



Understanding Extrafamilial Intergenerational Communication: A Case Analysis of an Age-Integrated Online Community

LIN LI, University of California, Irvine, USA

XINRU TANG, University of California, Irvine, USA

ANNE MARIE PIPER, University of California, Irvine, USA

In today's society, the relationship between younger and older generations is increasingly characterized by tension and conflict, with each generation holding deep-seated biases and stereotypes against each other. Fostering meaningful communication among generations is one way to avoid age segregation and dismantle associated biases. This paper presents a case analysis of an age-integrated online community (r/AskOldPeople) with an in-depth analysis of the most popular types of questions as well as the types of discussions within this community. Using content analysis of the top 999 posts, we describe the exchanges between different generations in this community, with people sharing experiences and perspectives, seeking advice, reminiscing about the past, and engaging in community building. Using thematic analysis of the same corpus, we also identified four themes characterizing the types of discussions prompted by the questions. We find that younger and older generations use the community to learn about experiences of the past, co-navigate psychosocial challenges across the lifespan, understand and commiserate about aging, and collectively make sense of crises and changes in the pandemic era. We discuss the meanings behind the themes and how r/AskOldPeople, as an age-integrated online community, supports intergenerational communication.

CCS Concepts: • Human-centered computing~Collaborative and social computing~Empirical studies in collaborative and social computing

Additional Key Words and Phrases: intergenerational communication, intergenerational engagement, online community, age integration, Reddit, older adults, age segregation

ACM Reference format:

Lin Li, Xinru Tang, Anne Marie Piper. 2023. Understanding Extrafamilial Intergenerational Communication: A Case Analysis of an Age-Integrated Online Community. *Proc. ACM Hum.-Comput. Interact.*, 7, CSCW2, Article 261 (October 2023), 25 pages, <https://doi.org/10.1145/3610052>

1 INTRODUCTION

A lack of meaningful exchange between generations has fueled popular sentiments of frustration and generational conflicts [13, 25, 52, 113]. This is exemplified by viral memes such as “OK Boomer,” in which US-based Generation Z (those born after 1996) offer the phrase as a dismissive retort to older people's (primarily the Boomer Generation, born 1946-1964) opinions and comments online [66]. While targeting the Baby Boomer generation, these cultural trends reinforce the deep-seated



This work is licensed under a Creative Commons Attribution International 4.0 License.

© 2023 Copyright is held by the owner/author(s).
2573-0142/2023/4 – Art 261. <https://doi.org/10.1145/3610052>

ageist attitudes towards and prejudice against older adults. Relatedly, narratives around generation wars or conflicts have become commonplace in popular culture portrayals and media discourse [1, 100]. One underlying cause of this conflict is age segregation, which refers to the separation of people based on their age in a society where age is used as a criterion for entrance, exit, or participation in institutional, social, economic, and cultural activities [112].

Age segregation as a macrolevel phenomenon has the power to shape the production and reproduction of ageism at the microscale [38]. In contrast, an age-integrated structure in which age is not used as a criterion for entrance, exit, or participation is an antidote to age segregation [111]. Age integration consists of two components: the removal of structural age barriers and the presence of cross-age interactions [102]. Age integration allows younger and older people to meet each other's needs for socialization and generativity while fostering mutual understanding, connection, and empathy [110].

Building age-integrated communities to facilitate intergenerational communication provides an essential way to reduce intergenerational conflict [9]. As intergenerational contact has largely been reduced due to age segregation, the family now represents the only true age-integrated social unit in Western societies [37, 120]. Consequently, with few exceptions [26, 123], intergenerational communication has been studied primarily in the context of family relationships [36, 50, 94], mostly focusing on systems to improve intergenerational communication within the family [50, 63, 83, 125].

The recent rise in using information and communication technologies for social interactions has the potential to either reinforce or weaken age-segregated communication and community [35]. On the one hand, older adults with lower digital skills may be excluded from online communities or have difficulty using specific technologies for communication [2]; on the other hand, online communities could challenge the structural barriers in offline settings by allowing entry and participation across age groups [2]. However, one critical problem with platforms such as Facebook and Twitter is that they often are filled with the ageist discourse that reinforces negative stereotypes of age and aging by portraying older adults as a "disempowered, vulnerable and homogeneous group" [61, 71]. Content analyses showed prevalent ageist attitudes and language on these platforms, with the implication of reinforcing ageism and creating new barriers between generations [61, 71]. The issue was exacerbated by the COVID-19 pandemic, which exposed the ongoing tensions between the so-called "Millennial" and "Baby Boomer" generations by highlighting the disparities in susceptibility to the virus, preventative practices including masking, and social distancing, and health outcomes [78, 104]. For example, the term "boomer remover" as a description of the COVID-19 virus reflected generational grievances and described the breakdown in reciprocal moral obligations of care between generations [25].

Anonymous online communities that promote cross-age interactions can provide a unique space for intergenerational communication. Particularly, individuals are more likely to engage in spontaneous self-disclosure when in anonymous conditions [48, 107], as there is less pressure for idealized self-presentation [72] and less potential for stereotyping based on age-related physical attributes [84]. The present paper analyzes one such online space: the subreddit "Ask Old People" on the Reddit platform. We analyzed the top 999 posts of the subreddit to describe the major types of questions raised in this space and to capture the types of intergenerational discussions that emerged organically as a response to the types of questions. We found that questions related to experience sharing, perspective sharing, advice seeking, nostalgia and reminiscence, and community building and appreciation are the most popular types of questions posted in this space. Related to the types of questions, we also found that people used this space to learn about

experiences of the past, co-navigate psychosocial challenges across the lifespan, understand and commiserate about aging, and engage in collective sense-making during crisis and change.

This paper contributes a case analysis of a rare, organically formed, age-integrated online community and identifies the question topics and discussions that are most popular in this space. By analyzing the questions and discussions that emerge within this community, our findings offer insights into structuring online spaces to support productive extrafamilial intergenerational communication. Our results also help envision alternative ways to combat age segregation by facilitating constructive, prosocial online communities, which could weaken the rigid offline barriers along age lines, empower both younger and older adults to interact with each other mindfully, and provide space for meaning creation and sense-making through reflection, dialogue, and community support.

2 BACKGROUND

Age segregation describes the phenomenon of segmenting individual life trajectories based on chronological age as adopted by the state and relevant social institutions [37]. The trend emerged in the 20th century [37] as industrialization broke the norm of the 19th century multigenerational households, which led to a state of “age apartheid” by the end of the 20th century [88]. In an age-segregated society, individuals’ lifetime is structured into three main “acts,” i.e., children are required to go to school, adults are expected to build family and work, and older adults are mandated to retire [54, 102]. Such social structuring of life course segregated individuals into disparate social institutions and arenas, which created institutional, spatial, and cultural age segregation [37].

The United States is becoming more age-segregated, as the young and the old take up different geographical, social, and cultural spaces that rarely intersect in an increasingly peer-centered society. All age categories have a strong tendency to confide in someone of their age [73] and maintain rather age-homogenous social networks [77]. Despite the family being an age-integrated social unit [37], the decreasing fertility rate, family size, and increased geographic distance between family members also contributes to declining intrafamilial intergenerational contact [119]. Older adults also face more social exclusion and weakened social ties than younger people [17].

One remedy for age segregation is to promote meaningful intergenerational communication. Intergenerational communication can enable the exchange of knowledge and information between different generations, reduce stereotypes perpetuated by media, and promote mutual understanding and appreciation [119]. Yet, most studies on intergenerational communication focus on the family context [36, 50, 94] and suggest that frequent familial intergenerational contact can increase emotional intimacy [41] and social support [109]. However, one major finding about intergenerational communication is asymmetry, as older adults spend much more effort than younger adults in initiating and maintaining communications [63, 64]. Lack of shared activities and interests [80] [16], differences in the preferred medium of communication [36, 63], and younger people’s stereotypes toward older adults [101] are reasons for such asymmetries.

The study of extrafamilial intergenerational communication has been lacking, reflecting both age segregation and the lack of scholarly attention. Without extrafamilial intergenerational contact, age segregation reduces opportunities for socialization for young and old, breaks apart the social fabrics that bind generations together, contributes to ageism, and prevents the formation of a generative society in which the old commits to caring for the young and vice-versa [42,123].

3 RELATED WORK

3.1 Online Communities and Social Interaction Among Older Adults

The rate of Internet-related technology adoption among older adults has grown rapidly since 2012. For example, 76 percent of Gen Xers, 59 percent of Boomers, and 28 percent of the Silent Generation reported using social media in 2021 [91, 92]. Prior research also reported a wide range of benefits for older adults to participate in online communities, such as overcoming social isolation and maintaining connections [20, 40], increasing feelings of control and self-efficacy [60], engaging in self-expression, identifying resources, receiving information, and social support [46, 93].

While older adults were usually described as passive participants or consumers in online communities, a growing number of works have focused on older adults as contributors in online communities [12, 39, 57]. For example, through a study on active older bloggers, researchers found that online content creation can support identity development in older adulthood and provide opportunities for social engagement and self-expression [12]. Another study demonstrated how women over fifty controlled self-presentation and pursued self-expression, inspiration, and connection through using Instagram [75]. Older adults are also reported to be more interactive and loyal to their communities once they become engaged in online communities [124].

3.2 Intergenerational Communication

CSCW and HCI scholars have long been interested in understanding the dynamics and addressing the challenges of intergenerational communication. For example, intergenerational play, a common topic of research in HCI [98], can increase players' enjoyment and positive emotions [86, 122], improve intergenerational understanding [19], and foster relationship closeness in both younger and older adults [87]. Most recently, HCI scholars explored game design elements that can foster intergenerational conversations by engaging both young and older adults in a life review game [59]. One case study on the channel Geriatric1927 on YouTube also revealed how YouTube has the potential to provide older adults with opportunities for "social interaction, intergenerational communication, reciprocal learning, and co-creation" [7, p.23]. Nevertheless, barriers also exist regarding older adults' site-specific digital skills, concerns for privacy and the triviality of the communication, and preference for face-to-face communication [49].

There have been considerable efforts to promote intergenerational communication through system design [16, 44, 50]. Prior work introduces systems that facilitate symmetrical sharing of information among older and younger adults through a family calendar [94], address the mismatch in time and media preference between different generations [82], enable location-based asynchronous communication among family members and friends [8], and use a tangible family photo interface and ambient awareness cues to share new messages [125]. While extensive prior work introduces new systems to prompt family communication, a few studies have examined new tools for extrafamilial intergenerational interaction [4, 26]. For example, one study explored the possibility of facilitating intergenerational mentorship through connecting older adults and elementary school students, which serves to address older adults' social isolation and provide valuable learning experiences for students [123]. Scholars also are often interested in producing oral histories by working with older adults so that children learn more about their historical experiences [26]. Despite this work, we know little about how naturally occurring online communities might support intergenerational communication and age-integrated discourse.

3.3 CSCW and HCI Studies of Reddit

Although many older adults are active online and participate in online communities, using social networking sites that are based on offline social networks and are not anonymous can highlight concerns for self-representation, i.e., older adults may feel pressured to present a positive or idealistic image of themselves to avoid face threats, especially given the various negative stereotypes associated with being old [84]. Audience size, diversity, closeness, and privacy concerns can shape online self-disclosure for all people [67, 68, 85, 96]. Therefore, anonymous online forums such as Reddit may provide a more open and democratic place for older adults to engage in intergenerational communication on their terms and remain anonymous. Indeed, Reddit is a site where many marginalized groups have found a space for discussion [24, 115], largely because Reddit allows users to maintain both visual anonymity and a high degree of discursive anonymity. Visual anonymity refers to the lack of visual representations of a person, such as pictures or video clips. Discursive anonymity refers to the condition where little or no personal identification information (name, email, gender, location, etc.) is revealed [95]. Such anonymity is valuable for people with socially stigmatized identities to share their emotions and self-disclose safely [76]. For example, researchers found that people use throwaway accounts on Reddit to disclose experiences with sexual harassment [5].

As one of the largest social media platforms, numerous works have examined how Reddit is used for information sharing, crisis resolution, self-disclosure, help-seeking, support seeking, and identity building. Specifically, people collectively made sense of Zika on Reddit by identifying, sharing, questioning, and discussing the crisis out of emergent information needs or distrust of formal information sources [55]. Individuals also developed self-disclosure strategies to initiate discussions and request assistance for professional development on Reddit [56]. Individuals in mental illness subreddits discussed concerns ranging from the daily grind to specific queries about diagnosis and treatment [18]. A variety of dementia-related stakeholders (e.g., undiagnosed people, family members, friends, and caregivers of dementia patients) exchanged social support in a dementia-related subreddit [47]. Asian Americans and Pacific Islanders tried to make sense of identity for themselves or reconstruct collective identity together through deliberation on a subreddit (e.g., argumentation with evidence) during the 2016 US presidential election [23].

Reddit enables moderators to have a range of controls for configuring their communities by granting the moderator agency to shape the discourse and norms of their communities [24]. Moderators of each subreddit set and enforce rules in the community, which are mostly restrictive, such as don't harass people, don't spam, don't use hate speech, etc. [29]. Additionally, moderators develop strategies to maintain the identity of the community, especially when there is an influx of newcomers that calls for heavier moderation [53]. In addition to rule enforcement, the moderators have a range of other controls for configuring their communities (e.g., editing stylesheets, viewing traffic statistics of their subreddits over time, and managing items that are reported for review) – and the work of moderation constitutes a significant form of unpaid labor [62, 74].

To fill the gaps regarding the lack of scholarly attention on extrafamilial intergenerational communication and to further understand older adults' online social interactions in the context of an age-segregated society, we identified an online community in which extrafamilial intergenerational communication is taking place organically and productively: the subreddit *r/AskOldPeople*. This subreddit provides a distinctive setting for observing the rich conversation surrounding extrafamilial intergenerational contact. Through an analysis of the top 999 posts on this subreddit and associated replies, we aim to understand the following research questions:

RQ1. What types of questions were the most popular in r/AskOldPeople? Who is asking them and to whom?

RQ2. What types of discussion are focal in this age-integrated community?

4 METHOD

4.1 r/AskOldPeople

r/AskOldPeople is a Reddit subreddit (i.e., subforum) created on September 9, 2013. We came across the subreddit as part of a larger research project that examines older adults' online engagement. As of January 4, 2022, the subreddit has 60,102 subscribers. Designated as a space for people to ask questions and receive answers from "old people," the subreddit has seen steady growth since 2018. The growth rate sped up during the pandemic, as it nearly tripled its number of subscribers from 22K in January 2020 to its current 60K [97]. The subreddit defines "old people" as those who are Generation X (born in 1965-1980) or older (i.e., age 42 or older). Posters are encouraged to identify their age/generation cohort using author flair (ranging from "Under 20" to "80 something"). By design, this subreddit does not impose constraints on who can join or post questions to the subreddit. As a general description, the subreddit is intended as "a place to discuss the past casually." As such, the community aims to promote broad participation by encouraging people of all ages to raise questions. At the time of the data collection, there were five rules listed in the sidebar of the subreddit, including "Must be 'old' (i.e., Generation X and older) to answer questions directly," "Be cool to one another," "No surveys or homework help," "Questions must appeal to a wider audience. No solicitations for personal advice/relationship questions," and "Not a health or mental health forum."¹ As of January 4, 2022, the subreddit had five moderators. In several posts, the creator of r/AskOldPeople outlined their rationale for setting up the community, citing reasons such as feelings of exclusion due to being older than typical 20-year or 30-year-olds on Reddit [70, 114], a desire to create a substitute for oral histories, and a desire to create space for discussing interesting experiences of the past and sharing perspectives on current events [69].

Per the subreddit guidelines, while anyone is allowed to post questions, only people who were born before 1980 are allowed to respond to posts directly. The rule is partially enforced by a bot (AutoModerator), which automatically posts a stickied comment, "Please do not comment directly to this post unless you are Gen X (b. 1980) or older," under each post. Direct responses to the posts, therefore, should come from people who are of older generations, as identified through author flairs (e.g., "Born When Truman Was President," "born in the 1960s," "40 something"), or disclosure of their age, generation, or lived experiences from past eras.

Reddit users can "upvote" or "downvote" posts and comments to show their likes or dislikes of each post, which shapes the (in)visibility of a post. The difference between the number of upvotes and downvotes is used to calculate the *score* of each post. All posts can be ranked based on their score, reflecting how well-received and popular a specific post is within the Reddit community. Top Reddit posts regularly attract public interest as a summary of the content that received the most user attention and approval. Reddit also releases a summary of top posts since 2008 [99]. Given our

¹ In March 2022, the moderators instituted an additional rule for the subreddit that limits text post bodies to 300 characters to "curtail the amount of advice posts". The post announcing the new rule was met with mostly negative comments about the change from community members [31].

interest in understanding what kinds of topics and discussions were most engaging to this community, we decided to sample the top-scoring posts within the subreddit. As a common practice when studying Reddit [15, 58, 90], collecting top posts allows us to capture datasets that cover popular topics and identify the patterns among them.

4.2 Data Collection

We used the Reddit API with the PRAW Python library to scrape the top 999 posts (999 threads with an average score of 160.61) from <https://www.reddit.com/r/AskOldPeople/> on November 10, 2021. For each post, we captured the title of the post, the body of the post, number of comments, upvote_ratio, score, poster ID, and time stamp of the posts. Within our corpus of top posts, 463 were posted in 2021 with an average of 130.33 comments; 357 were posted in 2020 with an average of 94.92 comments; 171 were posted in 2019 with an average of 83.44 comments; seven were posted in 2018 with an average of 37.43 comments, and only one was made in 2017 with 17 comments. The study was reviewed by our university's Institutional Review Board and deemed exempt status.

4.3 Data Analysis

To answer the first research question, we used a content analysis approach. Two coders first independently coded the same 200 posts (20% of the data) using open coding. An initial codebook was drafted after the first round and iterated on through research team discussion. The codebook consisted of (1) types of questions asked and definitions (experience sharing, perspective sharing, knowledge sharing, advice seeking, seeking emotional support, seeking intergenerational understanding, drawing generational differences or comparisons, nostalgia about the past, community building for the subreddit), (2) the poster's specified age (20s, 30s, 40s, 50s, etc., or unknown) and/or generational cohort (Silent generation [age 76-93]; Boomers [age 57-75]; Generation X [age 41-56]; Millennials [age 25-40]; Generation Z [age 9-24], or unknown), and (3) the relative age of the targeted audience for the post (older, peer, peer and older, younger, or unknown). We coded the relative age of the targeted audience since some posters made the post with explicit phrases such as "Old people," "Retireosis," "Old Americans," etc. To ensure that the codes we identified initially were not systematically different from the rest of the dataset, the two coders coded another randomly selected 150 posts and calculated intercoder reliability (Krippendorff's Alpha = 0.85 based on question type). After reaching a consensus on the codebook, the two coders split the dataset evenly and coded the remainder of the data.

We used a thematic analysis approach to answer the second research question regarding the types of intergenerational discussion in an age-integrated online community like r/AskOldPeople [11]. We analyzed our data corpus to identify the major themes occurring within the discussion, including initial posts and comment threads. Initial open codes include relationships, careers, life choices, illness, retirements, sense-making, adulting, aging, and nostalgia. Three researchers reviewed the data and revised and refined the themes iteratively throughout the process, resulting in the themes described under RQ2.

While we identify the specific subreddit of study, we are mindful of the ethics of conducting a study on public content created by people who did not consent to our research study. Thus, we follow the common practice of moderately disguising the original text to protect individual identities, such as paraphrasing and rewording posts to prevent the direct identification of individual posters in reporting our results [14, 81]. To ensure that these quotes (particularly the ones that are potentially controversial, political, or personally sensitive) are no longer searchable after our rewording, we also searched for all or segments of the reworded quotes with the keywords

“Reddit” and “Ask Old People” in popular search engines to ensure the content is not easily linked to its original poster. Further, we contacted all the subreddit moderators inviting them to participate in a paid interview study but we were unsuccessful in recruiting them.

5 RESULTS

5.1 RQ1. What Types of Questions Were the Most Popular in r/AskOldPeople? Who Is Asking Them and To Whom?

We identified six types of questions that appeared in our corpus of top posts: experience sharing, perspective sharing, advice seeking, nostalgia and reminiscence, community building and appreciation, and others. Table 1 details the question types and overall percentage of occurrences. The most common type of question involved sharing experiences from the past (71.27%). Experiences shared range from personal life choices (e.g., marriage, kids, careers), politics, cultural trends, consumer products, fashion, music, religion, hobbies, climate, technology, food, aging, retirement, etc. People also posted questions aimed at understanding other people’s perspectives (13.91%) or soliciting their views, beliefs, or attitudes about various topics, such as social and historical trends, personal life choices, and public events. In addition, posters also used this subreddit for advice-seeking questions (7.6%) related to dealing with unemployment, going through menopause, caregiving for older people, etc. A small percentage of the posts (3.5%) expressed nostalgia about the past. These posts often recall fond memories of the posters’ childhood or express a romanticized longing about living in bygone eras. Finally, a small percentage of the posts (2%), predominantly made by those identified as part of younger generations (e.g., Gen Z or Millennials), expressed appreciation for this subreddit.

Based on our analysis, only a small portion of posts in our corpus (22.02%) identified the poster’s age cohort or generation, which includes 5.01% identifying as Gen X, 8.91% as Millennials, 5.01% as Gen Z, 0.5% as Silent Generation, and 4% as Baby Boomer Generation. While only about a fifth of the posts mentioned the posters’ age cohort or generation, half of the posts (50.79%) explicitly identified a relative age group as their intended audience. Questions were primarily directed at people who are older (42.28%), peers and older (7.41%), peers (0.9%), and younger (0.2%). These data suggest that younger posters are asking questions of older people, and older posters are asking questions of other older people within this online space.

To further understand the discussions of this subreddit that provided them with such benefit, we now turn to an analysis of the types of intergenerational discussions that occur within this space.

Table 1 Most popular types of questions in r/AskOldPeople

Post types	Description	Example posts
Experience sharing (71.27%)	Sharing (or asking others to share) personal experiences, knowledge, or information about specific events, activities, or eras	Who has memory of checking out the coin returns in phone booths as you passed by them? (60 something) Did women actually get all dressed up daily? (age 24)
Perspective sharing (13.91%)	Sharing (or asking others to share) personal views, beliefs, perceptions, or attitudes about a specific topic	Does retirement seem less desirable to you when you approach retirement age? (age 25) Are you happy living a minimalistic life?
Advice seeking (7.6%)	Seeking advice for oneself or others on specific issues, topics, or choices	My father doesn't wish to be in a nursing home when he becomes very old, what should I do? (20 something) How to truly be happy while being alone and single? (age 19)
Nostalgia & reminiscence (3.5%)	Remembering and reflecting on (often in a positive way) past social, political, and cultural events, figures, trends, or practices	Remember how fun it was to call a radio station and get a song request? (60 something) Share your favorite late summer nostalgic memories (minus the dread of school starting) (age 67)
Community building & appreciation (2%)	Expressing gratitude towards and enjoyment of conversations that occur on the subreddit	As a 22 year old, thank you for this sub (age 22) I love this sub. (age unknown)
Other (1.7%)	Miscellaneous posts	Seeking interviews for radio show/Podcast (age unknown)

5.2 RQ2. What Types of Discussion Are Focal in This Age-Integrated Community?

To complement our analysis of the types of questions asked within this subreddit, we analyzed the higher-level types of discussions, attending to posts within our corpus and replies. Below, we describe four types of discussion the forum engenders and how different generations came together for discussion, negotiation, and mutual understanding. Each theme below is comprised of multiple question types identified in RQ1. That is, the discussion types presented below cut across multiple question types and illustrate the intergenerational discourse and exchange of knowledge occurring in this space. Through thematic analysis, we aim to characterize the sentiment and dynamics of discussion amongst members.

5.2.1 *Learning about Experiences of the Past.* Considering that the main purpose of the forum is for individuals to “discuss the past casually,” many posts in this forum are dedicated to sharing and comparing experiences from the past to the present and discussing the changes. For older generations, the posters find peers who can relate to their past experiences and with whom they can discuss them in detail. In doing so, they also reach audiences that are not of their age cohort who are willing to listen, learn, and engage. This type of discussion is characterized by curiosity

toward learning about the past by drawing on the knowledge, experiences, and observations of a diverse mix of people of different ages. The topics vary greatly, ranging from questions on music, food, language, interpersonal interactions, fashion/cultural trends, media products, technology, jokes, climate, prices, and celebrities. Some example questions are listed below:

“What is a cool TV series or movie you loved when you were younger that is rarely brought up today?” (50 something)

“What old technology do you miss and still use?” (age unknown)

“How was food from 1920 to 1970, and can you describe it?” (age unknown)

Often answers to these questions sparked further conversation around shared memories. For example, answers to the question “What is something that is now obsolete that you miss?” (age unknown) received a response from someone in their 50s that mentioned not being expected to work outside of office hours. This response and similar others highlighted the changing norms of work attributed to digital technology. Similarly, the question on “old technology” people miss received responses that mentioned things like newspapers, old-school alarm clocks, cars with buttons and knobs instead of touchscreens, old Nokia phones with the feel of actual buttons, wired earphones, and old iPods with a wheel. In each answer, the poster went into length to explain their fond memories of these objects.

Other questions prompted discussion about sociopolitical issues and norms in the past (e.g., experiences with racism and treatment of LGBTQ people). To the question “How bad was the racism when growing up?” (age unknown), one example response reads:

“My mother worked at an office in Chicago. She was a bookkeeper, and some of her coworkers were black. One time, after the company Christmas party, it was very late, and the brother of one of her black co-workers offered to walk her home and make sure she got home safe. Mom initially accepted the offer, then realized that a young black man accompanying a young white woman home would put his life in danger if the wrong people (or the wrong police officer) saw it. She walked home from the bus stop alone. It was safer for them both if she were alone rather than them being together. This would have been in the mid-1950s.” (60 something)

The subreddit functions as a multigenerational space for individuals to review and reinterpret personal experiences from a historical perspective. People joined the discussions to share memories of history and outline the changes that happened in between. It gave older generations a chance to educate and inform younger generations on topics ranging from small to significant societal and political shifts by sharing detailed examples, providing context, and reflecting on personal experiences of which younger people may otherwise be unaware.

5.2.2 Co-navigating Psychosocial Challenges Across the Lifespan. In this forum, adults of all life stages come together to co-navigate developmental changes and challenges. Through posing specific questions, group members came together to help (primarily) younger adults navigate psychosocial challenges, such as finding identity, building relationships, and establishing careers. Being confronted with major life choices, younger people use this forum to seek advice, support, and answers to cope with their confusion and anxieties. The main subthemes include finding one’s identity as a young adult, living a happy or better life in old age, and cultivating nurturing relationships throughout the lifespan. Some example questions in the first subtheme are as follows:

“Is it normal if you feel confused in your 20s-30s?” (age unknown)

“Are your 20s the best years of your life?” (age 24)

In response, older people in the forum provided answers rooted in their experiences of finding their identity and dealing with similar issues when younger. For example, people responded to the question of “whether your 20s are the best years” by offering counterpoints grounded in their own journey and encouraging a positive outlook for the future. One response reads:

“My first 30 years were full of mistakes and mishaps and poorly informed life decisions. My last 30 years have been incredibly wonderfully, awesomely fabulous...The first 20 years are learning about the world and absorbing as much information and knowledge as possible... the next 10 years (20-30 yrs) are putting that to use and applying it to day-to-day life...Once you hit 30... you start getting a better perspective of how ‘you’ fit into the world, you discover your secret superpower... choice... and how it can change the trajectory of your life... Then in your 40s and 50s, you pull ALL that knowledge into how you live and experience life through a practice of awareness, appreciation, kindness, and gratitude. When you reach 60, you’ve experienced a quality of life way better than you ever thought possible. At least that’s been my journey.” (63 years old)

A younger poster (30 something) commented on how this reply made her more optimistic about life after 30, saying, *“Thank you for your comment. As someone who just turned 30, I’m looking forward to the next 30.”*

The second subtheme is about how to age well as people seek tips to remain healthy, happy, and independent for as long as possible. One example of such questions related to aging well is:

“For the people who aged well with no diseases, what advice do you have for the young and what activities have bad effects on the long term that you’d advise stopping?” (age unknown)

Older posters responded with advice about physical health based on their experiences, such as *“STOP SMOKING!!!! Eat your veggies. Move your ass.”* (50 something) and *“eat healthy... Get enough exercise, some every day even if it’s not in the gym... Get enough sleep; seven hours at least, eight is better. Avoid alcohol and nearly all drugs...”* (60 something). Responses on how to live a happy life mentioned saving for retirement, buying a house, selecting relationships carefully, living below one’s means, staying creative, reading, etc.

The third subtheme is how individuals of all life stages co-navigate issues related to relationships (or lack thereof) throughout adulthood. Posters explore realities about aging without a child or a spouse, sharing experiences building lasting and quality marital relationships and friendships, and sharing best practices for handling adult children and (grand)parent relationships. For example, posters asked:

“I don’t see myself building a family in the future. I am curious about what is life like to grow old, unwed, and with no children?” (age unknown)

“Do you regret not having kids?” (age unknown)

The top answers to these questions primarily came from people who did not have a child, either by choice or circumstance. They offered an account of what their life is like right now and their motivations for making this decision:

“Made a choice and then found out it wasn’t an option anyway... Do I worry about loneliness in old age? Yes, but I also see many lonely old folks whose families don’t see or value them or who have lost adult children... Love your life, make the world better as you go, and leave it on your terms if you can.” (Gen X)

In response, younger people expressed gratitude for replies that rail against the social norm of having children at a certain age. One poster (age 21) replied, *“I’m 21, and my parents constantly try to ‘make me understand’ that any life without children is just depressing and that to have children is the only purpose in life. I never wanted kids, and I never found a reason that could change my mind on this. Still, posts like yours always help me to stay confident, thank you.”*

Through conversations like these, younger people find support and assurance from many experienced adults beyond their immediate social circles. Participation in this forum allows reasoning through major and difficult life choices, such as whether to have children and how to get over failed relationships, without the face threat they may experience on non-anonymous social media platforms [65]. These topics are particularly amenable to discussions with older generations who have experienced similar issues, learned from, and moved on from these critical pain points. The quantity and quality of responses also allow people to draw from multiple perspectives and see common and contrasting opinions within the responses. Older people also use the opportunities to engage with younger adults, reflect on their life’s journey, and foster new connections online. Such exchanges benefit people of all generations, as younger people find new perspectives on coping, and older posters find generativity, purpose, and meaning in contributing to the well-being of future generations.

5.2.3 Understanding and Commiserating about Aging. This subreddit provides a space for older individuals to share freely and candidly about the experience of aging, including physical, emotional, and psychosocial experiences, developing strategies for coping with these experiences, and sometimes with the (explicit or implicit) goal of seeking support from this community. Common physical experiences posters shared included gray hair, chronic pain, loss of eyesight and hearing, joint health, strategies for self-care, assistive technologies, and surgeries. For example, older posters shared their personal experience and asked the community about the following:

“When did your hair turn completely grey or white?” (60 something)

“How much pain are you in? As I have aged, I am noticing more chronic pain.” (age unknown)

In asking these questions, posters seek an understanding of others’ experiences with the physical aspects of aging and commiserate with those who are having trouble adjusting to these new realities. In answering these questions, posters openly exchanged intimate details and offered personal experiences. For example, regarding pain in old age, one person (60 something) wrote, *“66 here and pain-free so far.”* Yet another person (60 something) wrote, *“My knees are bad, making it unpleasant to walk upstairs or go on hikes. My back goes out like clockwork. My neck hurts, and I have headaches all the time. My friends and I spend most of our time talking about what new pain we’ve acquired...”*

As individuals age, new and challenging life experiences, such as losing loved ones, social isolation, and chronic health issues, also trigger various emotional and psychosocial experiences. The subreddit users, especially older posters, often posted about their emotional experiences, including loss, confusion, isolation, loneliness, grief, identity crisis, guilt, and positivity around the aging process.

“As you age, are there things that don’t get worse?” (age unknown)

“I am in my 60s and am feeling lazier. I also feel guilty about being lazy.” (60 something)

Even though the posters often did not identify their specific age, the questions usually elicited disclosure and reflections from older individuals. For example, in response to the question on *“things that don’t get worse,”* a conversation on the positive side of aging unfolded between three women, starting with the first person saying:

“Speaking for myself, almost everything. When we’re young, we haven’t had enough life experiences to put things into perspective, so many things seem like a big deal when they aren’t. So we have unnecessary hand wringing, angst, and distress. Experience solves that problem...Other things that got better: Self-confidence, financial security, lasting friendships, household items that bring me joy, opportunities to see amazing places, hobbies that bring me joy, so many new things learned, and an ever-growing ability to not care about what others think... So, yes, you have reason to hope.” (60 something)

In agreement with this comment, another woman added her perspective:

“All of the above, as stated by [previous poster]. I know myself well, so there is no more figuring out where I stand or finding my place in the world... I’m no longer ‘looking’ for some vague thing that will make me feel good/whole/loved... I’ve been married 30 years... I don’t need a group of others to make me feel valid/valuable, especially strangers on a screen...”

The conversation continued with another woman affirming the value in these older women’s comments and expressing gratitude for the quality of their responses:

“I love this. You and the commenter above you are goals for me. I’m only 45, and I adore hearing such solid, sound, principled comments from older women who are healthy and grounded.” (age 45)

There are also posts that reveal unsettling aspects of aging. For example, one poster talked about being scared when multiple deaths occurred in the family:

“Daughter married a very nice fellow a few years ago; his mother keeled over and died in the bathroom... she was 55 years old. Son-in-law’s aunt and grandfather followed the next year... My husband’s elder brother keeled over and died without notice a few weeks ago. My husband (who has diabetes) stopped moving and complaining about how weird he felt. I went over to touch his head to be sure that he was still alive... Everybody seems to be dying around me... I’m frightened and feel helpless. I don’t know what to do.” (age unknown)

The poster’s fear and confusion elicited advice for dealing with diabetes and how to cope with the grief over losing loved ones. For example, one user wrote:

“I definitely think one of the first things you should do is get your husband checked out by a doctor... Maybe a nutritionist can visit your home and discuss what foods he should avoid... We should focus on enjoying the loved ones with us now and make the most of our time. Spend quality time with loved ones. Catch up with old friends; even if it’s a phone call, it’s a form of connection. Have family over, even if it’s just for tea or to chat. Also, don’t be afraid to check out local bereavement groups...losing people can make us feel lost and unsure of what to do. But remember, you are not alone.” (age unknown)

Through these conversations, older posters provided social support, including informational, emotional, and esteem support for each other, which served to reinforce the supportive community norms and further establish the community as a multigenerational space for meaningful dialogue for many developmental challenges from adulting to aging. Specifically, older posters talked about how aging as a process manifested differently, as they reported different ages when they acquired grey hair and different levels of physical pain. These personal accounts challenge the homogenous stereotype of older adults and deconstruct one-sided narratives of aging that emphasize frailty, disability, and decline as universal. Moreover, the above conversation that took place among three women symbolizes a form of intergenerational mentoring while promoting an anti-ageist stance. Two older women served as role models for the younger woman by offering an empowering account of how growing older has allowed them to become more confident and secure. Such mutual support promotes the norms and values that destigmatize old age and embraces the experiences, maturity, and wisdom of being an older woman.

5.2.4 Collective Sense-Making during Crisis and Change. The fourth type of discussion in this subreddit involved posters collectively making sense of social events during moments of crisis and change, particularly related to significant political events (in the West and globally) and the experience of the COVID-19 pandemic. Posters often tried to understand current events in the context of similar historical events by drawing on older posters' past observations and experiences. For example, some posters drew comparisons between the fall of Saigon in 1975 and the fall of Kabul in 2021. Others contrasted living through the Cold War with the 2008 economic crisis or the 70s with living during a pandemic with multiple global tension points. Still, others discussed the Black Lives Matter protests in 2020 in comparison to the Civil Rights movement and the LA Riots in 1992, as well as Nixon's Watergate and Bill Clinton's impeachment in contrast with Trump's impeachment. Some example questions include:

"Has society always functioned this poorly, or am I just old enough to see it?" (age 31)

"People who are on the old side of old... do you think this is the worst times we are in?"
(age unknown)

In answering the question "*Have you lived through a similar time before?*" posters compared the COVID-19 pandemic to the AIDS pandemic as well as the flu pandemics in the 50s and 60s to emphasize the differences in fatality and draw similarities between some people's attitudes against prevention measures:

"I lived through the beginning of the AIDS pandemic, which has near 100% fatal before treatment was available... Sadly, people were just as stupid then as they are now. The rants against face masks remind me of the rants about condoms. It must feel like it's Groundhog Day all over again for poor Dr. Fauci ." (age unknown)

Older posters frequently mentioned how social media, the internet, and mobile phones expose people to more stressors, panic, and anxiety. In response to a post made by a person in their 20s wondering about the similarities in the current global tension with the cold war, one poster pointed to the lack of constant access to news as a factor that contributed to less stress during the cold war:

"Not remotely. First of all, even outside the context of the Cold War, you got news about twice a day (you read a morning paper of yesterday's news, and you watched the evening news), so you weren't just stewing all day in realtime bad news..." (40 something)

While the previous poster highlighted the role of digital news as generating anxiety, another older adult acknowledged the challenges exposed by the virus, advocated for social changes, and offered a sense of hope and pride for the next generation:

“This is different than anything I’ve witnessed in my 60 years. I think the virus exposed how bad things are. I’m afraid things aren’t going to be back like before, but human beings have survived much worse. I think this all is a catalyst for change for the better. It will be hard and take years, but society needed a good shakeup. Don’t stress over things you cannot change, though, OK? I am proud of your generation.” (60 something)

Echoing the sentiment of social change, a young poster (20 something) replied by asking for support from older generations, saying, *“Thank you, we’re doing the best with the hand we were dealt. We think it’s time for a change; all we can ask for is some support!”* After receiving these replies, the original poster edited the body of the post by adding, *“EDIT: Thank you, everyone, for all the great responses. I always find it comforting to be able to hear wiser opinions from some of you who have lived some interesting times yourselves. Everyone be safe, and again thank you for your time.”*

As the discussion above illustrates, younger posters expressed their need to make sense of unfolding national and global crises. The responses they received from older posters who brought in their own comparative experiences provided clarity and comfort to the younger posters, as reflected by their appreciative replies and edits. Notably, the comments made by older people exhibit diverse perspectives and experiences rather than homogenous viewpoints. A deeper understanding and broadening of one’s perspective through discussion, rather than surface-level descriptions or reaching a singular answer, appears to be the goal of these discussions.

6 DISCUSSION

Supporting and promoting intergenerational communication has long been a topic of interest for CSCW and HCI scholarship. Yet, few studies examine how technology can support extrafamilial intergenerational communication. The r/AskOldPeople subreddit is a novel instance of naturally occurring intergenerational communication within an age-integrated online community. Our in-depth analysis of the top posts of this subreddit contributes a deeper understanding of the types of questions people of all ages ask within this space and the types of discussions that unfold in this age-integrated community.

We found that the posters’ questions focus on experience sharing, perspective sharing, advice seeking, nostalgia and reminiscence, community building, and appreciation. Through resulting discussions, people are actively learning about experiences of the past from older people, co-navigating psychosocial challenges across the lifespan, understanding and commiserating about aging, and collectively making sense of the crises and changes. While older people are often subject to negative stereotypes and resultant harm [89, 103], the older people in the subreddit are viewed as the authority in answering questions and are appreciated by others who are here to listen to their opinions and perspectives. We now revisit our results with respect to prior literature on aging and reflect on how intergenerational communication unfolded in this community. We also discuss how this online community’s design features, processes, and mechanisms contribute to it being a supportive and productive age-integrated online community from which we can draw valuable lessons about supporting and promoting intergenerational communication.

6.1 Supporting Intergenerational Communication

From discussions on learning about the past and co-navigating psychosocial challenges across the lifespan, we can see that r/AskOldPeople supported intergenerational sharing of cultural and experiential knowledge and information. Functioning as a source of information, older people offer personal accounts as answers to address the varied interests and curiosities about the past posted within the subreddit. Older posters discussed topics such as favorite foods, music, and media products from the past and shared their experiences from early to late adulthood with younger people. While age segregation (online and offline) often limits young people's access to history, cultural practices, and experiences of older people who are not their family members, our results show that intergenerational communication within this online community not only provides information and knowledge but also provides psychological benefits for younger and older people.

Besides affording younger adults access to the past, this online community also enables younger people to ask older individuals about navigating life choices. While times have changed dramatically, the psychosocial processes associated with human development throughout life remain similar [22]. Based on Erikson's model of psychosocial development, the primary tasks in adult life include establishing identity and intimacy during early adulthood (age 17 to 45), developing generativity (i.e., being productive and committed to guiding younger generations) during middle adulthood (age 45 to 65), and maintaining ego integrity (i.e., coming to terms with the past and future in the face of death) in late adulthood (65 and beyond) [27, 28]. When entering adulthood, younger adults often are in a state of flux, with the main psychosocial developmental tasks being establishing identity and intimacy [27, 28]. Fulfillment of this task occurs alongside significant life changes, including leaving home, finding quality relationships, starting a family, or building a career [27, 28]. As similarity in experiences is more predictive of sources of social support than structural similarities in age, gender, and marital status [106], people who have moved past the same psychosocial developmental phases are uniquely suited to provide high-quality support and mentoring to younger generations. Indeed, we observed that older posters use this online space to serve as guides to younger adults by providing support, reassurance, and a longitudinal view of life that peers cannot offer, especially to those who lack intimate bonds with older people in other parts of their life.

As older posters share a gamut of emotional, physical, and psychosocial experiences related to aging, their discussions also challenge and subvert stereotypes of older adults as a passive, homogeneous, and vulnerable group [116]. Discussions also laid bare the increasingly invisible and hidden tasks and challenges of growing older, which remain the "unthought-known" of everyday social and personal experience [10]. As the literature on gerontology and medicine often uniformly pathologizes aging and views it as a problem to be made better with technical solutions [34, 117], older people's first-hand and diverse narratives highlight their specific abilities and needs and the broader context of their lives. By sharing in this community, participants engage in internal and external negotiations of the meaning, definitions, and boundaries of being "old." Moreover, the conversations among posters of all ages were overwhelmingly supportive and generative rather than pitting one generation against another, as was observed in prior work on ageism [57].

Lastly, for the type of discussions on collective sense-making, all generations showed concern and curiosity for the relationship between the past, present, and future in dealing with crises and changes of the pandemic era. Prior work on pandemic sense-making [105] describes the process of engaging with unfamiliar circumstances as gathering and generating data to help interpret unfolding events (i.e., enactment), selecting a tentative and viable explanation to simplify the complex environments (i.e., selection), and adopting a prevailing interpretation as a plausible cause

(i.e., retention) [118]. Similar sense-making efforts and processes also unfolded in this subreddit, particularly enactment and selection, as people posed questions and gathered responses that provided a broader perspective and context for current sociopolitical events and collaborated in locating tentative explanations, such as technology and digital news, in understanding the ambiguity and complexity in current affairs. Much of the discourse on generational conflicts are rooted in competition for limited resources and different generations' incompatible attitudes toward complex issues such as climate change [9, 25] without envisioning the alternative scenario of intergenerational support and cohesion via mutual understanding, especially when facing the same crises. There is also a somewhat hidden power struggle over generational equity between older and younger people [7], such as the implicit question of "Who had it better/worse?" For example, there are repeated discussions on whether the current time is the worst. Without intergenerational communication, such power struggles could become further entrenched and hostile [9, 25]. Nevertheless, instead of assigning blame, discussions within this age-integrated subreddit were nuanced and offered detailed comparisons of the past and the present, grounded in historical facts and experiences. A sense of solidarity, community, and appreciation developed through such exchanges, as evident by the mutually supportive and appreciative comments people make.

6.2 Towards Age-Integrated Online Communities

Age-integrated communities, which remove structural age barriers and enable cross-age interactions that foster mutual understanding, connection, and empathy [102], are a vital mechanism for combating age segregation and resultant ageist attitudes and generational conflict [110, 111]. Yet, age-segregated communities—where individuals of different ages do not occupy the same space and cannot engage in face-to-face interactions—are common in the physical world [120]. Age-homogeneous housing, such as nursing homes, retirement homes, and college dorms, are extreme versions of spatial age segregation [120]. In the context of rapid population aging, there has been growing interest across multiple disciplines to promote social and community cohesiveness through building age-inclusive communities and intergenerational programs and practices [116]. Co-located, shared physical sites or age-integrated centers are among the most prevalent intergenerational spaces [45, 79]. Micro design practices that foster intergenerational communication in built environments include open spaces that invite informal intergenerational engagements (e.g., public parks), structured spaces that encourage unstructured intergenerational encounters (nooks and alcoves that are transparent from a safe distance), and public places for brief, non-committal chance meetings (front lobbies and corridors, and Times Square) [51]. Literature on environmental design demonstrates that purpose-built age-integrated spaces can promote healthy and active living for all generations [108] and provide rich psychosocial benefits, such as cultivating an understanding of and an appreciation for age diversity and intergenerational communal experience [30].

Much like environmental design that sets up co-located, shared, accessible, and loosely structured spaces to promote informal intergenerational encounters [51], it is important to create accessible and equitable online spaces where older and younger people feel comfortable participating and engaging in intergenerational communication. While most online platforms are open for use by people of all ages, many social media sites, online forums, and groups are dominated by younger people [92]. Indeed, the impetus for creating this subreddit (as the community states) was the realization that Gen Xers and older are the minorities on Reddit and needed a space to talk about the past [70]. The emergence of r/AskOldPeople and its growing popularity is a relatively rare case of an organic age-integrated online community. We now revisit how r/AskOldPeople as an online

community challenge existing norms of age segregation and provides fertile ground for intergenerational interaction.

Reddit, as an online space, is known for the anonymity it provides users, which likely contributed to r/AskOldPeople becoming a space for productive intergenerational interaction. Anonymity in Reddit may have helped mitigate potential generational biases and negative age-related stereotypes, making the space more accessible to people of all ages. For example, the absence of visual and auditory cues may be beneficial for reducing age-related stereotyping, as younger adults often harbor stereotypical assumptions about older adults' physical and cognitive health based on one's appearance and speech [21, 42, 119]. We also found that socially sensitive and stigmatizing topics came up repeatedly in the subreddit, as people contemplated the feasibility and desirability of leading life without traditionally defined intimate relationships (i.e., child or spouse) and sought the opinion of older generations. Our results echo prior studies that show how the discussion of controversial topics is supported by the anonymous nature of Reddit, such as how parenting decisions around circumcision and vaccines are routinely discussed in the Mommit and Daddit subreddits [3, 5]. Discussions often centered on understanding and commiserating about aging (e.g., graying hair, physical pain, memory loss), intergenerational (and sometimes intra-generational) negotiation of what it means to be "old," and questions related to values, beliefs, and politics (e.g., attitudes towards racism, LGBTQ people) – all of which are associated with stereotypes and stigmas and may be unwelcome topics in social discussions [42, 57]. These emotionally taxing and stigmatized topics can be difficult to talk about in person or in non-anonymous online spaces, making the anonymous nature of Reddit an essential part of why individuals are likely to engage in sensitive and personal disclosure related to aging [65, 76, 84].

In addition to anonymity, this subreddit also has unique posting norms that may have contributed to its success. In the subreddit r/AskOldPeople, rather than allowing anyone to respond to questions, which might create a dynamic that amplifies the voices of Reddit's dominant younger group, the moderators stipulate an age or birth year requirement to make top-level comments. This norm simultaneously encourages the voices and knowledge of older people while allowing entry of younger people, who may post questions to the community. Thus, it shifts the power dynamic of whose knowledge and experience matter and who should speak up in this space. By redistributing the power in an online space and giving permission to speak first to adults who do not fit the typical age profile of Reddit users, the subreddit intentionally centers the voices of those who are otherwise at the margins in many online spaces. Additionally, Reddit's upvote/downvote metric allows users to negotiate and forge consensus about content generated by the community [58]. People of all ages can use upvotes to implicitly direct the discussions permitted and welcomed in this age-integrated community, allowing meaningful conversations to unfold organically and naturally. Moderators also work with users to set the norms and expectations about acceptable content by removing content they deem inappropriate or unsuitable for the community. The volunteer labor provided by the moderators in enforcing the rules effectively helped maintain the independence and the tailored experiences in the subreddit [32, 53]. Future system designs could consider features that promote similar community norms and mechanisms that shift power dynamics in online spaces that otherwise can be discriminatory toward older people's viewpoints.

6.3 Limitations and Future Work

Our study site, r/AskOldPeople, is a unique online space different from other online communities or social media sites. Housed on Reddit, the community rules set up by the moderators and upheld by the users enabled a specific dynamic among users and promoted a certain consensus between users and moderators. Consequently, community norms about supportive, productive, and prosocial

exchange may have filtered out users who are uninterested in behaving this way while retaining users who are interested in engaging in intergenerational communication respectfully. Therefore, our analysis is limited in that it reflects the interests of people already interested in engaging in intergenerational communication. It remains to be seen how the design of the subreddit is relevant in facilitating intergenerational communication with people who are not already interested in such communication.

We designed the present study to understand the most central questions and discussions within this subreddit, which meant we focused on the top posts that attracted the most positive attention based on scores. Ranked within each subreddit, top scores, to some extent, reflect both the *popularity* of the posts and people's *positive affect* (i.e., supportive, in agreement/acknowledgment) [121] when interacting with the post. This means that our corpus is not a complete representation of how individuals engaged with the subreddit, and it was sampled at a particular moment in time. Our analysis thus has potential bias due to its specific focus and fell short of representing other types of intergenerational communication that did not become top posts in the subreddit by the time we drew our sample. Future work could examine activity based on different criteria (e.g., posts with the lowest upvote ratio, content removed by the moderator, posts within a specific timeframe or containing specific keywords) to identify potential similarities and differences in findings.

Similar to the previous points on the limitations around choosing the specific subreddit and a specific subsample of the content within the subreddit, we also acknowledge the limitation of only taking a brief cross-sectional view of the community's ecology at the time of data collection. As an online community is a living and organic social entity, we can only represent how the community was at one specific time point due to the scope of the study. Notably, the community has been experiencing significant growth, from 60K subscribers in Jan 2022 to 374K in Jan 2023. Since March 2022, rule changes related to character limits and banning advice-seeking posts have elicited mixed comments in the community, as we mentioned in a footnote. However, disagreements over such rule changes occurred after our data collection, and we are unable to incorporate them into our analysis. Future research on similar communities could consider taking a longitudinal view to track their growth trajectory and how it relates to potential changes in platform features and community rules.

Like previous studies that used Reddit data, limitations also exist in identifying the demographic information of the members of this subreddit. Our analysis suggested that users are predominantly located in the US, and there is a diverse set of age groups. Nevertheless, it is difficult to assess the true extent of age integration in this subreddit since only some users chose to identify their age. The issue seems inevitable when studying anonymous online communities, although future work could use surveys or in-depth interviews to help understand age composition and integration.

Another limitation of the present study is that the subreddit's definition of "old people" is anyone who was born before the year 1980 (i.e., anyone more than 42 years old), which is a more liberal view than other sources that define older adults as individuals 65 years or older [43]. The subreddit's definition of "old people" reflects an emergent view of what constitutes "old," which views being old as a more fluid state or context-dependent feeling that is not strictly associated with chronological age. Nevertheless, future work could better understand the experiences of the oldest generations within this community, who are arguably the most minoritized and underrepresented in online spaces.

Lastly, adults who choose to post on r/AskOldPeople may have a higher level of interest in engaging online, which suggests that they may be more tech-savvy and accepting of using online

technologies for social interactions. We encourage future work to explore intergenerational communication with older adults who do not fit these characteristics. For future systems to support intergenerational dialog, removing structural barriers to entry and participation in online spaces via tackling the negative effects of digital inequality is the first step in building age-integrated online communities. Older adults (particularly in the US) have lower adoption rates and less frequent usage of social media sites compared to younger people [6, 92], which both reflects and exacerbates the structural marginality of older people in online spaces [33]. Without broader participation of older adults, meaningful intergenerational communication like the kind observed in r/AskOldPeople with active participation from older generations is unlikely to grow in scale.

7 CONCLUSION

As a counterexample to the age-segregated nature of contemporary online life, the increasing chasm between generations, and reduced intergenerational contact, we provide a case analysis of a unique online space where extrafamilial intergenerational communication is happening in a positive, productive, and prosocial way. Our analyses provide insights into the kinds of questions and discussions that are central to this age-integrated community and reflect on how these discussions initiate, unfold, and deepen in the forum, including the relevant features of Reddit and the specific community norms in the subreddit. Designing online and in-person age-integrated communities is a promising way to combat ongoing age segregation in contemporary Western society and the resulting ageism that is deeply ingrained in people of all ages. It is important to remember that ageism is harmful to all people and manifests in all aspects of life, shaping which employment opportunities are presented, attitudes about familial care duties, and societal expectations of one's appearance and ability [89]. Here, we present one instance of an age-integrated community that highlights the promise and potential of how technology can reshape public discourse as well as individual perspectives on aging, bringing together adults of all ages to discuss important sociopolitical issues, psychosocial challenges, and how to live one's best life together.

ACKNOWLEDGMENTS

This work was supported by NSF Grant IIS-2052424.

REFERENCES

- [1] A War Between the Old and the Young? 2014. <https://www.aarp.org/politics-society/advocacy/info-2014/the-generation-war.html>. Accessed: 2022-06-08.
- [2] Alicea-Planas, J., Neafsey, P.J. and Anderson, E. 2011. A Qualitative Study of Older Adults and Computer Use for Health Education: "It opens people's eyes." *Journal of Communication in Healthcare*. 4, 1 (Apr. 2011), 38–45. DOI:<https://doi.org/10.1179/175380611X12950033990179>.
- [3] Ammari, T., Schoenebeck, S. and Romero, D.M. 2018. Pseudonymous Parents: Comparing Parenting Roles and Identities on the Mommit and Daddit Subreddits. *Proceedings of the 2018 CHI Conference on Human Factors in Computing Systems* (New York, NY, USA, Apr. 2018), 1–13.
- [4] Amy, J.E., Ellis, J.B., Bruckman, A.S. and Satterwhite, R.C. 1999. Children and Elders Sharing Stories: Lessons from Two Online Oral History Projects. *Projects, Proceedings of Computer-Supported Collaborative Learning* (1999), 151–158.
- [5] Andalibi, N., Haimson, O.L., De Choudhury, M. and Forte, A. 2016. Understanding Social Media Disclosures of Sexual Abuse Through the Lenses of Support Seeking and Anonymity. *Proceedings of the 2016 CHI Conference on Human Factors in Computing Systems* (San Jose California USA, May 2016), 3906–3918.
- [6] Andrew Perrin 2015. *Social Media Usage: 2005-2015*. Pew Research Center: Internet, Science & Tech.
- [7] Bengtson, V.L. and Putney, N.M. 2006. Future 'Conflicts' Across Generations and Cohorts? *The Futures of Old Age*. J. Vincent, C. Phillipson, and M. Downs, eds. SAGE Publications Ltd. 20–29.
- [8] Bentley, F.R., Basapur, S. and Chowdhury, S.K. 2011. Promoting intergenerational communication through location-based asynchronous video communication. *Proceedings of the 13th international conference on Ubiquitous computing* (New York, NY, USA, Sep. 2011), 31–40.

- [9] Binstock, R.H. 2010. From Compassionate Ageism to Intergenerational Conflict? *The Gerontologist*. 50, 5 (Oct. 2010), 574–585. DOI:<https://doi.org/10.1093/geront/gnq056>.
- [10] Bollas, C. 1987. *The Shadow of the Object: Psychoanalysis of the Unthought Known*. Free Association Books.
- [11] Braun, V. and Clarke, V. 2006. Using thematic analysis in psychology. *Qualitative Research in Psychology*. 3, 2 (2006), 77–101. DOI:<https://doi.org/10.1191/1478088706qp063oa>.
- [12] Brewer, R. and Piper, A.M. 2016. “Tell It Like It Really Is”: A Case of Online Content Creation and Sharing Among Older Adult Bloggers. *Proceedings of the 2016 CHI Conference on Human Factors in Computing Systems* (New York, NY, USA, May 2016), 5529–5542.
- [13] Bristow, J. 2015. *Baby Boomers and Generational Conflict*. Springer.
- [14] Bruckman, A. 2002. Studying the amateur artist: A perspective on disguising data collected in human subjects research on the Internet. *Ethics and Information Technology*. 4, 3 (Sep. 2002), 217–231. DOI:<https://doi.org/10.1023/A:1021316409277>.
- [15] Chan, J., Atreyasa, A., Chancellor, S. and Chandrasekharan, E. 2022. Community Resilience: Quantifying the Disruptive Effects of Sudden Spikes in Activity within Online Communities. *Extended Abstracts of the 2022 CHI Conference on Human Factors in Computing Systems* (New York, NY, USA, Apr. 2022), 1–8.
- [16] Chang, A., Resner, B., Koerner, B., Wang, X. and Ishii, H. 2001. LumiTouch: an emotional communication device. *CHI '01 extended abstracts on Human factors in computing systems - CHI '01* (Seattle, Washington, 2001), 313.
- [17] Chen, W. 2013. Internet Use, Online Communication, and Ties in Americans’ Networks. *Social Science Computer Review*. 31, 4 (Aug. 2013), 404–423. DOI:<https://doi.org/10.1177/0894439313480345>.
- [18] Choudhury, M.D. and De, S. 2014. Mental Health Discourse on reddit: Self-Disclosure, Social Support, and Anonymity. *Proceedings of the International AAAI Conference on Web and Social Media*. 8, 1 (May 2014), 71–80.
- [19] Chua, P.-H., Jung, Y., Lwin, M.O. and Theng, Y.-L. 2013. Let’s play together: Effects of video-game play on intergenerational perceptions among youth and elderly participants. *Computers in Human Behavior*. 29, 6 (Nov. 2013), 2303–2311. DOI:<https://doi.org/10.1016/j.chb.2013.04.037>.
- [20] Cotten, S.R., Ford, G., Ford, S. and Hale, T.M. 2014. Internet Use and Depression Among Retired Older Adults in the United States: A Longitudinal Analysis. *The Journals of Gerontology: Series B*. 69, 5 (Sep. 2014), 763–771. DOI:<https://doi.org/10.1093/geronb/gbu018>.
- [21] Coupland, N., Coupland, J. and Giles, H. 1991. *Language, society and the elderly: Discourse, identity and ageing*. Basil Blackwell.
- [22] Darling-Fisher, C.S. 2019. Application of the Modified Erikson Psychosocial Stage Inventory: 25 Years in Review. *Western Journal of Nursing Research*. 41, 3 (Mar. 2019), 431–458. DOI:<https://doi.org/10.1177/0193945918770457>.
- [23] Dosono, B. and Semaan, B. 2018. Identity Work as Deliberation: AAPI Political Discourse in the 2016 US Presidential Election. *Proceedings of the 2018 CHI Conference on Human Factors in Computing Systems* (Montreal QC Canada, Apr. 2018), 1–12.
- [24] DosonoBryan and SemaanBryan 2020. Decolonizing Tactics as Collective Resilience: Identity Work of AAPI Communities on Reddit. *Proceedings of the ACM on Human-Computer Interaction*. (May 2020). DOI:<https://doi.org/10.1145/3392881>.
- [25] Elliott, R. 2022. The ‘Boomer remover’: Intergenerational discounting, the coronavirus and climate change. *The Sociological Review*. 70, 1 (Jan. 2022), 74–91. DOI:<https://doi.org/10.1177/00380261211049023>.
- [26] Ellis, J.B. and Bruckman, A.S. 2001. Designing palaver tree online: supporting social roles in a community of oral history. *Proceedings of the SIGCHI Conference on Human Factors in Computing Systems* (New York, NY, USA, Mar. 2001), 474–481.
- [27] Erikson, E.H. 1980. *Identity and the life cycle*. W W Norton & Co.
- [28] Erikson, E.H. 1968. *Identity: Youth and Crisis*. W. W. Norton & Company.
- [29] Fiesler, C., Jiang, J., McCann, J., Frye, K. and Brubaker, J. 2018. Reddit Rules! Characterizing an Ecosystem of Governance. *Proceedings of the International AAAI Conference on Web and Social Media*. 12, 1 (Jun. 2018).
- [30] George, D., Whitehouse, C. and Whitehouse, P. 2011. A Model of Intergenerativity: How the Intergenerational School is Bringing the Generations Together to Foster Collective Wisdom and Community Health. *Journal of Intergenerational Relationships*. 9, 4 (Oct. 2011), 389–404. DOI:<https://doi.org/10.1080/15350770.2011.619922>.
- [31] GetOffMyLawn_ 2022. NEW RULE: Keep your posts short and sweet and on topic. No personal advice posts. *r/AskOldPeople*.
- [32] Gilbert, S.A. 2020. “I run the world’s largest historical outreach project and it’s on a cesspool of a website.” Moderating a Public Scholarship Site on Reddit: A Case Study of r/AskHistorians. *Proceedings of the ACM on Human-Computer Interaction*. 4, CSCW1 (May 2020), 19:1-19:27. DOI:<https://doi.org/10.1145/3392822>.
- [33] Gilleard, C. and Higgs, P. 2008. Internet use and the digital divide in the English longitudinal study of ageing. *European Journal of Ageing*. 5, 3 (Jul. 2008), 233. DOI:<https://doi.org/10.1007/s10433-008-0083-7>.

- [34] Gladyshev, T.V. and Gladyshev, V.N. 2016. A Disease or not a Disease? Aging as a Pathology. *Trends in molecular medicine*. 22, 12 (Dec. 2016), 995–996. DOI:<https://doi.org/10.1016/j.molmed.2016.09.009>.
- [35] Gutierrez, F.J., Ochoa, S.F., Cornejo, R. and Vassileva, J. 2019. Designing Computer-Supported Technology to Mediate Intergenerational Social Interaction: A Cultural Perspective. *Perspectives on Human-Computer Interaction Research with Older People*. S. Sayago, ed. Springer International Publishing. 199–214.
- [36] Gutierrez, F.J., Ochoa, S.F. and Vassileva, J. 2015. Mediating Asymmetries in Family Communication: Supporting the eInclusion of Older Adults. *Universal Access in Human-Computer Interaction. Access to Today's Technologies* (Cham, 2015), 438–448.
- [37] Hagestad, G.O. and Uhlenberg, P. 2006. Should We Be Concerned About Age Segregation?: Some Theoretical and Empirical Explorations. *Research on Aging*. 28, 6 (Nov. 2006), 638–653. DOI:<https://doi.org/10.1177/0164027506291872>.
- [38] Hagestad, G.O. and Uhlenberg, P. 2005. The Social Separation of Old and Young: A Root of Ageism. *Journal of Social Issues*. 61, 2 (2005), 343–360. DOI:<https://doi.org/10.1111/j.1540-4560.2005.00409.x>.
- [39] Harley, D. and Fitzpatrick, G. 2009. YouTube and Intergenerational Communication: The case of Geriatric1927. *Universal Access in the Information Society*. 8, (Apr. 2009). DOI:<https://doi.org/10.1007/s10209-008-0127-y>.
- [40] Harley, D., Howland, K., Harris, E.B.J. and Redlich, C. 2014. Online communities for older users: what can we learn from local community interactions to create social sites that work for older people. (Sep. 2014).
- [41] Harwood, J. 2000. Communication Media Use in the Grandparent-Grandchild Relationship. *Journal of Communication*. 50, 4 (Dec. 2000), 56–78. DOI:<https://doi.org/10.1111/j.1460-2466.2000.tb02863.x>.
- [42] Hummert, M.L., Wiemann, J. and Nussbaum, J. eds. 1994. *Interpersonal Communication in Older Adulthood*. SAGE.
- [43] Indicator Definitions - Older Adults: 2019. <https://www.cdc.gov/cdi/definitions/older-adults.html>. Accessed: 2022-07-05.
- [44] Itoh, Y., Miyajima, A. and Watanabe, T. 2002. “TSUNAGARI” communication: fostering a feeling of connection between family members. *CHI '02 Extended Abstracts on Human Factors in Computing Systems* (New York, NY, USA, Apr. 2002), 810–811.
- [45] Jarrott, S.E., Morris, M.M., Burnett, A.J., Stauffer, D., Stremmel, A.S. and Gigliotti, C.M. 2011. Creating Community Capacity at a Shared Site Intergenerational Program: “Like a Barefoot Climb Up a Mountain.” *Journal of Intergenerational Relationships*. 9, 4 (Oct. 2011), 418–434. DOI:<https://doi.org/10.1080/15350770.2011.619925>.
- [46] Johnson, J., Black, R.W., Chen, Y. and Hayes, G.R. 2019. Older Adults with Dementia in an Online Forum: A Preliminary Analysis. *Conference Companion Publication of the 2019 on Computer Supported Cooperative Work and Social Computing* (New York, NY, USA, Nov. 2019), 231–235.
- [47] Johnson, J., Black, R.W. and Hayes, G.R. 2020. Roles in the Discussion: An Analysis of Social Support in an Online Forum for People with Dementia. *Proceedings of the ACM on Human-Computer Interaction*. 4, CSCW2 (Oct. 2020), 1–30. DOI:<https://doi.org/10.1145/3415198>.
- [48] Joinson, A.N. 2001. Self-disclosure in computer-mediated communication: The role of self-awareness and visual anonymity. *European Journal of Social Psychology*. 31, 2 (2001), 177–192. DOI:<https://doi.org/10.1002/ejsp.36>.
- [49] Jung, E.H., Walden, J., Johnson, A.C. and Sundar, S.S. 2017. Social networking in the aging context: Why older adults use or avoid Facebook. *Telematics and Informatics*. 34, 7 (Nov. 2017), 1071–1080. DOI:<https://doi.org/10.1016/j.tele.2017.04.015>.
- [50] Kang, B., Kang, S. and Hwang, I. 2021. MomentMeld: AI-augmented Mobile Photographic Memento towards Mutually Stimulatory Inter-generational Interaction. *Proceedings of the 2021 CHI Conference on Human Factors in Computing Systems*. Association for Computing Machinery. 1–16.
- [51] Kaplan, M., Haider, J., Cohen, U. and Turner, D. 2007. Environmental Design Perspectives on Intergenerational Programs and Practices: An Emergent Conceptual Framework. *Journal of Intergenerational Relationships*. 5, 2 (Sep. 2007), 81–110. DOI:https://doi.org/10.1300/J194v05n02_06.
- [52] Karp, H.B. and Sirias, D. 2001. Generational Conflict: A New Paradigm for Teams of the 21st Century. *Gestalt Review*. 5, 2 (Jan. 2001), 71–87. DOI:<https://doi.org/10.5325/gestaltreview.5.2.0071>.
- [53] Kiene, C., Monroy-Hernández, A. and Hill, B.M. 2016. Surviving an “Eternal September”: How an Online Community Managed a Surge of Newcomers. *Proceedings of the 2016 CHI Conference on Human Factors in Computing Systems* (New York, NY, USA, May 2016), 1152–1156.
- [54] Kohli, M. 1986. *The World We Forgot: A Historical Review of the Life Course*. Later Life: The Social Psychology of Aging. SAGE. 271–303.
- [55] KouYubo, GuiXinning, ChenYunan and PineKathleen 2017. Conspiracy talk on social media: collective sensemaking during a public health crisis. *Proceedings of the ACM on Human-Computer Interaction*. (Dec. 2017). DOI:<https://doi.org/10.1145/3134696>.
- [56] KouYubo and M, G. 2018. What do you recommend a complete beginner like me to practice? *Proceedings of the ACM on Human-Computer Interaction*. (Nov. 2018). DOI:<https://doi.org/10.1145/3274363>.

- [57] Lazar, A., Diaz, M., Brewer, R., Kim, C. and Piper, A.M. 2017. Going Gray, Failure to Hire, and the Ick Factor: Analyzing How Older Bloggers Talk about Ageism. *Proceedings of the 2017 ACM Conference on Computer Supported Cooperative Work and Social Computing* (Portland Oregon USA, Feb. 2017), 655–668.
- [58] Leavitt, A. and Clark, J.A. 2014. Upvoting hurricane Sandy: event-based news production processes on a social news site. *Proceedings of the SIGCHI Conference on Human Factors in Computing Systems* (Toronto Ontario Canada, Apr. 2014), 1495–1504.
- [59] Lee, S., Oh, H., Shi, C.-K. and Doh, Y.Y. 2020. Life Review Using a Life Metaphoric Game to Promote Intergenerational Communication. *Proceedings of the ACM on Human-Computer Interaction*. 4, CSCW2 (Oct. 2020), 98:1-98:21. DOI:<https://doi.org/10.1145/3415169>.
- [60] Leist, A.K. 2013. Social Media Use of Older Adults: A Mini-Review. *Gerontology*. 59, 4 (2013), 378–384. DOI:<https://doi.org/10.1159/000346818>.
- [61] Levy, B.R., Chung, P.H., Bedford, T. and Navrazhina, K. 2014. Facebook as a Site for Negative Age Stereotypes. *The Gerontologist*. 54, 2 (Apr. 2014), 172–176. DOI:<https://doi.org/10.1093/geront/gns194>.
- [62] Li, H., Hecht, B. and Chancellor, S. 2022. Measuring the Monetary Value of Online Volunteer Work. *Proceedings of the International AAAI Conference on Web and Social Media*. 16, (May 2022), 596–606.
- [63] Lindley and E, S. 2009. Shades of lightweight: Supporting cross-generational communication through home messaging. *UAIS on the Intergenerational Context as Emphasis for design*. 11, (Jan. 2009). DOI:<https://doi.org/10.1007/s10209-011-0231-2>.
- [64] Lindley, S.E., Harper, R. and Sellen, A. 2009. Desiring to be in touch in a changing communications landscape: attitudes of older adults. *Proceedings of the SIGCHI Conference on Human Factors in Computing Systems* (New York, NY, USA, Apr. 2009), 1693–1702.
- [65] Litt, E., Spottswood, E., Birnholtz, J., Hancock, J.T., Smith, M.E. and Reynolds, L. 2014. Awkward encounters of an “other” kind: collective self-presentation and face threat on facebook. *Proceedings of the 17th ACM conference on Computer supported cooperative work & social computing* (Baltimore Maryland USA, Feb. 2014), 449–460.
- [66] Lorenz, T. 2019. ‘OK Boomer’ Marks the End of Friendly Generational Relations. *The New York Times*.
- [67] Lu, W. and Hampton, K.N. 2017. Beyond the power of networks: Differentiating network structure from social media affordances for perceived social support. *New Media & Society*. 19, 6 (Jun. 2017), 861–879. DOI:<https://doi.org/10.1177/1461444815621514>.
- [68] Ma, X., Hancock, J. and Naaman, M. 2016. Anonymity, Intimacy and Self-Disclosure in Social Media. *Proceedings of the 2016 CHI Conference on Human Factors in Computing Systems* (San Jose, California, USA, May 2016), 3857–3869.
- [69] Major_Square 2020. Introducing r/AskOldPeopleAdvice. *r/AskOldPeople*.
- [70] Major_Square 2019. This subreddit is growing. A reminder of its purpose. *r/AskOldPeople*.
- [71] Makita, M., Mas-Bleda, A., Stuart, E. and Thelwall, M. 2021. Ageing, old age and older adults: a social media analysis of dominant topics and discourses. *Ageing & Society*. 41, 2 (Feb. 2021), 247–272. DOI:<https://doi.org/10.1017/S0144686X19001016>.
- [72] Manago, A.M., Graham, M.B., Greenfield, P.M. and Salimkhan, G. 2008. Self-presentation and gender on MySpace. *Journal of Applied Developmental Psychology*. 29, 6 (Nov. 2008), 446–458. DOI:<https://doi.org/10.1016/j.appdev.2008.07.001>.
- [73] Marsden, P.V. 1988. Homogeneity in confiding relations. *Social Networks*. 10, 1 (Mar. 1988), 57–76. DOI:[https://doi.org/10.1016/0378-8733\(88\)90010-X](https://doi.org/10.1016/0378-8733(88)90010-X).
- [74] Matias, J.N. 2016. *The Civic Labor of Online Moderators*. (Oxford, United Kingdom, Sep. 2016), 10.
- [75] McGrath, L. 2018. Achieving Visibility: Midlife and Older Women’s Literate Practices on Instagram and Blogs. *Literacy in Composition Studies*. 6, 2 (Nov. 2018). DOI:<https://doi.org/10.21623/1.6.2.7>.
- [76] McKenna, K.Y.A. and Bargh, J.A. 1998. Coming out in the age of the Internet: Identity “demarginalization” through virtual group participation. *Journal of Personality and Social Psychology*. 75, 3 (1998), 681–694. DOI:<https://doi.org/10.1037/0022-3514.75.3.681>.
- [77] McPherson, M., Smith-Lovin, L. and Cook, J.M. 2001. Birds of a Feather: Homophily in Social Networks. *Annual Review of Sociology*. 27, 1 (2001), 415–444. DOI:<https://doi.org/10.1146/annurev.soc.27.1.415>.
- [78] Meisner, B.A. 2021. Are You OK, Boomer? Intensification of Ageism and Intergenerational Tensions on Social Media Amid COVID-19. *Leisure Sciences*. 43, 1–2 (Mar. 2021), 56–61. DOI:<https://doi.org/10.1080/01490400.2020.1773983>.
- [79] Melville, J. and Hatton-Yeo, A. 2015. Intergenerational shared spaces in the UK context. *Intergenerational space*. R.M. Vanderbeck and N. Worth, eds. Routledge. 50–64.
- [80] Moffatt, K., David, J.M. and Baecker, R. 2013. *Connecting Grandparents and Grandchildren*. (2013).
- [81] Moreno, M.A., Goniui, N., Moreno, P.S. and Diekema, D. 2013. Ethics of Social Media Research: Common Concerns and Practical Considerations. *Cyberpsychology, Behavior, and Social Networking*. 16, 9 (Sep. 2013), 708–713. DOI:<https://doi.org/10.1089/cyber.2012.0334>.

- [82] Muñoz, D., Cornejo, R., Gutierrez, F.J., Favela, J., Ochoa, S.F. and Tentori, M. 2015. A social cloud-based tool to deal with time and media mismatch of intergenerational family communication. *Future Generation Computer Systems*. 53, (Dec. 2015), 140–151. DOI:<https://doi.org/10.1016/j.future.2014.07.003>.
- [83] Nagai, Y., Hiyama, A., Miura, T. and Hirose, M. 2014. T-echo: Promoting Intergenerational Communication through Gamified Social Mentoring. *Universal Access in Human-Computer Interaction. Design for All and Accessibility Practice* (Cham, 2014), 582–589.
- [84] Nelson, T.D. 2011. Ageism: The Strange Case of Prejudice Against the Older You. *Disability and Aging Discrimination: Perspectives in Law and Psychology*. R.L. Wiener and S.L. Willborn, eds. Springer. 37–47.
- [85] Nguyen, M., Bin, Y.S. and Campbell, A. 2012. Comparing Online and Offline Self-Disclosure: A Systematic Review. *Cyberpsychology, Behavior, and Social Networking*. 15, 2 (Feb. 2012), 103–111. DOI:<https://doi.org/10.1089/cyber.2011.0277>.
- [86] Osmanovic, S. and Pecchioni, L. 2016. Beyond Entertainment: Motivations and Outcomes of Video Game Playing by Older Adults and Their Younger Family Members. *Games and Culture*. 11, 1–2 (Jan. 2016), 130–149. DOI:<https://doi.org/10.1177/1555412015602819>.
- [87] Osmanovic, S. and Pecchioni, L.L. 2019. Playing with Words: The Experience of Self-disclosure in Intergenerational Gaming. *Human Aspects of IT for the Aged Population. Social Media, Games and Assistive Environments* (Cham, 2019), 189–203.
- [88] Overcoming Age Segregation (SSIR): 2021. https://ssir.org/articles/entry/overcoming_age_segregation. Accessed: 2022-07-05.
- [89] Palmore, E. 1999. *Ageism: Negative and Positive*, 2nd Edition. Springer Publishing Company.
- [90] Park, A., Conway, M. and Chen, A.T. 2018. Examining Thematic Similarity, Difference, and Membership in Three Online Mental Health Communities from Reddit: A Text Mining and Visualization Approach. *Computers in Human Behavior*. 78, (Jan. 2018), 98–112. DOI:<https://doi.org/10.1016/j.chb.2017.09.001>.
- [91] Pew Research Center 2021. Internet/Broadband Fact Sheet. Internet/Broadband Fact Sheet.
- [92] Pew Research Center 2021. Social Media Fact Sheet. Social Media Fact Sheet.
- [93] Pfeil, U., Zaphiris, P. and Wilson, S. 2009. Older adults' perceptions and experiences of online social support. *Interacting with Computers*. 21, 3 (Jul. 2009), 159–172. DOI:<https://doi.org/10.1016/j.intcom.2008.12.001>.
- [94] Plaisant, C., Clamage, A., Hutchinson, H.B., Bederson, B.B. and Druin, A. 2006. Shared family calendars: Promoting symmetry and accessibility. *ACM Transactions on Computer-Human Interaction*. 13, 3 (Sep. 2006), 313–346. DOI:<https://doi.org/10.1145/1183456.1183458>.
- [95] Qian, H. and Scott, C.R. 2007. Anonymity and Self-Disclosure on Weblogs. *Journal of Computer-Mediated Communication*. 12, 4 (Jul. 2007), 1428–1451. DOI:<https://doi.org/10.1111/j.1083-6101.2007.00380.x>.
- [96] Rains, S.A. and Brunner, S.R. 2018. The outcomes of broadcasting self-disclosure using new communication technologies: Responses to disclosure vary across one's social network. *Communication Research*. 45, 5 (Jul. 2018), 659–687. DOI:<https://doi.org/10.1177/0093650215598836>.
- [97] r/AskOldPeople subreddit stats (Ask Old People): <https://subredditstats.com/r/ASKOLDPEOPLE>. Accessed: 2022-07-12.
- [98] Reis, L., Mercer, K. and Boger, J. 2021. Technologies for fostering intergenerational connectivity and relationships: Scoping review and emergent concepts. *Technology in Society*. 64, (Feb. 2021), 101494. DOI:<https://doi.org/10.1016/j.techsoc.2020.101494>.
- [99] Rereddit Top Posts of 2021: <https://www.reddit.com/posts/2021/>. Accessed: 2022-07-12.
- [100] Respect your elders? Why the generation wars feel worse than ever: 2021. <https://www.independent.co.uk/life-style/millennial-gen-z-generation-war-b1823071.html>. Accessed: 2022-06-08.
- [101] Rice, M., Tan, W.P., Ong, J., Yau, L.J., Wan, M. and Ng, J. 2013. The dynamics of younger and older adult's paired behavior when playing an interactive silhouette game. *Proceedings of the SIGCHI Conference on Human Factors in Computing Systems* (New York, NY, USA, Apr. 2013), 1081–1090.
- [102] Riley, M.W. and Riley, J.W., Jr. 2000. Age Integration: Conceptual and Historical Background. *The Gerontologist*. 40, 3 (Jun. 2000), 266–270. DOI:<https://doi.org/10.1093/geront/40.3.266>.
- [103] Ryan, E.B., Szechtman, B. and Bodkin, J. 1992. Attitudes toward younger and older adults learning to use computers. *Journal of Gerontology*. 47, 2 (Mar. 1992), P96–101. DOI:<https://doi.org/10.1093/geronj/47.2.p96>.
- [104] Soto-Perez-de-Celis, E. 2020. Social media, ageism, and older adults during the COVID-19 pandemic. *EClinicalMedicine*. 29–30, (Nov. 2020), 100634. DOI:<https://doi.org/10.1016/j.eclinm.2020.100634>.
- [105] Stephens, K.K., Jahn, J.L.S., Fox, S., Charoensap-Kelly, P., Mitra, R., Sutton, J., Waters, E.D., Xie, B. and Meisenbach, R.J. 2020. Collective Sensemaking Around COVID-19: Experiences, Concerns, and Agendas for our Rapidly Changing Organizational Lives. *Management Communication Quarterly*. 34, 3 (Aug. 2020), 426–457. DOI:<https://doi.org/10.1177/0893318920934890>.
- [106] Sutor, J.J., Pillemer, K. and Keeton, S. 1995. When experience counts: The effects of experiential and structural similarity on patterns of support and interpersonal stress. *Social Forces*; Oxford. 73, 4 (Jun. 1995), 1573.

- [107] Suler, J. 2004. The Online Disinhibition Effect. *CyberPsychology & Behavior*. 7, 3 (Jun. 2004), 321–326. DOI:<https://doi.org/10.1089/1094931041291295>.
- [108] Thang, L.L. and Kaplan, M.S. 2013. Intergenerational pathways for building relational spaces and places. *Environmental gerontology*. Making meaningful places in old age. G.D. Rowles and M. Bernard, eds. Springer. 225–252.
- [109] Tomassini, C., Kalogirou, S., Grundy, E., Fokkema, T., Martikainen, P., Broese van Groenou, M. and Karisto, A. 2004. Contacts between elderly parents and their children in four European countries: current patterns and future prospects. *European Journal of Ageing*. 1, 1 (Dec. 2004), 54–63. DOI:<https://doi.org/10.1007/s10433-004-0003-4>.
- [110] Uhlenberg, P. 2000. Integration of Old and Young. *The Gerontologist*. 40, 3 (Jun. 2000), 276–279. DOI:<https://doi.org/10.1093/geront/40.3.276>.
- [111] Uhlenberg, P. 2000. Introduction: Why Study Age Integration? *The Gerontologist*. 40, 3 (2000), 48.
- [112] Uhlenberg, P. and De Jong Gierveld, J. 2004. Age-segregation in later life: an examination of personal networks. *Ageing and Society*. 24, 1 (Jan. 2004), 5–28. DOI:<https://doi.org/10.1017/S0144686X0300151X>.
- [113] Urlick, M.J., Hollensbe, E.C., Masterson, S.S. and Lyons, S.T. 2017. Understanding and Managing Intergenerational Conflict: An Examination of Influences and Strategies. *Work, Aging and Retirement*. 3, 2 (Apr. 2017), 166–185. DOI:<https://doi.org/10.1093/workar/waw009>.
- [114] U.S. Reddit app users by age 2021: 2022. <https://www.statista.com/statistics/1125159/reddit-us-app-users-age/>. Accessed: 2022-06-12.
- [115] Van Den Tillaart, S., Kurtz, D. and Cash, P. 2009. Powerlessness, marginalized identity, and silencing of health concerns: Voiced realities of women living with a mental health diagnosis. *International Journal of Mental Health Nursing*. 18, 3 (2009), 153–163. DOI:<https://doi.org/10.1111/j.1447-0349.2009.00599.x>.
- [116] Vanderbeck, R.M. and Worth, N. 2015. *Intergenerational space*. Routledge.
- [117] Vines, J., Pritchard, G., Wright, P., Olivier, P. and Brittain, K. 2015. An Age-Old Problem: Examining the Discourses of Ageing in HCI and Strategies for Future Research. *ACM Transactions on Computer-Human Interaction*. 22, 1 (Feb. 2015), 2:1-2:27. DOI:<https://doi.org/10.1145/2696867>.
- [118] Weick, K.E. 1988. Enacted Sensemaking in Crisis Situations[1]. *Journal of Management Studies*. 25, 4 (1988), 305–317. DOI:<https://doi.org/10.1111/j.1467-6486.1988.tb00039.x>.
- [119] Williams, A. and Nussbaum, J.F. 2013. *Intergenerational Communication Across the Life Span*. Routledge.
- [120] Winkler, R. 2013. Research Note: Segregated by Age: Are We Becoming More Divided? *Population Research and Policy Review*. 32, 5 (Oct. 2013), 717–727. DOI:<https://doi.org/10.1007/s11113-013-9291-8>.
- [121] Wohn, D.Y., Carr, C.T. and Hayes, R.A. 2016. How Affective Is a “Like”? The Effect of Paralinguistic Digital Affordances on Perceived Social Support. *Cyberpsychology, Behavior, and Social Networking*. 19, 9 (Sep. 2016), 562–566. DOI:<https://doi.org/10.1089/cyber.2016.0162>.
- [122] Xu, X., Li, J., Pham, T.P., Salmon, C.T. and Theng, Y.-L. 2016. Improving Psychosocial Well-Being of Older Adults Through Exergaming: The Moderation Effects of Intergenerational Communication and Age Cohorts. *Games for Health Journal*. 5, 6 (Dec. 2016), 389–397. DOI:<https://doi.org/10.1089/g4h.2016.0060>.
- [123] Yuan, Y. and Yarosh, S. 2019. Beyond Tutoring: Opportunities for Intergenerational Mentorship at a Community Level. *Proceedings of the 2019 CHI Conference on Human Factors in Computing Systems* (Glasgow Scotland Uk, May 2019), 1–14.
- [124] Zaphiris, P. and Sarwar, R. 2006. Trends, similarities, and differences in the usage of teen and senior public online newsgroups. *ACM Transactions on Computer-Human Interaction*. 13, 3 (Sep. 2006), 403–422. DOI:<https://doi.org/10.1145/1183456.1183461>.
- [125] Zhao, M., Chen, Z., Lu, K., Li, C., Qu, H. and Ma, X. 2016. Blossom: Design of a Tangible Interface for Improving Intergenerational Communication for the Elderly. *Proceedings of the International Symposium on Interactive Technology and Ageing Populations* (New York, NY, USA, Oct. 2016), 87–98.

Received July 2022, revised January 2023, accepted March 2023.