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Personal experiences of digital public services access and use: Older migrants' digital choices

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ABSTRACT

This paper presents a study of the personal experiences of older migrants as they use digital technologies and electronic services. Focusing primarily on digital health and social services, the aim of this research is to gain a better understanding of the digital divide at a micro-level. The concept of digital choice is used to analyse the personal decisions that lead to an engagement with digital technologies and internet services or a disengagement from online tools. A qualitative case study of Russian-speaking migrants in Finland utilised participant observation, interviews, and diaries to gain insights into the adoption of digital public services from the user perspective. This paper contributes to the view of digital engagement as a complex and multifaceted process that involves socio-demographic determinants, as well as individual agency and social context. The key findings of this study show that individual efforts and personal attributes, such as habits, sense of trust, and fears, play critical roles in shaping digital engagement. The context of ongoing digitalisation in the public sphere is discussed as an important push factor influencing the research participants' adoption and use of digital services.

1. Introduction

In the scholarship examining the digital divide, the diverse levels of access to and use of Information and Communication Technologies (ICT) are predominantly explained by individual characteristics (such as digital skills), demographic factors (such as age and education) and structural determinants (such as socio-economic status) [1–3]. However, these large-scale studies have generally overlooked the diverse range of personal reasons behind digital (dis)engagement and how they relate to different life situations and contexts. These studies have examined the barriers to adopting digital technology but failed to consider what individual abilities are required to overcome these obstacles and how personal agency impacts on this process [4,5]. Helsper [4] has commented on these biases in the literature and has called for a more detailed view of digital technology adoption and the individual and contextual influences.

The primary purpose of this paper is to examine the personal experiences of older migrants adopting digital services and the internet. The overall focus of this study is to extend the understanding of digital engagement at the personal level. To achieve these objectives, the study looks beyond the socio-economic parameters of digital engagement and examines in detail how older migrants make choices to use or not to use the internet and digital services. This research also uncovers the structural contexts involved in accessing and using the internet and digital services. By moving beyond the traditional approaches to studying the digital divide, the dynamic processes that shape and constitute the barriers to online services can be better understood. This study therefore elaborates on the concepts of *digital choice* [6] and *digital engagement* to provide a nuanced perspective on what lies 'behind' the digital divide. Digital engagement is understood as an iterative and dynamic process in which individuals adopt new technologies and are influenced by changing circumstances and socio-structural contexts [7]. The digital choice refers to a person's decision to either engage with or disengage from digital technologies.

Previous research on older migrants, their access to digital technology and use of these resources has emphasised disadvantages such as language barriers, inequalities related to migrant background or ethnicity, and exclusions due to older age [8]; H. [9]; J. W [10]. However, qualitative and quantitative studies have also shown that older migrants can adopt the internet quickly, and when compared to the native population, they utilise this technology in a broader way to compensate for the lack of social capital in a new country [11–13]. This conflicting evidence shows that more research on digital engagement of older migrants is required.

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Therefore, this article contributes to the scholarship on digital engagement in two ways: it provides a detailed qualitative study on older migrants' internet access and use; as well as it examines the different levels of digital engagement, including the agentic and structural sides.

The research participants of this study were Russian-speaking adults, aged 65 years and older, who migrated to and settled in Finland. Although, the majority of the participants had been living in Finland for more than ten years and some have acquired the Finnish citizenship, they are referred to as older migrants in this paper. Russian speakers were chosen for this study as they form the largest foreign-language community in Finland; accounting for 20% of the total foreign population of Finland at the end of 2019 [14]. This population group includes people who have moved to Finland from the former Soviet Union countries and whose mother tongue is Russian.

The research was conducted using participant observation and interviews as the central data collection techniques. The data was then analysed using the inductive thematic analysis method [15,16]. Public services were chosen as the focus for this research as they are particularly relevant for the older migrants residing in Finland who use digital technologies and electronic services.

The research questions of this study are:

1) What are the older migrants' experiences of internet and digital services access and use?
2) What are the personal reasons behind digital choices? What contexts shape the choices and how?

Next, this paper describes the theoretical and conceptual background to digital choice and the digitalisation of public services. The methodology of this study is then outlined and the findings of the research are presented. Finally, the roles of personal decisions and contexts are discussed in relation to digital engagement.

2. Background and related literature

The following chapter draws on the previous literature related to personal reasons for digital (dis)engagement as well as defines how the structural and agentic aspects are presented in the studies of the digital choice. It continues to outline government-driven digitalisation as a context for digital choices.

2.1. Digital choice and agency

In this study, the concepts of digital engagement and digital choice are understood as involving autonomous voluntary action and involuntary contextual circumstances that are regarded as equally important. However, previous research on ICT adoption and use has rarely addressed both concepts [4]. To reveal the 'hidden' personal reasons behind the digital divide, studies have focused primarily on agency and the diverse range of related concepts such as intentionality, choice, motivation, purposiveness, freedom, and creativity [6,17–20]. The concept of *individual agency* has also been widely examined [5,19,21,22]. For example, Selwyn [22] highlighted the personal reasons motivating a deliberate choice to disengage from online society. This study approached digital disengagement as an execution of agency and independent decision-making, and the personal reasons were grouped into categories, such as limited time to use a computer, having access to a surrogate user, disinterest in digital technology, following established habits, and conservatism [22]. In a qualitative study of older adults living in Oxford, England, Helsper [23] identified similar reasons for people disengaging from digital services and in addition noted the significance of frustration, fears, and privacy concerns.

In line with the agency studies, Dutton et al. [6] defined *digital choice* as individual autonomous decision-making related to the uptake of new devices and the internet. They claimed that the digital divide will never close completely as the use of digital technology relies on decisions based on personal wishes and desires as well as economic, social, and educational resources. In this study, digital choice implied that a person possessed, or had the opportunity to obtain, the necessary resources (such as sufficient income or skills) to access digital technologies [6,24]. Thus, previous studies have identified the dominant role of structural context in creating barriers to agency or allowing voluntary choices.

In contrast, other studies have demonstrated that structural and individual aspects are equally important when examining digital choice [5,21,25]. For example, the subjectivity of digital engagement and the importance of personal choice were demonstrated in a study of cultural identities that had a significant influence on ICT acceptance and use [25]. However, digital choice remains a difficult concept to fully resolve as digital engagement is deeply embedded within wider social structures and the immediate social context. For example, Katz et al. [26] showed that a family network constitutes an essential social context that influences the adoption of technology. Helsper [4] also identified that a person's social environment can have a significant impact on their digital engagement. Similar conclusions were drawn by Quan-Haase et al. [7] in their analysis of older people and digital engagement in the context of everyday practices. Although these studies have focused on different subjects, they have highlighted the complexity of digital engagement and provided new insights on the changing contexts and their impact on individuals and their actions.

In this current study, the digital choice is not defined as a complete inclusion or exclusion from digital society, nor does it imply purely agentic and independent decision-making. Instead, the digital choice is produced via everyday personal decisions regarding digital technologies and services. Personal preferences and their diverse contexts influence those decisions. The concept of choice can include the individualistic view of a rational, independent action; however, this study attempts to define the circumstances surrounding digital choices without assuming a predefined agentic or deterministic viewpoint. The notion of agency is often conceptualised as the ability to create an action [27]. This study focuses on how digital choices are constrained or facilitated. Different situations that require older migrants to make a digital choice are analysed. These situations include learning to use technology, using online banking websites, renewing medicine prescriptions online, completing electronic forms, and using digital public services.

2.2. Public services and the rise of the digital citizenship

In the 2000s, people who have deliberately disengaged from innovative technologies may have made the decision to pursue a non-digital lifestyle. However, in contemporary western societies, the question of digital choice has become more pertinent as government-driven digitalisation reforms have rendered the access to essential services more reliant on digital technology [28]. In the Nordic countries and in Finland in particular, the broadband penetration is close to universal and many everyday services are becoming digital-by-default, and this includes the banking, social and healthcare services [28,29]. Welfare service providers are currently implementing web-based communication platforms that are replacing traditional in-person service delivery [30]. In Denmark, for example, it became mandatory for citizens to communicate with the state through Digital Post in 2014 [31]. Schou and Pors [28] have shown how digital-by-default services have become a part of national citizenship and this situation has led to the concept of a digital citizen. Governments have therefore pushed citizens to use digital services by transferring the responsibility for state-related business to the citizens themselves; thus creating a system that is self-serving [28]. Digitalisation reforms have created the 'ideal of citizenship in the twenty-first century' [32]; p. 140). This is a conceptual figure of a public service client who takes responsibility for their individual situation, maintains their own social benefits, and sustains contact with the public sector [32,33].

Despite the rapid pace of digitalisation, electronic government (e-

government) scholarship has continued to show that citizens contacting authorities still choose traditional modes of communication, such as phone calls and face-to-face visits [34,35]. These more personalised modes of interaction can appear more favourable when the services are complex and ambiguous [34,36]; W [37]. However, the Nordic states have shown a desire to strengthen the digital-by-default service delivery. Therefore, this article focuses on how, and in what contexts, older migrants make digital choices regarding the new forms of interaction implemented in social and health services.

3. Methodology

3.1. Case of Finland

Finland has been among the European front runners of e-government development as well as other key Digital Economy and Society indicators [38]. Digitalisation has been an underlying theme of public administration during the last decades [39]. However, it is evident that in Finland barriers to digital pubic service use remain [40,41]. Finnish digital public services utilise online banking systems and their secure credentials to complete online identification. To access personal accounts via public service websites, Finnish residents are required to log in using their internet banking passcodes [41]. The Finnish websites requiring this identification include the Social Insurance Institution (Kela), the Tax Administration (Vero), and health information systems. Recent evidence has demonstrated that there is a disparity in the access to online identification between people with a migrant background (88%) and the rest of the population (98%) [41]. Moreover, a nationally representative study of Russian-speaking migrants in Finland has shown that only 65% of people older than 64 years have internet banking credentials [42]. These credentials are now a requirement when accessing digital public services and the general rise of digital citizenship in Finland brings new challenges for older migrants navigating access to public sector. The difficulties they face form a potential threat to their citizenship right of universal access to public services [43]; forthcoming).

Digital advisory services that are mostly publicly funded emerged around Finland in response to these largely neglected by public services challenges of older migrants. Such initiatives, for example, third-sector organisations, were argued to leverage for differential inclusion in public services among marginalised groups [40]. Thus, organisations providing digital support for marginalised groups are of major interest for this study.

3.2. Data collection

The research material for this study was gathered and analysed by the author. The following three data collection techniques were used: participant observations (approximately 100 h), semi-structured interviews (n = 17), and collected documents (n = 16). The data collection was carried out in collaboration with a third-sector organisation and two educational centres that organised similar activities and workshops for Russian-speaking people. The pilot observations were conducted between February and May 2019 and the primary data collection period was between November 2019 and March 2020. Participant observation was employed during the workshops and interviews were then arranged with the attendees. The workshops used for the study were conducted in Russian and focused on technology, the internet, and digital services.

The method of participant observation was used to gather data in writing on how the research participants learned and used the digital technologies in the natural settings. To understand the challenges the research participants faced in the process, particular attention was given to observing their reactions, feelings, and emotional expressions, such as hesitations and indications of uncertainty or fear. Seventeen semi-structured interviews were conducted with the people who attended the workshop series. The interviews were all recorded and lasted between 45 min and 1 h 30 min. The recordings were then transcribed using the automated transcription software Happy Scribe. Prior to the interviews, the participants were asked to fill in diaries for seven days to record their use of digital technology with a short description of the activity and its duration. During the interviews, these diaries helped the participants remember the ICT use. The final data set included 16 documents as one interviewee did not complete a diary.

Three data collection techniques (see Table 1) together generated rich data on the digital engagement of older migrants. Observations identified different situations that required older migrants to make choices. They also provided data on digital choices that were the most important for them and that brought most resonance in how they experienced their adoption and use during the workshops. Diaries played an instrumental role in helping participants recollect their digital practices, on which they elaborated during the interviews. Face-to-face interviews generated most of the data, including the grounds for digital choices. They helped capture the interviewees' reflections on their learning and challenges in accessing and using the public service. Interviews uncovered the personal reasons behind the digital choices as well as the contexts in which they were made.

3.3. Research site and participants

The workshops that responded to the challenges of older migrants in accessing the public services online were the primary data collection sites. I browsed through all the courses available for migrants and older people (on https://ilmonet.fi/[1] website), oriented on improving the digital skills and chose those that were offered for Russian-speaking people. The list of the courses was narrowed down to those that included digital services in its curriculum. Finally, only two municipal educational centres and one third-sector organisation matched the criteria that were ultimately included in the sample.

The research participants found and enrolled in workshops themselves, which has implications for the gathered evidence. Participants' own initiative to attend the educational courses entails their active stance and agentic attitude to digital engagement that separates them from marginalised non-users. On the other hand, workshop attendants were only learning to use digital technologies, which entails they were not proficient in them yet and needed guidance in improving their digital skills. Recruiting research participants from such workshops

Table 1
Data generation activities.

Method	Instrument form	Data
Observation	Unstructured	1. Notes on what is happening, dialogs, participants' questions, difficulties, the time it takes for appropriate task, reactions, emotions. 2. Memos written by observer after each observation session
Interviews	Semi-structured, interview guide	Answers to questions in the interview guide. Guide included following themes: information about the life of research participant before and after migration; use of social and health services in Finland, service and information needs; digital skills, internet use, workshop-related questions; online services adoption and use experiences.
Diaries	Structured	Answers to questions: which devices have you used; with what purpose; for how long - for each day last week.

[1] https://ilmonet.fi/ is a website that lists all the courses available in the Greater Helsinki area for the adult education. It includes all institutions that provide courses for adults.

responded well to the initial aim of studying older migrants as they access and use digital public services.

The workshops on digital technologies were conducted in a similar manner across all of the research sites in the Greater Helsinki area: the sites included a third-sector organisation and two municipal education centres. All three centres organised in-class workshops that were led by an instructor. During the workshops, each participant practiced on a computer or tablet. The weekly or biweekly sessions were primarily focused on a specific website or digital service. The workshops were conducted in Russian although the websites of the Finnish public services use Finnish or Swedish (the country's two official languages) and in some cases English. Therefore, the instructor, who was fluent in the Finnish language, often translated the content of the webpages into Russian for the participants.

Among the 17 interviewees recruited from the workshops, ten were aged between 65 and 70 and seven were aged between 71 and 79. Only two of the interviewees were men. The majority of the participants had completed a higher education degree and had been residing in Finland for more than 10 years. While nine of the participants had become Finnish citizens, only three were fluent in Finnish. The remaining participants assessed their language skills at the levels of beginner or lower intermediate. The interviews revealed that most of the participants were in a relatively vulnerable position, receiving minimal national pension (as opposed to employment-related pension) and social benefits, such as a housing allowance to support rent payments.

3.4. Ethics

Prior to the author's participation in the workshops, their involvement was discussed with the instructor. Permission to attend and observe the workshops was obtained from both the instructor and the visitors. Moreover, the author was invited to be part of the teaching and learning process to help the participants with their questions. This contribution from the author encouraged a more trustful relationship with the research participants and a deeper engagement in the activities. All the participants signed an informed consent form. The responses of the participants cannot be linked to their identities and pseudonyms are used to ensure anonymity. The study was approved by the Ethical Board of the University of ** (Statement 40/2019). The Data Protection Agreement was made with the Happy Scribe Ltd to protect the security of the data and identities of the research participants.

3.5. Data analysis

The inductive thematic analysis [15,16] was applied to reduce, describe, and interpret the data collected from the observations, diaries, and interviews. The pilot observations allowed focusing the analysis on the specific topics that research participants had identified as the most important; a process that is essential for the inductive strategy [44]; p. 64). During the course of the data collection, the material was read, compared, and analysed several times in a cyclic manner to identify recurring themes. This method ensured a familiarisation with the data and allowed the themes to evolve during the data analysis process. Initially, the patterns were identified from the answers to the interview questions and the topics raised by the participants during the observed workshops. Some of these themes were not directly connected to the research questions. The identified themes or patterns were then formed into second-level categories that were either more distinct or broader and inclusive of multiple themes (for example, 'help availability' and 'poor language skills' were merged into 'barriers to internet use'). In the final stage, the categories were made more abstract and compared with existing literature. The analysis was performed with the assistance of Atlas.ti 8.4.2 software. The three data collection techniques were complementary and allowed a triangulation of the data to ensure it was of a high quality.

4. Results

4.1. General patterns

All the research participants had access to the internet at home and through a mobile phone. In addition, each participant had access to at least two of the following digital devices: computers, laptops, tablets, smartphones, smartwatch or fitness tracker. As reported in their diaries, they all used the internet on a daily basis. However, the range of use was limited to simple tasks, such as messaging and video calling (using WhatsApp, or Skype) and entertainment, for example, watching videos on YouTube or reading the news. The majority of the participants reported that they had never used ICT at work and that their digital skills were low. Six of the participants reported in their diaries and interviews that they had never used the Finnish digital public services. Four participants did not have personal online banking codes and were therefore unable to authenticate to services electronically. Therefore, this study is not focused on the first-level digital divide concerning physical access to the internet and technologies, but rather on the second and third levels of digital divide that examine skills and usage patterns and the diverse outcomes of digital engagement, respectively (for more information see: [45].

A larger observation sample included fieldnotes and memos on different situations that caused migrants to make digital choices and on circumstances of these choices. The analysis identified the digital choices that were mentioned most often and that participants considered most important. Those choices included attending workshops to learn about technologies, using online banking, using the website of medical records, filling applications online or in-person, and using digital public services in general. Interviews then paid specific attention to these themes.

A larger data from both interviews and observations contributed to spotting and understanding difficulties that the older migrants faced adopting and using the internet and digital services. The results demonstrated that participants experienced adoption and use of digital public services as very complex and difficult to grasp. Such difficulties were derived from the complicated nature of the public service system. Insufficient knowledge about the service that they tried to claim also influenced the experience of adoption. Participants also reported hardships with understanding the online forms in the Finnish language. In most cases, adoption and use of digital services involved negative emotions, such as stress and anxiety. The central personal reasons for disengagement from digital services included laziness, fears, conservatism, feelings of distrust, and previous non-digital routines and habits. Importantly, none of the participants learned to use digital services by themselves, but with help of the workshops or/and friends and close ones.

All participants voluntarily enrolled in the workshops; therefore, they all made a digital choice in favour of learning to use ICT and the internet. This first decision signals that the participants considered their digital skills insufficient and valued improved engagement with digital technology in daily life. The motivations for attending the workshops included learning more about smartphone and computer functions, installing updates, learning to use digital social and health services, improving general IT skills; for some, it was the chance to socialise.

To view the discussed above digital choices in a nuanced way, next, I study five cases in greater detail. They refer to five research participants, with one quotation from the observation site and four from the interviews. The cases were carefully chosen to represent the research participants of a larger sample, including those of different ages, participants who were more and less skilled in internet use, those who remained non-users of digital services as well as those, who used them extensively. The chosen cases illustrate the reasons behind the digital choices in the larger data in the most detailed and meaningful way.

4.2. Digital choice to disengage

4.2.1. Complexity of the digital choice: case of electronic pension system non-use

While the participants in this study were active users of the internet, their digital choices in different domains were not always in favour of a technological solution. The first example concerns the participants of Russian nationality that made a digital choice regarding the use of the Russian e-government system. As the interviewees had also previously worked in Russia, they received pensions from both Russia and Finland. In order to receive the correct Finnish pension and housing allowance, they are required to provide the Finnish Social Insurance Institution (Kela) with their Russian pension documents once a year. In the past, these documents could only be obtained in person at the appropriate government department in Russia. However, at the point of the data collection for this study, there was an option to print the documents directly from the newly digitalised Russian e-government service, gosuslugi.ru. Therefore, travelling to Russia to acquire the papers was no longer required if the customer could manage the retrieval process online. An email and mobile phone number are the only requirements when registering on the gosuslugi.ru website. In theory, access to this service was possible for each research participants as they all held these two forms of identification.

One of the workshops was dedicated to learning how to use the gosuslugi.ru website. The significance of this topic was illustrated by the fact that a larger number of people than usual (23 participants) attended the workshop. Prior to the event, a recommendation was sent to the participants requesting that they bring personal laptops so that they could register on the website. The following quote from the observation diary describes how the workshop progressed:

> *[Observation diary, 2 March 2020]*
>
> Before the workshop covering the Russian gosuslugi website, only two people had managed to register on the website and the other participants had failed to do so. Actually, the events illustrate this situation very well as only the participants who had brought their own devices could even try [there were only three people with devices]. However, after the workshop, the participants started discussing the fact that just one person had actually managed to sign up. At the next workshop, I asked the participants if they had tried to acquire the pension documents online and the answer was: 'I heard in the workshop that only one person had managed to log in' [Galina said this and the others reacted with approval]. This was the reason that they had not even tried to register. This is a very special situation, as the only other option is to get the documents personally, which means travelling to Russia. Physically going to Russia (about 500–1500 km generally by bus or train depending on the city of former residence) is easier than trying to sign up for gosuslugi.ru on the Internet.

After the workshop, it was clear that when the participants needed this document in the future, they would probably conform to the traditional method of retrieval. Galina (aged 69) had missed the initial workshop, but had clearly discussed the topic with the other attendees. Like the other participants, Galina had physical access to the internet and digital devices, and help was available at the workshops. Galina had already acquired basic computer skills, and she had demonstrated a willingness to ask for assistance when a problem occurred or when she encountered a difficult task. However, she had made a voluntary choice to remain a non-user of the electronic pension service, *gosuslugi.ru*. Importantly, Galina could still choose between use and non-use of online service as she also had an opportunity to travel to Russia and complete the process in a traditional way.

It remained unclear if the other workshop attendees had influenced Galina or if her decision was based on the habit of travelling to Russia for the document or a personal desire for a non-digital lifestyle. It is also possible that Galina may have had general security concerns or trust issues regarding e-government and computers. These observations underline how complex the digital choice is and, that the reasoning of it goes beyond the socio-economic determinants and digital skills. Next, an analysis of the interview and diary data is presented to uncover how the participants of this study defined their digital choices.

4.2.2. Compound barriers to engagement in digital public services

The following Examples illustrate how participants explained their choice to disengage from the internet services due to habits of a non-digital lifestyle and a fear or distrust of technology and the public service websites. During the interview, Lina (aged 73) expressed a lack of trust in the digital public services while discussing her diary of ICT use:

> Lina: [reading the diary question] OK, what kind of public services websites have I used, Kela, Vero [Tax Administration] and others, I need to talk about the last time I used them. I have written here that I have never tried, I do not know how, I do not trust them. For some reason, this is it. But, if I must, I will have to. When they all go to digi [when they will digitalise], then I will have to use them. I will have to learn the internet page of Kela, social services, and maybe read the news there too.
>
> Interviewer: That was what I wanted to talk about in more detail. What do you think about it? [the digitalisation]
>
> Lina: Well, I am afraid. But, I think that this is life, it's just inevitable. It dictates, why life dictates, there is probably not enough employees … The queues are really big there. But I do not use them [digital services].

Later in her interview, Lina was asked how she had previously applied for the social benefit. Lina replied that she had used a paper-based application with assistance from 'some Finn who knew how to do it'. Based on earlier discussions, it was clear that Lina had used the internet for communication and entertainment. However, she was willing to continue running her errands non-digitally including paying bills, maintaining tax records, and applying for social benefits. Lina's digital choice to remain a non-user of digital public services can be explained by several aspects of digital engagement: Lina did not possess the necessary digital skills to use the electronic web services, nor did she trust them. Moreover, Lina required assistance from a Finnish national to file the paper-based social benefit application. Therefore, it is likely that Lina lacked sufficient knowledge about the social benefit and perhaps the necessary Finnish language skills. This situation demonstrates the disparity between the concept of an independent digital citizen and a Finnish resident such as Lina who faces multiple barriers to becoming a successful user of digital public services.

Another example relates to the electronic health information system in Finland (OmaKanta, in Finnish) that patients can use to renew their medicine prescriptions and view laboratory test results and treatment records. Interviewee Anna (aged 77) reported that she knew how to use this system and how to apply online for an extension of a soon-to-be expired medicine prescription. However, she reported that previously she had physically gone to the nearest health centre rather than completing the process digitally. When explaining her reasons, Anna described her own personality in a negative way, characterising herself as old-fashioned and lazy:

> Interviewer: When we talked about the online management of medicine prescriptions, you told me that you wanted to go physically to renew the prescription 'for sure'. Can you please tell me why you did not want to do it on the internet even though you told me that you know how to do it online?
>
> Anna: The point is that I do not know why, I think it might just be because of my own conservatism and habit. The habit and that's it, nothing else prompted me to go to the health centre. And that it is not

far away. Last time I was there, there were just two people in the queue … But I am telling you, just because of my conservatism, I cannot explain it with anything else, it might even be a laziness to figure out completely how to do it. But I know how to do it online. I trust it more to go there myself.

Interviewer: So, is this a trust of computers, or maybe also something else?

Anna: Well, firstly, because it is easier for me face-to-face, I mean, to speak Finnish, and by phone it is such a pressure for me. Although it becomes easier and easier. It used to be that I could not talk on the phone at all and I did not understand anything …

This type of internet use has a specific complexity – in this case, applying for a new medical prescription – and this may have influenced Anna's 'conservative' and safe choice. Anna anticipated that her Finnish skills were not good enough to communication clearly with her medical doctor remotely. Furthermore, to navigate the service effectively, the end-user requires a comprehensive knowledge of the website content and a complete understanding of the steps involved in the digital prescription renewal process. Given the level of detail, completing this task online constituted a risk for Anna, and this is of particular significance when health and wellbeing are involved. It is therefore a logical response to choose a face-to-face conversation over communication that is computer-mediated when managing complex and ambiguous topics [34], especially when using a second language.

From a comparative point of view, it is interesting to note that Galina's digital choice took place within the context of the Russian pension system and, hence, did not involve a language barrier. However, both Galina's and Anna's digital choices were made in relation to public service websites that required relatively strong digital skills and knowledge of a complex issue. In these contexts, the knowledge requirements and necessary digital skills created significant barriers to accessing the online pension and healthcare systems. It can be argued that having to conduct the transactions in a second language presented an additional layer of difficulty for the research participants.

The digital choice to disengage was shaped by both personal reasons (such as conservatism, laziness, trust, and habit) and objective individual characteristics (such as language and digital skills). These collectively produced a multilevel barrier to the electronic health information system, thus illustrating the significance of both the subjective and objective sides of digital engagement.

4.3. Decision to engage: coercive force of digitalisation

Participants in general were motivated to learn to use the internet and digital services independently. The desire to become a more independent user was an important reason for participants who could not rely on ICT help from friends and relatives. Even when help was available, participants indicated that not having to rely on others was significant. For example, Valentina (aged 65) described her feelings on independence: '[while discussing the online appointment booking system for public services] For me this is a really terrible problem. I want to tell you, the most terrible problem is when I need to ask somebody for help'. The importance of maintaining independence was also raised later in the same interview:

Interviewer: You have enrolled for the workshops about computers and smartphones. Why have you decided to go?

Valentina: Why have I decided to go? I am here at the digital workshops for the same particular reason that I do not want to ask anyone for help, I want to master it myself.

The digitalisation of public services was also the reason why many of the participants have made a digital choice to learn more about the internet. For example, Inna (aged 70) described her shock when she visited the local Kela office:

Interviewer: Why have you decided to go to the digital workshops?

Inna: Because, I mean, I heard that everyone is going digital, like when I last came to apply for asumistuki [housing allowance] I needed to go to Kela. It used to be, you know, you go inside, take a queue number, and wait until you're called. And now, when I came, I was absolutely shocked! There are computers everywhere and there are just three consultants in the lobby. I was standing there, I did not know what to do at all. First, I had to pull a piece of paper with bank codes out of my bag and log in to a bank, I did not know that! After this was done, I also received a paper from N. city [in Russia] on how much my pension is there … I need to go to the pension [institution]. Of course, the girl there in Kela helped me, she has done everything for me. And I decided, I need to look for courses …

Interviewer: When you firstly came to the workshops, what did you want or hope to learn?

Inna: I wanted to know everything, how to log in to Kela, how to use Vero, how to do all these things. I have got a lot from workshops already.

As her options for interacting with authorities had been limited to the digital format, Inna was required to improve her use of the internet, the banking website, and the online public services. This situation provoked powerful emotions and it reflects the significance of the issues faced by the research participants when they navigate the newly digitalised public services in another language. Inna's digital choice to attend the workshops and use the digital services represents her effort to become a digital citizen. These actions also ensure that she maintains her right as a citizen to access the public services.

Following Valentina's statements on the importance of her independent use of ICTs, later in her interview she raised the issue of feeling fearful when discussing the online public services of Kela and the employment office (TE-toimisto):

Interviewer: I also wanted to talk about your experience of using electronic services such as Kela, TE-toimisto. Have you ever used their websites?

Valentina: In the beginning I hadn't, I was afraid of them. This is again psychological, it is a problem for our generation that is, being afraid … but if it was accessible in our own language, switching into Finnish is difficult.

Interviewer: Is it because of language or also other reasons?

Valentina: Because of language, yes language. I was terrified of computers. You know, I hated it fiercely, when I came close to a computer I was like shaking. It was later, it took me a great deal of effort to make up my mind, I am not a fool, I understand the future is through computers. I do not like it, I still do not like computers, how it all happened … I do not know whether you remember, TE-toimisto kept all the applications on shelves [in paper] about all courses, applications.

In her answer, Valentina began with the language barrier and then moved to elaborate on her fears concerning computerisation. The strong expressions used by Valentina emphasised the hardships she experienced in the past and continues to encounter when using computers and digital public services. In her diary and interview, Valentina reported using multiple digital services in Finland, including internet banking, the tax website, the pension institution website, TE-toimisto, and Kela. Despite being an active user of multiple services, Valentina stated that completing tasks online still evoked feelings of anxiety and stress.

This example revealed two of the components influencing digital choices: the individual's willingness to be an independent user of ICT for public services, and the more universal process of digitalisation in

Finland's public sector. Both of these issues appear to be essential for the research participants' reasoning. Valentina expressed her own significant effort to overcome fears and her lack of language and digital skills. Simultaneously, she described that digital choice is situated in the context of the coercive force of the digitalisation of the public services.

Coercive force of digitalisation refers to the government-driven transformation of public institutions. A digital-only encounter leaves the service users with little space to choose a preferred service delivery channel. Valentina and Inna were both overwhelmed with emotion when they saw their ability to make a digital choice restricted by the digitalisation of public services. Regardless of the multiple difficulties they faced, both participants had to learn how to navigate between the different online services and web applications, thus creating a meaningful reason to attend the workshops.

5. Discussion

5.1. Contribution and future research

This study aimed to further the research on digital engagement at the personal level. This was achieved by examining the individual reasons for digital (dis)engagement and studying the structural contexts involved in the use of digital services. In general, the findings contribute to the literature on digital engagement and to the limited studies of older migrants' internet and digital services access and use with a detailed qualitative account. It advances the digital divide studies as it develops the perspective on the internet and digital services use as a complex and multifaceted phenomenon. Most importantly, this study has demonstrated that digital (dis)engagement involves much more than socio-economic factors and digital skills. It has showcased the variety of personal reasons and contextual determinants involved in internet adoption that are often neglected in the studies on digital divides.

This paper viewed the digital engagement of the particular type that is the adoption and use of digital public services. Antecedents of e-government adoption have been studied with the widely used technology adoption models [46], as well as paying close attention to one determinant, such as trust [47,48]. Previous literature on e-government has also viewed the context of forced or mandatory digitalisation as pushing factors towards its adoption [28,31,33]. This article extends those studies with a micro-level display of multilevel determinants. The case of older migrants opened up the compound barriers to e-government services as situated within the digitalisation context. Furthermore, this paper has demonstrated how older migrants do not conform to the normative and symbolic picture of an independent public service user. Due to the language barriers and their lack of knowledge regarding the public service system and poor digital skills, the requirements of this group conflict with the ideal digital citizen. The asymmetry between the construct of a self-serving digital citizen and the actual public service clients is emphasised when examining the multilevel hardships faced by older migrants as they adopt the internet and digital public service systems. This study has drawn attention to this contradiction and its potential to create services that produce anxiety, stress and exclusion.

Examples of the digital choices regarding the public service channels in this study revealed that older migrants often prefer traditional modes of communication such as a personal visit to the digital one. Studies on channel choice viewed numerous determinants of it including indicators related to users [49]; W. J [50]. as well as the ways characteristics of the channels and services influence their use [35,51]. Traditional and digital service delivery channels were also previously examined from a relational perspective [36]. This paper brought up the role of the language skills and the knowledge of the local welfare system for the channel choice by the example of older migrants. It calls for more research into migrants' channel choice practices and how the local language skills, as well as the knowledge about the public services, influence the use of the digital form of their delivery.

5.2. Multiple faces of the digital engagement

The first research question asked what the older migrants' experiences of internet and digital services access and use are. Although older migrants have used the internet for communication and entertainment, they experienced adoption and use of digital services as a very complex, difficult task. They also felt fear and distrust towards online services and adopting and using them provoked strong negative emotions, such as stress and anxiety.

The second research question was what the personal reasons behind digital choices are and what contexts shape the choices and how. The interplay of the objective and subjective personal reasons and contexts was the key to understand why one or another digital choice was made (see the chart in Appendix A.). Empirical Examples provided evidence on the complexity of hidden reasons behind the digital divides and outlined what implicit meanings the adoption of the internet and online public services had for the research participants. From the point of view of voluntary decision-making and personal agency, digital choices were influenced by a willingness to pursue independence, routines and habits, laziness, fears, conservatism, and feelings of distrust. The context of government-driven digitalisation also created challenges that affected the use of digital services by establishing the boundaries for the citizens' freedom of choice. Objective determinants, such as language barriers, public services knowledge, and digital skills, also played essential roles in digital public service (dis)engagement.

Findings from this study have some policy implications. The current study has shown that digital-by-default solutions may put such population groups as older migrants at risk of being unable to access the public services. Availability of formal advisory services both remotely and in-person is thus of crucial importance. The wide provision of workshops and courses oriented on developing the language and digital skills as well as those that advise on digital services is also essential. The research had demonstrated that the digital divide could not be solved by eliminating a single barrier such as poor ICT-related skills. Implementing measures to enhance the digital engagement of older migrants in public services must account for all the potential elements influencing the process. These components include not least the simplicity, usability, and reliability of online content; multiple language options for website text and help menus. Implementing the webpages of e-government and e-health services with all of the online forms in plain Finnish may also improve their usability for migrants. It is also important that the government agencies orient on reducing the stress among the digital public service clients and continue to offer public services through multiple channels so that customers unable to access the digital services are not disadvantaged.

5.3. Limitations

This study is based on a specific case of older people with migration histories who have permanently settled in a new country. The research participants in this study were generally highly educated. Besides, they voluntarily started attending the workshops, which means that they were active and willing to engage with a digital society, and this may have shaped their digital practices and choices. Therefore, the recruited participants may not reflect the broader experiences of older people with migrant backgrounds. In addition, previous research on Russian-speakers in Finland has revealed differences within this population group [52]. However, this paper does not differentiate between the nationalities of the research participants. Another limitation to consider is the low number of male participants. This can be explained in part by the recruitment strategy that found research participants through digital support workshops. Each of the three research sites had more older female clients seeking digital support. Therefore, this analysis does not provide an exhaustive list of the reasons behind digital engagement. Instead, the primary purpose of this paper was to produce a qualitative account of the phenomenon by examining one case in-depth.

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Declaration of competing interest

No potential conflict of interest was reported by the author.

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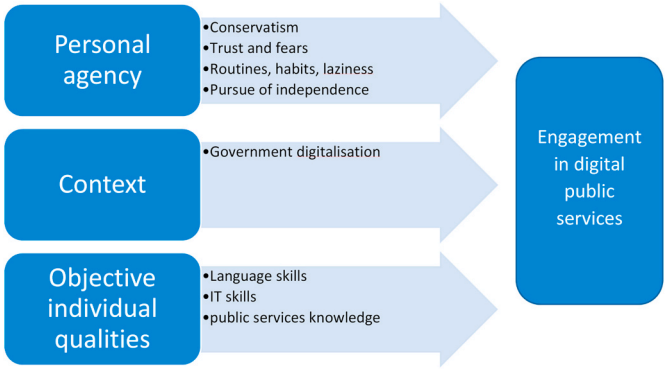
Appendices.

Appendix A. Levels of engagement in digital public services



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