance provided by the government,”* and that the government should be *“preventing the infections by applying restrictions and having a plan”* while having *“tighter restrictions for travel between high risk areas.”*

When talking about the issues in leadership, some suggested that their government should have ensured more timely responses to the issues, as well as engaged in public education and open communication. Comments such as the *“government need[s] to be more transparent”* and *“consistent communication”* were aimed at the leadership. Often, these comments criticized the lack of responsiveness and decisiveness, stating that *“lack of thoughtful and consistent leadership at all levels of government”* contributed to high prevalence of the virus, and that *“better leadership”* would help in overcoming the current crisis.

Prevention and preparedness

A key takeaway from the qualitative responses related to a timelier response based on the data. Whether it was per scientists’ recommendations, based on current and past pandemic knowledge, or experiences from the international community, participants had strong opinions on preparation and preparedness. Concerning preparation, the most common comments related to the act of gathering information to create and implement a plan, while preparedness related to obtaining personal protective equipment (PPE) and preparing for the upcoming challenges. Mitigation action, such as social distancing, hygiene, and mask wearing, were generally considered common sense. Like the previous dominant themes, more than 250 participants mentioned the relevance of preparation and preparedness.

Part of the prevention suggestions were solely focused on mitigation options. Participants said, *“do not leave the house unless it is necessary.”* They further emphasized the *“use of face masks... ”*, *“...etiquette sneezing and coughing”*, and *“wash your hands, bathe daily, eat well, and disinfect the whole house.”* One pervasive theme related to the healthy lifestyle, in which individuals would not only need to self-regulate with social distancing and mask-wearing but also with daily exercise and healthy eating (e.g., no meat, no sugar, no toxic food).

Quite often, participants mentioned the importance of PPE, especially when reflecting on the first responders. This expressed the idea that our obligation should be to protect them, as they are crucial to help the infected. Participants mentioned the need to *“have a better storage supply of PPE, biohazard suits, face*

shields in hospitals, and sell them in mainstream stores for average civilians/consumers to purchase them.” Another dimension, besides self-isolation for prevention, was timely response. There was a strong push for health promotion campaigns, in which there should be a “*continuous health promotion campaign normalizing mask-wearing, physical distancing, regular hand washing, [and] alcohol-based hand sanitizer usage...*”

Media

Media was a theme that largely divided our participants. One participant nicely captured the essence of media communication in the pandemic: “*there is too much information or misinformation.*” Primarily, this was how participants learned about the pandemic, what to do, how to go about it, as well as the prevalence of the virus and resulting deaths. Social media, news, and radio were cited as the most frequent sources of information. While many participants pointed out conflicting information, others were increasingly distrustful of all information.

Some were concerned that “the media exploits stories and skews numbers to their benefit.” Others were quick to point out that “conspiracy theories, myth, and irrational misinformation compete with real data for popularity in the society.” Furthermore, some participants were convinced that even officials and scientists were involved in a misinformation agenda and would state “media should not give false information by virologists in order to unsettle the population.”

Conversely, others scrutinized the quality of reported news by “*searching [the] internet for false and true information.*” The idea intended for “... *correct information [to be] spread throughout the country.*” Some also mentioned the absence of transparency and called for “*more information sharing in general*” by “*verified/trusted/legitimate sources.*” This line of thinking highlighted the need for a “*cohesive, science-based message*” that would simultaneously be a “*single source at all times.*” Lastly, some sought information exclusively from official sources, such as the CDC, WHO, and various departments of health experts, as they wanted a comprehensive picture of the situation. Such behaviors indicate that individuals sought international statistics to figure out how their country compares, while seeking diverse sides of political sources. One such example reads, “*I regularly look at Worldometers to look at the data for different countries. I also look at varied online news from various political viewpoints and seek out new research. From all this I get a feel for what I think seem right.*”

Well-being

While our participants tackled many different topics, one was consistently related to well-being; well-being for themselves, their families, those they care for, as well as the global society. Many were concerned about the economy and individuals’ ability to financially survive the crisis, overcome mental health issues

triggered by the pandemic, and provide sufficient care for those most vulnerable. Consistent with the literature on in-group and out-group relations [1], participants showed the highest regard when their loved ones were closely affected by the pandemic.

These opinions were consistent across all groups. Participants would insist that we would need to “maintain social distancing for a while but be able to change the status of phase because people [adults and children] are having psychological as well as economic consequences.” Many encouraged the economic efforts to implement remote work, including statements such as “encourage work from home”, “revamp the current employment system – allow employers to work from home”. However, others were quick to plead that we would need to “try find a good balance between restrictions and maintaining the economy.” Overall, the majority thought that we would need to be careful to maintain “the wellbeing of society, which is a balance between avoiding becoming ill and avoiding too much economic loss.”

Mental health issues were often brought up in combination with the economy and restrictions. “[P]eople are more affected now by all the restrictions, financially, and more important [,] mentally.” There were suggestions that everyone should “do research before sacrificing everyone’s mental health and livelihood”, that the restrictions should be reconsidered because there were cases of “mental issues [and an] increase in suicides”, as well as feeling “disappointed and passive under the lockdown” which would significantly disrupt their “happy life.”

Lastly, many were concerned about others and mentioned that the pandemic is causing them to be “more responsible, and [to] be sure that our neighbor is [doing fine].” This responsibility extended to their families – “the fact that I got children that need to be protected” – however, there were those who expressed “more worry for the elderly and vulnerable people who would be of higher risk.” Time and time again, participants clearly expressed concern for protecting their elderly parents and ensuring their loved ones were safe by learning how to care for others aside from themselves.

GENERAL DISCUSSION

The findings demonstrate a distinction in pandemic-specific decision-making. When asked about whether to return to normal daily activities under a specified timeframe (i.e., now, 2 weeks, 2 months), respondents largely chose the delayed timeframe when the risk was an increased infection or death rate. The choice between time frames and the associated risk was not as clearly differentiated when the risk pertained to business survival and failure. While our study does not allow us to conclude the underlying reasons for such differences, this finding may be related to long-term orientation. For example, respondents displayed greater long-term orientation and consideration when pondering the

outcome of a person rather than a business. However, this distinction lessened when respondents were considering a business's outcome. This is not to say that participants lacked a sense of long-term orientation. One possible explanation may concern the people behind the businesses posited in the question. In this sense, respondents may have also exhibited interpersonal consideration for the people behind the businesses. Since the extent of underlying rationale could not be adequately assessed in the present study, future investigations should aim to identify the rationale driving decision-making in the pandemic or a general crisis.

The evaluation across cultural groups demonstrated a lack of differences in pandemic-specific decision-making. This is inconsistent with the studies investigating cross-cultural decision-making styles [12][13]. While we did not directly address decision-making styles, rather the action of decision-making itself, it is still plausible that cultural differences would exist. Importantly, the development of the decision-making task in the present study was contextually biased, given that the story, which participants were asked to consider for each scenario, was based on the pandemic statistics of the United States at the time of survey development. This likely impeded some respondents from applying the scenario, considering that the pandemic situation likely differed in their country. Additionally, the decision-making task did not allow for further assessment into the rationale in choosing one scenario over another. We also were unable to stringently categorize culture, which would be pertinent for additional inference. Further investigation is necessary to better understand the underlying mechanisms of decision-making across cultures.

The data also suggest that empathy had no modulating effect on decision-making within or across cultures. Given that the two are intertwined, this finding was surprising. Conversely, the qualitative data reveals that empathy and interpersonal consideration were commonly reported as influential in respondents' pandemic perspectives, as well as a key factor when planning pandemic actions. There was a variety of reflections in the qualitative analysis, ranging from taking care of the immediate family to acting for the common good. Some participants mentioned how they had more responsibility about their neighbors and those vulnerable: *"I am more worry(ied) for the elderly and vulnerable people who would be of higher risk,"* while others were concerned about their children and their families: *"the fact that I got children that need to be protected"* and *"my parents are at risk and I live with them. I want to protect them."* Many used the airplane oxygen mask model, in which they mentioned taking care of themselves so they would not cause harm to other people's health. Notably, there was considerable differences when talking about pure numbers of those infected or deceased and when reflecting on those close to them. Nevertheless, many participants supported behaviors that would contribute to the common good. Future research may consider a more comprehensive measure of empathy to better investigate empathy across cultures.

The most salient portion of the qualitative analysis were recommendations given for the current COVID-19 pandemic. Those ranged from needs assessment, distribution of PPE material, and proactive measures to healthcare revolutionizing and improved communication from the government and those in leadership positions. Overall, the consensus expressed that we, as a whole (i.e., the whole world), need to learn from current experiences and apply them in the future.

When talking about needs assessments, participants were concerned that all measures were not equally effective and there should be some contextualized effort in addressing those differences; for example, differences in rural versus urban places, differences in the spread of the infection, and differences in access to the preventative measures (e.g., PPE, sanitization, masks, etc.). The highest concern was for essential workers and for governmental responsibility to provide safe working conditions for such workers. Numerous comments mentioned urgency and the need for quicker/faster reaction times.

Moreover, there was a pervasive theme that included better communication and the issues of false information and misinterpretation of data. Participants were adamant that leadership should take firm actions, such as keeping restrictions in place, mask mandates, develop vaccines, and plan, while limiting misinterpretation of the available information. Furthermore, increased international collaboration and lessons learned from other countries across the globe in similar situations and similar contexts would aid combative measures already in place. The government would also be responsible for building the crisis management, evaluating the current situation, and adjusting as needed. It seems that many thought the world failed to respond to the pandemic adequately on all previously mentioned areas.

CONCLUSION

The present study explored pandemic perspectives and associated decision-making through a forced choice task positing two pandemic-specific scenarios. Respondents' subjective reports elaborated on what influenced their perspectives, and ultimately their decision-making, as well as suggestions for future situations. The findings revealed that decision-making differed in the context of humanity versus economy, with suggestively greater consideration in the humanitarian context scenarios. A lack of cross-cultural differences with regards to decision-making was also demonstrated in the present study and further suggests no modulating effect of empathy on decision-making. However, these findings should be further investigated with an adjusted decision-making task, as well as increased stringent classification of cultural groups. It may be insightful to evaluate decision-making style as well as cultural tendencies (e.g., long-term orientation) next to the decision-making task. These investigations would allow for proper examination into these relationships. Importantly, the subjective reports emphasize prevention and preparedness through increased response time, trust in a scientific recommendations, and statistics, as well as communication and

unity from the governmental level. Therefore, the present study roundly highlights public perspectives on a global scale, which seemingly calls for similar actions and preparedness and comparably prioritizes delayed decision-making concerning reopening strategies.

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