



Journal of Health Disparities Research and Practice
Volume 14, Issue 1, Spring 2021, pp. 31-55

© Center for Health Disparities Research
School of Public Health
University of Nevada, Las Vegas

US Immigrants' Experiences with the COVID-19 Pandemic- Findings from Online Focus Groups

Awele Maduka-Ezeh, University of Delaware
Ikwesilotuto T. Ezeh, InspireHealth, Wilmington, DE
Benjamin E. Bagozzi, University of Delaware
Jennifer A. Horney, University of Delaware
Somawina Nwegbu, InspireHealth, Wilmington, DE
Joseph E. Trainor, University of Delaware

Corresponding Author: Awele Maduka-Ezeh, amaduka@udel.edu

ABSTRACT

Objective: Immigrants in the United States (US) are disproportionately affected by disasters. Yet the effects of one type of disaster—pandemics—have been underexplored in this regard. The purpose of this study was to better understand these effects, with specific attention to the impacts of the COVID-19 pandemic on US immigrants and their social networks.

Design: Forty-five US immigrants (aged 18 and above) participated across eight online focus groups during spring 2020. Using “criterion of inclusion” sampling, participants were recruited via gatekeeper and snowball sampling methods. Anonymity was maintained throughout all online focus group sessions. Discussions were transcribed and then categorized into distinct code families for immigrants’ “experiences during pandemic” and “pandemic response activities.” The resultant human-categorized content was then qualitatively analyzed to explore the effects of COVID-19 on US immigrants.

Results: COVID-19 posed unique challenges for immigrant communities in spring 2020. These challenges included added burdens of sending financial resources abroad, caring for dependent parents, and managing immigration status anxieties—alongside more commonplace challenges concerning childcare, employment, and interpersonal relationships. At the same time, US immigrants showed remarkable ability to leverage their experiences and social networks in response to COVID-19, so as to (1) provide pandemic-relevant health education within their communities, (2) provide targeted support to those in need (both in the US and in their home countries), and (3) draw upon past experiences in immigrants’ home countries when navigating the COVID-19 pandemic and the associated government lockdown in the US.

Conclusions: US immigrants were significantly impacted by the COVID-19 pandemic. In addition to more broadly-imposed pandemic burdens related to concerns about childcare, employment, and interpersonal relationships, immigrant communities have faced unique challenges brought on by the pandemic. However, this study’s examination of pandemic

Journal of Health Disparities Research and Practice Volume 14, Issue 1, Spring 2021

<http://digitalscholarship.unlv.edu/jhdrp/>

Follow on Facebook: [Health.Disparities.Journal](https://www.facebook.com/Health.Disparities.Journal)

Follow on Twitter: [@jhdrp](https://twitter.com/jhdrp)

experiences and response activities has illustrated that US immigrants' unique backgrounds, cultures, and social networks have provided them with a number of notable resources and strategies for coping with the COVID-19 pandemic. These findings offer important insights into strategies that should be leveraged as part of planning and response to prevent the disparate impacts of current and future pandemics on immigrant populations.

Keywords: Pandemic response; Immigrant; COVID-19; Online Focus Groups

INTRODUCTION

Experiences in the United States (US) have shown that immigrants and other ethnic, racial, and linguistic minorities are disproportionately impacted by disasters. This is consistent across multiple hazards, including wildfires (Siddiqui, 2011), hurricanes (Andrulis, 2007) (Wang, 2008), and pandemics (Truman, 2009). Multiple factors contribute to these disparities, including concerns over immigration enforcement (Siddiqui, 2011), socioeconomic factors (Eisenman 2009), lack of access to preferred information sources, mistrust of government, language barriers, and pre-existing health and social disparities (Kandula, 2004; Carter-Pokras, 2007; Truman, 2009).

Pandemics and outbreaks of infectious diseases pose unique challenges for immigrants due to recent migration history; poorer living conditions; and immigrants' lower rates of vaccination against infectious diseases compared to their US born counterparts (Kandula, 2004; Truman, 2009). Immigrants may also be at risk of exposure to disease-causing organisms through ongoing contacts with social networks in their home countries (Truman, 2009).

However, the association between immigrant status and the impacts of pandemics is likely more complex than can be explained by lack of resources, vaccination rates, and differential exposures. We sought in this study to understand the COVID-19 pandemic as experienced by immigrants in the US during the spring of 2020, with particular attention to the impacts of social connections on those experiences.

Background: The 2020 Coronavirus Disease (COVID-19) Pandemic

An outbreak of a novel coronavirus was initially recognized in late December 2019, when a cluster of cases of pneumonia of unknown cause from Wuhan, China was reported to the World Health Organization (WHO). The number of cases grew rapidly and by January of 2020, the WHO declared the outbreak a "Public Health Emergency of International Concern" (WHO-China, 2020; Yi, 2020). An early report (in February 2020) from the WHO-China Joint Commission on COVID-19 highlighted the measures that China had put in place to control the novel coronavirus (WHO-China, 2020).

Unfortunately, these measures were unable to contain COVID-19 as the disease spread rapidly to other parts of the world, and on March 11th 2020, became recognized by the WHO as a pandemic of unprecedented proportions (WHO 2020). This occurred even as national and international public health agencies struggled not only to contain the spread of the disease, but also to accurately define the scope of the pandemic (Cucinotta, 2020; Vogel, 2020; Barber, 2020).

In the days, weeks and months following the initial recognition of the pandemic, strict containment measures were applied in countries across the globe in an attempt to get ahead of the pandemic. Initially aimed at preventing introduction of the disease within their borders, efforts by various countries included repatriating their nationals from China, quarantining returning travelers

and banning travel from locations where the outbreak had been noted (Arima, 2020; Böhmer, 2020; Finnegan, 2020; Kassam, 2020; John, 2020)

Despite these measures, the pandemic continued to expand and political and public health focus shifted to identifying, isolating, and managing individuals with the disease, in an attempt to prevent further spread. To this end, several directives were rolled out across the US and in much of the world, including widespread government-ordered social distancing and stay-home orders, mass quarantine and shutdown of businesses and public places (including schools, restaurants and places of worship), and travel bans (CDC-NCIRD, 2020; Calsyn, 2020; Miller, 2020). It was during these unfolding events that we undertook this study in April and May of 2020 in an effort to understand the experiences of immigrants during the pandemic.

METHODS

This study was approved by the University of Delaware's institutional review board (IRB) and all members of the research team completed training on the use of human participants in research. To understand immigrant experiences in the context of COVID-19, online focus groups were employed to address the following research questions:

1. How do immigrants experience pandemics and what impacts do social connections have on these experiences?
2. What preparedness and response activities do individual immigrants engage in relative to pandemics, and how are these influenced by social connections and networks?

Selection of participants for this study was done using purposive sampling, specifically, "criterion of inclusion" sampling in which participants are selected that meet predetermined criteria (Palinkas, 2015). For our study, the required criteria for inclusion were that participants had to be immigrants (which we defined as persons who were born outside of the 50 US states and Washington, DC- regardless of current citizenship or citizenship at birth) who were aged 18 years and above and were English-speakers.

Given our prior experience that demonstrated the difficulties of recruiting immigrants for research, it was important to our study to make use of gatekeepers to gain access to members of immigrant communities. To this end, contact was made with local community members and staff from the state health department who are known members of immigrant groups and/or worked with immigrant groups. These initial contacts were then asked to not only be participants (if they met the inclusion criteria), but also to be gatekeepers by connecting the research group to members of the gatekeeper's immigrant communities and transmitting the necessary information on how to connect to, and anonymously participate in, the online focus groups. Attempts were made to recruit additional research subjects by snowballing in which focus group participants were asked to connect researchers with members of their social network who would be willing to participate in future focus groups. This however, proved less successful as noted below under "results". Prior to the focus groups, informed consent was obtained using an online consent form hosted on SurveyMonkey (SurveyMonkey, San Mateo, CA).

Data Collection

A preliminary demographic questionnaire was used to collect background information on focus group participants to determine those who met eligibility criteria. The demographic questionnaire was hosted on the SurveyMonkey website and made available to participants as web links sent from researchers and/or gatekeepers.

Online synchronous (real-time) focus groups were held in April 2020 and May 2020 using Zoom web-conferencing (Zoom Communications, San Jose, CA). Weekend and weekday, daytime and evening focus group options were made available to participants. The resulting groups were mixed groups comprised of all who selected a particular date and time to participate. This was crucial, during the stressful time brought on by the pandemic, to make participating as convenient as possible.

After each participant consented to participate and completed the demographic questionnaire, a link to connect to the focus group was provided, along with instructions to ensure that the participant's anonymity was maintained while in the focus group discussion. To this end, participants were instructed to choose a pseudonym by which they would be addressed and with which they would introduce themselves to other participants.

For participants connecting by computer: they were to log out of all existing Zoom accounts prior to attempting to connect to the focus group. They were then to enter their chosen pseudonym when prompted for a name by the system. As a result of these steps, a participant's chosen pseudonym was the name that was displayed on the Zoom dashboard. This pseudonym was accordingly the only information that was visible to other participants and to the researchers during the focus group, thus maintaining anonymity of each participant.

For participants connecting by phone: they were instructed to dial "*67" prior to dialing the Zoom call-in number, in order to block their caller ID once connected. By doing this, the participants showed up on the Zoom dashboard with a tag of "Call-in User + a number" e.g., "Call-in User1", "Call-in User2", with the number assigned sequentially by the system based on when they dialed in. This allowed the phone numbers they were calling from to remain hidden and inaccessible to both researchers and other participants, thus maintaining their anonymity.

At the start of each focus group, the facilitator introduced the topic, shared the rules for interaction and asked participants to introduce themselves. These introductions comprised only general descriptive information (country of birth, US state where they reside, and length of time living in the US). The facilitator then introduced the discussion questions sequentially. The focus group guide comprised six questions:

Regarding the current COVID-19 (coronavirus) pandemic:

1. How has this outbreak affected you as a person, your kids, your job, your profession or other areas of your life?
2. Do you think it impacts you differently as an immigrant than it does people born in the US? Explain.
3. How is it impacting other immigrants you are connected to?
4. Even before this pandemic, some of us were very connected to other people from our home countries, some were not. How are your connections and your networks affecting your experience in this outbreak?
5. Beyond the government mandated/imposed changes, what activities have you or immigrant groups you are connected to taken part in, in response to the coronavirus outbreak?
6. What motivates you (or your group) to respond in the ways described?

The focus group discussions were recorded on the Zoom software and transcribed by the same software. Transcripts from the focus groups were then retrieved from Zoom, proofread, and then uploaded to the qualitative analysis software Atlas-Ti where data analysis was done.

Data Analysis

Data analysis was undertaken using Atlas Ti software, version 8.4 (Atlas-Ti, Berlin, Germany). An inductive approach was used in which the data in the transcribed files was subjected to open coding. This approach was taken to allow identification of multiple themes from the data, with sequential grouping of the identified themes under broader categories as described by Payne (2004). The adequacy of the coding frame was then tested, following a process previously described by O'Connor (2020).

The resulting coding scheme was then split into two thematic "code families," following the approach described by Campbell (2013). Each focus group transcript was then coded twice—first with the codes in the first code family, then again with the second code family and its associated codes. This approach made the coding cognitively more manageable (in that it required fewer codes for each coder to recall at a time) and improved inter-coder agreement in a manner that is consistent with what Campbell had described (2013).

The code families were, "*Individuals' experiences during pandemic*" and "*Individuals' pandemic response activities*." There were 15 and 11 codes, respectively, in these code families for a total of 26 codes applied to the focus group transcripts. Coding of the transcripts was carried out by two independent coders and assessments were made for inter-coder agreement using the relevant applications in Atlas-Ti software. For the code families "*Individuals' experiences during pandemic*" and "*Individuals' pandemic response activities*", Krippendorff's α was 0.938 and 0.917 respectively, indicating good intercoder agreement.

RESULTS

Eight focus groups were conducted on Zoom in April and May 2020. Forty-nine individuals agreed to participate in the focus groups. Most of these (forty-five) were recruited directly by outreach from the researchers or by gatekeepers. Only four additional participants were recruited via snowball recruitment by persons who had themselves participated in earlier focus groups. The forty-nine individuals were sent the link to the online demographic survey questionnaire and completed the questionnaire.

Ultimately, however, only 45 of these individuals participated in the focus groups (for a 92% retention rate). Because each focus group was designed such that participants who joined the focus group discussions would be anonymous to both the researchers and the other participants, it is not possible to tell which 45 of the 49 who completed the demographic questionnaire ended up participating.

Of the 49 completing the demographic questionnaires, 35 (71.4%) were women and 14 were men (28.5%). Thirty-eight (77.6%) were aged between 41 years and 60 years (Table 1). Forty-six (93.8%) had completed a Bachelor's degree or higher. Only 45 of the 49 focus respondents indicated a length of residence in the US. Of these, 42 (93.3%) had lived in the US for 10 years or more. Focus group participants represented 17 countries from 5 Continents—North America, Europe, Africa, Asia, Australia (see Figure 1 below).

Table 1: Focus Group Participant Age

Age (years)	# of respondents	Percent of total
21-30	2	4.1%
32-40	7	14.3%
41-50	27	55.1%
51-60	11	22.5%
61-70	2	4.1%
Total	49	100%

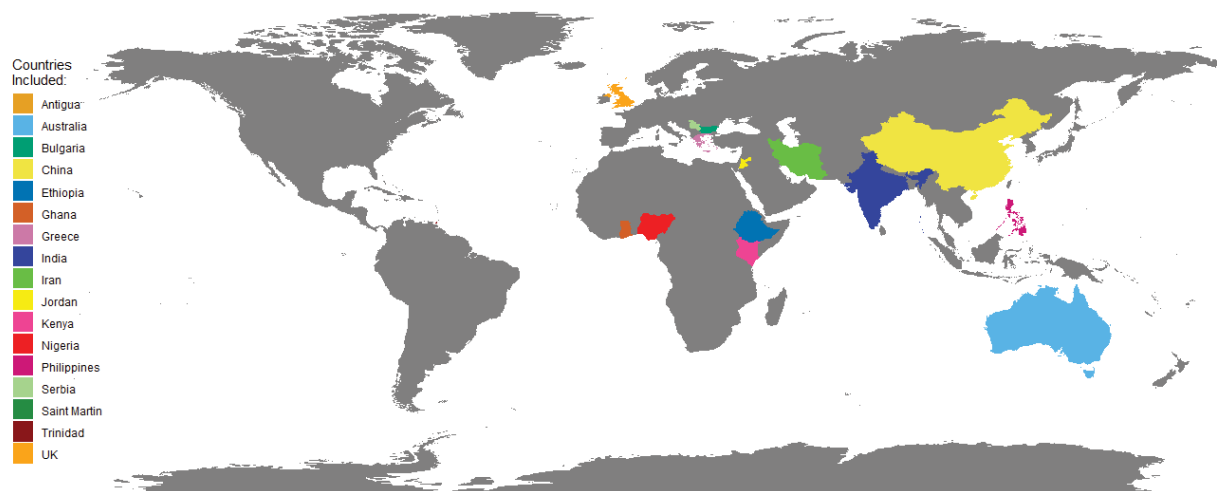
Table 2: Focus Group Participant Highest Educational Attainment

	# of respondents	Percentage of total
High School Diploma/GED	2	4.1%
Some College	1	2.0%
Bachelor's Degree	6	12.2%
Masters/Doctoral Degree	38	77.6%
Other	2	4.1%
No response	0	0%
Total	49	100%

Figure 1 (Participants Birth Countries)

Focus Group Participants

by Country of Birth



“WE’RE ALL IN THIS TOGETHER” BUT “AS YOU KNOW, I AM AN IMMIGRANT”

“We’re all in this together,” the title of the theme song of a 2006 musical film, this expression emerged as a popular catchphrase around the 2020 COVID-19 pandemic. It was widely used- from the White House and presidential speeches (Morrison, 2020) to social media (Guarnieri, 2020) and more. The sentiment behind that phrase reflects one set of findings of this study: that in many ways and across multiple domains, the spring 2020 COVID-19 pandemic impacted everyone in the US- regardless of race, religion, immigration status, place of birth or other distinguishing features. Although all our respondents were immigrants, some of the experiences they describe were likely shared by individuals (immigrants and non-immigrants) across the US.

However, there was more to the COVID-19 pandemic. There were certain aspects of the pandemic’s impacts that appeared to be linked to pre-existing factors (including both strengths and vulnerabilities) within the immigrant populations that our focus group respondents represented. There was the consciousness among these immigrant respondents that they were from a different place, (and that this came with a different way of thinking, and a different way of being and of engaging with difficulties, including the ongoing COVID-19 pandemic).

Some of this “differentness” was helpful and protective, enabling the immigrants to more easily navigate the unprecedented circumstances brought on by the COVID-19 pandemic and the associated society-wide changes. Other aspects of the differentness were challenging as these immigrants struggled with social pressures, expectations and norms that made their engagement with the pandemic more difficult. This subset of findings highlights the complex interplay of two sets of factors: (i) immigrants’ cultural norms, expectations, and obligations that created challenges in dealing with the pandemic, and (ii) the life experiences, culturally-informed mindsets and the

opportunities embedded in immigrants' social connections that proved protective for these immigrants as they engaged with the pandemic.

Economic Impacts of COVID-19 Pandemic

Several respondents reported impacts of the 2020 COVID-19 pandemic on their jobs and finances. These ranged from job losses and business closures to partial or complete furloughs and pay cuts. Also reported were experiences with loss of vacation time by healthcare workers who were furloughed and forced to use vacation, as well as time away from work for quarantine following exposure to a COVID-19 case. Individuals impacted by these changes, among the focus group respondents, ranged from a postal worker who was quarantined, to a doctor whose pay was cut by 20% and a dentist who was forced to close his private dental practice.

Others reported unique stressors brought on by the pandemic as they continued to work at jobs where the staffing had been reduced or where COVID-19 threatened already sparse staffing complements. A prime example of this was a doctor who was one of only two neonatologists working in his hospital's neonatal intensive care unit:

"I also work in healthcare and I'm a neonatologist and there's only two of us (neonatologists). It's a small unit. And we're like scared to death- (what) if we catch it and transmit to the babies? And if one of us cannot work, then it's going to be a big problem because there's only two of us. We always have this fear that if one of us catches it (COVID) it's gonna be hard. While the one person is quarantined, the other one (will have) to work all the time."

Another area that was noted by several participants as problematic was having to deal with their children's online schooling while also trying to stay on task and meet the demands of their (newly) remote jobs. This was because of the sudden, government-ordered closure of all schools—from pre-kindergarten to colleges. Parents of grade school children suddenly found themselves grappling with the challenge of serving as stand-in teachers and guides to their children as they attempted to navigate the world of internet learning in collaboration with teachers who themselves were learning how to move classes and deliver didactic material online.

Challenges were noted not only with needing to help children (sometimes multiple children) navigate web-based learning but also with working parents being distracted by the children (and other family members) while themselves attempting to work remotely from home. In the words of one participant:

"But the bad or the inconvenient part is that, as a parent, for my youngest who does online schooling, I have to make sure zoom is working. I have to make sure he's on time for his video conference and what time does it meet. I mean, I'm in my conference call (for work). He runs to me. And you know, it interrupts my day."

Beyond helping children schedule and connect to classes, some families had issues with having inadequate technology (both in terms of quality and quantity) to meet the needs of both parents and children as both groups struggled to attend to work and school concurrently during usual business hours. As a mother of two teenagers from Brooklyn, New York shared:

"But now we're stuck in a house with three of us. Everybody's in school. Everybody needs computers. So we're having to schedule ourselves. She (daughter) is up in the nighttime. Between let's say from 5p.m to about 5/6 a.m. is her computer time. So my son now gets to do the 7am to 5pm shift. And as you know, they're both teenagers, so they are getting on each other's nerves and so it's a testing time."

In response to the above comment, another parent shared:

“Not only computers- even the bandwidth in the house. You have limited bandwidth and you realize that kids need it, parents also need it, and suddenly everything is slow. And anytime they're doing this video conferencing using zoom (for school) it takes a lot of bandwidth and (then) dad cannot do anything”

Another area that came to light in the focus groups was how interpersonal relationships and family dynamics were impacted by the pandemic.

COVID-19 Impacts on Interpersonal Relationships

“A Silver Lining”. Interestingly, even while acknowledging the hardships and challenges brought on by the pandemic, many focus group participants, across multiple focus groups, mentioned how the COVID-19 pandemic and associated mandatory shutdowns had had positive impacts on their relationships.

Some shared how it had allowed them to spend time with their immediate family (children and spouses) where they had previously not had the time. Parents appreciated being able to interact with their children and observe traits and characteristics in the children they had not noticed previously. Several respondents shared how both having extra time, and the anxiety brought on by the pandemic, had caused them to reach out to friends and family with whom they had not been in touch for prolonged periods (sometimes months to years). Some of these sentiments are captured below:

“I think, honestly. That it was a blessing in disguise, just because I am now able to focus a little bit more on my family and my children. As we all know, schools are currently closed and I can, you know, focus my time on being with them.”

“I feel like it's making our connection stronger because we want to make sure that everybody's doing well. And now we have a bit more time. Being home, we have the ability to reach out.”

“It's just opened my eyes to realize how bad the situation truly is at the moment. And it just made me appreciate the moments- my social life, my relationships with people- and I just cannot wait to have my relationships and social life back”

One respondent described it as having found a “silver lining” to the otherwise terrible pandemic situation, in being able to reconnect with friends, family and loved ones with whom they had lost touch during the general busy-ness of life because of competing priorities that pushed time with family to the back of their minds.

However, these positive sentiments, though shared by most, were not universal among participants as noted below.

An “Un-Bonding” Experience? Of the 45 total focus group participants, 3 reported that having to stay at home constantly with their families was impacting them, and their relationships, negatively. One was a woman with adult children, whose children were forced to return to her home for the shutdown period. She commented on the strains that this, and having to constantly be in the house with her husband (a gentleman who was usually a global traveler) were causing to their family dynamics. She noted in this regard:

“So, everybody says, ‘it's wonderful family time’. You know, your family is bonding, but I think in some ways this is becoming an un-bonding experience (for my family).”

Another respondent was a mother of a child with special needs and shared how they were experiencing the pandemic. This mother (a homemaker) shared how, with a child with special needs, she greatly treasured the times that she had to focus on herself and unwind while her child was away at school or in therapy sessions. With the shutdown that the COVID-19 pandemic brought, she no longer had this much-needed time for self-care.

"I have a child with special needs and before all this he could go to school and you could have people come in to help with taking him out to the community to help him so that (I) could have some 'me-time' or you know, some respite. But for now, he is home with me... no room for me to spend my 'me time'."

"And the other thing about the situation with my child that has special needs is that he's getting very anxious and cranky. Up to the point that the day after schools were closed, he left the house (unannounced). And I was like 'Oh my God, I don't know how to deal with this for the whole period'. There is so much uncertainty (about) when life will return to normal. So that really gets to me."

She also shared how not having access to her child's therapy sessions was negatively impacting her son. To this end, she emphasized that with a child with special needs, transitioning to online therapy and classroom sessions was particularly difficult. This discussion about unique challenges that may be faced by families of children with special needs was a completely incidental finding but is mentioned here because of the potential significance in terms of planning to cater to the needs of such individuals during future disasters or pandemics.

Concerns over Dependent Parents

One recurring theme in all the focus groups conducted was immigrants' concern over elderly parents. As noted above, respondents came from 17 different countries across 5 continents. Interestingly, across the represented cultures, there was expressed a strong sense of being personally responsible for the health and welfare of one's elderly parents. This included being responsible to ensure they had ongoing access to healthcare to meet their needs. Across the board, this was one of the greatest sources of anxiety relative to the COVID-19 pandemic.

For some respondents, their elderly parents lived with them in the US. In these cases, respondents felt the added burden of avoiding COVID-19, not just to protect themselves and their children, but also to protect their elderly parents. As one participant (originally from Bulgaria) put it:

"Everyone at home is nervous. NERVOUS!!! I mean, especially in our situation when we have my mom living with us, which we all know that the elderly is at a higher risk. We take full responsibility of trying to protect ourselves and not get exposed because we know that our bodies may be able to survive it (the coronavirus). But then it can reflect negatively upon the older members of our family."

For others, their greatest anxiety was that their parents lived in their home countries, without access to the kind of healthcare that respondents had become used to in the US. These participants worried about what would happen if their parents fell sick from coronavirus.

"Also making it very difficult for us is because we have parents in the Philippines and at this point in time we realized, you know, they're also (at) an advanced age in their 80s. So we can only do so much to warn them please, please, please to stay at home because if anything happens, we can't go there, or you can't come here."

In some cases, an interesting dynamic appeared to be at play in which the participants expressed their responsibility to care for their parents, but grappled with the fact that those same parents would not necessarily heed their admonitions about how to protect themselves from the coronavirus. As expressed by a participant whose parents live in Nigeria:

“When you have older parents, sometimes they might decide to do what they want to do, as opposed to what you think is best for them...some very defiant parents who do not understand (and who insist that they) must go to church and must go for their meetings, and do not understand that they must sit indoors and social distance as they've been guided to.”

Yet another source of heightened anxiety was the widespread travel bans that kept participants from visiting elderly relatives overseas and from having those relatives visit them. Some even struggled with fears over what would happen if their parent were to die, as they would not be able to organize/participate in their funeral services. One participant from Antigua shared her concern in this regard as she worried about her parents accessing supplies and healthcare in the light of the travel bans:

“Being an immigrant, I still have family members who live in the (Caribbean) islands. My dad and my stepmom are in the islands, my mom and my other siblings live in another island. So I'm worried about how this affects my family. Because when you think about an island, everything is shipped in -other than agricultural stuff. So adds another layer of concern (because) for my family, as soon as somebody has beyond a cold, they fly to the US mainland and get medical services. That's not available because flights are now shut down”

In addition to ensuring the physical health and wellbeing of elderly parents during very uncertain times, another pervasive concern was for the economic security of other family members, friends and loved ones who remained back in the participants' home countries.

Concerns over Economic Needs of Associates in Home Country

Unlike the concerns over elderly parents (in the US and overseas), concerns regarding siblings, extended family, friends and loved ones in the home countries were not primarily health-related. Although healthcare access was a minor worry, the primary concern was economic.

The 2020 COVID-19 pandemic had caused widespread hardships and large-scale economic shutdowns and stay-home orders in countries all over the world. In light of this, participants expressed significant concerns over how loved ones in their home countries would cope. This was in addition to being concerned about their own finances and that of their immediate families in the US. One participant expressed how she felt as if she was herself feeling the pain of hunger that her family in her home country was going through:

“We also realize they have a lot more (going on). It's more than just isolating that's bugging them. We have a lot of relatives who are going hungry. Because they are daily wage (earners) so lots more basic, you know, how they get by. We feel, we feel helpless and desperate because we going through everything for them”

Another shared how (despite the hardships she was going through with her husband's business being hard hit in the US), she knew she was better off than her counterparts back in her home country.

“We feel far more lucky than majority of the people elsewhere, especially, you know, our countrymen. We are far, far lucky because at least we have food on the table and we know we won't go hungry for the next two/three months”

One participant shared her concern about how the COVID-19 pandemic (and the control measures) compounded an already difficult time that her relatives were going through in dealing with the March 2020 earthquake in Croatia.

"I have relatives there that I have been keeping in touch with. And now, there was an earthquake there in Zagreb in the capital about a month ago and I was concerned. And they had pictures of people running outside trying to distance themselves socially while they were running outside of their houses."

For some focus group participants, the struggles of their families back home took not only an emotional toll, but also a financial toll. This was often because hard-hit family members in their home countries increasingly had to reach out to these immigrants to request financial assistance. This represented yet another burden on these immigrants, who in some cases were already struggling to grapple financially with the challenges caused by the pandemic.

Cultural and Language Issues

Interestingly, language barriers and difficulty understanding COVID-19 prevention messaging was not a major issue that was mentioned during the focus groups. This is likely because participants in the focus group discussions happened to be relatively well educated, with most having bachelor's degrees or higher and so had a good baseline grasp of English.

For these research participants, other issues related to their cultures posed more of a challenge. One such issue was the tendency among some immigrant groups to live in a communal manner with several generations living within the same house, a practice which was continued even in the US. This presented an issue with new public health guidelines such as those related to social distancing. As one gentleman from Iran shared:

"I know that my community tends to be a more closely knit community. We have more people, you know, we have mom, dad, brother, sister, kids still living in the same house. Unlike many others (Americans) that I know. For example, my sister-her two daughters who are in their late 20s or early 30s, they still live at home, and that's how they want it to be. It's not the fact that they need to. But that's how their family unit is, which obviously makes it harder for them to have social distancing."

This sense of communal living and interaction was shared by others. In this respect, the emotional burden that this can impose on individuals was perhaps best captured by a gentleman who was worried about 4 generations of his family members and the impacts that the pandemic already had, and could have, on them:

"I also have my in-laws, who are in their 80s living with us. So, having to worry about them. One of my children was in Spain for the semester. So, having to worry about him too. And when the crisis became really heightened, luckily, we were able to get him back home. However, (he had) to be in quarantine for 14 days. So, having a 20-year-old stuck in a room, and then worrying about keeping my mother- and father-in-law at the distance where they're not going to have any kind of interactions (with him). And my third child... she happened to be in the hospitality business. She lost her job ...and my grandchild (is) with her. So, all of those are compounded on top of everything else as well"

Immigration Status Issues

One respondent, a physician who by his own account has dedicated his life to serving vulnerable populations (including undocumented immigrants), expressed his concern over how immigration status impacted the population he served.

“My biggest fear is for the undocumented immigrants here. You know, some of them to have to work. They're not getting anything from this stimulus package because they're undocumented”

Others shared how distrust of the government negatively impacted immigrants within their circles, making it difficult for many to trust and accept the information and governmental directives that were meant to protect them. Some of this distrust was noted to be a carry-over of their experience from tyrannical governments in their home countries. In addition, fears over immigration action here in the US also fueled the distrust.

Also significant was the potential for immigration action fears to drive the pandemic as sick individuals failed to seek healthcare. This was a concern raised by some of the healthcare professionals in the group and supported by one participant who shared:

“I know of three people who were here under student visa and when the school closed, they were worried about what's going to happen to their status. And even though they started not feeling well, they will not go in (for medical care). They were afraid that if they go in (for medical care) that they're going to be discovered. The fact that their visa is about to run out because the school closed. And they hadn't finished (school) and that fear itself created actually more problems because now there were so many people in that household over-exposed”

Immigrants' Pandemic Protective Factors

Despite the significant challenges that immigrants faced during the pandemic, it was evident from the focus group discussions that there were some protective factors that helped them as they dealt with the pandemic and the challenges that came with it. These included their ways of thinking and responding to challenges and the social networks they had access to. Key features with respect to the latter component included a shared sense of community and the support that participants received from their social networks.

A Different Worldview & Helpful Perspective. In general, the experiences of growing up under an oppressive government or living through multiple disasters are considered undesirable. However, for several focus group participants, experiences with these types of difficulties during their former lives in their home countries appeared to have equipped them with a mindset that alleviated some of the stressors brought by the COVID-19 pandemic.

For some, having lived through prior hardships in their home countries allowed them to view the 2020 COVID-19 pandemic and the challenges it brought with a sense of hope and a confidence that they would get through. One healthcare worker described this perspective in the following manner:

“Having grown in the Philippines, having been through so many disasters, I just feel that, you know, just talking to my patients and to friends who are born here (in the US), I just feel that I have more optimism and I tend to look more at the brighter side of things and not dwell on that negative impact. So emotionally probably I have a different perspective from most of them.”

For others, past experiences in having grown up under dictators or communist governments helped to ensure that complying with stay-at-home orders was relatively easy. Indeed, these

individuals in particular found it difficult to understand why their native-born American friends and associates struggled to comply with stay-home orders. One Nigerian participant shared:

“So, having grown up in a dictator state at a time when we had dictators ruling us, when they told you to stay home, you stayed home. So for me (talking to American friends), I'm like, ‘People, what's the, what's the big deal? Can you please just stay home? But I understand that America- and even though I've lived here for more than 12 years- it's just a different mindset. (Americans) don't like to be told what to do. And so, it's just a different way of thinking.’”

Another participant, from Bulgaria, agreed and contrasted her emotional response and her compliance with the stay-at-home order with that of her American-born life-partner:

“Growing up in a communist country since I was the age of 10, I also have (that) mentality. If something is being told to me or my family by the government, we better follow it. There wasn't like double thinking or making your own choice or (being) liberal about it. But with my (American) partner, (his response is) ‘I have the choice to decide for myself. Nobody can do this to me. I have to be convinced’. So, I can totally see the difference there.”

And for other participants, the hope and appreciation that they derived from being in the US, and from being able to take advantage of what the US had to offer, seemed enough to keep them going even through significant difficulties, including job loss.

“I was one of those people that unfortunately was laid off. However, I feel very positive about it. I am very thankful to live in the United States and to have the support that I have here. So, I cannot be more thankful for being an American citizen. I can compare (my situation) with individuals that live in my home country that were (also) laid off- they get no support. Unfortunately, they don't get the unemployment benefits that we do. It's a pretty poor country (so) they try to get by, and they try to figure it out on their own.”

For these participants, it appeared that the hardships of their pre-American lives, the difficulties they had lived through and the appreciation of the opportunities afforded them in their new country, together gave them a hope and resilience that helped them to endure the difficulties imposed by the COVID-19 pandemic.

A Strong Sense of Community & Obligation. One recurrent theme throughout the focus groups was the recognition of a strong sense of community among immigrants. Although in some contexts, as seen above, this sense of community can lead to difficulties, it is also a great asset that immigrants both draw upon for themselves, and contribute to, for the benefit of others in their social networks.

Embedded within this larger theme of obligation to (and opportunities from) participants' social groups and networks was the sense that they were lucky, blessed, and/or privileged to be in the position that they are in at the moment, thus behooving them to give back to others.

A number of these reactions were culturally informed as several of the participants came from cultures in which helping (and being helped) by members of one's community was inherent to the ethos of the group. As one gentleman from Ghana shared:

“When you look at immigrants specifically and immigrants anywhere, they're used to leaning on each other. Most immigrants are used to that because back home, that's what they do. You have an uncle, aunt, brother, sister or those extended family members who are there to consult in time of need. But here when we migrate,

although some people say we are Americanized, yet all those values still stay with us. And when there's a need, we are there."

For others, it is the shared experience of immigration and the common obstacles they and other immigrants overcame that informs their sense of commitment to other immigrants. As a participant from Sint Maarten expressed:

"In life, we go through different obstacles and we all know that our journey as immigrants to this country has been difficult. We all have a story to tell and, in this time, why not listen to somebody else's story? Maybe that's all they need is to just let loose and have someone listen to them"

Another participant went beyond the idea of shared challenges of the immigration experiences bringing immigrants together and pointed to ongoing prejudices he perceived against immigrants as driving his commitment to help and support others.

"Many of us really understand, especially as immigrants. I know many of us had to really work even harder to be where we are. And we can understand the fact that other people have those set prejudices against us. It makes you want to even do more. We want to rise and be above it and do what truly is right to do for others. It's not just about us. It's about (the fact that) it really does take a village."

And this sense of community, this feeling of obligation to give back and to help the groups they came from or belong to, motivated several of these individuals to respond to the COVID-19 pandemic in small and in big ways, both locally in the US and in their home countries.

Sense of Community Leads to Responsive Actions

The sense of community, feeling of obligation and eagerness to give back, along with a generosity inspired by their faith was what several of the participants pointed to as motivating the response activities and acts of kindness they undertook in the face of the spring 2020 COVID-19 pandemic. This was a true pandemic, affecting most of the world, and accordingly, the response activities undertaken by these immigrants were both local and international.

Pandemic Response: Emotional Support and (Virtual) Communities of Care. Several participants reported providing emotional support to friends and family during the pandemic. Whether by phone calls to check on their welfare, offers to buy groceries for the elderly, or offering special prayers, being there for the members of their social networks was a top priority for many participants. Some reported creating or participating in online communities of care to cater for the needs of the most vulnerable in their immigrant groups including the elderly, persons with disabilities and those individuals who had no family in the US and so were more prone to feelings of isolation. Some of the respondents also reported being the recipients of these acts of support from others.

Some participants continued to reach out to provide this support despite raging internal conflicts in which they struggled with doubts. This included doubts about whether what they were doing was enough (a sentiment shared by several), and concerns for their own safety. Examples of each of these perspectives are provided below.

The first is from a focus group participant who struggled with uncertainty about how to support a friend who found herself in a difficult situation, with a COVID-19 infected husband living in a tiny Brooklyn, NY apartment with herself and several children and in which there was no way to isolate the sick husband to keep from getting the rest of the family infected.

"You call constantly but you don't want to call constantly because you don't know what to say or what to do. And you want to pray with them but yet still, you're like

"maybe this is not the right time to pray, because they're going through something that I don't understand really". But you still try... and basically ask 'Do you want to talk?'. And (sometimes) they would say 'Yes', and (sometimes) they will say 'No'."

The second is from another participant who reported second-guessing herself after she went over to drop off food for a sick friend.

"Now we just found out a family friend has it (COVID-19). So, it's very touching because you have to go there to help them. Maybe drop food and other things. I was there and as soon as I came back, I just came in and washed up immediately... But you can't just ignore them."

Working through their own internal struggles, these participants reported how they continued to reach out to support and encourage others within their networks

Pandemic Response: Cash and In-Kind Donations (Local). Several focus group participants reported that they had made donations in cash and in-kind in response to the pandemic in the US. These took on different forms including donations of cash and gift cards to church members in need. Some sent food and money to friends who had lost their jobs while others donated food to the homeless population and cash to organizations purchasing much needed personal protective equipment for medical professionals and first responders.

Beyond direct cash donations, there were efforts to connect immigrant business owners to resources to help their businesses during the shutdown. One physician took it upon himself to personally purchase personal protective equipment and distribute these resources to his circle of fellow healthcare workers (working in different facilities) for their personal use. This occurred at a time when several health systems were short on personal protective equipment. His donation allowed his friends the ability to do their jobs with less concern about catching COVID-19. Notably, this concern for fellow healthcare workers was not limited to the COVID-19 response in the US.

Pandemic Response: Cash and In-kind Donations (International). Several of the respondents who were healthcare workers reported donating cash or supplies to hospitals and health systems in their home countries (most commonly the hospitals where they had received their clinical training).

One Nigerian-born doctor participated in a fund raiser along with other members of her alma mater who live in the US. Funds raised were sent to the teaching hospital attached to their medical school in Nigeria, and earmarked for the COVID-19 response. Another reported on how monies that had been put together by his group for a social event were instead diverted and donated to a hospital in their home country. An Iranian-born pharmacist and his immigrant group donated money to help purchase equipment for COVID-19-treating facilities in Iran.

But perhaps most telling was how a Filipino doctor and her immigrant doctor group were moved with empathy for their former medical school classmates who had been tasked with managing COVID-19 in their home country:

"We have (in the US) an alumni association from my medical school (in the Philippines) and we have been channeling financial donations since we found out that our alma mater- the hospital that we trained in- has been designated the coronavirus center in the Philippines. You know, it's one thing to be designated but it's another thing to come up with the resources. And it's my classmates back home, who are on the front lines. So, we're donating quite a bit to help out. We privately

purchased all the needed equipment and the basic PPE. And it's been wonderful to be able to help at least in some way."

But it was not just cash and in-kind donations and emotional support that these immigrants provided in light of the pandemic. Several provided another crucial resource- health education.

Pandemic Response: Educating of Networks. Several participants in the focus groups (both healthcare workers and others) shared how a substantial share of their response to the pandemic was in terms of educating their fellow immigrants about the disease, how it is transmitted and how to prevent it. For some, this involved interpreting the prevention guidelines in a way that was culturally relevant to members of their immigrant group and thus easier to understand and implement. For many others, it was more about dispelling myths and conspiracy theories that had arisen within their social networks. As one participant pointed out:

"I have been able to share with other immigrants who are sort of non-science based and who are really struggling with fear and anxiety because of what they're hearing, both in the social media and in the media. And so, it's really been helpful to be able to say, 'Well, you know, this can be refuted by this fact, because here in the evidence for it.' And I could always point to the science in cases where that exists."

Of the several who reported participating in some form of education of their communities, it had all been done voluntarily out of an eagerness to help others they saw struggling to understand the disease and its cause. In addition, some did this out of concern that some members of their communities were not taking the pandemic seriously and so risked exposure to the virus. The importance of educated and knowledgeable immigrants undertaking the task of interpreting prevention messaging to their immigrant groups was underscored by one participant who stated:

"We have helped groups to better understand because not everybody felt that information that they were getting about the COVID-1919 -what to do and all of the things that we're hearing- was true. We actually have had social calls with our groups to try to explain that. (We explain) what an epidemic is, and how serious it is and how they really do need to follow the different things (to protect themselves)"

DISCUSSION

In this study, we sought to understand how immigrants engage with pandemics, including what preparedness and response activities they participate in. Next, we aimed to gain insight into any influences that immigrants' social connections and networks, (and the norms, expectations and obligations embedded within those networks), have on their pandemic experiences. Finally, we sought to highlight the impacts of the spring 2020 coronavirus disease (COVID-19) pandemic, as experienced by immigrants living in the US.

Online focus groups were used to address these questions. Research has shown that focus group respondents are more forthcoming with respect to sensitive topics than are survey respondents; and that focus groups can offer unique insights into the diversity and/or consensus of experiences across a group, given their affordance of respondent interaction (Morgan 1996). These qualities made focus groups desirable for our present study.

Online focus groups are useful for reaching members of populations that are otherwise hard to reach either because they are stigmatized, unable or unwilling to participate in face-to-face groups, rare or few in number, or geographically dispersed. In this regard, online focus groups have been used to conduct a wide variety of research projects targeting a broad range of

participants, including research with lesbian-gay-bisexual-transgender youth (Thomas, 2013; DuBois, 2015; Ramo, 2019); persons with rare and serious health conditions (Tates, 2009; de-Jong, 2012; Boateng, 2016); and (perhaps most relevant to this work) immigrant populations (Lijadi, 2015).

One major difference compared to in-person focus groups is that with online focus groups, there is the possibility to draw participants from geographically remote areas (Rezabek, 2000; Watson, 2006; Lijadi, 2015). In this regard, online focus groups proved invaluable as this method allowed data collection to continue even during the stay-home and quarantine orders imposed by the US government in response to the spring 2020 COVID-19 pandemic.

Because this study was conducted a few weeks into the COVID-19 pandemic's onset in the US, it provided an invaluable opportunity to study emerging pandemic response activities and to gain initial insight into the impacts of an unprecedented and far-reaching infectious disease crisis in real-time, even as the COVID-19 pandemic unfolded. In these regard, this study provided invaluable insights into immigrants' response activities, difficulties encountered, and sources of resiliency.

One key component of the pandemic response by individual immigrants was to educate their networks regarding the pandemic and associated prevention measures. This was crucial protective factor for these groups, as several researchers have reported that inadequacy and ineffectiveness of risk communication is an important contributor to immigrants (and other minority populations) being disproportionately impacted by disasters.

It has been noted that immigrants often have continuing exposure to pandemic-causing organisms through social networks extending beyond the US (such as frequent contact with new immigrants arriving in the US from their home countries, and immigrants' personal travel to their countries of origin to visit with friends and family) (Truman, 2009).

In our study, however, we observed a different (protective) dimension to these social networks, in which immigrants sent cash and in-kind donations back to their home countries to provide relief for individual associates and family members. Perhaps more significantly, we found that immigrants also organized with their US-based immigrant groups and networks to gather and send donations to hospitals and health-systems in their home countries, thus bolstering the pandemic responses in those countries. This is consistent with past research on immigrant remittances and assistance during non-pandemic-oriented natural disasters (Joseph and Rather 2009). In illustrating how this also occurred during a pandemic, we add to existing knowledge in this regard.

Donations in this regard took the form of cash donations, hospital equipment and personal protective equipment sent to these overseas healthcare centers. This illustrates how ongoing social networks and connections to immigrants' home countries (construed in existing literature as potentially deleterious), can in fact have a very beneficial component that has not been highlighted in previous works. As such, we highlight a positive aspect to the ongoing social networks that immigrants maintain with their home countries (connections that had previously been noted primarily in light of the deleterious impacts to pandemic control).

More locally, the focus group participants also reported strong involvement in meeting the physical needs of immigrants and non-immigrants in their networks and local communities. This included monetary and in-kind donations to those in need.

An important aspect of the immigrant pandemic responses noted in this study was the provision of emotional support to the individual immigrants' networks. This took several forms,

including phone calls to check up on friends, family and church members; individual and organized prayers and words of encouragement; and standing up of virtual communities of care to provide support for vulnerable members of the immigrant communities. Focus group participants reported that they not only contributed by providing emotional support, but also themselves drew upon this resource, made available through their social networks and strong social connections. This is very much in keeping with the “individual-oriented” approach to understanding social capital (as popularized by Burt and others) in which social capital comprises resources derived from social networks that people utilize for their individual advantage and wellbeing (Burt, 2000; Grootaert, 2004; Krishna, 2007).

The ability to draw from support embedded within social networks was noted by participants as contributing to their sense of wellbeing and their thoughts about being able to successfully weather the pandemic. This finding supports what other researchers have found regarding the place of social capital in helping individuals cope and recover from other disaster types (Aguirre, 1995; Beggs, 1996; Aldrich, 2010; Sadri, 2018). However, it goes beyond previous works to provide much-needed insight into the specific role of social capital in helping individuals cope with, and respond to pandemics.

In this regard, the norms and authority relations under which immigrants had been raised in their home countries (and which they carried in their individual and collective memory even in their new/host country), became a frame of reference that enabled them to view the COVID-19 pandemic restrictions in a positive light and thus cope effectively with the hardships the restrictions produced. Specifically, the life experiences, of significant hardships related to having lived under tyrannical governments in their home countries, having survived repeated natural disasters, and having endured the difficulties inherent to the process of immigrating and adjusting to a new country, created in several of these respondents, a unique worldview in which they viewed the COVID-19 pandemic through the lens of prior experiences.

This engendered a set of positive thoughts and a resilient mindset that helped them cope and make sense of the pandemic and its inherent hardships. As an example, for many of the respondents, the experiences of having spent their formative years living in their home countries governed by ruthless dictators, made it easy for them to comply with US-government issued social distancing directives. These individuals drew from their prior experiences and in doing so, the COVID-19-associated inconveniences paled in comparison with what they had faced prior to immigrating.

Related to this, several respondents espoused a deep appreciation for the opportunities and privileges extended to them here in the US and referenced this as being a source of positivity that helped them to cope with the challenges brought on by COVID-19.

The crucial role that social capital plays in the wellbeing and success of immigrants in their new home country has been well described. This has been highlighted relative to academic success, business success and upward progression in employed positions. (Marger, 2001; Bankston, 2004; Kalnins, 2006; Tinarwo, 2015). We expanded upon this knowledge by showing how social capital also contributes to immigrants' ability to respond to pandemics, and to cope with the stressors that pandemics bring.

Unfortunately, not all aspects of social capital are positive. Negative impacts of social capital have been described by some authors. In this regard, the concept of “behavioral contagion” has been described in which “behaviors (including detrimental behaviors) can spread within a social network” and lead to adverse outcomes for the members of that network (Villalonga-Olives,

2017). Our study expanded upon this by demonstrating another potentially disadvantageous aspect to immigrants' social capital.

Although the strong sense of community, along with cultural norms and expectations that obligated immigrants to other members of their groups and social networks provided benefits to immigrants, there were challenges that stemmed directly from these characteristics of immigrants and immigrant groups.

Focus group participants reported on how their culture-mandated responsibility to care for their elderly parents and to attend to their parents' healthcare needs took a significant emotional toll and proved to be an added stressor as they struggled themselves to adapt to the COVID-19-induced societal changes.

Additionally, several participants struggled with the emotional burden induced by concerns over the economic wellbeing of extended family and associates in their home countries who were also dealing with changes and restrictions related to COVID-19. There were also financial strains related to associates from home reaching out to these immigrants to request financial assistance to address dire needs.

Additionally, because several of the immigrants in the US continue with customary practices from their home countries that make for communal living (sometimes with multiple family generations living within the same home), this proved to be challenging with the stay-home orders and quarantine/isolation directives brought on by COVID-19.

In this situation, respondents found not only that they had to worry about the health, room and board, and financial welfare of large numbers of household members (some of whom had lost jobs due to COVID-19), but also that because of close-living quarters, social distancing, quarantine and isolation were difficult or impossible to accomplish when a member of the household had been exposed to, or contracted COVID-19.

Previous disaster scholars have reported that immigrant populations are known to be distrustful of government establishments for various reasons including an ingrained mistrust of governments that originated in their countries of birth, as well as fears of deportation or other negative consequences for those who are undocumented immigrants (Tsou, 2009; Siddiqui, 2011). We found this to be a concern raised by some of our participants who described how associates of theirs chose to avoid seeking healthcare because of concerns over immigration status and expired visas.

There were other impacts of the COVID-19 pandemic that our study found which, though not necessarily unique to immigrants, are worth highlighting in an attempt to add to the limited, but rapidly expanding knowledge relative to the 2020 COVID-19 pandemic.

First were the significant economic impacts which affected a large proportion of respondents in terms of job losses, significant pay-cuts, unpaid furloughs, shuttering of businesses and loss of paid time off. Other job-associated stressors were the significant emotional toll that COVID-19 took on several of our study participants who were healthcare workers and worried on the one hand about bringing the disease home to their families, and on the other hand, worried about impacts of staffing shortages in their work units on their ability to perform their jobs safely and well.

Next was the impact on parents of having to grapple with trying to work remotely (many for the first time) while simultaneously providing guidance and technical support to children who were suddenly forced to receive education in an online environment. No less significant were

issues related to lack of access to the necessary technology to support the work and educational needs of their families.

Finally, findings from one of our 8 focus groups indicated the significant challenges faced by individuals with special needs (and their families) in dealing with the COVID-19-mandated restrictions. The information we obtained herein was limited but was enough to highlight the need for further research in this area.

With regard to interpersonal relations, most participants reported a positive effect of the stay-at-home orders. This was because people, when forced to stay home, found the time to reconnect with friends and family that they had lost contact with in the daily grind of their busy lives. Additionally, in being mandated to shelter at home with their immediate families, individuals reported that stronger bonds were formed and an increased awareness and appreciation of the unique qualities of members of their households emerged. Some went as far as to describe this as the “silver lining” to the troubles of the COVID-19 pandemic.

However, these sentiments were not universal. For a minority of study participants, being forced to stay in close confines for prolonged periods with members of their families was detrimental. This was because it made it such that persons who in non-pandemic times spent significant times away from each other and only interacted briefly under normal circumstances, were forced to be in each other's presence day in and day out. Likely heightening pre-existing (but previously easily overlooked) tensions, the stay home orders thus became for those families an “un-bonding experience”.

Limitations and Strengths

Limitations of the study include that the sampling approach was nonrandom and as such, the findings represent the experiences of individuals in the focus groups and may not be generalizable. However, the intent of the study was not to generate generalizable data but rather, to obtain a view into experiences during the pandemic. Another limitation was that incidentally, most participants were relatively well educated. They also needed to have some degree of comfort in using internet or phone technology (to allow them to join the online focus groups).

Additionally, due to the researcher's language limitations and funding limitations exacerbated by the pandemic, we were constrained to recruiting only English-speaking participants.

Nonetheless, the study provided ample insight into challenges faced by the immigrants who participated in the focus groups. We thus observe that if (what turned out to be) an “elite” group of immigrants could have faced these significant trials; it is likely that these problems were experienced in even greater acuity by less educated immigrants with less access to the resources that education and English proficiency afford. Future research should more closely examine the experiences of these groups.

A key strength is that this study was conducted in real-time, even as the pandemic unfolded. This allowed us to capture a snapshot in time as this pandemic, (and the unprecedented social changes it generated) unfolded.

CONCLUSION

The online focus group discussions yielded information relative to how individual immigrants and their social networks experienced and responded to the spring 2020 COVID-19 pandemic. They also provided insights into the influences from pre-existing social connections, and the support, expectations and responsibilities that came with those networks. Very importantly,

they allowed an examination of how immigrants' backgrounds, cultures and way of thinking and of being, in many instances helped, and in other instances detracted, from their ability to cope with the pandemic.

REFERENCES

- Aguirre, B.E., Wenger, D.E., Glass, T.A., Diaz-Murillo, M., & Vigo, G. (1995). The social organization of search and rescue: Evidence from the Guadalajara gasoline explosion. *International Journal of Mass Emergencies and Disasters*, 13 (1), 67-92.
- Aldrich, D. (2010). Fixing recovery: Social capital in post-crisis resilience. *Political Science Faculty Publications*. Retrieved October 21, 2018, from https://www.researchgate.net/publication/43549746_Fixing_Recovery_Social_Capital_in_Post-Crisis_Resilience
- Andrulis, D.P., Siddiqui, N.J., & Gantner, J.L. (2007). Preparing racially and ethnically diverse communities for public health emergencies. *Health Affairs*, 26(5), 1269–1279. doi:10.1377/hlthaff.26.5.1269
- Arima, Y., et al. (2020). Severe acute respiratory syndrome coronavirus 2 infection among returnees to Japan from Wuhan, China, 2020. *Emerging Infectious Diseases*, 26 (7) 1596-1600.
- Atkinson, C. (2014). The 2011 flood in Minot (North Dakota, USA) and the role of faith-based and nonprofit groups in hazard event response and recovery. *International journal of disaster risk reduction*, 8(2), 166-176.
- Bankston, C. (2004). Social capital, cultural values, immigration, and academic achievement: the host country context and contradictory consequences. *Sociology of Education*, 77(2), 176-179.
- Barber, G. (2020). New COVID-19 antibody study results are in. Are they right? Retrieved from wired.com: <https://www.wired.com/story/new-COVID-19-antibody-study-results-are-in-are-they-right/>
- Beggs, J. H. (1996). Situational contingencies surrounding the receipt of informal support. *Social Forces*, 75(1), 201-222.
- Boateng, B. N. (2016). Online focus groups with parents and adolescents with heart transplants: Challenges and opportunities. *Pediatric Nursing*, 42(3).
- Böhmer, M. B. (2020). Investigation of a COVID-19 outbreak in Germany resulting from a single travel-associated primary case: a case series. *Lancet Infect Dis*. doi:10.1016/S1473-3099(20)30314-5
- Burt, R. (2000). The network structure of social capital. *Research in Organizational Behavior*, 22, 345-423.
- Calsyn, M. G. (2020). Social Distancing To Fight Coronavirus: A Strategy That Is Working and Must Continue. Retrieved from <https://www.americanprogress.org/issues/healthcare/news/2020/03/25/482278/social-distancing-fight-coronavirus-strategy-working-must-continue/>
- Campbell, J. L. (2013). Coding in-depth semistructured interviews: problems of unitization and intercoder reliability and agreement. *Sociological Methods and Research*, 42(3), 294–320 . doi:<https://doi.org/10.1177/0049124113500475>

- Carter-Pokras, O. Z. (2007). Emergency preparedness: knowledge and perceptions of Latin American immigrants. *Journal of Health Care for the Poor and Underserved, 18*(2), 465-81.
- Centers for Disease Prevention and Control, National Center for Immunization and Respiratory Diseases [CDC-NCIRD]. (2020). Travelers prohibited from entry to the United States. Retrieved June 26, 2020, from www.cdc.gov: <https://www.cdc.gov/coronavirus/2019-ncov/travelers/from-other-countries.html>
- Cucinotta, D. V. (2020). WHO declares COVID-19 a pandemic. *Acta Biomed, 157*-160. doi:10.23750/abm.v91i1.9397
- DuBois, L. Z. (2015). To have sex or not to have sex? An online focus group study of sexual decision making among sexually experienced and inexperienced gay and bisexual adolescent men. *Archives of Sexual Behavior, 2027*-40.
- Dynes RR, Q. E. (1976). Organizational communications and decision making in crises. Retrieved March 7, 2019, from <http://udspace.udel.edu/handle/19716/1274>
- Dynes, R. (2006). Social capital: Dealing with community emergencies. *Homeland Security Affairs, 2*(2).
- Eisenman, D. G. (2009). Developing a disaster preparedness campaign targeting low-income Latino immigrants: Focus group results for project PReP. *Journal of Healthcare for the Poor and Underserved, 20*(2), 330-345.
- Finnegan, C. N. (2020). US evacuation flight from China's coronavirus zone rerouted to March Air Reserve Base. Retrieved from abcnews.com: <https://abcnews.go.com/US/us-chartering-evacuation-flight-wuhan-coronavirus-zone-california/story?id=68571310>
- Grootaert, C. N. (2004). Measuring social capital- an integrated questionnaire. *World Bank Working Paper Number 18*. Retrieved March 28, 2019, from <https://openknowledge.worldbank.org/bitstream/handle/10986/15033/281100PAPER0Measuring0social0capital.pdf?sequence=1>
- Guarnieri, M. (2020). Stop saying 'we're all in this together.' You have money. It's not the same. *Washington Post April 18, 2020*. Retrieved May 26, 2020, from <https://www.washingtonpost.com/outlook/2020/04/18/coronavirus-retail-jobs-inequality/>
- John, T. T. (2020). *These countries have evacuated citizens from Wuhan because of the coronavirus*. CNN.com January 29, 2020 Retrieved from <https://www.cnn.com/2020/01/29/world/wuhan-coronavirus-evacuations-intl/index.html>
- Joseph, G., & Dilip, R (2009). Remittances and natural disasters: Ex-post response and contribution to ex-ante preparedness. Policy Research Working Papers. <https://doi.org/10.1596/1813-9450-4972>
- Kalnins, A. (2006). Social capital, geography, and survival: Gujarati immigrant entrepreneurs in the US lodging industry. *Management Science, 52*(2), 233-247.
- Kandula, N. K. (2004). Assuring the health of immigrants: what the leading health indicators tell us. *Annual Review of Public Health, 357*-376.
- Kassam, A. K. (2020). Spain, Portugal work to repatriate nationals from coronavirus-hit Wuhan. *Reuters, January 27, 2020*. Retrieved from <https://uk.reuters.com/article/us-china-health-spain/spain-portugal-work-to-repatriate-nationals-from-coronavirus-hit-wuhan-idUKKBN1ZQ1V2>
- Kawamorita, H. S. (2020). Entrepreneurial universities in times of crisis: case of covid-19 pandemic. *Journal Of Entrepreneurship, Business And Economics, 8* (1), 77-88.

- Kouřil, P. F. (2020). "Smart" quarantine and "blanket" quarantine: the Czech response to the COVID-19 pandemic. *Eurasian Geography and Economics*, 61 (4) 587-597.
doi: <https://doi.org/10.1080/15387216.2020.1783338>
- Krishna, A. (2007). How does social capital grow? A seven-year study of villages in India. *The Journal of Politics*, 69(4), 941–956.
- Lijadi, A. & van Schalkwyk, G.J. (2015). Online Facebook focus group research of hard-to-reach participants. *International Journal of Qualitative Methods* 14 (5)
doi: <https://doi.org/10.1177/1609406915621383>
- Marger, M. (2001). Social and human capital in immigrant adaptation: the case of Canadian business immigrants. *The Journal of Socio-Economics*, 30 (2) 169-170
- Miller, H. F. (2020, March 25). New Mexico, Washington and a slew of other states are telling their residents to stay home amid coronavirus. *CNBC March 25, 2020*. Retrieved from <https://www.cnbc.com/2020/03/23/massachusetts-under-stay-at-home-order-until-april-7-gov-baker-announces.html>
- Morgan, D.L. (1996). Focus Groups. *Annual Review of Sociology*. 22, 129-152.
- Morrison, C. (2020). Trump adopts more serious tone in latest coronavirus briefing. *Washington Examiner, March 14, 2020*. Retrieved May 26, 2020, from <https://www.washingtonexaminer.com/news/trump-adopts-more-serious-tone-in-latest-coronavirus-briefing>
- O'Connor, C., Joffe, H. (2020). Intercoder reliability in qualitative research: debates and practical guidelines. *International Journal of Qualitative Methods*.
doi:<https://doi.org/10.1177/1609406919899220>
- Palinkas, L. A. (2015). Purposeful sampling for qualitative data collection and analysis in mixed method implementation research. *Administration and Policy in Mental Health*, 42(5).
- Payne, G. P. (2004). Sage key concepts: Key concepts in social research. London: SAGE Publications, Ltd. doi: 10.4135/9781849209397
- Ramo, D. E. (2019). Exploring identities and preferences for intervention among LGBTQ+ young adult smokers through online focus groups. *Journal of Adolescent Health*, 64(3).
- Rezabek, R. (2000). Online focus groups: Electronic discussions for research. *Forum: Qualitative Social Research*.
- Sadri, A. M., et al (2018). The role of social capital, personal networks, and emergency responders in post-disaster recovery and resilience: a study of rural communities in Indiana. *Natural Hazards*, 90, 1377-1406.
- Siddiqui, N. P. (2011). Ethnicity and minority status effects on preparedness. In C. Sproles, *Encyclopedia of Disaster Relief* (pp. 175-177). Sage Publications.
- Tates, K. Z., et al (2009). Online focus groups as a tool to collect data in hard-to-include populations: examples from paediatric oncology. *BMC Med Res Methodol* 9 (15)
<https://doi.org/10.1186/1471-2288-9-15>
- Thomas, C. W., Wotten, A., Robinson, P. (2013). The experiences of gay and bisexual men diagnosed with prostate cancer: results from an online focus group. *European Journal of Cancer Care*, 22 (4) 522-9.
- Tinarwo, M. (2015). Forging Ties: Social Capital Utilization by Zimbabwean Social Workers in Britain. *Migration & Integration*, 851-869.
- Truman, B. T. (2009, October). Pandemic Influenza Preparedness and Response Among Immigrants and Refugees. *Am J Public Health* , 99(Suppl 2), S278–S286.

- Tsou, A., et al. (2009). Emergency Preparedness for African Immigrants in West Philadelphia. *RWJ Clinical Scholars University of Pennsylvania*. Retrieved from <https://www.diversitypreparedness.org/~media/Files/diversitypreparedness/RWJCS%20EP%20for%20African%20Immigrants.ashx?la=en>
- Villalonga-Olives, E, & Kawachi, I. (2017). The dark side of social capital: A systematic review of the negative health effects of social capital. *Social Science & Medicine*, 194, 105-127. doi:10.1016/j.socscimed.2017.10.02
- Vogel, G. (2020). 'These are answers we need.' WHO plans global study to discover true extent of coronavirus infections. *Sciencemag*, April 4, 2020. Retrieved from: <https://www.sciencemag.org/news/2020/04/these-are-answers-we-need-who-plans-global-study-discover-true-extent-coronavirus>
- Wang, T. Y. (2008). Integrating immigrant families in emergency response, relief and rebuilding efforts. *GCIR publications* <https://www.gcir.org/publications/gcirpubs/emergency>.
- Watson, M. P. (2006). The analysis of interaction in online focus groups. *International Journal of Therapy and Rehabilitation*, 13(12), 551-557.
- WHO. (2020, June 17). Rolling updates on coronavirus disease (COVID-19). *WHO publications*, June 17, 2020. Retrieved June 26, 2020, from www.who.int: <https://www.who.int/emergencies/diseases/novel-coronavirus-2019/events-as-they-happen>
- WHO-China. (2020). Report of the WHO-China Joint Mission on Coronavirus Disease 2019 (COVID-19). In B. L. Aylward (Ed.). *World Health Organization*. Retrieved from https://www.who.int/docs/default-source/coronaviruse/who-china-joint-mission-on-covid-19-final-report.pdf?sfvrsn=fce87f4e_2
- Yi, Y. L. (2020). COVID-19: what has been learned and to be learned about the novel coronavirus disease. *International journal of biological sciences*, 1753–1766. doi:<https://doi.org/10.7150/ijbs.45134>