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# Design Challenges for Reconnecting in Later Life: A Qualitative Study

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**Abstract**

Friendships and social interactions are renowned contributors to wellbeing. As such, keeping a healthy amount of relationships becomes very important as people age and the size of their social network tends to decrease. In this paper, we take a step back and explore reconnection—find out about or re-contact old friends, an emerging topic due to the increased use of computer-mediated technology by older adults to maintain friendships and form new ones. We report on our findings from semi-structured interviews with 28 individuals from Costa Rica and Poland. The interviews aimed to explore whether there is a wish to reconnect, and the challenges encountered by older adults to reconnect. We contribute with design considerations for tools allowing older adults to reconnect, discussing opportunities for technology.

**Author Keywords**

Reconnection; Older adults; Social networks; Design challenges; Qualitative study

**ACM Classification Keywords**

H.5.m. [Information Interfaces and Presentation (e.g. HCI)]: Miscellaneous

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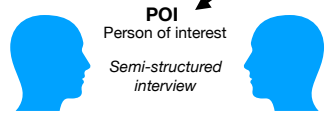
*DIS'18 Companion*, June 9–13, 2018, , Hong Kong

ACM 978-1-4503-5631-2/18/06.

<https://doi.org/10.1145/3197391.3205426>

## Interview

Interviews were face-to-face, between one participant and one researcher.



**Researcher**

**Participant**

We asked participants to think of a single person, who appeared in their pictures, and with whom they had been very close but had lost contact.

## Data collection

After identifying and describing the (POI), we asked:

- **Reason:** the reason for losing contact with the POI,
- **Attempts:** whether they had tried to find out about, or contact (i.e. *reconnect* with) the POI in the past,
- **Strategies:** strategies used to *reconnect*, if they had tried, or the reasons for not trying.

## Data analysis

We conducted an **inductive content analysis** on the answers, recording transcriptions. The coding was completed independently by Spanish and Polish native speakers. After this step, the codes as well as the excerpts were translated to English, and researchers worked together towards a unified categorization.

**Figure 1:** Study procedure

Location (n)	Age (Mean)
Costa R. (17)	66-90 (70.5)
Poland (11)	67-82 (70)

**Table 1:** Study participants.

## Introduction

Friends and family play an essential role in our lives, providing instrumental and emotional support that contributes to our general health and wellbeing. This is true at every age and even more as we grow older [7]. Across the life span, this network of support tends to become smaller [22] and more geographically dispersed [3]. These changes, along with life events such as retirement or bereavement, limit our opportunities to engage in social interactions, thus putting us at risk of loneliness and social isolation [15, 6].

Research on social interactions suggests distinct benefits and challenges of familial and friendship relationships. Friendships are associated with stronger effects on subjective wellbeing [14, 13], impact on morale [20] and better functioning [4] as compared to familial relationships. This relative importance of friendships in later life is explained by the voluntary nature of friendships, which makes them more selective and therefore, potentially of higher quality [20, 2]. For the same reasons, friendships are also more vulnerable than any other type of relation [1], especially to non-normative life events such as relocation [22]. Indeed, the reduction in the social network size with age is particularly present in the friendship social network [19, 22].

In this paper we aim at understanding the challenges and opportunities in *reconnecting* older adults with lost friends and contacts with the help of technology. Reconnecting is an emerging topic [10, 11, 5] motivated by older adults' increasing use of computer-mediated technology, particularly social media, to maintain and re-engage social connections.

Surveys with older adult users of Facebook, for instance, indicate usage to be driven mainly by the need to support and maintain existing social networks, by *checking* what friends are up to, *keeping* in touch with friends, and *re-acquiring* lost contacts [10, 11]. The latter is cited not only

a source of great user satisfaction but as an opportunity to build social capital [9]. However, our understanding of reconnection is limited to studies on specific social media platforms and by older adults from specific regions. Such limitations motivate a better understanding of how to support reconnection, and what existing or new technologies may support reconnection efforts.

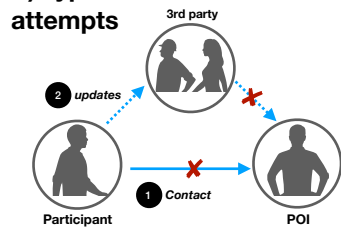
In this paper, we report on a pilot for a larger multi-site study aiming at exploring the potential of reconnection in later life. We focus on the fundamental question of whether there is a wish for reconnecting, and the reasons why older adults fail to reconnect with their friends. In doing so, we aim to identify the main challenges that can help derive design considerations for technology as well as guide future reconnection studies.

The pilot was conducted in Costa Rica and Poland, locations representing different social and cultural contexts. We interviewed 28 participants and found that the wish for reconnecting is real and that the challenges older adults face are only partially addressed by current technology. In the remainder we describe the pilot and our preliminary results.

## Methods

In Costa Rica, we studied a rural community near the capital, characterized by very low income, very high crime rate, and high social ties within the community. In Poland, we conducted the study in a small city in a rural area with students of the University of the Third Age, where retired or semi-retired older adults can continue their education and training. In selecting these two locations, our aim was to test the pilot under different conditions, and assess whether the different social, cultural and economic contexts had an impact on the wish and challenges to reconnect.

## A) Types of reconnection attempts



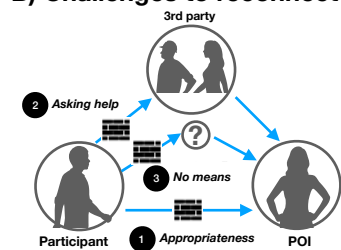
### 1 Attempt to contact directly

"She changed phone numbers and then we lost contact.." (JO, 67M)

### 2 Attempt to get updates

"I wanted to establish contact [with the POI] so I asked friends from school but they did not know anything about [the POI]" (KR, 69F)

## B) Challenges to reconnect



### 1 Appropriateness of contact

"It would have been awkward to stay in touch... back then you had to have respect and keep distance... it was not convenient". (GP, 69M, referring to a married female POI)

### 2 Unwillingness to ask help

"I could try to reach [POI], my daughter in law's sister is working in [workplace of POI], but I do not want to involve other people into this". (JE, 68M)

### 3 No means to get in touch

"I wish I could meet him, talk about old times but I don't have the means..". (MA, 70M)

**Figure 2:** Reconnection attempts and challenges

We considered eligible, participants who had no cognitive or vision impairments and were 65 or older (age to be considered an older person in developed countries [21]). We asked participants for pictures related to school, work, vacations, trips, or events (e.g. concerts), dating back at least 10 years and portraying three or more (non-relatives) people with whom they were very close but had lost contact, people of interest (POI). The specific objective of reconnecting was not disclosed, to prevent participants from thinking of people with whom it would be easier to reconnect.

In Costa Rica participants were recruited via phone calls, from a directory of people who already agreed to participate to a social project organized by the University of Costa Rica, of which this study is part. In Poland, recruitment was done face-to-face at the University of the Third Age.

We conducted semi-structured interviews with 38 older adults (26 female and 12 male). We discarded 10 interviews from Costa Rica from the analysis, for a total of 28 participants (18 female and 10 male, age range: 66-90, mean: 71.8). Interviews were omitted for the following (non-exclusive) reasons: participant had recent contact with POI (7), participant was related to POI (2), participant did not indicate a POI (3), and POI had passed away (1). In the interview, participants were asked to identify a POI from the pictures, and inquired on their wish and attempts made to reconnect. The data collected was analyzed using inductive content analysis. Details are shown in Figure 1. The study was approved by the IRB of the University of Costa Rica.

## Findings

### The wish to Reconnect

Our results show that the problem of "losing contacts" is real: We identified friends with whom people had lost con-

tact in nearly all interviews (barring 3 participants who could not identify a POI among the pictures they brought). In most cases these were friends from school, work, or neighbors. Moreover, only for 4 out of 28 lost contacts from *randomly* selected pictures there was no interest in reconnecting.

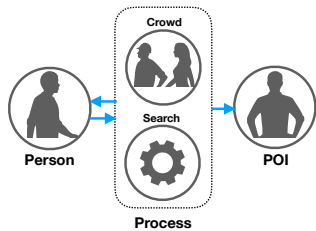
The main reasons for disconnecting were people relocating or the association ending (e.g., people changing jobs, finishing school), thereby ceasing the occasion for contact. For relocation, however, economic and social factors differ (e.g., migration and employment instability in Costa Rica and moving to study in Poland). These observations support current literature on the vulnerability of friendship relationships [1, 3] and on how life events shape our social networks making them smaller and more dispersed [22, 3].

The wish to reconnect was manifest in two distinctive ways (see Figure 2A): *resuming contact* with the lost friend, e.g., by trying to contact them directly, and *checking out* what the lost friend is up to without necessarily engaging in a conversation, e.g., asking a friend about them. These two scenarios are closely related to the motivations of older adults who actually use online social networks [10, 11].

### Challenges to reconnection

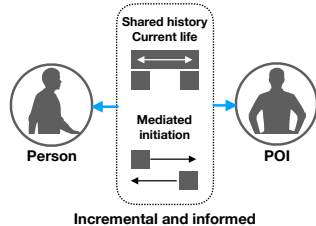
Practical and perceived barriers prevented participants to attempt or realize their wish to reconnect. In most cases, the interest in reconnecting was not followed by actual attempts (17 participants did not try, out of which 4 expressed no interest in reconnecting). Only 5 participants acted (unsuccessfully) on their wish, while other 6 tried only to get updates about their lost friends through common contacts. Those who did not try to reconnect, mainly did not because they i) did not know how or have the means to get in touch (9 people had no way to contact or had lost track POIs), and ii) felt awkward just "popping up" in people's life after a long time (see Figure 2B).

### Finding contacts



This is not only about searching people using metadata. It is about facilitating reconnection search strategies that can help finding contacts or people capable of helping (Crowd) without exposing the person and making it safe for everybody. In this context, finding contacts is more of a process than a one time query.

### Facilitating reconnection



Allowing for less direct and more informed reconnections. It is not only about allowing people to send “friend requests”, but facilitating incremental and even mediated contact, giving people enough context (e.g., common history, current life) as to avoid anxiety, awkwardness, thus lowering the barriers to reconnection.

**Figure 3:** Opportunities for technology

Digging deeper on the awkwardness aspect, we identified two salient aspects. The first was a certain discomfort in initiating a call to reconnect. Another issue was the “appropriateness” of contact (e.g., contacting a now married female friend). Thus, the challenge might not only be finding a way to initiate contact but also creating opportunities comfortable for both sides to write or talk. This observation is supported by a recent study on factors affecting users decisions to accept friend requests on Facebook from people who had been out of touch for long periods, indicating the influence of factors such as social anxiety, sociability, uncertainty about the partner and perceived reward [17].

#### *Opportunities for technology*

What we take home here as a first observation is the wish for a “third party” to be involved in creating opportunities for reconnection that takes away the burden of initiating contact and the related awkwardness (e.g., facilitating a gradual or casual reconnection). Participants referred to this as persons who would organize a reunion, but we speculate that an IT system could play the same (or a supporting) role.

This being said, participants who had last met their contacts in reunions reported the interest in keeping in touch fading after some time. It is therefore clear that reconnection and relational maintenance should go hand in hand. This hints to the importance of social context and associations [16], and building on common aspects [18], so as to motivate meaningful reconnection and strengthen bonds. IT systems should support this need by helping older adults keep connections active or reviving dormant ties (as suggested by previous studies, e.g., [12]).

With respect to finding contact information on the lost friend. Interestingly, not having the contact at hand, and so having to ask others for help, sets the barrier to reconnecting too high for some participants. Social search features can lower

these barriers by allowing users to find their friends online. Still, the limited personal information shared by older adults on social media [8] and the perceived complexity [11] might pose challenges to an effective use of these tools.

### Discussion and Conclusion

Our preliminary studies point to a wish for reconnecting in later life, independently of the cultural context. Although besides this wish, we observed that only respondents from Poland did not want to involve other people when trying to reconnect. This hints to the importance of cultural aspects in the design of suitable solutions. Current technology gives an opportunity to do so, since it fails to address some of the barriers that prevent reconnection attempts. Social networks are a good foundation, but we argue that technology should assist on initiating contact, help to find information and keep (re)connection active and meaningful (see Figure 3). Search should be more about facilitating strategies that take advantage of the help our network or others can provide to find lost contacts, friendship requests should provide context to reduce awkwardness and become less intrusive.

In focusing on failed reconnection cases we have added a new perspective to the emerging reconnection phenomena. Reconnecting is a complex construct that requires further studies on how to facilitate this process. This pilot also helped us identify limitations and considerations for future studies, including measuring the perceived connectedness with POI, explore more in detail the role of technology, and the perceived gain in reconnecting.

### Acknowledgements

This project has received funding from the EU Horizon 2020 research and innovation programme under the Marie Skłodowska-Curie grant agreement No 690962.

## REFERENCES

1. Rebecca G Adams. 1986. A look at friendship and aging. *Generations* 10, 4 (1986), 40–43.
2. Rebecca G Adams and Emily M Taylor. 2015. Friendship and happiness in the third age. In *Friendship and happiness*. Springer, 155–169.
3. Kristine J Ajrouch, Alysia Y Blandon, and Toni C Antonucci. 2005. Social networks among men and women: The effects of age and socioeconomic status. *The Journals of Gerontology Series B: Psychological Sciences and Social Sciences* 60, 6 (2005), S311–S317.
4. William J Chopick. 2017. Associations among relational values, support, health, and well-being across the adult lifespan. *Personal relationships* 24, 2 (2017), 408–422.
5. Caterina Desiato. 2013. Virtualizing the Past: Re-connecting on Facebook and Emerging Social Relationships. In *System Sciences (HICSS), 2013 46th Hawaii International Conference on*. IEEE, 3363–3372.
6. Betty Havens, Madelyn Hall, Gina Sylvestre, and Tyler Jivan. 2004. Social isolation and loneliness: Differences between older rural and urban Manitobans. *Canadian Journal on Aging/la revue canadienne du vieillissement* 23, 2 (2004), 129–140.
7. Julianne Holt-Lunstad, Timothy B Smith, Mark Baker, Tyler Harris, and David Stephenson. 2015. Loneliness and social isolation as risk factors for mortality: a meta-analytic review. *Perspectives on Psychological Science* 10, 2 (2015), 227–237.
8. Clayton J Hutto, Caroline Bell, Sarah Farmer, Cara Fausset, Linda Harley, Julie Nguyen, and Brad Fain. 2015. Social media gerontology: Understanding social media usage among older adults. In *Web Intelligence*, Vol. 13. IOS Press, 69–87.
9. Adam N Joinson. 2008. Looking at, looking up or keeping up with people?: motives and use of facebook. In *Proceedings of the SIGCHI conference on Human Factors in Computing Systems*. ACM, 1027–1036.
10. Eun Hwa Jung and S Shyam Sundar. 2016. Senior citizens on Facebook: How do they interact and why? *Computers in Human Behavior* 61 (2016), 27–35.
11. Eun Hwa Jung, Justin Walden, Ariel Celeste Johnson, and S Shyam Sundar. 2017. Social networking in the aging context: Why older adults use or avoid Facebook. *Telematics and Informatics* (2017).
12. Ee-Peng Lim, Denzil Correa, David Lo, Michael Finegold, and Feida Zhu. 2013. Reviving Dormant Ties in an Online Social Network Experiment.. In *ICWSM*.
13. David Mellor, Lucy Firth, and Kathleen Moore. 2008. Can the Internet Improve the Well-being of the Elderly? *Ageing international* 32, 1 (2008), 25–42.
14. Martin Pinguart and Silvia Sörensen. 2000. Influences of socioeconomic status, social network, and competence on subjective well-being in later life: a meta-analysis. (2000).
15. Martin Pinguart and Silvia Sorensen. 2001. Influences on loneliness in older adults: A meta-analysis. *Basic and applied social psychology* 23, 4 (2001), 245–266.
16. Kelly Quinn. 2013. We haven't talked in 30 years! Relationship reconnection and internet use at midlife. *Information, Communication & Society* 16, 3 (2013), 397–420.

17. Artemio Ramirez Jr, Erin M Sumner, and Jameson Hayes. 2016. Reconnect on Facebook: The Role of Information Seeking Behavior and Individual-and Relationship-Level Factors. *Cyberpsychology, Behavior, and Social Networking* 19, 8 (2016), 494–501.
18. Emanuel Sanchiz, Francisco Ibarra, Svetlana Nikitina, Marcos Báez, and Fabio Casati. 2016. What makes people bond?: A study on social interactions and common life points on Facebook. In *Collaboration Technologies and Systems (CTS), 2016 International Conference on*. IEEE, 26–30.
19. Theo Van Tilburg. 1998. Losing and gaining in old age: Changes in personal network size and social support in a four-year longitudinal study. *The Journals of Gerontology Series B: Psychological Sciences and Social Sciences* 53, 6 (1998), S313–S323.
20. Vivian Wood and Joan F Robertson. 1978. Friendship and kinship interaction: Differential effect on the morale of the elderly. *Journal of Marriage and the Family* (1978), 367–375.
21. World Health Organization. 2002. Definition of an older or elderly person: Proposed Working Definition of an Older Person in Africa for the MDS Project. <http://www.who.int/healthinfo/survey/ageingdefnolder/en/>. (2002). Accessed: 2018-01-19.
22. Cornelia Wrzus, Martha Hänel, Jenny Wagner, and Franz J Neyer. 2013. Social network changes and life events across the life span: A meta-analysis. *Psychological bulletin* 139, 1 (2013), 53.