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Article

Older Adults Learning Digital Skills Together: Peer Tutors' Perspectives on Non-Formal Digital Support

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Abstract

In later life, digital support is predominantly received outside of formal education from warm experts such as children, grandchildren, and friends. However, as not everyone can rely on this kind of informal help, many older adults are at risk of being unwillingly left without digital support and necessary digital skills. In this article, we examine non-formal digital support and peer tutoring as a way to promote digital and social inclusion through the acquisition of necessary digital skills. First, we ask: (a) What is peer tutoring, in the field of digital training, from the peer tutors' point of view? Then, based on the first research question, we further ask (b) what are the key characteristics of peer tutoring in relation to other forms of digital support? Our thematic analysis is based on semi-structured interviews ($n = 21$) conducted in Central Finland in 2022 with peer tutors aged between 63 and 84. Peer tutors offered individual guidance by appointment and also supported their peers in group-based settings. Based on our study, we argue that from the peer tutors' point of view, being a peer entails sharing an age group or a similar life situation and provides an opportunity for side-by-side learning. Although every encounter as a peer tutor is different and the spectrum of digital support is wide, these encounters share specific key characteristics, such as the experience of equality between the tutor and the tutee that distinguishes non-formal peer support from formal and informal learning.

Keywords

digital inclusion; digital skills; informal learning; non-formal learning; older adults; peer support; peer tutor

Issue

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1. Introduction

Although older adults cannot be addressed as one homogeneous group and their use of digital technologies and digital skills vary, there is still a substantial number who face the risk of digital exclusion due to poor digital skills (Reneland-Forsman, 2018; Schirmer et al., 2022). Digital technologies can have a positive impact on the lives and well-being of older adults (Forsman & Nordmyr, 2017; Hill et al., 2015; Seifert et al., 2021), whereas the lack of digital skills may prevent the use of digital technologies thus limiting older adults' possibilities to access and manage their data and participate in online activities (Takagi

et al., 2014). As new digital technologies are continuously emerging, a certain level of digital skills is required to gain access to essential digital services (Bhattacharjee et al., 2020; Llorente-Barroso et al., 2022) and be an active citizen of society (Urbina et al., 2022).

European Commission has measured citizens' digital skills in member states since 2015. In 2022, a new version of the *Digital Skills Indicator* was introduced, including five specific areas: information and data literacy, communication and collaboration, digital content creation, safety, and problem-solving (European Commission, 2022). Reflecting this, digital skills extend beyond their functional definition related to the use of

digital devices and tools. For instance, digital skills can refer to the ability to navigate, filter, and evaluate information online successfully, but it also involves digital social skills, such as the ability to interact online (Saari et al., 2022). Furthermore, digital skills are acknowledged as fundamental civic skills in a rapidly-digitalizing society (Ilomäki et al., 2016), where the functionality of everyday life depends on digital technologies (Hänninen et al., 2022).

According to previous research (Hargittai & Dobransky, 2017; Olsson & Viscovi, 2018; Takagi et al., 2014), older adults frequently struggle to familiarize themselves with digital technologies due to insufficient digital skills and limited support systems. However, older adults' use of digital technologies has increased in recent years (European Commission, 2020), raising the need for organizing digital support (Pihlainen & Ng, 2022). In Finland, widely acknowledged as one of the front-runners in the field of digitalization (European Commission, 2022), 73% of people aged 65–74 had used online banking during the past three months in 2019, a number that grew to 82% by 2022 (Official Statistics of Finland, 2023). Similarly, 21% of Finns aged 65–74 and 7% aged 75–89 had shopped online in the past three months in 2019 (Official Statistics of Finland, 2023); by 2022, the corresponding percentages had grown to 35% and 13%. Reflecting the increase in the use of digital technologies, it is important to recognize that the Covid-19 pandemic may be a significant factor behind the development as social isolation affected the use of digital technologies (Llorente-Barroso et al., 2022; Rasi-Heikkinen et al., 2022).

Regarding the research on the use or non-use of digital technologies, older adults are typically defined as those aged 65 or older (Hunsaker & Hargittai, 2018; Rasi-Heikkinen et al., 2022). This definition is supported by recent statistics (Official Statistics of Finland, 2023) that indicate individuals over 65 use digital technologies less frequently than younger age groups. In the present study, we use the age of 65 years or more as the definition of an older adult, as it is also the common retirement age among the EU member states (Finnish Centre for Pensions, 2022). In addition, the majority of participants in this research fell within this age range except for one who was only slightly below the threshold at 63 years old. However, it is essential to acknowledge that defining older adults exclusively by their chronological age has limitations, as it does not consider environmental factors, family status, or a person's perception of their health (Escourrou et al., 2022).

In later life, digital support is predominantly received outside of formal education from warm experts such as children, grandchildren, and close friends (Gallistl et al., 2020). However, previous studies (Mehraeen, 2017; Pihlainen & Ng, 2022) have shown that digital support from warm experts or other younger people may not always meet the needs of older adults. Even though digital support received from family and friends has posi-

tive features, including in-depth knowledge of the novice user (Hänninen et al., 2021), informal support cannot replace more formal training when it comes to the acquisition of new digital skills (Gallistl et al., 2020).

Concerning learning digital skills, a peer tutor is commonly defined as a person who volunteers and offers digital support to a person in the same age group and in a similar life situation (Takagi et al., 2014). In more detail, it refers to a situation where a more experienced person supports someone less proficient in digital technologies. Peer tutoring has proved to be an efficient and preferred method of learning digital skills in later life (Aavikko et al., 2022), as besides other features, peers do not use excessive jargon that may be too difficult to understand (Takagi et al., 2014) and digital support is offered with a calm pace (Kärnä, 2022).

This article aims to introduce a new perspective on peer tutoring and non-formal learning as a part of older adults' acquisition of new digital skills. Non-formal learning refers to an organized activity provided outside the formal educational system by a wide variety of institutions and different organizations (Merriam & Baumgartner, 2020; Ross-Gordon et al., 2016). There is a proven need for non-formal digital support (Pihlainen & Ng, 2022), as older adults are often obliged to rely on the digital support received from family and friends (Gallistl et al., 2020). Previous studies have produced important information on older adults as users of digital technologies (Hunsaker & Hargittai, 2018; Quan-Haase et al., 2018), as well as sources of digital support, such as warm experts (Hänninen et al., 2021; Martínez & Olsson, 2022), and different digital support needs of older adults (Hänninen et al., 2023; Hunsaker et al., 2019). However, less is known about the quality of peer tutoring, its key characteristics, and the reasons why older adults find value in helping each other and receiving support from their peers rather than younger people.

This research explores peer tutors' subjective experiences of digital support and the key characteristics of peer tutoring in relation to other forms of digital support, for example, warm experts and cold experts, such as help desks or salespeople at local shops providing digital services. Thus, we ask (a) what is peer tutoring, in the field of digital training, from the peer tutors' point of view? Then, based on the first question, we further ask (b) what are the key characteristics of peer tutoring in relation to other forms of digital support? The research material consists of 21 interviews conducted in Finland.

2. Learning Digital Skills at an Older Age

Digital support refers to assistance, help, or guidance provided to individuals with the use of digital technologies (Hunsaker et al., 2020; Marler & Hargittai, 2022). As non-formal learning has already been proven an efficient way for older adults to gain new skills and knowledge, it is important to study digital support and peer tutoring process more thoroughly (Aavikko et al., 2022;

Åberg, 2016; Takagi et al., 2014) as it is still utilized to a very limited extent.

Adult education can be divided into three forms: informal, non-formal, and formal learning (Ross-Gordon et al., 2016). Informal learning generally covers all learning that is part of our everyday lives and occurs outside formal and non-formal education (Song & Lee, 2014). In the context of digital skills, the notion of informal learning typically extends to warm experts who offer digital support to older adults (Pihlainen & Ng, 2022). A warm expert can be defined as a non-professional user of digital technologies who is close to older adults (e.g., a child, a grandchild, or a friend) and who aids them with digital technologies (Bakardjieva, 2005; Hänninen et al., 2021; Olsson & Viscovi, 2018).

Non-formal learning, on the other hand, refers to a more coordinated activity in an organizational setting outside the formal educational system (Merriam & Baumgartner, 2020). It can be provided by various institutions, libraries, and organizations (Osorio, 2008; Ross-Gordon et al., 2016), such as adult education centers and third-age universities. In addition, these learning opportunities are usually based on short-term voluntary participation without prerequisites (Pihlainen & Ng, 2022). As the sense of belonging and being part of a group or a class can help prevent social exclusion and loneliness at an older age (Åberg, 2016), non-formal learning can also positively affect older adults' social well-being. Thus, assistance with digital technologies can also be seen as one form of social support (Quan-Haase et al., 2017).

Learning in later life can be more challenging (Schlomann et al., 2022), as the aging process can cause a cognitive decline (Dumas, 2017) and affect fine motor skills (Hoogendam et al., 2014) as well as vision and hearing (Michalowsky et al., 2019). In addition to these challenges, digital support for older adults can fail because it does not consider the inevitably different lifeworlds of older adults, potentially leading to unsuccessful digital training (Schirmer et al., 2022). Thus, when learning to use digital technologies, older adults typically prefer practical digital support that is relevant to their daily needs (Ahmad et al., 2022). This is essential because older adults can be more reluctant to use digital technologies if they do not recognize the relevance they could have in their own life (Selwyn, 2004). This emphasizes the need for a digital support model that acknowledges older adults' special needs and life situations.

In Finland, digital training for older adults is mostly provided by adult education centers, such as folk high schools, third-age universities, and other organizations that offer educational activities to seniors (Kärnä, 2022; Pihlainen et al., 2021). As older adults often lack the chance to familiarize themselves with digital technologies through formal education or in working life (Kärnä, 2022), these organizations play a key role in providing digital support for older adults in Finland (Ministry of Finance, 2017). Educational intervention in later life is one of the most effective ways to support older adults'

participation in society (Lai, 2020), and digital support is an important prerequisite of digital inclusion (Marler & Hargittai, 2022). However, a significant amount of digital support is still the sole responsibility of warm experts (Pihlainen & Ng, 2022), and demand for more organized digital support remains high (Ministry of Finance, 2017).

3. Data and Methods

This qualitative research was conducted with an inductive and data-led approach. The qualitative analysis is based on semi-structured interviews ($n = 21$) carried out in Central Finland during spring 2022 with peer tutors aged between 63 and 84. The mean age of interviewees was 72. Nine interviewees were male, and 12 were female. Due to the Covid-19 pandemic, all interviews were conducted via Microsoft Teams or phone. All participants were peer tutors who offered a wide range of digital support to other older adults. Participants were recruited through the Summer University of Jyväskylä, which provides technology-related courses for older adults and enlists people to volunteer as peer tutors. The average length of the interviews was 78 minutes, the shortest being 62 minutes and the longest 111 minutes. All interviews were audio-recorded and transcribed, resulting in a total of 144,506 words. The fieldwork was conducted following the General Data Protection Regulation.

Peer tutors who participated in the study had mixed educational backgrounds, including individuals with expertise in healthcare, humanities, technology, and education. Most participants, 16 out of 21, had at least a bachelor's degree. In addition, it was common that digital technologies played a significant role in the participants' past work across various industries and professions or as a hobby. All interviewees shared an interest in volunteer work and owned multiple digital devices, which were frequently used. The interviews, consisting of 54 questions, covered what kind of digital technologies peer tutors and the tutees used in their daily digital lives and what kind of digital support was needed and sought. The participants were also asked to define peer tutoring and describe how they perceived it based on their personal experience. More specifically, the interviews included the following sections: background info, the experience of being a peer tutor, experience of aging, learning, digital inclusion, peer tutors' requirements and qualifications, and digital services in the everyday life of older adults from the peer tutor's point of view.

All interviewees were volunteers in the Geronet project, which offered training for peer tutors and those wanting to be one, aiming to increase societal equality and support older adults' independence and inclusion. The project was carried out in Finland by summer universities and Finnish National Agency for Education between 2019 and 2021. Tutors worked on the information and communication technology courses and at the help desks located, for instance, in libraries or residential care homes. It was typical that participants

had volunteered as peer tutors for several years, the longest experience being over 20 years. All names in this research are pseudonyms to protect the participants' anonymity. Two authors of this article, Viivi Korpela and Laura Pajula, have also been involved in the Geronet project between 2020–2021 as teachers and lecturers.

Our observations did not indicate any discernible effect resulting from conducting interviews remotely. All interviewees had clear instructions and prior knowledge of using Microsoft Teams and phones, which enabled low-threshold participation in a familiar online environment. In addition, this research did not collect data on sensitive or private topics, such as health or personal finances. Reflecting on this, we have no significant reason to question the reliability of the answers or the trustworthiness of the results. Also, in line with previous research (Gray et al., 2020; Khan & MacEachen, 2022), the use of videoconferencing platforms for conducting qualitative research offered a secure, accessible, and cost-effective means of data collection.

The inductive thematic analysis (Clarke et al., 2015; Terry et al., 2017) is based on interviews with peer tutors. The data was analyzed with close reading, and no specific program was used. Regarding the division of labor, the corresponding author oversaw the analysis, interpreted the findings, and drafted the manuscript. Co-authors participated in data collection, including conducting interviews, and contributed to the argumentation and development of the manuscript's structure. In the first part of the analysis, we will identify what peer tutoring is from the peer tutor's point of view, and what meanings peer tutors ascribe to peer tutoring in the field of digital training. In the second part of the analysis, we will further explore the key characteristics of peer tutoring and seek to highlight differences to other forms of digital support, such as the support provided by warm experts.

4. Results

4.1. Perceived Dimensions and Meanings of Peer Tutoring

The interviewees described peer tutoring as a shared journey, working alongside someone who knows less about digital technologies to teach them how to use them. From the participants' point of view, peer tutoring also meant sharing a similar life situation and being in the same age group, but it was also described as a companionship built on equality and shared respect between the tutor and the tutee. In addition, the informality of the peer tutoring sessions was also an important feature for the peer tutors. The interviewees stressed that there were no specific teacher or student roles between the tutor and the tutee and that peer tutoring was typically a reciprocal relationship where both were sharing their knowledge and learning new skills together. The interviewees also emphasized that peer tutors are not professional teachers, which was commonly perceived as a

strength instead of a weakness as Daniel, 71, described his take on peer tutoring:

We need peer tutors because the threshold for asking for help is significantly lower. This is true, especially when someone who is very timid and unsure asks for digital support. Professionals are professionals. They speak jargon, and it usually goes overboard.

In the interviews, peer tutors shared their experiences with two different kinds of digital support. The first form of digital support was individual peer support, which usually took place at a library with an appointment. These individual and non-formal meetings typically proceeded at their own pace in consonance with the wishes of the person being helped. The other form of digital support took place in technology courses, where the role of the peer tutor was to assist the course teacher and offer low-threshold support by sitting alongside the participants, ensuring no one got left behind. Despite the heterogeneity of peer tutoring, there were still many similarities and unifying factors. For example, digital support was generally needed with daily tasks, such as using digital services and devices, or different applications, as Elisa, 66, describes below:

Well, the most common topics are probably online banking services and e-government services. But of course, there are other things too. Questions, such as which browser is the best, how to renew a passport, or book a doctor's appointment online. And how to install applications on smartphones and such.

As the tutor and the tutee were of the same age and had an equal footing with each other, it could lower the threshold for seeking help and asking questions that people might otherwise have felt too silly to ask. From the peer tutor's point of view, this was one of the reasons why the peer tutoring model was more appropriate than other forms of digital support, such as paid digital support. Henrik, 74, for example, explained that asking for digital support from a "man looking like a Santa Claus or a woman looking like a Mrs. Claus" can significantly lower the threshold. Being the same age makes it also easier to put yourself in the other's position and to understand why learning can be more difficult at an older age (Takagi et al., 2014).

Paid digital support was not the only form of digital support peer tutors found was problematic compared to the support received from peers. According to the interviewees, older adults repeatedly faced problems when seeking digital support from warm experts. The support received from family, especially from younger family members, was commonly perceived as excessively fast, and it often left older adults wondering what had happened. From the peer tutors' point of view, this kind of digital support did not generate new skills or in-depth learning, which eventually led the older adults to seek

more appropriate support from their peers, as Heidi, 72, describes below:

The children and grandchildren do it so quickly that it's impossible to keep up with them. It just happens and there is no time to learn how to do it yourself. In that way, we peer tutors are probably better at advising older adults. We know how to put ourselves in their position and how to guide them.

Peer tutors wanted to avoid solving everything themselves on behalf of the tutee when offering digital support. In the interviews, successful peer tutoring was described with characteristics including patience, empathy, and encouragement. From the peer tutors' point of view, one important feature of a peer tutor is also the ability to read the learning situation and accommodate the other person's needs. Regarding older adults, this generally meant giving enough time for practicing and repetition and understanding that it might take more than one meeting to learn a new digital skill. According to Nikolai, 76, peer tutoring was all about giving the tutee space to learn by doing, instead of helping too much:

We have this permanent instruction in peer tutoring that the client does, and we advise. And if it doesn't work out on the first try, then we do it two or three times, as many times as it takes for the new information to become familiar.

The interviewees also shared a common view that there is insufficient digital support available in their rapidly digitalizing society. The tutors were willing to offer all the support they could, but at the same time, there was a concern about the adequacy of their skills and the ability to offer digital support. Drawing from the interviews, it was common for peer tutors to question whether they had what it took to be a tutor as digital technologies evolve so fast and the list of new digital technologies grows daily. As Anna, 74, explained it, support is not only needed by the tutees but also by the tutors themselves:

There are an awful lot of different devices, and you don't always know about all of them. When this happens, you can always ask a friend for advice. In the beginning, I wondered if I would be able to advise older adults. But the fact that I was not alone, it brought security. This is an important part of peer tutoring.

There was also concern among the peer tutors regarding the privacy of the tutees. A prevailing view among the participants was that a peer tutor should not handle sensitive and private information. However, too often, they were the only source of support for older adults who were seeking assistance with mobile banking. One of the questions that weighed on many peer tutors was whether they should offer digital support on mobile

banking because of the related privacy issues. By helping the tutees, they would have access to private information they should not see. But if they had refused to help, the older adults would have been left without support. Leo, 72, described this dilemma as a choice that had to be made between two bad options:

We do not use the online bank on behalf of anyone else. We can advise how to get there, but once you are online, we are not involved. That's the idea. But, of course, when the person asks for help, it's a very tricky place to say no.

In addition, peer tutors were anxious about the position of other older adults in a digitalized society. Based on this consensus and their experience, peer tutors recognized the importance of their volunteer work. As Olivia, 68, points out below, the role of peer tutoring is fundamental as it can offer digital support to older adults who might not be able to receive it from elsewhere:

Many have children and grandchildren far away, and there are no people in their circle of acquaintances who can help. Many are alone with these things. And then there are people whose spouses used to take care of everything, and then he or she passes away, and they are left alone.

From the interviewees' point of view, peer tutoring was also consistently described as a meaningful hobby, which meant that peer tutoring was something both the tutor and the tutee benefited from. In the interviews, peer tutors highlighted the importance of the community and the spirit of togetherness among the peer tutors. According to Helena, 69, volunteering as a peer tutor brought a new meaning to life and offered an opportunity to be useful and help others: "I have experienced it both as a meaningful and rewarding thing to do for myself. You feel that you are useful; that is the most important thing, I feel. After all, everyone wants to feel useful and needed."

According to the interviews, peer tutoring had a strong social dimension that cannot be overlooked or belittled. From the interviewees' point of view, peer tutoring was a meaningful social event for older adults, emphasizing the social aspects of non-formal learning (Pihlainen et al., 2022). This was particularly evident in peer tutoring situations, where older adults sought someone to chat with rather than support with digital devices. However, this did not hinder the learning process or prevent the gaining of new knowledge; rather, it strengthened the social dimension of non-formal learning (Åberg, 2016). As Maria, 73, explained, the social aspect of peer tutoring was a significant part of the peer tutoring and helped battle the loneliness of older adults:

Along the way, there have also been older adults who come, even though there is no real problem. They feel

it is important in another way. It may be that older adults don't meet people as much as they would want to, and they may find companionship in us.

It was unequivocal across the interviews that teaching how to use digital technologies to older adults was neither a simple task nor was it always successful. However, peer tutors agreed that older adults commonly experienced peer tutoring as better quality digital support when compared to warm experts or salespeople. Furthermore, the general sentiment was that peer tutors understood the challenges older adults faced when learning to use new digital technologies better than younger people.

4.2. Key Characteristics of Peer Tutoring in Relation to Other Forms of Digital Support

Based on the first research question, several key characteristics made peer tutoring unique and distinct from other forms of digital support. These included the equality between the tutor and the tutee, the informality of peer tutoring without formal curriculums, and the strong social dimension and sense of belonging. From the peer tutor's point of view, key characteristics also included the possibility for repetition and learning at one's own pace. In addition, peer tutors described tutoring as a reciprocal relationship where information was shared, and the tutee had enough time to learn by experimenting instead of just having the tutor solve problems on their behalf.

The peer tutors also emphasized the meaningfulness of tutoring as it allowed them to be part of a bigger group, a feeling they frequently missed, having retired. As the willingness to offer digital support was not driven by family relations or money, peer tutors offered digital support from a different standing point than warm experts or salespeople (cold experts). According to the peer tutors, this intrinsic motive for giving digital support was a unique characteristic of peer tutoring. Reflecting on this, peer tutors could be seen to operate in a manner between these two forms of digital support. Peer tutors were not warm experts, as older adults did not share an existing relationship with them. However, they were not as cold as, for example, salespeople, as there was the potential for meaningful companionship as the relationship developed further. In this light, peer tutors could be defined as not warm or cold, but somewhere in between.

One of the main key characteristics of peer tutoring was the similar age and shared life experiences, which often connected the tutor and the tutee. This distinguished peer tutoring clearly from other forms of digital support, as according to the peer tutors, family members or salespeople at retail stores were typically younger and came from different lifeworlds. As Paula, 71, specified, peer tutors were not young professionals or family members who use difficult technological terms and act like they know everything, which made the situation less complicated for older adults:

Of course, it can be easier for the older adult that we are not like the young nerds who pretend to know everything. It may not always be like this, but it's possible we are better at speaking the same language as older adults.

For many older adults, asking for help from family members or friends was not an option for a variety of reasons, including long distances or the absence of loved ones. This differentiated peer tutoring from other forms of digital support, as from the peer tutors' point of view, it was generally more equally available to all people. However, as Anna, 74, describes below, it was also recognized by the tutors that the peer tutoring model needs to be further developed, as some older adults were still excluded from the possibility of receiving peer tutoring because of their physical limitations:

Of course, one thing is that peer tutoring is free for older adults. But if it is organized in a library or somewhere else outside the home, the fact is that older adults with mobility problems are often unable to participate.

Reflecting on this, peer tutors shared the view that peer tutoring activity still needs to be further developed to better serve and reach older adults who need digital support. Nevertheless, it was hoped that a range of key characteristics in peer tutoring would remain the same. For example, the majority of the participants concurred that creating a calm and easygoing situation was the very essence of peer tutoring. It was also one of the key characteristics that distinguished peer tutoring from other forms of digital support, as peer tutors could focus on the matter without rushing.

5. Conclusions

By elucidating the potential of peer tutoring in facilitating digital skills among older adults, this study contributes to the research on older adults' use of digital technologies, expanding the understanding of the efficacy and versatility of peer-based learning models and addressing the unique challenges older adults face in the rapidly evolving digital society. In addition, this research not only addresses the largely unexplored intersection of older adults, digital skills, and peer tutoring but also holds the potential to transform educational practices tailored for this demographic by providing new techniques for learning digital technologies, consequently enhancing the digital inclusion of older adults.

This research examined peer tutoring from the peer tutors' point of view and highlighted the key characteristics which made it unique and separate from other forms of digital support. Recalling our initial questions: (a) What is peer tutoring, in the field of digital training, from the peer tutors' point of view? Then, based on the first research question, we further asked (b) what

are the key characteristics of peer tutoring in relation to other forms of digital support? According to the peer tutors, peer tutoring was a reciprocal relationship based on equality and the absence of professional roles or curriculums. It was sharing knowledge between two older adults of the same age and similar life experiences. It was not over helping or fixing the problem on behalf of the other; rather, it was learning by trial and error with the option of repeating things and taking as much time as needed to learn. In addition, peer tutoring had a significant social relevance, as it was a meaningful social event for both the tutor and the tutee. From the peer tutors' point of view, tutoring was also an important way to participate in volunteer work and meaningfully engage with society. For some, the motivation behind volunteering was more personal, as they wanted to feel useful and to be part of a larger community.

The second part of our analysis examined the key characteristics of peer tutoring. The main key characteristics that separated peer tutoring from other forms of digital support were the shared age group, the equal footing with each other, and the informality of the situation. Peer tutors typically offered digital support and focused on problem areas without any hurry. The research highlighted that this was experienced as a quality of digital support that busy children or salespeople could not match. In addition, peer tutoring was distinguished from other sources of digital support, as it was often the only source of digital support for older adults who didn't have warm experts or enough resources to seek professional digital support. The study also revealed the significance of the sense of belonging in peer tutoring. This finding agrees with previous research, as a non-formal learning environment can prevent social isolation in later life (Åberg, 2016) and provide critical social support that can help older adults better accept and use digital technologies (Tsai et al., 2017).

The findings of this study align with previous research, as older adults continue to experience difficulties in keeping up with the rapid pace of evolution in digital technologies (Loos & Ivan, 2022) and tend to seek social support for their use of digital technologies (Llorente-Barroso et al., 2023). In addition, following previous research (Aavikko et al., 2022), our findings highlight the multifaceted significance of peer tutoring and the importance of recognizing not only its impact on tutees but also the opportunities for self-development and experiential learning it provides to the tutors themselves. Diverging from previous research (Doh et al., 2015), which anticipates and observes a noticeable male predominance among peer tutors (senior technology experts), the current data presented more gender-balanced results, with over half the participants being female. In addition, the researchers discern no substantial disparities in outcomes or engagement between the genders in this study, thereby enriching our understanding of the gender dynamics at play in this context.

For future research, it would be essential to further clarify whether the older adults who received digital support from peer tutors experienced peer tutoring as casual and easily accessible as the peer tutors themselves did. As the ideals of peer tutoring may differ from the practice, we need to examine whether older adults feel that the tutor is their peer and in an equal position to them. In addition, when searching for a solution to the shortage of digital support, it is also important to ask if it is possible to offer peer tutoring for all older adults and acknowledge the possibility that the number of older adults with the needed digital skills can be very limited compared to the number of unskilled older adults who want digital support (Takagi et al., 2014).

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Conflict of Interests

Viivi Korpela and Laura Pajula have worked for the Summer University of Jyväskylä as commissioned technology-course instructors for short periods during 2019–2023.

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