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### Combating Loneliness: An Intergenerational Pen Pal Program

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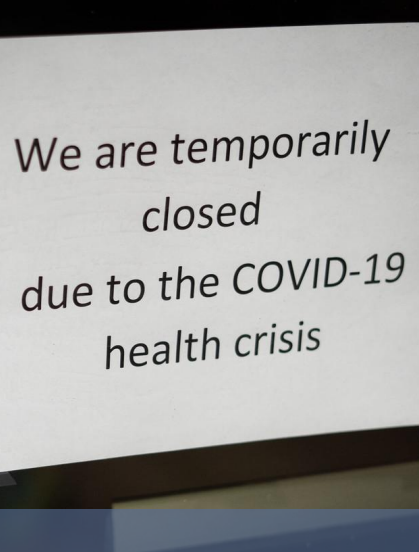
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# Mitigating the Damaging Effects of Covid-19 Isolation in the Elderly

Mazana Boerboom, Maria Goheen, Hailey Powell, Addie Slinger, Brenna Spurling



# The Problem at a Glance



We are temporarily  
closed  
due to the COVID-19  
health crisis



## COVID-19

The COVID-19 pandemic forced everyone to take a step back, isolate, and distance themselves from loved ones

## LONELINESS

This step back put all populations at greater risk for negative side effects of loneliness

## OLDER ADULTS

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



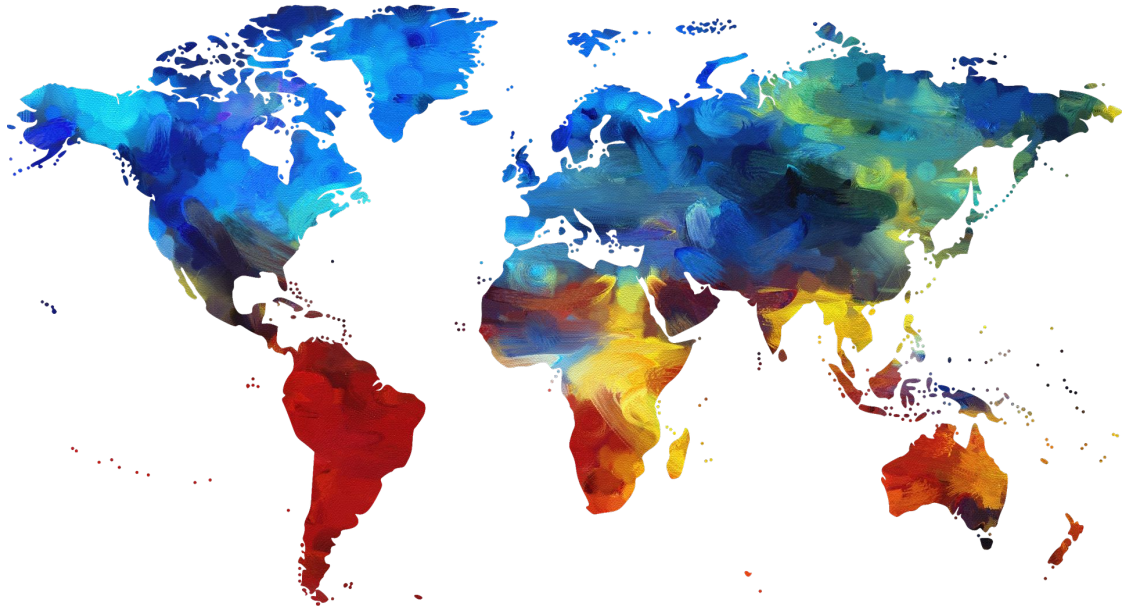


# Intergenerational Connection

- 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





A photograph of two hands wearing white latex gloves shaking hands. The hands are positioned in the center of the frame, with the fingers interlaced. The background is dark, and the entire image is overlaid with a semi-transparent blue rectangle. The text "OUR EFFORTS" is centered over the hands in a white, bold, sans-serif font.

**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.

**A look inside...**  
This brochure contains information regarding the effects of loneliness in older adults caused by the COVID-19 pandemic. This brochure was created to educate others about these effects, while also providing local and national resources to help mitigate these effects. Inside you will find information that looks at loneliness caused by COVID-19, loneliness in older adults, and intergenerational connection. On the back of this brochure will be a list of resources.

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

**LOCAL RESOURCES:**

- Missoula Aging Services
- MOLLI Osher Lifelong Learning Institute
- Aging Services at Montana DPHHS

**NATIONAL RESOURCES:**

- National Council on Aging
- Friend to Friend America

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

**Local Resources: Information & Resources**

**LONELINESS AND COVID-19**

- Mandatory shutdowns have made it difficult for necessary human connection.
- Loneliness levels are more related to the duration of isolation, rather than the intensity.
- Social distancing hasn't allowed for friends and families to spend time together.
- COVID-19 has exacerbated loneliness among the elderly.

**LONELINESS IN OLDER ADULTS**

- Loneliness has led to an increase of depression and anxiety among older adults.
- There has been an increase in both loneliness and depression, and the effects will likely outlive the pandemic itself.
- 24% of this population is socially isolated, even without the added pressures of COVID-19.
- Older adults typically do not have the means to turn to technology to connect with others.

**INTERGENERATIONAL CONNECTION**

- The three main ways to combat loneliness in elderly populations are improving social skills with training and practice, increasing social support with visitors and intrapersonal connection, and increasing access to social activities and events.
- Quality, intergenerational social connections have proven effective at loneliness mitigation.
- It has been proven important to have quality relationships rather than a large quantity of them.
- Intergenerational bonding activities are some of the most effective strategies to mitigating loneliness.

**SIGNS & SYMPTOMS TO LOOK FOR**

- Getting ill more frequently
- Change in diets
- Low self-esteem
- Irregular sadness and crying
- Withdrawing from others
- Having transactional communication
- Increase in risky behaviors such as gambling and substance use

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

# Pen-Pal Program

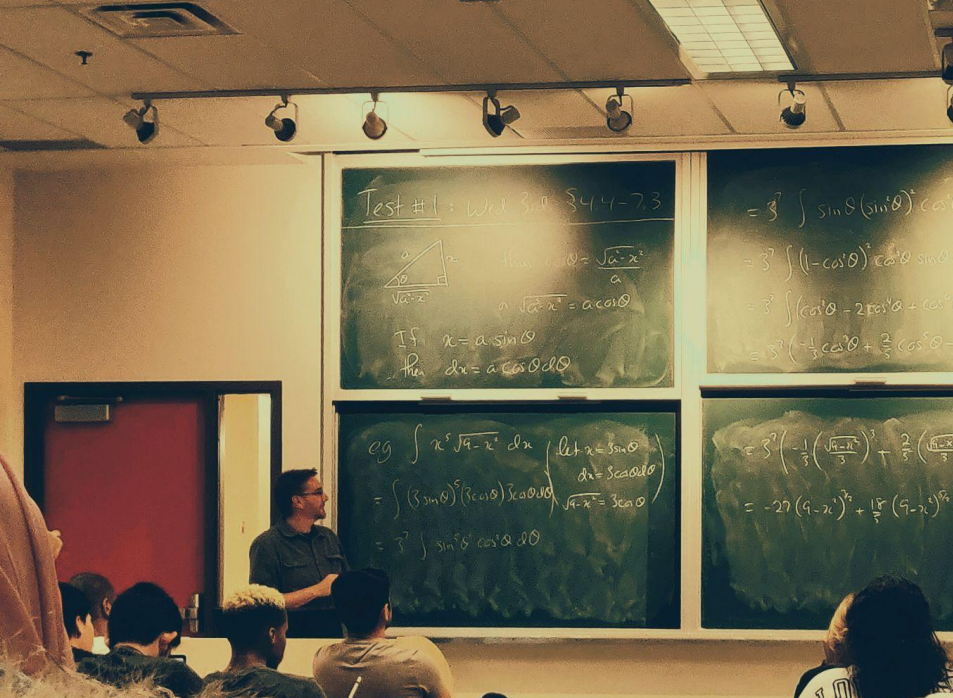
## Who, What, Where, and When:

- 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.



Our Preparation





Test #1: Wed 3.0 344-7.3

$$\frac{a}{\sin \theta} = \frac{b}{\sin \theta} = \frac{c}{\sin \theta} = \frac{1}{\sin \theta} = \frac{1}{\sin \theta}$$

If  $x = a \sin \theta$   
Then  $dx = a \cos \theta d\theta$

eg  $\int x^2 \sqrt{4-x^2} dx$  (let  $x = 2 \sin \theta$ )  
 $dx = 2 \cos \theta d\theta$   
 $\sqrt{4-x^2} = 2 \cos \theta$   
 $= \int (2 \sin \theta)^2 (2 \cos \theta) (2 \cos \theta d\theta)$   
 $= \int 8 \sin^2 \theta \cos^2 \theta d\theta$

$$= 8 \int \sin^2 \theta \cos^2 \theta d\theta$$
$$= 8 \int (1 - \cos^2 \theta) \cos^2 \theta d\theta$$
$$= 8 \int (\cos^2 \theta - 2 \cos^4 \theta + \cos^6 \theta) d\theta$$
$$= 8 \left( \frac{1}{2} \cos^2 \theta - \frac{2}{5} \cos^5 \theta + \frac{2}{7} \cos^7 \theta \right) + C$$

$$= 8 \left( -\frac{1}{3} \left( \frac{\sqrt{4-x^2}}{2} \right)^3 + \frac{2}{5} \left( \frac{\sqrt{4-x^2}}{2} \right)^5 - \frac{2}{7} \left( \frac{\sqrt{4-x^2}}{2} \right)^7 \right) + C$$
$$= -27 \left( \frac{\sqrt{4-x^2}}{2} \right)^3 + \frac{16}{5} \left( \frac{\sqrt{4-x^2}}{2} \right)^5 - \frac{16}{7} \left( \frac{\sqrt{4-x^2}}{2} \right)^7 + C$$

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.

Our Implementation



**COMMUNICATION**

**FACILITY PARTNER  
SELECTION**

**TIMELINE**



**INTERPRETING  
RESULTS**

**CHALLENGES**



# FEEDBACK



# 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?



# QUOTES

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

**-Honors Student**

**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**

**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**

**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**

# MOVING FORWARD





## 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

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# Conclusions and Questions