The Digital Competences and Agency of Older People Living in Rural Villages in Finnish Lapland

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Abstract

Older people's digital competencies are a means to minimise their possible risks for being excluded from society. Therefore, the research in this field needs to be strengthened. This paper examines the digital competences and agency of older people who live in remote rural villages in Finnish Lapland. We argue that older people's agency is the key factor that keeps them included in contemporary society. Hence, our theoretical viewpoint rests on the theory of the modalities of agency. Our data consist of three focus group interviews that were conducted in small, remote villages during the spring of 2015. We analysed our data deductively, and the results showed that elderly villagers interpret their digital competencies through their personal needs and desires. History, the present and the future are intertwined in the villagers' conceptions. Our respondents' digital competencies are diverse; older people living in villages are not a homogenous group. Based on our results, we argue that digital competence is very much a distributed competence of elderly dyads, families with three generations and informal networks of villagers and that it should not, therefore, be assessed solely as an individual characteristic.

Keywords: older people's digital competence, agency, media agency, media literacy

Introduction

This paper presents a study that focuses on the *digital competences* and *agency* of older Finnish people who live in remote rural villages in Finnish

Lapland. In Finland, people in the 64–89 age group use the Internet substantially less than those in younger age groups. Furthermore, 25% of people in the 64–75 age group report having never used the Internet. The individual's use or non-use of the Internet is also related to the area in which he or she lives, and older people who live in rural areas use the Internet less than city dwellers (Official Statistics of Finland, 2015).

Older people's non-use or low use of the Internet has raised concerns about their possible risks for being excluded from services related to education, well-being, health, social security, welfare, communication and participation in the digitalised society. Accordingly, national European strategies have prioritised the need to promote older people's access to the Internet and the need to better understand their specific needs in terms of, for example, digital competence-related training and support services (Sourbati, 2009). In recent years, public authorities and international organisations have launched a significant number of media literacy initiatives aimed at older people (Abad, 2014).

The concept of digital competence (Ferrari, 2013) that is applied in this research overlaps with the concept of media literacy. Therefore, in this paper, we present a discussion and previous research that deals with both concepts. Digital competence, broadly defined, refers to "the confident, critical and creative use of ICT to achieve goals related to work, employability, learning, leisure, inclusion, and/or or participation in society" (Punie, 2013, p. 2), whereas according to, for example, Ofcom (2006, p. 10), media literacy is "the ability to access, understand and create communications in a variety of contexts" (cf. Aufderheide, 1997). The concept of digital competence has been assessed as being narrower and more instrumental in its focus compared to the concept of media literacy, which is understood as being more critical (see, e.g., Gutiérrez & Tyner, 2012).

The concepts of digital competence and media literacy underscore the crucial meaning of ICT- and media-related competences in present-day society. The European Commission (2010) has acknowledged digital competence as one of the eight key competences for lifelong learning and participation in increasingly digitalised societies. The academic literature on media education and media literacy identifies the following three key purposes to which media literacy contributes: (a) democracy, participation and active citizenship; (b) the knowledge economy, competitiveness and choice and (c) lifelong learning, cultural expression and personal fulfilment (Livingstone, Van Couvering, & Thumim, 2005, p. 7). The use of ICTs in general has been considered an opportunity to improve older people's living conditions, to strengthen their social community and to facilitate their everyday lives in rural areas (Kilpeläinen & Seppänen, 2014; Kilpeläinen, 2014).

Digital Competences of Older People

The concept of digital competence refers to a complex set of knowledge, skills and attitudes needed to participate in digital societies (Ferrari, 2013, p. 11). In this paper, we use the definition of digital competence provided by the European Commission's Joint Research Centre's Institute for Prospective Technological Studies, which summarises the areas of digital competence as follows (Ferrari, 2013):

> **Information**: Identify, locate, retrieve, store, organise and analyse digital information, judging its relevance and purpose.
> **Communication:** Communicate in digital environments, share resources through online tools, link with others and collaborate

through digital tools; interact with and participate in communities and networks; cross-cultural awareness.

Content-creation: Create and edit new content from word processing to images and video; integrate and re-elaborate previous knowledge and content; produce creative expressions, media outputs and programming; deal with and apply intellectual property rights and licences.

Safety: Personal protection, data protection, digital identity protection, security measures, safe and sustainable use.

Problem-solving: Identify digital needs and resources, make informed decisions on the most appropriate digital tools according to the purpose and need, solve conceptual problems through digital means, creatively use technologies, solve technical problems, update own and others' competence.

Substantially less research has been conducted on the media literacy and media education of adults and older adults compared to children and youth (Dennis, 2004; Hakkarainen, Hyvönen, Luksua, & Leinonen, 2009; Livingstone, Van Couvering, & Thumim, 2005; Ofcom, 2006; Tisdell, Stuckey, & Thompson, 2007). However, the existing research suggests that adults may lack the necessary skills to critically evaluate the point of view from which information is presented (Livingstone, Van Couvering, & Thumim, 2005). Of the three aspects of media literacy (i.e. access, understanding and creation), creation has been the most under-researched (Livingstone, Van Couvering, & Thumim, 2005).

In the United Kingdom (UK), Ofcom's (2006) report on media literacy amongst people aged 65 or older indicated that the *breadth* of their Internet use was around one-tenth of the maximum potential. The report illustrated much lower levels of media literacy for older people compared to UK adults as a whole. This was especially the case with regard to older people's *volume* of Internet usage and their *competence in digital tasks* (e.g. blocking computer viruses or e-mail spam and listening to the radio over the Internet). Compared to adults, older people have reported *less interest in learning* more about Internet technologies and use. Their *preferred method of learning* about digital technologies, the Internet included, is through friends and family, compared to other methods, such as reading the manual/instructions, trial and error on their own, finding out from the supplier/store, or going to a class/learning in a group. Conversely, previous research has identified the following key enablers of adult media literacy (see Livingstone, Van Couvering, & Thumim, 2005): self-efficacy (skills and confidence in using new media technologies), social support networks and family composition—especially having children in the household.

Modalities of Agency as a Theoretical Approach

In this study, we take a holistic approach to older people's digital competences and explore these from the viewpoint of the *theory of modalities of agency.* This theory, which was formulated in Finland by Jyrki Jyrkämä, draws on the theories of agency, especially in sociology and aging research, as well as on the theoretical ideas of the French semiotician Julien Greimas and his followers (Jyrkämä, 2008). Jyrkämä argues that the behaviour of humans is the result of the dynamic interaction of the modalities of agency: *knowing how to, being able to, having to, having the opportunity to, wanting to* and *feeling. Knowing how to* refers to the enduring knowledge and skills that a person has acquired during his or her life course or will acquire in the future. *Being able to* primarily entails an individual's physical and mental abilities, which vary from situation to situation and change throughout the course of aging. *Having to* entails physical, social normative and moral barriers, necessities and

constraints. Conversely, *having to* encompasses the *opportunities* that various situations provide. *Wanting to* is related to motivation and to being motivated, as well as to volition, aims and goals. *Feeling* deals with the human tendency to evaluate and make value judgements, as well as to experience and associate emotions with things and situations. According to Jyrkämä (2008), "agency is something that originates from, takes shape, and is renewed within the intertwined and dynamic process of these modalities" (p. 195, author's translation). Bandura (2001) stresses a person's own experience of capability as the basics of agency.

An example of the modalities of agency in the lives of older people is the automated teller machine (ATM) (Jyrkämä, 2008, pp. 195–96). The user of an ATM is required to *know how* to and *be able to* operate the machine. Various kinds of *wanting to* may be related to its use: Whereas one person wants to learn how to use the ATM, another does not, and still another person asks a more skilful and able grandchild to accompany him or her to the ATM. A person may also give his or her bank card to his or her home help. Differences also exist in terms of the modality of *having to,* as there may be localities without ATMs. In terms of *feeling,* older people are known to appreciate more traditional, face-to-face forms of customer service at the bank. When looking at various everyday situations (e.g. using the ATM), different types of intertwined modality constellations can be discerned. A person may, for example, represent the following type: "I know how to, I want to, I am able to and I even like to use the ATM", and another person may represent the following type: "I know how to, I am able to, but I don't want to".

With regard to older people, the theory of modalities of agency is best seen as a heuristic viewpoint or framework that makes it possible for researchers to understand and analyse older people in their everyday life situations, including their interactions and positions with respect to services related to, for example, education, well-being, health, social security and welfare (Jyrkämä, 2008). Jyrkämä stated that for the researcher who is conducting research from the viewpoint of the modalities of agency, it is crucial for him or her to take into consideration the contextuality of agency, as well as its object orientation and its connectedness in terms of time, place and situation. In addition, the dynamic and interactional nature of agency is central to the framework.

Lipponen (2007) reflected on the concept of media literacy through the frameworks of sociocultural learning theory and agency. He argues that instead of understanding media literacy as the generic knowledge and skills of individual people, we should think of it more in terms of *situated* and *distributed* literacy. Following this line of thought, understanding people's media literacy requires understanding the situations and contexts within which they act. It is central to understand that a person learns to master, in particular, the tools of thinking and the action of the communities to which he or she belongs.

Earlier researchers have verified that individual, cultural and societal conditions define the relationship between older people and the use of ICTs (Hakkarainen, 2012; Kilpeläinen & Seppänen, 2013; Rasi & O'Neil, 2014; Suopajärvi, 2014). In the case of older people's Internet (non)use, digital competences (Ferrari, 2013) can be thought of as only one or two modalities of agency (i.e. *knowing how to* and *wanting to)* that explain whether and how older people use the Internet. However, for a more holistic understanding, we need to find out how *all the modalities interact with each other*. In previous research, older people's non-use or low use of the Internet has been explained by factors and barriers that can also be examined from the viewpoint of modalities of agency. These include physical limitations (*being able to*); lack of perceived needs and benefits of use (*wanting to*); lack of relevance to everyday living and lifestyle (*wanting to*); lack of sufficient skills, information and

support (*knowing how to*) and negative emotions (*feeling*) toward the Internet (Abad, 2014; Hakkarainen, 2012; Hakkarainen & Hyvönen, 2010; Harwood, 2007; Livingstone, Van Couvering, & Thumim, 2005; Quinn, 2014). However, research into how the factors *interact with each other* is still scarce (Livingstone, Van Couvering, & Thumim, 2005; Wagner, Hassanein, & Head, 2010).

Research Questions, Data and Analysis

This paper reports the first phase of our research process. During this phase, we used the modalities of agency of *knowing how to* and *having to* (Jyrkämä, 2008), and we formulated the following research questions: How do the respondents assess their digital competences and the need to enhance them? Do the respondents report feeling social or societal pressure to use the Internet? If so, how does this pressure manifest itself?

To answer the research questions, we analysed the research data gathered through three focus group interviews with older people living in three small rural villages in Finnish Lapland. The use of a focus group interview makes it possible for participants to express their ideas in situ (Barbour, 2007). All the interviews (see Table 1) were conducted during the spring of 2015, and both authors of this paper were the interviewers. All the interviews were audio recorded with the respondents' informed consent. The shortest interview lasted one hour, and the longest lasted for one hour and 39 minutes. The participants were both female and male. The preconditions to take part in the interview were the following: retired, living in a remote village, and either an Internet user or non-user.

Table 1 *Description of focus group interviews*

Focus group interviews	Number of participants (female/male)	Age (years)	Internet user/ non-user	Duration	Number of transcribed text pages
Int. one	3/3	62–86	4/2	1h 31 min	78
Int. two	3/2	64–85	3/2	1h 2 min	84
Int. three	5/0	67–84	4/1	1h 39 min	113

Our aim was to generate discussion rather than to conduct interviews. In doing so, we wanted to produce interactive, shared and reciprocal knowledge (Kilpeläinen, 2012). The topics and parts of the questions used in the focus group interviews were specified in advance as follows: the respondents' living history in the village, the benefits and disadvantages of living in the village, communality in the village, locality, Internet use or non-use in everyday life and digital competence.

The audio data were first transcribed verbatim by a trainee in the second author's faculty. The analytical approach can best be characterised as deductive. We read the transcripts individually to identify and mark interview passages in which the respondents talked about their Internet use, digital competences (Ferrari, 2013) and everyday lives in the village in terms of the selected modalities of agency—that is, *knowing how to* and *having to* (Jyrkämä, 2008). We then analysed and coded the data by writing notes on the printed transcripts, the unit of analysis being, at times, a word, a phrase, a sentence or a longer text passage. After completing our individual analyses, we compared and discussed our thoughts and codings in one data session. In the following sections, we will present and discuss our findings. All the extracts reported in this paper have been translated into English by the authors.

Results

Digital Competences from a Time Perspective

Digital competence has been acknowledged as one of the key competences for lifelong learning and participation in increasingly digitalised societies (European Commission, 2010). However, the data provide somewhat contradictory evidence regarding the important meaning of digital competence for the respondents' present and future lives in remote rural villages. Giddens (1984, p. 35) identified three forms of time: short day-to-day time, lifelong time and institutional time. The first form is constantly changing, the middle one is relatively stable and the last one, which is related to the culture of action, changes the slowest. Applying Giddens' categories, villagers described three types of time: personal time, village time and societal time. Their personal time has changed since retirement and during the time spent living in the villages. Village time can be interpreted as a timeline for actions at the village level—for example, annual or other periodically recurring common events. The last one—societal time—represents societal needs and changes, and it has impacts on village time and personal time.

First, the villagers situated their everyday lives through their personal lives. The respondents enthusiastically told numerous stories about their past, as well as their present, in which digital technologies and, accordingly, digital competence had no role. Within their life course, digital technologies were viewed as newcomers, and their significance is partly constructed in relation to the individual's past. Interestingly, the villagers' stories implied that *competencies other than digital competence* were more significant and personally meaningful in their lives. For instance, we were told stories about how the villagers managed in the past to collectively gather money to buy a TV and a piano for the village school, how they used to organise trips to the theatre in the nearest city or how they wrote and staged a play about the history of the village. In regard to these collaborative efforts, the various modalities of agency (Jyrkämä, 2008)—that is, *knowing how to*, *being able to*, *having to, having the opportunity to*, *wanting to* and *feeling*—seem to come together. The skills and competences that these stories demonstrate do not include digital competences. In our analysis, we noticed that to understand the meaning of Internet and digital competence from the respondent's viewpoint, one has to acknowledge the *life course* of the respondent; in other words, this must be done to view digital competence from the time perspective (see also Emirbayer & Mische, 1998). This became evident as several respondents talked extensively about their previous lives *without* digital technologies (see also Suopajärvi, 2014).

Second, the villagers were keen to situate their personal lives into their home villages. Their life histories are included in their everyday lives. The historical and cultural habits of the villages are embedded into the newcomers step by step, and it takes time to accept and to be accepted in a village:

> [...] Getting used to everything new, it takes its time. (Female, 78 years, Interview 1)

> [...] By doing something together, children living in the village learn. (Female, 78 years, Interview 1)

In village time, the rhythm of the year provides frames and structures. There are some regularly repeated events in the village, and countless villagers organise and attend these social ceremonies/events. Nature and the four distinct seasons play a crucial role in village time, in which the past, the present and the future are present at the same time. For example, summertime is associated with activities and competences (e.g. not getting lost in the woods) other than digital competence, as evidenced by this excerpt from our first interview:

> R1: [...] In the summer, you get to be out in nature a lot more, fishing and picking berries. (Male, 64 years)
>
> R2: Yes, that's right. (Female, 78 years)
>
> R1: It can be that summer always takes you to the woods. (Male, 64 years)
>
> R2: Yeah, that's what it does. You know my husband [name omitted], even if he is 86 [years of age]—and he was already 86 last summer—he picked blueberries and lingonberries for us, just like that! [...] And our daughters were a bit worried about Dad getting lost. But our son [name omitted] said that Dad knows the area so well that when he goes to his own part of the woods, he will not get lost. (Female, 78 years)

Third, the issue of societal time came up, especially in the discussions concerning communication habits, which have changed extensively in recent decades. Information technology has brought about new methods of keeping in touch. As one respondent in the first interview stated, "Paper letters are water under the bridge" (male, 62 years). However, the local history, culture and habits play an important role in everyday life. Even if information technology is subverting some traditional structures, it is formulating new ones at the same time. One respondent in the second interview talked about the changes:

> R1: Earlier, there were no phones. [—] If you had something to take care of, you had to visit. (Male, 64 years)
>
> R1: I have acquaintances in Southern and Central Finland. I usually check online [to see] what are they doing [and] what is happening there. (Male, 64 years)

Even if communication inside the village has been decreasing, the respondents stated that they communicate via the Internet with their family members who live far away.

Diverse Individual and Distributed Digital Competences

Definitional issues surrounding the concepts of media literacy, digital literacy and digital competence have been and will continue to be debated. According to Livingstone, Van Couvering and Thumim (2005), one ongoing debate is "whether media literacy is most usefully thought of as a societal capacity ('a media literate society') or an individual competence or skill" (p. 5). Lipponen (2007) proposed the concept of situated and distributed media literacy, which cannot be described using generic, context-free knowledge and skill specifications. In the situated and distributed media literacy framework, participation in media communities and the viewpoint of media agency are central. However, Lipponen argued that the more generic and situated viewpoints of media literacy are best seen as complementary to each other.

Our data confirm that solely belonging to a certain chronological age group does not define a person's digital competences or media preferences (see Harrington, Bielby, & Bardo, 2014; Ofcom, 2006). Harrington, Bielby and Bardo (2014) argued that assuming too much homogeneity regarding older media users and audiences has, to date, been a tendency of media/cultural studies. Sixteen respondents aged 62 to 86 years took part in our study, and they constituted a diverse group in terms of their self-reported Internet use and digital competences. The group included non-users, moderate users and active users. For example, one of the more active Internet users (age 67) told us that she considered the Internet "a necessity" for her. In her Internet use, the modalities of agency (Jyrkämä, 2008) seemed to come together as she told

us that she knew how to use her laptop for banking, making doctor's appointments, signing up for courses, purchasing tickets, searching for information and updating her blog, among other activities. She reported good digital competences in all areas: information, communication, content creation, safety and problem-solving (Ferrari, 2013). However, as Lipponen (2007, p. 57) concluded, *media agency* can also be seen as *resisting*, contesting and deviating from customary ways of thinking and acting. In the abovementioned case, the respondent reported that she used "almost everything" on the Internet but *did not want* to use Facebook (cf. Quinn, 2014).

Conversely, five participants in our research did not use the Internet at all. Their decision not to use the Internet was related to the interaction of various modalities of agency (see also Hakkarainen, 2012). In the case of one 78-year-old non-user, the *dynamic* interaction of modalities of agency could be seen as she talked about how starting a computer class and experiencing difficulties there because of poor hearing (*being able to*) had changed her willingness (*wanting to*) to learn new computer skills. This excerpt also demonstrates how the meaningful subject of digital competence in this case is actually a *dyad*— that is, a husband and a wife, instead of an individual person:

> My husband [name omitted] and I, we went to that computer class together, and I thought that, for sure, I will learn these things. [...] But that didn't work out, because my husband [name omitted], who, at that time, already had pretty poor hearing, and the instructor teaching the course, he was talking behind our backs, and for a man, he had such a quiet voice that even I couldn't hear. So, I didn't want to bother. I dropped out of the course. (Female, 78 years, Interview 1)

Looking at the data from the present research, we argue that digital competence and, therefore, to some extent, media literacy are very much distributed competences of elderly dyads (couples living together), families with three generations and informal networks of villagers. In all the focus group interviews, the issue of children, grandchildren or villagers doing Internet tasks (e.g. searching for recipes and paying bills) for the respondents and helping and supporting them in their Internet use was evident (see also Livingstone, Van Couvering, & Thumim, 2005), as the following excerpts show:

> I give my bills to my daughter [name omitted], [and] she pays them. I don't even have the machine. Yes, they [her children] would have bought a computer for me, but I said I won't take it. I don't want to learn how to use it. (Female, 86 years, Interview 1)

> I don't use the computer at all. [...] Not in any way, I don't even open it. I have such a great secretary [refers to her husband] that I don't need to. (Female, 69 years, Interview 2)

> I manage very well [without the Internet] because my daughter uses it. [...] She does everything for me. (Female, 78 years, Interview 3)

Therefore, seeing digital competence only as an individual characteristic provides a limited view. Agency can be seen in the way in which individuals know from whom to ask for help and how to do so if and when needed (Lipponen, 2007).

Conversely, respondents' *understanding* regarding the opportunities afforded by the Internet technologies developed through their interactions with their children and grandchildren. As Lipponen (2007, p. 57) argued, "Agency is essentially connected with an understanding about what resources are available, how to find them, and how to use them". For example, one respondent told us how her grandson found information about a car accident

from the Internet, and another stated that her grandson helped her with a computer problem:

> Yesterday my grandson [name omitted] came, opened his laptop and started to look for where the car accident had happened. He was saying "Oh, it was right there". (Female, 85 years, Interview 2)

> And then our grandson [name omitted], the youngest one, who is eight years now … I was trying to send a photo the other day, and it's kind of funny that this first grader asked me what was the problem I had with it. (Female, 68 years, Interview 3)

Social or Societal Pressure to Use the Internet

During this first stage of our research process, we also wanted to examine our data from the modality of agency of *having to,* which refers to the physical, social normative and moral barriers, necessities and constraints (Jyrkämä, 2008) related to our respondents' Internet use and digital competence. The results of our analysis coincide with those of our previous research (Hakkarainen, 2012), indicating that older people experience pressure from society to use the Internet. Some of the pressure reported by our respondents was clearly partly social and partly self-inflicted in nature, as in the case of one respondent who worked as the village representative in the Regional Council and who described the interplay of the modalities of *having to* and *wanting to* in the following way (Interview 1):

> Respondent: Because I ended up in this position [representative in the Regional Council], I want to take care of my responsibilities as well as possible. Well, of course school children have contacted me a lot […]. (Male, 62 years)

> Interviewer: How have they contacted you?

> Respondent: Through e-mail.

Older people's social networks are highly important in terms of Internet use and digital competence, as Livingstone, Van Couvering and Thumim (2005, p. 56) argued, "The more people one knows who use, say, email, the more incentive one has to use it oneself; the more one's community is 'wired', the greater the benefits of participating online". Several respondents talked about the necessity of using the Internet in present-day society and developing one's digital competences. The *having to* modality was talked about both in positive and negative ways, as the following excerpts indicate:

> […] Because we live in a computer age like this, it is clear, because it is an electric age, where we have to use and learn how to use [the Internet]. […] I always use it [Internet] to check my e-mails and pay my bills. And if I have something to take care of, I know how to go there [on the Internet]. (Male, 64 years, Interview 1)

> R1: […] and I just wonder how someone not using the Internet, how is he able to manage anymore? (Female, 69 years, Interview 3)

> R2: Yeah, and you need to have a printer, too, if the forms will be there [on the Internet]. (Female, 84 years, Interview 3)

The respondents also had several examples about not complying with the social pressures to use the Internet, thereby showing *media agency* that entails resisting and deviating from customary ways of thinking and acting (Lipponen, 2007, p. 57):

> Interviewer: Have you ever felt that you would like to learn [how to use the Internet]?

R1: Well, no. They [family members] told me that they will bring it [iPad] to me, but I said don't bring it to me; I will manage without. (Female, 85 years, Interview 2)

R2: It's not my thing. I don't want to stare at the screen. (Female, 69 years, Interview 2)

R3: And then we have that villager [name omitted], for instance, she stills travels to the city to pay her bills at the bank. (Female, 78 years, Interview 1)

Discussion

In this study, we used the theory of *modalities of agency* (Jyrkämä, 2008) to explore the self-reported *digital competences* (Ferrari, 2013; see also Lipponen, 2007) of 16 older Finnish people, aged 62 to 86 years, who live in three remote rural villages in Finnish Lapland. We selected two modalities of agency—that is, *knowing how to* and *having to*—through which we examined our data. We sought answers to the following questions: How do the respondents assess their digital competences and the need to enhance them? Do the respondents report feeling social or societal pressure to use the Internet? If so, how does this pressure manifest itself?

The analysis of the data indicated, first of all, that the participants in our study were a very diverse group and that there are differences in terms of their self-reported Internet use and digital competences. Villagers assess the need to use ICT-based solutions from their own personal viewpoints. Their everyday lives were founded on different kinds of habits and life history. Hence, the roles of digital competences were mainly small in their everyday lives, even if they knew in theory the advantages of using ICT. However, if villagers had a personal need to use ICT, they were keen and willing to develop their competences. This points out to the need to provide specifically designed *need-based training* and *support* for elderly people (see also González, Fanjul, & Cabezuelo, 2015).

According to the data, it is clear that we need to view digital competences from a time perspective by considering the *life course* of the respondent (see also Emirbayer & Mische, 1998) and an aspect of time that we termed "village time"—that is, a timeline for actions at the level of the village, such as annual or other periodically recurring social events. Based on our results, we also argue that digital competences are very much the distributed competences of elderly dyads (couples living together), families with three generations and informal networks of villagers and should not, therefore, be assessed only as an individual characteristic.

The meanings of digital competences in the respondents' everyday lives in the village did not always encounter the present-day understanding regarding the crucial role of digital competences in contemporary society (e.g. European Commission, 2010). The meanings assigned to Internet use and digital competences were often subordinate to other, more meaningful *previous, present* or *future* activities and competences (see also Hakkarainen, 2012; Hakkarainen & Hyvönen, 2010; Kilpeläinen 2014; Talsi, 2014). In other words, the villagers were assessing and mapping these meanings through their own everyday life events, as well as the needs and communities to which they belonged (see also Lipponen, 2007).

Looking from the perspective of modalities of agency, the data indicate that digital competences are related to the dynamic interplay of the modalities of agency (Jyrkämä, 2008); of these, we looked closely at the modalities of *knowing how to* and *having to.* To gain a deeper understanding of the

interaction between the various modalities, our next step in this research is to analyse the present research data through all the modalities of agency.

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