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# Development and refinement of a communication guide to help young adults in Texas reconnect and reduce loneliness

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#### ABSTRACT

*Objective:* Loneliness among young people is a contemporary public health crisis exacerbated by the COVID-19 pandemic. The present research examined the development of a modest yet meaningful health communication intervention resource that would become an asset in a larger health campaign: a communication guide aimed at helping young people reach out and reconnect with others.

*Methods*: Study One established the need for a loneliness intervention in Texas with survey data (N=795). A communication guide was developed based on research and theory. Study Two employed focus group interviews with potential audience members (N=31) to critically assess and inform revisions to the communication guide. *Results*: Study One results indicated that a substantial proportion of young adult Texans felt as though their social connection had decreased and their loneliness had increased since the onset of the pandemic. Themes in focus group responses from Study Two suggested several strengths of the communication guide and some opportunities for revision.

Conclusion: A communication guide with tips for reconnecting could be a valuable tool to empower young people and promote social connection.

*Innovation:* This study involved the development and refinement of a new communication resource that was informed by a priority audience of a major health communication campaign.

# 1. Introduction

Loneliness is increasingly considered to be one of the major public health crises of our time. In 2023, the Office of the U.S. Surgeon General [1] published a landmark report that synthesized decades of scientific research from numerous disciplines. This vast body of evidence, vetted by a team of expert advisors, all pointed to the conclusions that loneliness and social isolation have been on the rise for decades to our great detriment, warranting further attention from researchers, health practitioners, community leaders, and citizens.

Evidence consistently shows that social connection has declined and loneliness has increased in the United States for many years [2], with changes brought on by the COVID-19 pandemic exacerbating those trends [3]. Such troubling patterns and the associated risks are further elevated for certain groups of people, especially younger individuals: "During the past two decades, young people...have experienced the

most severe decline in social connection" [4]. In a representative survey of >10,000 U.S. adults, young people ages 18-24 were twice as likely to report feeling lonely than older adults ( $\geq$  65) [5]. Additionally, there is evidence that during the pandemic, increases in loneliness and depression were greater for young adults (ages 18-34) than for older adults [6]

Social (dis)connection and loneliness are important to study and address because the two constructs are correlated with dire consequences to individuals and society, including poorer self-reported health outcomes as well as objective increases in risks of multiple morbidities and premature mortality. Put simply yet strikingly:

Large population studies have documented that...those who are more socially connected live longer, while those who experience social deficits, including isolation, loneliness, and poor-quality

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relationships, are more likely to die earlier, regardless of the cause of death  $\lceil 1 \rceil$ .

Some of the most frequently-cited systematic review and metaanalytic research on this topic offers stunning benchmarks to put the risks of loneliness in perspective in comparison with known health behaviors: Statistically speaking, lacking social connection is more dangerous to people's health than daily binge drinking or smoking five packs of cigarettes per week [7,8].

In addition to increased risks of cardiovascular, metabolic, and neurological diseases, there is little doubt that the rising loneliness and mental health epidemics of the twenty-first century go hand in hand. The World Health Organization (WHO) [9] has reported that the prevalence of depression and anxiety worldwide jumped >25% during the past few years, and called the need for action on mental health "indisputable and urgent." There have been significant increases in mental health challenges among young Americans such as anxiety and depression [10]. Many of these, again, were amplified during the pandemic, with loneliness accounting for significant proportions of variance in worsening mental health [11].

Among the best documented protective factors against stress, anxiety, and depression are close, caring, and supportive relationships with others [12]. The Harvard Study of Adult Development, one of the most well-known and rigorous longitudinal studies of mental health and emotional well-being in the U.S., has indicated that connections with partners, family members, and friends are prospective predictors of happiness and longevity [13]. The WHO [14] lists social support networks as a major determinant of health, noting that "greater support from families, friends and communities is linked to better health." Likewise, one of the recommendations from the U.S. Surgeon General's [1] report on loneliness is for public health authorities to establish social connection as a key indicator of health and a priority area for health promotion. Clearly, intervention work in this area is needed.

# 1.1. Overview of parent project and approach of the current study

The present study was designed as one component of a larger parent project whose objectives were to design, implement, and evaluate a major behavioral health campaign across the state of Texas, funded by the Texas Health and Human Services Commission (HHSC). During the formative research stage of the parent project, we completed extensive reviews of scholarly literature, did an environmental scan to explore related interventions (e.g., the U.S. Centers for Disease Control's "How Right Now" initiative), and conducted interviews with community leaders to arrive at the logic model for the parent project. Some of that work has been peer-reviewed and disseminated separately [15-17]. The eventual public health campaign was designed to direct Texans toward a number of resources, including those that could help them (re)build and strengthen their support networks (Turn To campaign homepage: https ://www.hhs.texas.gov/services/health/prevention/turn-to). All procedures were designed by a multidisciplinary team of health communication and health promotion scholars and practitioners, in consultation with HHSC and with approval from the University of Texas at Austin IRB.

The research presented in this manuscript took an iterative, incremental health communication approach to the public health problem of promoting social connection among young people. Our approach was informed by a number of best practices in the development and implementation of health communication interventions [18-21]. We were guided by existing health and interpersonal communication research and theory to develop our intervention. Using multiple methods, we collected empirical data to establish the need for our intervention, triangulate findings, and pretest our intervention materials. We worked with a range of stakeholders—including practitioners, community members, representatives of the priority audiences, program planners, creative professionals, public health experts, and communication

researchers—to develop intervention materials that were relevant, accessible, and ecologically valid.

# 1.2. Goal of study one: understanding loneliness patterns in a priority audience

For the reasons reviewed thus far, an important upstream component of the broader health campaign we were developing was the goal of promoting social connection. Driven by the evidence that their already declining social connection dropped even more drastically during the height of the COVID-19 years, we sought to develop theoretically-driven and evidence-based intervention strategies to help young people start reestablishing social ties now that the COVID-19 pandemic was abating yet while millions of people continued to experience its detrimental consequences on social connection. As an initial step, it was important to conduct a needs assessment to establish whether the social connection and loneliness problems plaguing the country and world as a whole were evident in a priority population of our campaign, which was young adult residents of Texas. Thus, we asked the following research question: How have levels of social connection and loneliness among young adults in Texas changed since the beginning of the COVID-19 pandemic?

#### 2. Study one methods

# 2.1. Design and sampling strategy

A questionnaire designed by the authors in consultation with HHSC was administered by the survey research firm Centiment during early 2022. Centiment was selected because of their ability to engage in purposive sampling and their data quality measures, including soft launch procedures to gauge completion rates, and software that guards against interference from bots [22]. Centiment recruits via a range of social media platforms as well as advertisements to recruit participants to complete surveys. Participants can elect to be compensated directly for their time or allocate their payment as a charitable contribution. We contracted with Centiment to recruit people residing in Texas for a onetime cross-sectional survey. We oversampled the ethnic minorities who were particularly hard hit by COVID-19 in Texas to ensure that their voices were prominent in these findings and in the overall development of campaign assets [23]. Several questions not pertinent to this manuscript were administered to participants for the formative research of this campaign, some of which are detailed elsewhere [e.g., 17].

### 2.2. Participants and procedures

After cleaning the data to delete respondents who failed an attention check or provided a non-Texas zip code, the final sample was comprised of N=795 young adult participants ranging in age from 18 to 34 years old (M=25.6, SD=4.9). A majority identified as female (n=447; 56.2%) and 41.6% identified as male (n=331); the rest selected nonbinary (n=16; 2.0%) or prefer not to answer (n=1; 0.1%). Participants described their race/ethnicity as Hispanic/Latino/a (n=494, 62.1%), Non-Hispanic White (n=121, 15.2%), Non-Hispanic Black (n=127, 16.0%), or Other, which included mostly Multiple Races and Asian (n=53, 6.7%). At the time of the survey, they were living either in large cities (n=284, 35.7%), suburban areas (n=267, 33.6%), small towns (n=184, 23.1%), or rural areas (n=60, 7.5%).

According to theoretically- and empirically-derived conceptualizations in previous research [24,25], young people view loneliness as a negative emotional experience that occurs when they feel socially disconnected from others. To capture both facets of this perspective, two items measured whether participants' (1) social connection and (2) loneliness had (a) increased, (b) decreased, or (c) not changed since the outbreak of COVID-19. Descriptive statistics were calculated for each item and mean differences by demographic subgroup were explored.

#### 3. Study one results

Seven out of ten participants said that their social connection had changed since the pandemic had begun: 49.4% reported a decrease and 19.1% reported an increase. The remaining 31.2% indicated no change. In terms of loneliness, 46.9% of respondents said that they were more lonely since the onset of the pandemic; 15.6% said they felt less lonely; and 37.0% reported no change in their level of loneliness.

We tested for differences across demographic groups in our outcome variables with a series of crosstab analyses. There was no evidence that racial/ethnic group was associated with how people described their social connection,  $\chi^2$  (6, 793) = 11.47, p = .08, or loneliness,  $\chi^2$  (6, 793) = 1.56, p = .96. There was some evidence that gender identity was associated with changes in social connection,  $\chi^2$  (6, 793) = 18.32, p <.01, and loneliness,  $\chi^2$  (6, 791) = 13.54, p < .05. These observed frequencies can be found in Table 1. A notable pattern was that males were more likely to report an increase in social connection and a decrease in loneliness than females were. The overall trend, though, was still for people to report a decrease in social connection and increase in loneliness most frequently, followed by no change, followed by an increase in social connection and decrease in loneliness. The cells for the non-binary and unreported gender identities were extremely small and thus should be interpreted cautiously. A  $\chi^2$  difference test comparing only females and males was still significant.

There was no evidence that change (or lack thereof) in social connection was associated with geographic region/urbanicity,  $\chi^2$  (6, 793) = 10.24, p=.12. However, the chi-square test was significant for changes in loneliness by geographic region/urbanicity,  $\chi^2$  (6, 791) = 14.88, p<.05. An increase in loneliness was reported more frequently among people living in suburbs as compared to rural areas, a decrease in loneliness was most prominent in rural areas, and no change was most likely to be reported among people living in a small town. Frequencies by category are available in Table 2.

# 4. Study one discussion

#### 4.1. Key findings of study one

Results of Study One indicated that a substantial proportion of young adult Texans felt as though their social connection had decreased and their loneliness had increased since the onset of the COVID-19 pandemic. To put these descriptive statistics into perspective using current demographic data from the state of Texas: If approximately half of young adults in Texas experienced decreased social connection and increased loneliness, that amounts to an estimated 3.0 to 3.3 million people [26]. The heightened rates of loneliness and decreased social connection reported among younger adults mirrors prior research conducted during COVID-19 indicating that young adults are especially vulnerable to isolation and social disconnection [11]. Our empirical evidence provided a warrant for developing intervention materials aimed at helping people to counteract those trends by reconnecting with others.

**Table 1**Observed frequencies from chi-square difference tests by gender identity.

	Change in Social Connection/ <i>Change in Loneliness n</i> (within category %)		
	Increase	Decrease	No Change
Female	66 (14.8%) /	234 (52.6%) /	145 (32.6%) /
	214 (48.1%)	53 (11.9%)	178 (40.0%)
Male	79 (23.9%) /	151 (45.6%) /	101 (30.5%) /
	149 (45.3%)	68 (20.7%)	112 (34.0%)
Non-binary/Third gender	7 (43.8%) /	7 (43.8%) /	2 (12.5%) /
	9 (56.3%)	3 (18.8%)	4 (25.0%)
Prefer not to say	0 (0%) /	1 (100.0%) /	0 (0%) /
	1 (100.0%)	0 (0%)	0 (0%)

**Table 2**Observed frequencies from chi-square difference tests by geographic location.

	Change in Lonelin	Change in Loneliness $n$ (within category %)		
	Increase	Decrease	No Change	
Large city	134 (47.5%)	50 (17.7%)	98 (34.8%)	
Suburb	140 (52.4%)	39 (14.6%)	88 (33.0%)	
Small city or town	77 (42.3%)	21 (11.5%)	84 (46.2%)	
Rural area	22 (36.7%)	14 (23.3%)	24 (40.0%)	

We considered these findings in light of existing literature. There is promising evidence that young adults' loneliness can begin to improve via modest but meaningful connections with their relational partners, such as texting when regular in-person contact is not feasible [24]. In other research, young people have expressed beliefs that it is beneficial to take initiative to reach out to others when one is feeling lonely or isolated, and that they see the advantages of making authentic attempts to become closer with others or make others feel included [25]. Reaching out to others can be difficult [27], however, and a prudent next step was to develop intervention materials that could help with this communication task.

#### 4.2. Development of communication guide

The purpose of the communication guide was embedded in its title: "Reconnecting with someone you haven't talked to in a while." We developed a two-page resource with tips for overcoming barriers to reaching out to people and suggested scripts for initiating a get-together or a catchup with someone after having lost touch. A copy of the communication guide is available in the article's supplementary material. Consistent with research indicating that health interventions are more effective when guided by communication theory [18], the content was developed by a team of interpersonal and health communication experts and informed by research and theory on communication, relationships, coping, and social support [28-30]. For example, the suggested tip, "reframe negative thoughts" encourages positive reappraisal as a coping strategy to manage stress and is grounded in literature relevant to this project [31]. The tone of the guide was intended to be conversational, encouraging, and non-judgmental, and went through several rounds of revision by a professional copywriter with feedback from the rest of the team to achieve those goals. The guide was professionally designed in a style that was visually consistent with other creative assets of the broader health campaign.

#### 5. Study Two

# 5.1. Goal of Study Two: pilot and refine communication guide

The purpose of Study Two was to bring intended audience members' perspectives into the design and evaluation of this specific campaign asset: A communication guide that would offer suggestions for how people could reach out to reconnect with people if their social ties had frayed during the pandemic. This research would establish which aspects of the communication guide people found most relevant and useful, and which features of the guide needed further revision before it was suitable for wide distribution. We asked the following general research question: What are perceived strengths and limitations of a communication guide designed to help people reconnect with others?

# 6. Study Two methods

# 6.1. Design and sampling strategy

Study Two was designed to gather input from people who were members of a priority audience: young adults in Texas. We wanted to gain insights into what may or may not be helpful tips and scripts for this particular population. Focus group methodology was suitable for this research for several reasons. Focus groups are an efficient means of bringing purposively sampled groups of individuals to provide perspectives on the validity of instruments, experimental stimuli, or intervention materials. They facilitate the rapid collection of multiple opinions, allow respondents to engage with each other's points of view, and enable researchers to surface consensus or divergence in opinions on phenomena of interest [32,33].

Upon approval from IRB at the research team's university (Study #00001843), participants were recruited to participate in focus group interviews during which they were asked to offer feedback on the communication guide. Inclusion criteria limited the sample to any individual between the ages 18–34 living in the state of Texas who was fluent in English. Recruitment occurred via advertisements disseminated through community organizations; social media posts; flyers hung up in public spaces such as coffee shops; and word-of-mouth snowball and network sampling. After interested participants were scheduled into a focus group, they received digital documentation including informed consent materials and the draft of the reconnecting communication guide so that they could review it prior to the focus group. All participants received a \$25 e-gift card for their time.

#### 6.2. Participants and procedures

Recruitment for Study Two yielded 31 young adults residing in Texas, ranging in age from 18 to 34 years old. Their mean age was 24.13 (SD = 4.84). A majority identified as female (n = 26; 84%) and 16% identified as male (n = 5). The participants described their race/ ethnicity as Asian (n = 11; 35%), White/Caucasian (n = 7; 23%), Hispanic/Latino/a (n = 6; 19%), Black/African American (n = 6, 19%) and Native American (n = 1; 3%). Over the course of three months during the spring of 2023, ten focus groups were conducted, each comprised of between 2 and 5 participants. Ideally, focus groups would have four to eight people each [33], but ours were somewhat smaller because we prioritized respondents' scheduling preferences and we had some noshows. Interviews were conducted in English by the second and third authors, who are both trained qualitative researchers. During the interview, moderators followed a semi-structured protocol to ask participants what they liked about the communication guide, what they would revise, and how they could envision people using the guide. Interviewers engaged in memo-writing from the onset of the interview to record initial reactions and compare with existing literature. Focus group interviews lasted an average of 80 min, were audio- and videorecorded, and were transcribed verbatim with AI software.

# 6.3. Data analysis

The first four authors completed the data analysis. We acknowledge the positionality of the research team, the majority of whom identify as female, live in Texas, and are within the age range of our young adult audience. We followed Braun and Clark's [34,35] organic reflexive thematic analysis approach, which emphasizes exploring the data to develop coherent patterns of meaning. Analysis was based on interview transcripts; theoretical memos that were written throughout data collection; and notes and conversations of the research team during which themes were crafted, interpreted, and refined. We complemented this overall qualitative analytical process with Owen's [36] guidance for constructing themes in relational communication by looking for sentiments that were recurrent, repetitious, and forceful. To ensure coders were coding in a similar manner and building intercoder consistency [37], we each separately coded a group of three (c) transcripts every other week, then met to compare and debate codes and discuss new themes. No member checking was conducted, but negative case analysis was completed. De-identified excerpts are presented in the results section with participants' self-reported demographic information, along with pseudonyms and a code to indicate their focus group.

#### 7. Study Two results

Findings from the focus groups indicated several aspects of the communication guide content that participants approved of maintaining, and also pointed to some opportunities to revise and refine the guide. We present specific themes within each of those categories next.

#### 7.1. Strengths of communication guide

#### 7.1.1. Realistic and helpful

Overall, focus group participants described the communication guide as realistic and helpful. They commented that the explanations, examples, and sample scripts felt relatable and sounded like guidance that people could easily use to overcome the "normal" but significant challenges of drifting away from valued relational partners. When asked to comment on what they liked about the guide, Sammie, 19yo Asian female (FG4) said, "Definitely its relevance. I think this is something that everyone experienced with the pandemic." The introduction to the guide acknowledged bluntly that social ties had suffered in recent years, which prompted Sally, a 21-year-old Asian female (FG5), to say that the guide was good at addressing a real problem that people were facing:

I feel like a lot of people, or at least for me, you lost the connection just because, you just sadly just forgot, or they just weren't... completely pertinent to your life the way that they used to be...And so, I think the guide's just really good at [saying], "Yeah, it's okay. You can still just go back and talk to them."

This theme also captured participants' observations that the content gave them good ideas for communication strategies that could be both implemented as-is and tweaked as needed so that they felt authentic. One individual summed up this perspective: "For me, it's actually going to be useful and it's something I can actually relate with and I can actually use and I can put some lines in there and use it...so, it's really cool" (Jason, 27yo Black male; FG1).

Furthermore, there was a sense that the tips for reconnecting could be carried out with little effort or burden, that the guide offered several ways to overcome felt barriers to reaching out. Louise expressed a common piece of feedback, that it was helpful to see suggestions of "simple" strategies: "I like the small little tips of use social media, use a little funny meme, or share a photo. It shows that...there's a simple way to do it" (Louise, 19yo Asian female; FG4). We built this feature directly into the guide's copy, with the tip to "Consider this a small leap." The ostensibly low lift for getting started on the road to reconnecting was appealing to many participants.

# 7.1.2. Accessible

Respondents noted that they appreciated how both the content and the organization of the communication guide made it easy to follow. This theme included observations about the communication recommendations themselves (i.e., the conversation starters made sense); the "direct" and plain language of the intervention material; and the format of the digital document. These sentiments were reflected in comments such as: "I love how it's straightforward... sometimes being wordy is tiresome. It's straight to the point and it's easy to read. And I love how you've differentiated with colors and you've put it in bold and then you explained it" (Justin, 27yo Black male; FG1). On the whole, it seemed as though the main ideas of the guide were easy for respondents to identify and understand.

#### 7.1.3. Reassuring

The first page of the communication guide included a section called "Things to keep in mind," where we presented some encouragement to help people overcome feeling nervous about getting started and reaching out in the first place. This section was one of the areas of the guide that participants really seemed to like, because it normalized and reframed the awkwardness and trepidation that many of them had felt.

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Some participants resonated with the perspective that it could feel shameful to have fallen out of touch with someone, which created a vicious cycle wherein people felt bad for not having reconnected already, and so they continued to avoid it. Jaclynn, a 26yo Latinx female (FG7), put it this way:

I really like the "don't wait to reach out" part. I almost feel like it should be bigger, because I know I do this personally. I get so stuck in my head, like, "Oh, I should have replied to my friend." Now all of a sudden, three days have passed, and that text message is still in my inbox. So, I just really like that inclusion…it doesn't matter how long it took you to get there as long as you do it.

Another respondent said it was helpful to see the reminder to have realistic expectations for what might happen: "It's like, it's okay if it doesn't exactly work out. It's just, at least you're doing something about it versus just not doing anything at all" (Scarlett, 20yo Asian female; FG6).

#### 7.1.4. Suitable for intended audience

Finally, one of the specific questions that we asked during the interviews was, "What age group do you think this guide was written for?" In general, participants believed that the communication guide seemed to be written by and for people in their twenties and thirties. There was some variation here, though, with several individuals saying that it seemed "widely applicable" (Heather, 31yo Caucasian female; FG6) beyond young adults.

#### 7.2. Suggestions for improving communication guide

#### 7.2.1. Make it less text-heavy

When asked about suggestions for revising and improving the communication guide, many participants mentioned that it was a lot to read and absorb. Some described the amount of text as potentially "overwhelming," even if they saw the value of the information. One recommendation that came up multiple times was to consider turning the two-page document into social media visuals, such as a series of Instagram-style carousels, where people could swipe through one panel at a time that contained either a tip or a sample script. Another related suggestion was to create illustrations or animated cartoons with people and speech bubbles rather than just text alone.

#### 7.2.2. Offer more varied scripts

Despite an expressed preference for a lighter amount or feel in the communication guide's text content, several times the focus group conversations suggested a desire for additional information. More specifically, respondents clearly valued the examples of how one might reach out in different ways, and talked through ideas for broadening the types of approaches that people might find useful. For example, maybe someone does not want to get together in person, but they still wish to stay in touch. Participants intuited that conversation starters could be adapted to the type of relationship, level of intimacy, age of the interactants, and so on, all of which would be consistent with best practices for tailored communication.

Some participants felt that the recommendation to blame the disconnect or awkwardness on the pandemic was a stretch. That approach struck Matthew (30yo Latinx male; FG9) as a forced and somewhat disingenuous excuse: "Because of the way social media is now, we have tons of different ways that we can connect with people with our phones, just in general. It's hard for me to read that and kind of accept that little tidbit." Other people thought that the reference to the pandemic, in materials intended for distribution starting in 2023, felt too dated or just like a topic that they did not want to revisit; but for others, it seemed to ring true.

Conversations about whether it made sense to blame distance on the pandemic sometimes led to discussions about how to hit the right note of formality. For some people, bringing up the pandemic just felt too serious. Sammie (FG4) commented that saying to someone that "the past couple years really took a toll on me' is really heavy, serious" and she would lean more toward reaching out with a much more casual yet personal conversation starter. Similar sentiments were voiced with respect to the guide's sample script of "I saw your post on Facebook and it made me miss you," which several people found too serious and inappropriate for less intimate social ties.

Some of the more relaxed strategies that were proposed fit with the guide's recommendation to use social media; as one participant said, "Usually when I catch up with friends or something, I'll just be like, 'Hey, what's up?" Or maybe I'll send a TikTok or a meme and then we can go from there" (Marcia, 30yo Black female; FG2). As to the matter of social media, many respondents commented that Facebook seemed out of place if the target demographic was young adults reconnecting with other young adults.

#### 7.2.3. Show step-by-step sequence

One point of discussion that arose during some of the interviews pertained to the order of the information in the communication guide. Some participants were unsure as to whether the sample script wording was provided in a particular order that people should follow for best results. Some said that they would prefer that the communication guide be numbered with actions and statements following a precise sequence. As Brian (21yo Latinx male; FG4) said, for example:

I guess one thing that could be fixed though is maybe the order that they're presented in, because I feel like you put at the very bottom "ask how they're doing." I feel like that should be one of the first things that you are asking, just because you haven't hung out in quite a time.

It should be noted that the sample communication strategies we provided in the guide were actually not intended to be a step-by-step script, nor did respondents demonstrate much consensus about what the "correct" order would be.

#### 7.2.4. Affirm the option of not reconnecting

Lastly, some participants mentioned that it might be worthwhile for the guide to recognize explicitly that not all relationships can or should be rekindled. A sentiment that surfaced in several interviews was the perspective that some relationships end for healthy, natural reasons that do not need to be taken personally or undone. Participants noted that connections are often lost when people move away, get busy with life transitions, or simply do not fit into each other's lives anymore. As Kylie (23yo Caucasian female; FG7) said, "You're going to have some, I call them, 'seasons,' 'side characters' [that] come in and out."

A few participants also correctly commented on the implied scope of the communication guide, pointing out that these recommendations seemed intended for restoring relationships that had been fulfilling but had blamelessly fallen by the wayside. Sally (FG5) said the following:

I feel like this guide, it addresses losing connections with people that you weren't really like, ending on bad terms with. And so maybe I feel like people would need more help dealing with that type of reconnection than just what like, just fell off. I feel like that's easier to do than..."I never want to talk to you again."

In sum, one suggestion that emerged for revising the guide was to include a statement reminding people that they should not feel pressured to reconnect if they prefer not to, or if the other person does not reciprocate the effort.

#### 8. Discussion and conclusion

The two studies presented here offer empirical evidence that young adults in Texas (a) have been affected by the loneliness epidemic and (b) saw both value and room for improvement in a resource that helps them start to reconnect with people they care about. We learned that this

communication guide could be valuable for people who wish to reach out but feel hesitant to do so. Respondents indicated that the communication guide could help people overcome the sense that it has been too long, the person would not want to hear from them, or they would not know what to say. The results of Study Two suggest that theoretical propositions about interpersonal communication and relationships can translate into actionable steps that resonated with a key audience of a major mental and behavioral health campaign. Notably, respondents indicated their desire for incorporating even more scripts in the guide. Communication researchers exploring conversational goals and planning suggest that pre-conversational planning allows interactants to tailor their objectives to diverse situational contexts, thereby increasing the likelihood of achieving positive outcomes effectively [38,39]. Because pre-conversational planning does not imply adhering strictly to a single conversational script, this guide serves as a communication framework allowing for adaptability to the dynamics of the interaction and context. It may be worthwhile for additional scripts to be disseminated in cost-effective ways, such as providing periodic examples via social media channels.

#### 8.1. Innovation

The research presented here is innovative for several reasons. This project involved the development and refinement of a completely new tangible resource and novel intervention to promote health and reduce the social isolation that skyrocketed during the pandemic. This intervention has been guided by theory and informed by original empirical research from the beginning, including scholarly literature reviews, environmental scans, and the data that are organized in the current manuscript. Study One highlighted the need to address the decline of social connection among young adults following the COVID-19 pandemic and supported our decisions regarding the development of a communication guide tailored to this vulnerable population. Focus group interviews in Study Two informed how we went about modifying the conversation guide from the perspectives of young adults to ensure that it is suitable/effective in addressing the needs of our intended audience. Data from Study Two indicated that the guides were easy to follow; they were realistic portrayals of what impeded reconnection; they offered feasible next steps and scripts; and they could be made even more inclusive and evergreen by not over-emphasizing the pandemic. It is also important to point out that the communication guide tested in this research applied health communication scholarship to bolster efficacy for how to perform the communicative call to action. This is an intervention aimed at promoting quality communication, and not just quantity, by suggesting strategies rather than vaguely telling people to reconnect.

Our project underscores the value of rigorous health communication and health promotion research to create evidence-based strategies for facilitating social connection and improving population health. Together, the findings of these two studies directly influenced the design and revision of campaign assets that became publicly available in 2023, and will be further tested as they are disseminated through diverse media channels. Scientific studies like these can guide implementation of resources that can be adopted by other stakeholders and used to empower people. Equipping individuals with some motivation and tools to reach out and reconnect is a way to nudge them toward a small and free, yet potentially very meaningful, health behavior. At a broader level, the larger Texas Turn To campaign for which this communication guide was created is highly innovative because of its upstream approach to improving mental health and reducing substance use among Texans, by promoting social connection and community building. The campaign advances communication at multiple levels, by encouraging interpersonal communication and social network connection via a range of mass communication campaign messaging.

#### 8.2. Limitations

Some limitations to this research are worth noting. Due to the aims of this research, all participants in Study One and Study Two were residents of Texas. The samples of both studies included more self-identified females than males, which could have introduced some bias into the findings. It is possible that males were less likely to volunteer to participate in this study because they are less interested in this sort of reconnection intervention, though the data from Study Two did not indicate any differences according to respondents' sex or gender. In terms of self-reported race/ethnicity, although Hispanic/Latino/a individuals constitute the largest demographic group in Texas, especially among younger folks, they were still somewhat overrepresented in the Study One sample. Therefore, observed frequencies (in the crosstabs analyses specifically) should be interpreted with that oversampling in mind. A few of the focus groups had only two participants each, which may have limited respondents' ability to interact with more diverse opinions that would have solidified or modified their own perspectives. Thus, despite the strengths of the samples and multi-method, multistudy research approach, there are limits to how representative and generalizable these findings are.

#### 8.3. Future directions

The communication guide is currently publicly available, and so some important next steps will be to track the frequency with which people are downloading it, and to examine how accessing the communication guide may covary with important demographic and other variables. Although we report some demographic differences in Study One, we note that we did not design the communication guide to be tailored to specific subgroups of young adults. Further assessment of the communication guide will be helpful, especially in longitudinal designs where participants may report back on how the guide influenced their social interactions, and to what ends. A Spanish version of the communication guide will also be created and disseminated, and it will be important to examine how its content can be created to meet the needs of that particular audience in culturally-appropriate ways.

Finally, despite the worthwhile knowledge and tangible deliverables that this research yielded, it is also prudent to point out that this sort of communication intervention ought to be merely one component to bigger, systemic solutions to social disconnection. Reconnecting with others is an extremely valuable endeavor; but it is unreasonable to assume that people can text message their way out of poverty or societal structures that contribute to loneliness and associated health problems. This final observation is consistent with the perspective presented in the Surgeon General's report, which argues for a social-ecological approach. The evidence-based resource that our research yielded could be one of many assets in a larger health promotion portfolio that works to combat the serious problem of loneliness.

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# **Declaration of Competing Interest**

The authors have no competing interests to declare.

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#### Appendix A. Supplementary data

Supplementary data to this article can be found online at https://doi.org/10.1016/j.pecinn.2023.100246.

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