Older Adults’ Experiences Moving Community Online in Independent Living During the Covid-19 Pandemic

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Abstract
In this paper, we explore older adults’ experiences moving daily social activities online in a senior independent living community during the early stages (March 2020–June 2020) of the Covid-19 pandemic in the United States. We present findings of a semi-structured interview study with eight older adult residents where we discuss their needs and how they used technology to support and adapt during the phase of required physical distancing. Our findings suggest that participants felt well supported by their organization and community, and found information and communication technologies (ICTs) that were useful for supporting the transition. However, some participants felt that they did face challenges and the ability to adapt may have been influenced by technology access and residents’ prior established ties within the community. Based on our findings, we reflect on how we might better support older adults living in community settings in future crisis.

Keywords
older adults, Covid-19, information communication technology, independent living

Introduction
In late 2019 and early 2020, Covid-19 spread across the world, causing many countries to place restrictions on travel, movements, and in-person gatherings (Shahid et al., 2020). Older adults, those 65 years of age or older, were one of the groups most impacted by Covid-19 (Shahid et al., 2020), and in turn, many senior organizations enacted restrictions to lower risks of infection and promote safety within those communities. However, with new restrictions, older adults, like many others across the world, found ways to adapt to access resources and information as well as to connect with others (Chen, 2020). Studies show that some older adults turned to technology and increased their use of technologies during the pandemic due to the need to adapt and connect with others (Richards et al., 2021; Sin et al., 2021). Yet, some older adults also encountered barriers to technology adoption (Martins Van Jaarsveld, 2020; Sin et al., 2021). For example, one study found that a transition to using online resources required some older adults in Saudi Arabia to increase dependence on help from others to manage daily activities, which put them at risk due to the need to interact with others physically (Alharbi et al., 2021). These findings align with others that suggest that some older adults felt forced to increase their use of technology out of a need to connect (Richards et al., 2021) leading to less autonomy (Nurain, Caldeira et al., 2021). Nurain and colleagues noted that, more generally, older adults faced tensions in balancing independence and safety concerns during the pandemic, which they argue suggests a need to reexamine the design of technologies to support older adults during crisis (Nurain, Caldeira et al., 2021; Nurain, Chung et al., 2021; Nurain, Huber et al., 2021).

This paper extends prior work by examining the experiences of a group of older adults in a senior independent living community adapting and moving social activities online during the Covid-19 pandemic. We explore older adults’ experiences connecting within their community during the nationwide lockdowns in the United States and the technologies that supported them. We interviewed eight members of a senior independent living community to understand how residents leveraged information and communication technologies (ICTs) to...
support their needs and the barriers they encountered. We found that because of support from the organization, prior social ties, and close peer relationships established prior to the pandemic, many felt that their physiological, esteem, and self-actualization needs were supported. Therefore, community residents turned to ICTs and other digital resources mainly to adapt to the changing environment around them.

Methods

We interviewed eight older adults, 65 years of age or older, living in an independent living community in the United States (US) during late July to August 2020. At the time, nationwide lockdowns were ending in the United States, however, some locales recommended continued restrictions for specific populations most affected by Covid-19, including older adults, and those living in senior communities. At the time of the study, some restrictions were still in place at our partner community such as limits on movement outside of individual homes, and restrictions on group gatherings with those outside a residents’ immediate household.

To recruit, we sent recruitment emails to all residents using email, and scheduled interviews with those that responded with interest. The inclusion criteria were that participants be 65 years of age or older, a member of the independent living community, and had interest in the study. Interviews were held using video conferencing software and scheduled at the participants’ convenience. At the time of the study (late July–August 2020), due to the risk of Covid-19 on the population of older adults, our partner organization still had strict restrictions in place, therefore, our recruitment strategy is likely limited due to practical limitations and need to conduct interviews online. We likely excluded participants that do not use email or had no access to a computer to participate in the interview. Virtual interview sessions lasted about 1-hour.

Interviews were semi-structured and focused on the following topics: experiences adapting during the period of lockdown during the pandemic, informational and social needs residents had, benefits and barriers to addressing their need for information and connecting, and the ways technology did or did not support the move online. All participants were 65 years of age or older and participants’ time in the community ranged from 5 months to 9 years (AVG ~ 4 years or 52 months, SD~3 years or 40 months). Six participants identified as female and two identified as male. Residents of the partnering community tend to be highly educated (at least a bachelor’s degree or higher). Most participants who volunteered to speak with us were heavily involved in civic engagement within the community and discussed that they were responsible for disseminating content to and assisting other residents in the community.

At the time of the study, the impacts of physical distancing on older adults during the pandemic had not been studied extensively. Therefore, our study was exploratory with a goal of understanding the experiences of individuals living in a structured independent living community environment and the role technology played in supporting them. Our assumption was that like many older adults across the world, at the time, older adults living in these environments would need to adjust for safety reasons and may turn to technology as a way to do so. We were interested in the impact the community environment might have on their access to tools that kept them informed and connected during the pandemic. Therefore, the goal of our investigation focused on exploring if and how residents adjusted to meet their needs for finding information, resources, and connecting during the time of physical distancing. During interviews, we focused on the following research questions:

1. What were independent living residents’ experiences connecting with others during the early stages of lockdown during the pandemic?
2. What, if any, individual or community technological resources did they leverage to support their needs within the community?
3. What barriers, if any, did they encounter meeting their needs within their community?

We recorded and transcribed each session. The data was analyzed using thematic analysis (Blandford et al., 2016). To analyze data, the authors independently reviewed each transcript and used open coding to categorize participant quotes. After the independent review and coding, the research team discussed, consolidated, and categorized open codes (Figure 1). The final set of themes correspond with the sections of the findings: residents’ needs, technology supports, and barriers.

Results

We found that due to their current place in life and family, peer, and organizational support that was in place prior to the pandemic, participants felt that generally many of their personal individual needs were met or remained mostly unchanged. However, residents shared that as physical distancing requirements began, they found that they needed to adjust and think of new ways to connect within their senior living community. We focus on these experiences below.

Residents Needs During Early Stages of Pandemic Lockdowns

With requirements for physical distancing many essential services such as dining provided by their community moved online. Fortunately, the organization already had in place an online ordering option and the residents we interviewed felt that the organization did an excellent job transitioning services to account for safety measures. However, residents shared with the new influx of
Residents also expressed that as physical distancing measures began, they needed to adapt to find ways to engage socially with other residents. As independent living residents that are part of a community, one of the perks was engaging with other residents and having convenient social opportunities to connect with peers. However, this came to a halt for many months, and therefore residents began looking for alternative ways of connecting. P7 shared, “I use the web a lot [to connect]. I use it mainly for information or telephone numbers or emails [of residents] or contact with staff people, for access to Zoom meetings.” Other residents also shared that as physical distancing continued, they turned to online sources to find ways to connect with others and try to build community. P2 shared that initially they began using Zoom to continue their civic engagement activities within the community, but overtime it evolved. They explained, “Like [P1]. I’ve been using Zoom almost nonstop; it feels like some days. It primarily started out as doing committee work, and then it has evolved interestingly enough because the building that I’m in has sort of organically grown Zoom groups to get together in informal ways. So I find the people who live on the same floor as I do, we’ll organize a Zoom meeting periodically. And I also found that residents that we met just before the shutdown, we’re kind of doing one on one virtual cocktail hours, periodically. So it’s both a source of social connectivity to compensate for the fact that we just don’t see one another under the current operating rules, even if that’s been relaxed slightly recently. But for the past several months it’s been devoid of any kind of social contact.” Our findings therefore suggest that while participants had built-in supports as members of an independent living community, they needed additional mechanisms for sorting through the new influx of information tied specifically to their community rules and to adjust community activities online.

Technologies that Supported Moving Online

Residents, like many others across the world, turned to technology (e.g., video conferencing, online communications) to stay connected, P4 shared, “I use Zoom a lot. I have my own Zoom account and I use it for friends and family; but a lot of friends here where I set up the Zoom account with small groups of friends or another couple, or we’ve done some pre-dinner kinds of thing. So, I use my Zoom account, a fair amount to keep in touch with people here. I do some other things too, a lot of Email.” P7 also shared some of these social interactions were essential to continue existing civic work residents volunteered to do to support the community. P7 shared, “It [zoom] has enabled our committees to continue operating; otherwise, we would have had an absolutely contactless time, I think. So, thank goodness.” P6 shared, “Yes, I use it [Zoom] for cultural arts and I have 10 chairs and I’m able to have meetings with them. I think the Zoom meetings are absolutely wonderful. I also have a book club that meets with Zoom meetings and a discussion group.” However, adaption was not without its challenges. P3 explained, “Everybody’s still struggling with Zoom . . . We need more sophisticated management of Zoom than we have. We have had some big sessions with management where people could ask questions. And I think that Zoom has really helped . . . because that’s the only in-person contact we have with management.”
Therefore, while video conferencing provided a convenient way to connect with others, participants noted open challenges around formatting and facilitating these interactions such as structuring large sessions.

Participants also described using several other technologies, some of which were provided by the community, that they felt were helpful to them for connecting with family, friends, or with others in the community. Among the technologies mentioned were websites/online sources, including an internal resident portal restricted to community members, videos provided by the community leadership streamed through Vimeo and YouTube, Zoom, a closed-circuit TV channel, phone, and email. Some residents also mentioned heavily relying on paper notices such as the community newsletter to keep up with things going on in the community. P5 shared, “And I know there’s a push to try and get rid of paper and have residents rely more on the contents of the website, but that’s not really going to be practical . . . because you just can’t find stuff as fast as you can [with a hard copy]. I always keep the last week of newsletter around in case I want to refer back to it, I wouldn’t want to go online to refer to it necessarily, it’s so convenient to use the hard copy.” Participants felt that having a variety of different mediums for staying informed and connecting with the community overall promoted inclusion and addressed potential accessibility barriers.

Video conferencing was discussed often by participants. They appreciated the videoconferencing sessions from leadership to stay connected with the leadership staff and to see other residents. Participants shared that leadership hosted several Zoom sessions where community members were invited and made these available in various forms online and through the closed-circuit TV. Some residents also began working on shared activity modules in the form of video to continuing fostering community among the residents. P8 stated, “We think the videos are a good idea. We think of the ones there [on the website] as being just samples, because most of them are just updates from higher management. A couple of us [residents] have been working on education modules; we have one that’s done that we tried out in a Zoom session with about 10 different residents . . . . What we would like to be able to do that we think would be beneficial, is if we had the ability to create sessions like that and upload the links on the website so that people can refer to them.” Though it took time, participants shared that the ability to continue social and other community activities online helped them stay connected with others in the community even in times where they could not meet or see each other physically.

Residents also felt that additional information communication technologies (ICTs) such as the closed-circuit TV system were helpful particularly for those that might have lower digital literacy. The closed-circuit TV system was added prior to the pandemic and featured personalized live-streamed or pre-recorded content for the community in additional to regular TV channels. P3 explained, “Yeah the one [communication tool] that has changed dramatically is the closed-circuit TV or private TV . . . . staff really rose to the occasion, and by a week or two, after we were stuck in our rooms and getting our meals in black plastic boxes, they had it really up and running and with full-day programming . . . . There’s a very strong feeling, people really used it . . . . It reaches people who are not computer literate.” P6 shared that for some residents, the TV may be one of the only ways they were able to connect with things going on in the community during that time. They noted, “There are many people here who can’t go out and who rely on the TV . . . . these are the people who don’t really come out, and they really rely on the TV. It’s absolutely essential . . . . And I can’t be more in favor of it, even though I’m not a TV watcher.” Therefore, residents felt that having a variety of methods available in the community to connect with the organization and other residents was helpful with their transition to online activities.

**Barriers to Moving Online**

Despite the success residents felt they had in adapting, participants shared that they felt there were still open challenges in accessing content and engaging with others as things moved online. Some of those challenges were due to infrastructure such as lack of connectivity and Wi-Fi in some community areas. P1 shared that “there’s much less Zoom connectivity, almost zero connectivity within the older building [on campus].” Participants also mentioned that some encounter accessibility challenges when using technologies which presented challenges when trying to connect online. P1 noted, “I throw in one shortcoming of Zoom that I’m sure I’ve encountered, that the new group Google Meeting takes care of, which is there’s not easy to put captions in. And I’m using a Google Meeting actually with a friend of mine with severe hearing problems . . . . that is a shortcoming, both because of the informal things that have no captions, but also the TV channel recordings of Zoom things for a later showing. And those don’t have captions . . . . And the captions in Google Meet aren’t wonderful. They do some strange things. I used the word “account,” and it came out “cows” and things like that because it’s a speech recognition software.”

At a community level, participants mentioned two additional barriers to connecting with their community during the pandemic. While participants shared that many had found ways to adapt their community social interactions online, they felt this was heavily dependent on when someone joined the community and where they resided. P2 shared that they believed one reason they could adapt to online community social interactions more easily is that they had been a part of the community long enough to have established relationships through in-person interactions. They were already part of a social network within the community. Additionally, they lived on a floor that had individuals that spearheaded and organized online social
interactions. P2 explained, “Well, it’s come about in a couple of ways. One is that the floor I’m on was one of the first ones to move in. So, we had a pattern of established social connections on that floor. It was beginning to expand into other floors as they were filling the building from top to bottom, so we had some sense of one another, organizationally. . . . The building [also] has a pretty lively set of floor leaders who are responsible for communicating things to the residents of a floor and also gathering up feedback and aggregating it and forwarding it to various committees. So those floor leaders have played an important role because they, prior to the shutdown, were basically hosting informal gatherings, and now they’re doing it through Zoom. So, I think I count myself as fortunate that we had a couple months’ worth of time to really get to know people a bit.” P1 shared an opposite perspective. They shared, “You’re hearing different perspectives from the two of us [P1 and P2]. And there are a whole lot of reasons probably for that, including that the [the older building], which is the one I’m in, people have known each other a longer time, so maybe there’s less motivation [to get together]. People in the new building tend to be younger, and more of them are computer savvy, which is helpful.” So, some residents believed in addition to access barriers, time in the community and existing social circles could impact residents’ ability and motivation to gather online for social purposes.

Discussion

We found that while the older adults in our study used different types of technologies to adapt to meet their needs for connecting within their senior living community during the time of strict Covid-19 restrictions. Yet, some open challenges still exist. As noted by others who studied older adults and technology use during Covid-19 (Richards et al., 2021; Sin et al., 2021), we found that participants appreciated not only having technology but non-technical mediums for connecting to information and resources. Participants felt supported by their organization and appreciated the variety of technologies available including online, closed-circuit TV, and paper mailers to support inclusion and accessibility. Based on our findings, we reflect on participants shared experiences and suggest opportunities to improve access to information, resources, and other community members during times of crisis in the future in particular to supporting community building in shared living environments.

Beyond Information Diffusion

Residents appreciated the various mediums that the community put in place to alleviate access barriers and ensure that residents received information in as many ways as possible. Participants felt that the different technical and non-technical mediums used to communicate with residents aided information diffusion, or the spread of information throughout the community. Still, participants mentioned, at times, the influx of information could be confusing. Researchers have explored approaches for communicating guidance and safety information during the pandemic to older adults, given they were at one time one of the most impacted groups. These efforts have explored how older adults navigate information for vaccination (Ankenbauer & Lu, 2021) and contact tracing (Wagner et al., 2021) as well as tools that can reduce efforts in findings information (Chun et al., 2021; Saleem et al., 2020). However, our findings suggest opportunities and a need to identify strategies to assist individuals with the management of crisis-related information more broadly in relation to community rules and guidance. For example, future approaches might explore ways to bring together disparate information to support individual health decisions and movements within the community or help residents wade through an increasing amounts of information. Such approaches will likely also need to involve other stakeholders key to providing information. Hence, as our participants noted, while approaches that aid in managing information would be helpful, a new set of challenges will likely arise for those providing the information to ensure it is kept up to date. Therefore, in addition to approaches that help users navigate information, there may also be open opportunities to better support information suppliers in disseminating crisis information within a community.

Supporting Community Connection

Most study participants shared different ways they adapted their social interactions to continue engaging in personal relationships and to continue their service as community members. In future times of crisis, the approaches residents shared as part of our findings may be beneficial to help organizations brainstorm approaches for supporting their residents. For example, organizations could find strategies to help members to continue social interactions or to connect residents to leadership. However, our findings suggest that even with strong community support, the ability to engage in community-building for activities, be it social or civic engagement, likely depends on residents’ ability to overcome access barriers and nurture and grow existing social ties in the community. Others have noted that some older adults felt forced to adapt to new technologies (Richards et al., 2021), while others were not able to adapt due to limited technical skill or by choice (Sin et al., 2021). Some of our participants shared similar perspectives. However, we also found additional barriers that limited efforts to continue community-building for residents of the community. For example, some newer residents may have had difficulty connecting to online community events and groups as many of the traditional supports (e.g., in-person informal resident gatherings) were now restricted. Residents that did not use technology regularly before the pandemic may have found it more challenging to put in place the tools and
acquire the skills needed to participate in online community engagements. Therefore, an opportunity exists to explore ways to support community-building efforts by exploring fully virtual onboarding activities that support residents in connecting, whether online or through the support of others through a peer-support model. Our findings highlight one potential approach as some residents volunteered to serve as connectors to attempt to bring people together online. This peer-support model may be a practical approach within a community context such as senior living which, often already has some measures in place to support incoming residents to acclimate them to the community. Therefore, some automated strategies to help residents find and match with others with common interests and experiences could be beneficial for supporting engagement.

Limitations and Conclusion

Our study represents a case of older adults sharing their experiences using technology to adapt daily activities as members of a senior community. Our findings are limited based on our context and small sample. In addition, the community we partnered had a strong technical infrastructure and staff to support residents as well as many residents with a high degree of technical skill. Therefore, our findings likely do not include experiences of all residents that live within the community. However, we believe these findings contribute a better understanding of the supports and challenges experienced by those in a senior living community during a time of crisis and ways technologies might support information needs and connections in the future. Our findings also provide examples of opportunities for senior organizations to support residents in times of future crisis and open areas for improvement.

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