

Exploring Factors Enhancing Resilience Among Marginalized Older Adults During the COVID-19 Pandemic

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Abstract

Marginalized older adults are highly vulnerable to COVID-19 due to social isolation and physical and functional limitations. Despite these stressors, they appear to be resilient by leveraging individual, community, and societal resources. This study conducted in-depth interviews with marginalized older adults to understand how COVID-19 affected their mobility and daily lives. We also identified different levels of protective factors affecting their resiliency to pandemic stressors. COVID-19 influenced not only the physical health but also the mental health of older adults. However, they overcame adversity by using technology to continue daily activities, exchanging informal support with family and neighbors, relying on formal support from community organizations, and keeping themselves physically active in their neighborhoods. Our findings suggest a holistic approach to enhance the resilience of older adults during an unprecedented event.

Keywords

coping behavior, protective factors, physical activity, mental health, qualitative methods, COVID-19

Introduction

Older adults have been perceived as the group most vulnerable to the effects of COVID-19, with high mortality and infection rates (Shahid et al., 2020). Prior to COVID-19, social isolation was already established as a major health concern for older adults that results in an increased risk of cognitive decline, mortality, and re-hospitalization (Nicholson, 2012). During the pandemic, researchers argue that social distancing and stay-at-home orders have disproportionately affected older adults, making this population more socially isolated than ever (Berg-Weger & Morley, 2020; Morrow-Howell et al., 2020).

Due to fears of the virus as well as social distancing guidelines, older adults are likely to struggle with fulfilling spiritual and emotional needs (Vernooij-Dassen et al., 2020). Moreover, a survey reported that 53.4% of respondents aged 70 years and over had experienced a decrease in exercise since COVID-19 began (Central Statistics Office, 2020). Hare et al. (2013) and Leiva et al. (2017) argued that the effects of depression on cardiovascular health were coupled with sedentary behaviors. The combination of decreased social interaction and low levels of physical activity brought on by COVID-19 puts older adults at a much higher risk of overall health (Goethals et al., 2020). While many researchers have documented devastating impacts of the COVID-19

pandemic on older adults' health and well-being, there is still a lack of research identifying protective factors at varied levels in order to support older adults in their resilience against various stressors during COVID-19.

Resilience is defined as a "dyadic interdependence" of individual and environmental factors (Aldwin & Igarashi, 2012). The ecological model of resilience includes individual (e.g., individual characteristics), contextual (e.g., family and friends), and sociocultural (e.g., institutions or community) resources to understand how well equipped an individual is to cope with novel stress (Aldwin & Igarashi, 2012). According to this model, individual resilience involves not only individual coping strategies, but also the individual's environment, which may enable or impede individuals ability to apply those coping skills. For example, individuals with poor

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health, limited social networks, or low socioeconomic status tend to lack the opportunity to utilize individual coping skills, not necessarily due to limited capability of individuals but often due to their environments (Aldwin & Igarashi, 2012).

Technology has been perceived as a resource to help individuals cope with many of the challenges associated with the COVID-19 pandemic (Morrow-Howell et al., 2020). Older adults' use of technology on a daily basis has been linked to higher rates of self-efficacy and coping strategies for stress (Yagil et al., 2016). However, older adults who have difficulty with technology or those who do not have smartphones disproportionately experience isolation (Seifert et al., 2021). Morrow-Howell et al. (2020) describe the pandemic as a "sink or swim moment" for older adults' relationship with technology (p 530), suggesting the importance of focusing on vulnerable older adults who were unable to utilize technology for information, socialization, and remote appointments.

In addition, Morrow-Howell et al. (2020) argued that family could play an important role in increasing the health and well-being of older adults during COVID-19, particularly for older adults with physical and functional limitations who have a high dependence on outside help. Furthermore, the relationship between poor built environments and high COVID-19 death rates appear to be positively correlated (Hu et al., 2021). Impoverished neighborhoods tend to be crowded and have a poorly suited built environment, leading to a population that is highly vulnerable to COVID-19 outcomes (Emeruwa et al., 2020).

Previous literature on the subject focused on capturing changes in physical activity and social behaviors but failed to explore subjective experiences of older adults from marginalized backgrounds regarding their daily lives during the pandemic (Berg-Weger & Morley, 2020; Woods et al., 2020). As much as marginalized populations are disproportionately affected by the COVID-19 pandemic (Kantamneni, 2020), it is critical to present primary data showing some challenges that they experienced.

In particular, Whitehead and Torossian (2020) highlighted older adults' coping behaviors in response to COVID-19 related stressors. By categorizing factors that older adults found joyful and comforting in the midst of COVID-19, Whitehead and Torossian indicated coping resources, such as family, faith, and self-care. However, this study lacked indepth information from voices of older adults and addressed the needs of identifying various levels of protective factors in place among marginalized older adults to combat various challenges associated with COVID-19. This study aimed to fill the gap in the state of knowledge by conducting in-depth interviews to explore daily activities of marginalized older adults and how they coped with various challenges during the COVID-19 pandemic when there was state-wide quarantine enforcement. Using a general inductive approach, we identified individual, social, and environmental protective factors supporting marginalized older adults from such adversity.

Materials and Methods

Study Design

We conducted in-depth, semi-structured, individual interviews. The interview guideline consisted of 12 questions that investigated (1) the biggest challenges they experienced during the pandemic, (2) how COVID-19 affected their lives, including daily activities, (3) any accommodations made to improve their daily lives, (4) their social networks, and (5) expected assistance from government agencies or communities during the pandemic. The interview guideline is available upon request. This study was approved by the University of Texas at Arlington Institutional Review Board (#2020-0034).

Study Procedure

Using a convenient sampling method, older adults with limited income were recruited from urban and suburban communities in North Texas. We partnered with a local organization that serves older adults and their family members. Directors from federally funded volunteer programs (i.e., Foster Grandparents and Senior Companion Program) promoted this study in their volunteer groups. Inclusion criteria included (1) being aged 55 years and older; (2) having the ability to provide consent for themselves; and (3) being able to communicate in English. As these programs require older volunteers to have an income of up to 200% of poverty based on the Department of Health and Human Services poverty guidelines, we did not apply any specific income level as an inclusion criterion. Those who were interested in the study provided us with their name and contact information. Trained, female social work research assistants followed up to reiterate the purpose of the study and conducted the interview over the phone with individuals who agreed to participate in this study from July through August 2020. The participants provided consent at the beginning of the conversation and were asked to find a place where they would feel comfortable sharing their lived experiences. As a result, 18 older adults participated in the interviews. During the data analysis, we were able to establish the repetition of responses thus determining that saturation was reached (Power et al., 2015). Each interview lasted approximately 40-60 minutes and the participants received a \$5 Walmart gift card along with a copy of the consent form via mail. All of the interviews were conducted over the phone and audio-recorded for transcription. The audio files were transcribed verbatim by a professional company.

Data Analysis

Qualitative data files were cleaned and entered into ATLAS.ti. The data were analyzed using a general inductive approach (Thomas, 2006). The leading investigator of this study (Lee)

Table 1. Demographics (n = 18).

Variable	Frequency	Percent
Age (M = 73.5; SD = 6.8, minimum = 65; ma	aximum = 86)
Gender		
Male	I	5.6
Female	17	94.4
Race/ethnicity		
White	2	11.1
Black/African American	14	77.8
Hispanic	2	11.1
Marital status		
Married/living with a partner	2	11.1
Separated or divorced	6	33.3
Widowed	I	5.6
Single, never married	7	38.9
Missing	2	11.1
Highest education		
K-12th grade (no diploma)	3	16.7
High school graduate/Tests of General Educational Development	4	22.2
Post-high school education (no degree)	6	33.3
2-year college degree	I	5.6
4-year college degree	2	11.1
Graduate or professional degree	I	5.6
Missing	I	5.6
Annual household income		
Less than \$10,000	7	38.9
\$10,000-\$19,999	2	11.1
\$20,000-\$29,999	I	5.6
\$30,000 and more	3	16.7
Missing	5	27.8
Employment status		
Part-time	3	16.7
Retired	14	77.8
Missing	I	5.6
Car		
Yes	8	44.4
No	10	55.6
Mobility		
Able to walk more than ¼ mile at once	10	55.6
Able to walk less than 1/4 mile at once	4	22.2
A lot of difficulty with mobility	3	16.7
Missing	1	5.6

Note. M = mean; SD = standard deviation.

and two trained research assistants separately reviewed the data and created codes. Three coders discussed initial codes that were frequent across the participants and collaboratively developed and agreed upon key themes. The second author (Hyun) who was not involved in the initial data analysis process separately assessed transcripts to confirm or challenge the initially presented themes. Final themes were identified after reaching consensus from all of the researchers. Two themes emerged from the data: (1) sedentary behaviors

and (2) the negative impact on mental health and social well-being that reflected major challenges our participants experienced during the COVID-19 pandemic. To respond to such challenges, we were able to identify various coping strategies addressed across the participants and developed four major themes based on the individual, social, and built environments: (1) individual environment: use of technology, (2) social environment: informal support from family and neighbors, (3) social environment: formal support from community organizations for older adults, and (4) built environment: walkable neighborhoods. To increase trustworthiness in our study, we conducted peer debriefings and stakeholder checks (Janesick, 2007; Thomas, 2006). We used pseudonyms when presenting our findings.

Results

Participants

Table 1 indicates demographics of the participants. The average age of the participants was 73.5 years old (n = 18). The majority of the participants were female (94.4%), Black or African American (77.8%), and retired (77.8%). While 38.9% had never been married, 11.1% were married, 33.3% were separated or divorced, and 5.6% were widowed. About one-fourth (22.2%) of the participants had at least a 4-year college degree while 38.9% had less than a high school diploma. One-half of the participants reported their annual household income as less than \$19,999. In addition, 55.6% of the participants did not have a car but relied on public transportation, special transportation for seniors (i.e., paratransit), ride hailing, such as Uber/Lyft, or other people (i.e., family and friends) for their trips. While 38.9% of the participants were only able to walk less than 1/4 mile at once or reported having significant difficulty with their mobility, 55.6% of the participants reported that they were able to walk more than 1/4 mile at once.

Sedentary Behaviors

Many participants identified that restrictions against congregating, gatherings, and group exercise at senior centers affected their overall physical health. One participant, Mary, claimed that she used to be active in spite of her limited mobility and participated in an exercise program offered by a local hospital.

"Although I do have my limitation as far as my mobility with walking, the biggest challenge is that I'm not able to get out as often, not even go to the hospital. Hospital, you could go there and walk around, and do the mile walk. Because of COVID-19, I don't have access to do that. Before, I went there three to four days a week for at least an hour or 45 minutes to get my walking in. When I say my walking, of course, I'm using my rollator." (Mary)

Mary expressed her concerns about the loss of muscle strength and balance that she had experienced during the COVID-19 outbreak. She said that she tried to walk as often as she could in her house but noticed a loss of balance since she was not able to maintain the same level of activity at home.

"When you walk, you're strengthening your muscles. You're strengthening, especially your leg muscles. But when you're not doing that, and it's like, they're doing more resting than they are doing any type of activity, it could be a hindrance. Sometimes, even in my household, if I haven't been walking as often as I used to, I lose more balance." (Mary)

Other participants also discussed insufficient physical activities and reduced levels of physical fitness which, in turn, negatively affected their health. Consequently, they suffered ailments such as aching knees, feelings of tiredness, and a lack of energy. Additionally, those with existing health conditions, such as arthritis found that the lack of physical activity worsened their symptoms.

"I can't volunteer anymore. That was something to do every day. COVID-19 is scary. I am not able to move around like I used to do. I am walking less. Oh, I might get a little stiff from sitting. I have arthritis, so sitting don't help that much. Sometimes I just get up and walk from the front to the back [of the house]." (Lynn)

"The biggest challenge during this time is staying at home because we can't participate in senior activities. I used to go to water aerobics on Monday through Thursday. I would go over to the recreation centers on Fridays. Now we're not having any of that. I exercise less. My knees are aching, my legs are aching, and I'm just tired, because I sleep a lot. And that's because I don't have to get up and go anywhere. I can tell the difference." (Janet)

The Negative Impact on Mental and Social Well-Being

COVID-19 influenced not only the physical health but also the mental health of older adults. Although many participants stayed in touch with their family and friends, they mentioned that they still felt lonely because of the limited physical contact with others.

"Lonely... You can't go uncovered, but [family members] they're trying to stay safe as well. And I only have one son here. My kids call and check often, but it's not like looking in their face and getting a hug and all that." (Barb)

"I feel socially isolated, but I'm not at home by myself, I've got my husband luckily. Mostly, we communicate with other family over the phone. But I have that yearning of going to see them and actually socializing with them physically. It does get lonely." (Heather) A lot of older adults felt vulnerable during the pandemic, namely, people like Mary who had mobility limitations and therefore expressed additional concerns as they often require assistance from others to meet their daily needs.

"It's a little depressing. For the agency, it's just hard for them to find someone that really wants to come and go into someone else's house with all this going on, even if they are exercising precautions. So that puts me at a disadvantage because I am in need of help, because of my mobility issues." (Mary)

However, the study participants showed resilience from such stress and hardship to some extent. First, technology served as an individual-level protective factor against this novel disease. Secondly, their social environment, including both informal support from family and neighbors and formal support from community organizations, created a buffer against loneliness and social isolation. Lastly, living in a walkable built environment was identified as a protective factor to keep older adults active and healthy.

Individual Environment: Use of Technology

An individual resource that has been reportedly vital among the participants was technology. A few participants demonstrated prior competence with technology, while many others mentioned that they learned internet and teleconferencing skills during the pandemic.

"I did not use the internet a lot before COVID-19. Now, I do use it more to shop than going into the stores, even for household items ... I started with computers and worked in a business in 80's ... I'm not afraid of computers. I was able to load Zoom on my phone, on my iPad, and on my laptop without any problems. That was surprising to me." (Ashley)

"This is my first time I just started. You can do the Zoom on computer or you can do it on the phone. Church has a live-stream. I'm doing Zoom now as far as we have Bible study." (Janet)

Being able to join religious services and communicating with family and friends were good motivators for many older adults to learn and utilize teleconferencing. Moreover, many older adults familiarized themselves with virtual platforms as medical clinics incorporated telehealth services into their practices. In particular, some participants described benefits of telehealth services, with some detailing how health care was more accessible than ever, and that they preferred these new options over in-person visits.

"I do telemedicine ... It's better if they look you over eye-to-eye, but what are you going to do? I'm sure it's going to be a big to-do going forward, long after COVID-19covid-19. I think the issue of

people getting primary care face-to-face is going to be limited." (Donna)

"It's much easier ... I need a hip replacement. It's already broken, and it hurts to try to get up and go. Usually the office is pretty long walk. If I go, I would have to use valet parking. You gotta pay for that. That's extra." (Tammy)

In addition, many older adults used the internet (e.g., YouTube) to stay active and physically and mentally engaged.

"I have to exercise, and [there is] YouTube for the seniors to exercise with. I checked that out yesterday. I surely did. I do the leg exercise, like stand up on the panel. And I'll walk around sometime in the apartment without the walker stick." (Amy)

"I live by myself. When I feel a little bit lonely, I go on my patio, read, and go on YouTube. I love YouTube, I get a lot of information. The last year and a half I really came into YouTube and I'm enjoying it. Love some information and learning." (Cindy)

While technology served as the most critical protective factor for our participants, some shared challenges utilizing the internet or teleconferencing. A few mentioned not having access to the internet or having poor internet connectivity.

"The hospital was where I could just go in because they had different activities for the seniors. They still have a program online, but I don't have access to that [the internet]." (Mary)

"I try to use Zoom every Sunday, but everybody else is on the internet so it's hard to get it in the mornings because I don't have the best internet service. But yes, I do. I try to watch something as far as I can go, as long as my internet is working." (Ashley)

When technology was challenging, some older adults used the telephone to interact with others and continue religious activities.

"It's all about computers. I don't even have a computer. They [family and friends] make phone calls to talk and check in and see how I'm doing. I have a cousin that's a pastor in Houston and he's doing live screening. So, I call him on the line every Sunday morning. So that helps with me not being able to go to church." (Lynn)

Social Environment: Informal Support from Family and Neighbors

Many participants reported that their social networks were considered a vital resource to meet their daily needs during the pandemic. As Donna who lives alone said, "with COVID, you are putting on an extra layer of need, either their family or neighbors or somebody," family played an important role to

support older adults, particularly those who do not drive, during this difficult time.

"My son used to take me to go food shopping ... So instead of doing that, he does the food shopping, or his wife does it. And I've had deliveries and they've also set up deliveries for me to do the stuff. I have family that can actually help me out." (Donna)

Some of the participants reported that their grandchildren helped combat emotional and social challenges during the pandemic. They reported that their grandchildren visited often, taught them how to use a smartphone, and provided fun games.

"I use that [Facetime] whenever my grandkids call. Nobody had been able to teach me how to use it. They walked me through it. You call that number and then their face pops up. My grand-daughter told me that. That's all you gotta do Grandma, it's not that hard." (Barb)

While most of our participants relied on their family members for help, some participants exhibited strong social networks that included neighbors. Not only did these older adults receive help from their neighbors, they also helped their neighbors and shared resources.

"There's nobody but me. Sometimes I have a very nice friend next door who tell me always "Please call me if you need any help." She tried to bring me flowers. She'd even come up and water them after she gave them to me." (Tammy)

"I have friends, neighbors, who don't go out at all because they do have worries... they've got a medical condition. But I try to do the times when I go to the store, I call and ask them, "Do you need something?" And I usually get it for them." (Heather)

Social Environment: Formal Support from Community Organizations for Older Adults

Our participants praised changes that some organizations made to accommodate social distancing guidelines to support older adults during the pandemic. The participants said that some organizations switched congregate meals to homedelivered meals and provided virtual support groups and webinars. In addition, local organizations helped these older adults stay informed via newsletters and flyers, sent them care packages, and often called to check on them.

"Well, they keep us informed of where there are free resources. The director made personal contacts with all and left a care package. Which was remarkable. Because we're not doing anything, but they are keeping in touch with us. My church has, the local aging organization has, and senior centers have ... So those are places that I've had people who call me to check on me." (Ashley).

"We all seniors learn to listen and pay attention to the newsletters. Yes, and they mail them out to us. Birthdays, events, what's going on, what's coming up. It's a lot of different things. They never forget an individual. It's wonderful." (Barb)

Built Environment: Walkable Neighborhoods

Many participants voiced that they wanted to remain physically active, with several stating that they started walking around their neighborhood more often than before. This demonstrated the importance of the built environment, including safe streets and well-maintained sidewalks for older adults.

"I can still go walking, but I don't feel safe enough to go the gym ... I used to go the gym. I try to do more [walking now]. Walking has helped a lot ... Oh I have got a bike to ride around." (Christine)

"I've been walking around my apartment because I don't have to come in contact with nobody. With exercising, it gets good. I like to move around. It's good for you, and it's good at a certain age anyway, for anybody. I love it. It makes my life better." (Cindy)

However, some older adults complained about their neighborhood environments due to off-leash dogs or individuals who were not wearing masks. A few participants indicated their fears of walking around their neighborhood, where they would see people gathered in groups or not wearing masks.

"It's terrible over here. I'm afraid to get out and go walk, even with a stick or whatever because dogs were so bad loose. I don't try to walk far no more." (Sue)

"I hate to go to these parks because these young people, they don't regard this as something that is tragic. All these people are dying, they still don't get it. And they're not going to wear a mask and different stuff, you know? Well, this can't happen to me." (Nancy)

Discussion

We conducted individual in-depth interviews with marginalized older adults to explore physical and emotional challenges that these older adults experienced during the COVID-19 pandemic. Using an inductive approach, several individual and environmental protective factors were identified. First, technology was a strong individual-level resource that appeared across the study participants. Lam et al. (2020) estimated that in 2018, approximately 40% of older adults (13 million) in the United States were not prepared to use technology. As the findings of our study showed, however, an increasing number of older adults—despite their lower income and lack of resources—developed an interest in learning about computers or different mobile devices in the

midst of the pandemic. We discovered that their desire to communicate with their family members, to continue their religious activities, and to participate in telemedicine served as strong motivators for these older adults to learn new skills related to digital devices and technology.

However, many marginalized older adults in our study still struggled with limited access to the internet, which limited their social lives but also negatively impacted their overall well-being, including their physical health. Policies should recognize those who have limited access to the internet and develop programs to support them. For example, when remote medical visits are unavoidable, marginalized older adults may benefit from being provided a device with built-in Wi-Fi that allows videoconferencing or telecommunication with their medical professionals (Lam et al., 2020). Moreover, some of the older adults in our study relied on telephones to engage with their family and other social networks. Given that a large portion of information and resources are solely distributed online, older adults that are less affluent and less educated have more difficulty obtaining useful resources to meet their needs than affluent and highly educated older adults (Anderson & Perrin, 2017). Therefore, a telephonebased approach could better support marginalized older adults particularly when planning for and responding to national emergencies, such as COVID-19.

The ecological model of resilience in late life by Aldwin and Igarashi (2012) highlights environmental-level resources as a means of providing support for resilience, as they do not necessarily increase individual resilience but provide people with an opportunity to identify and utilize individual resources. In line with previous research by Kim and Zakour (2017) indicating informal support and community trust as two significant factors related to emergency preparedness, we also discovered that social support through family and neighbors (informal support) and efforts that community organizations made for older adults (formal support) made them more resilient from the challenges during the pandemic. Although our participants tended to focus on the support that they received from their family members for groceries or trips to medical appointments, family members' roles can extend beyond this basic support. Marginalized older adults have a higher risk of deterioration in health than others, but they tend to have limited support from professional services (Whittier et al., 2005). During COVID-19 particularly, family members may be the best and often only individuals who can recognize changes in the physical and mental health of their loved ones. Local organizations should assess varied needs of family caregivers and provide home- and community-based services to meet the needs of family caregivers as well as their care recipients. Furthermore, many participants in our study relied on their neighbors for some of their daily needs. They discussed their experiences in helping their neighbors as well as receiving help from them. High levels of neighborhood cohesion are associated with greater mental well-being in older adults (Gale et al., 2011). It is necessary to raise public awareness of the issue regarding social isolation among older adults and the importance of making friendly check-ins with older adult neighbors living alone.

Individuals who have strong connections with community organizations are more likely to be well equipped for disaster-related emergencies than those who are socially isolated (Kim & Zakour, 2017). Our participants shared positive comments on newsletters and flyers that they had received from the partner organization and senior centers. Such efforts helped older adults stay informed and feel connected to their community. Community organizations can also adopt an evidence-based program, such as Circle of Friends that uses a telehealth delivery platform to provide socially isolated older adults with physical, art, and therapeutic activities (Berg-Weger & Morley, 2020). Using traditional as well as innovative methods, organizations would be able to better serve community-dwelling older adults during the pandemic.

Lastly, findings from our study highlighted the importance of built environments, such as walkable neighborhoods and outdoor safety. Many participants in our study were living in affordable housing for seniors (e.g., apartments for lowincome older adults) and neighborhoods with limited resources. While some of these marginalized older adults spent more time outside walking around their neighborhoods, others were afraid of going outside due to unsafe neighborhood conditions. A few participants specifically mentioned issues around unattended dogs. Along with high crime rates, safety features (e.g., traffic signals and street lighting) and fears of being attacked by someone else or unattended dogs are often used to measure a neighborhood's perceived level of safety (Richardson et al., 2017). Therefore, it is critical to develop community education programs and continue to educate community members regarding pet etiquette in public and neighborhood maintenance in order to promote safe outdoor activities.

Limitations and Directions for Future Research

Due to the limited strategies available to promote this study and difficulties in getting in contact with potential participants during the COVID-19 lockdown, a total of 18 older adults participated in this interview. The majority of the participants were female and Black/African American, which might have contributed to gender or racial/cultural biases. In addition, we were not able to recruit participants who were unable to communicate in English due to the researchers' limited capacity. We might have excluded some Spanish-speaking older adults and other immigrants who were disproportionately affected by COVID-19, compared with other ethnic groups. The small study sample size further limited our ability to review cohort differences in our findings. For instance, the oldest-old age group (those age 85 years and older) tend to struggle with technology, compared to other age groups (Lam et al., 2020; Seifert et al., 2021). This group could also have different levels of social networks and mobility health compared to others. We recommend that future research examine cohort differences in subjective experiences of older adults during the COVID-19 pandemic. Lastly, findings from this study encourage further exploration about individual factors beyond technology. For example, Aldwin and Igarashi (2012) explained that generalized resistance resources refer to values and perspectives gained from experiencing similar events in the past. By targeting older adult survivors of natural disasters or previous pandemic diseases, researchers may be able to gain knowledge regarding generalized resistance resources that enhance resilience from such adversity.

Conclusion

The results of this study revealed that many older adults were able to leverage protective factors at multiple levels to demonstrate resiliency to pandemic stressors. Although technology was unable to replace the emotional satisfaction received from person-to-person contact, it provided older adults with access to vast resources for learning, entertainment, and physical activity. Beyond informal support, formal support from community organizations proved to be vital, keeping older adults informed with community-based resources and services for their needs. Fears of physical injury and personal safety in neighborhoods emerged as critical factors that could impede older adults' physical activity and worsen their social isolation. These results suggest that a holistic approach is required to improve individual, social, and built environments to enhance marginalized older adults' resilience from an unprecedented event.

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IRB Protocol

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