

**Original Article** 

Women, youth and everything else: age-based and gendered stereotypes in relation to digital technology among elderly Italian mobile phone users Media, Culture & Society 2017, Vol. 39(6) 798–815 © The Author(s) 2016 Reprints and permissions: sagepub.co.uk/journalsPermissions.nav DOI: 10.1177/0163443716674363 mcs.sagepub.com



Francesca Comunello

LUMSA University, Italy

## Mireia Fernández Ardèvol

Universitat Oberta de Catalunya, Spain

# Simone Mulargia

Sapienza University of Rome, Italy

## Francesca Belotti

Sapienza University of Rome, Italy

#### Abstract

In the context of an international research project on older people's relations with and through mobile telephony, Italian participants spontaneously provided narrations on mobile phones that appeared to be structured around strong stereotypes. Respondents show a twofold representation of mobile phones either as a simple communication tool or as a 'hi-tech' device, which generates multifaceted stereotypes. More specifically, when the mobile phone is considered as a simple communication tool, age-based stereotypes address younger people's bad manners, while gendered stereotypes depict women as 'chatterboxes' or 'social groomers'. On the other hand, when the mobile phone is considered a 'hi-tech' device, age-based stereotypes underline younger

**Corresponding author:** Francesca Comunello, LUMSA University, Borgo Sant'Angelo 13, 00193 Rome, Italy. Email: francescacomunello@gmail.com people's advanced user skills, while gendered stereotypes focus on women's lack of competencies. Based on that, we provide a conceptual framework for analysing such stereotyped – and apparently conflicting – representations. Interestingly, while some issues also emerged in other countries, the masculine assumption that women are less-skilled mobile phone users appears as a peculiarity of Italian respondents.

#### Keywords

gender, Italy, mobile communication, older people, representations of mobile phones, stereotypes

## Introduction

Mobile communication is playing a growing role in everyday practices. Due to constant market innovations, changes in mediated communication practices are far from complete. Mobile telephony is the most popular information and communication technology (ICT) among older individuals in the European Union (EU), while senior citizens consistently show lower adoption rates compared to other age groups (Eurostat, 2010). An online survey in Italy (Nielsen, 2013) shows a generalized adoption of mobile telephony (97%) among the population aged 16–64 and a high popularity of smartphones (62%). The latter are more popular among men (66%) than women (57%); the highest use rate appears in the 25- to 34-year-old cohort (72%), while the lowest corresponds to the 45–64 cohort (54%). However, individuals accessing Internet via mobile phones account for 11% of the Italian population (27% in the EU) and for 1% of 65- to 74-year-olds (4% in the EU) (Eurostat, 2013). From these reports, we can infer that the current interest of public and private decision makers is in advanced uses of mobile devices. However, results also justify the interest of approaching this ICT from a broad perspective that includes basic uses, such as standard voice calls.

Europe is an old society that is growing older. Projections of the demographic shift forecast an increase in the population over 65 in the EU from 18.2% in 2013 to 28.1% in 2050, which is similar to projections of Italy (Kotzeva, 2014). Despite their increasing demographic importance, older people are the least-studied age group when it comes to understanding ICT use and adoption (Richardson et al., 2011). Thus, it is relevant to define a research project to explore the relationship of older people with and through mobile telephony at an international level (Fernández-Ardèvol and Prieto [2011] discuss the initial design).

This article focuses on the results of the research conducted in Italy where participants spontaneously provided narrations on mobile phones that appeared to be structured around strong stereotypes. The goal is, therefore, to analyse age-based and gender-based stereotypes in relation to digital technology among mobile phone users aged over 60 and to provide a conceptual framework for analysing such stereotyped – and apparently conflicting – representations.

The problem of both age-based and gendered stereotypes about mobile phone usages and competences is significant, because such prejudices affect adoption processes, thus influencing the broader issue of mobile phone diffusion. Technologies shape and, in turn, are shaped by social structures (Lawson-Mack, 2001), including the unequal power relations existing in the current society (Wajcman, 2007). Such differences and power relations, existing between men and women as well as between young and old people, are reflected in ICT use and in the necessary skills that constitute cultural and institutional barriers to the full and effective participation of women and seniors in the information society (Castaño, 2008; Fusaro and Arsenault, 2008). Stereotypes about ICT usages contribute significantly to digital inequalities, as they deploy important implicit modes of operation that influence social behaviours (Greenwald and Banaji, 1995). They are inaccurate and biased beliefs about alleged uses of the devices that tend to homogenize and stigmatize specific social groups about their ICT usages. Consequently, ICT-related stereotypes affect individuals' motivation to approach technology, thus generating digital exclusions. 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 (Ganito, 2010; Sawchuk, 1995). Due to the high penetration rates of mobile phones, a specific attention to such a device can be particularly revelatory for unveiling sexist and ageist stereotypes related to ICT perceptions.

Moreover, mobile devices are complex artefacts, to which several different meanings can be attached. Users tend to understand each 'new' device through a metaphorical lens (Lakoff and Johnson, 2008), interpreting it in terms of something they already know. Literature on social representations related to digital technology has not addressed the topic of stereotypes, while literature on ICT-related stereotypes has hitherto disregarded the meanings attached to such devices, considering them in a monolithic way. This has generated results that are often hard to be used to build a comprehensive picture. In this article, we devote a central role to the social representations associated with mobile phones, in order to build a multifaceted picture of the related gender-based and agebased stereotype. Such a framework could be further developed to be applied to other domains.

## **Theoretical framework**

To analyse the meanings that mobile telephony use has in people's lives and in their selfpresentation to others, we rely on a multifaceted approach, which is shaped by the domestication perspective. It is precisely during specific stages of the domestication process that the meanings of the technologies arise. The first stage refers to the initial moment of 'appropriation' and considers how users negotiate the meanings of a new technology that may – or may not – lead to its first acquisition. The second stage refers to 'incorporation' processes, in which the new technology takes its own place in users' homes. With the 'objectification' stage, the focus is on the place of technology in users' everyday routines – considered in terms of spatial and time constraints. The last stage, 'conversion', takes into consideration the role technology users, then in a whole process of identity construction (Haddon, 2011; Silverstone and Haddon, 1996; Silverstone and Hirsch, 1992). The domestication approach offers a useful theoretical framework to address technology's role in contributing to (re)defining the politics of the home – even in terms of dynamics of power in inter-gender relations – and to understand users' efforts in creating and negotiating rules about technology's proper use contributing to highlighting 'people's gendered identities and the gender connotations of technologies' (Haddon, 2006: 198; see also Bergman and Van Zoonen, 1999).

Domestication analysis of mobile communication must go beyond the home, addressing use in public spaces and the different kinds of rules – explicit or tacit – that tend to shape people's expectations about appropriate use of technologies (Haddon, 1998). In their attempt to propose an integrative model for understanding mobile phone appropriation processes, Wirth et al. (2008) consider the conversion process as dealing with the idea of meta-communication, underlining the role of observation and evaluation of the behaviour of others in negotiating potential forms of appropriation. In this regard, we can assume that the conversion process is where forms of social representation emerge.

The concept of social representations, rooted in Durkheim's (1976 [1915]) 'collective representations', was first developed by Moscovici (see, for instance, Farr and Moscovici, 1984) and subsequently adopted for studying ICT in general (Fortunati and Manganelli, 2008) and mobile telephony in particular (Contarello et al., 2007). A social representation can be defined as a 'socially elaborated and shared form of knowledge that has a practical goal and builds a reality that is common to a social set' (Jodelet, 1991: 48). The social representations framework is particularly useful for exploring the meanings attached to ICT or, in other words, the social-construction process through which the sense and the practices associated with new technologies are continuously created and re-created by different communities (Sarrica, 2010). The social representations approach highlights the basic processes of anchoring and objectification, 'through which people make familiar what is new, classifying and naming it, and transform what is unfamiliar into new "reality" (Contarello et al., 2007: 152). Such processes are continuously negotiated, and conflicting social representations often coexist.

Social representations literature also focused on the 'similarities' between different ICT. For instance, Fortunati and Manganelli (2008) found that the mobile phone was perceived as being as similar to the PC as to the landline phone in the early 1990s in Italy. As mobile phones, and especially smartphones, are initially perceived by their adopters as 'new' devices, they undergo an anchoring process through which people tend to understand them in terms of already-known technologies. More specifically, Berg et al. (2005) report that respondents seem to conceptually position the mobile phone on a continuum between, on the one hand, a sophisticated electronic gadget – that is 'something more than a fixed line telephone' (pp. 349–350) – and, on the other, a simple communication tool – something similar to the traditional landline phone. Such different understandings of the mobile phone trigger multifaceted age-based and gendered stereotypes.

Stereotypes influence normative behaviours and create norms and roles (Stangor and Schaller, 2000 [1996]), which can explain ICT adoption (Buccoliero and Bellio, 2014) and usage practices. Stereotypes can refer to older people (North and Fiske, 2013) or women (Prentice and Carranza, 2002) or both, that is, specific-gendered age-based stereotypes (Kornadt et al., 2013).

On the one hand, generational stereotypes might arise from the assumption that technological generations relate differently to the surrounding ICT landscape (Loos, 2012). In this sense, technological innovations are seen as a series of turning points that separate different generations (as summarized by Andò, 2014). In particular, the rhetoric embedded in the concept of so-called digital natives (Prensky, 2001) depicts ICT devices as tools inherently fitting for younger people, in a context in which youth has become a (positive) symbolic value (Buckingham, 2006). Neves and Amaro (2012) discuss how cross-cultural paternalistic stereotypes are built around older people, who are often classified as incompetent and warm, less competitive than younger generations and technophobic. However, their study in Lisbon showed that most of the older participants did not perceive or present themselves as technophobes. Indeed, 'research has shown that negative stereotypes of older people avoiding technology and incapable of its use are outdated' (Broady et al., 2010: 483). However, ageism might be shaping confidence and lack of motivation for older people to use ICT (Neves and Amaro, 2012).

Following Mannheim's (1952) definition of generation, media environments can be considered as 'generational contexts', where different age-based groups arrange the technological experience in a similar way. Thus, people's media experience within their cultural environments may shape the social construction of a 'generational identity', arising from exogenous forces and discursive practices (Colombo and Fortunati, 2011). The generational semantics (Corsten, 1999) produced by senior citizens to interpret their own relationship with ICT deals with the perception of both personal abilities and socially expected performances and might be shaped by their own perception of age and ageing (Rozario and Derienzis, 2009). In particular, expectations about the way a given ICT is used by an older person shape actual uses.

Nevertheless, the social representation of an age-based digital divide persists and affects the behaviour assessment of youths and the elderly. When the mobile phone is considered a 'complex' communication system, a social representation of youths as 'authorities' or 'innovation's drivers' (Berg et al., 2005) and the elderly as 'naïve' (Livingstone and Bober, 2006) or 'dependent' (Berg et al., 2005) predominates. Youths become teachers, and older individuals become pupils. Conversely, when the mobile phone is considered as just a telephone, it no longer is a question of competence, but of rules. Adults would no longer be (self-)represented as 'immigrants' (Prensky, 2001) in a digital world; rather, they would be the 'parents' who establish, or transmit, relevant norms around social interaction for the younger generations, their 'kids'. Thus, a rulegoverned activity would prevail that establishes a normative framework around interpersonal phone-mediated communication, and the pupil-teacher relationship diverts within a generational conflict. Senior citizens might feel the need to preserve and transmit a corpus of rules ('etiquette') regarding, among others, the use of telephony in general and of the mobile phone specifically. Yet, each generation is a culturally situated group that grows up with a specific style of media, and the social-construction process is a dynamic and reciprocal relationship between conventions and social practices (DeSanctis and Poole, 1994). Thus, the 'm-etiquette' (Lacohée et al., 2003: 207) inevitably changes: although youths may appear unconcerned about traditional models of socialization, they simply follow certain but different rules about mobile phone use (Yoon, 2006), being aware of when, where, why and how to use this technology (Caronia and Caron, 2004; Lipscomb et al., 2007). As happens at any age, the assessment of the elderly, therefore, depends on the adopted perspective: they tend to attribute their own mobile phone's usage to situational causes – that is, current circumstances, but as observers of the

behaviour of youths, they tend to refer it to dispositional qualities – that is, personal unchanging characteristics (Nisbett et al., 1973). In other words, older people do not duly take into account situational factors shaping behaviours (Cumiskey and Ling, 2015) when they view young people's mobile phone usage as unacceptable.

On the other hand, gendered stereotypes related to mobile phone representations are referred to women's competence levels and to social roles (Castells et al., 2006: 45–47; Nordli and Sorensen, 2003), again, depending on whether the phone is conceived either as an advanced ICT or as a simple telephone. Overall, the analysis of the relation between mobile phones and gender can be understood in the context of both 'gender and digital technology' literature and of 'gender and telephony' literature.<sup>1</sup>

The gender and digital technology literature, either from a techno-optimistic or a techno-sceptical perspective, has long focused on the role of technology in perpetuating/ challenging traditional gendered roles referred to as women's subalternity. According to Wajcman (2004), second-wave feminism generated a fatalism that emphasized the role of technology in reproducing patriarchy. In the 1990s, however, the third-wave feminism, drawing upon the most radical literature on the topic – that is, cyberfeminism (Haraway, 1985) and technofeminism (Wajcman, 2004) – considered that ICT could empower women and transform gender relations (Ganito, 2010) through bypassing the dichotomous male-female categories (Braidotti, 1996). While liberal feminists considered technologies as neutral and controlled by men, radical feminists 'argued that gender power relations are embedded more deeply within technoscience' (Wajcman, 2009: 4). Yet both approaches suffer from a limited conception of the relationship between gender and technology (Van Zoonen, 2002). The former relies on an archetype, according to which, women's use of technology is mostly presented as dystopic, but women's 'alienation' from technologies can be considered as a historical and cultural construction 'achieved through discourse, performance and repetition' (Pilcher and Whelehan, 2004: xi). Conversely, the latter approach is affected both by technological determinism and conceptualizations, considering digital environments as 'extraordinary' worlds, with loose connections to the offline world – as generally proposed during the so-called 'first age of internet studies' (Wellman, 2004). Moreover, it often adopted an essentialist perspective of male and female capabilities, thus perpetrating 'an understanding of gender differences as innate and rooted in biological and psychological underpinnings' (Marwick, 2013: 7).

The normalization of digital technology usage, which has been 'fully embedded in everyday life' (Wellman, 2004: 125) since the so-called second age of Internet studies, can contribute to focusing on the mutual shaping of gender and technology and, therefore, to recognizing that both are 'multidimensional processes that are articulated in complex and contradictory ways which escape straightforward gender definitions' (Van Zoonen, 2002: 6). Any gendered meaning emerges during the domestication process and the development of specific media cultures. This aspect is particularly evident in the literature on gender and mobile telephony that shows how 'in daily practices the mobile phone is a place of gender performance, either to reinforce traditional roles, or [...] constructing new meanings' (Ganito, 2010: 85), even if we can witness a sort of equalization in mobile phone diffusion. Mobile phones may appear as active agents in evolving gendered relationships (Tacchi et al., 2012), but overall, they have a dichotomous, performative nature (Butler, 1990): they can either reinforce traditional roles (Lemish and Cohen, 2005) or

create new cultures (Lee, 2005); yet women's usage of the mobile phone has often been characterized by their gender roles or attributed to their femininity (Lee, 2005).

More precisely, when the mobile phone is perceived as a simple communication tool, gender-based stereotypes concern (women's) social roles and communicative style. The discourse on women and caring (Lewis, 2006; Ungerson, 1983; Wood, 1994) shifts within the mobile media environments, while the 'social grooming calls' (Ling and Haddon, 2003), which primarily have a socio-emotional function within the personal networks, are referred to women. These are considered as 'chatterboxes' keeping in touch with (grand)kids, friends and relatives (Kopomaa, 2000), as happened when the landline telephone first appeared (Fischer, 1992). Then, as now, women were described as using phones for chatting with their personal networks and for companionship in times of loneliness. Conversely, when the mobile phone is represented as a 'hi-tech' communication system, gender-based stereotypes concern competence levels. In this case, the referred scenario is the whole world of technology, where both research and common sense traditionally classify women as low skilled and unwilling to use it (Clayton et al., 2009; Hargittai and Shafer, 2006). Although women do actually build a more intimate relationship with technology (Ganito, 2010), thus blurring gender differences (Lemish and Cohen, 2005; Shade, 2007), gendered perceptions of competence diverge from actual skill levels (Hargittai and Shafer, 2006).

Literature has explored the interplay between gender and digital technology, on the one side, and between age and digital technology, on the other side, while less attention has been devoted, in such a context, to mobile communication devices. We believe that a more detailed analysis of mobile communication devices under the lens of genderbased or age-based stereotypes is needed. Stereotypes are central in understanding adoption and usage of mobile phones; conversely, such devices can be seen as tools that help to highlight more general stereotypes, which are relevant in order to understand our attitude to technology and, in more general terms, the role it plays in our culture. Moreover, by focusing on the different meanings attached to mobile phones, we aim at building a more accurate picture of the related gender-based and age-based stereotypes.

By considering the representation of the mobile phone as (a) a simple communication tool or (b) a 'hi-tech' device, in this article we address the following Research Questions:

- *RQ1*. Are there any significant age-based stereotypes related to mobile phones among the seniors in our study, and if so, what are they?
- *RQ2*. Are there any significant gender-based stereotypes related to mobile phones among the seniors in our study, and if so, what are they?

Moreover, literature on stereotypes related to digital technology usage has often focused singularly *either* on age-based stereotypes *or* on gender-based stereotypes; for a better understanding of the phenomenon, we believe that a focus on their interplay is needed. Therefore, we address this additional Research Question:

• *RQ3*. How do age-based and gender-based stereotypes among the seniors in our study intersect? In shaping intersected stereotypes, is there a prevailing dimension between age and gender?

## Methodology

The empirical evidence we discuss in this article comes from research that explores the relationship older people have with and through mobile phones in Italy, which belongs to wider research taking the same approach in different cultural settings (Fernández-Ardèvol and Prieto), focusing on older users' motivations and usage practices, on their perceptions of mobile phones, on their adoption and domestication of mobile phones and on their usage skills. Due to such exploratory objectives and considering the specific circumstances of the research context, we adopted a qualitative research strategy, facilitating a flexible and interactive design (Maxwell, 2005; Miles and Huberman, 1994). In the general context of the research, in what follows, we focus on the age-based and gender-based stereotypes that spontaneously arose regarding ICT use.

We conducted 51 semi-structured interviews in Rome and in mid-sized towns in Lazio and Umbria – central Italy – between October 2013 and February 2014. With ages ranging from 60 to 95 years, participants were men and women with variegated socio-cultural backgrounds. All of them were mobile phone users, even though this was not a selection criterion. We stopped participants' recruiting when we reached data saturation and information redundancy (Maxwell, 2005). Interviews were recorded, transcribed and subjected to thematic analysis.

# Age-based stereotypes, gender-based stereotypes and their intersections

This section is organized in three parts: the first one looks at age-based stereotypes among the seniors in our study, the second at gender-based stereotypes among the seniors in our study, while the last analyses their intersection.

## Age-based stereotypes

The attitude of respondents towards young people is ambivalent. It oscillates between appreciating their 'technological skills' and criticizing how much they use the mobile phone. In particular, while considering the mobile phone as a 'simple communication device' is related to complaints about the communicative bad manners of youths, considering it as a 'hi-tech' device leads to celebrating their advanced competencies and skills:

I have some 13-year grandnephews who are so technologically advanced they could be rocket scientists [...]. I meet them, they say 'Hello aunt!' I greet them and ... down! They bend over the phone and then there is no more conversation. I don't recognize them anymore! I'm from a different era. (Female, 79)

Respondents' description of younger mobile phone users often starts from observing their closest young relatives or acquaintances and reaches more generalized descriptions of youths.

On the one hand, participants recognize youths' high levels of expertise, until defining them as 'university professors in telephony' (Male, 77). They also seem to be happy to be led by (grand)children in technological innovation, both in terms of adopting their

children's rejected devices and asking for their help and support in using them. Among such 'warm experts' (Bakardjieva, 2005), they mention both young relatives and young people in their relational networks, such as 'the children from the after-school club' (Female, 70). Respondents' narratives about younger people's use of mobile phones also show that some of them do not have a clear picture of the concrete nature of youth practices, which are often described as effective – 'they fiddle a bit with the mobile, and they find everything they're looking for' (Male, 63):

My children wouldn't [give up the mobile] because they're crazy about it ... they have 3–4 mobiles, of all kinds [...] They do whatever they want with them! And the iPad ... They have everything! ... It's not only my children, because I see everybody has everything! (Male, 69)

On the other hand, participants also complain that youths have been abandoning traditional patterns of social interaction by (ab)using the mobile phone. The distance between the (perceived) traditional social interaction habits and norms, and the new ones, is commonly assessed in negative terms: respondents do not seem to consider that young people might simply be following their own 'm-etiquette' rules, which might differ from those followed by older people. Interaction with mobile devices during meals emerges as one of the most critical scenarios (see Baron and Hård af Segerstad, 2010). A grandmother claims that, while eating together, 'children and grandchildren [...] are always typing', which inhibits face-to-face conversations. She also complains that, in such a context, 'parents don't say anything to them and grandmothers have to shut up! But I tell them: [...] "So, have you come to visit your grandmother?! [No, you've come] for food!"" (Female, 73). A complex set of generational relations emerges: on the one hand, the grandmother classifies children and grandchildren in the same category impolite behaviour, 'always typing' while at lunch; on the other, she would expect her adult children, her grandchildren's parents, to assume a traditional normative role. Overall, age-based stereotypes are the starting point for a dystopian interpretation of today's youth behaviours, which are sometimes compared to an idealized 'golden age', where youths used to play open-air traditional games. In the following quotation, the widespread usage of mobile phones is explained in terms of 'impositions', as if kids were deprived of choosing a (traditional) lifestyle they are supposed to prefer:

Everybody has [mobile phones] now! [...] I suppose it's a good thing but it's almost mandatory for boys and girls. They're always stuck to their computers and mobiles, they don't live! Why does someone spend the whole afternoon looking at a little box? They don't play blind man's bluff, they don't run, they don't go picking poppies. (Female, 79)

In some cases, moreover, such perceived overuse of the mobile phone is paradoxically described as a communication inhibitor – 'let's say that [the mobile] goes against communication itself!' (Female, 62). Or as revealing aspects of loneliness:

I criticize the excessive use [of the mobile] because if they don't have their phone, if they don't have contact with other kids, if they don't have 550 text messages a day, they're not happy! [The mobile] probably reflects society. [...] So maybe they're just lonely and depend on their mobile phone. (Male, 65)

While criticizing attitudes and habits of youths, some respondents clearly refer to a 'generational' dimension, explicitly comparing it to what they used to do when they were young and underlining a vast distance between the two generations, also in terms of 'understanding':

I think they belong to a different generation, and that all of them ceaselessly send messages [...] I don't know what they are for, I can't understand it. But they do it. When we were young we had other manias, but they were not as tragic as today. (Male, 69)

Such a sense of generational belonging is widespread among participants – who tend to generalize, especially when talking about young people – and appears to be based on the different representations of mobile phones – as simple communication tools or 'hi-tech' devices. Regardless of how or how much young people use their mobile phones, their competencies and behaviours take on a symbolic value, assessed according to the participants' backgrounds and education. Senior citizens describe similarities in the way young people experience mobile phones; hence, they draw a boundary between their own generation and younger ones. Such generational boundaries are sometimes related to the idea of 'being (having been born) technological'. In the original Italian answers, there is a shift in the use of the term 'technological', which departs from describing objects and is often used to qualify people, both in positive and negative terms:

I was not born 'technological', like those who are younger than me or at least were born more 'technological' [...] I see my younger colleagues using the iPhone all the time, for many reasons. (Male, 63)

### Gender-based stereotypes

With regard to gender issues related to mobile phone usage, we identified different stereotypes that again appear to be connected to the two social representations of the mobile phone. When it is seen as a simple communication tool, women are generally highlighted for their communicative styles; when it is seen as sophisticated ICT, stereotypes about women's (alleged) low level of competence prevail. Such stereotypes appeared in both women's self-representation and men's discourse.

In particular, when the mobile is perceived as a simple telephone, stereotypes are related to the image of women as 'chatterboxes' or as the ones in charge of family care and relational activities. Female participants usually linger over longer conversations, mainly with girlfriends. One of them, for instance, explains that she 'spoke on the phone for twenty minutes' with some girlfriends on the day of the interview (Female, 66), while another did so 'for half an hour' and explains that work-related calls are usually shorter (Female, 67). Even when women describe themselves as 'untalkative', they mention some anecdotes regarding their 'chatty' girlfriends. For example, a woman mentions a friend who likes to be on the phone for 'at least one hour!' (Female, 83), while another participant can even have '24-hour calls!' with a specific friend, with whom the shortest call 'lasted two hours and fifteen minutes' (Female, 63).

Furthermore, the mobile phone is perceived as a useful tool for accompanying relatives in everyday life, thus experiencing 'present absence' (Rainie and Wellman, 2012: 103):

My niece [lives] in Milan [...]. Every evening, she leaves work and calls me, while she's waiting for the bus [...]. She does everything while talking ... I keep her company and then she arrives home. But every night! [...] She wants to tell me all the important news of the day. (Female, 87)

There are consistent findings showing that women are more likely to use mobile phones for maintaining social networks and coordinating family activities (Castells et al., 2006). Women participants seem to redefine their caring activities through mobile phones and provide insightful commentaries on the changes in communication relations (Sawchuk and Crow, 2012) and on gendered roles:

These days, I call my sister  $\dots$  as she is getting on, so we dwell a little more on [...] concrete things: the house, the rent, what we eat  $\dots$  so, during the evening I use [the phone] a little bit more. (Female, 84)

Conversely, when the mobile phone is represented as a sophisticated electronic gadget - to which participants refer by using the word 'technology' - the arising gender-based stereotypes concern women's competence level. Both male and female respondents tend to almost take it for granted that women are less skilled in using mobile phones. This is a specific result of the research conducted in Italy, as such a generalized discourse did not appear in previous research conducted in Barcelona (Fernández-Ardèvol and Prieto, 2011), Los Angeles (Fernández-Ardèvol, 2012) or Montevideo in Uruguay (Fernández-Ardèvol, 2013). In these case studies, it could happen that a woman used to have the unique mobile phone of the couple, with the husband rejecting the direct adoption of the device. In Italy, some male participants spontaneously refer to their women partners as an example of lack of skills or interest in technology. For instance, one declares his wife is 'not as good' as him in using the mobile phone (Male, 69); another says his wife 'likes her old mobile phone and you'd better keep your paws off it', and identifies this preference with a generic lack of interest 'in such things' (Male, 65). Similarly, some women delegate innovation's driver role to their partner, as if men were the experts par excellence. As the following quotation shows, only when the mobile phone is conceived as just a telephone do women seem to perceive themselves as capable, as if telephony functions were basic and easy to learn:

I wasn't able to use the mobile phone ... at all! They taught me: 'grandmother, you press here, you switch on here, you check your credit here'. Even I can do it! Imagine how good I am! [...] Now I do it all on my own. [...] I became good at it! (Female, 87)

The perception that women have no interest in ICT is so strong that in some cases the purchase of the first mobile phone by a woman is considered as an indicator of 'emancipation', because in most cases, the first mobile phone used to belong to the husband. For instance, a respondent explains that, by the time she acquired her first mobile phone, her girlfriends 'already had one and were all more emancipated' (Female, 83). Conversely,

the first mobile of another respondent was her husband's, because 'he had a slightly better attitude to such stuff' (Female, 66). The respondent implicitly depicts herself as far from innovation, as if there was no need for her to acquire a personal mobile phone, while 'still' having the landline phone.

The idea of women as not competent in ICT is so deeply rooted among participants that one defines herself as 'not good' while immediately reporting the use of advanced functions and applications (Fortunati and Taipale, 2014): she takes pictures, has 'fun' with Google Maps, checks train schedules, plays games, regularly checks her email, uses the weather app, 'well ... all that stuff' (Female, 62). The notion that women do not have 'a positive relationship with technology' emerges, as if women had a 'different approach to technology and, thus, [find it] more difficult' compared to men (Male, 63).

#### Intersections between age-based and gender-based stereotypes

Finally, we also analysed whether and how age-based and gender-based stereotypes interact in participants' narratives. When the mobile phone is seen as a 'simple communication device', age stereotypes seem to be independent from gendered stereotypes, and vice versa. In this case, when respondents address youth and their communicative bad manners, or what they perceive as a form of 'addiction', gendered stereotypes do not seem to be in place, and they refer either to 'youth' (or 'young people'), or to 'boys and girls':

I don't accept that someone is [mobile] phone-addicted. I get angry when I walk around and I see, especially young people, that have become dominated by the phone. No, no, absolutely not. (Male, 72)

On the other hand, when respondents address women, considering their social roles as the ones in charge of family care and relational activities, age considerations, as well as the related stereotypes, do not seem to be involved. In the following quotation, the female respondent reports that she uses the mobile phone for keeping in touch with children and grandchildren, and underlines the role of her daughter in keeping in touch with her son:

[I usually talk] to my grandchildren and my daughter [on the mobile]. With my son a little bit less because he calls when he's out ... Most of the time, it is my daughter who helps me to communicate with my son. (Female, 73)

When the mobile phone is considered as a 'hi-tech' device, on the other hand, agebased and gendered stereotypes seem to interact in complex ways. More specifically, participants' narratives seem to distinguish between 'youths' and 'younger people'. When considering narratives of youths, age-based stereotypes seem to prevail over gendered ones: in this case, female (grand)children are commonly described as ICT experts. When considering narratives of younger people who are not perceived as young, on the other hand, a more nuanced picture seems to emerge. Some of the respondents describe their female children as more skilled (thus showing a prevalence of age-related stereotypes), while others describe them as less skilled than their male counterparts, or even

		Representation of the mobile phone	
		Sophistication	Simplicity
Stereotypes	Age Gender	Skills/Competencies Skills	Proper behaviour Social roles

Table I. Relationship between mobile phone social representations and stereotypes.

than themselves (thus showing a prevalence of gendered stereotypes). For example, a man explains how one of his daughters – who is in her mid-late 20s – 'is a little bit more technological than [him]' (Male, 63), while another prefers to depend on his son-in-law because he 'is a considerable expert on such stuff', while his daughter 'is more complicated, like all women' (Male 70);<sup>2</sup> even female participants say they rely on their sons-in-law for technological matters. Such attitudes towards female children appear to be related both to age – being young versus just being younger – and to marital status.

## Conclusion

Mobile phones constitute powerful triggers for creating meaningful narratives that tend to be affected by stereotypes. As we have shown throughout this article, when it comes to older Italian users, such stereotypes are related both to age and gender. They particularly vary according to the prevailing representation of the mobile phone adopted by respondents, which can be either seen as a sophisticated technological device or as a simple communication tool. As summarized in Table 1, while the age-based stereotypes respectively refer to competence level and socialization patterns of youths, gendered stereotypes concern women's skills and social roles. Therefore, attitudes towards both young people and women seem to be multifaceted – and sometimes ambivalent. They tend to shape stereotyped narratives that seem to be widespread in Italian society, and especially among Italian elderly (Istituto Nazionale di Statistica, 2013).

The model emerged in analysing the narratives of participants and in questioning the related emerging stereotypes. In our opinion, further research could employ it as a conceptual framework for analysing digital communication practices, focusing both on the prevailing representation of digital devices in order to analyse stereotypes and on the intersections of age and gender in shaping such stereotypes.

By focusing on older people (who are far from the 'ideal user' often assumed for ICT), the findings critically contribute to the more general debate on ICT and everyday life. Under-representation of older people in ICT usage affects both tool design and theory, often implicitly assuming that the 'ideal user' of ICT is young and ready to take advantage from all the potentials of ICT.

As stereotypes are sometimes also related to patronizing attitudes, moreover, findings also contribute to overcome patronizing perspectives in the analysis of ICT uses by older people.

Interestingly, when the representation of the mobile phone as a sophisticated device prevails, respondents tend to diffusely use the terms 'technology' and 'technological'. It is worth noting that the adjective 'technological' is used, in standard Italian, to designate

objects – that is, tools – while many respondents used it to describe people, as if it was an intrinsic personal characteristic. Such a shift seems to be related to a broader attitude towards ICT, in which people, especially those that perceive themselves as less skilled, tend to represent and evaluate themselves in 'technological terms' instead of evaluating ICT in 'human terms' – as proposed, for instance, by the user-centred design approach (Norman, 1988). Such a reference to ICT devices in terms of 'technology' – and to people in terms of 'technological' – is probably changing over time, as devices become increasingly integrated into people's everyday lives, until they become 'invisible' (Norman, 1998). Further research is needed in order to better grasp such a phenomenon.

Finally, peculiarities arise in the Italian context, compared with similar research conducted in other European and non-European countries. The main common issues are negative opinions on youth behaviour and women's self-description as not very skilled users of mobile telephony; while the main difference is the masculine assumption that women are less-skilled users and less interested in ICT, which seems to point to a higher gender-based stereotyped discourse in Italian respondents.

#### Acknowledgements

We thank the participants for their generosity.

#### Funding

This paper was partially supported by the ACM Research Network (SSHRC ref. 890-2010-0138).

#### Notes

- 1. There is limited literature on gender and landline telephony, as the telephone stopped being a research topic many years ago, when there were still few gender studies (an exception being Fischer, 1992).
- 2. Respondents did not consider it impolite to express these pejorative stereotypes to the female interviewer.

#### References

- Andò R (2014) What does TV actually mean? New Consumer Experience and Generations. Participations 11(2): 156–181.
- Bakardjieva M (2005) Internet Society: The Internet in Everyday Life. London: Sage.
- Baron N and Hård af Segerstad Y (2010) Cross-cultural patterns in mobile-phone use: public space and reachability in Sweden, the USA and Japan. *New Media & Society* 12(1): 13–34.
- Berg E, Mörtberg C and Jansson M (2005) Emphasizing technology: socio-technical implications. Information Technology and People 18(4): 343–358.
- Bergman S and Van Zoonen L (1999) Fishing with false teeth: women, gender and the internet. In: Downey J and McGuigan J (eds) *Technocities*. London: Sage, pp. 90–107.
- Braidotti R (1996) Cyberfeminism with a difference. In: Peters MA, Olssen M and Lankshear C (eds) Futures of Critical Theory: Dreams of Difference. Lanham, MD: Rowman & Littlefield, pp. 239–260.
- Broady T, Chan A and Caputi P (2010) Comparison of older and younger adults' attitudes towards and abilities with computers: implications for training and learning. *British Journal of Educational Technology* 41(3): 473–485.

- Buccoliero L and Bellio E (2014) The adoption of 'Silver' e-Health technologies: first hints on technology acceptance factors for elderly in Italy. In: *Proceedings of the 8th international conference on theory and practice of electronic governance*, Guimaraes, 27–30 October, pp. 304–307. New York: ACM.
- Buckingham D (2006) Is there a digital generation? In: Buckingham D and Willett R (eds) *Digital Generations: Children, Young People and New Media*. Mahwah, NJ: Lawrence Erlbaum, pp. 1–13.
- Butler J (1990) Gender Trouble: Feminism and the Subversion of Identity. New York: Routledge.
- Caronia L and Caron AH (2004) Constructing a specific culture: young people's use of the mobile phone as a social performance. *Convergence: The International Journal of Research into New Media Technologies* 10(2): 28–61.
- Castaño C (ed.) (2008) La segunda brecha digital. Madrid: Cátedra.
- Castells M, Fernández-Ardèvol M, Qiu JL, et al. (2006) *Mobile Communication and Society: A Global Perspective*. Cambridge, MA: MIT Press.
- Clayton KL, von Hellens LA and Nielsen SH (2009) Gender stereotypes prevail in ICT: a research review. In: Proceedings of the special interest group on management information system's 47th annual conference on computer personnel research, Limerick, 28–30 May, pp. 153–158. New York: ACM.
- Colombo F and Fortunati L (eds) (2011) *Broadband Society and Generational Changes*. Frankfurt am Main: Peter Lang.
- Contarello A, Fortunati L and Sarrica M (2007) Social thinking and the mobile phone: a study of social change with the diffusion of mobile phones, using a social representations framework. *Continuum: Journal of Media and Cultural Studies* 21(2): 149–163.
- Corsten M (1999) The time of generations. Time and Society 8(2): 249-272.
- Cumiskey KM and Ling R (2015) The social psychology of mobile communication. In: Sundar SS (ed.) *The Handbook of the Psychology of Communication Technology*. Chichester: John Wiley & Sons, pp. 228–247.
- DeSanctis G and Poole MS (1994) Capturing the complexity in advanced technology use: adaptive structuration theory. *Organization Science* 5(2): 121–147.
- Durkheim E (1976 [1915]) *The Elementary Forms of the Religious Life*, 2nd edn. Sydney, NSW, Australia: George Allen & Unwin Ltd.
- Eurostat (2010) Use of mobile phones [isoc\_cias\_mph]. Special module 2008: individuals Use of advanced services. Available at: http://ec.europa.eu/eurostat/web/products-datasets/-/ isoc cias mph (accessed January 2016).
- Eurostat (2013) Devices used for mobile connection to the internet [isoc\_cimobi\_dev]. Special module 2012: mobile connection to the Internet (Data explorer). Available at: http://ec.europa.eu/eurostat/web/products-datasets/-/isoc\_cimobi\_dev (accessed October 2016).
- Farr RM and Moscovici S (eds) (1984) *Social Representations*. Cambridge: Cambridge University Press.
- Fernández-Ardèvol M (2012) Older population and mobile communication in Los Angeles. Preliminary results of a case study. *IN3 Working Paper Series* WP12-001. Available at: http://journals.uoc.edu/index.php/in3-working-paper-series/article/view/n12-fernandez (accessed May 2016).
- Fernández-Ardèvol M (2013) Personas adultas mayores y comunicación móvil. La importancia de la voz y los SMS en Montevideo [Older people and mobile telephony: the role of voice and texts in Montevideo]. *Revista de Ciencias Sociales* 26(33): 97–120.
- Fernández-Ardèvol M and Prieto LA (2011) Mobile telephony and older people: Exploring use and rejection. *Interactions: Studies in Communication & Culture* 3(1): 9–24.
- Fischer CS (1992) America Calling: A Social History of the Telephone to 1940. Berkeley, CA: University of California Press.

- Fortunati L and Manganelli A (2008) The social representations of telecommunications. *Personal* and Ubiquitous Computing 12(6): 421–431.
- Fortunati L and Taipale S (2014) The advanced use of mobile phones in five European countries. *British Journal of Sociology* 65(2): 199–385.
- Fusaro M and Arsenault M (2008) Internet, nouvel espace citoyen pour les personnes du troisième âge? *Nouvelles pratiques sociales* 21: 63–83.
- Ganito C (2010) Women on the move: the mobile phone as a gender technology. *Comunicação & Cultura* 9: 77–88.
- Greenwald AG and Banaji MR (1995) Implicit social cognition: attitudes, self-esteem, and stereotypes. *Psychological Review* 102: 4–27.
- Haddon L (1998) The experience of the mobile phone. *Paper presented to the XIV world congress of sociology, social knowledge: heritage, challenges, prospects*, Montreal, QC, Canada, July–August.
- Haddon L (2006) The contribution of domestication research to in-home computing and media consumption. *The Information Society* 22: 195–203.
- Haddon L (2011) Domestication analysis, objects of study, and the centrality of technologies in everyday life. *Canadian Journal of Communication* 36: 311–323.
- Haraway D (1985) A Manifesto for Cyborgs: science, technology, and socialist feminism in the 1980s. *Socialist Review* 80: 65–108.
- Hargittai E and Shafer S (2006) Differences in actual and perceived online skills: the role of gender. *Social Science Quarterly* 87(2): 432–448.
- Istituto Nazionale di Statistica (2013) Stereotipi, rinunce e discriminazioni di genere. Available at: http://www.istat.it/it/archivio/106599 (accessed October 2016).
- Jodelet D (1991) *Madness and Social Representations*. Berkeley, CA: University of California Press.
- Kopomaa T (2000) *The City in Your Pocket: The Birth of the Mobile Information Society*. Helsinki: Gaudeamus.
- Kornadt AE, Voss P and Rothermund K (2013) Multiple standards of aging: gender-specific age stereotypes in different life domains. *European Journal of Ageing* 10(4): 335–344.
- Kotzeva M (ed.) (2014) Eurostat Regional Yearbook 2014. Luxembourg: European Union.
- Lacohée H, Wakeford N and Pearson I (2003) A social history of the mobile telephone with a view of its future. *BT Technology Journal* 21(3): 203–211.
- Lakoff G and Johnson M (2008) Metaphors We Live By. Chicago, IL: University of Chicago Press.
- Lawson-Mack R (2001) *The Digital Divide: Standing at the Intersection of Race and Technology*. Durham, NC: Carolina Academic Press.
- Lee DH (2005) Women's creation of camera phone culture. *Fibreculture Journal* 6: Available at: http://six.fibreculturejournal.org/fcj-038-womens-creation-of-camera-phone-culture/ (accessed October 2016).
- Lemish D and Cohen AA (2005) On the gendered nature of mobile phone culture in Israel. *Sex Roles: A Journal of Research* 52(7–8): 511–521.
- Lewis J (2006) Men, women, work, care and policies. *Journal of European Social Policy* 16(4): 387–392.
- Ling R and Haddon L (2003) Mobile telephony, mobility, and the coordination of everyday life. In: Katz JE (ed.) *Machines That Become Us: The Social Context of Personal Communication Technology*. New Brunswick, NJ: Transaction Publishers, pp. 245–265.
- Lipscomb TJ, Totten JW, Cook RA, et al. (2007) Cellular phone etiquette among college students. *International Journal of Consumer Studies* 31(1): 46–56.
- Livingstone S and Bober M (2006) Regulating the internet at home: contrasting the perspectives of children and parents. In: Buckingham D and Willett R (eds) *Digital Generations: Children, Young People and New Media.* Mahwah, NJ: Lawrence Erlbaum, pp. 93–113.

- Loos E (2012) Senior citizens: digital immigrants in their own country? *Observatorio (OBS\*) Journal* 1: 1–23.
- Mannheim K (1952) The problem of generation. In: Mannheim K (ed.) Essays on the Sociology of Knowledge. London: Routledge, pp. 276–320.
- Marwick A (2013) Gender, sexuality and social media. In: Senft T and Hunsinger J (eds) *The Social Media Handbook*. New York: Routledge, pp. 59–75.
- Maxwell JA (2005) *Qualitative Research Design: An Interactive Approach*, 2nd edn, vol. 41. Thousand Oaks, CA: Sage.
- Miles MB and Huberman MA (1994) Qualitative Data Analysis. Thousand Oaks, CA: Sage.
- Neves BB and Amaro F (2012) Too old for technology? How the elderly of Lisbon use and perceive ICT. *The Journal of Community Informatics* 8(1). Available at: http://works.bepress. com/bbneves/1 (accessed May 2016).
- Nielsen (2013) The Mobile Consumer: A Global Snapshot. The Nielsen Company, Available at: http://www.nielsen.com/content/dam/corporate/us/en/reports-downloads/2013%20Reports/ Mobile-Consumer-Report-2013.pdf (accessed May 2016).
- Nisbett RE, Caputo C, Legant P, et al. (1973) Behaviour as seen by the actor and as seen by the observer. *Journal of Personality and Social Psychology* 27(2): 154–164.
- Nordli H and Sorensen KH (2003) Diffusion as inclusion? How adult men and women become users of mobile phones. STS-working paper 04/03. Available at: https://www.ntnu.no/c/ document\_library/get\_file?uuid=f9323810-0837-434f-85b9-5023cd06c383&groupId=10265 (accessed May 2016).
- Norman D (1988) The Design of Everyday Things. New York: Basic Books.
- Norman D (1998) The Invisible Computer. Cambridge, MA: MIT Press.
- North MS and Fiske ST (2013) Act your (old) age: prescriptive, ageist biases over succession, consumption, and identity. *Personality and Social Psychology Bulletin* 39(6): 720–734.
- Pilcher J and Whelehan I (2004) 50 Key Concepts in Gender Studies. London: Sage.
- Prensky M (2001) Digital natives, digital immigrants part 1. On the Horizon 9(5): 1-6.
- Prentice DA and Carranza E (2002) What women and men should be, shouldn't be, are allowed to be, and don't have to be: the contents of prescriptive gender stereotypes. *Psychology of Women Quarterly* 26(4): 269–281.
- Rainie L and Wellman B (2012) *Networked: The New Social Operating System*. Cambridge, MA: MIT Press.
- Richardson M, Zorn TE and Weaver CK (2011) Older people and new communication technologies: narratives from the literature. In: Salmon CT (ed.) *Communication Yearbook 35*. London: Taylor & Francis, pp. 121–154.
- Rozario PA and Derienzis D (2009) 'So forget how old I am!' Examining age identities in the face of chronic conditions. *Sociology of Health & Illness* 31(4): 540–553.
- Sarrica M (2010) ICT meanings and practices: contributions from the social representations approach. *Journal of Community Informatics* 6(3). Available at: http://ci-journal.net/index. php/ciej/article/view/731/612 (accessed April 2016).
- Sawchuk K (1995) From gloom to boom: age, identity and target marketing. In: Featherstone M and Wernick A (eds) *Images of Aging: Cultural Representations of Later Life*. London: Routledge, pp. 173–187.
- Sawchuk K and Crow B (2012) 'I'm G-Mom on the phone' remote grandmothering, cell phones and inter-generational dis/connections. *Feminist Media Studies* 12(4): 496–505.
- Shade LR (2007) Feminizing the mobile: gender scripting of mobiles in North America. *Continuum: Journal of Media and Cultural Studies* 21(2): 179–189.
- Silverstone R and Haddon L (1996) Design and the domestication of ICT: technical change and everyday life. In: Silverstone R and Mansell R (eds) Communication by Design: The Politics of Information and Communication Technologies. Oxford: Oxford University Press, pp. 44–74.

- Silverstone R and Hirsch E (eds) (1992) Consuming Technologies: Media and Information in Domestic Spaces. London: Routledge.
- Stangor C and Schaller M (2000 [1996]) Stereotypes as individual and collective representations. In: Stangor C (ed.) Stereotypes and Prejudice: Essential Readings. Philadelphia, PA: Psychology Press, pp. 64–84.
- Tacchi J, Kitner KR and Crawford K (2012) Meaningful mobility: gender, development and mobile phones. *Feminist Media Studies* 12(4): 528–537.
- Ungerson C (1983) Why do women care. In Finch J and Groves D (eds) *A Labour of Love: Women, Work and Caring*. London: Routledge & Keegan Paul, pp. 31–49.
- Van Zoonen L (2002) Gendering the internet: claims, controversies and cultures. European Journal of Communication 17(1): 5–23.
- Wajcman J (2004) TechnoFeminism. Cambridge: Polity Press.
- Wajcman J (2007) From women and technology to gendered technoscience. *Information, Communication & Society* 10(3): 287–298.
- Wajcman J (2009) Feminist theories of technology. *Cambridge Journal of Economics* 34(1): 143–152.
- Wellman B (2004) The three ages of internet studies: ten, five and zero years ago. *New Media & Society* 6(1): 123–129.
- Wirth W, von Pape T and Karnowski V (2008) An integrative model of mobile phone appropriation. *Journal of Computer-Mediated Communication* 13(3): 539–617.
- Wood JT (1994) *Who Cares? Women, Care, and Culture.* Carbondale, IL: Southern Illinois University Press.
- Yoon K (2006) Local sociality in young people's mobile communications. A Korean case study. *Childhood* 13(2): 155–174.