# Elders' Perceptions on the Role of ICTs on Their Lives

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**Abstract.** Elders have embraced the technology at a later stage than the rest of population due, mainly, to their difficulty to keep pace of the evolution of the technology, life situations that usually do not require a big exposure to the internet, and the age-related physical limitations such as failing eyesight or reduced dexterity. But in a context of promotion of active aging, the internet offers a real option to fight social isolation and, in consequence, to improve elderly well-being. A theoretical reflection about how computer mediated communication could help this age group to increase social capital is offered. As Western governments are designing inclusion programs for the elderly the social perspective and potential benefits of the technology should be taken into account.

**Keywords:** Elderly · Technology · Internet · Social capital · Social isolation · Computer mediated communication · Active aging · Inclusion · Digital divide

#### 1 Introduction

On May 22nd 2009 Maria Amelia López, the world oldest blogger at that time, passed away in her hometown, a small village in the North of Spain, Muxia. She was introduced to the internet by her granchildren two years before that and since then she blogged about her political memories but also about her own life. While doing so, as she stated in one of her last posts "I forget about my illness. The distraction is good for you—being able to communicate with people. It wakes up the brain, and gives you great strength." Her blog was during those years a global success with more than 1.5 million visits.

Some years later, on March 2014, Peter Oakley, the "Internet GranDad" died in the UK at the aged of 86<sup>2</sup>. His YouTube channel was once the most popular of this video platform. Between 2006 and 2014 Mr. Oakley uploaded more than 400 videos covering subjects as his childhood memories or his everyday events. One of the most surprising effects of his presence on the YouTube was that thousands of users "adopted" him as GranDad and talked to him sharing hours of online conversations. Later on, he recognized that "there are millions of people without grandparents who find small comfort in

<sup>1</sup> http://amis95.blogspot.com.

http://www.independent.co.uk/news/people/internet-grandad-peter-oakley-diesaged-86-9214952.html.

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old, simple, stories. I have had my 15 min of fame - and enjoyed every minute of it."<sup>3</sup> In one of his videos he also stated that "being online has alleviated my loneliness"<sup>4</sup>.

These two cases received a wide interest from worldwide media. Both were frequently interviewed by newspapers and television stations from all over the world. Their stories were relevant due to its exceptionality: elders are far away of technology and it is not usual to see them in the center of the digital stage.

But one the most interesting things about these stories is that both of them recognized how being connected to the world through the technology alleviated some of the ailments they were suffering because of their age: it was good to forget about health problems and it helped them to fight loneliness and social isolation.

## 2 Elders in a Connected World

As both Mrs. López and Mr. Oakley stated several times, being online could be a source of benefits for elderly people that should be actively explored. Inclusion policies in Western countries in the last years have focused on this particular group and research has been lately focused on finding out the main functionalities and profits that technology could offer to active aging lifestyles [1].

But in fact these efforts also recognize that older population has had more difficulties to embrace technology than other demographic groups and this is why they need extra resources now. This probably will change in the next few years quite radically with the retirement of a generation of able technology users that would use technology to manage a new life stage full of social activities.

In the meanwhile, and when implemented, one of the objectives of the policies is fighting social isolation and loneliness through technology as an effective way to improve older people's well being and quality of life [2].

### 2.1 Elders Online

In 2014, according to Pew Internet Research, 57 % of citizens aged 65 or more in the US used the internet, email or access the internet via a mobile device<sup>5</sup>, while a 74 % of those owned a cell phone. Consultancy firm McKinsey&Company report [3] found out that in October 2014, 18 % of the 4,4 billion offline individuals worldwide were seniors (55 and up). This group is disproportionately represented as it supposes, according to this study, the 7 % of the online population worldwide. In the particular case of Spain, for example, latest available data shows that 74,6 % of elderly people (age 65 and up) has never used the internet<sup>6</sup>.

http://www.independent.co.uk/news/people/internet-grandad-peter-oakley-dies-aged-86-9214952.html.

http://www.telegraph.co.uk/news/uknews/10389336/Peter-Oakley-being-online-has-alleviated-my-loneliness.html.

<sup>&</sup>lt;sup>5</sup> http://www.pewinternet.org/data-trend/internet-use/latest-stats/.

<sup>&</sup>lt;sup>6</sup> Imserso, Barómetro Mayores UDP, January 2015, ref. 14089-14223/III-2.

When using the technology, cognitive age, technology-related anxiety and adventurousness are the psychological variables relevant to their online behavior [4]. According to Rogers [5] it could be said that, as a group, elders' innovativeness is lesser than in other age groups as children or young adults, for example, that have adopted the technology at a quicker pace and in a more pervasive way.

There are several reasons to explain this weak relation between this age group and digital technology: elders are less familiar with computers and mobile devices than the younger generations, and it can be difficult for them to keep pace of the rapid evolution of the technology. Seniors, who are more likely to be retired or unemployed, have because of this life situation less exposure to the internet and the latest technologies on a everyday basis. And, besides that, there are also physical limitations such as failing eyesight or reduced dexterity that can also present issues for this age group.

While it is true that internet penetration amongst this group is, all over the world, less significant than the rest of population, during the last five years some technological advances, as the touch-based screen devices, have had a relevant and positive impact on the number and the extent of activities older people is embracing in Western countries.

From a theoretical point of view, and based on previous research, this article offers a reflection on how and why elderly is coping with a highly digital social environment, with and intensive culture of sharing personal information with others. Cultivating social capital [6], creating and maintaining social bonds, emerges as a feasible explanation to the actual practices and a promising reality for those elders who are not still online.

#### 3 Social Media Use: Potential Benefits and Risks

In November 2015 Facebook had more than 1.5 billion accounts (almost 1 billion of these were accounts of active users)<sup>7</sup>. Spending time on social media platforms or applications is one of the most popular activities for internet users all over the world. But understanding the reasons behind this behavior is a very complex issue.

Kietzmann et al. [7] propose a honeycomb of seven blocks to explain social media functionalities. According to them social media users are revealing their identity (the real or the ideal one), having conversations, sharing content with others, maintaining a public presence, establishing relationships, managing reputation and trust, and taking part in groups or communities. The blocks are not exclusive and most users are doing several of these things at the same time.

Exploring the reasons behind elders' social media use is still a novel field, as this age group has only recently joined the social networking sites in a significant way. As Peral et al. [4] explained, the existing preconceptions about elders are not valid anymore and cognitive age, feeling younger, is probably the most important driver to be present online.

Besides this, establishing and maintaining social ties is also very important for this age group. As families are spread in different physical locations, technology offers the elderly an effective and cheap way to be in contact with their children and, above all,

<sup>&</sup>lt;sup>7</sup> http://www.internetworldstats.com/facebook.htm.

their grandchildren. Real time video applications, as Skype, Google Hangout or Face-Time, are some of the most popular tools to satisfy this particular need. And once they are online, creating new social connections is very natural for this age group.

Fighting boredom and loneliness have been two the main objectives to explain elderly media usage: this target group is heavy user of television content as a way to entertain themselves and pass the time [8]. The internet offers them a new way to discover and consume content but it also adds a valuable social component that potentially makes it very attractive to this group.

## 3.1 Benefits: Building Social Capital

Social capital has been mentioned as one of the potential benefits of social media use. That engagement and participation in social groups have positive consequences for both the individual and the community is not a novel idea as it refers to Durkheim's suggestion of group life as an antidote to anomie and self destruction [9].

According to Portes (2000: 44) two elements may help to explain the popularity of the concept of social capital in the last decades: firstly, it focuses on the positive consequences of sociability ignoring the less attractive ones; but it also relates those consequences with a broader discussion where social capital can be a source of power and influence as if it were a financial asset.

Social capital could be bridging (and inclusive) and/or bonding (or exclusive). The former is formed through open social connections including several people who can join a single common interest, while the second refers to those tighter forms present on homogeneous groups, with a strong identity. Although inclusive social capital allows a greater number of relationships in the wider environment, they may be weaker than those typical of most closed or exclusive groups.

One of the main functions of social capital is being a source of network-based support beyond the immediate family: in an aggressive and very individualistic society, where lifestyles push individuals to be away from the family unit, social networks become a good substitute for human support.

It is Putnam [10] who advocates in a more determined way that also virtual social networks can add to social capital as they also create value, both individual and collective, and users can "invest" in building a network of relationships.

In recent years it has become clear the crucial role of communication technologies helping people to create social and emotional connections; also as internet can improve our communication skills it has an immediate effect on the enrichment of social communities. There is agreement on the ability of computer mediated communication to generate a sense of intimacy similar to face to face communication, which explains how research has consistently related internet usage with higher levels of general wellness [11–13].

The ability of mediated communication to increase or at least maintain social capital has been widely studied by Katz et al. [14]. Social capital increases with the development of virtual communities while the physical ones are still extending. An increase in virtual social relationships should not imply a reduction of the physical social life, but can complement and expand internet community relations, and consequently the social

capital. Thus, a greater computer mediated communication should be followed by more social contact, civic participation and a greater sense of community.

It could be argued that computer mediated communication presents a clear barrier for elderly as sometimes it is difficult for this age group to deal with technological devices and applications. Learning curve is slower for them as their use is less intensive and usually not associated to work tasks and pressures. And, of course, physical limitations also are important: reading on small screens could be challenging when facing failing eyesight, and interacting with content, even through touch-based screens, could be a difficult with reduced dexterity. But in the last years several advances are being developed to allow an easier user experience despite of the age and physical conditions. Accessibility is today a must for software and hardware companies and it could be foreseen a clear improvement in this area, so the technology mediation would be everyday less relevant from the practical point of view.

It is relatively easy to find arguments to support how the use of social networking sites can increase social capital, but these benefits can only be achieved when, as Katz et al. note. (2004: 13) subjects are aware of the online /offline duality and are mature enough to understand and take advantage of the social networks' benefits.

And in this particular point elderly are better equiped than other age groups. Their life experience, not an asset in the case of younger users [15], allows them to have an increased awareness of the online/offline duality and, at the same time, they are able to understand the real benefits of social networking sites because they have a real need to satisfy.

In fact some researchers have found out a compensatory use of social networking sites due to the existence of weak or unsatisfactory social relations rather than an online investment countered by a strong social capital offline [16].

So, in terms of cultivating social capital, and being a fact that the physical barriers avoiding a more general use of the technologies by this age group are being reduced, it could be said that elders are in a very good position to explore the social media and social networking sites as a way to develop social capital. They have the need to foster the use, but also have the experience to understand what the real benefits are. And, at the same time, they do not have the eagerness of some younger internet users.

#### 3.2 Social Media Risks: Privacy and Trust

While building social capital could be a potential benefit for elders' usage of social media, it is also true that there is not always a direct and positive correlation between this use and an increase in social capital. In fact, and according to Katz et al. [14], physical distance produces more fragmented and less dinamic communities.

The emergence of social media in the last decade has also led to a scenario where social convergence has become the norm online [17] and personal information is the currency. While privacy concerns around this issue are clear and very important, internet users are disclosing a huge amount of personal information in order to create, establish or maintain personal relationships. The potential benefits, such as an increase in social capital [18, 19], seem to balance the risks perceived by users [20].

Social networking sites, as Facebook or Twitter, or other types of social platforms as dating sites, invite their users to set up a personal profile first and then share personal information with their friends and followers. Previous research about how individuals present themselves in cyberspace has demonstrated that they can be strategic managing their self image online [21].

In the case of elders, their usually slower publication pace, due to lower technical abilities, protects them from some of the risks that younger and more able users are facing.

A possible risk this age group could face when developing virtual relationships is related to the cues that a more experienced user has to understand a behavior and, therefore, to trust or not a particular user who wants something from him or her [22]. While none seems to be free of this risk, and emotions can sometimes lead to take unsafe decisions regarding disclosure of personal information, more experienced users have at least previous examples or ways to quickly read misconducts and act accordingly.

#### 4 Discussion

Since the arrival of the internet to the general population, elder people has had a complicated relationship with technology even in the more developed world. Western countries are fighting to make this digital divide everyday less significant through the promotion of inclusion programs, but it is still an important barrier in most developing countries.

Probably due in part to their apparent lack of interest, and their real lack of presence online, research about the motivations and drivers for elders' social media usage is yet in its first steps. While there are a good number of researchers working on the relation between health and technology, are mainly the functional abilities of the devices the ones that are being explored.

From a social sciences point of view there is room for improvement and implementation of research projects dealing with their inner motivations, and the psychological barriers that older users are facing when dealing with technology. An interdisciplinary effort is required to properly cover this, as it is a fact that there are physical elements that can constitute barriers higher enough to deter these users to try or repeat an experience with technology.

Social capital has emerged as a natural result of the social media explosion we are living in. While researchers are trying to measure the real impact of its usage over social capital, it seems that elders are in a very good position to explore this potential benefit: they have a real need of social contact and at the same time have the maturity to embrace the use of social media minimizing the risks and maximizing the opportunities.

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