

ISSN: 1795-6889

www.humantechnology.jyu.fi

Volume 14(3), November 2018, 343-365

"I USE IT CORRECTLY!": THE USE OF ICTs AMONG ITALIAN GRANDMOTHERS IN A GENERATIONAL PERSPECTIVE

Fausto Colombo

Department of Communication and
Performing Arts

Università Cattolica del Sacro Cuore
Italy

Piermarco Aroldi
Department of Communication and
Performing Arts
Università Cattolica del Sacro Cuore
Italy

Simone Carlo
Department of Communication and
Performing Arts
Università Cattolica del Sacro Cuore
Italy

Abstract: In this project, we investigated the role played by digital media and information and communication technologies (ICTs) in building intergenerational and intragenerational relations for grandparents. Specifically, we investigated the possible relationships between grandmothers, children, and grandchildren, with the aim of understanding the dynamics of intergenerational exchanges and how grandmothers experience the use of the Internet as a tool to facilitate communication with family members. The research shows that the reflections regarding the role of the Internet among elderly people are often linked to a generational identity and generational belonging and involve constant comparison with younger generations. Several grandmothers affirm their correct use of technology (in a wise and moderate way) in contrast with what they see as the antisocial and immoderate modes of its use by the younger generations.

Keywords: the elderly, ICTs, generations, grandmothers, family.

©2018 Fausto Colombo, Piermarco Aroldi, & Simone Carlo, and the Open Science Centre, University of Jyväskylä

DOI: https://doi.org/10.17011/ht/urn.201811224837





This work is licensed under a Creative Commons Attribution-NonCommercial 4.0 International License.

INTRODUCTION

Family relations and intergenerational communication within the family have a great impact on the appropriation of information and communication technologies (ICTs) among the elderly, especially grandmothers (Ivan & Hebblethwaite, 2016). On one hand, the possibility of keeping in touch with family members, especially the younger ones, is perceived by the elderly as a major benefit of going online (Selwyn, Gorard, Furlong, & Madden, 2003). On the other, ICTs often enter grandmothers' lives due to family pressure for safety reasons, that is, as a way of checking up on grandmothers' activities (Quan-Haase, Martin, & Schreurs, 2016; Sawchuk & Crow, 2012). In both cases, learning to use ICTs is perceived by the elderly as convenient, or even as a social duty, for communicating efficiently within their family setting (Carlo & Rebelo, 2018). Intergenerational relations thus seem to be a main reason for the elderly to start and continue going online, resulting in strengthened intergenerational relations (Colombo, Aroldi, & Carlo, 2015; Fernández-Ardèvol, Sawchuk, & Grenier, 2017). At the same time, the elderly also use ICTs for entertainment, information, and to communicate with their friends in an intragenerational perspective (Nimrod, 2014).

Using ICTs for both intergenerational and intragenerational relations also allows the elderly the opportunity to reflect on the differences between their own use of the Internet and that of the younger generations (Carlo & Rebelo, 2018). Therefore, as regards the elderly, mindfulness about digital media use is accompanied by a typical concern in old age today. They tend to question both the social role of their age (especially for the old-elderly, those more than 75 years old; Augé, 2014; Salzberger-Wittenberg, 2013; Zagrebelsky, 2016) and the aging of themselves and of their generation (especially for the young elderly, 65-74 years old).

In the Italian case, speaking about the digital elderly means taking into account a distinctive slice of the population. People over 65 using ICTs are a minority characterized by a stable economic and employment situation, a higher level of education, a satisfying relational context, and good levels of physical activity (Colombo et al., 2015). The progressive digital access of older Italians reveals a classic dynamic of the digital divide, influenced by socioeconomic dimensions (Loges & Jung, 2001; Van Dijk, 2005). In segments with limited digital access, such as the elderly Italian population, wealthier elders with greater cultural and social capital, who started to use computers during their qualified working career, are characterized by increased possession and use of ICTs (Colombo et al., 2015).¹

The relevance of inter- and intragenerational relational use of ICTs by the elderly and the distinctive characteristics of the senior ICT users are key elements leading beyond the notions of the age group as an independent variable shaping the uses of ICTs to a more complex notion of "generation." The word generation has been defined as "an age cohort that comes to have social significance by virtue of constituting itself as a cultural identity" (Edmunds & Turner, 2002, p. 7). In a generation, the biographical traits coexist alongside historical and cultural ones, with membership of an age group being associated with specific historical experiences, the development of distinctive consumption patterns, or the occupation of certain positions in the family chain (Colombo, Carlo, & Aroldi, 2014). Such a multidimensional category appears particularly useful for studying users who cannot be reduced to either individual sociodemographic traits (such as age, gender, education, job position) or to corresponding life styles (such as those codified by marketing). Rather, they have to be closely and simultaneously related to a number of factors. These factors are stage

of life, "technobiography," family and friendship networks, common values shared with other members of the same generation (Corsten, 1999; Edmunds & Turner, 2002), historical development of media systems, steps in technological innovation, as well as the wider structural changes affecting the social and cultural system (Bolin, 2017).

From a historical point of view, people over 65 years old today belong (at least in Italy, but more generally in Europe) to two different generations. The first was born immediately before or during the Second World War, and then participated in the prolonged reconstruction that took place throughout the 1950s; the second was born in the postwar period, experienced the birth of youth as a sociological category, and was the protagonist of the youth movements of the 1960s.

This second now-elderly generation, in particular, has been studied extensively and has served as a matrix for the most recent studies of generations. It has been called the "Postwar Generation" (Colombo, Carlo, & Aroldi, 2014), has been depicted as an active generation (Edmunds & Turner, 2002) and characterized by some unique features. It was the first generation to embody youth as a cultural and social group, with its own habits, tastes, and values (the first of all values being forever young) that differed from those of the adults (Savage, 2007). It was a global generation, largely spread worldwide. It showed a global consciousness, "demonstrated by the domino effect of the social protests and the extent of cross-national activism" (Edmunds & Turner, 2002, p. 565), sustained by a global media system that broadcast the same music, images, fictions, and values. It was also a strong generation that earned agency and proved willing to take history upon its shoulders (Colombo, 2011).

However, it must be recognized that the two older generations today have more points of contact than they had in the past. Both generations are characterized by having experienced the advent of great technological innovations during their childhood and youth. Regarding the people from the wartime generation, these innovations were the first home appliances, the first mass-produced motorcycles and cars, and then television. Turning to people from the postwar generation, the innovations included television, mobile equipment (radios and record players), CDs, and the first electronic games and computers.

Furthermore, both these generations have aged in a very different way from previous generations, thanks to longer life expectancies generated by better health conditions and care, diffused prosperity, and a more active social representation in the third (and fourth) age.³ Participation in the network society through an intense and appropriate use of ICTs is a relevant part of this new way of aging.

These generational attitudes are reflected in the use of ICTs, which often are seen as tools that need to be continually updated with the technological and social changes and with new digital skills. These attitudes drive people in this age group—together with other behaviors—to show they are still active and involved in social life, open to even the latest digital innovations as they were to the first technological revolutions. This means that the generational history of technological use had a real relevance in the processes of literacy in the older generations' youth, and this remains true of their contemporary encounters with computers and digital devices. Members of the postwar generation in particular used these during their professional lives. They are people who became familiar with digital technologies during their careers, onwards from the late 1990s, at the height of the great wave of digitalization of Italian society.⁴

However the use of ICTs by the older generations also reveals other particular characteristics. The first one, which forms the background to our contribution, is the marked difference in use in terms of gender. This characteristic may be surprising because these generations were pioneers in supporting women's emancipation. In particular, postwar women gradually left their roles as solely wives and mothers to experience also a life of work and public engagement. The question of ICTs and their use thus makes it possible to understand the difference of gender within a common generational belonging.

In fact, despite the generational emancipation of postwar women and their entering in the life of work in the last decades of 1900s, elderly women who today use ICTs regularly constitute a rather small homogeneous group, an elite in terms of economic, cultural, and social capital (Colombo et al., 2015). It comprises women who had professional experience during the first phase of computerization of Italian society. This enabled them to overcome the gender gap and make their generational attitudes prevail, while maintaining their gender specificity, especially in relationships with family members and their own friendship circles. In particular, the few grandmothers with digital skills see ICTs as an instrument for relationships with the younger generations (represented by their grandchildren).

As highlighted in our previous research, this aspect has been one of the objectives of the researchers involved in the project "Grannies on the Net" presented here. Its aim was to understand how grandmothers use Facebook and digital devices within family and friendship networks and their subjective—personal and generational—perception of ICTs and their use.

In relation to the use of ICTs by older people, many researchers focused on the "grey divide" (Duggan & Brenner, 2013; Morris & Brading, 2007), that is the digital divide affecting over-65s. Focusing often on the first-level divide (access and use), the grey divide has been conceptualized as a clear distinction between users and nonusers (Millward, 2003). It often has been investigated in terms of the sociodemographic variables capable of determining it (Friemel, 2016).

More recently, researchers have deconstructed this dichotomous vision that distinguished between users and nonusers, suggesting a more nuanced view of the specificity of the adoption of ICTs by the elderly and their digital skills. For example, Fernández-Ardèvol et al. (2017) recorded the daily communication practices of elderly supported by technologies. They distinguished different usage configurations that change over time depending on one's position in the course of life, according to the notion of technobiographies (Kennedy, 2003). Moreover, Quan-Haase, Williams, Kicevski, Elueze, and Wellman (2018) proposed a detailed clustering of the over-65 ICT users on the basis of the various digital practices. In this perspective, the scholars highlighted the subjective dimension of the elderly, with a focus on their self-perception as ICTs users.

An important part of this self-perception concerns not so much the use or not of ICTs but their "correct" use. In fact, despite the openness to technological innovation over the years, today's older generations sometime appear to be victims of normative attitudes about how they should use ICTs correctly. The elderly seem to be subjected to pressures toward digitization and connectivity by the younger generations (but also by institutions and the market), which often fail to take into account elderly subjectivity, their everyday use of text messages, and their relational contexts (Aroldi & Colombo, 2016; Sourbati, 2016). On one hand, the elderly learn the use of ICTs in the most mainstream way, often transmitted by the younger generations (represented by children and grandchildren). On the other hand, the

elderly often criticize such dominant uses and shape their use to suit their own needs and their standards of correctness or appropriateness (Carlo & Rebelo, 2018).

The proper use of a communicative technology can mean many different things. Some authors have discussed the implicitly normative dimension of platform affordances. When researchers use the term affordance, they refer to the actionable properties between an object and an actor (Gibson, 1977). As recalled by Costa (2018) recently, the concept "has been embraced by social scientists and media and communication scholars to describe the relationship between the properties of technologies and the structure of social relations, and to point out the technological qualities that are subsumed by users' practices" (p.10). Thus, the use of the notion of affordance is justified by the intention to avoid technological determinism. However, an interpretation of the affordances of ICTs and, in particular, of the social network sites as intrinsic "properties and features of a technology that are separated from the social context and the work of human users" (Costa, 2018, p. 10) suggests that some online communication practices are actually more correct than others because they are more coherent with platform affordances. For example, Comunello, Mulargia, and Parisi (2016, p. 529) showed that users "attribute intrinsic characteristics to different platforms, and refer to act accordingly." Moreover, the users described a "platform-sensitive approach as 'proper,' acting in response to nuanced representations of the peculiarities of different social media platforms" (p. 529).

Comunello, Fernández-Ardèvol, Mulargia, and Belotti (2017) also emphasized the power and prejudices of the social discourse concerning ICTs, capable of accrediting some social uses with greater force than others and facilitating the dissemination of some particular social practices and the related netiquette. Therefore the stereotypes contained in the social discourses on ICTs are seen as capable of reinforcing digital inequalities because they are

inaccurate and biased beliefs about alleged uses of the devices that tend to homogenize and stigmatize specific social groups about their ICTs usages.... This is particularly evident when digital inequality varies according to age and gender, as these factors are two pivotal axes articulating ICT-related power relationships in life nowadays and influencing even the devices' design and other technical features. (Comunello et al., 2017, p. 800)

A particular meaning of correct use is related to digital literacy, the physical ability of the elderly, and the usability of the interfaces (Bol et al., 2014). The focus shifts to confidence in the elderly's digital skills compared to the complexity of technologies and the fear of making mistakes in their use. Recently, researchers have taken into consideration this subjective dimension. For example, Quan-Haase et al. (2018) built their typology of elderly users on the basis of two parameters: the self-perception of their digital skills and the number of online activities. The types proposed include, among others, reluctant users, apprehensive users, and savvy users, with each group being characterized by a specific self-assessment of the adequacy of its use of ICTs, especially when compared to that of younger generations. Older users are afraid of incurring different forms of wrong use (e.g., lack of digital skills, anxiety of wasting their time, fear of breaking the computer).

Fernandez-Ardevol et al. (2017) made explicit the normative dimension present in many social discourses about the digital access of the elderly, including scientific research. Fernandez-Ardevol et al. stated that "research on older users often contains normative

injunctions on 'appropriate use' that tend to equate non-use with a series of problems that digital technology could solve" (2017, p. 41). Overcoming the concept of the right or wrong way to use media technology, Fernandez-Ardevol et al. (2017) gave voice to the subjectivity of elderly users about how they use "a medley of devices to maintain, filter or cut their connection to the world" (p. 39). It emerged that what the elderly think is an appropriate use of a particular media contributes to shaping specific communication practices. In these approaches, the correct use is configured as a use that responds to the personal and contextual characteristics and needs of the users, respecting the preeminent and relevant values (Ivan & Hebblethwaite, 2016), also in their generational identity. For example, Ivan and Hebblethwaite (2016) showed that the use of Facebook by grandmothers is influenced by social standards regarding privacy and decency. Their concerns regard "what information they perceived to be 'decent' or 'appropriate' to share in a public forum" (p.8), "how others would judge what grandmothers shared on Facebook," and "about teaching their grandchildren about these norms of decency and privacy" (p.19).

Starting from this scenario—one that considers users in the context of their generation and asks them to reflect on their online experience, in both intra- and intergenerational relationships—our research questions are

RQ1: What is the subjective experience of grandmothers with ICTs, where those inter-and intra-generational relationships are facilitated by ICTs?

RQ2: How do elderly people understand the "correct" use of ICTs and their own use of ICTs compared with ICTs use of other generations?

METHOD

We grounded the article in data collected in Italy as a part of an international research project titled Grannies on the Net: Understanding the Role of Internet Communication Technologies (ICTs) in Family Relationships with Grandparents.⁵ The main goal of this international project was to understand how grandmothers experience the use of the Internet as a tool to facilitate communication with family members and, at the same time, as a tool of communication, entertainment, and leisure activities with friends. We investigated how grandmothers learned to use ICTs, as well as their resistance to and difficulties in using them.

We collected data through four focus groups, each lasting approximately 2 hours and conducted in February and March 2017 in Milan, Italy. We recruited 28 Italian women, first via a snowball approach through acquaintances and then in collaboration with a local association of the elderly. In particular, in the process of finding and selecting possible participants, we culled participants from Milan's University of the Third Age and a leisure association (attended not exclusively by the elderly) in a suburban neighborhood of Milan. We organized two focus groups in the University office and two others in the association's office. We prepared the way for the focus group by a brief phone call between each elderly participant and one of the researchers. The aim of the call was to have prior knowledge of the grandmother and to check—through a closed questionnaire—her possession of the characteristics (age, family situation, computer skills) needed to participate in the focus group. The selection criteria were being 65 years old or older, a grandmother, and a frequent

user (at least twice a week) of at least one digital device from among the following: computer, laptop, tablet, and smartphone. The participants were born between 1936 and 1952 (average age was 72, minimum 65, maximum 81) and residents of Milan; the majority of participants declared they used either a desktop or laptop computer daily, as well as a smartphone. On the whole, the sample turned out to be very homogeneous, made up of well-educated middle- and middle-upper class women. Most of them were involved community activities in Milan. This peculiarity of the sample is not the result of a particular selection in the recruitment phase, during which no restriction was placed on socioeconomic or sociocultural status. Rather, the researchers considered the consequence of the spread of ICTs among older women in Italy that, as we have seen previously (Colombo et al., 2015), still tends to favor people with high economic, cultural, and social capital. Therefore the members of the focus group present characteristics that are consistent with the relatively small and privileged segment of older women ICTs users in Italy, and thus very relevant in order to understand their appropriation dynamics.

The use of the focus group method in this research allowed the researchers "to observe a large amount of interaction on a topic in a limited period of time" (Morgan, 1996, p. 8) and to experience the participants' natural vocabulary on the topic. Interaction, one of the most distinctive features of this method, is important as it leads to "a relatively spontaneous response" and produces a "fairly high level of participant involvement" (Morgan, 1996, p. 10). The "friendliness" of this methodology for its participants "who typically enjoy their interactions together" (Morgan, 1996, p. 18) also makes it particularly suitable for the participants' age group. Moreover, the focus group method activates social interactions that accentuate the shared experiences and allows the mutual recognition among members of the same generation.

Each focus group was led by a pair of researchers, one in charge of moderating the discussion while the other made a videotape and took notes on the most significant discursive interactions. After the warm-up phase, the researcher investigated the participants' phase of learning to use ICTs, that is, understanding when and how the grandmothers learned to use ICTs and for which reasons. Then the researcher asked the participants to describe ICTs and their risks and benefits in the users' everyday lives. A second section focused on how they communicate with their families, compared with how they communicate with their friends and acquaintances, and the difficulties faced when using ICTs with these two different types of people. The final section encouraged the participants to declare what they would change about these technologies and what, as they understand it, is the "correct and appropriate use" of ICTs.

During the focus groups, information was collected about family relationships and individual memories, including very personal and familial situations for some interviewees (such as relationships with children and grandchildren). In addition, sociodemographic information was collected that revealed their opinions regarding the use of ICTs with the characteristics of the participants.⁷ All the material recorded in Italian was transcribed and translated into English by researchers in order to support a cross-cultural comparison of data in the framework of the international project. Finally, all the transcripts were analyzed using video writing programs to facilitate a qualitative thematic text analysis and the coding and comparison of data within the framework of the constant comparative method (Glaser & Strauss, 1967).

RESULTS

We present the main results of our research focusing on two main points. The first point is the analysis on how technologies are inserted into the personal stories/biographies of the elderly. The second point is the elderly grandmothers' reflections on the dimension of correctness and appropriateness in the use of ICTs

The Technobiographies of Elderly Women

A first set of accounts refers to the respondents' technobiographies, which highlight their learning processes and family role. Both motivations for and resistance to using digital media were involved in the gradual appropriation of ICTs by the grandmothers. In particular, the narrative produced by the grandmothers allowed us to understand their motivations to use ICTs in relation to their personal inclinations and the system of relationships to which they belong. During the interviews, the grandmothers recalled when and why they began to use ICTs, with a focus on the memorial and retrospective dimensions of their first steps in digital use.

Each grandmother interviewed had and used at least one device for digital communication (e.g., computer, laptop, tablet, smartphone). The interviews clearly revealed that often the digitalization process and ICTs usage was not a recent event in our respondents' lives. According to many of them, they learned how to use digital technologies some years before. In fact, the majority of our grandmothers were retired teachers or office workers. They first experienced the digitalization processes during the second half of the 1990s.

A significant number of these grandmothers learned to use computers (often self-taught) in their office work, giving the world of computing a value of primarily utility and not leisure. As a 71-year-old woman told us: "I learned in the office. I worked for almost 35 years for an American company, then for a Japanese company. There was a computer in the office. I learned from there and then everything else followed from that." Another informant said, "I learned a little by myself and a bit because of courses for teachers available at school" (66 y/o).

The education of children and the need to give them tools for school and homework were an additional incentive to understand information technology and the digital world. The computer often entered the grandmothers' homes when their children attended university or school. For some grandmothers, it was an opportunity to get closer to ICTs and the digital world: "I started with the PC years ago out of curiosity, to help the children for school, and then later the smartphone came. I've always used the PC a lot" (72 y/o).

In many cases, the interviewed grandmothers learned to use the computer alongside their school-age children. In some cases, the grandmothers taught the basics of computer usage to their little children: "In fact, my daughter learned to use the PC with me. I introduced her to the PC. Now things are different. Maybe for a lot of functions, I have to ask her to help me" (65 y/o).

Grandmothers who had owned a computer for many years still use it nowadays to do research or send emails. However, they acknowledged that they use it less than before, particularly since the arrival of smartphones and tablets and the beginning of a new era of digital media. In the last few years, the grandmothers had perceived that the real change has been the arrival of the Internet and the smartphone but especially computer usage in social relations and entertainment, not just for work and to help children with homework.

The first digitalization processes⁹ were restricted to work and children's education. During the second digital wave, characterized by the Internet and smartphone, the role of technology in the family became fundamental. The younger members of the family both supported and pressed the elderly to adopt new technologies, often providing the devices to their elderly members to help them keep in touch within the family. In some cases, the second wave triggered a reaction on the part of the elderly people, who wanted to demonstrate to their relatives they are still just as capable of learning and as competent as the younger members of their family.

For our participants, the motivations for starting to use ICTs in this second wave were both personal and relational. In the first case, the impulse was related to the notion of adequacy and the need for keeping up with the times. In the second one, motivations were linked to family pressures in order to be connected with and to be reached by other family members. This was particularly true when their children and grandchildren lived some distance away".

As for the theme of the family's role in stimulating technologies, the possibilities and necessity to keep in touch with their children and grandchildren remained the initial incentive for adopting technologies. In the cases of later entry to the new digital world, this adoption was due to some precise and particular event in the grandmothers' family lives, typically when children or grandchildren moved away from home. This event made the adoption of the smartphone or the Internet connection urgent. One informant said,

I started 16 years ago when one of my children moved to the US. He gave us the PC so as to learn to stay in touch, and then we were committed to it. I did two little courses, though unfortunately they closed after a while, but that helped me. (76 y/o)

Familial relationships supported and stimulated the initial usage of the ICTs, but in some cases, it was not a serene relationship. The grandmothers perceived a sort of family pressure concerning the updating and learning of new digital services and devices: a commitment to keep up with the times but especially to be connected with the family network. One of our informants told us,

I always refused to use the iPhone. Then my children and husband almost forced me to, and since then, when I use the smartphone, I also use WhatsApp. It's quite handy. I don't really like telecommunications. But I use them because otherwise I would feel cut off from my family. (71 y/o)

The interviewed grandmothers considered the digital tools essential to maintaining intimate relationships with distant family members. This situation particularly applied to the grandmothers whose children and grandchildren live far away and who see the digital channels as tools capable of simulating the proximity and feel, albeit virtually, the pleasure of physical contact, and an intimate relationship with distant relatives. In particular, grandmothers found the digital tools enabled them to observe their grandchildren's growth from a distance, through pictures shared online.

I can see my granddaughter growing up. I actually see her two or three times a year when I go there, but I still feel really close. For me, it's thrilling every time, every Sunday. She can't talk yet but she is starting to play. It's just a joy. (66 y/o)

This dimension of subjective and relational motivation appears even stronger when the grandmothers reflected on the nature of the personal challenge that often framed the adoption of the technologies. According to some grandmothers, in particular the oldest ones, the adoption of digital technologies was recounted as a personal challenge in relation to their family and society in general; it was also a personal challenge to still feel active. As one informant said,

I always wanted to keep up with the times and, at some point, I decided to buy a smartphone. My son asked me what I wanted a smartphone for, but I'd decided to buy one. One reason was because, in everyday life, I saw everybody using the new technology, and I didn't want to be outdone, apart from the fundamental importance of always keeping in touch. (79 y/o)

For some grandmothers, learning to use the computer and other digital devices (especially through organized courses for the elderly) was an occasion to show their independence, modernity, and activity. Joining these courses offered an opportunity for the grandmothers to feel active and independent, a value also pointed toward husbands and children. One informant said, "I've been a widow for 15 years. After a while, my children were grown up, and they didn't need me anymore. I subscribed to a course without having a computer, so I didn't learn anything until I inherited one" (67 y/o).

This sense of a personal challenge produced positive results both in terms of self-satisfaction and inclusion within the family network. Many of the interviewed grandmothers described how often the basic stimulus impulse to use the new digital technologies came from children but rarely from grandchildren. This is true of the older grandmothers with adult grandchildren. In particular, the children saw the digital access of their elderly parents as an opportunity for their inclusion in the lives of their children and grandchildren: "My daughter taught me to use all these things because I used to reject them. It was a way to bring me closer" (71 y/o).

After the learning phase, it seemed the younger generation did not devote as much attention to answering grandmothers' additional doubts and questions. According to our participants, it seemed that the introduction to the new digital world happened mainly at restricted and unexpected moments, perhaps involving the present of a smartphone or the casual download of a new service, but it was not followed by day-by-day assistance. Numerous grandmothers expressed a certain difficulty in getting help from children and grandchildren. They described their grandchildren as very intelligent and clever but unwilling to help their grandmothers except when asked specific and often insistent questions. Their answers are often hasty and incomplete:

When children do take the time to teach, they're so fast. They don't understand that we may need to take note, and they should answer without hurrying. They're so quick on the uptake themselves, and they don't think that it's different for us. (76 y/o)

In particular, the grandmothers considered their grandchildren to be rushed and not able to explain the complex steps in ICTs usage attentively. The grandmothers stated they require a certain patience in teaching with respect for their learning processes and comprehension of the different literacy levels. These requests often fall on deaf ears. Several of the interviewed grandmothers realized, often with some frustration, that they could not always count on their children or grandchildren to assuage doubts about how to use computers and smartphones.

"My grandchildren didn't help us understand how to use these devices better. So I stopped asking" (79 y/o).

It is interesting that the difficulties in technology use were not blamed on the technologies themselves, but rather on the generational limits of the family members in the specific familial learning environment. "My grandchildren know how to do everything on a computer, and they wanted to teach me. They do everything and they expect me to understand, but they don't help me" (72 y/o).

This difficulty in receiving assistance is compensated for by seeking help from their husbands, from young people outside the family (often paying them for their services), who are considered more helpful and patient, or other more expert elderly people. One commented "I don't ask my children because they never explain anything. I prefer to go to the shop or to a friend who knows more than me" (73 y/o).

The elderly informants considered the younger generation less able to understand the time it takes for elderly people to learn new digital technologies. To this generational problem, we can add another issue related to the familial dynamics. Children and grandchildren are often perceived as impatient when it comes to teaching.

Rather than the informal, disorganized, and often rushed instructions provided by children and grandchildren, several of the interviewed grandmothers seemed to prefer a more formal learning process, based on the teacher–learner relationship, in a classroom setting, with homework, a final examination, and the awarding of a certificate. Information technology courses organized by public or private bodies were appreciated by our participants for the instructors' patience in teaching the use of computers and smartphones.

However, according to several grandmothers, learning by doing is still fundamental, supplemented by advice requested of people of their own age or their children. In particular, the grandmothers with a high degree of self-reliance attributed importance to learning by doing. They were aware of being able to learn by themselves, by going about it calmly without being bothered by the availability of others:

I'm self-taught. I'm stubborn and I try to work things out for myself. I'm also familiar with computers because I learned to use them long ago. I'm not afraid. Even if I make mistakes, I try to correct them by myself. (71 y/o)

It must be a generational problem because we have learned the use of certain tools in the last 10 years, limited to small things. I took two small courses and I use the technology, but I don't know how to use it properly. (76 y/o)

The Correct Use of ICTs

Within the above framework, the issue of the proper use of ICTs stands out. According to the interviewed grandmothers, using ICTs rightly means never making mistakes due to lack of technical or digital skills. From this point of view, some of the respondents were more confident than others, but generally speaking, all of them seemed to know very well what they can and cannot do. Their accounts expressed a cautious attitude, concerned to avoid taking risks or causing damage, but this attitude did not lead to marked limitations on their use of ICTs. For example, most of them indicated they are more likely to use a prepaid card rather than a credit card when making purchases or bookings online, but not exclusively. They also used online

home banking. When they did not know how to do something, they were likely to ask someone for a help. Some of them were restrained from using the riskier online services—such as home banking—on the recommendations of their children, but most of them seemed to be able to do online exactly what they needed to do. In their words, the right use of technology sounds to them, first of all, like a fairly confident use, proportional to their (often limited) skills.

I find that computer writing is simpler. For me, it is more convenient to use a big keyboard and not risk making mistakes due to automatic correction as happens with the smartphone. And email allows you to think longer. It's a letter. (79 y/o)

In contrast with awareness of their limited technical skills, the interviewees often claimed they use ICTs more wisely than the younger generations. A clear distinction was made between digital skills and social competences involved in this use. While the elderly were seen to be lacking in the former, the younger were deficient in the latter. Young people's familiarity with digital media was thus perceived as a source of greater opportunities, especially material and practical ones; at the same time, however, it is perceived as a loss in human, cultural, and moral terms. Some of the grandmothers emphasized that the technical skills of the younger generation do not go hand in hand with a careful evaluation of the costs and benefits in the use of technologies. In particular, from the point of view of human relations, if the technologies offered young people notable advantages in daily and practical life, this help was not the same in terms of developing human relationships. This was encapsulated by one 76-year-old grandmother: "In fact, the problem for young people is just this. They're interested, for example, in games, chatting with friends on Facebook Instagram. They're detached from reality. They have maybe 3,000 friends on Facebook and two friends nearby."

The reflections the grandmothers made on the role of technology in everyday life clearly brought out the importance they attribute to comparing the different generations, old and young. Even more than cultural and social differences, characters and contexts, the seniors revealed that age is the most telling factor affecting the ways people use technologies.

Their generation and even more the next one are kind of superficial. I see my grandchildren who, although they still can't read, can use, decide, search. I also think that it's a matter of the generations. Young people are more skillful in using them but somewhat less prepared. (71 y/o)

Another told us:

Perhaps we come from a generation used to clear rules. I've often been over to my daughter's place recently and I've seen that all her friends live with their cell phones by their side. They talk and write at the same time; They send messages. We don't. For example, if we're at the [dinner] table, I might happen to get a phone call but I put away my smartphone. We enjoy the company. Now they're addicted to smartphones. (71 y/o)

In a more analytical way, different kinds of comparison were made. In quantitative terms, for example, the elderly criticized their younger relatives for their excessive use of ICTs. They see them both as a cause of their loss of human relations (as described above) and, in itself, like a kind of immoderate behavior:

I can notice it when my grandchildren come back to Italy for 2 months a year. When they come here, they chat with me a bit, and then they're always on the phone. Before, there used to be a chance to chat a little more. (76 y/o)

In reaction, our respondents were likely to criticize excessive use of ICTs, especially of chat sites and instant messaging (sometimes by their peers). What is intriguing in this attitude is a sort of intimate contrast between the personal standpoint and the reasons for being online or the rules of netiquette. The terms *limits* and *self-regulation* were often evoked as a solution to this contradiction:

When I receive too many [messages], I just delete them. There are contacts who even write these useless messages 10 or more times a day. The problem is that maybe in the middle of all of these there is an important message and it goes unnoticed. You have to regulate yourself. (66 y/o)

Sometimes the claim toward a more self-regulated use of smartphones and mobile devices was seen as a sort of distinctively personal behavior (in keeping with the meaning of distinction theorized by Bourdieu, 1979). According to the interviewed grandmothers, excessive use of ICTs means being a superficial person, deeply devoted to that kind of triviality. One commented. "I even turn it off after a while. Otherwise even text messages and the most irrelevant things keep arriving, sometimes late at night. It's too much" (65 y/o). Another said, "I feel irritated whenever I pull out my cell phone. I feel I'm behaving like those empty young people" (76 y/o).

Besides, in the words of our elderly respondents, the amount of time spent using ICTs is just the most evident indicator of their wrong use by younger people. They also went more deeply into the matter, making comparisons between being online and offline, which the excessive use of ICTs tends to blur. On the opposite side, the right use seemed to be the outcome of a complex trade-off between three different issues: the awareness of the netiquette of every single platform or device; striking a balance between being always online —in order to be easily reachable by children and grandchildren—and respect for their privacy; and the evaluation of the appropriate limits to be placed on sharing private and family contents.

The grandmothers involved in our focus groups were generally very conscious of the proper use of each platform or device. Most often, a sort of local suitability was at stake, as the result of a long negotiation between their family members (and sometimes their peers). And they indicated that they try to follow the common rules. "I use voice messages a lot. My granddaughter wants a voice answer. She doesn't want me to answer her with a written message" (68 y/o).

It is interesting to note how the grandmothers perceived strong differences in terms of correct use between the different services and platforms available. In other words, the different tones of a message, the identity of the interlocutor, the context, and the topic to be addressed called for different platforms and services, depending on the technical affordance but also a different netiquette. The grandmothers claimed that one has to follow a careful netiquette in deciding which technology to use and for what reason.

When my son wants to tell me important things, he sends me an e-mail because it is more serious. WhatsApp is also used for trivial things, like good morning messages and chain letters. So, for the most serious things, email is better. (66 y/o)

Let's say that SMS is more serious. You aren't playing; you're just sending a message. WhatsApp, on the other hand, is also very playful; it's fun. You can use emoticons. A voice message can express information or tell a joke. (71 y/o)

As a part of these common rules, the interviewed grandmothers often had to be easy to reach to enable their children to keep tabs on their health and safety or their grandchildren's, whenever they were being looked after by their grandmothers. "During the day, to reassure her, I show my daughter-in-law that my granddaughter is eating or sleeping so she isn't anxious. If I don't send a picture or updates, she asks me how it's going" (66 y/o). "I call my daughter 'Mother Anxiety' because of these technologies and because they always have to communicate everything" (76 y/o).

At the same time, the respondents seemed to be very proud of respecting the privacy of their children, unless in case of real need. But they also wanted to have the freedom to be disconnected. "My sons are always busy and maybe they don't answer the phone, but I can always write them a message" (67 y/o). "Sometimes in the evening, I switch off my cell phone because I don't want to be dependent on it. Everyone knows that if they need anything, they can reach me on the landline" (71 y/o).

But the issue our respondents were most sensitive to seems to be sharing. In their accounts, they hardly could understand the pressures of sharing private and family contents with other people. Once again, comparisons often were made between the different generations and their habits.

I personally don't feel like sharing what I'm doing with everybody. I only share with the people I want to share with. Even though I know that my daughter and my son are on Facebook and share photos with each other. I disagree and I don't do it. (71 y/o)

I think my children feel it is quite natural to post personal photos. They were born in a different age. We're more suspicious. (81 y/o)

As can be seen easily in the exchange between the participants quoted above, at stake here is not just the role of ICTs in everyday family life, but the more important distinction between the realms of direct and mediated experiences or between the close and intimate space of home and that of the social network. Overlapping the different realms or spaces can be, in their words, a source of personal frustration and family misunderstanding:

I belong to a generation that sees a phone call or personal meeting as more important when you have something to say or share, instead of sending a video or photo. I often wonder whether all these people who photograph and share everything in the end really enjoy everything they share. (71 y/o)

Being in touch and connected all the time also leads to lots of problems with others, the family. Even in young couples, it causes a lot of divorces, in my opinion. (70 y/o)

It is noteworthy that the whole issue of the right use of ICTs involves a generational discourse as well as a gender one. While the former is related to the family space, children, and grandchildren, the latter refers to husbands. From this point of view, our grandmothers often described their motivation in ICT use as a form of emancipation from their male family members and declared that they used ICTs more correctly than their husbands did. In the words of our respondents, learning to use ICTs properly opened up a space of independence for them,

with a new set of tools for making themselves more self-sufficient and a new field in which to demonstrate their skills.

I started taking a computer course 3 years ago and now from Internet I've passed to the smartphone. I did this because I wanted to escape from my husband, who's been staying at home all day for 17 years in retirement. Then everyone used computers and I never did, so I started and now I'm really satisfied. (67 y/o)

I think women always want to prove something to someone while men don't. If men aren't interested, they just give it up, while women suffer if this happens. (65 y/o)

Reference to a woman's husband sometimes revealed an unusual role reversal, especially when our respondents' husbands failed to learn to use PCs and ICTs, refusing even when their profession required them to adopt some form of ICT. One grandmother told us, "My husband resigned when he was forced to work with a computer because he wasn't able to. To avoid using one, he opened an office of his own" (81 y/o). Another said,

My husband is a lawyer and he categorically refuses to learn anything. The only thing he can do is send e-mails and messages. For the rest, he even refuses to surf the Internet... I've tried to teach him millions of times, but I can't. He says he has secretaries and he doesn't need to. (81 y/o)

As this last quotation clearly shows, here a gender issue has become entangled with a matter of power. Generally speaking, having achieved better digital skills in using ICTs than their husbands, our interviewees saw this as revenge for their own historical gender inequality.

Women can multitask. And to achieve equality, we've worked, and we still have to work a lot harder. So we're much more motivated and much more committed. Men had their secretaries, and women in general were like secretaries who did things for them. (71 y/o)

Women want to be more independent; men already feel independent" (72 y/o).

In my opinion, women are more curious to learn things, maybe things that previously belonged to the male world alone. (76 y/o)

On the other hand, this kind of emancipation through ICTs can also generate a sort of resistance, especially when the ability to use PCs and digital devices is perceived as a new challenge or a further assignment to fulfill amid the many tasks of everyday family life. In this case, our respondents welcomed their husbands' greater skills (sometimes with a bit of maternal indulgence). "My husband even refused to use Internet. Then he learned to use it and now he also deals with the online bookings, arranging flights, hotel reservations et cetera. He's made a leap forward" (65 y/o).

Finally for the grandmothers, learning to use computers meant not only remaining in step with the times but having the opportunity to satisfy a growing need for entertainment. Far from being just a relational tool for keeping up contacts with family and friends, the Internet is increasingly a resource helping older people to extend and cultivate their passions. Hence, if ICTs are often understood by the family as useful technologies enabling grandmothers to stay in touch and in emergency situations, our interviewees perceived the importance of the role of the Internet as a personal leisure tool. "There was a very interesting site about learning how to play bridge. It was very useful. You could see the game and you learned something. I really like it for learning" (79 y/o).

Our grandmothers continuously negotiated the characteristics and affordances of ICTs. They were able to choose, from the numerous digital services available, the one that best met their needs, interests, and values. The grandmothers did not perceive technology as a monolith that had to be accepted as a whole, but rather as a series of tools that can be adapted to specific forms of use and gratification.

I use Facebook to watch my son's concerts but not for friendships. On YouTube, I look at the recipes. With friends, I use Whatsapp. The tablet is for games and photos; the computer for the e-mail of our association; Skype for talking with in-laws in Russia. With my husband, I only use the phone. Everything has its function, (72 y/o)

DISCUSSION

In this work, the effectiveness of the qualitative and ethnographic methodology is shown to support a non-normative view of the adoption of ICTs in the older generations. As we expected, this methodology stimulated the reflectiveness of the subjects interviewed, in particular with regard to the motivations in using (or not using) ICTs. It also was effective as we explored the differences between the use of the Internet as performed by the elderly and that of the younger users in both intergenerational and intragenerational dimensions, as well as the social role of age.

We sought firstly to investigate how grandmothers experienced their use of the Internet as a tool to facilitate family communication with family members—especially relationships among grandmothers, their children, and their grandchildren—as the main motivation to go online. Starting with the aim of understanding the dynamics of intergenerational exchange through online platforms, we analyzed grandmothers' reflections concerning the role of the Internet in their daily lives and their use (or nonuse) of digital services. This included comparison with the ways ICTs are used by the younger generations as well as by the participants' peers, seen in an intragenerational perspective. Against this background, the issue of what is considered the right use of ICTs clearly emerged and was supported by the participants' comments. We can now propose a more systematic reflection about these issues.

Focusing on the motivations for going online or the resistance in doing so, one can clearly see the pressures of a variety of external forces that our respondents adapted to. The most evident was the need to maintain a connection with children and grandchildren in a context of increasing personal and family mobility, relatively unknown in the Italian society of the past. Learning new digital technologies is perceived as convenient (if not a real social duty) in order to have tools for communicating efficiently within the family network. Similarly, just as some respondents learned to use PCs in their earlier working lives, nowadays they are driven to learn to use ICTs in order to perform their new social or familial tasks (e.g., as volunteers or caregivers). More deeply, what is at stake here is a matter of social inclusion: the need to keep up with the times, be like others, accept a challenge (with themselves or others), stay young (compared to their peers who reject new technologies), and be independent (in the case of home banking). All in all, these types of use of ICTs act like a form of reaction, an antidote of sorts, to the perception of an ongoing social and family exclusion, marginalization, and dependency.

While digital communication tools are considered to be central to maintaining and nurturing up distant relationships with children and grandchildren, the role of ICTs becomes more problematic in building intimate relationships among people in everyday contexts. Daily use of ICTs reveals a complex relationship with the younger generations regarding technological issues, often characterized by different competences. The grandmothers' answers tell us that the relational experience accompanies and continuously supplements the adoption of new technologies. While in the public discourse (Aroldi & Colombo, 2016) the motivations for the adoption of ICTs by the elderly are always linked to the idea of digital citizenship and of active and healthy aging, the most important motivation for the elderly, as evidenced by actual experience, is the need for human contact in relational, not individualistic, ways.

Nevertheless, the self-reflective awareness of our participants is manifested in the understanding of personal limits in the full use of ICTs and the consciousness that family members are not always good teachers. The difficulties in interacting with their families in the use of ICTs emerged from the statements by the elderly about the role of ICTs in ways that we define as generational. Our interviewees made it clear that being older means speaking a different language and having different needs, even when using the same technologies.

We also can add that the perception of risks in the use of ICTs is probably a consequence of the particular reflectiveness that we have illustrated. Our interviewees highlighted the potentially alienating effect (on themselves) of certain ICTs more intensely than the opportunities. Our respondents seemed more focused on the potential impact of ICTs on their relational environment than on the opportunity for performativity offered by technologies. According to the interviewed grandmothers, it was not just a matter of adopting ICTs as a new means for communicating but also of adopting a particular mindset—one that they see contrasts with what they value as relational needs and values.

For our elderly participants, the "correct use of ICTs" meant an adapted use, requiring an adequate work of self-adaptation to new contingencies and new technological tools. Adequacy is thus the first and true standard measure of their right ICTs use. In a subtler way, especially when comparing their use of ICTs with those of their relatives (husbands, children, and grandchildren), the interviewed grandmothers applied another yardstick. They seemed to negotiate the technological affordances of platforms and devices with their personal needs, interests, and values in a very dynamic process (Costa, 2018; Davis & Chouinard, 2016). Here, a more complex idea of appropriateness comes into play: Our respondents attributed great importance to the use of the digital technologies they considered to be correct, fair, and appropriate, and they were very reflective about it.

Yet differences in the use of ICTs by the members of older and younger generations cannot always be justified or described solely in terms of different degrees of literacy, technical skills, and familiarity with digital languages. It rather seems to be a matter of different labels applied by the elderly to ICTs. Several grandmothers affirmed they use the technologies correctly in a wise and moderate way. By contrast, they say that the younger people often use them in an antisocial and unregulated way, in some cases verging on pathology and dependence. Elderly people perceive that they are less skillful in technology use than the younger people, but they feel they use technologies with more common sense and moderation.

The interviewees invariably encountered difficulties and felt anxious. They often saw technology as a quarry that escapes their complete comprehension and control. Technology was sometimes considered dangerous, excessive, and intrusive—capable of throwing away

and spoiling beautiful moments (i.e., when the smartphone is intrusive and spoils face-to-face relationships)—and wasting the younger peoples' time. But the grandmothers were generally confident of their own abilities to avoid these dangers. They affirmed with pride that their age, their experience with complicated things in life, their wisdom, and their moderation can protect them from the risks and excesses of digital communication.

In particular, the grandmothers said they consider with attention both when to use technologies and which media and services to use for a certain aim (e.g., playful, formal, intimate). They chose from a wider range of available platforms and technologies on the basis of previous experiences, as well as of platform affordances. According to Costa (2018), this shows how social media affordances have to be seen always as "affordances-in-practice": not fixed and stable technical properties, but "the enactment of platform properties by specific users within social and cultural contexts" (p. 11).

As we have presented, according to the interviewed grandmothers, an appropriate use of technology is a moderate use in quantitative terms. It has to avoid triviality. It has to maintain a balance between being contactable and invading others' privacy. It is grounded in both personal and social competences about digital platforms and their netiquettes. Finally, the elderly seemed in particular to resist and criticize a use of ICTs that leads to a collapse of contexts due to "the lack of spatial, social, and temporal boundaries" (boyd, 2008) between private and public space and between close friends or family members and distant acquaintances. They seem also to resist the phenomenon of coalescence—that is, the entangled connection between online and offline, mirroring and shaping each other (Boccia Artieri et al., 2017).

Reflections on the role of the Internet among the elderly, their digital literacy, and their evaluations of what is right or wrong in using ICTs often are linked to their own technobiographies and their generational belonging, as well as to gender identity. In short, the use (or nonuse) of ICTs by the elderly is related to a mindset concerning the role of technologies in their everyday lives. But a "technological mindset" (Bowers, 1988) is not a normative way of using technologies: It is shaped in the daily use of technologies in reciprocal observation of the use of technologies by other members of the family or among friends.

CONCLUSIONS

We sought to investigate the possible relationships in place between grandmothers, children, and grandchildren, with the aim of understanding the dynamics of intergenerational exchange, and how grandmothers experience the use of the Internet as a tool to facilitate communication with family members. We analyzed grandmothers' reflections on the role of the Internet in their daily lives and the use (or nonuse) of digital services. The focus rested in particular on the point of the right and appropriate use of ICTs as part of a generational reflectiveness among our interviewees. Taking into account how the elderly (individually and as a part of a group) reflect on the role of ICTs in their lives allows us to emerge at least partially from a perspective of adequacy as normative discourse (Fernandez-Ardevol et al., 2017). Rather, it places the emphasis on the experience of the subjects and not on their adequacy to use ICTs. In this sense, the consideration of correctness indicates the point of view of the subjects and not that of normativity.

Our hypothesis is that the reflectiveness about the correct use of ICTs of our interviewees is linked with generational belonging and the "we-sense" of the grandmothers. Nevertheless, the small number and other features of the participants in our focus groups exclude any possibility of generalizing our results. The grandmothers involved in the research represent an uncommon profile of the Italian elderly. They are middle- and middle-upper class and are involved in community activities in one of the richest Italian cities (Milan). Thus, the grandmothers we interviewed are a wealthy and active niche of the Italian elderly population. Further research should explore the differences in uses among the elderly people with different social and cultural backgrounds and should be supplemented with quantitative surveys that make it possible to generalize the results.

Secondly, but no less important, the interviewed grandmothers belong to a generation of people who are not digital natives (Prensky, 2001). Rather, they started using digital technologies only in their adulthood (although not necessarily only in recent years). At present, it is not possible to clarify whether the resistance shown towards ICTs is generational (due to their having grown up and learned to live without ICTs) or age-related (becoming elderly means living with more moderation generally, including the use of technologies).

For these reasons, our research leaves some questions open:

- Is the technological mindset of today's elders a generational mindset? What will happen with the next generation of digital seniors, who today (as young or mature adults) are experiencing and accepting the collapse of contexts (boyd, 2008)? Will they continue to see communication technologies as a place for context collapse? Will the elders of the future, belonging to another generation, accept coalescence (Boccia Artieri et al., 2017) because they have grown up in a generation that accepts this technological mindset?
- Or is the mindset of today's elders a matter of age? Do users become resistant to coalescing as they grow older? Will the elders of the future refuse coalescence because it is old age that favors a resistant approach to this feature of ICTs?

Answering these questions will be possible only through longitudinal research that studies the evolution of the generations and their relationships with new technologies in the coming years.

Future research also will need to consider gender. Our research has investigated only grandmothers, who probably are more involved in intergenerational (digital) relations with children and grandchildren than grandfathers (Fernández-Ardèvol et al., 2017; Fortunati, 2017). The decision to study only grandmothers, however, has consequences and leaves some questions open. The first question concerns how the level of literacy of our interviewees was affected by the fact that older women are the least digitized and literate cohort in Italy and that most grandmothers have started to use ICTs only in the last few years.

A second question concerns the normative attitude of grandmothers: Can we say that grandmothers have a normative attitude not only to the use of ICTs but in general in their approach to life? Further research involving also grandfathers will be able to answer these questions and clarify the role of gender in ICTs adoption and use.

Finally, there is the cultural dimension. The role of grandmothers in families, and generally the role of the elderly in society, is culturally and socially orientated (Bramanti & Meda, 2012). Hence the relational use of ICTs could be influenced by the role that society gives grandmothers. For these reasons grandmothers in different countries might have a different approach to ICTs. Again, an in-depth, cross-national analysis could provide useful

insights into the role of ICTs in the everyday lives of grandmothers and a comparison of different approaches and roles given to digital media in intra- and intergenerational relations

IMPLICATIONS FOR APPLICATION AND POLICY

The role of media and communication technologies in improving the quality of life, health, and care of the elderly is today a key issue in the academic and political debate (Colombo & Carlo, 2015; European Commission, 2010). In some cases, policies do not take into account the real reasons why some seniors seem to resist the adoption of certain technologies and the use of some public digital services (Carlo, 2017).

What we stress from our research is that, while it is true that ICTs are a useful resource for the elderly and can improve their health, the care they receive, and their role in society, it is equally true that they are used by the elderly for social and familial relations and pure entertainment. Moreover, our research shows that the main resistance to the use of technologies among the elderly is not related to low literacy or incomprehension of the opportunities offered by ICTs. Such resistance is often cultural and social (and generational). Faced with the pressure to be always connected and techno-enthusiasts, the elderly claim the freedom to choose their degree of digital inclusion. Public policies of digital inclusion for the elderly must therefore take these elements into account in order to be really effective.

ENDNOTES

- 1. In Italy, 30.8% of 65-74 year-olds and 8.8% of those over 75 use the Internet; 5.5% of women over 75 have access to Internet, 13.5% of males over 75 are Internet users. The digital divide in Italy is therefore accentuated with age and gender, helping to define a large area of digital exclusion that overlaps with that of social isolation and affects, in particular, older women who live alone and with fewer resources, both economic and cultural (Colombo et al., 2015; Centro Internazionale Studi sulla Famiglia, 2017).
- 2. We define technobiography as the personal stories of the elderly about how technologies are inserted in their biographies and in the personal lives of the users, whether or not elderly were born, grew up, studied, or worked in a digital world (Fernández-Ardèvol et al., 2017; Kennedy, 2003).
- 3. Third age (over 65 years old) is the period after middle age (45–64 years old). With the extension of life expectancy, the fourth age has become a new period after the third. Starting at about age 80 or 85, the fourth age includes the last years of life (Colombo, 2011).
- 4. Almost half of the over-65s who use a computer today learned to do so before the age of 50 and another third before the age of 60 (Colombo et al., 2015).
- 5. Researchers carried out the project in collaboration with an international network (Canada, Romania, Peru, Israel, Italy, Spain, and Colombia) coordinated by Shannon Hebblethwaite, Department of Applied Human Sciences of Concordia University, Montreal, Canada. Research was funded by Social Sciences and Humanities Research Council of Canada and by the centers of research/departments involved in the network (for Italy, OssCom the research center on media and communication of Università Cattolica).

- 6. In terms of education, 6 had a university degree, 2 did not complete university, 12 participants had completed high school, 4 had not completed high school, and 4 less than high school. Only one participant said that she did not have the Internet at home. All participants were retired, retired but involved in voluntary activities, or not employed. Our sample is not representative of Italian elderly population, especially in term of education level: In the north of Italy, only 5% of elderly women have a university degree, 15% had completed high school, 23% had not completed high school, and 57% had completed only elementary school (Istituto Nazionale di Statistica, 2017).
- 7. Università Cattolica Ethics Committee approved the project. According to Università Cattolica Ethics Committee, methods of research and managements of potentially sensitive personal information of participants comply with the European Privacy Policy and Helsinki Declaration.
- 8. The data quotes presented here have been translated from Italian by the authors.
- 9. Home computers and Internet connections became common in Italy in the 1990s/2000s.

REFERENCES

- Aroldi, P., & Colombo, F. (2016). The elderly, IT and the public discourse: Representations of exclusion and inclusion. In J. Zhou & G. Salvendy (Eds.), *Human aspects of IT for the aged population. Healthy and active aging* (pp. 176–185). New York, NY, USA: Springer Verlag.
- Augé, M. (2014). *Une ethnologie de soi. Le temps sans âge* [An ethnology of oneself. Ageless time]. Paris, France: Seuil.
- Boccia Artieri, G., Gemini, L., Pasquali, F., Carlo, S., Farci, M., & Pedroni, M. (2017). Fenomenologia dei social network [Social network phenomenology]. Milan, Italy: Guerini Associati.
- Bol, N., Romano Bergstrom, J. C., Smets, E. M. A., Loos, E. F., Strohl, J., & Van Weert, J. C. M. (2014). Does web design matter? Examining older adults' attention to cognitive and affective illustrations on cancerrelated website through eye tracking. In C. Stephanidis & M. Antona (Eds.), *Universal access in human-computer interaction*. *Proceedings HCII 2014*, Part III, Lecture Notes in Computer Science, 8515 (pp. 15-23). Switzerland: Springer International Publishing.
- Bolin, G. (2017). Media generations. London, UK: Routledge.
- boyd, D. (2008). *Taken out of context: American teen sociality in networked publics*. (Doctoral dissertation, University of California, Berkeley, USA). Retrieved from https://www.danah.org/papers/TakenOutOfContext.pdf
- Bourdieu, P. (1979). La distinction. [The distinction]. Paris, France: Les editions de minuit.
- Bowers, C. A. (1988). The cultural dimensions of educational computing: Understanding the non-neutrality of technology. New York, NY, USA: Teachers College Press.
- Bramanti, D., & Meda, S. G. (2012). I grandi anziani: l'ultima transizione familiare [The old elders: the last family transition]. In G. Rossi & D. Bramanti (Eds.), *La famiglia come intreccio di relazioni: la prospettiva sociologica* [The family as a network of relationships: the sociological perspective; pp. 111–140]. Milan, Italy: Vita e Pensiero.
- Carlo, S. (2017). Invecchiare on-line [Aging online]. Milan, Italy: Vita e Pensiero.
- Carlo, S., & Rebelo, C. (2018). Technology: a bridge or a wall? The inter(intra)generational use of ICTs among Italian grandmothers. In J. Zhou & G. Salvendy (Eds.), *Human aspects of it for the aged population. Acceptance, communication and participation* (pp. 446–464). Lecture Notes in Computer Science, vol. 10926. Cham, Switzerland: Springer.
- Centro Internazionale Studi sulla Famiglia (CISF). (2017). *Le relazioni familiari nell'era delle reti digitali* [Family relationships in the age of digital networks]. Milan, Italy: San Paolo Edizioni.
- Colombo, F. (2011). The long wave of generation. In F. Colombo & L. Fortunati (Eds.), *Broadband society and generational changes* (pp. 19–35). Berlin, Germany: Peter Lang.

- Colombo, F., Aroldi, P., & Carlo, S. (2015). New elders, old divides: ICTs, inequalities and well-being amongst young elderly Italians. *Comunicar*, 23(45), 47–55.
- Colombo, F., & Carlo, S. (2015). Access and use of ICTs among the Italian young elderly: A field study. In J. Zhou & G. Salvendy (Eds.), *Human aspects of it for the aged population* (pp. 166–176), Lecture Notes in Computer Science, 9193. London, UK: Springer.
- Colombo, F., Carlo, S., & Aroldi, P. (2014). "Stay tuned": The role of ICTs in elderly life. In G. Riva, P. Ajmone Marsan, & C. Grassi (Eds.), *Active ageing and healthy living*, (pp. 145–156). Amsterdam, Netherlands: IOS Press.
- Comunello, F., Mulargia, S., & Parisi, L. (2016). The "proper" way to spread ideas through social media: Exploring the affordances and constraints of different social media platforms as perceived by Italian activists. *The Sociological Review*, 64, 515–532.
- Comunello, F., Fernández-Ardèvol, M., Mulargia, S., & Belotti, F. (2017). Women, youth and everything else: Age-based and gendered stereotypes in relation to digital technology among elderly Italian mobile phone users. *Media, Culture & Society*, 39(6), 798–815.
- Corsten, M. (1999). The time of generations. *Time & Society* 8(2–3), 249–272.
- Costa, E. (2018). Affordances-in-practice: An ethnographic critique of social media logic and context collapse. *New Media and Society, 1,* 1–16.
- Davis, J. L., & Chouinard, J. B. (2016). Theorizing affordances: From request to refuse. *Bulletin of Science*, *Technology & Society*, *36*(4), 241–248.
- Duggan, M., & Brenner. J. (2013). The demographics of social media users. *Pew Research Center's Internet & American Life Project* (pp. 1–14). Washington, DC. Retrieved from http://www.pewinternet.org/files/old-media/Files/Reports/2013/PIP_SocialMediaUsers.pdf
- Edmunds, J., & Turner, B. S. (2002). *Generations, culture and society*. Philadelphia, PA: USA: Open University Press.
- European Commission. (2010). Ageing well in the information society, an i2010 initiative: Action plan on information and communication technologies and ageing. Brussels, Belgium: EU Publishing.
- Fernández-Ardèvol, M., Sawchuk, K., & Grenier, L. (2017). Maintaining connections: Octo- and nonagenarians on digital "use and non-use." *Nordicom Review*, 38 (Special Issue 1), 39–51.
- Fortunati, L. (2017). How young people experience elderly people's use of digital technologies in everyday life. In S. Taipale, T. A. Wilska, & C. Gilleard (Eds.), *Digital technologies and generational identity: ICT usage across the life course* (pp. 102–119). London, UK: Routledge.
- Friemel, T. N. (2016). The digital divide has grown old: Determinants of a digital divide among seniors. *New Media & Society*, 18(2) 313–331.
- Gibson, J. J. (1977). The theory of affordances. In R. E. Shaw & J. Bransford (Eds.), *Perceiving, acting, and knowing* (pp. 67-82). Hillsdale, NJ, USA: Lawrence Erlbaum Associates.
- Glaser, B., & Strauss, A. (1967). The discovery of grounded theory. London, UK: Weidenfeld and Nicholson.
- Ivan, L., & Hebblethwaite, S. (2016). Grannies on the net: Grandmothers' experiences of Facebook. Family Communication, Revista Română de Comunicare și Relații Publice, 18(1), 11–25.
- Istituto Nazionale di Statistica. (2017). *Annuario statistico Italiano 2017* [Italian statistical yearbook 2017]. Rome, Italy: Istat Pubblicazioni.
- Kennedy, H. (2003). Technobiography: Researching lives, online and off. *Biography: An International Quarterly*, 26(1), 120–139.
- Loges, W. E., & Jung J. Y. (2001). Exploring the digital divide: Internet connectedness and age. *Communication Research*, 28(4), 536–562.
- Millward, P. (2003). The "grey digital divide": Perception, exclusion and barrier of access to the Internet for older people. *First Monday*, 8(7), unpaginated.
- Morgan, D. L. (1996). Focus groups as qualitative research. Thousand Oaks, CA, USA: Sage.

- Morris, A., & Brading, H. (2007). E-literacy and the grey digital divide: A review with recommendations. *Journal of Information Literacy*, 1(3), 13–28.
- Nimrod, G. (2014). The benefits of and constraints to participation in seniors' online communities. *Leisure Studies*, 33, 247–266.
- Prensky, M. (2001). Digital natives, digital immigrants. On the Horizon, 9(5), 1–6.
- Quan-Haase, A., Martin, K., & Schreurs, K. (2016). Interviews with digital seniors: ICT use in the context of everyday life. *Information, Communication & Society, 19*(5), 691–707.
- Quan-Haase, A., Williams C., Kicevski M., Elueze I., & Wellman B. (2018). Dividing the grey divide: Deconstructing myths about older adults' online activities, skills, and attitudes. *American Behavioral Scientist*, 62(9), 1207–1228.
- Salzberger-Wittenberg, I. (2013). Experiencing endings and beginnings. London, UK: Karnacs Books.
- Savage J. (2007). Teenage: The creation of youth culture. London, UK: Chatto & Windus.
- Sawchuk, K., & Crow, B. (2012). I'm G-Mom on the phone: Remote grandmothering, cell phones and inter/generational dis/connections. *Feminist Media Studies*, 12(4), 475–489.
- Selwyn, N., Gorard, S., Furlong, J., & Madden, L. (2003). Older adults' use of information and communications technology in everyday life. *Ageing & Society*, 23(5), 561–582.
- Sourbati, M. (2016). Ageism, social inclusion and digital public service: Considering age relations in the 21st century. In E. Scabini & G. Rossi, (Eds.), *L'allungamento della vita: Una risorsa per la famiglia, un'opportunità per la società* [The extension of life: A resource for the family, an opportunity for society; pp. 229–245]. Milan, Italy: Vita e Pensiero.
- Van Dijk, J. A. G. M. (2005). The deepening divide. London, UK: Sage.

Zagrebelsky, G. (2016). Senza adulti [Without adults]. Bologna, Italy: Einaudi.

Authors' Note

All correspondence should be addressed to Simone Carlo
Department of Communication and Performing Arts and
OssCom, Centre for Media and Communication Research
Università Cattolica del Sacro Cuore
c/o OssCom, Largo Gemelli 1. 20123, Milan. Italy
simone.carlo@unicatt.it

Human Technology ISSN 1795-6889 www.humantechnology.jyu.fi