

ENRICH



PROJECT ENRICH

*Empowering New Relationships
with Intergenerational Community Hubs*

Prepared for the 2023 Geneva Challenge by:

Julia McKenna

Caroline Wu

Catherine Tran

Fiona Teague

Emily Burke

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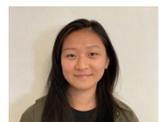


Abstract

Loneliness is a pressing public health issue with detrimental effects mentally and physically and is a risk factor for all-cause mortality. COVID-19 has amplified this issue, leaving many older adults and students disproportionately affected. Intergenerational programming presents a solution by connecting these groups within an interconnected community combating isolation and coping with loneliness together. Using a socio-ecological model offers a holistic approach to address this complex issue – offering an alternative to other solutions which may be single-pronged. *Project ENRICH*, a collaborative community-based initiative, aims to tackle loneliness through three phases: community consultation, improving the built environment, and implementing programming. Operating in a cyclical pattern, constant (re)evaluation of the program and adjustments ensures the program remains effective as community needs evolve. By enhancing community spaces and fostering intergenerational connections, this project empowers postsecondary students and older adults to thrive. While the authors have been mindful that our initiative is feasible for implementation across postsecondary campuses, this report will focus on a pilot program at The University of British Columbia in Vancouver. This program hopes to nurture sustainable and long-term belonging for older and younger adults and foster flourishing communities for generations to come.



Julia McKenna: Julia is pursuing a MSc in Kinesiology at the University of British Columbia. Here, her research focuses on the promotion and evaluation of exercise interventions targeted towards healthcare workers. During her undergraduate degree at Queen’s University, she worked on several projects surrounding the dissemination and implementation of Canada’s 24-Hour Movement Guidelines.



Caroline Wu: Caroline is pursuing a MA in Kinesiology at the University of British Columbia. Her research involves understanding how knowledge from research is being utilized by practitioners and policymakers in the promotion of health and wellbeing at postsecondary institutions. For her undergrad, she completed a Bachelor of Kinesiology at UBC with a minor focusing on Political Sciences.



Catherine Tran: Catherine is completing a MA in Kinesiology at the University of British Columbia. Her research is focused on the health and healthcare experiences of Vietnamese older adults. For her undergraduate degree, Catherine completed a Bachelor of Science in Kinesiology at the University of Calgary with a minor in Biological Sciences. She is passionate about working with older adults, immigrants, and newcomers.



Fiona Teague: Fiona is completing a MA in Child and Youth Studies at Brock University. Her research has focused on understanding and supporting youths’ mental health through transitional experiences. In her undergraduate thesis at McMaster University, she interviewed first year students to understand their experience transitioning to postsecondary amidst COVID-19. Her master’s thesis aims to understand the mental health and physical activity needs of newcomer youth to Canada.



Emily Burke: Emily is a MA of Health Promotion student at Dalhousie University. Passionate about creating healthier communities through upstream approaches to physical activity promotion and chronic disease prevention. Her thesis research focuses on the impact of built environment interventions on children’s movement and play behaviours. Prior to her Master’s, Emily completed a bachelor’s degree in Life Sciences with a minor in Psychology from Queen’s University.



Introduction

Loneliness has been conceptualized as a distressing, internal, and subjective experience stemming from a discrepancy between an individual's preferred connection with others and their actual experience (Badcock et al., 2021). In part due to the negative affect caused by loneliness, individuals may use it as an adaptive response that motivates the formation of social connections (Cacioppo et al., 2014). Social connection is recognized as a basic determinant of health (Wilkinson & Marmot, 2003), and broadly refers to how individuals connect with others, depending on the structure, quality, and function of those relationships (Holt-Lunstad, 2018). The structural component refers to a numerical assessment of the number of relationships or the frequency of contact, while the quality refers to an assessment of the positive or negative aspects of those relationships (Holt-Lunstad, 2018). Further, the functional component evaluates the actual or perceived resources or aid that can be provided through the relationship (Holt-Lunstad, 2018). Both the quantity and evaluated quality of social connection is important, where more and better social relationships is a protective factor, while poorer and fewer social relationships is a risk factor (Holt-Lunstad, 2018).

Preventing loneliness and bolstering social connection can lead to a host of individual positive outcomes, such as emotional well-being in happiness, calmness, life fulfilment, educational attainment, and economic prosperity (Baumeister & Leary, 1995; Murthy, 2023). Beyond components of well-being, there are also physical health effects, whereby those who are socially connected live longer, while social isolation is associated with health issues and an increased risk for early death from all causes (Murthy, 2023). In a recent meta-analysis of 35 articles with 77,220 participants, loneliness was found to be a risk factor for all-cause mortality (Rico-Urbe et al., 2018).

Expanding beyond the notion that individual social interactions can lead to social connection, the social ecological model considers the connection and complex interplay among multiple factors, including the broader community and society (Dahlberg & Krug, 2002; Holt-Lunstad, 2018), as shown in [Figure 1](#). While the model has previously been applied to other public health issues, it can here represent how risk and protective factors can exist in each broader system. While loneliness may be thought to merely exist on an individual level that is



remedied by relationships, it is important to consider how these relationships exist in the context of communities and broader societal structures. For example, in 2018, only 16% of Americans reported that they felt attached to their community (Parker et al., 2018). Perhaps the way forward to attend to loneliness as a public health issue is to facilitate the spaces that can both (1) encourage and build sub-communities, and subsequently (2) give individuals a sense of community engagement.



Figure 1. The social ecological model (Source: Dahlberg & Krug, 2002)

The Problem and Rationale

Problem

While loneliness can be viewed as a general public health issue, there are also contextual factors that may exacerbate the issue and specific demographics that may be most vulnerable. The physical distance and isolation that was necessary during the COVID-19 pandemic put individuals at a higher risk of experiencing loneliness.

Older adults in Canada are expected to comprise up to 20-30% of the total population by the year 2068 (Statistics Canada, 2019). However, studies have shown that older adults report some of the highest rates of social isolation and loneliness (Kannan & Veazie, 2023). It has been suggested that 1 in 4 older adults over 60 experience some degree of loneliness (Chawla et al., 2021). Further, loneliness and social isolation among those aged 65 years of age and over was found to have increased during the COVID-19 pandemic, prevalent in 28% and 31% of older adults respectively (Su et al., 2023). There may also be subgroups of the aging population who are most at-risk for experiencing loneliness, such as those who reside in



institutional care or who have had their social ties limited through other life experiences (Pinquart & Sorensen, 2001). This has resulted in a magnitude of studies and interventions targeted towards this population, which range from the use of technology, support groups, and teaching psychological skills. When examining the effectiveness of these interventions, older adults were found to be knowledgeable about social community resources however those targeted towards loneliness were found not to be desirable or helpful (Karicha et al., 2017). When support is described as a specific intervention to address loneliness for older adults, this also deterred engagement (Karicha et al., 2017). Furthermore, loneliness in older adults was connected to the need to belong to something (Larsson et al., 2019). Therefore, it's important to shift the focus away from treating older adults as lonely individuals and towards building social connectedness and community instead.

While older adults have reported high rates of social isolation and loneliness, younger adults were also twice as likely to report feeling lonely (Cigna Corporation, 2021; Murthy, 2023). Specifically, rates of loneliness in younger adults have increased every year from 1976 to 2019 (Buecker et al., 2021). During COVID-19, it has been reported that loneliness disproportionately affected young Canadians where nearly 70% of 18-24-year-olds reported loneliness from physical distancing compared to 54% of the general population (McQuaid et al., 2021). In addition to the negative outcomes outlined previously, loneliness can also lead young people to feel that they are less efficient in overcoming adversity (Marelli et al., 2021), which may be especially relevant in a university setting with concerns of student retention (Hunter, 2006). The transition from high school to university has been linked to these increased feelings of loneliness (Diehl et al., 2018). Additionally, loneliness in postsecondary students has been attributed to both a lack of emotional and social support (Diehl et al., 2018). This lack of support is partially due to the loss of meaningful relationships and membership to social groups when moving to university (Ellard et al., 2022). As emerging adults, postsecondary students are neither adults nor adolescents, living in a period of instability and in-between (Arnett, 2006). During this time, exploration of relationships and self-identity is crucial for developing expectations for the future (Arnett, 2006). Scholars have also found increased feelings of loneliness in emerging adults due to increased use of smartphones, and social media apps



(Macdonald & Schermer, 2021). This indicates that this population would also benefit from programming that addresses social connectedness and community building. Furthermore, universities have the power and responsibility to address the problem of loneliness amongst their student population (Ellard et al., 2022). Campuses are ideal spaces to foster community connectedness as they have the resources to facilitate and maintain safe spaces for student interaction (Ellard et al., 2022).

Rationale

Research has indicated that older adults and postsecondary students report the highest rates of loneliness, yet interventions have yet to effectively solve this problem. Literature has also suggested that both these groups would benefit from programming that focused on building long term relationships. Therefore, our proposed solution is to address these groups as members of an interconnected community rather than isolated populations. This can be done through intergenerational programming, an intervention design used to connect older adults with younger populations. Intergenerational programming has previously been successful to promote intergenerational relationships, combat social isolation, cope with loneliness, and increase perceived sense of community (Suleman & Bhatia, 2021; Xu et al., 2022), especially when they are built to consider recurring rather than episodic interactions (Martins et al., 2019). In the past, this type of programming has been used frequently in past studies but tends to focus on technology-based interventions (Karicha et al., 2017). These are often short-term programs that pair together an older adult with a younger volunteer. Although these programs have shown some positive impact, they do not address the need for social connectedness and community. Developing an intergenerational program that helps foster long-term belonging in both older and younger adults is the goal for our project.

Belonging to a group with a shared interest was found to be more effective than one-on-one support or social groups (Karicha et al., 2017). The need to belong is thought to be a fundamental and innate human motivation (Baumeister & Leary, 1995), which contributes to perceived meaningfulness in life (Lambert et al., 2013). Baumeister and Leary's (1995) belongingness hypothesis posits that humans have a drive to form and maintain interpersonal relationships, where interactions must be pleasant, stable, and within a caring environment to



satisfy this need. While stability of interactions is a component of belonging, the hypothesis believes that the loss of a relationship can be replaced by development with another, to a certain extent (Baumeister & Leary, 1995).

It is crucial for the intervention to have a long-term purpose and connect members beyond the initial shared feelings of loneliness. Community members should feel like collaborators, rather than participants in a study or intervention. The opinions and values of community members should be used to inform and contribute to change (MacIntyre & Hewings, 2022). Additionally, research has shown that multi-pronged strategies are more effective than single project interventions (Poscia et al., 2018). As we shift away from technology-based interventions, it's also important to discuss the impact of the built environment on loneliness and how it can be incorporated into our solution. Developing environmental spaces that support social connection is equally important as group programming.

Our Solution: Project ENRICH

Loneliness is a complex public health issue. Therefore, our solution, *Project ENRICH*, builds on evidence-based approaches and recommendations to holistically address loneliness. *Project ENRICH* is a multi-phase participatory intervention focused on creating 'less lonely' community spaces and promoting meaningful intergenerational connections. The goal of *Project ENRICH* is to alleviate loneliness among postsecondary students and older adult populations. *Project ENRICH* will achieve its goal through three phases: (1) consultation with local postsecondary students and older adults to empower priority populations, inform phase 2 and phase 3 action plans, and increase opportunities for collaborative action; (2) built environment enhancements at one key local setting to create a vibrant and accessible community hub (i.e., add green space, wayfinding elements, flexible seating and intimate areas, etc.); and (3) promotion of community partnerships and programming to create opportunities for meaningful intergenerational connections. Additionally, a project evaluation (described in greater detail below) will be performed to measure and assess the achievement of project outcomes and help inform future loneliness reduction interventions.



Project ENRICH uses a socio-ecological perspective to understand the multilevel individual, social, and environmental factors that influence loneliness (Leyland et al., 2023). Also, the socio-ecological perspective highlights how sociodemographic factors (i.e., age, gender, race and ethnicity, disability, etc.) can influence an individual's relative risk of loneliness and contribute to health inequities across populations (Leyland et al., 2023). Therefore, our intervention will target multiple dimensions of loneliness through equitable and inclusive built environment enhancements and programming to maximise its potential impact. Additionally, previous research has emphasised the effectiveness of loneliness interventions that incorporate community-level participation and engagement (Akhter-Khan & Au, 2020; Gardiner et al., 2016; Patel et al., 2019; Yanguas et al., 2018). Accordingly, *Project ENRICH's* action plan will be informed by its target populations and other relevant community stakeholders to tailor the intervention to community needs and build capacity through strengthened community partnerships.



A Timeline of *Project ENRICH*

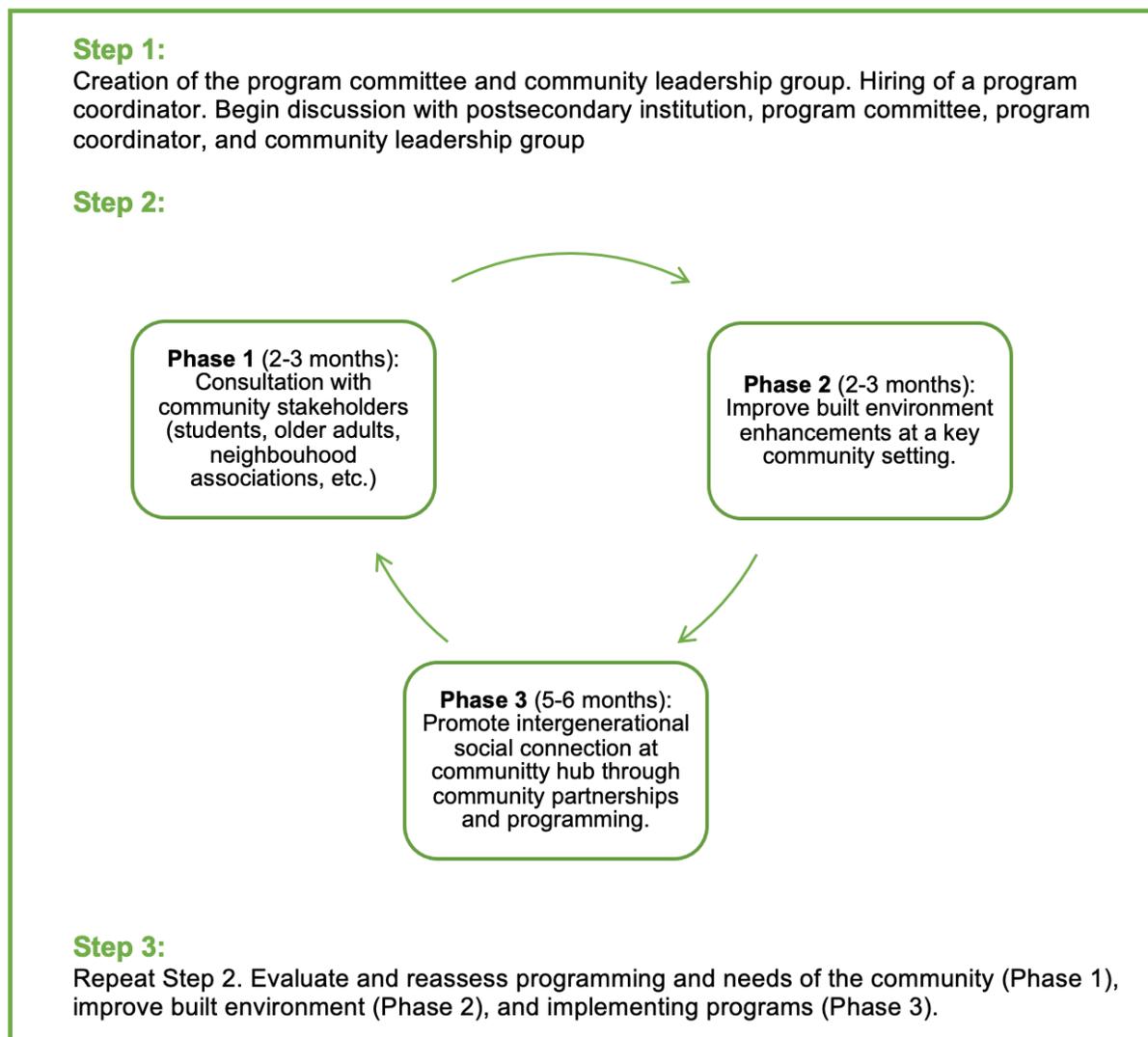


Figure 2. A timeline of the implementation and continuation of Project ENRICH

Implementation

Project ENRICH will be implemented in three phases: (1) consultation with local postsecondary students, older adults, and other community stakeholders; (2) development of a community hub through built environment enhancements at one key community setting; and (3) promotion of intergenerational social connection at our community hub through community partnerships and programming. Additionally, an informal evaluation of *Project ENRICH* will be performed to assess the intervention's processes and outcomes.



Phase One: Consultation

The first phase of *Project ENRICH* is focused on consultation with the intervention's target populations (postsecondary students and older adults) as well as with other relevant community stakeholders such as university and municipal staff, community, and non-profit organisations, etc. The *Project ENRICH* team will engage with individuals and community members via email, phone, and in-person meetings. At the same time, our team will invite those interested to join a community leadership group, who will participate in focus groups (online or in-person) throughout the project's implementation. The community leadership group will also be asked to participate in a committee as part of the project's evaluation. Initial consultations with the committee leadership group will allow our project team to assess community readiness and leverage existing community partnerships and resources. Additionally, ongoing consultation with the community leadership group will ensure Phase 2 & Phase 3 actions are tailored to meet the needs of each individual community, build community capacity for reducing loneliness, and mitigate any potential risk involved.

Phase Two: Improving the Built Environment

The project's second phase will include built environment enhancements at one key community setting. The setting will be selected based on its available resources and proximity to both postsecondary students and older adults within the community. Built environment enhancements will be co-designed with community leadership to create a vibrant, accessible, and friendly community hub where postsecondary students and older adults can meet and connect. This will be achieved by improving aspects of the physical and social environment that may hinder social connection. Examples of built environment enhancements include (but are not limited to) increasing green space, lighting, and pedestrian areas, adding flexible seating, creating accessible wayfinding paths, and installing community-generated art.

Improving the built environment at and around our community hub is important because the space(s) in which one lives and spends time can have major impacts on one's health, wellbeing, and subjective feelings of loneliness (MacIntyre & Hewings, 2022). For instance, community spaces that are uninviting and/or inaccessible to certain demographic groups can limit individual's opportunities to make and maintain quality relationships (Using



design to connect us, 2020). Therefore, making the community hub more inviting and accessible through the addition of simple elements such as flexible seating, lighting, and community artwork could increase community members' usage of the space and engagement in social interaction.

In addition, evidence shows increasing greenspace and promoting physical activity through the built environment has a variety of health benefits, including reduced risk of loneliness (MacIntyre & Hewings, 2022; Wheeler et al., 2020). Adding green space and accessible pedestrian infrastructure at the community hub may encourage community members to engage in active travel and physical activity (Bower et al., 2022; Wheeler et al., 2020). Further, this may positively impact students and older adults' independent mobility, as they will be able to easily navigate and move within and around the hub.

Implementation of built environment enhancements at the community hub will occur prior to the project's third and final phase. However, changes or additions may be made throughout the remainder of the project's duration based on community feedback and findings from the project's evaluation. Additionally, built environment enhancements will be determined based on the resources and capacity of the local community. Communities may choose to implement more cost-effective changes such as increasing wayfinding signage and flexible sitting areas if resources are limited. Alternatively, some communities may choose to implement more extensive changes such as installing new infrastructure to create pedestrian zones with green space, if a wealth of resources are available.

Phase Three: Implementing Programming

The third phase of *Project ENRICH* will involve implementing events and activities to the space to ensure ongoing engagement while integrating the needs and interests of the community. While we suggest some potential ideas below, this phase will also be flexible as it will be tailored based on findings from the consultation in phase one and be constantly adjusted in a cyclical process as needs from the community arise or change. This will allow the community partners to take a more collaborative role by bringing their interests and hobbies to the program.



The creation of a community garden can help contribute to an improved built environment (as a goal of phase two), while also creating potential benefits of its own. While community gardens vary by environment and produce in the literature, many operate on a shared nature in which individuals work collectively to care for a garden growing plants and produce such as flowers, herbs, fruits and vegetables (Lovell et al., 2014). Since a community garden involves the action of caring and producing something, it provides an activity where individuals come together for a common purpose with shared experience and goals (Egli et al., 2016; Firth et al., 2011). Independently, community gardens can thus *create* community by increasing ties of those with similar interests (Firth et al., 2011). In part, community gardens can also create a sense of ownership and pride within space (Egli et al., 2016), where individuals can recognize their belonging in a community as akin to the presence of something they created within that place. If well sustained, community gardens can also serve the tertiary process of supplementing nutrition or food security and may encourage other social events like cooking and eating communally (Egli et al., 2016; Firth et al., 2011). For example, community members can learn various recipes for dishes made from produce grown in the community garden, similar to that of another study (Jones et al., 2013). Nearly 40% of students across post-secondary Canadian campuses experience food insecurity (Silverthorn, 2016), and this is consistent with findings in students at our proposed pilot site of The University of British Columbia (cite?). Adding accessible community gardens across campus could be especially beneficial, as students are often living alone for the first time and on a restricted budget. Both young adults living in student residences and older adults living in nearby institutions do not have access to the green space provided by a yard. Therefore, these gardens could be an opportunity to offer green space fresh food, along with the opportunity for intergenerational knowledge translation on gardening and food preparation based on what is grown.

Activity-based programming is another potential idea that could contribute to fostering strong community engagement. For example, movement-based community activities such as dance classes offer individuals the holistic benefits of group fitness. One study evaluating the impact of community dance classes for older adults found there to be positive impacts in fostering inclusion among participants (Paglione et al., 2023). Offering an opportunity for skill



mastery, combined with providing a space to be creative and expressive allowed individuals support to their physical, social, and emotional needs. Most notably, participants highlighted appreciation for the opportunity for social connectedness and collective effervescence provided before, during, and after each dance class (Paglione et al., 2023). Such programming could offer the holistic benefits of movement in a fun, engaging, and inclusive manner while being accessible and inclusive to a wide range of community members.

Community engaged arts is another program that offers strong potential to combat loneliness. Through these projects, professional artists collaborate with members of the community and engage in the group process of art creation (Moody & Phinney, 2012). Typically, the final product is displayed in a public setting to be further appreciated by and engaged with among the wider community. Examples of these projects include murals, interior design of community spaces, and other larger art pieces. This process emphasizes collaboration at its core, pairing the skills and expertise of the professional artist with each community member's own creativity, ideas, and life experiences together in the activity of art creation (Moody & Phinney, 2012). Involvement in community engaged arts has been found to reduce loneliness through partnership and collaboration (Matarasso, 1997). By allowing community members to work together towards a shared goal, they are able to develop a sense of meaning and purpose, connect to other local artists, and build and/or strengthen intergenerational relationships in the community (Moody & Phinney, 2012). Examples of other community programming are listed in the table below (Table 1).

Table 1. Examples of programs that could be implemented in Phase 3 of Project ENRICH

Program	Description
<i>"Take one, leave one" library</i>	A free book exchange program in which individuals are able to take a book to read, or leave a book for others. Individuals are encouraged to engage with their community by leaving books for others to enjoy. These libraries would require little to no cost/upkeep and would be freely accessible to all, removing barriers that might exist in accessing books.



<p><i>“Take one, leave one” yarn</i></p>	<p>Similar to the take one, leave one libraries, this system would operate nearly identical, but with yarn. While once considered an activity for older adults, knitting and crocheting has been recently gaining popularity among Gen Z post-pandemic (Surgenor, 2023). This may be an ideal activity to link generations together to engage in a shared hobby of knitting; individuals can share tips, explore collaborative creative projects, and relax over this lowkey and accessible activity.</p>
<p><i>Intergenerational mentorship programs</i></p>	<p>These programs could allow older and younger community members to bond over shared interests and/or engage in mutually beneficial relationships where individuals learn and teach skills to one another. Examples could include language classes, craft workshops, life skill transfer workshops (such as teaching young participants how to create a budget, apply for jobs, learn about mortgages), and other shared interests. This program would emphasize the benefit of intergenerational relationships through the formation of strong connections among those of different life experiences, alleviating loneliness among both groups.</p>
<p><i>Drop-in nights</i></p>	<p>Events such as family movie nights, knitting sessions, coffee house performances, and board game nights at the community centre are a great way to engage community members with little commitment required. These events could be offered at low cost or by donation and allow for individuals to come and go as they please. This could attract individuals who may not be comfortable signing up for a program far in advance, and allow opportunities to connect in a relaxed and low key atmosphere.</p>



Evaluation

To evaluate the effectiveness of *Project ENRICH* on loneliness, ensure needs are continuously being met, and other concerns stakeholders may have, all community hubs will need a way to gather feedback from the participants of the program and users. Though there are many ways to gather feedback from users (e.g., one-on-one interviews, focus groups, formal surveys, etc.), it is suggested for all hubs to have a visible and accessible suggestions and feedback box. At these boxes, users can provide anonymous suggestions, impressions, and opinions about the hub and programs. For example, to gauge the participants perception of loneliness, the feedback sheets can include a prompt asking about how connected they now feel to the community and how the space can be improved to improve feelings of connectedness. This box should be reviewed weekly by the program coordinator and team.

Besides having a suggestion box for participants who may not be comfortable providing written feedback (e.g., language barrier, hard of seeing, etc.), program coordinators and volunteers should dedicate time to communicate and gather feedback from participants in the hubs. When having these conversations, coordinators and volunteers should ask how *Project ENRICH* (e.g., environment, programs, facilities, etc.) are serving their needs and ways it can be improved. For example, two volunteers can be tasked with gathering opinions and feedback of users in the hub on a program held last week or opinions about how to improve the space. After these conversations, the volunteers and the program coordinator can schedule a separate meeting to discuss feedback gathered, which items can be actionized, and feasible ways by which this might be done. Conversation should make users feel like valued collaborators contributing towards improvement of their community. By having a less formal way to converse and gather information, also known as natural conversations (Bernard, 2011), it is said that people will feel more at ease, reducing the power imbalance often observed in formal interviews, and reflects more of an individual's realistic perceptions and experience (Swain & King, 2022). It is important to have continuous conversations between the users and coordinators of the program to ensure the programs and hub are continuously meeting the wants and needs of its users.



Looking to serve a diverse population with varying needs, it will be ideal to create a program committee with members from the community leadership group and representatives of the institution. This committee will be imperative when discussing the future directions of the program's development, required funds, and other related logistics of implementation. Besides planning and logistics, the program committee will also play a supportive role to the program coordinator and when thinking about where to improve with the feedback gathered from the program users.

To ensure hub users that their voices are being heard, and the actions taken by the program are communicated across to users, program leaders can create a bi-monthly poster reviewing actions, programs, and events and post it to a public community bulletin. This poster should be available both online and in-person. The creation of such a poster will create and demonstrate accountability from program leaders and also indicates to hub users that their opinions and suggestions are heard and being implemented.

Planning and Piloting

Where: Choosing a location for the community hub

When choosing a location for the project to take place in, it is crucial for decision makers to consider creating the hub in an area that will meet the needs discussed from the consultation with the community in Phase 1. For example, it will be important to keep in mind the facility size (e.g., number of users), accessibility of the location (e.g., walk, transit, parking, etc.), and projected budget by an institution. To minimize the impact *Project ENRICH* may have on the environment and need for additional funding, communities and planners can seek out facilities that may be repurposed and/or reused.

Who: Stakeholders and decision makers

To guide the conversation during the planning of such a program, having a knowledgeable program coordinator can promote effective communication and partnership between stakeholders. For example, they can assist in building cross campus sector silos' and tap into the different expertise of personnel. Moreover, the planning of such a program should be led in collaboration with the program committee and community leadership group.



Depending on where the program is to take place and who it will serve, representatives from the target populations should be a part of the discussion.

Pilot: The Old Barn Community Centre in Vancouver, B.C.

A pilot would be useful to work out any potential implementation details and evaluate any potential risks to our project. For example, in our pilot, the Old Barn Community Centre is a location with pre-existing facilities that would be ideal to implement and integrate programs and activities (e.g., cooking classes, sharing stories, etc.) as well as build and strengthen community belongingness (e.g., student study spaces, daily strolls, meet-up spots, etc.).

The Old Barn Community Center is a recently renovated building located near the edge of UBC's main campus. This is a large space that holds many events for residents living on campus such as Family Movie Night and the Seniors and Friends Lecture. The space is a two-story building that houses meeting rooms, a small fitness facility, and several social spaces. The Old Barn Community Center is also conveniently attached to a local coffee shop next door. However, although close to student housing, a majority of students do not know of this space or how to get there. There is an opportunity to use this space more efficiently as a community hub to better connect the 12,000 students living on campus and 11,000 people living in the campus residential neighbourhoods (UBC, 2017). This space would therefore possess capability to further integrate students living on campus and away from home who may not be able to connect with their families in person.

The Old Barn Community Center serves as an ideal place for our study's pilot project as it is located on campus and is close to neighbourhood housing. The community centre is easily accessible through walking or by transit, has spaces indoor and outdoor for groups to gather, and has existing relationships with the surrounding community, including *Tapestry*, an active aging senior's community (Tapestry, 2023). Though the Old Barn Community Centre has many well-established facilities and events (e.g., family movie nights, community coffee talks, children's gardening workshop) serving families and the older adult population, this space could be further improved by incorporating more novel programming to include postsecondary students. This includes creating low-cost and engaging programs that invite students to interact



with older adults in the community and facilitate increased social cohesion, as well as introduce better wayfinding for students on campus to make the space more accessible.

To guide the conversation throughout the consultation, planning, and implementation phases, having knowledgeable personnel about the campus and health promotion on the program committee will be pertinent. For example, at UBC, Levonne Abshire, the director of the Health Promotion and Education unit (specializing in health promoting strategies and programs) as well as Debbie Yeh, the coordinator from the Campus and the Community Planning unit (specializing in campus building and community engagement) are two individuals from units that should be included in the conversation when designing this project on UBC campus. As well, having the community leadership group, with representatives of students and the older adult population, would be important during all phases.



Examples of built environment improvements possible at the Old Barn Community Centre



Figure 3. Lobby of the Old Barn Community Centre



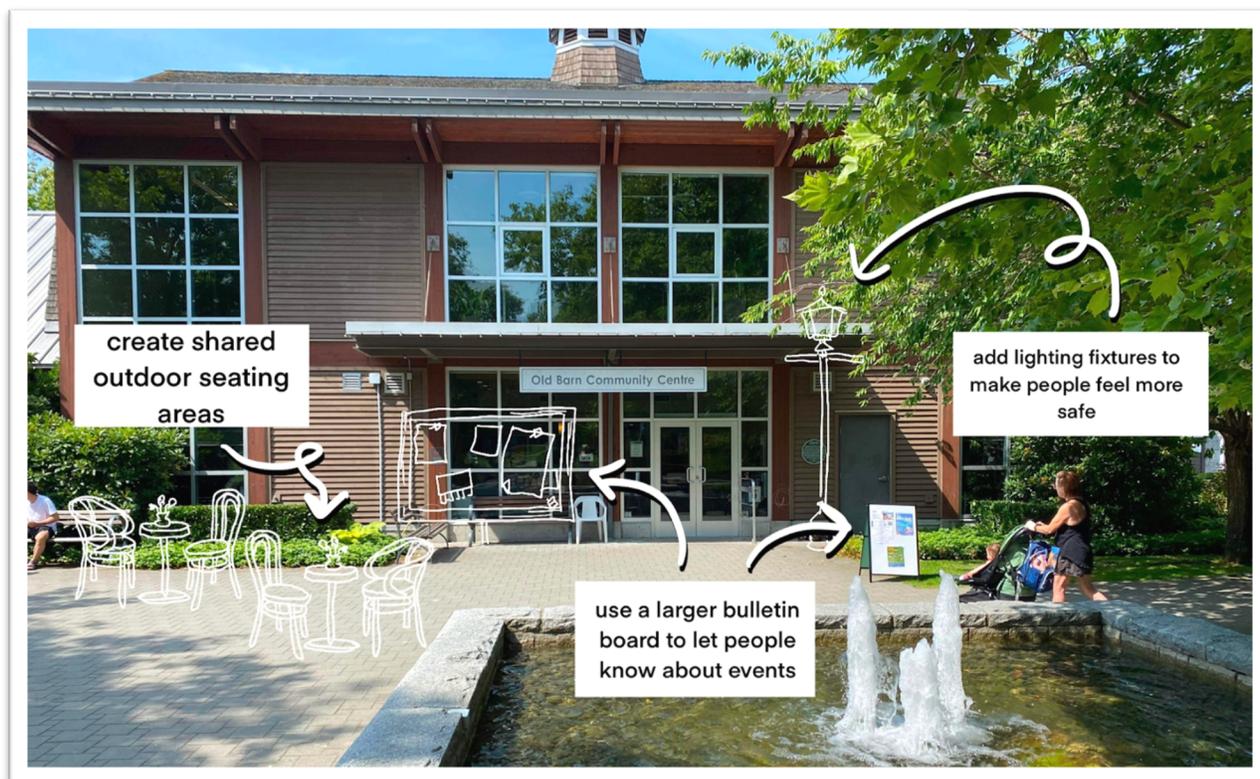


Figure 4. Front entrance of the Old Barn Community Centre



Figure 5. Foyer/main hall of the Old Barn Community Centre



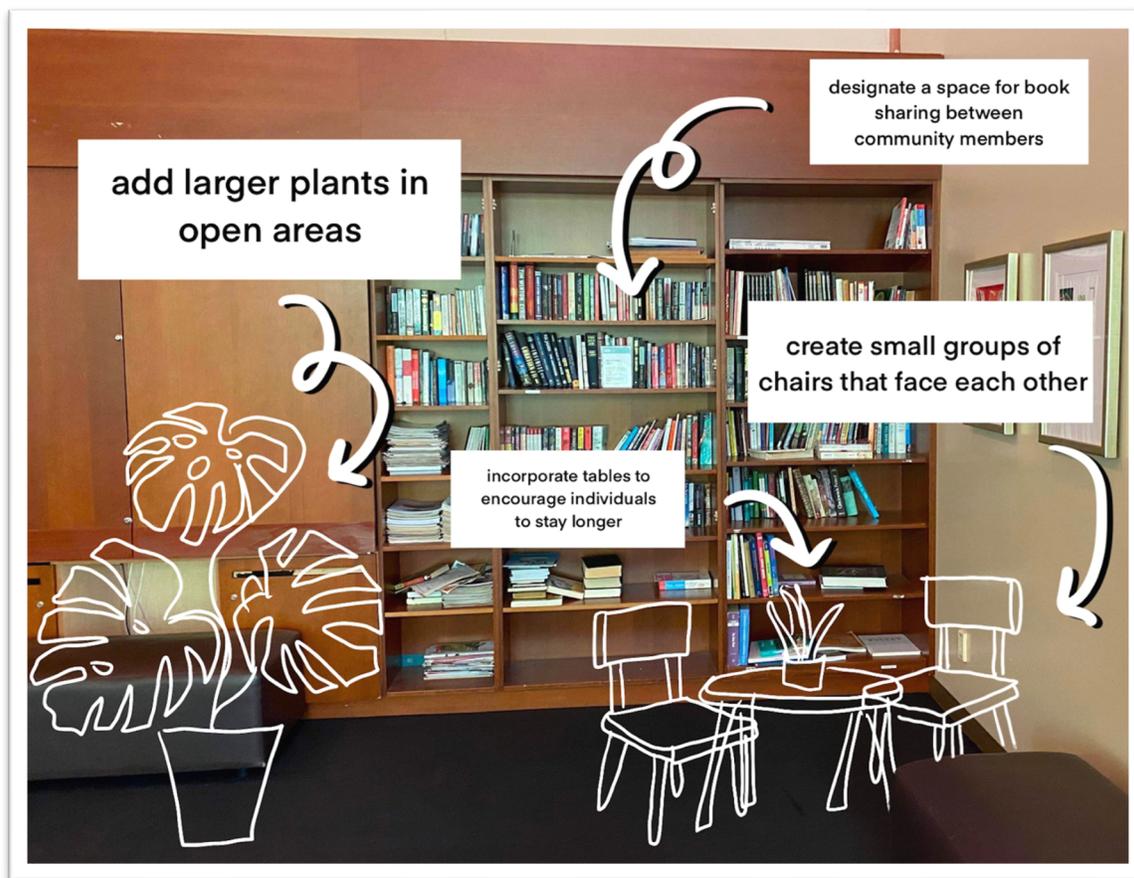


Figure 6. The reading nook at the Old Barn Community Centre

Scale and Sustainability

Like any program, we hope for *Project ENRICH* to be a sustainable project, ensuring flourishing communities for generations to come. However, the size of this project as well as the longevity of such a program also depends on the buy-in of stakeholders (e.g., universities, retirement homes, etc.) as well as the ability to create and develop a strong team of dedicated employees and volunteers led by a capable program coordinator. The creation of a head program coordinator position would aid to be a liaison to strengthen relationships among stakeholders, organize logistics, evaluate programming, and ensure overall sustainability of the project. The longevity of such a project will also benefit from having a program committee. As discussed in the evaluation section, this committee can help address the needs of the community and guide the program coordinator.



The scalability of this project in different communities will also rely on having stakeholders that prioritize the issue of addressing loneliness and are willing to invest time and money towards these efforts. Further, the success of this program is dependent on the availability of a suitable physical space that can serve as a place for participants to gather and collaborate. As mentioned in the planning phase, ideally, there would be a space identified in each community that is available for use, but not currently optimally being used and/or is not adequately meeting the needs of the community.

Our pilot study focuses on the community surrounding the Old Barn Community Centre in the UBC area, with hope that this pilot will serve as a framework to benefit communities of various sizes and types (e.g., institutional or neighbourhoods) across the country, and potentially, across the globe. However, it is important to note that the chosen facility for the pilot study already possesses a well built and well-established infrastructure, potentially allowing for easier implementation of *Project ENRICH* than others. Other communities may take inspiration from the pilot study but will need to adjust based on the capacity of their facility's own unique needs. *Project ENRICH* offers organizers flexibility to adapt to different community sizes and versatile programming tailored to the unique and specific needs of each community. The benefit of this project is that it relies on a cyclical nature; there will be constant re-evaluation of the three phases (consultation, improving built environment, implementing programming). Adjustments to the programming/environment will be made in consultation with community members, constantly evolving to meet the needs of the community as they arise. This project has the potential to have a long-lasting impact on communities and can span across several years.

Practical Implications

As *Project ENRICH* is a community-based participatory intervention, its effectiveness will be dependent on the readiness and responsiveness of each community involved (Whelan et al., 2019). Additionally, long-term implementation will be required before the effectiveness of the intervention is fully actualized (Herbert-Maul et al., 2020). However, following project actions, we anticipate decreased rates of loneliness and increased social cohesion among postsecondary students and older adults who access programs or services at the community hub. Physical and



mental health benefits may also occur in the target population, as well as the broader community, due to the potential for *Project ENRICH* to increase social interaction, physical activity, and improve the quality of the built environment surrounding the community hub. In addition, we anticipate postsecondary students who access the community hub to report increased positive attitudes towards older adults, given the opportunities for meaningful intergenerational connection. This outcome will likely be reciprocal in nature, as older adults may feel a greater sense of social belonging with a larger social network in their community. Finally, it is our hope that this participatory intervention will build community capacity for reducing loneliness and serve as a framework for the development and implementation of future holistic and community-level interventions targeting loneliness.

Conclusion

Loneliness is a growing public health concern among postsecondary students and older adults living in Canada. Previous interventions for loneliness in adult populations have often targeted individual health behaviours or were not tailored to the needs of multiple end-users. For instance, technology-based interventions have been shown to have varying impacts across populations. Additionally, the COVID-19 pandemic demonstrated the importance of the social and environmental factors for influencing loneliness. Therefore, innovative loneliness interventions are needed, considering individual, social, and environmental contexts, to effectively reduce loneliness at the population-level. *Project ENRICH* is one such intervention. Focused on creating more opportunities for meaningful social connection through the development of community hubs and intergenerational programming, *Project ENRICH* aims to create long-term, community-level reductions in loneliness. Using a flexible community-based participatory approach, *Project ENRICH* is designed to be scalable for diverse populations and settings. Thus, *Project ENRICH* is a practical solution to address loneliness in postsecondary students and older adults across Canada and abroad.



References

- Akhter-Khan, S. C., & Au, R. (2020). Why Loneliness Interventions Are Unsuccessful: A Call for Precision Health. *Advances in Geriatric Medicine and Research*, 2(3).
<https://doi.org/10.20900/AGMR20200016>
- Badcock, J. C., Holt-Lunstad, J., Garcia, E., Bombaci, P., & Lim, M. H. (2022). Position statement: Addressing social isolation and loneliness and the power of human connection. *Global Initiative on Loneliness and Connection (GILC)*.
- Baumeister, R. F., & Leary, M. R. (1995). The need to belong: desire for interpersonal attachments as a fundamental human motivation. *Psychological bulletin*, 117(3), 497.
- Bernard H. R. (2011). *Research methods in anthropology: Qualitative and quantitative approaches* (5th ed.). AltaMira Press.
- Buecker, S., Mund, M., Chwastek, S., Sostmann, M., & Luhmann, M. (2021). Is loneliness in emerging adults increasing over time? A preregistered cross-temporal meta-analysis and systematic review. *Psychological Bulletin*, 147(8), 787.
- Cacioppo, J. T., Cacioppo, S., & Boomsma, D. I. (2014). Evolutionary mechanisms for loneliness. *Cognition & emotion*, 28(1), 3-21.
- Chawla, K., Kunonga, T. P., Stow, D., Barker, R., Craig, D., & Hanratty, B. (2021). Prevalence of loneliness amongst older people in high-income countries: A systematic review and meta-analysis. *Plos one*, 16(7), e0255088.
- Cigna Corporation. (2021). *The Loneliness Epidemic Persists: A Post- Pandemic Look at the State of Loneliness among U.S. Adults*.
- Dahlberg LL, Krug EG. (2002). Violence: a global public health problem. *World Report on Violence and Health*. Geneva, Switzerland: World Health Organization, 1-21.
- Egli, V., Oliver, M., & Tautolo, E. S. (2016). The development of a model of community garden benefits to wellbeing. *Preventive medicine reports*, 3, 348-352.
- Firth, C., Maye, D., & Pearson, D. (2011). Developing “community” in community gardens. *Local Environment*, 16(6), 555-568.



- Gardiner, C., Geldenhuys, G., & Gott, M. (2018). Interventions to reduce social isolation and loneliness among older people: an integrative review. *Health & Social Care in the Community*, 26(2), 147–157. <https://doi.org/10.1111/HSC.12367>
- Herbert-Maul, A., Abu-Omar, K., Frahsa, A., Streber, A., & Reimers, A. K. (2020). Transferring a community-based participatory research project to promote physical activity among socially disadvantaged women—experiences from 15 years of BIG. *Frontiers in Public Health*, 8, 546. <https://doi.org/10.3389/FPUBH.2020.571413/BIBTEX>
- Holt-Lunstad, J. (2018). Why social relationships are important for physical health: A systems approach to understanding and modifying risk and protection. *Annual review of psychology*, 69, 437-458.
- Hunter, M. S. (2006). Fostering student learning and success through first-year programs. *Peer Review*, 8(3).
- Jones, M., Kimberlee, R., Deave, T., & Evans, S. (2013). The role of community centre-based arts, leisure and social activities in promoting adult well-being and healthy lifestyles. *International Journal of Environmental Research and Public Health*, 10(5), 1948-1962.
- Kannan, V. D., & Veazie, P. J. (2023). US trends in social isolation, social engagement, and companionship— nationally and by age, sex, race/ethnicity, family income, and work hours, 2003–2020. *SSM-Population Health*, 21, 101331.
- Kharicha, K., Iliffe, S., Manthorpe, J., Chew-Graham, C. A., Cattan, M., Goodman, C., Kirby-Barr, M., Whitehouse, J. H., & Walters, K. (2017). What do older people experiencing loneliness think about primary care or community based interventions to reduce loneliness? A qualitative study in England. *Health & Social Care in the Community*, 25(6), 1733–1742. <https://doi.org/10.1111/hsc.12438>
- Kwan, M. Y., Brown, D., MacKillop, J., Beaudette, S., Van Koughnett, S., & Munn, C. (2021). Evaluating the impact of Archway: a personalized program for 1st year student success and mental health and wellbeing. *BMC Public Health*, 21(1), 1-7.
- Lambert, N. M., Stillman, T. F., Hicks, J. A., Kamble, S., Baumeister, R. F., & Fincham, F. D. (2013). To belong is to matter: Sense of belonging enhances meaning in life. *Personality and social psychology bulletin*, 39(11), 1418-1427.



- Larsson, K., Wallroth, V., & Schröder, A. (2019). "You never get used to loneliness" – older adults' experiences of loneliness when applying for going on a senior summer camp. *Journal of Gerontological Social Work*, 62(8), 892–911.
<https://doi.org/10.1080/01634372.2019.1687633>
- Leyland, A., Marquez, J., Goodfellow, C., Hardoon, D., Inchley, J., Leyland, A. H., Qualter, P., Simpson, S. A., & Long, E. (2023). Loneliness in young people: a multilevel exploration of social ecological influences and geographic variation. *Journal of Public Health*, 45(1), 109–117. <https://doi.org/10.1093/PUBMED/FDAB402>
- Lovell, R., Husk, K., Bethel, A., & Garside, R. (2014). What are the health and well-being impacts of community gardening for adults and children: a mixed method systematic review protocol. *Environmental Evidence*, 3(1), 1-13.
- MacDonald, K. B., & Schermer, J. A. (2021). Loneliness unlocked: Associations with smartphone use and personality. *Acta Psychologica*, 221, 103454.
<https://doi.org/10.1016/j.actpsy.2021.103454>
- Macintyre, H., & Hewings, R. (2022). Tackling loneliness through the built environment. Campaign to End Loneliness. Retrieved from
<https://www.campaigntoendloneliness.org/wp-content/uploads/Final-CEL-Tackling-loneliness-through-the-built-environment-v4.pdf>
- Marelli, S., Castelnuovo, A., Somma, A., Castronovo, V., Mombelli, S., Bottoni, D., Leitner, C., Fossati, A., & Ferini-Strambi, L. (2021). Impact of COVID-19 lockdown on sleep quality in university students and administration staff. *Journal of Neurology*, 268(1), 8–15.
- Martins, T., Midão, L., Martinez Veiga, S., Dequech, L., Busse, G., Bertram, M., ... & Costa, E. (2019). Intergenerational programs review: Study design and characteristics of intervention, outcomes, and effectiveness. *Journal of Intergenerational Relationships*, 17(1), 93-109.
- Matarasso, F. (1997). Use or ornament? The social impact of participation in the arts. Stroud, UK: Comedia.



- McQuaid, R. J., Cox, S. M., Ogunlana, A., & Jaworska, N. (2021). The burden of loneliness: Implications of the social determinants of health during COVID-19. *Psychiatry research*, 296, 113648.
- Moody, E., & Phinney, A. (2012). A community-engaged art program for older people: Fostering social inclusion. *Canadian Journal on Aging/La Revue canadienne du vieillissement*, 31(1), 55-64.
- Murthy, V. H. (2023). Our epidemic of loneliness and isolation: The US surgeon general's advisory on the healing effects of social connection and community.
- Paglione, V., Magrath, J., McDonough, M. H., Din, C., & Kenny, S. J. (2023). 'Promoting wellness, having fun, and creating community': a dance instructor's pedagogical practices and perspectives on the influence of community dance classes for older adults. *Research in Dance Education*, 1-18.
- Parker, K., Horowitz, J., Brown, A., Fry, R., Cohn, D. V., & Igielnik, R. (2018). What unites and divides urban, suburban and rural communities.
- Patel, R. S., Wardle, K., & Parikh, R. J. (2019). Loneliness: the present and the future. *Age and Ageing*, 48(4), 476–477. <https://doi.org/10.1093/AGEING/AFZ026>
- Pinquart, M., & Sorensen, S. (2001). Influences on loneliness in older adults: A meta-analysis. *Basic and applied social psychology*, 23(4), 245-266.
- Poscia, A., Stojanovic, J., La Milia, D. I., Duplaga, M., Grysztar, M., Moscato, U., Onder, G., Collamati, A., Ricciardi, W., & Magnavita, N. (2018). Interventions targeting loneliness and social isolation among the older people: An update systematic review. *Experimental Gerontology*, 102, 133–144. <https://doi.org/10.1016/j.exger.2017.11.017>
- Raymond, J. M., & Sheppard, K. (2018). Effects of peer mentoring on nursing students' perceived stress, sense of belonging, self-efficacy and loneliness. *Journal of nursing Education and Practice*, 8(1), 16-23.
- Rico-Urbe, L. A., Caballero, F. F., Martín-María, N., Cabello, M., Ayuso-Mateos, J. L., & Miret, M. (2018). Association of loneliness with all-cause mortality: A meta-analysis. *PloS one*, 13(1), e0190033.



- Silverthorn, D. (2016). *Hungry for knowledge: Assessing the prevalence of student food insecurity on five Canadian campuses*. Toronto: Meal Exchange.
- Statistics Canada. (2019) Population projections for Canada (2018 to 2068), Provinces and Territories (2018 to 2048) Highlights. Retrieved from <https://www150.statcan.gc.ca/n1/pub/91-520-x/2019001/hi-fs-eng.htm>
- Su, Y., Rao, W., Li, M., Caron, G., D'Arcy, C., & Meng, X. (2023). Prevalence of loneliness and social isolation among older adults during the COVID-19 pandemic: A systematic review and meta-analysis. *International Psychogeriatrics*, 35(5), 229-241.
- Suleman, R., & Bhatia, F. (2021). Intergenerational housing as a model for improving older-adult health. *BC Medical Journal*, 63(4), 171-173.
- Surgenor, H. (April 7, 2023). Young people are starting to knit and crochet for mental health. *CBC Radio*. Retrieved July 10, 2023 from <https://www.cbc.ca/radio/holiday-special-woold-report-1.6802265>
- Swain, J., & King, B. (2022). Using Informal Conversations in Qualitative Research. *International Journal of Qualitative Methods*, 21. <https://doi.org/10.1177/16094069221085056>
- Tapestry. (n.d.). *Wesbrook Village*. <https://discovertapestry.com/community/wesbrook-village/>
- Using design to connect us*. 2020. The Loneliness Lab. Retrieved from <https://tacklinglonelinesshub.org/wp-content/uploads/2021/07/Using-Design-to-Connect-Us.pdf>
- Wheeler, W., Gordon-Brown, H., Lovell, R., (2020) Making the Most of Green Space for People's Health. European Centre for Environment and Human Health, University of Exeter. Retrieved from https://beyondgreenspace.files.wordpress.com/2020/07/making-the-most-of-green-space-for-peoples-health_uae_2020.pdf
- Whelan, J., Love, P., Millar, L., Allender, S., Morley, C., & Bell, C. (2019). A rural community moves closer to sustainable obesity prevention - an exploration of community readiness pre and post a community-based participatory intervention. *BMC Public Health*, 19(1), 1420. <https://doi.org/10.1186/S12889-019-7644-X/FIGURES/1>
- Wilkinson, R. G., & Marmot, M. (Eds.). (2003). *Social determinants of health: the solid facts*. World Health Organization.



Xu, L., Fields, N. L., Chen, Z., Zhou, A., Merchant, A., & Zhou, A. (2022). Big and Mini: A promising intergenerational program for social connections. *International journal of environmental research and public health*, 19(8), 4566.

Yanguas, J., Pinazo-Henandis, S., & Tarazona-Santabalbina, F. J. (2018). The complexity of loneliness. *Acta bio-medica : Atenei Parmensis*, 89(2), 302–314.

<https://doi.org/10.23750/abm.v89i2.7404>

