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Do Seniors Find Digital Reminiscence Meaningful?
A User Study

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Abstract. Reminiscence as a mental and social process gains more meaningfulness when people get older. In this paper, we present a study of the needs and potential of a reminiscence digital tool to support well-being of seniors living at home. The results show that whilst reminiscence is perceived important social and family activity for the seniors, and they are quite familiar with using computers and Internet in their daily life, there still are challenges for the seniors to utilize digital tools for reminiscence. In particular, digital tools should support better the social aspects of reminiscence.

Keywords: reminiscence; digital tool; seniors; elderly; user study

1   Introduction

Grandma is sitting in the rocking chair and telling stories of her childhood to her grandchild. This is a familiar situation for many of us. Studies have shown that reminiscence interventions have an effect on psychological and psycho-social well-being of the elderly, for instance on life satisfaction, emotional well-being as well as cognitive performance [1]. Furthermore, engaging reminiscence with people with dementia provides an opportunity for health care staff to gain better knowledge of their residents, understand current behaviors and personality of their patients as well as facilitate communication in the care context [2,3,4].

Technology has proven to be a valuable trigger for supporting everyday reminiscence and practises around the reminiscing [5,6]. By using technology people have had access to rich and engaging multimedia reminiscence materials and for people with dementia, technology has offered opportunities participate to social interactions and take ownerships of conversations [7]. Various digital services have been created to gather people memories and life stories. For instance, TellAbout1[1] is a service to which families can privately share their photos and videos and create stories. In Book of You[2], people can create a life story using words, pictures, music and film to bring

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[1]   https://www.tellabout.net/
[2]   http://www.bookofyou.co.uk/

family, friends and carers together in one place. Muistikko[3] is a public memory bank where people can share their memories of their life in Finland.

It is however unknown how well elderly people take digital or online tools into use for reminiscence outside a therapy context. The potential user group should be quite notable: for instance in Finland, 53% of 65-74 years old Finnish citizens use the internet daily or almost daily [8]. But do elderly people find digital reminiscence service meaningful and useful for their personal use? The objective of this study is to explore the meaning and value of digital reminiscence for seniors still living at home. We set three research questions: 1) Is digital reminiscence interesting to seniors living at home? 2) What kind of uses of a digital reminiscence service the seniors find valuable? 3) What kind of challenges there are in digital reminiscence for the seniors?

We used two methods of investigation. First, we carried out two focus groups, one with seniors and another with homecare workers, who pondered digital reminiscence as part of homecare and from the perspective of seniors as homecare clients. Second, we recruited a group of seniors for a two-month field trial to use a digital reminiscence tool in their weekly group meetings. We interviewed the group and observed their using the tool. The study was carried out by using Epooq, an online reminiscence service as a tool to demonstrate digital reminiscence.

2   Epooq the digital reminiscence service

Epooq[4] is an online reminiscence service for storing and sharing personal memories and life experiences. Memories are stored as "treasure chests", which soar on the "sky" above the "clouds of memories" (Figure 1). The chests are filled with the memories "worthy of gold". A memory can consist of text, images, video or audio clips.

Fig. 1. The main window of the online reminiscence service (on a web browser)

The service allows the user to share the memories in public or for a certain group, or keep them private. The memories can be linked to different themes, events, periods or

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3   http://muistikko.finlit.fi/?locale=en
4   http://www.epookki.fi/home.html

locations and they can be searched by a particular topic. The scrollbar (on the right in Figure 1) can be used to navigate the time line for memories in the past (or future).

The service supports the user's reminiscing activity by suggesting topics or prompting questions related to certain themes. Also shared memories may work as stimulants for personal reminiscence.

3 Method and participants

3.1 Focus groups

To collect initial insight and feedback about digital reminiscence, we arranged two focus groups: one with seniors living at home, one with homecare workers. Both focus groups took place in a service centre for local elderly people, providing housing services and recreation and rehabilitation activities. The group discussions lasted about an hour. In the beginning, the Epooq service was introduced to the participants.

The senior group comprised of six elderly persons, three female and three male. Their ages varied between 68 and 76 years. And all had been retired at least six years. In addition, one volunteer of the service centre (female, 55 years old) attended the discussion. All but one used a personal computer and Internet daily or almost daily and one person used them 1-3 times per week.

The homecare worker group involved five females: two practical nurses, two home nurses and the service designer of homecare services of the municipality (a community health nurse). Their experience of care work was from six to 30 years. In this group, also one of the developers of the Epooq reminiscence service was present to give the introduction of the service.

3.2 Field trial

To collect user feedback based on real use experiences, a two-month field trial was arranged. A group of volunteer seniors participated using the Epooq service: 8-12 female seniors, 60-82 years old, who use to attend weekly handicraft activity meetings in a service centre for elderly people. The meetings usually lasted one hour and were coordinated by a senior volunteer. The group had been active for several years.

The trial consisted of eight weekly meetings, preceded by an introductory session about the Epooq service and purpose of the study. Eight reminiscence themes were pre-set for the weekly meetings: childhood, school time, important life events and celebrations, seasonal events, free time activities, work, home and home region, and societal/public events. In a group meeting, a volunteer member of the group acted as a coordinator and used a computer to enter the group's memories into a private community area in the Epooq service. The computer display was projected on a big wall screen for others. In the last meeting, the group's use of the service was observed and the participants were interviewed in the group. The coordinator was interviewed also individually.

All group members were offered a possibility to use the service also with a personal id, but only the coordinator tried the service independently at home during the trial.

4 Results

4.1 Senior focus group

The senior group found the digital reminiscence interesting especially for storing their memories to their grandchildren and other future generations. In particular, collecting and sharing the stories of family and other relatives was seen important. Some memories could be public, for instance those which are related to major occurrences in the society such as war: photographs and stories of war time. Also old family traditions were seen important. The participants suggested that the primary users would be children, grandchildren or other close members of the family and who would be able to manage the technology, seldom the elderly persons themselves. The service would however be used by the elderly persons themselves to browse memories together with the family and friends. The participants were interested in memories of the following kinds: funny memories, childhood activities, celebrations and parties (and also less pleasant social events such as funerals), historical events of the family, travels, and public events or occurrences (e.g. war, national events, sports events). The possibility to choose between public and private memories and to be able to delete a memory was found important. The user interface of the online service was perceived as clear.

4.2 Homecare worker focus group

The participants discussed using digital reminiscence as part of homecare activities (used by or with a homecare worker) and from the perspective of their (senior) homecare clients. The clients were mainly 65+ years old (average 80-85 years) with varying physical conditions. According to the participants, they rarely have computers, tablets or smart phones, or other technologies such as activity wristbands. Some have assistive technologies such as a safety wristband or an automatic medicine dispenser. Usually their family members provide and help with the technology. The participants agreed that persons suffering from memory problems can learn to use technology if given a chance. The technology needs to be very simple and easy to use.

The idea of digital reminiscence was perceived positive as it would help to create and store stories of the elderly person, bring happiness to elderly suffering from dementia, and help the care worker to know about the history and person of the client. The participants found that the Epooq service should be clearly focused to recreation instead of being part of care work. There are therapy-centred methods that utilise reminiscence and the digital reminiscence tool was preferred not to overlap too much with these. The primary user of the tool would seldom be the homecare client her/himself but a family member. Also a homecare worker could be the primary user but the participants were concerned that the role and duties of a care worker are different from family members, making the use more problematic (see below).

A particular issue of discussion was the vulnerability of the elderly as users of technology, especially considering use of private and possibly sensitive data. First, many elderly persons of today fear technology – the reminiscence service was seen more potential for the elderly of the future. The fear or timidity may concern not just

technology but also the person that would be the primary user to record memories into the tool. Letting somebody to use the service for the elderly person requires trust. Second, the elderly person needs to understand clearly who has access to her/his memories in the digital service, and what happens to them when the elderly person passes away. Third, homecare workers as primary users have a confidentiality agreement as part of their work. But care-related information they need to share with other workers. How should they deal with the memories in the service? Also, care workers want to respect the privacy of their clients. The participants felt that they hurt the privacy of the client by just entering to her/his home. They would not like to cross another privacy border as primary users of the reminiscence service.

4.3 Field trial

The participants used the Epooq service in each weekly meeting, the primary user being the volunteer coordinator of the group. She recorded seven "treasure chests" i.e. group memories into the service. They were given names such as *Memories from the first grade*. Each of them included several "sub-memories" i.e. short stories, for example: *Ritva's handicraft phobia: We knitted socks and I made a mistake when knitting at home. I asked advice from the teacher. She unravelled the whole sock. I lost my enthusiasm for knitting for years.*

In the beginning of the trial, many of the participants were slightly suspicious about both the reminiscing activity itself and using an online service to support it: they doubted that their memories are interesting to no-one. But in the end of the two-month trial, most of them found the group reminiscence sessions very valuable as a social activity: they had enjoyed sharing their personal stories in the group, they had had fun and laugh while reminiscing and had learnt new issues about each other and the history. However, the participants did not find the online service supporting well their reminiscence. Partially this was due to usability and user experience issues in the service, as it was compared to well-known social media platforms (e.g. Facebook). Furthermore, whilst the participants found the *group reminiscence activity* to be meaningful, they were still unsure whether the stored *memories* are of importance. In the group meetings, the participants sometimes returned their earlier memories in the service to continue reminiscing about the same topic, but they were not willing in using the digital service by their own to store and browse personal memories without the social group activity. Only the coordinator was interested in using the service for storing personal images with stories. The group however discussed that the personal memories could be used i.e. in schools when teaching history for children, or historians could use the material as part of their work. These were found as valuable uses.

5 Discussion

The results show that reminiscence is an important activity to seniors also outside therapy contexts. In this study, reminiscence is valued as a social activity, to share memories and traditions with others, family in particular, and to future generations.

Digital reminiscence is interesting as far as it supports the social relationships or communication. In the focus groups, the meaning of the digital reminiscence was seen as a recreational activity to share personal and family memories within the family and friends. Digital reminiscence service can also indirectly support social activity by connecting seniors who are not so familiar with new technologies to their more technology-savvy children and grandchildren: often the primary user of the digital reminiscence service was seen somebody else than the senior her/himself. In the two-month field trial, a group of seniors found reminiscence as an important social activity but generally were not willing themselves to use the online service to store and share their memories. Digital tools should especially support the social nature of the reminiscence activity for seniors to find it meaningful. For instance, involving family members, schools and historians to provide uses for he digitally shared memories might increase the acceptance of digital reminiscence. High usability and user experience are important as also seniors are increasingly using widely spread social media services and may set their expectations for usability based on those.

6   Acknowledgements

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