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Enhancing Older Adults' Digital Inclusion Through Social Support: A Qualitative Interview Study

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Introduction

This chapter examines the connection between social and digital inclusion by highlighting the process of acquiring support for digital technology use among older adults in Finland. The chapter illustrates that acquiring

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support for digital technology use is a reciprocal process that both enhances and requires digital inclusion. Despite the fact that older adults' access to digital technologies has increased in recent years, adults aged 65 and above still engage with digital technologies in a less versatile way in comparison to younger adults, even in countries that are considered advanced in digital development (Friemel, 2016; Hargittai et al., 2018; Statistics Finland, 2018). Key challenges related to digital capabilities among older adults include the availability of social and personal support, changing personal interests in later life and physical difficulties in operating digital devices (Quan-Haase et al., 2017).

In order to engage actively with digital technologies, older adults may benefit considerably from social and technical support from other people who share their everyday lives and lifeworld, within or outside the same household. In contemporary Western families, it is typically one or two family members who serve as warm experts (Bakardjieva, 2005; Taipale, 2019) providing help and support in digital technology use (Eynon & Helsper, 2015). In contrast to professional ("cold") experts, warm experts include younger family members, grandchildren, and sometimes same-age partners or older family members who provide assistance in installing devices, repairing software, demonstrating new technological possibilities or providing peer support in connection with digital technologies (Taipale, 2019). Along with ageing, social and personal relationships may encounter changes, thus transforming the dynamics of receiving and providing social support (Bildtgård & Öberg, 2017; English & Carstensen, 2014; Liu & Rook, 2013; Lüders & Gjevjon, 2017). In light of this, we argue that the decreasing amount of social support that is available to older adults, combined with increasing demands on such support in everyday life, significantly affects the relationship between social and digital inclusion in later life.

The research material is based on 22 participant-induced elicitation (PIE) interviews conducted in 2018 with older adults between the ages of 57 and 89 residing in newly built senior apartments in Central Finland. We aim to identify older adults' experiences with digital technologies, and the help they have received in relation to these experiences. In this context, we ask (1) what is the process for older adults to acquire social support in digital technology use and (2) what are their needs and experiences in the process of acquiring support that enhances their digital inclusion?

Our analysis shows that social support in technology use reinforces digital inclusion by ensuring older adults' access to technology, catering

for their positive approach towards technology and improving their skills and abilities to use digital technologies independently. We argue that the connection between digital and social inclusion also operates the other way round. Digital inclusion is required for older adults to be able to gain social support, but difficulties and differences between older technology users may appear due to older adults' experiences and their need for a certain type of support.

This chapter first discusses existing literature evidence on the role of social support in digital inclusion in relation to older adults' needs for support. This is followed by a presentation of the interview-based PIE method and field research. The results section presents the different stages of incorporating social support for digital technology use and the needs older adults have in relation to this process. In the conclusions, we draw together the findings regarding the relationship between social and digital inclusion by showing how the process of acquiring social support is connected to access, skills and approaches towards digital technologies among older adults.

The Role of Social Support in Digital Inclusion

Social support is considered one of the most relevant factors enhancing older adults' digital inclusion (Courtois & Verdegem, 2016; Piper et al., 2016; Quan-Haase et al., 2017; Tsai et al., 2017). *Digital inclusion* in turn can be defined as procedures and practices used in everyday life for reconciling subjectively experienced digital divides (e.g. Gingrich & Lichman, 2015; Helsper, 2017). It entails the ability to adopt digital technologies and to use these technologies in everyday life contexts (e.g. Selwyn et al., 2003; Tsatsou, 2011; Seifert et al., 2018). Studies consistently show a clear divide in digital technology usage between people from different age groups, indicating lower levels of adoption and use among people aged 65 and above (Friemel, 2016; Hargittai et al., 2018). In order to overcome challenges regarding digital technology, older adults benefit especially from the social support of their immediate social networks, which enhances their engagement with digital technologies (Eynon & Helsper, 2015; Selwyn, 2004a).

Social support, indicating the amount of emotional, informational and instrumental support provided by the members of the immediate social networks (e.g. Taylor, 2011), is pronounced in digital technology usage in several ways. For instance, Stewart (2007) argues that social support—the

investment by and exchange of expertise of people who are more knowledgeable than others—plays an important role in digital engagement. Social support enhances digital technology use by providing access to information, helping others with their adoption of new technologies, assisting in interpreting the meaning of new technologies in daily life and providing practical support in the use and upgrading of digital technologies (Courtois & Verdegem, 2016). The characteristics of support given by members of social networks nevertheless vary. For instance, family support is associated with tangible support in giving instructions for use, as well as emotional support in encouraging and persuading people to use digital technology. Workplace and peer support relate to more structured support of use for those older adults who remain active in working life (Courtois & Verdegem, 2016; Day et al., 2012). Both sources of support can entail positive and negative implications in the context of digital engagement. Family support extending from children to parents (Correa et al., 2013) or from grandchildren to grandparents (Barbosa-Neves et al., 2013) endorses the development of digital knowledge and skills, but only if family members are available and willing to help (Courtois & Verdegem, 2016). Peer support, on the other hand, is efficient if it is provided by a person from the same reference group to the person receiving help (Lin et al., 2010). For instance, help may be impactful when received from a friend or a colleague who shares similar challenges with digital technologies. Although workplace support can increase the motivation to use digital technology, it can create at the same time stress due to the increased requirements (Day et al., 2012).

By definition, social support indicates one form of *social inclusion*, that is, the involvement in and attachment to networks that give a person access to the knowledge and support of others. Research shows that the usability of socio-technical systems has a formative role in social inclusion (Choudrie et al., 2017; Tsatsou et al., 2017). The connection between social and digital inclusion is, nevertheless, shaped by personal access, skills and attitudes (Helsper, 2012). *Access* is needed for a person to start using the device; by applying *skills* a person operates the device (Livingstone & Helsper, 2010); and certain *attitudes* promote engagement with the device (Selwyn, 2004b). Variation in these personal abilities, needs and expectations underline the great challenge of social inclusion in a digitally connected society (Zamani, 2017).

Older adults constitute a divergent group of technology users whose digital skills and the need for social support are often associated with other

socio-demographic factors beyond age. Despite this, older adults may have specific intentions and expectations of acquiring social support in the context of digital technology use. Older adults can, for example, have an increased need for social support while at the same time their possibilities to find or to benefit from that support may be limited at the later stages of life (English & Carstensen, 2014; Lüders & Gjevjon, 2017; Quan-Haase et al., 2017). The availability of social support may be connected to social and personal relationships that often encounter some changes, either in the form of increasing or decreasing social contacts (e.g. Bildtgård & Öberg, 2017; Kuoppamäki, 2019; Lüders & Gjevjon, 2017). In contemporary societies, traditional social and personal relationships have become less normative, indicating a large proportion of older adults living without grandchildren, or without daily contact with grown-up children, which is not necessarily associated with social isolation or experience of loneliness as such (Waycott et al., 2019). Therefore, the amount or quality of social networks does not necessarily reflect older adults' ability to gain or benefit from social support in digital inclusion.

Research Material and Methods

The research material consists of participant-induced elicitation (PIE) interviews conducted among older adults aged 57–89 living in newly built senior apartments in Central Finland ($N = 22$) between November and December 2018. The research data also includes one interview with an elderly couple, bringing the total number of interviewees to 23. All interviewees were recruited by a housing association that specialised in providing communal housing services to older adults over the age of 55 in need of a variety form of support in daily matters. Fourteen of the interviewees were female and nine were male. The interviewees consisted of both those who lived with a spouse and those who lived alone.

The research material comprises qualitative interview data and photographs that were collected from the interviewees. The main themes of the semi-structured interviews conducted with PIE included how and what kind of digital technology was used by the interviewees in their daily lives and what kinds of problems and benefits they have experienced with digital technologies. All interviews were recorded, and they lasted on average about 60 minutes. Each person participating in the study was asked to select a device or software they use in their everyday life prior to the interview, which was then photographed by the researcher (Bignante, 2010;

Epstein et al., 2006; Hänninen, 2020, Hänninen et al., 2021). This visual material documenting the older adults and digital technology provided a concrete point of reference for the interviewer to contextualise the experiences of the interviewees (Collier, 1957; Hänninen, 2018; Harper, 2002) and make the interviews more personal (Hänninen, 2018; Kaufmann, 2018; Padgett et al., 2013; Symons Downs, 2019). All interviewees had a smartphone or basic mobile phone at their disposal. It was also common that the older adults participating in the study used a computer, laptop or smart television on a daily basis.

Many aspects of digitalisation are often embedded in the daily life of the person participating in the study (Hine, 2015; Ling, 2012). Therefore, without focusing on the practical side of technology use, these aspects might escape the fieldwork altogether. This is evident not only with many of the devices used by older adults but also with the numerous applications most technology users have installed on their smartphones and other devices today without giving them much thought. As we had no opportunity to do observation during the fieldwork in the traditional sense, PIE provided us with the necessary methodological tools, and thus methodological validity, to compare what older adults said they were doing while using digital technology with how they actually used it (Hänninen, 2020; Hänninen et al., 2021). The device or software chosen for photographing was explored together with an interviewer during the interview to gain better insight into their digital technology use.

The data analysis followed the principles of inductive content analysis (Elo & Kyngäs, 2007) that were applied through systematic categorisation. In the first phase of the analysis, the interview transcripts, amounting to 372 pages, were read through and categories describing social aspects of digital technology usage were formed inductively. This resulted in the formulation of six categories (needing help in technology use, asking for help in technology use, receiving help in technology use, using technology to maintain social connectedness, co-use of technology with others, co-use of technology in public places). In the second phase, three of the six categories that were related to the process of acquiring and receiving social support for digital inclusion were included in the analysis. This resulted in 46 pages of text and 3 categories, namely needing, asking for and receiving help in digital technology use. In the final phase, these three categories were further thematised, to identify the heterogeneity of older adults' experiences in the process of needing, seeking and receiving support.

Acquiring Social Support for Digital Inclusion Among Older Adults

Experience of (In)Adequate Skills: Needing Help in Technology Use

During the interviews, older adults actively shared experiences of the difficulties they encountered in technology use. Even though interviewees had incorporated digital technology into their daily lives, they still encountered difficulties using devices and applications, keeping up with digital development and remembering how to make use of the myriad of technical information already at their disposal. There were also interviewees such as Sam, 72, who stated he simply does not have adequate skills and the knowhow to use digital technologies: "It [technology use] depends on how my brain can take it [advice] in. (--) If I can't get my head around it or I can't remember it, then I just need to ask for help again." A similar experience was also apparent in the case of Anna, 74, who also described the difficulties of learning new information: "It's just when you don't learn anymore. You can't learn anymore, and it makes me feel anxious because I can't do it. I feel helpless."

For many interviewees, these difficulties seemed to be associated with learning new information, in particular. Many shared experiences of feeling challenged learning new things. Although most interviewees had one or more warm experts at hand, the quality and characteristics of support had a strong impact on their learning process. In practice, this means that they had expectations related to the availability and form of help, as described by Maria, 78: "I just need some help quickly, but then when somebody actually gives me advice, it should take place really slowly. (--) I need the help in written form so that I can revisit the advice at home. (---) So that I could browse through it and see how it was supposed to go."

Many interviewees experienced a relatively strong need for help in technology use and it was evident that not all of them could use digital technologies by themselves. Nevertheless, a considerable number of the interviewees clearly expressed a personal need to manage to use technologies without external support. Others argued that they had not encountered any problems, that using digital technologies was generally easy or that they had managed to follow the general instructions. However, as a general note, managing to use digital technology independently was regarded as an important skill despite the potential difficulties.

The need for help was identified especially in social situations where the interviewees compared themselves with the younger people in their immediate social networks (see also Colombo et al., 2018). Older adults evaluated their own digital skills in relation to the skills of their children and consequently felt less knowledgeable about the digital world (see also Quan-Haase et al., 2018). These reflections were usually conducted in social situations involving interaction with computers or other technical devices. For example, when younger people were playing with computers, the interviewees noticed their own inadequate skills, as described by Olivia, 71: "It's amazing when, the girls, just started school [at approx. 7 years old], and the boy, he's on third grade [approx. 10 years old], they are so much better in all technical activities than I am."

Older adults' accounts on not needing support in digital technology use can, in fact, indicate limited technology use. Some interviewees, like Vilma, 89, mentioned that they had not experienced any difficulties with digital technology, except, for instance, when needing to buy a new battery for the device. Vilma also mentioned that she had never had any problems with her smartphone. However, later in the interview, it turned out that she only read SMS messages but did not send them herself. She liked to carry her smartphone only for immediate safety:

> I can do it very well by myself, I don't need any help. I know how to charge it [the mobile phone]. When it shows that the battery starts to get low, that's all there is to it. I just take care of that. I always carry the mobile phone with me just in case I fall. It's for my safety.

The interviewees who had never experienced any problems with digital technology argued that they had also never downloaded any applications or programs or played mobile games. In this respect, one could describe their technology use as rather simple in style. The need for help regarding technology use was considered to be a question of self-efficacy: an effort in trusting in one's own abilities and the willingness to manage technological challenges independently, whether the actual use was frequent or not. Independence was highly valued, regardless of the perhaps slightly contradictory finding that many of the interviewees occasionally accepted help from others.

Asking for Help in Technology Use

Older Adults Asking Warm Experts for Help

Older adults generally have two kinds of resources at their disposal while seeking help in using digital technologies: family members, friends or other close acquaintances (warm experts) and professional resources, such as helpdesks and customer services (cold experts) (Bakardjieva, 2005). In almost every case, the interviewees preferred asking their friends for help over asking their acquaintances or unknown persons. The interviewees frequently mentioned various members of their immediate and extended family network, ranging from their own children and grandchildren to the spouses of their children. Sofia, 57, regarded her grown-up son as the most important source of support in installing new digital devices, fixing technological problems or helping with updating the software:

> My devices are updated by Eetu [the adult son], he has installed new programs for me. Every time I have problems, I always contact him, and he knows immediately [laughs] what to do. For me [technology is difficult to understand] but not for him.

Asking grown-up children for help was a natural choice for interviewees who had children. In more general terms, however, receiving social support from grown-up children depends on how much the children are involved in older adults' lives, or whether the family relations are close or distant, beyond digital matters (Kuoppamäki, 2019; Taipale, 2019). Although interviewees mentioned their grown-up children as the most frequent source of social support, there was a lot of diversity in the details of exactly how their children helped them with digital technology. Most interviewees had received some help from their grown-up children, such as installing new programs. However, those interviewees who were frequently in contact with their grown-up children and their families asked for help more often, which in turn seemed to result in receiving more help. In addition, the persons supporting older adults did not necessarily possess good digital skills or have the opportunity to be physically available. Requests for help were most likely directed to a person with whom the older adults had a close relationship, regardless of the digital skills or the age of the warm expert.

The tight connection between social and digital inclusion was highlighted in the interviews in many ways. Being able to ask family members,

friends and close acquaintances for help can indicate that there is a perceived connection and attachment among older adults and their grown-up children. Interviewees experiencing a strong sense of social support generally expressed a more nuanced use of digital technologies, regardless of their lack of digital skills or the number of problems they had encountered. Additionally, social support can advance digital skills and the ability to solve digital problems independently later on or along the way, as demonstrated by Sara, 64:

> My son-in-law (--) I have no one else to call, from him I usually, or if he cannot help, then I get help from somewhere. Last summer I bought a Chromecast and I managed to install it by myself with my old mobile phone, but after I bought a new phone, I could not do it anymore, so I asked my son-in-law for help. He gave me some advice and then I managed to do it.

A limited number of close relationships was clearly connected to the risk of being digitally excluded. The interviewees who had only a few close relationships in their daily lives rarely described experiences of using technologies in social situations, or alternatively they described their technology use as rather simple. Interviewees with many close contacts appeared more relaxed when asking for help in technology use, as in the case of Stella, 78: "I call my girlfriend [laughs], and I can really call her anytime. If I have a problem, then I go to my neighbour (--). In my last apartment I had a good co-worker living in the same building too."

In many cases, the connection between social and digital inclusion was strengthened when asking for help was associated with other social activities. In fact, some interviewees reported that they asked for help in digital technology use in order to meet their family members: technical support was used as an excuse for meeting their grown-up children a bit more often. For example, Ida, 69, mentioned that she did know how to operate her television, but she liked to ask her son to come over and fix something so that they could have coffee together:

> My son is [helping me] with everything, for example, with the television. I can't do it myself, and he's friendly and comes over (--). I'm always asking him to come over, so that's one reason for him to come. It's a "kill two birds with one stone" kind of situation; he visits, and we have a coffee (--) and that's the reason for him to come over, the real reason.

According to the analysis, help was not always asked for because it was truly needed, but because it maintained connectedness. Thus, it can be argued that asking for help increased both social and digital inclusion. Some interviewees, for example, used social media to ask help from family members and friends in order to solve technological problems or to receive advice regarding technology use. This kind of activity took place even among older adults with good digital skills: digital technology was used creatively to strengthen social contacts as well as digital inclusion.

Older Adults Asking Cold Experts for Help

In addition to family members and friends, the interviewees also sought professional support from helpdesks or customer services. Although these cold experts were not considered as important as warm experts, they were still a frequent source of support in digital inclusion. The main reason to rely predominantly on family members and friends, and only secondarily on professional resources, was related to financial issues. Most interviewees who discussed using cold experts as a resource for support mentioned high costs as a major obstacle to relying on them. As Leevi, 82, said, cold experts are mainly used if there is no other form of support available: "I've sometimes asked for help from outside, when I have been somewhere far away, and that has been the only option." Sofia had a similar experience:

> These [the help desk service] came with the devices (--) what's that thing that you can call for help – helpdesks and such, but they are so expensive and cost a lot, so I won't call them if I can get the service for free from somewhere else.

Also, similar to other digital technology users, asking cold experts for help was sometimes a frustrating experience for older adults, who found it difficult to communicate with IT support professionals (Courtois & Verdegem, 2016). Interviewees expressed their annoyance about waiting and the lack of personalised help, in particular. On the other hand, the main reason for the interviewees to rely on professional sources of help related to their efforts to maintain independence. Many interviewees did not want to be a burden on their family members and friends, and they wanted to solve technical problems on their own. Cold experts were used for solving specific problems, rather than as a source of general advice. Ella, 84, for example, wanted to get help in buying train tickets with a smartphone:

> It has to be personal guidance and advice, so that they [cold experts] would take a look at the individual problems. If I buy a train ticket, I would like to know how to open it and get it on the screen of your mobile phone.

Regarding digital support from cold experts, some interviewees found the "consumer-centric approach" of asking for help successful and described their experiences with customer service in positive terms. In these cases, older adults had received a solution to their specific problem, or they were themselves active in pursuing and developing their skills in using digital technology. For example, when the older adults were acquiring new technology and were interested in comparing software, and when the customer service took this into consideration and provided specific advice, the overall experience of asking for help was positive. This was demonstrated in the example of Linda, 66:

> I have asked [for advice] from the stores. I like to do comparisons on the internet, like mobile phones, whether to buy Sony or some other brand. There are a lot of different models that are hard to understand (--). Then I just asked [from a salesperson] whether I can call with this one. Because I still like to call people. But I have received some really good advice. When I bought this one, I was given excellent advice.

The feeling of being digitally included and hence able to ask for help with digital matters has a positive bearing on the feeling of social inclusion. When older adults had the opportunity to ask for help and successfully received it from IT professionals, their chances for broader social communication improved as well. Their practices of seeking help from cold experts included buying new smartphones to improve communication with family members and helping in the use of online banking services to ensure independent living. As Linda's example shows, the interviewees reported that being digitally included can have a positive impact on social inclusion in the form of enhanced access to social networks. However, experiencing these benefits happened only in cases where asking cold experts for help was successful.

Ensuring Access: Receiving Help in Technology Use

The final step in the process of acquiring help was that of receiving help, which interviewees discussed especially in the context of getting access to

devices and using or starting to use devices. Many interviewees discussed their decision-making process and highlighted their individual preferences in accessing technology. For others, the decision to acquire digital technology was conducted with warm experts involved in decision-making, as the example of Sofia demonstrates:

> My brother gave me that Lumia. I think that I learned the Lumia more easily, and it was easier than the Samsung (--). But I had a digibox just because I really needed it (--) I had to get it, when Eetu [Sofia's son] moved away, and I had no computer (--) My brother is interested in digital technology and all these laptops, so he always buys a new one and gives me his old ones.

Although most interviewees had made the final decision to acquire new technology themselves, the process of getting access to the new technology was preceded by encouragement from warm experts. If technology was acquired for collective use, the decision was made together with other family members. Similarly, in personal contexts, adult children encouraged or occasionally even pressured interviewees to buy new technology to ensure social inclusion—that is, the possibility of maintaining social communication. To be included digitally, older adults needed reinforcement from warm experts, whose role was to identify cases where older adults were at risk of becoming digitally excluded. Therefore, grown-up children, having more up-to-date knowledge of digital developments, could provide information and skills that the interviewees did not have themselves. This is what Ella indicatively described regarding her situation:

> We decided together, my husband and I, that we really need that [new mobile phones], we have received new versions of these mobile phones, and in [that process] it has been our children, grown-up children, who have pressured us, that you have such old phones that we can't contact you. Your phones won't ring anymore.

When discussing the help received in device usage, interviewees mentioned how warm experts managed the whole installation process so that the device was ready for them to use. This was especially clear in cases where the interviewees were feeling lonely or socially isolated, since, along with ageing, some interviewees had started to experience loneliness and a loss of independence. While warm experts provided a lot of training and support in the usage of digital technology, the interviewees gradually

became more dependent on warm experts. The interviewees experienced challenges in expressing their concerns in digital issues. The help received from warm experts in such daily matters thus resembled general personal and emotional support. Aaro, 78, described the difficulties in getting help and the feeling of being left alone:

> The Sharp [computer], I have, it was my son who programmed and installed it. They tried to do it in the store, but it wasn't working. (--) There were no people at the store helping me (--) I don't know why they didn't give me an appropriate printer there. They just want to sell you [stuff] (--) if you don't keep a tight rein on them there [laughs].

Our analysis underlines the fact that older adults experience challenges that lower the chances of keeping up with complicated digital advancement. Ageing also increases the risk of feeling lonely and socially isolated (see also Cattan et al., 2005). Many interviewees had a limited number of warm experts available in their networks to provide personalised assistance. Social isolation can also lead to a situation where there are fewer opportunities for digital inclusion. The same is true vice versa; a certain degree of digital inclusion is required to provide the necessary infrastructure for social inclusion in the digital era, which underlines the reciprocal relationship between the two forms of inclusion. This reciprocal connection between social and digital inclusion was strengthened as a result of support received from warm experts to whom older adults preferred to turn for in receiving help in the access and use of digital technologies. Even though older adults asked for help from cold experts, they regarded it as less beneficial and accessible than help received from warm experts.

Discussion and Conclusions

In this chapter, we have examined the process by which older adults residing in senior apartments in Central Finland acquire social support facilitating their digital inclusion in everyday life. Our analysis covered both older adults who admitted a need for help and received social support and older adults who expressed less or no need for assistance in technology use during the interviews. Drawing from the analysis, it was characteristic of the interviewees that they had started to engage with digital technologies but were not (yet) very advanced users in terms of the frequency and scope of digital engagement. The fact that they had all recently moved to senior

apartments may reflect the interviewees' preparedness for old age and their readiness to seek and receive support in daily matters, including digital technology use.

Our study confirms that warm experts are the most significant source of social support that improves older adults' digital skills and approach towards digital technologies (Courtois & Verdegem, 2016, Taipale, 2019). Additionally, the study contributes to knowledge about digital inclusion by addressing the process of acquiring support in relation to older adults' own perception of their skills, approaches, access and usage experiences (Colombo et al., 2018; Helsper, 2012; Quan-Haase et al., 2018). Regarding the need for help, warm experts help older adults identify the skills or situations they most need help with by providing an opportunity for reflecting on their relationship with technology. Regarding asking for help, warm experts provide a source of social attachment that increases older adults' own interest and motivation in the context of digital engagement. Similarly, cold experts were asked for advice in more specific technical issues, of which solving helped maintaining and facilitated social connections. In receiving help, warm experts support social and digital inclusion by providing both technical and non-technical assistance and thus decreasing the challenges some older adults might experience in the course of ageing.

Based on these findings, we argue that social support is an important element in shaping and establishing the connection between digital and social inclusion. Our analysis suggests that the relationship between digital and social inclusion is genuinely reciprocal: immediate social networks, warm experts in particular, serve as a key source of emotional, informational and instrumental support enhancing access to and use of digital technologies in later life. To an increasing extent, digital inclusion is becoming a precondition for maintaining and nurturing significant relationships that are at risk of vanishing as people get older. Although the relationship between social and digital inclusion is well acknowledged (Colombo et al., 2018; Courtois & Verdegem, 2016; Helsper, 2012; Quan-Haase et al., 2018; Taipale, 2019), our research adds to this knowledge by showing that the relationship between digital and social inclusion especially benefits those older technology users who already exhibit a good level of social connectedness.

The interview material reveals older adults' desire to be able to use digital technologies independently. The desire to age without external assistance in technology use was especially explicit among those who did not

receive any technical assistance or who had very little assistance at their disposal. For those who received assistance and found it significant, this independence resembled a need for autonomy, individuality and the willingness to make decisions for oneself. In the Finnish context, this need can be interpreted through the cultural ethos of "coping independently regardless of the circumstances"—a concept of self-sufficiency that has been transmitted from the Baby Boomer generation (Karisto, 2007) of an agrarian society to modern urban life (Kortteinen, 1992).

Our research also raises questions concerning the connection between social and digital inclusion from an ethical perspective. To prevent social and digital exclusion, many policymakers in Finland and other countries call for increased digital inclusion for all by improving the usability of digital public services (see also Choudrie et al., 2017). Digital inclusion undoubtedly increases social inclusion for older adults, but some older adults may prefer securing social connectedness without digital interaction. This could be the case for an older person aged around 90 who is content with only reading SMS messages, and not experiencing the need to send text messages herself. For this age group, maintaining the feeling of independence, individuality and autonomy, as well as the ability to sustain a meaningful physical and face-to-face connection is of utmost importance. This should be taken into consideration in the digital design of public services, as well as deployment of new applications, devices and technological systems in the everyday life of older users.

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