Mitigating the Damaging Effects of COVID-19 Isolation in the Elderly

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Abstract

In an effort to both analyze how COVID-19 has impacted traditionally isolated communities and prevent loneliness, we have created a pen-pal program between UM students and senior adults. We have implemented a pilot pen-pal program to create lasting social bonds without exposing seniors to COVID-19. The program is currently running through the Davidson Honors College “Intro to Honors” course, with plans to leave the program self-sustaining in future semesters. To pair partners, we distributed interest surveys and matched relevant interests. To inform people of how loneliness affects seniors, we created a brochure that highlights our research, with plans to distribute it in the Curry Health Center and among our community partners. At the conclusion of our pilot program, we will have our senior partners fill out a feedback form to understand the effectiveness of our program.

Our research points toward the need for loneliness prevention strategies, especially in the wake of the pandemic, which has exacerbated social isolation in older adults. Social connection has proven to be one of the most successful mitigation techniques, but physical contact can be dangerous because of the pandemic. Dialogue through letter-writing can create invaluable social bonds without potentially exposing elderly participants to COVID-19. The senior participants in our pilot grew up writing letters and communicating via physical mail so the pen-pal program was extremely comfortable to this generation. Pen-pal programs create a viable and sustainable solution, accessible for all generations to reduce the negative effects the pandemic has had on the elderly.
Introduction

Across the world, COVID-19 has impacted our way of life. The trauma that remains will likely linger for a lasting period of time. One of the biggest challenges we have had to overcome has been loneliness at the hand of forced isolation. Loneliness occurs when a person has a perceived deficit between how much social and emotional support they desire and how much they are truly getting (Adam, Sanders, & Auth, 2004). With this definition, we can understand how social isolation can impact loneliness levels. It is important to note the difference between loneliness and social isolation. Loneliness is a perceived state, while social isolation is an objective state of being physically distanced and spending time physically away from others (Adam et al.). The idea of loneliness as a public health issue is gaining traction with terms like “the loneliness epidemic” and an influx of research that finds a negative link between loneliness and mental health, physical health, mortality, and unhealthy behavior (Victor & Pikhartova, 2020). With the COVID-19 pandemic, it became imperative to distance ourselves from one another, cutting into the social time that is so important for us as social animals. The elderly population remained at higher risk of loneliness, given their predisposing factors. Three percent of adults over the age of 75 report being often lonely (Victor & Pikhartova). Generally, “older adults” are usually 65 years and older. One study explains that “social isolation among older adults is a ‘serious public health concern’ because of their heightened risk of cardiovascular, autoimmune, neurocognitive, and mental health problems” (Armitage & Nellums, 2020). From early in the pandemic, the elderly were singled out as being particularly at-risk of dying from COVID-19. In general, self-reported loneliness decreases as a person ages (Victor & Pikhartova), but the elderly are a particularly vulnerable population that are frequently left out of conversations about mental health and social support.
As of April 2022, the CDC has reported over 80 million cases of COVID-19 in the United States and more than 950,000 deaths. With cases and deaths continuing to fluctuate, people are encouraged to stay home and socially distance as much as possible. Because the elderly population is at a much higher risk for contracting COVID-19, assisted living centers have had to limit exposure to their residents. Residents have not been able to see their loved ones or their friends within the facility, which causes any individual to be lonely and crave human connection. We saw this in action in America, where the pandemic’s ground zero was a retirement home in Kirkland. It became paramount for these individuals to ensure isolation.

One study found that in countries battling COVID-19, older adults are self-quarantining and isolated from people who put them at risk for contracting the virus. And yet another study found that in a study covering 27 countries, the older a person was the more likely they were to isolate themselves, avoid small gatherings, having guests over and using public transportation during the pandemic (Daoust, 2020). Though it’s clear COVID-19 has exacerbated loneliness among aging populations, it wasn’t a new phenomenon. Social isolation and loneliness has been an issue among older adults living in nursing homes. Putting elderly in nursing homes and hospitals is relatively normalized in Western cultures. But other cultures, such as many Asian, Hispanic and Middle Eastern cultures, value family caregiving. COVID-19 has affected these cultures differently. Unlike other cultures, Americans already experience connection gaps with older generations, and COVID-19 has only exacerbated these gaps while also increasing the risk for depression, dementia, immune functioning and inflammation, and much more (National Council on Aging, 2021).

Most senior facilities around the country have faced tight COVID-19 protection efforts, and that’s no different than what’s happening in Missoula, Montana. According to MTN News
Missoula senior facilities created regulations that restrict visitors coming inside facilities, enforce masking and protective equipment for staff, limit group activities and dining, and increase testing and quarantines. The Missoula Aging Services has noticed that the local elderly community has been battling loneliness, so they have put forth efforts to decrease this issue. In an article on KPAX News by Jill Valley (2020), she found that Missoula Aging Services has developed a new program to help residents feel more comfortable using technology to help them stay connected during and after the pandemic. Missoula Aging Services wants the elderly community to have access to tablets, while also being able to navigate applications like Zoom and Facebook. While this does not make up for face-to-face interaction, it allows residents of senior facilities to chat, browse, and keep their loved ones updated on how they are doing through this unprecedented pandemic.

**Literature Review**

Studies have proven the elderly generation, especially those living in residential care or assisted living facilities, experience loneliness at a higher rate than most other demographics. One study from the University of Arkansas found 22-42% of this population reported high rates of loneliness, compared to the average 10% (Miriani & Crawford, 2021) and 24% of this population is socially isolated (National Academies of Sciences, Engineering, and Medicine, 2020). Many studies have sought to provide preventative measures, combating this perceived loneliness with a variety of solutions, ranging from intrapersonal connection to information and communication technology. Multiple studies demonstrate that loneliness among older adults was a problem long before the COVID-19 pandemic. However, studies conducted after the onset of the pandemic in multiple parts of the world point toward an increase in the effects of loneliness
on older adults. While this loneliness has been felt across all age groups, older adults are more at risk for both the coronavirus and loneliness.

**The Historic Correlation Between Loneliness and the Elderly Population**

The correlation between loneliness and the elderly is not a new area of concern or study. Even before the outbreak of COVID-19, researchers have seen the potential negative effects that this relationship can have and have taken steps to view this problem more critically. One of the first things that researchers have done is more clearly talk about the loneliness experience. The work published by Domènech-Abella, Mundó, Haro, and Rubio-Valera (2019) reflect this as they study the difference between the *subjective* feeling of loneliness and the *objective* size and presence of a social network. These and other studies use this definition to investigate the relationship that emerges between this subjective feeling of loneliness and negative outcomes in the elderly population.

The most common negative outcome of loneliness in this population is the presence of anxiety and depression (Domènech-Abella et al., 2019). In their work, Domènech-Abella et al find that higher perceived loneliness and a small social network result in higher levels of Generalized Anxiety Disorder and Major Depression Disorder. These findings are reflected also in the work of Aylaz, Aktürk, Erci, Öztürk, and Aslan (2012) among others.

Another important aspect of this research is the factors that seem to affect perceived levels of loneliness and what strategies can be taken to mitigate the negative outcomes found. A study conducted by Narusawa, Sakata, and Takata (2017) attributes loneliness to factors such as social participation, living situation, hobbies, and activities. Domènech-Abella et al. (2019) adds to these factors the size of a person’s social network. These are important factors to note as future
research works to mitigate the effects and decrease levels of loneliness within the elderly population.

There is evidence to support that levels of loneliness can be decreased and therefore the negative outcomes can be lessened as well. Tsai and Tsai (2011) devised a longitudinal study that explored the effect that a three-month long video conferencing program had on nursing home patients and their perceived levels of loneliness. The results show that these video conferences increased feelings of social support and decreased feelings of loneliness and diagnoses of depression. This is the type of work that our future research hopes to add to as we work to develop programming that helps reduce loneliness in our own community.

Loneliness and the Pandemic

One impact of COVID-19 was increased loneliness. As defined earlier, loneliness is a negative experience which can be caused by lack of social interaction (Labrague, De los Santos, Janet Alexis, & Falguera, 2021). Mandatory shutdowns and stay-at-home orders have made it difficult for family and friends to connect with one another. While our project revolves around loneliness in older adults, we found research that suggests that older adults were not the only population affected by this pandemic. Labrague et al. found that the younger generations struggled with increased loneliness because confinement orders kept them from socializing with their peers. Socializing and participating in extracurricular activities were shown to be a coping mechanism to increased levels of loneliness.

With physical limitations intact, many people have turned to social media to alleviate the diminishing contact we have with others caused by COVID-19. Social media has allowed us to connect with those around the world, staying up to date on what people are doing. While social media can be a great outlet, some research suggests that it has negative side effects that come
with it. Saltzman, Hansel, and Bordnick (2020) stated that new outlets connecting through technology can bring concerns of knowledge, access, and safety. Saltzman et al. also state that technology can disregard other barriers, like poor mental health which can increase loneliness levels. Addiction to social media can increase levels of depression and anxiety. A study found that depression has the strongest association to loneliness, when regarding isolation and mental illness. This finding was consistent across children, adolescents, and older adults (Knopf, 2020). With the ongoing pandemic, Knopf found that loneliness levels were more directly related to depression by the duration of loneliness, rather than the intensity. With new variants of COVID-19 surging across the globe, quarantine and social isolation efforts will not be ending any time soon.

Loneliness not only affects our mental health, but our physical health as well. Witwer (2020) found that self-regulatory behaviors related to well-being and management of chronic conditions depleted due to higher degrees of loneliness. A healthy diet, regular exercise, routine doctor visits, and moderating our drug and alcohol intake are all being affected by loneliness levels caused by COVID-19's disruption of routine and social support. With decreasing physical health, this also decreases the chances of people to actively combat loneliness. When people do not feel/look good, they are less likely to engage in socially stimulating activities. Loneliness caused by COVID-19 has several effects, ranging from mental and physical health decline to a shrinking social circle.

The Effects of Loneliness on Older Adults in COVID-19

Older adults are more at risk of dying from COVID-19, with an overall 10% higher chance of death among elderly and as high as 15% higher among those over 80 (Burlacu et al., 2021). Because of this, social isolation is more imperative for older adults than for other
populations, particularly during the spikes of the pandemic (Burlacu et al.). Loneliness poses its own risks as it can be linked to poor mental and physical health and higher rates of mortality (Heidinger & Richter, 2020).

An Austrian study found that there was an increase in loneliness among older adults who live with another person, but a much smaller increase among those living alone (Heidinger & Richter, 2020). Researchers stated that intense distancing measures could lead to an increase of loneliness among older adults. (Heidinger & Richter). Their study compared data taken from April through July of 2019 and April through May of 2020, which were pre-isolation measures and then, when isolation restrictions were in place. Another study conducted in New England also found an increase in both loneliness and depression among older adults (Gilbody et al., 2021). From the beginning of the Coronavirus pandemic, there were predictions of significant negative effects on the public’s mental health due to restrictions, and surveys reported increased levels of loneliness and diagnoses of depression (Gilbody et al.).

Another European study found that the mental health implications of the pandemic will likely outlive the pandemic itself. The number of people affected by the virus are a larger number than those who actually receive it (Burlacu et al., 2021). Researchers found that loneliness can be considered social pain, due to effects on the brain. MRI scans found brain activation in the same region where pain and rejection are located when scanning individuals who reported high levels of loneliness (Burlacu et al.). It also said that the elderly living in nursing and assisted living homes are at a much higher risk as they live in a setting with a higher population of people with chronic diseases and a higher risk of control management (Burlacu et al.).

Another study done in Turkey found low levels of loneliness among those living in nursing homes. The study reported that allowing at least three people in the room with elderly
residents and giving the residents an opportunity to connect virtually with their loved ones helped alleviate some feelings of loneliness (Savci, Cil Akinci, Yildirim Usenmez, & Keles, 2021). The same study reported that levels of loneliness are a major factor in the mental health of older adults and as a result their overall quality of life (Savci et al.).

While telehealth and other technological ways of connecting can sometimes be a solution to problems from social isolation, such as a hesitancy to go to the hospital when showing symptoms of illness, they are not full-proof solutions and can be less accessible (Burlacu et al., 2021). Burlacu et al. stated that seniors are not familiar with new and constantly changing technology and some do not have access to the Internet. It can be difficult for seniors to not only access the means to connect online, but also understand how to. Gilbody et al. (2021) used a remote intervention method of combating the effects of loneliness and depression, which found that older adults preferred a telephone call over a video call.

**The Power of Intergenerational Connection**

Analysis proves social connection to be an incredible mediator in elderly loneliness and even disease and sickness. But social connection can be more complicated than it may seem, not only do the number of social relationships matter, but the quality within those relationships. Quantity and quality can impact their health (National Academies of Sciences, Engineering, and Medicine, 2020). There are a variety of proven methods to fight elderly loneliness. One study found a series of interventions, or mitigation measures, that tackle loneliness. These include laughter therapy, horticultural therapy, and reminiscence therapy (Quan, Lohman, Resciniti, & Friedman, 2019). This review found activities consisting instructed group bonding activities, The most effective activities used to target loneliness were group bonding activities, educational lessons, and skill development classes (Cohen-Mansfield & Perach, 2015). The research seems
to point toward bonding activities, specifically intergenerational activities, like storytelling, playing games, and conversing with family members, to be most effective at combating elderly loneliness. And, even more important seems to be the active participation of this demographic: “Common characteristics of effective interventions [against elder loneliness] were those developed within the context of a theoretical basis, and those offering social activity and/or support within a group format. Interventions in which older people are active participants also appeared more likely to be effective,” (Dickens, Richards, Greaves, & Campbell, 2011). That is, activities that encourage active interaction on the part of the elderly were more effective at targeting and mitigating loneliness. Interventions incorporating all of these characteristics may therefore be more successful in targeting social isolation in older people.

A Suicide Prevention Resource Center study (2020) found three main ways to mitigate elderly loneliness: Improving social skills with training and practice (including using cognitive behavioral therapy and interpersonal psychotherapy), increase social support with visitors and intrapersonal connection, and increase access to social interaction like social activities and events. The same study points out that there is a correlation between feeling lonely and having negative thoughts about other people, social situations, and trusting others which contributes to an increase in social isolation, which in turn, increases loneliness (Suicide Prevention Resource Center). Thus, to address this potential feeling of mistrust, other measures can be taken, tweaking the implementation of such preventative actions. The Arkansas study examined the effectiveness of a pen pal program, coordinated between honors college students and an assisted living home (Miriani & Crawford, 2021). The program matched participants with members of the opposite demographics and facilitates eight weeks of letter writing with a weekly prompt, similar to what our group aims to complete. The study ran an abridged version of their pilot pen pal program,
and thus the results were not as extensive. But the program yielded positive feedback from the
time it was functioning (Miriani & Crawford).

**Solutions Already in Place**

When researching solutions in place and action that has been taken to mitigate the
loneliness in older individuals since COVID-19, technology is found to be a common tool used.
This already isolated group is extremely vulnerable due to the effects of both the pandemic and
loneliness. There is a large emphasis on the new phenomena of telehealth. Many studies discuss
the need and implementation of technological healthcare options for the elderly. One article
explains the move towards telemedicine providing various therapy options and medical services.
However, it continues to explain that family and organization intervention are necessary for
creating and assisting with these technological tools (Conroy, Krishnan, Mittelstaedt, & Patel,
2020). The extensive amount of time training individuals brings up dilemmas in itself when
having to rely on others for a solution. Individuals in nursing homes typically have fewer social
circles and interactions due to their circumstances, making those who lack companions willing or
capable to train them further estranged.

Another research article explains the move toward technology being a valuable solution
for this vulnerable group suffering from further isolation. They explain that a resource similar to
an Apple Watch could be used to track and monitor health needs, while providing personalized
recommendations to prevent further mental strain on individuals (Ammar et al., 2021). However,
a similar issue with this concept appears when bringing up the question of who would provide
and train the isolated elderly.

The article by Conroy et al. (2020) explains that the government, insurance, or nursing
homes should provide inexpensive devices for use by the elderly to connect them to various
resources. When we spoke with the representative from Missoula Aging Services, he also mentioned their plan to distribute tablets to older individuals in assisted living homes in hopes of connecting them to others. They have a limited supply of devices and can only focus on small groups of individuals at a time with a long training period led by volunteers. This leads to a search for a solution to mitigate loneliness in a generation who has little to no experience with technology.

In response, an article explains the comfort the elderly across the country have found in a more traditional form of communication through pen pals. It discusses an assisted living home in New Hampshire which has inspired individuals from all over to participate and create their own pen pal programs. Homes in Connecticut, Pennsylvania, California, Texas and more have founded their own programs with great feedback and engagement with the community. An aid at one of the homes explains that most people within this age group grew up writing and sending letters through the postal service (Network, 2020). Participants write a few sentences about themselves and turn in the form which helps pair pen pals together. This program is thought to have been useful prior to COVID-19 as well because these older individuals are able to use brain function and form personal connections.

A New York Times article discusses the use of pen pal programs to mitigate loneliness in the elderly population, as well as connect younger individuals to this isolated group. The authors provide many examples across the country, specifically a home in Pennsylvania in which participants write once a week about a hobby or story to share with each other. A doctor explains that this proves successful in reducing the loneliness felt from isolation as it creates a back and forth communication pattern, allowing for an organic social bond to form between the pair (Zaveri, 2020). In a time where in person interaction proves dangerous, especially for the
vulnerable elderly group, a pen pal program creates a deeper engagement possible for individuals of all ages.

Moving Forward

This research points toward the need for loneliness mitigation strategies, especially in the wake of the pandemic, which has exacerbated social isolation in older adults. Social connection has proven to be one of the most successful mitigation techniques, but because of the pandemic, physical contact can be dangerous. And not all assisted living facilities have the resources and time necessary for implementing and training technological solutions. As other studies have proven pen pal programs to be successful in combating elderly loneliness, our group aims to provide an accessible alternative, leaning into this pen-and-paper method. This solution would be self-sustaining and outlast our group’s time at the school. It would also target a severe need in the community.

Methods

In an effort to both analyze how COVID-19 has impacted traditionally lonely, isolated communities, and mitigate that loneliness, we propose the creation of a pen-pal program with UM students and the elderly. The initiative would be implemented in one of the Introduction to Honors courses through the Davidson Honors College, with the intent of it becoming self-sustaining. We want the pen-pal program to be worked into the curriculum so it will be long-term and on-going, even after we graduate. We hope to make the program stable enough before the spring semester of 2022 so we can be around to assist with any issues. We will partner with a local assisted living facility and pair them with college students enrolled in the Introduction to Honors. The partnerships will be determined by interests to help create a lasting bond between participants.
We plan to create a resource web page that describes effects and symptoms of loneliness in the elderly and provides a helpful resource for the Missoula community. The resource page would be found on Missoula Aging Services or Curry Health’s website for all to access. We believe this route will be more sustainable long-term. We will also create a brochure that provides information on loneliness within the elderly community and some ways to combat it. The brochure will mention our pen-pal program so if somebody is interested in joining, they will be able to get in contact with somebody. The brochures will be available at local assisted living and nursing homes for residents, staff, and visitors to see. Our goal is to shed light on the issue and provide resources to identify problematic and concerning behavior to mitigate negative effects.

In conjunction with advice from Missoula Aging Services, we plan on partnering with an Honors College class and Edgewood Healthcare, pairing honors students with respective older people in the assisted living facility. We plan to conduct an initial survey that would help match partners based on interests — that is, ensuring each pair has some sort of shared hobbies or life experience to write about. Staff at Edgewood have said they are happy to help facilitate the project on the living facility’s end, helping the elderly write and exchange the letters. Our capstone group met with Davidson Honors College Dean Tim Nichols to chat about the various options available to institute this program in a class. We came to the decision to implement the program as part of the Intro to Honors curriculum, the mandatory freshman year class in the Honors College. This way, the program will become self-sustaining as it is adopted into each year of Intro to Honors, and outlive just our GLI capstone group.

At the beginning and end of the semester, we will have the elderly fill out an anonymous survey assessing loneliness. This way, we will have empirical data to evaluate the efficacy of our
program. It will help us in our efforts to produce the informational brochure and web resource page. That way, we’ll be able to blend our hard data with anecdotal evidence to create a well-rounded report.

Given the nature of our project and the research we plan to collect, we will not need to seek IRB approval for the use of human subjects. The goal of our project is not to create generalizable knowledge, a necessary tenet of research as defined by the IRB. The goal is to provide a service to the community and decide whether or not it is effective in our specific environment. During our process, we plan to collect information about participants and engage in personal contact with individuals, but this data will not be stored and will not be used to make conclusions that can be applied across populations.

This project will not need any intellectual property rights, as we do not plan to use designs, writings, or any other predesigned work to help in our project. Surveys, questionnaires, and other forms of data collection will be designed by us. Our websites, brochures, and other materials will also be unique to our group and our project. There are no plans to use any property that is subject to copyright, trademarks, or patents. There are no steps that will need to be taken in regard to seeking approval.

In order to mitigate the loneliness in the elderly population exacerbated by the effects of COVID-19, pen-pal programs have proven successful. In a time where in-person interactions leave this group extremely vulnerable, the back and forth communication is extremely valuable in forming social bonds lost through isolation. These older adults grew up writing letters and communicating via physical mail making the pen-pal program extremely comfortable to this generation. Connecting participants through similar interests will ensure meaningful
engagement. Pen-pal programs create a viable and sustainable solution accessible for all generations to reduce the negative affects the pandemic has had on the elderly.

**Findings and Analysis**

Throughout our pilot program, we encountered some challenges: communication and the timeline. Communication and the timeline problems went side by side. The assisted living centers struggled to stick to the provided timeline due to staff shortages and inconsistent times certain people were working. Due to the staff shortages, communication with us was splochsy since we only had one contact at each home. Since our project was voluntary, we could not make them follow the schedules and had to be understanding of their situations. We altered our timeline several timelines, which ended up in having to remove two weeks of scheduled letter writing. Since issues would arise suddenly, communication between us and the assisted living centers were happening at the last minute, which caused us to scramble and to problem solve on the dime. Pick-up and drop-off times suddenly changed which was hard for five college students with packed schedules to work around. For our Fall implementation, we plan on using the postal service to help alleviate this issue.

Another issue that we encountered was some participants dropped out and instead of the nursing homes informing us of this change, they would allow another participant to join in place of the previous one. While this was great to keep our numbers consistent, it was hard to decipher where this new name was coming from and who their partner was supposed to be. This added an increase of communication with the homes, to the point where we felt like we were bothering them. To navigate these issues, our group stayed in constant communication with one another and worked together to brainstorm solutions for each unique situation. Moving forward, we would like to add more points of contact to allow for more seamless communication flow and so
other people can be in the loop about the program and timeline. Another solution to this issue would be allowing all participants to agree upon a timeline that works for all parties involved. We had a one-week turnaround rate, and it seems that was challenging for the participants involved, so going forward we would want to check in and see what turnaround rate is feasible.

Another problem we faced was how we were going to interpret results from our pilot program. Due to the voluntary nature of our project, we had to brainstorm how we could gather “data” without it being qualitative data. We decided to provide feedback surveys about the program in general to gather thoughts and opinions on what we could do to make it better and run more smoothly. We did not want to infringe on the privacy of our participants, so the questions were oriented on the process, and what they would like to see implemented in the future. The feedback survey provided us with valuable, tangible answers that could help our program more than personal feelings about the project itself.

In order to understand the effect of our six-week pilot pen-pal program, we distributed post-program feedback surveys to gauge the attitudes and opinions of our participants and staff who played a part. These surveys can be found in Appendix 3. The questions selected for this survey were very broad and mostly aimed at getting a general impression of how feasible and effective this program was as well as what could be changed moving forward.

The responses from these surveys were majority positive and the critical feedback we got was useful in deciding what to do with this program moving forward. Much of the critical feedback regarding what could be changed or what could have been offered by this pilot, was similar to what our group deduced. Clear communication about timelines and commitment would have been beneficial, especially after talking with Edgewood about their patients who have dementia and may need a little extra time or flexibility within the program. Both students
and residents also said that they wished the program would have been longer so that they could have had more opportunities to write to their pen pal. A few suggested starting the program in the fall and others suggested upping the frequency with which letters were sent. All of these suggestions were helpful in determining what could be changed in order to better benefit participants in the future.

Alongside these suggestions, most of our surveys contained answers that were generally positive and appreciative of the program as a whole. All participants that responded said that they would participate in this program again, and many contained quotes like “I thought this pen pal program was a wonderful idea. I think the elderly often times go unnoticed,” from a student at the DHC and “Great way for opposite ends of the ages to communicate…I got very lucky with the pen pal that was assigned to me,” from a senior resident. These quotes were extremely heartwarming and uplifting. They proved that the program we created was effective and had a positive impact. This feedback showed our group that our program is important and deserves a permanent place at UM.

Even though the importance of this program is obvious, given that four of the five of our group members will be graduating this May, it was hard to decide how this program could continue without us. Thankfully, the Honors Student Association (HSA) at the Davidson Honors College has agreed to take over this program and fully implement it in the fall. They are extremely excited to take this program and to open it up to members of HSA as well as anyone else that is interested in communicating with this population. Based on our feedback from this pilot program, they plan to take on a looser structure with more opportunities to write, depending on what is feasible and desirable for both residents and students, which we think will make both parties more excited and comfortable in their participation. Our next step, as this capstone project
comes to a close, is to introduce the officers of HSA to our contacts at the senior living centers and to provide them with the supplies necessary to get them started, like envelopes, paper, stamps, and whatever else they feel may be beneficial. Hopefully, given their commitment and enthusiasm, this intergenerational pen-pal program will have a permanent place at the University of Montana.

**Conclusion**

We are so thankful for HSA and their excitement for continuing this program that we have worked hard to put together, and we are extremely excited to see what happens with this program in the fall. Based on our research, this pilot program, and the feedback from participants, we see this program as a success with great potential for positively impacting this population of older adults that can often go unnoticed. As research has shown, this communication between generations will simultaneously shift perspectives and mitigate stigma that surround a vulnerable population, especially as it continues to reach younger generations at the university. We are extremely optimistic about the impact that this program will have moving forward, and we are proud of the connections we have made and the work we have accomplished over the course of a few short months. This pen-pal program was effective and necessary in serving an underserved population in the Missoula community, and will hopefully continue to do so long after our time at the University of Montana.
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Appendix 1: Interest Survey

**PEN PAL SURVEY**

Name: ___________________

1. Where are you from? How long have you been in Minnesota?

2. What are some hobbies or interests?

3. What is your favorite book?

4. What is your favorite food?

5. If money were no object, what would be your dream vacation?

6. If you could meet anyone in the world, past or present, who would it be and what would you ask them?

7. What is your favorite place you have visited?

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Appendix 2: Brochure

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**MITIGATING THE DAMAGING EFFECTS OF COVID-19 ISOLATION IN THE ELDERLY**

**LOCAL RESOURCES:**

- Minnesota Aging Services

- MLK Lifelong Learning Institute

- Aging Services at Minnesota

- Mayo Clinic Health System

- Student Advocacy Resource Center

**NATIONAL RESOURCES:**

- National Council on Aging

- Friend to Friend Network

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**LONELINESS AND COVID-19**

- Increased isolation, stress, and worry have made it difficult for elderly people to connect with others.
- Loneliness levels are more related to the duration of isolation, rather than the intensity.
- Social distancing has isolated people from friends and families to spend time together.
- Loneliness and anxiety levels are associated with loneliness among the elderly.

**LONELINESS IN OLDER ADULTS**

- Loneliness has been linked to an increase in depression and anxiety among older adults.
- There has been a rise in depression and loneliness, and the effects will likely endure.
- 34% of the population is socially isolated, even without the added stress of COVID-19.
- Older adults typically do not have as many resources to turn to in times of crisis.

**LONELINESS IN UMN STUDENTS**

- 65% of students feel that they lack support during these unprecedented times.
- 30% of students stated they felt lonely.
- In 2019, 35% of the students felt emotionally unengaged in their life.

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**INTERGENERATIONAL CONNECTION**

- The main ways to combat loneliness:
  - Reaching out to family and friends
  - Increasing social support with others
  - Participating in community activities
  - Maintaining strong relationships with others

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**SIGNS & SYMPTOMS TO LOOK FOR**

- Frequent calls or correspondence
- Change in behavior
- Loss of appetite
- Difficulty sleeping
- Irregularity of sleep
- Withdrawing from others
- Increase in risky behaviors such as gambling and substance use

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*Loneliness can lead to many physical and mental changes. Please reach out to resources if you or someone you know is suffering from the effects of loneliness.*
Appendix 3: Feedback Surveys

Peer-Pal Program Feedback
Thank you for taking part in our Peer-Pal Program! The 2022 Tawke Global Leadership Initiative Capstone group wants to thank you for taking the time to participate in this program and we hope it has been meaningful to you for the last six weeks. In order to gauge how effective the program has been, we would like to ask you a few questions. You can choose to answer all or none of the questions below, and any questions left unanswered will not affect your participation in the program in any way.

This survey will remain anonymous, so identifying data will be collected, but the data collected will be published and presented to the public. We appreciate your participation!

1. What are your initial thoughts or opinions about the six-week peer-pal program?

2. What do you wish this program could have offered?

3. What would you change about the program?

4. What worked well for you?

5. Would you participate in this program again?

6. Do you have any other comments?
Mitigating the Damaging Effects of Covid-19 Isolation in the Elderly

Mazana Boerboom, Maria Goheen, Hailey Powell, Addie Slanger, Brenna Spurling
The COVID-19 pandemic forced everyone to take a step back, isolate, and distance themselves from loved ones. This step back put all populations at greater risk for negative side effects of loneliness. Older adults, however, were especially affected. 24% of this population is socially isolated even without the pressures of COVID-19.
Loneliness and COVID-19

- One study found that loneliness is a literal “social pain” after looking at MRI scans.
- Loneliness can lead to increased depression and anxiety disorders (Knopf, 2020)
- Loneliness levels more related to duration of isolation, rather than intensity (Knopf, 2020)
- High levels of loneliness increase chances for a decline in physical health
Loneliness in Older Adults

- COVID-19 has exacerbated loneliness among the elderly.
- Older adults are more at risk of dying from COVID-19.
- The elderly living in nursing and assisted living homes are at a much higher risk.
Intergenerational Connection

- Quality, intergenerational social connections have proven effective at loneliness mitigation.
- The most effective activities used to target loneliness were group bonding activities, educational lessons, and skill development classes.
- COVID-19 required a more indirect approach.
- Pen pal programs have been proven effective.
Global Context
OUR EFFORTS
What:

- We gathered the most compelling sections of our research, from loneliness warning signals to preventative measures, in a brochure.

Where:

- We distributed that to the Curry Health Center’s Wellness Program and our senior living facility partners.
Pen-Pal Program
Who, What, Where, and When:

- Over the course of six weeks, February-April, we instituted a pilot pen pal program.
- We connected students in honors and seniors in assisted living homes in Missoula.
We exchanged ~40 letters in 6 weeks.

The How?
We matched people based off interest surveys and hand delivered the letters between students and residents.
CHALLENGES

COMMUNICATION

FACILITY PARTNER SELECTION

TIMELINE

INTERPRETING RESULTS
Feedback Survey Questions

- What are your initial thoughts or opinions about this six-week program?
- What do you wish this program could have offered?
- What would you change about the program?
- What worked well for you?
- Would you participate in this program again?
It's a great program, but a little more challenging with residents with dementia. Some days were good and some days were not...It was a good program. Please continue doing this.

-Senior Living Staff

I really liked it. She was an interesting young lady. I enjoyed hearing about her life and sharing some of mine with her.

-Senior Resident

I thought this pen pal program was a wonderful idea. I think the elderly oftentimes go unnoticed.

-Honors Student

Great way for opposite ends of the ages to communicate...I got very lucky with the pen pal that was assigned to me.

-Senior Resident
Working with HSA

- Plans to start program in the fall
- Opening up the program to all members and any other students who are interested in participating
- Loose structure with more opportunities to write
Conclusions and Questions