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Evaluating Feasibility, Value and Characteristics of an Intergenerational Friendly Telephone Visit Program During the Covid-19 Pandemic

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ABSTRACT

Objective: Volunteer organizations offer telephone outreach to older adults to relieve feelings of loneliness and to promote emotional well-being, though the feasibility, perceived value, and characteristics of the participant experience of these community interventions have not been well-studied. We examined these elements of an intergenerational college-based telephone call program during the Covid-19 pandemic. **Methods:** Community-dwelling older adults and undergraduate volunteers engaged in eight, weekly, 30-minute, unscripted telephone conversations. Feasibility criteria included enrollment, retention, and attendance rates. A rapid qualitative analysis of program evaluation responses was used to extract themes related to participants' experiences of the intervention. **Results:** Ten older adults (mean age [range] 74.53 [70–84] years, 88% women) and nine undergraduates were enrolled from February to August 2021, achieving recruitment targets and enrollment rates of 76.9% and 90%. Seven out of the 10 enrolled dyads completed the full series of eight telephone conversations and qualitative assessments over an average of 10.5 weeks. Most older adults who completed the call schedule valued the conversations as a source of social connection, noting the mutuality, respect, and broadened perspective that characterized their intergenerational relationships. Undergraduates described value in giving to others and in conversations that stimulated personal reflection and feelings of closeness. Undergraduates frequently described their experience as novel and broadening of their perspectives.

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Conclusion: *Though study completion rate and participant experience varied across dyads, we found qualitative evidence of perceived value, active relationship-building and broadened perspectives among many older adults and undergraduates who completed an intergenerational telephone program.* (Am J Geriatr Psychiatry 2022; ■■■:■■■–■■■)

HIGHLIGHTS

- **What is the primary question addressed by this study?**

We investigated the feasibility, perceived value, and participant experience of an intergenerational telephone intervention to promote social interactions between college undergraduates and socially isolated older adults during the Covid-19 pandemic.

- **What is the main finding of this study?**

Community-dwelling older adults and undergraduates engaged in eight, weekly, unscripted telephone conversations, achieving enrollment, retention, and attendance rates of 70% or greater. Qualitative analysis of post-study survey responses from the seven dyads who completed the full call series revealed that most older adults derived emotional and structural value from the intervention, while undergraduates found value in giving to others, engaging in self-reflection, and developing closeness through conversations.

- **What is the meaning of the finding?**

Though study completion rate and participant experience varied across dyads, we found qualitative evidence of perceived value during an active relationship-building process between older adults and undergraduates who completed an intergenerational telephone program.

INTRODUCTION

Social isolation and loneliness are increasingly recognized as serious health risks for older Americans.¹ Social isolation and loneliness are related forms of social disconnection that are associated with the incidence and worsening of anxiety and depressive disorders, coronary artery disease and stroke, dementia, and premature death.²⁻⁶ Thus, social distancing policies and isolation during the Covid-19 pandemic have uniquely impacted older adults.

Social isolation is the objective lack or limited extent of social ties or interactions, whereas loneliness is the subjective discrepancy between one's actual and desired social relationships.⁷ Susceptibility to loneliness is highly variable across individuals and is influenced by genetic factors, person-specific characteristics such as marital status and health, the environment, such as living alone, and their interactions.^{5,8}

During the Covid-19 pandemic, social distancing recommendations and objective risk exacerbated social isolation and loneliness among older adults. Older adults living alone face even greater inherent, physical limitations to sustaining social relationships.^{9,10} In response, this study examined the impacts of an intervention for older adults who were living alone in the community and endorsed feelings of loneliness.

During the early pandemic, younger adult volunteers at educational institutions and community organizations across the United States offered telephone and video call outreach programs for older adults in the community.¹¹⁻¹⁷ These interventions provide an opportunity for social interactions across generations, though their objectives may vary (e.g., wellness calls, empathic conversations, service-learning experiences or explicitly social or "friendly" visits). Despite the proliferation of intergenerational programs and their face validity to enhance social connection,¹⁸ the feasibility, value, and participant experience of these varied programs have not been well-studied.

This pilot study evaluated an intergenerational, telephone-based, friendly visit intervention for older adults living alone during the Covid-19 pandemic. The intervention was modeled on the Concordium program, an established volunteer organization, initiated by Harvard undergraduates in 2019 and adapted to a strictly telephone-based format in the spring of 2020. Concordium promotes regular paired social interactions between undergraduates and community-dwelling older adults desiring more interpersonal contact. The intervention consisted of a series of one-on-one “friendly phone visits” in which undergraduates and older adults engaged in conversations of mutual interest for the purpose of socialization. We sought to define the 1) feasibility, 2) perceived value and 3) characteristics of the participant experience of this intergenerational program. Feasibility metrics included enrollment, retention, and attendance rates. We also acquired qualitative data, complemented by questionnaire measures of loneliness and other aspects of psychological well-being, to better understand the participant experience of the program from the perspective of both older adults and undergraduates.

MATERIALS AND METHODS

Participants

Community-dwelling older adults were recruited through Mass General Brigham research registries and clinician referrals from February to August 2021. Institutional recruitment resources were used to accelerate enrollment and to reach older adults living alone. Participants were age 65 years or older, English-speaking, lived alone, and they endorsed feelings of loneliness sometimes or more frequently during the past week, based on a single-item loneliness question from the Center for Epidemiological Studies-Depression scale.¹⁹ All participants lived alone in their homes except for one older adult who was confined to a single room in a rehabilitation facility with minimal social contact. Only individuals with hearing impairment were excluded. The target recruitment was 10 dyads. As research questions were primarily qualitative, this sample size was deemed sufficient to reach saturation. Undergraduates living either on- or off-campus were recruited through the Concordium

program at Harvard College. There were no exclusion criteria for enrollment of undergraduate participants.

The Partners Human Research Committee approved this study, and all participants provided informed consent prior to enrollment.

The Concordium Intervention

The Harvard Concordium is an undergraduate-run volunteer program which connects students with community-dwelling older adults experiencing loneliness. The program was created by students in 2019 with support from a faculty advisor and was adapted to a telephone-based format during the Covid-19 pandemic. Since the program began, older adults have been recruited through senior centers, assisted living communities, and skilled nursing facilities. Contacts with older adults are conceptualized and described as “friendly visits,” highlighting their social nature and conversational format. Recreation coordinators and staff from these centers refer older adults who they believe would engage actively with the undergraduates and benefit from the program. Older adults are generally cognitively unimpaired as there is a separate “Harvard Buddies” visitation program for persons with dementia. Students are paired with older adults based on common interests. They are expected to interact at least once per week and to continue the relationship for at least one year.

For this study, undergraduates underwent the standard 30-minute Concordium training session, which covered volunteer expectations and tips for conversation, and, for the purpose of data collection, instructions for completing the electronic surveys. Volunteer expectations included punctuality, serving as a positive presence, and alerting the study staff of any concerns or questions. Tips for conversation included encouraging students to ask questions, to speak about oneself, to embrace silence, and to be respectful. A few sample conversation prompts were provided. Students were asked to complete an electronic post-visit form after every call to track the completion and time duration of each call and to document topics discussed. Undergraduates were matched with older adults based on common interests and hobbies. Dyads were expected to complete eight, weekly telephone conversations lasting approximately 30 minutes. This call schedule was selected because it aligned with the timeline of the university

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academic term and because discussions with Concordium leaders suggested that eight sessions were sufficient for the dyads to establish a rapport, ease and conversational style. We also consulted with a researcher experienced in loneliness interventions who endorsed this time frame. Undergraduates initiated these sessions with an introductory phone call and made subsequent calls each week thereafter.

Call completion was tracked and prompted, if needed, by the Concordium student leader or research staff. The practice of monitoring and prompting is consistent with typical Concordium practice. For this study, the additional component of questionnaire administration, tracking and prompting was carried out by research staff. To ensure the safe conduct of the study, senior investigators were available to address difficult clinical situations that might occur during the calls. This deviated from prior Concordium practice in which the student leader could interact with staff from referring centers in concerning situations. Older adults and undergraduates received a single \$100 stipend after, and only if, they completed all eight telephone calls and post-study assessments.

Feasibility Criteria

Enrollment, retention, and attendance rates were used to evaluate the feasibility of the intervention. Enrollment rate was calculated as the proportion of participants who enrolled in the study out of all eligible participants. Retention rate was defined as the proportion of participants who started the program and completed all calls and post-study assessments. Attendance rate was defined as the proportion of dyads that completed at least 75% of the eight scheduled calls.

Qualitative Questions

After completing eight calls, older adult participants and undergraduate volunteers responded to four open-ended program evaluation questions. Undergraduates responded via a RedCap survey sent by email. Older adults responded during a telephone call with the study psychologist. Questions related to two domains: perceived value and characteristics of the intergenerational connection. First, the value of the conversations was evaluated using two questions:

1) *Were these conversations valuable for you? If so, in what way?* 2) *Do these conversations impact your experience of loneliness?* Second, the nature of the intergenerational connection was evaluated using two questions: 1) *What is it like connecting weekly with someone of a younger (or older) generation?* 2) *Were these conversations enjoyable for you? If so, in what way?*

Qualitative Analysis

A rapid qualitative analysis approach was used to extract meaning from the open-ended program evaluation responses. This method is an efficient and well-validated tool for qualitative program evaluation.²⁰⁻²³ Undergraduate and older adult responses were analyzed separately. First, research staff assembled a templated summary of each set of survey responses. These summaries were organized by domains that corresponded to the interview questions. The templated summaries were used to create a matrix in which domains were included as columns and participants as rows. Through a series of meetings, the research team reached consensus on included themes within each domain.

Standardized Questionnaires

We measured clinical outcomes using standardized assessments of loneliness and other aspects of psychological well-being. This was undertaken to pilot the use of validated instruments in an online, self-administered format, to collect preliminary data on these outcomes, and to complement the qualitative analysis. Participants completed pre, mid- and post-intervention assessments by answering online questionnaires at baseline and after the fourth and eighth telephone calls, using the RedCap Platform (RedCap, version 12.0.19). A RedCap link was emailed to participants who completed the questionnaires at home.

Loneliness was assessed using the 8-item *PROMIS Social Isolation Scale – Short Form 8a* (PROMIS).¹ The *Behavioral Activation for Depression Scale - Short Form* (BADs), a nine-item scale, was used to assess behaviors impacting change according to the behavioral activation treatment model.^{2,3} Positive emotions and psychological well-being were assessed with the *Positive Affect and Well-Being – Short Form* (PAWB), a nine-item scale.⁴ The *10-item Perceived Stress Scale* (PSS) was administered to measure self-appraised

levels of stress during the past month.⁵ Additional information on the scales is provided in the online supplement.

Statistical Analyses

Descriptive statistics for the sample and for the clinical questionnaire data were derived using R software (R, version 4.0.4 R Foundation for Statistical Computing, Vienna, Austria). The questionnaire data were standardized to z-scores. Pre-study to post-study change scores were calculated. As this was a pilot evaluation of feasibility and acceptability, clinical outcomes were not evaluated with inferential statistics.

RESULTS

Enrollment, Retention, and Attendance

Older adult recruitment, enrollment and retention data are summarized in Figure S1 in the supplement online. Twenty older adults responded to the recruitment advertisement. Fifteen were reached and screened for the study. Two prospective participants did not endorse loneliness resulting in 13 eligible older adults, who all consented to the study. Three older adults withdrew consent before starting the study. Of these three older adults, two withdrew before receiving an undergraduate match and without giving an explanation. In the third case, the matched undergraduate withdrew from the study prior to the initial meeting, citing time constraints. The older adult then decided against participation. This reflects an *enrollment rate* of 10 out of 13 (76.9%). Nine were recruited through community outreach and one was referred by their clinician. Nine of the 10 eligible undergraduates were enrolled, reflecting an *enrollment rate* of 90%.

Seven out of 10 older adults completed the study, corresponding to a *retention rate* of 70%. Reasons for non-completion included a decision to withdraw after the undergraduate failed to make a scheduled call (Week 2), no reason given by the older adult (Week 6), and the death of an older adult from cardiac disease (Week 7). For older adults, questionnaire data were acquired for 10 pre-study assessments, eight mid-study assessments, and seven post-study assessments, consistent with participant enrollment at these timepoints.

Nine rather than 10 undergraduates were enrolled to achieve 10 dyads, because one undergraduate was paired a second time after his first older adult partner withdrew from the study during Week 2. All nine undergraduates completed the study except in circumstances when the older adult withdrew, corresponding to a *retention rate* of 77.8%. For undergraduates, questionnaire data were acquired for nine pre-study assessments, nine mid-study assessments, and seven post-study assessments.

Attendance rate for the dyads was 80%. This reflects the three dyads that discontinued their participation in the study. The final seven dyads took an average of 10.5 weeks to complete all eight calls. On some occasions, undergraduates were prompted to arrange alternative times to accommodate all eight calls with their partners because of unexpected medical appointments, school exam schedules, travel, and technological difficulties.

Characteristics of the Final Sample and Telephone Calls

The final sample was comprised of 10 older adults and nine undergraduates. Older adults (90% female) had a mean age (SD) of 73.43 (5.71) years and mean education (SD) of 17.40 (2.63) years. They were all unmarried, either never married ($n = 5$), divorced ($n = 1$), or widowed ($n = 4$). The nine undergraduates (56% female) had a mean age (SD) of 19.94 (1.24) years. Duration of telephone calls ranged from 15 to 60 minutes, with an average call duration of 35 minutes. Information on topics of conversation is presented in Table S1 in the supplement online. In brief, common topics included: *social relationships* (e.g., family background; romantic lives; friends; losses); *present situations* (e.g., Covid-19; politics; racism); *hobbies and interests* (e.g., business ideas, gardening, baking; places to visit; exercise); *education* (e.g., educational background, college experiences); and *well-being* (e.g., life purpose, being lonely).

Senior investigators interacted with two undergraduates during the study. In one instance, investigators provided communication suggestions to an undergraduate when the older adult partner shared traumatic life circumstances. In a second instance, a senior investigator contacted an undergraduate to inform him that his older adult partner had died.

*Evaluating Feasibility, Value and Characteristics of an Intergenerational***TABLE 1. Themes and Representative Quotations From Qualitative Analysis of Older Adult and Undergraduate Responses**

Theme	Example Quotations
Older adults	
Value of the program	
<i>Structural value</i>	<p>“[The conversations] gave me something to look forward to...It was the highlight of the week.” (Participant 4)</p> <p>“I think [the conversations] might [impact my experience of loneliness] because I know I will be talking to someone at least once a week... It keeps an appointment on the calendar.” (Participant 1)</p>
<i>Emotional value</i>	<p>“These calls would have been helpful all along, but now it’s too perfect... Definitely less lonely due to the calls... it was sort of like therapy.” (Participant 2)</p> <p>“I met someone who listened to me – I guess we all really want that.” (Participant 6)</p>
Characteristics of intergenerational connection	
<i>Mutuality</i>	<p>“We both had an interest in history. There’s plenty of history around Boston. We had a lot to talk about. She is a history major at Harvard... I love Boston and the old buildings. I go on history tours... I told her that if she needed it, I can point her in the right direction.” (Participant 4)</p> <p>“We could talk about so many different things. He’s from India and I have spent a lot of time in India and I have traveled around there more than he has! And, as time went on, he became more comfortable sharing his experiences at Harvard and I’m glad I could be there for that. Constant contact with upper class kids with so much privilege was tough at times. I also have a large amount of experience with that. I was so happy for him for getting into med school..., and I was glad I could support him in that. He told me that I was one of the first people he told.” (Participant 5)</p>
<i>Respect</i>	<p>“I was amazed for the simple reason that I sometimes think that younger folks today are lacking empathy and lacking social skills. She did not blow me off. We connected. It never felt like she was looking at watch... she was really authentic.” (Participant 2)</p> <p>“It’s refreshing, a young kid, so sweet and such a wide frame of reference... In the beginning of our conversations with him I mentioned being a lesbian and said the year I shared that for the first time, and he said, “Oh Stonewall.” I was so surprised that he knew that. [He was] so mature and aware.” (Participant 5)</p>
<i>Broadened perspective</i>	<p>“He was a great and brilliant young man. [The conversations] were absolutely valuable...We had interesting discussions. . . I learned a lot about. . . his struggles and experiences. He was so open. We talked about family and location of his family. We spoke about nature. It was great.” (Participant 3)</p> <p>“It’s interesting. I hear her youth. It has me think a bit like when my daughter was younger. It’s like an adolescent way of thinking and I see the good and bad in it.” (Participant 1)</p>
<i>Relationship building</i>	<p>“[The conversations] would go from having silence and to more conversation. Sometimes they are enjoyable, and we find something we are both enjoying.” (Participant 1)</p> <p>“In the beginning it was a little awkward. But it takes two, and he was engaged in talking to me. It wasn’t one sided. . . It’s also on the person who is isolated to be curious and keep the conversation going... I enjoyed [the conversations] and he did too. I found out that he got sick, and he didn’t contact me first and I was worried, and then I heard from him, and I was so relieved. I just knew he wasn’t blowing me off since we had a nice relationship.” (Participant 3)</p>
Negative experiences	
<i>Mutuality</i>	<p>“I don’t think you can connect so well [with someone younger] ... It was obvious he was younger.” (Participant 6)</p>
<i>Structural value</i>	<p>“Sometimes I felt like I had the duty to have the conversation. Sometimes I needed to do something, but I stayed home to get the call. Sometimes [it was] a duty and inconvenience to have the call.” (Participant 7)</p>
Theme	Example Quotations
Undergraduates	
Value of the program	
<i>Value in giving</i>	<p>“I felt like I was helping someone who needed interpersonal connection and that was rewarding. I also learned a lot about how to interact with someone who is struggling with their mental health.” (Participant 8)</p> <p>“It was a fulfilling experience because it did not take much effort or extra work for me to make a 30-minute phone call each week, but the conversations might have had an impact on the person of the older generation with whom I spoke. I felt like I was doing something “good” for the community even though I have never met my conversation partner in-person.” (Participant 10)</p>

(continued)

<i>Self-reflection</i>	<p>“They remind me that I’m not alone and have plenty of friends and family who love me. They also remind me the importance of being able to be alone and be able to feel secure in that and be able to entertain myself.” (Participant 9)</p> <p>“These conversations have helped me understand loneliness in a new way. I’ve learned that loneliness is not just a feeling of not having anyone to talk to but can also be a feeling of having lots of people to talk to but nobody to be truly transparent with. I learned that, while I have lots of people who support and respect me, I have few people with whom I can be completely transparent and honest.” (Participant 11)</p>
<i>Closeness</i>	<p>“I actually found that there were many areas in which the two of us had much more in common in our perspectives than I often have with my peers. This was rather a comforting feeling, to be honest.” (Participant 13)</p> <p>“[Name] is someone with whom I can share almost anything given her supportive nature and the fact that she is not part of any of my other social circles.” (Participant 11)</p>
Characteristics of intergenerational connection	
<i>Novelty</i>	<p>“I never got to know my grandparents, so these were my first real conversations with an elderly person, and more importantly this is the first real relationship I’ve developed with an older person.” (Participant 9) “It was wonderful to find, in a person so much separated from me in age and inevitably in life context, a shared kind of intellectual curiosity, an easily sparked enthusiasm for exploring all sorts of new questions and cultures.” (Participant 13)</p>
<i>Broadened perspective</i>	<p>“Very interesting - she had a very different but equally valid perspective on events and life, and it was enlightening to hear it.” (Participant 8)</p> <p>“These conversations were valuable for me because they provided me a perspective and understanding of how music teachers like [Name] lived, and it was really cool to just learn about her backstory and how mature people find their different goals and values for life... More specifically it was cool to see how someone from a different generation shared my concerns with work culture, woke culture, climate change and the end of the world, and issues that I previously and myopically thought only my generation was passionate about.” (Participant 12)</p>
<i>Relationship building</i>	<p>“Simply put, I appreciated the process of making a new friend, and I looked forward to our conversations.” (Participant 13)</p> <p>“[Name] and I have had several deep conversations about serious social issues and struggles that we have faced in our own lives. Beyond opening up to each other personally, we have related to each other incredibly well based on our shared interests in sports, our love for New York City, and other common passions. I view [Name] as a close friend and look forward to one-day meeting in person if that is at all possible.” (Participant 11)</p>

Participant numbers were randomly assigned.

Qualitative Analysis

Two domains were evaluated for both older adult and undergraduate participants: Value of the Program and Characteristics of Intergenerational Connection. Within these domains, key themes are presented below. Themes and illustrative quotations are summarized in [Table 1](#).

Themes for Older Adults

Older adults found *structural and emotional value* in the call program. Some older adults expressed that scheduled telephone calls introduced structure to their weekly routines. The calls represented a reliable, recurring event and they were positively anticipated throughout the week. For a few older participants, the telephone calls provided companionship and connection during the pandemic experience. Some broadly remarked that they felt less lonely because of

the regular conversations, while others noted that they derived enjoyment from being heard and speaking with their undergraduate partner about a range of topics.

For most older adults, the *intergenerational connections* which developed through conversations were characterized by feelings of *mutuality* and *respect*. Some cited the reciprocal nature of the conversations, whereby both partners made meaningful contributions toward discussion of a common topic. They shared their lived experiences to engage with the academic and personal perspectives of the undergraduates. Further, this theme captured the mutual emotional investment in some intergenerational relationships, with one older adult describing the happiness she experienced when her undergraduate partner shared a deeply personal accomplishment with her.

Some participants expressed *respect* and admiration toward the character of their undergraduate

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partner. Some were impressed by the tangible knowledge that students brought to their conversations, while others noted their empathy, authenticity, and maturity. Underpinning this theme was a thread of pleasant surprise, as older adults often found themselves challenging their preconceived notions about the younger generation.

Two older adults reported *negative experiences* from the friendly visit intervention. Unlike many who connected deeply with their younger partners, these older adults reported low *mutuality* and *respect* in their intergenerational connection. One noted that the difference in their ages was an inherent barrier to building rapport, while another felt that their undergraduate's reserved personality made it difficult to achieve satisfying exchanges. Further, while most older adults noted the *structural value* of the program, one participant described it as burdensome, either because it interfered with other plans or because the undergraduate partner erratically deviated from their call schedule.

Themes for Undergraduates

Undergraduates recognized three main *values* in the program: an opportunity to *give, reflect,* and develop *closeness* with their older adult partner.

Some undergraduates experienced a sense of *reward from giving* through participation in the program. These students viewed conversations as altruistic opportunities, feeling that they were promoting the well-being of their conversation partner and contributing to a wider community effort to engage isolated older adults.

Many undergraduates noted that the telephone conversations prompted them to engage in *self-reflection* about the role of social relationships in their daily lives. These conversations elicited thoughts about the quality and quantity of ties with friends and family, as well as the nature of loneliness at their own life stage.

Many undergraduates derived value from feeling *emotionally close* to the older adults they were matched with. These students described conversations marked by shared interests, humor, warmth, and trust. They cited the emotional support they received from their older adult partner, even characterizing their relationship as stronger than those with their peers.

For some undergraduates, their *intergenerational connections* were *novel*. They noted an inherent excitement in forging an intergenerational relationship. For some of these students, the intervention was their first opportunity to connect meaningfully with an older adult. Others were pleasantly surprised to discover converging values, interests, and outlooks with their older adult partners, especially on social issues and cultural commentary.

Shared Themes Across Generations

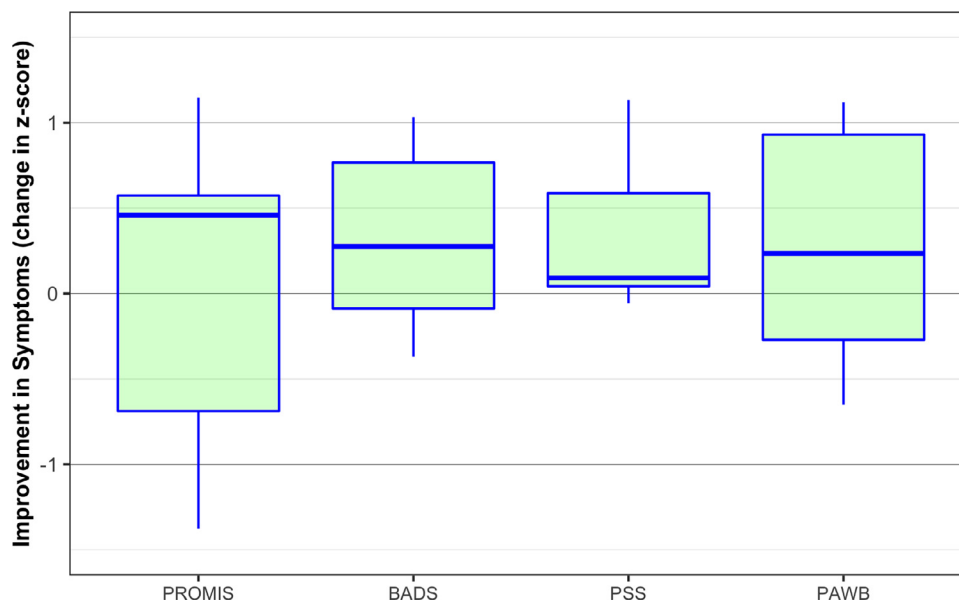
For many older and younger participants, *intergenerational connections* were characterized by *broadened perspectives* that emerged during the process of *relationship building*. Older adults expressed that their undergraduate partner introduced them to concrete knowledge about unfamiliar cultural and academic topics. Conversations also exposed them to new ways of thinking, as they learned about their younger partner's outlook toward life. In parallel, learning emerged as a common thread among undergraduates. Many explained that hearing about their older partner's lived experiences enriched their understandings of academic topics and social issues.

Participants from both age groups described an active and reciprocal process of deepening their connection with their partner. Given the unstructured nature of the telephone calls, dyads often experimented with different subjects before establishing a shared base of enjoyable topics. Conversations sometimes began as stilted or superficial before growing to encompass more personal topics as well as social, cultural, and political issues.

Clinical Outcomes

Data from clinical questionnaires are presented in [Figure 1](#) and the supplement online. For the seven older adults who completed the study, median pre- to post study change scores for loneliness, behavioral activation and positive affect and well-being all lie in a positive (improved) range whereas the median change score for perceived stress lies close to 0 (no change). These findings are presented in more detail in the online supplement.

FIGURE 1. Pre- to post-study changes in clinical outcomes for older adults. Each box plot indicates the median and interquartile range for the seven older adult participants who completed both baseline and endpoint questionnaires. The questionnaire data were standardized to z-scores, with positive change scores indicating improvement in symptoms. Abbreviations: BADS: behavioral activation for depression; PAWB: positive affect and well-being; PROMIS: patient-reported outcomes measurement information system (social isolation short form); PSS: perceived stress scale.



DISCUSSION

This study examined the feasibility, perceived value and participant experience of a college-based, friendly telephone visit program for older adults living alone during the Covid-19 pandemic. Feasibility was supported by relatively high rates of enrollment (77%) and retention (70%) for the older adults and even higher rates for the undergraduates. The attendance rate (80%) was also high, aided by administrative monitoring and support in a similar manner to program practices outside of the study. Of note, the retention rate reflects two out of 10 older adults who withdrew voluntarily from the study suggesting that the program did not meet the expectations of all participants. Further, one older adult died while participating in the study, a reminder of the potential for social isolation and loneliness to contribute to earlier mortality.

Our pilot study leveraged a college-based telephone program which does not require extensive volunteer training. The program utilized an

unscripted call format, fostering natural conversation. Participants discussed many subjects, including intimate relationships, family and friend relationships, societal concerns, hobbies and interests, and reflections about well-being. This suggests that the unscripted nature of the conversations facilitated a natural process of interpersonal exchange and relationship building.

Among the seven older adults who completed the study, most responses indicated that the program fostered valuable intergenerational connections. Older adults valued the regular opportunity for social interaction and interpersonal connection. They described a give-and-take process of relationship building and increasing ease of conversation. Feelings of respect and broadened perspective were strong themes. Responses differed, however, for two older adults who were critical of the undergraduates' maturity and interpersonal style and viewed the call schedule more negatively. Of note, these participants also reported some positive elements of the experience. Thus, while acknowledging withdrawals from the study and some critical comments, we found

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qualitative evidence of value for most older adults who completed the study.

All undergraduate volunteers indicated that they valued the telephone calls, often expressed as a means of giving to others. For many undergraduates, commonalities and exchanges with older adults instilled feelings of closeness and personal reflection. Like the responses of older adults, undergraduates expressed broadened perspective as well as an appreciation for the novelty of building a relationship with an older person. These findings are noteworthy as intergenerational programs are typically framed as benefiting older adults. This analysis provides support for bidirectional benefits and, in some cases, stronger benefits for younger participants, from such programs. Our findings align with recently published intergenerational projects using a similar series of telephone or video calls over a period of 6–12 weeks.^{16,17} These programs reported improvement in ageist attitudes among undergraduate participants,¹⁷ and benefits described as intergenerational closeness, friendship, and learning and sharing by both younger and older groups.¹⁶ In a program involving health professional students interested in gerontology, students described feelings of mutuality and friendship and two-thirds chose to continue their telephone calls after the program concluded.¹²

Other reports of intergenerational programs during the pandemic included three interventions administered through academic medical centers and community service agencies. Two, year-long programs served a primary social safety net function, involving formal training of student volunteers and utilizing structured calls to inquire about health, transportation, and access to food.^{14,15} Student volunteers widely endorsed “a renewed sense of meaning and purpose” through participation.¹⁴ Survey responses from a subset of older adults indicated that most felt listened to, supported and happier from the calls.¹⁵

The third study used a randomized, controlled trial design and validated questionnaires to investigate the social and mental health benefits of empathetic telephone calls from younger volunteers to older adults from a food-outreach program.¹³ Older adults elected to receive calls two to five times per week over 4 weeks, most choosing five calls weekly. The study found high levels of satisfaction among older adult participants and provided strong evidence for the

benefits of intergenerational call programs on validated measures of loneliness, anxiety, and depression. Although our study was not powered to evaluate the statistical significance of changes in standardized psychological measures, we found that loneliness, behavioral activation, and positive affect and well-being change scores all fell within a positive (improved) range for older adult participants, while perceived stress remained constant. These pilot data support the implementation of these measures in larger studies to further characterize the potential psychological benefits of intergenerational programs.

There are widespread efforts among grassroots organizations to promote intergenerational connections, though these programs are generally not well-publicized or broadly accessed. For example, a nation-wide registry of intergenerational programs includes over 30 Massachusetts organizations offering intergenerational engagement through conversation and activities involving art, music, dance, knitting, meal-sharing, gardening, and environmental projects.¹⁸ Certain programs are directed towards perceived needs of younger or older participants. The groundswell of activity represented by these programs implies a latent desire for friendships and perspectives that transcend the boundaries of age and life circumstance. This may also imply a natural synergy between younger and older generations as they construct a mutual and adaptive view of a changing world.²⁴ University-based programs may benefit from partnering with such community organizations to enhance participant recruitment and to collaborate on recruitment of volunteers and participants, on shared goals, for exchanges regarding best practices, and to support the continuity of university programs over time.

Important limitations to this study should be noted. A stipend was provided as compensation for participants who completed all quantitative and qualitative assessments which was only possible after completing all the calls. This incentive introduced a bias favoring feasibility. The single-arm design and sample size were chosen to perform initial evaluations of program procedures, pilot the use of validated scales, and acquire qualitative data, but not to test the efficacy of the intervention on questionnaire outcomes. Furthermore, the scope of our intervention was eight friendly visit sessions, whereas Concordium relationships often last two years or more.

Therefore, our findings do not address the nature and impacts of the enduring friendships that can develop through this college program. Recognition of this important distinction was a valuable outcome of this preliminary study. Thus, future research using larger samples and telephone partnerships of longer duration are needed to better understand the process and nature of relationships formed through these programs. These understanding may help identify pitfalls and improve procedures to enhance their durability and value.

Using research outreach resources, clinical referrals, and minimal exclusion criteria, we recruited older adults with challenging behavioral health conditions, personality traits, and medical illnesses, all of which are risk factors for loneliness. This deviated from regular Concordium practices which mostly rely on select referrals and contacts with senior center and assisted living community staff. Investigators helped undergraduates navigate challenges, such as revelations of traumatic life circumstances from an older adult to a younger participant and the unexpected death of another older participant. Our experience suggests that collaborations between undergraduates and health professionals could more effectively broaden the reach of intergenerational programs to older adults affected by serious medical and psychiatric disorders, who are at high risk for loneliness.

In conclusion, while study completion rate and participant experiences varied across dyads, we found qualitative evidence of perceived value, active relationship-building, and broadened perspectives among many older adults and undergraduates who completed an intergenerational telephone program. Though greater outcomes research is needed to understand the best candidates and procedures for these programs, friendly telephone visit programs may be a means to achieve mutually beneficial social connections across generations and, thereby, healthier societies beyond the Covid-19 pandemic.

PREVIOUS PRESENTATION

A portion of this work was presented at the American Association for Geriatric Psychiatry 2022 Annual Meeting, March 18-21, 2022, Orlando, FA, poster session: Kumar A, Zide B, Altman A, Donovan N. "Evaluating Social Connection and Well-being in an Intergenerational Friendly Visit Program during the COVID pandemic: A Pilot Study".

AUTHOR CONTRIBUTIONS

All authors contributed to developing the study concept and design. ABK, BSZ, ANA, and NJD acquired the data. Analyses were performed by TB, BSZ, JML, ANA, and NJD. All authors contributed to the interpretation of data. TB, ABK, BSZ, and NJD drafted the manuscript. All authors participated in the editing process and approved the final manuscript. Funding was obtained by ANA and NJD, who also supervised the study.

DISCLOSURE

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SUPPLEMENTARY MATERIALS

Supplementary material associated with this article can be found, in the online version, at <https://doi.org/10.1016/j.jagp.2022.12.190>.

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