

## Age and Technology in Digital Inclusion Policy: A Study of Italy and the UK

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**Abstract:** The role of media and communication technologies in increasing the quality of life of the elderly is today a key topic in academic and policy debates. This article discusses findings from a study into the way public policy frames the role of technologies in later life. The aim of our study was to critically investigate the policy discourses on ‘old age’ and on the role of digital ICT in fixing challenges associated with ageing. Our focus was on digital inclusion policies of the UK and Italy, two countries experiencing similar trends in population ageing but different ICT diffusion patterns. We found that an age-based understanding of digital technology use was quite common, as was an enthusiastic embracing of the role of digital ICT in the implementation of Active Ageing and Information Society goals. We also found that the understanding of the role of digital technology and its relationship to (old) age has been changing over the last decade, starting to reflect social complexity as ICT diffusion increases among older age groups.

**Keywords:** age, active ageing, ICT, digital divide, digital inclusion, older people, public policy

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*Âge et technologie dans les programmes politiques d'inclusion numérique: une étude sur l'Italie et le Royaume-Uni*

**Résumé:** Le rôle des médias et des technologies de la communication dans l'amélioration de la qualité de vie des personnes âgées est aujourd'hui un sujet clé dans les débats académiques et politiques. Cet article présente les résultats d'une étude sur la manière dont les institutions politiques définissent le rôle des technologies dans la vie des personnes âgées. L'objectif de notre étude est de comparer la façon dont les discours politiques traitant de l'inclusion numérique considèrent la « vieillesse » et le rôle des technologies numériques au Royaume-Uni et en Italie, deux pays qui ont des profils de vieillissement de leur population similaires mais des modèles de diffusion des TIC différents. Nous avons constaté que les politiques publiques sur l'utilisation des technologies numériques étaient couramment âgéistes mais plaçaient toutefois une attention particulière sur les avantages des TIC numériques dans la mise en œuvre des objectifs du vieillissement actif et de la société de l'information. Nous avons également constaté qu'au cours de la dernière décennie, la compréhension du rôle de la technologie numérique pour les personnes âgées avait évolué et commençait à refléter la complexité sociale à mesure que la diffusion des TIC augmentait parmi les groupes plus âgés.

**Mots-clés:** âge, vieillissement actif, TIC, fracture numérique, inclusion numérique, politiques publiques

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## **Introduction**

The role of media and communication technologies in improving the quality of life (Colombo et al., 2015), and of the health (Vimarlund & Olve, 2005) and care services (Damant et al., 2013) of the elderly is today widely recognized in the academic (Zhou & Salvendy, 2018) and political discourse (EC, 2010; Eggermont et al., 2006)). Digital information and communication technologies (ICTs) have been perceived as 'a potential partial solution' to the 'problem of ageing' and the challenges it poses for contemporary welfare societies (Olsson et al., 2019). In Europe, policy responses have emphasized both the impact of changes in the age composition of populations on the planning of future social and economic policy goals (EC, 2015) and the contribution of ICTs to improving contact with others and access to services for ageing populations (EC, 2012). 'Active Ageing' endorsed by the World Health Organization in 2002 (WHO, 2002) as the main objective of health and social policies for old people has also been a topic of increasing attention in policy discussions (Boudiny, 2013). This is consistent with a dominant narrative of old age as a burden and something individuals should aim to reverse through activity, technology and consumption (Phillipson, 1998; Biggs, 1999; Walker, 2012). Active Ageing is sutured to neoliberal notions of efficiency and the restructuring of the social care delivery system (Raisborough et al., 2014, Macnicol

2015). In this context digital ICTs are proposed as technologies for adjustment to lifestyle in order to remain active through ageing (Hawley-Hague et al., 2014). Within these broader trends policy initiatives in active ageing and in digital economy (EC 2012; 2015) have shaped digital inclusion agendas across the EU, setting targets for increasing the take-up of digital ICTs among older groups mainly through policies designed to develop ICTs literacy (the learning of skills to use computers and the internet) among the elderly: The role of technology in ‘changing the way we grow old’ is today a major focus in commercial tech advertising (see e.g. <https://garage.hp.com/us/en/modern-life/technology-aging-seniors-security.html>)

In this article we critically analyse the findings of an empirical investigation of digital inclusion and active ageing policy programs in the UK and Italy. (Carlo & Sourbati, 2015; Sourbati & Carlo, 2015). In our study we examined the way formal policy institutions frame the role of digital technologies in the lives of older people in different national contexts, with our focus on how the ‘problem’ of ageing and the ‘solutions’ of activity/active ageing and technology are discursively constructed in these policies (Jorgensen & Phillips, 2002). The objective of our study was to critically examine the discursive construction of ‘old age’ and of the role of ICTs, including the use of any widespread stereotypes surrounding ‘age’ and ‘digital ICT’, in digital inclusion policies. Our two case study countries, the UK and Italy, are of a similar population and economy size, show similar trends in population ageing but different ICT diffusion patterns. At the time this study was undertaken (2015) 58.4% of adults aged 65-74 were regularly using the internet in the UK whereas in Italy the figure is much lower at 21.4% according the Eurostat (EC, 2015b): the two countries represented case studies typical of the EU, North and South.

Taking a grounded theory approach to the research task (Strauss & Corbin, 1994), we examined the following research questions: RQ1: How are the categories of ‘elderly’/‘old’, ‘ageing’ and ‘Active Ageing’ defined in digital inclusion policy documents? RQ2: How is the ‘role of ICTs in the life of older people’ understood in digital inclusion policy documents? RQ3: What are the consequences of a ‘lack of use of ICTs’ for the lives of older people according to public policy documents? RQ4: What is the role that institutions assume to increase elderly ICTs access and uses?

## **1. Theoretical and Contextual Starting Points**

In the reported study we examined constructs of old age and ICT use as digital inclusion programmes were underway, against the backdrop of social and economic policy agendas pertaining to Active Ageing policy goals. Our conceptual framework and subsequent analysis were informed by critical studies on media technology use (Feenberg, 2002; Colombo, 2020) and on social and media representations of ageing (Loos, Ivan et al. 2017). This section provides an overview of the concepts and analysis that informed our study.

### 1.1. *Chronology-based Generalisations of Age and Digital ICT Use*

Engagement with digital media technologies has been commonly understood through the popular, though not unproblematic, digital native-immigrant binary: based on Prensky's (Prensky, 2001) widely used conceptualisation, while children are digital natives, feeling 'at home' with technology, older adults are digital immigrants, struggling to understand and keep up with it. (Livingstone, 2018). Age is here a homogenous category for both the old and the young ends of the binary. Thus, in their engagement with media technologies older people have been constructed using existing stereotypes of inept and vulnerable technology users (Joyce & Loe, 2010; Loe, 2011). These kinds of blanket approaches and labels are used to describe today's 'young older' people in developed economies who are the first generation to grow up with consumer electronics, ICT and the internet (Coughlin, 2017). Thus, what Givskov and Deuze (2016, p.10) call 'an outdated mode of conceptualizing the relationship between people and media' leads to a 'fail[ure] to address [older adults'] simultaneous identity as agents and recipients of scientific and technological change'.

In agreement with blanket age-based understandings, generational perspectives on media technology adoption that follow ideas of intrinsic age or generational 'technological horizon' are both limiting and widely used (Gilleard et al., 2015). As Gilleard et al (ibid.) point out, it is too simplistic to see technology diffusion in terms of younger groups as 'adopters' and older groups as 'laggards': While studies have found greater age to be associated with lesser use of digital ICT this observation is moderated by other factors including expertise effects (Arning & Ziefle, 2009), type of technology (Feist et al., 2010) and factors such as income, work status and marital status (Rice & Katz, 2003).

### 1.2. *The Active Ageing Agenda*

Against global trends in population ageing and constantly increasing pressures on national welfare budgets old age represents both a financial burden to the State and a challenge to be overcome. Launched by the World Health Organization in 2002 as a global policy response to the ageing of the world populations (WHO, 2002) the promotion of 'active ageing' (AA) would become a common reference in policy vocabulary during the past decade. The WHO defines AA as "the process of optimizing opportunities for health, participation and security in order to enhance quality of life as people age" (WHO, 2002, p. 12). Following the WHO framework action plans, research and policy frameworks were made a priority internationally. The European Innovation Partnership on Active & Healthy Ageing AHA was introduced in 2011 (EC, 2012) with aims including the improvement of health and quality of life of Europeans with a focus on older people, and supporting long-term sustainability and efficiency of health and social care systems.

Also known as 'successful ageing' (Rowe & Kahn, 1997) and 'ageing well' (Ylänne et al., 2009) active ageing is sutured to neoliberal notions of efficiency and

the restructuring of the social care delivery system (Raisborough et al., 2014; Macnicol, 2015). AA emerged as the major policy response to demographic ageing as marked with the designation of 2012 as the European Year of Active Ageing (Walker & Maltby, 2012). A central plank of Europe's AA policy discourse (EC, 2015) is the enhancement of individual empowerment and responsibility, self-care, participation in social activity, and fitness to work. These discourses are consistent with a dominant narrative of old age as a burden, a battle to be fought against, and something individuals aim to reverse through activity, technology and consumption (Phillipson, 1998; Briggs, 1999; Walker, 2012). Linking to the common portrayals of ageing and new media technologies, while population ageing is commonly portrayed in terms suggestive of catastrophe ('ticking time bomb', 'grey tsunami' etc.), old age is constructed as a dimension of digital inequality (Marshall & Katz, 2016).

### *1.3. Digital ICT as a Resource for AA and the Digital Inclusion Policies*

Although not a focus in research and policy relating to old age and ageing of populations during the 20<sup>th</sup> century, digital ICTs came to the centre of approaches to old age in the past two decades. Kahana & Kahana (2003) were among the first in gerontology scholarship to conceptualise the relevance of Internet and digital technologies as a new class of resources helping old people achieve goals of 'successful aging', namely, positive affective states, meaning in life, and maintenance of valued activities and relationships. The role of the internet and digital ICT in enhancing older groups' quality of life would receive increasing amounts of emphasis as digital ICT diffusion grew and the internet started emerging as an important context in social life. This included the role of digital interactive media in maintaining social relationships as a core element of aging well (Leist, 2013). Using data from the U.S. Health and Retirement Study (Heo et al., 2015) longitudinal study results indicated that higher levels of Internet use were significant predictors of higher levels of social support, reduced loneliness, and better life satisfaction and psychological well-being among older adults. Two decades on and 4.1 billion internet users globally, ICT is most commonly positively associated with social inclusion, and a lack of access with digital exclusion. (Zambianchi & Carelli, 2018) study found 'positive attitudes toward Internet technologies' to constitute 'the most important predictor of social well-being, and [...] a significant predictor for psychological well-being as well' (p. 371), resonating with a new consensus that the adoption and use of information and communication technologies lead to experiencing enhanced quality of life (Francis et al., 2019).

In the context of an information society agenda that brought digital information and communication technologies (ICTs) to the heart of social inclusion policies (Adams & Fitch, 2006) in Europe the contribution of digital ICTs to improving contact with and services to the ageing population was underlined by the European Commission (EC) and in national member states (EC, 2012; Olsson et al., 2019). In the EC digital agenda technology adoption is a potential answer to the 'the problem of ageing': according to the European Commission (EC, 2010) ICT 'can help elderly

individuals to improve their quality of life, stay healthier, live independently for longer, and counteract reduced capabilities which are more prevalent with age. ICT can enable them to remain active at work or in their community' (p.2).

Representing a number of areas of opportunity, ICTs have been proposed as technologies for functional maintenance (Marshall & Katz, 2016) and lifestyle adjustment to remain active through ageing (Hawley-Hague et al., 2014) in what Stenner et al. (2010 p. 468) see as a strategy to 'reinvent the very meaning of ageing in a future society, and to rethink questions of rights and duties'. AA is thus not only a response to the problems pertaining to the rise of welfare and social care costs but also a market opportunity. Intelligent and pervasive healthcare technologies, cognitive homes and intelligent transport have emerged as the new major areas of media-technological market development (Winchcomb et al., 2017) where 'grey' becomes 'the new green'.

Against the backdrop of national digital inclusion policies launched across EU member states our study, which took place in 2015, set out to investigate how old age and new technology is understood and talked about in public policy.

## 2. Sample and Method

Our sample comprised digital inclusion policy documents published between 2009 and 2015. The following criteria were used to select policy documents: *Policy relevance* - main and explicit focus was the diffusion of digital ICT devices and services among the national population; *Public availability* - these were public policy oriented as opposed to promoting digital inclusion within an organization; *Online access* - documents were sourced online. For the purposes of this study we adopt a broad definition of policy as those "courses of action (and inaction) that affect the set of institutions, organizations, services and funding arrangements of the health and health care system. It includes policy made in the public sector (by government) as well as in the private sector" (Buse et al., 2012, p. 6). We examined a total of 56 documents (35 for Italy, 21 for UK) comprising all major, national policy initiatives in each country in order to obtain a comprehensive body of data for the analysis of trends in digital inclusion and ageing policies. We included policy announcements, green and White Papers and specialist studies commissioned by public sector organizations, independent agencies and private sector forms produced by organizations operating at different levels within each national administration. Each country sample consisted of documents published by corresponding national organizations reflecting national administrative structures implementing digital inclusion initiatives.

**Table 1.** Italian sample

<b>Organizations</b>	<b>Types of document</b>	<b>Number of documents</b>
National Government agency	Policy strategy	5
Ministry of Education and Ministry of Innovation	White paper, presentation of field program	2
Local Government administrations	White paper, presentation of field program	8
Regulators, Independent/Higher Education research institutes and public sector agencies	Data report	2
Hospitals, clinical centres of research	Presentation of field program	2
Charities, associations for older people, independent commissions, foundations	Presentation of field program, policy recommendation	10
Corporations and companies	Presentation of field program	6

**Table 2.** UK sample

<b>Organizations</b>	<b>Types of document</b>	<b>Number of documents</b>
National Government agency	White paper. Policy evaluation paper.	6
Regulators, Independent/Higher Education research institutes and public sector agencies	Data report, Field Program, Policy manifesto	10
Charities, associations for older people, independent commissions	Field program, Policy commentary, Project evaluation	5

Our sample comprised digital inclusion documents published between 2009/10 and 2015<sup>2</sup>. We used 2010 as the watershed, thanks to the publication of Digital Agenda for Europe, a key document of the European Union about “the potential of

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<sup>2</sup> In the case of the UK this period extends to prior to the publication of the 2010 EU Digital agenda as the main points of the proposals had already been proposed and adopted through the national policy processes. E.g. the 2009 Digital Britain White Paper.

Information and Communication Technologies (ICTs) in order to foster innovation, economic growth and progress” (EU, 2010). The selection of documents did not aim to be exhaustive but comprised all key policy initiatives, definitions and program announcements in each country in order to provide a comprehensive body of data for the analysis of trends in digital inclusion and ageing policies. We used a textual qualitative content analysis (Hsieh & Shannon, 2005) to map terminological and discursive choices in the policy papers and reports covering different aspects of digital inclusion and older age. Our approach involved three steps: Selecting national policy documents from 2009/10 to 2015; Identifying broad areas of themes and creating a list of corresponding questions/queries and corresponding number of fields; Applying Content Analysis: map whether/how these fields were defined in each document in the sample.

In analyzing this data (section 5 and 6) we paid attention to both the textual data (rhetoric, arguments) and the broader policy contexts. The five themes (and corresponding questions) guiding our CA were as follows:

1. How does the document define the following terms: ‘older people’, ‘the elderly’, ‘ageing’, ‘active ageing’, ‘social inclusion’, ‘social exclusion’, ‘digital access’, ‘digital skills’, ‘digital inclusiveness’?
2. What are the causes of the low use of ICTs among the elderly?
3. What is the role of ICTs in the life of the elderly?
4. What are the consequences of the lack of use of ICTs in the life of older people?
5. What is the role envisaged for institutions in policies to increase the use of ICT/internet by older people?

In the next section we report the main results of our analysis.

### 3. Results

In this section we present the results of our analysis against the five key questions. We discuss the results from Italian and British data together, underling similarities and differences.

*RQ1: How were the categories of ‘elderly’/‘older people’, ‘ageing’ and ‘Active Ageing’ defined in digital inclusion policy documents of UK and Italy?*

In both Italian and UK documents, a precise definition of “the elderly” is often not present: there is no specification about characteristics of older people. In case of definitions of “the elderly”, there is a general reference to a chronological age range: the elderly are the people “over 65 years old”. A second kind of definition is more qualitative, and in some cases combined with chronological indications. The



definition of elderly is related to a general description of some difficulties and inabilities of older people. In some cases these difficulties are related with the lesser ability to use ICTs: for example, elderly are people with difficulties in reading and calculating. In some Italian documents the elderly are described as “naturally and biological” less likely to use a computer and the Internet. The elderly are compared and associated with other disadvantage categories, such as poor, illiterate, immigrants, disabled, unemployed women, those living in social housing, South Italian population and British population from the countryside. In some documents they are described as “alone”, underlining the condition of living without partners (e.g. following the loss of their partner) in the same household. Few Italian documents use an umbrella definition such as “grandfather”/’grandparent’, situating older people within generational roles in the family and the condition of care receivers and givers in relation to children and grandchildren.

With regard to the understanding of the term “ageing”, reference to “ageing” was often present in Italian documents but not so often in the UK sample. The way “ageing” was defined in Italian documents is consistent with the impact in Italian public debate of “ageing” and ageing related problem, and personal and social consequences. Ageing is generally defined as a personal problem of physical health and a progressive loss of physical integrity: a deterioration of vital functions such as sight, hearing, mobility, cognitive function. Ageing is also a personal problem of social isolation: ageing reduces the opportunity for social interaction. In particular, Italian documents underline the possible problems of Italy (and of Europe) as consequences of the progressive ageing of society in terms of retirement and medical assistance and, in general, of the economic impact of the increase of a non-productive and potentially less healthy population. Only a few documents talk about ageing in terms of opportunities. Ageing could be a new phase of life full of opportunities and well-being compared to a less easy life before the age of 65 (see Auser – Elderly Italian associations documents).

Only a few documents that were analyzed define active ageing - with more documents often simply using the definition of the Active Ageing Index (AAI). The Active Ageing Index is in some cases introduced in Italian documents as a grid to analyze possible policy action. In British documents the term active ageing<sup>3</sup> is not used with the exception of one policy blog posting (TAEN – Age employment network) referring to the publication of the 2015 Active Ageing Index tables by the EC. This document is critical about the definition of active ageing only in narrow economic terms of older people’s employment, underlining how “employment is only one element in a new Active Ageing Index (AAI)”. The approach here corresponds more to a life-course approach rather than one of generational conflict (between the young and the old) as it stresses the interconnections between what we do at different ages. It stresses that ‘successful ageing’ means much more than avoiding illness and retaining independence and includes having a sense of purpose,

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<sup>3</sup> In the UK AA has been used as a social policy tool See for example (Boudiny, 2013: 1081).

being part of the community, maintaining strong social contacts and networks, physical activity and mental stimulation.

*RQ2: How was the 'role of ICTs in the life of older people' understood in digital inclusion policy documents?*

Both Italian and UK documents underlined the opportunities that ICT gives to the elderly as citizens, consumers, and (in Italy) potentially frail or vulnerable individuals. Generally, there are several implicit assumptions about how the ICTs could resolve problems indicated. For example, that the internet offers information and cultural content for the elderly, political and social integration and cohesion, and that ICT applications such as video-chat, instant messaging and social media can become a tool to maintain social relations. Learning to use ICTs was seen (mainly in Italian documents) as an opportunity to improve intergenerational relations, for example with grandchildren to create content and to share personal and social memories with peers as well as with younger generations. In UK documents the main focus in government policy initiatives was to enable access to digital public services and to carry out transactions. ICTs were also seen as tools that enable the elderly to have a more autonomous life thanks to online services (eHealth) and to new personal and home technologies (domotics). AAL (Ambient Assisted Living) could offer a safer domestic environment and reduce isolation. The elderly who use the Internet and computers have more opportunity to be mentally active. A computer offers an opportunity for improvement of sight, coordination, mobility. Finally, ICTs offer the elderly the chance to be smart consumers and users, thanks to online services (eCommerce, Home Banking, travel information). They offer an opportunity to the elderly to contribute to the economic development of Italy as new consumers: the explicit reference is to a "silver economy" that could help a company to produce new devices and services. Any references to the use of ICTs and digital literacy for new professional competences for the elderly are quite residual.

Despite the extensive emphasis on the benefits of using ICT, only a few of the documents in the sample explicitly define what is digital access and digital inclusion and discuss the reasons for non-use by the elderly. Consistent with the development of a national strategy for the 'digital transformation of public services' and plans to provide all government information and related services digital 'by default', UK documents referred to the need for digital access as a prerequisite to access public services meant as access for all who are entitled to use the service: "By digital by default, we mean digital services that are so straightforward and convenient that all those who can use them will choose to do so whilst those who can't are not excluded". (GDS, 2013). UK documents recognized the multi-dimensionality of digital inclusion: "There is seldom just one reason why people are digitally excluded, and there is no single approach to solving it. Digital inclusion is about overcoming all of these challenges, not just one" (Digital Inclusion Strategy, 2014). In that broader policy context UK documents included a more nuanced approach to socio-economic factors of digital access. In Italian documents, the analysis of the

causes of the elderly digital divide was often brief and/or implicit, mainly referring to biological factors (old age) with low use of ICTs among the elderly understood as a natural consequence of old age. A majority of Italian documents adopted the digital 'native' and 'immigrant' binary as a metaphor that describes the relationship between biological age and life experience with digital ICT. In this context, barriers to digital access (e.g. in documents proposing usable design) contrasted the complexity of digital technologies to a combination of generic biological/health decline such as problems with motor and coordination skills, declining eyesight, reduced hearing and cognitive decline. An explanation of low levels of ICT use, in both countries, was related to the lack of motivation and interests: also the elderly do not understand the usefulness of the ICTs and of digital services because they are generally less motivated and curious: "The main barrier to the use of computers and the internet among this audience appears to be a lack of understanding of and confidence with 'how it works'" (Age UK, 2009). However, UK documents offered a more nuanced and socially aware analysis of the digital divide and digital exclusion of older groups, for example the charity Age UK (2013), which points to the role of social networks/social capital. Some documents also acknowledged a combination or complexity of factors; for example, how advanced age played out with lower socio-economic status and educational qualifications in digital exclusion (Age UK, 2009).

*RQ3: What were consequences of the 'lack of use of ICTs' for the lives of older people?*

Documents from both countries underlined disadvantages relating to a lack of engagement with digital ICT and the digital divide among the elderly. These included, firstly, consequences for the individual: the health, cultural, social/relational deficits; quality of life and active ageing. Those without digital skills and digital devices could risk premature ageing, a lower quality of life and health consequences (Race Online, 2012). Individuals who are digitally disconnected have fewer opportunities to obtain access to the information society, to the digital revolution and to new forms of political participation, with no access to all public digital services, such as eGovernment services. Those without the Internet risk exclusion from familial contacts, especially with younger people. Secondly, negative impacts concerned public and societal consequences, such as stifling economic/market development (Italy), less savings for the public sector and less social cohesion. Lack of use of ICTs in later life was associated with three areas of outcomes, two of which related to economic outcomes (cost savings and reducing the size of the public sector): One, digital and economic development with lower levels of ICT use among the elderly, taken to mean a less competitive, weaker digital market. Non-use of digital ICT has stifled the development of innovative commercial services (see Active Ageing Going Local, 2014, Italy). Two, costs for the public administration: older people's non-use of digital ICT was an obstacle to digital innovation in public administration and related 'digital first' or 'digital by default' programs that aimed to reduce the costs in the public sector, especially of

eHealth. Three, costs on intergenerational solidarity, being associated with less cohesion between generations (these ideas were found in Italian documents).

*RQ4: What was the role that institutions assumed, to increase access and use of ICTs for the elderly?*

As noted in the introduction of this article, our analysis is based on several documents, from two countries with different approaches to the role of institutions in promoting ICTs, in order to investigate the range (or otherwise) of public discourse on the role of digital ICT in relation to old age, and global initiatives such as the AA. Thus, based on our sample, we were able to identify trends in the public policy understanding of the role of public sector institutions to increase digital ICT diffusion among older groups.

In some documents the role of institutions was (still) related to promoting the ownership of digital devices and network/connectivity. The attention to ICTs access was more the case in Italy, where the rate of internet take-up among older people is significantly lower than in the UK. It included the provision of new and faster, better performing broadband connections across the nation and distributed computers and laptops among the elderly. A second important area of institutional intervention was “digital skills”. Most of the Italian documents analyzed propose the organization of courses for the elderly to improve digital skills needed to operate computer and network hardware and software. In the UK, ‘assisted digital’ support and a provision of inclusive person-centered support are linked with the necessity to offer universal access of digital service to all: “This is an integral part of providing digital by default services. Assisted digital support: consider how they will provide this assistance at the same time as they are digitally transforming their services” (GDS, 2013). Italian documents widely quoted the importance of the intergenerational approach to the teaching and learning of ICT skills. The use of younger generations as formal or informal teachers is present in several policy documents and seems to be one of the major trends in ICTs for elderly policies in Italy: several (public and private) institutions are involved in courses where younger generations help the elderly to learn to use a computer. Most of the documents that we analyzed are promoting high schools and senior centres as places where courses can be organized. Usage of digital (web) services was a focus in several UK documents. At the time of the research the Government Digital Services were implementing approaches to digital service design in the context of the transition to a ‘digital by default’ public service delivery: “The government has to ensure fair access to services for those who are entitled to them. To design services that work for users, we need to understand who can use digital services, who can’t, and what else we need to provide for people who aren’t online’ (Government Digital Strategy (GDS), November 2012). eGovernment and eHealth and the general digitalization of public administration make it imperative to consider demand side questions about services among the elderly. Digitalization of public administration could deprive older people of current levels of (physical, person-to-person) access. Several different

policy documents propose a redesign of public digital services to make them easy to use. The majority of these services are in the area of eHealth and eGovernment, but also for sociality (social network sites for the over 65s) and leisure (eg: digital storytelling). The issue of “design for all” and accessibility is marginal in Italian documents.

#### **4. Discussion of Findings**

In this section we discuss our findings starting with broadly common threads in policy discourses in the documents analyzed.

*Technology will drive change:* Policy documents were generally optimistic about the role and the impact of ICTs: especially in Italian documents, ICTs were an indubitable source of economic, social, human development and also benefits to elderly life and to society as a whole. There was no discussion of the reasons for digital exclusion. Reference to risks associated with digital technology use (such as fraud and privacy) were minimal. In the UK the emphasis of digital inclusion policies was placed on the design of government digital services: digital inclusion in the ‘*digital by default*’ strategy for the electronic/digital provision of public services is a matter of service design – not of addressing the lived circumstances and conditions of life of various disadvantaged groups. In short, much of the policy documents analyzed shared an enthusiasm for the role of digital ICT and an emphasis on the need and methods for overcoming the digital divide.

*Old age is associated with frailty:* Old age was typically represented as a period associated with risks of isolation, poverty, and mental and physical decline and disabilities. In terms of the relationship between age and new, digital technologies old people were positioned as part of a broader group of disadvantaged ‘non-users’ of technology, such as the disabled, poor, or unemployed while new ICT was envisaged to help old people to transform their old age into a period of life full of opportunities, while also addressing problems associated with old age such as isolation, disability, cognitive deficits. This can be seen as echoing a stereotypical view of the elderly but also of the role of ICTs in their life. Absent in these representations was any reference to social, economic and lifestage contexts. Social and structural dimensions (e.g.: exclusion, unemployment, and age-discrimination) did not receive policy attention in a majority of documents. Notable exceptions are studies and programs of older age associations such as AgeUK. There was almost no reflection on the opportunities associated with old age and the potential of ICTs in terms of both leisure and employment opportunities for the elderly.

*ICTs are tools to economize public resources and rationalize public administration, and to reduce the size of the public sector:* “Digital by default services are more efficient and more convenient for users” (GDS, 2013). ICTs were considered useful tools to cut public costs, by e.g. replacing face-to-face services with digital provision (e.g.: public administration services). This digital

transformation of public services requires a basic level of digital capability on behalf of older groups of citizens. Whereas a high number of (elderly) non-users as seen as an obstacle to the “digital by default” policies. Documents also underlined how ICTs help the elderly to have a more autonomous life thanks to online services (eHealth) and to new personal and home technologies (AAL, domotics, Internet of Things) that can reduce costs of public health and social care provision. There was no reflection on what the shift from a relationship-based model of care to a technology-based model of care means for elderly patients.

There were also significant differences between the Italian and UK documents. Overall, there were differences in the discursive focus of digital inclusion policies, especially surrounding the centrality of references to Active Ageing and the ‘generational’ divide/differences frameworks. Both terms are central to the digital exclusion and old age policy and research in Italy but not in the UK. Likewise, the ‘intergenerational divides’ and their role in framing population ageing were an emphasis of the digital inclusion discourses in Italy but not in the UK, reflecting national contexts. In Italian documents the “intergenerational rhetoric” (Lusher et al. 2010) is quite recurrent. Italian documents often used the metaphor of *digital native* and *digital immigrants* to underline the importance of the intergenerational relationship as a (familiar and social) moment where old people learn to use a computer. This rhetoric is less present in British documents. AA has been a dominant paradigm for health and social policy (Walker, 2012) and health and social policies in the UK have been delivering care in a more individualized and commodified form. In that context critical perspectives in social policy analysis have critiqued the generational conflict as a frame for neoliberal economic policies (cutting back public services) (Gilleard & Higgs, 2010) and have seen Active Ageing as another aspect of the same dominant paradigm of social welfare (health and social care policy). The emphasis of the latter on autonomy, choice and consumer rights underscores the need to limit collective provision to those who are least able to look after themselves (Moffat & Higgs, 2007). A case in point were the UK plans for ‘assisted digital’ (UK Government, 2013) Compared to Italy, the UK is a more generationally segregated and individualized society (Daatland & Herlofson, 2003). Business and family models in Italy may bring different generations into closer contact (and conflict?) (Albertini et al., 2016). At the time of the empirical study in the UK the public debate on welfare reform was mainly targeting groups of working age, including immigrant workers and the unemployed who receive social security support. Thus, the focus of national policy has been more focused on skills to increase digital transactions and the take-up of e-public services (Sourbati, 2012).

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<sup>4</sup> A characteristic of intergenerational rhetoric is its preoccupation with a generalizing antagonistic argumentation between idealization (solidarity) and threat (conflict). Frequently, intergenerational differences are dramatized. Metaphors are also important elements of intergenerational rhetoric. (Lüscher et al., 2010, 95)

## **Conclusions**

In this study we investigated policy discourses that frame old age and digital ICTs usages. While a growing body of scholarship has been focusing on how a diversity of older groups are engaging with media technologies (see e.g. Peine & Neven, 2019) our study examined the policy discourses surrounding this relationship, a context that is also ‘ambivalent and often contradictory’ (Gallistl et al., 2020, p. 235). We examined how ‘old age’ is understood in public initiatives coordinating digital inclusion programmes and ICT-based solutions, from e-government, e-public service information to (more recently) telecare and smart city solutions; what kind of assumptions about the ‘end users’ are mobilised here and whether these are by homogenous constructs of old age as a period of dependency, fragility and technological ‘deficit’ or whether more diverse constructions emerge; what kind of solutions digital technology is promising; what we can learn about policy approaches to technology and age; whether these changes over time are following changes in digital media adoption and use. Our investigation of how older people are addressed through digital inclusion policy in the two countries reveals co-constructions of age and exclusion, and shifting chronological boundaries of ‘old’ age and mutual understanding of old age and new technology.

Our study found that the way old age, digital ICT use and digital inclusion/exclusion was constructed in policy discourses appeared to mirror levels of digital media diffusion. This can be seen more clearly by comparing the documents from Italy with the UK documents. In the latter country, where digital inclusion has been a focus in public policy over the past twenty years, ICT diffusion levels are higher. In the UK, a less homogenous, technology-centric and more nuanced approach started to emerge, as two thirds of adults aged 65+ use the internet, and technology use patterns reflect long-standing inequalities (including sex/gender and ethnicity) rather than generational divides. In Italy, a strong focus on generational ‘digital divides’ came with expectations that ICT would facilitate AA, enhancing the social and economic inclusion of older groups. Based on our findings this paper makes a case for sensitivity to diversity in experiences of age and media use to promote age-friendly policy design for all.

Another important finding in our study relates to emerging changes in (chronology-based) understanding of older people and old age: during the first decade of e-government and the programmes promoting ICT diffusion in UK policy documents ‘older age’ was defined as 55+. However, as the second decade of the 21st century advanced so did internet diffusion across Europe. In many countries across Northern Europe (initially) and more widely (later) older adults online exhibit diverse patterns of digital ICT access. Chronological age-based categorisations, including in national statistics, are now using a greater range of categories. Public policy debates and documents have started to define the digital divide as skills gap/media literacy, not a dimension of old age, including e.g. the Office for National Statistics and research by the Communications regulator (Ofcom) which finds that class and age interact in ICT use (Media literacy Audits 2005-2015 Ofcom seminar

6, London, UK June 2015). In light of this trend, policy discourses on ‘the problem’ of older people who are not using digital ICT can be interpreted using a ‘mutuality’ approach. (Sourbati & Carlo, 2015) Here we borrow from Livingstone (Livingstone, 2008) who uses ‘mutuality’ for researching people’s engagement with new media. Livingstone defines media literacy as an interface concept, between the reader and the text (including technology). We apply this framework to old age and media use to describe how this relationship evolves following the diffusion of digital ICT use among older groups. Along the way the definition of who is ‘older’ shifts in national statistics (for example from those 55+ twenty years ago to more nuanced age-based groups that today include 80+). Our findings for the UK also illustrated how the digital divide takes its place alongside other long-standing, persistent issues of social equity and social justice, including sex/gender and race rather than generational divides. In Italy strong discursive focus on generational divides was coupled with an expectation for ICTs to contribute to active ageing, realize benefits for older people and more generally be a source of economic, social and human development.

In this article we set out to contribute towards a counter to approaches that place their emphasis on generational divides as an interpretative framework of ICT use, conceptualizing ICT use by older people as a dimension of Active Ageing and a phenomenon of ‘digital migration’. Findings of our empirical investigation (Carlo & Sourbati, 2015) demonstrate not only a new shift towards more nuanced approaches to age and technology, but also long-standing stereotypical views which are still holding strong in ageing Europe. We conclude by proposing a framework for age-inclusive media/technology policy design that represents a shift in dominant, commonsense understandings of age as a chronological binary, of old age as a homogenous other and of old internet users as digital immigrants. Our study results contribute to an expanding debate on the ‘age-technology-participation and social inclusion nexus and how digital technology is discursively linked to ageing and social and economic participation (Fleming, Mason and Paxton, 2020) As digital technology diffuses we need to address older people as an expanding and increasingly diverse group of technology users, in public policy too, by showing sensitivity to the diversity in experiences of age and technology engagement, in order to promote age-friendly policy design for all. (Sourbati & Loos, 2019).

Age relations, digital inclusion and active ageing require further examination – the reported study only identified some trends in their occurrence in policy documents in Italy and the UK. Digital ICTs are by default considered an essential infrastructure of e-government and the digital economy. Further study is required into relationships between ageing, being older and inclusion policy with particular focus on the role of digital connectivity, and, from a public policy perspective, how these may play out locally, in different national contexts. With regard to Active Ageing agendas, caution has been advised when considering dominant policy approaches to AA: the indices of the EU tool could be criticized for their bias



towards the youngest and healthiest older adults<sup>5</sup>. A further study into these interrelationships and interactions could benefit by an examination of the co-evolution of technologies and public policies as questions of age-aware design for inclusion in the physical/built and technological/service environment (including smart cities and Internet of things (IOT) solutions) in the emerging ‘silver economy’ being the major policy initiatives for the future. Lastly there are differences in national approaches to the analysis of the digital divide and digital exclusion and the trajectory of the terms during the past fifteen years or so as can be seen in the review of UK policies. Further exploration of emerging trends would require examination of normative-cultural views, analytic frameworks and attention focused on public policy, with a new context being introduced post-Brexit.

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<sup>5</sup> According to Boudiny (2013:1085) this is even more applicable to current definitions ‘that treat health and independence as ‘ultimate goals’. Unintentionally, this discourse [may create dichotomies as it] further excludes the most vulnerable older adults as – under the present phrasing – active ageing seems unattainable for many of those who are already frail and dependent.’

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