






# Internet and the Elderly: Enhancing Active Ageing

## Mayores e Internet: La Red como fuente de oportunidades para un envejecimiento activo

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### ABSTRACT

Global ageing has led European and international organizations to develop programs for active ageing, in order to reconstruct the role of the elderly in society. Active ageing includes social communication aspects which have been the subject of less research than other more pressing ones linked to physical and economic characteristics. This research is centered on these communication variables; it addresses the link between the elderly and Internet, and has two main objectives: To discover how useful Internet is for this age group, and to explain the potential this medium has for active ageing. To do so, a qualitative methodology is used based on three discussion groups, each made up of five or six people between the ages of 56 and 81, led by an expert moderator. The results of the qualitative content analysis of each discussion indicate that the Internet is a source of opportunities for the elderly, and this potential may be divided into four categories: Information, communication, transactions and administration, together with leisure and entertainment. This potential improves the quality of life for the elderly and contributes to their active ageing. However, to maximize this, e-inclusion programs and methodologies are needed to make the Internet user-friendlier for the elderly and provide them with training in digital skills.

### RESUMEN

El progresivo envejecimiento de las sociedades ha llevado a los organismos internacionales y europeos a desarrollar programas de envejecimiento activo, capaces de construir una nueva cultura sobre el papel de las personas mayores en la sociedad. Estos incluyen aspectos sociales de carácter comunicacional que, sin embargo, han tenido menos desarrollo investigador que otros más apremiantes, vinculados a aspectos físicos y económicos. Esta investigación atiende precisamente a estas variables comunicacionales, abordando la vinculación de los mayores con Internet y planteándose dos objetivos principales: Conocer las utilidades que tiene Internet para este colectivo y explicar los motivos que convertirían a este medio en una fuente de oportunidades para un envejecimiento activo. Para satisfacerlos, se utiliza una metodología cualitativa que se apoya en el desarrollo de tres grupos de discusión constituidos por cinco y seis personas de 56 a 81 años y moderados por un experto. Los resultados obtenidos del análisis cualitativo del contenido en cada discusión indican que Internet es una fuente de oportunidades para los mayores, que pueden aglutinarse en cuatro categorías: Informativas, comunicativas, transaccionales y administrativas, y de ocio y entretenimiento. Estas oportunidades optimizan la calidad de vida de los mayores y contribuyen a su envejecimiento activo, si bien, su máximo aprovechamiento precisa de programas de «e-inclusion» y metodologías que aproximen Internet a los mayores, facilitándoles una formación en competencias digitales.

### KEYWORDS | PALABRAS CLAVE

Internet, the elderly, active ageing, cognitive stimulation, digital divide, digital literacy, ICT, healthy living.  
Internet, personas mayores, envejecimiento activo, estimulación cognitiva, brecha digital, alfabetización digital, TIC, vida saludable.

## 1. Introduction and state of the question

According to a recent UN report (2014), in 2050, Spain will become the third «oldest» country in the world, with 34.5% of its population over the age of 65 (Aunión, 2014). The 2012 Eurobarometer states that, depending on the European Union country, the concept of what 'elderly' means is very different, but, on average, anyone over the age of 63.9 is considered «elderly» (TNS Opinion & Social, 2012). In view of this progressive ageing of the population, «the challenge in the 21st century is to delay the onset of disability and ensure optimal quality of life for older people» (WHO, 2001: 3). Thus, during the 1980s, the European Union began to develop a new policy on ageing, which meant moving from a passive attitude to a more proactive one among the elderly. This new approach allows for greater well-being of older people and contributes to the economic sustainability of the social protection systems in the European Union, and thus can unify the interests of all stakeholders (citizens, NGOs, business interests and policy makers) (Walker, 2009).

Active ageing was defined by the WHO (2002: 79) as «the process of optimizing opportunities for health, participation and security in order to enhance quality of life as people age». This concept is linked to both physical and social and mental well-being, and also refers to the participation and integration of old people in society (WHO, 2002; OMS, 2002).

From a psychological perspective, the work of Fernández-Ballesteros et al. (2010) shows the criteria and predictors for what they call «successful ageing», which spring from the three variables with which Rowe and Khan (1987, 1997) characterized the opportunities of ageing: «Usual», «pathological» and «successful». In this study, based on the ESAP (European Survey on Aging Protocol) and its PELEA version (Protocol for the Longitudinal Study of Active Ageing), social and participative engagement was identified as one of the aspects of «successful ageing». It is on this point that this work is based and it is also the point which has inspired the least research in comparison with other more urgent aspects linked to health or economics.

The European Union (2011) declared the year 2012 as the «European Year for Active Ageing and Solidarity between Generations» in order to combat the effect of demographic ageing on the social models of the member states, and to promote the creation of an active ageing culture as a permanent process in a multi-age society.

Since the 1990s, the European Commission has developed programs intended to tackle this new cha-

llenge, by building initiatives which lead to greater levels of independence and integration of the older age group. Within these programs, communication has been considered a key element for the development of active ageing. Nevertheless, in spite of its importance, Nussbaum and Coupland (2008) consider that communication is not yet a core concept in studies on ageing.

However, there is no doubt that ICT can offer new possibilities for the elderly. For this reason the R&D Report on ageing underlines the need to encourage research into technological aspects to combat the effects of human ageing (Parapar & al., 2010).

It has been proven that it is precisely in old age that ICT offer relevant opportunities for the improvement of psychological processes (Aldana, García-Gómez & Jacobo, 2012; Elosua, 2010), social aspects (Martínez-Rodríguez, Díaz-Pérez & Sánchez-Caballero, 2006), and issues that are clearly related to dependency (Del-Arco & San-Segundo, 2011; Malanowski, Özçivelek & Cabrera, 2008). Ala-Mutka et al. (2008) suggest various policies with a holistic focus in order to improve the quality of life of the elderly through a process of permanent training, based on ICT, in which the involvement of the institutions and younger generations is essential. It also seems crucial that such methodologies should include instruments for the assessment of the media competences of the elderly (Tirado & al., 2012). However, it seems complicated to decide with certainty if ICT can improve the quality of life for the elderly, as there are three variables which are decisive in measuring this impact: Wealth, health, and social relations (Gilhooly, Gilhooly & Jones, 2009).

In this context, Internet appears to offer great support for active ageing, and should be taken into account in the development of active ageing policies in present-day and future societies. It has been predicted that the percentage of older Internet users will grow in the next few years; but this growth will presumably be slow due to the difficulties of access this group has because of its low level of education (lower than secondary-education) (Fundación Vodafone, 2012). In spite of this, the general spread of web accessibility and the abundance of devices that enable mobile access have provided new ways of improving the quality of life. But the undeniable potential offered by the Internet to other younger groups appears to be limited in the case of the elderly. The digital divide is more evident between these two collectives in modern societies. On this point, the elderly make up a group who are at risk of exclusion –or of isolation– (Querol, 2012; Fernández-García, 2011). ICT can counteract

this, by promoting the collaboration and development of learning communities who will overcome physical limitations (Shepherd & Aagard, 2011), and by offering them an opportunity for social integration and healthy orientation (Agudo, Fombona & Pascual, 2013).

This divide between the young and the old generations, brought about by discrimination in access to ICT, has become one of the great challenges for the UN and the European Commission. Thus, during the «World Summit on the Information Society», organized by the United Nations International Telecommunications Union in Geneva (2003) and in Tunisia (2005), a commitment was declared to those groups who are at risk of marginalization (UN, 2003). Regarding the same concern, the European Commission has carried out several initiatives, outstanding amongst which is «i2010», which intends to promote accessibility and ensure that all groups will learn basic digital skills (European Commission, 2005). A year later, «e-inclusion» is considered a key element in achieving integration of ICT and their use in people's lives in order to guarantee their participation in the information society, to reduce the digital divide and to promote better quality of life and social cohesion (European Commission, 2006). The «e-inclusion» policies should focus on helping the most excluded individuals to use ICT productively (European Commission, 2007). On this point, the European Union Digital Agenda 2020 aims to make the most of the potential of ICT «to respond to the needs of an ageing population» and so to contribute to active ageing (Directorate-General for Employment, Social Affairs and Inclusion, 2012: 18). At present, one of the aims regarding the use of ICT in order to achieve independent living for the elderly is to reduce their need for assistance (Bubbolini, 2014).

As we have indicated, despite the fact that recent studies show that social aspects such as communication have been identified as an important part of active ageing, there has been less research on this subject in comparison with other more pressing issues. This piece of research focuses precisely on this type of communication variables and tackles two essential objectives:

- a) Awareness of the multiple uses of the Internet for the elderly.
- b) Explanation of the reasons that make this medium a source of opportunities for active ageing.

## 2. Material and method

The methodological design responds to a qualitative typology. The discussion group was considered, in this case, as the most suitable qualitative tool, because it admits more in-depth explanation, which will allow us to discover the potential of the Internet.

Thus, a model was designed to gather first-hand data on the experiences of older people with Internet. This design is based on three discussion groups, guided and moderated by an expert, and the later qualitative analysis of the content expressed in each discussion.

The members of the sample were chosen in accordance with the following criteria: Internet users of both sexes, aged between 56 and 81, belonging to the middle class, with different education levels, who reside in urban areas of different sizes and show a clear interest in an active life (they are all linked through being involved in continuous education programmes). In this way, sufficient heterogeneity was achieved to guarantee greater wealth and variety in the opinions expressed.

The procedure followed by the moderators was to interfere as little as possible, with the help of a position statement which gives the major points to be dealt with in the group, but also to help the participants to freely express the use they make of the Internet as a means to improve their everyday habits, and to optimize their quality of life.

The length of each group discussion varied, which is why the Group Z conversation was shorter. The conversation was guided but not conditioned by the moderator

The group discussions were recorded and transcribed, thus permitting a qualitative analysis of the contents which has allowed us to identify relevant aspects in the participants' experiences regarding the proposed objectives. Such analysis is focused on the corpus of textual data resulting from the transcription of speech, together with the description and interpretation of same in order to, later, establish the possibility categories offered by the Internet for active ageing. This taxonomy responds to a subject criterion in accordance with units of content which were defined «by taking

**Table 1. Fact sheet for group X**

MEMBERS	4 women and 2 men
AGE	Between 63 and 70
RESIDENCE	Guadalajara (Castilla La Mancha)
PROFILE <sup>1</sup>	Lower grade managers and professionals Lower grade supervisors and technicians
OCCUPATION	All retired
LINK	Classmates (Guadalajara Adult Education School)
TIME	01:00:43

as units those fragments that express an idea referred to a topic» (Gil, García & Rodríguez, 1994: 192).

### 3. Results

The experiences narrated by the participants in the three discussion groups have shown some concurrence in considering the Internet to be a source of opportunities to optimize their habits for living and to contribute to their active ageing.

The richest results were obtained from the experiences from group X and group Y; those of group Z were less productive. These data have been classified into four categories of opportunities, according to the results of the consensus detected in the analysis of the discourse. As it has been explained, this classification corresponds to a subject criterion which permitted its own nomenclature at a later stage. Moreover, isolated quotes from some of the participants have been incorporated as they reflect a consensus on the opportunities which the Internet offers them.

#### 3.1. Information opportunities

For the elderly the Internet has become a magnificent source of information. It is a large encyclopedia, dynamic, comfortable and easily accessible, which allows them to find information on multiple subjects: «I consult Internet a lot, for anything and everything» (group X, 2014).

Google is the only search engine used by the participants in the different groups and the resource through which they access other information sites which are of interest to them. However, they admit to not using other types of information platforms such as blogs and forums.

The recurring topics for consultation found in the discourse analysis of the groups can be classified into the following areas:

a) Current affairs: This age-group shows special interest in the news that affects the areas in which they are involved (province, town, country) and some of them confess a preference for digital press rather than the traditional one.

b) Health issues: Interest in this type of information is widespread among the participants in all the discussion groups. Nevertheless, they always look for infor-

**Table 2. Fact sheet for group Y**

MEMBERS	3 women and 3 men
AGE	Between 55 and 70
RESIDENCE	Paracuellos del Jarama (Madrid)
PROFILE <sup>1</sup>	Lower grade managers and professionals Lower grade supervisors and technicians
OCCUPATION	All retired
LINK	Classmates (Paracuellos de Jarama Adult School)
TIME	01:17:21

**Table 3. Fact sheet for group Z**

MEMBERS	5 women
AGE	Between 56 and 81
RESIDENCIA	Madrid (Madrid)
PROFILE <sup>1</sup>	Non-skilled worker
OCCUPATION	All but one retired (one unemployed)
VINCULACION	Classmates (Language Academy in Chamberí)
TIME	00:28:59

mation which affects them more or less directly: «If this hadn't happened to me, I wouldn't look it up on Google» (group Y, 2014). In general, they look for data on:

- Illnesses. In this case, they always trust the diagnosis of the healthcare professional and are simply interested in natural remedies or want to find out more or better understand the information offered by the physician, but always keep in mind that «Internet can never take the place of a doctor» (group Y, 2014).

- Doctors. On this point, they look for information about the professionals who are going to treat them and/or members of their families and/or friends.

- Hospitals. They are interested in the quality of the centers in which they are treated: «I always get into information about the hospital, about the prizes they have been given, the awards they have received; that is the prestige of the hospital» (group X, 2014).

- Healthy diets. For them Internet is a source of information on healthy habits, although they consider that diets usually change.

c) Culture and general interest topics: This age group, particularly the women, frequently use the web to find recipes. They often look for information about things that intrigue them, for example: «When there is a word that doesn't sound familiar, Wikipedia or a country. I mean, the information on Wiki, it's just sensational» (group Y, 2014). Even to resolve one-off technical problems: «Well, any question that arises or that I don't know, technical information, anything there is» (group X, 2014). Regarding culture, they also look for information on exhibitions, travel, theatre and other activities related with their leisure and entertainment.

An important aspect that affects the information opportunities offered by Internet refers to the reliability

of the data. On this point, the participants are wary: «I don't believe everything they say [...] There are a lot of smart asses» (group X, 2014). Therefore, they realize that Internet: «It is not the panacea. There is a lot of rubbish too» (group Y, 2014). For this reason, they stress the importance of verifying the information and finding it in reliable sources. Apart from the reliability of the source of information, there are other variables which influence their feeling of more or less confidence in the data, such as the design and appearance of the website or the prestige of said platform.

Particularly for health information, they are especially cautious and express warnings on moderation in the use of the Internet for access to this type of data, so as not to become hypochondriacs: «You make your life a disease» (group Z, 2014).

### 3.2. Communication opportunities

Within the communication opportunities offered by the Internet, the one most used by the participants in the research is email. Several members of the groups consider that smartphones have made communication easier, offering more immediate connection to email or the social networks. They have concentrate the use of the computer to those personal interactions to which they prefer to devote most time, such as communication with family members who live abroad, using platforms like Skype: «The computer, well I use it for Skype, if I'm talking to Manuela [her daughter]» (group Y, 2014).

Moreover, the increase in mobile devices has, amongst this group, promoted the possibility of communicating by means of social networks such as WhatsApp and Facebook. As is common amongst other age groups, WhatsApp has replaced traditional telephone communications: «WhatsApp, right, I've stopped using the telephone» (group X, 2014). On the other hand, Facebook is seen as a means of interaction with friends and family members, less immediate than WhatsApp, but more enjoyable for many of the participants, as it allows them to share experiences: «Well, my daughters sent me photos of my grandchildren» (group Z, 2014). Belonging to Facebook is determined by a link of friendship or a family relationship with other people who belong to it. This fact and the feeling that attending to several social profiles is a waste of time are variables which explain why they do not belong to other networks such as Twitter. Those with a negative opinion on social networks prefer not to spend time on them: «But as for Facebook, if you really want to know what I believe, I think it's a lot of rubbish» (group X, 2014).

In general, the communication opportunities offered by the web facilitate social interaction which involves the elderly in relationships that strengthen their social abilities and keep isolation away; these are effects that improves their motivation, self-esteem and satisfaction. Additionally, making the most of these opportunities causes admiration amongst their peers: «I'm very pleased to say that on WhatsApp the person I send most messages to is a gentleman of 93» (group X, 2014).

### 3.3. Transactional and administrative opportunities

Internet has made certain everyday habits easier for older people, due to the possibilities it offers to carry out «online» transactions and administrative processes. On this point Miranda (2004) states that these operations are particularly useful for those people who have limited mobility because of health problems. Thus the elderly may feel that these possibilities are very beneficial and convenient.

The members of the groups habitually use the web for their income tax returns or to manage bills and bank accounts: «I, for example, for the natural gas bills, the telephone bills and everything, everything, I do it on Internet, and bank on Internet, except for withdrawing money because I don't let me» (group Z, 2014). They also use it frequently to ask for appointments (to see the doctor or for bureaucratic processes), and emphasize its convenience and immediacy compared to other ways of doing so, such as going to the centre or telephoning.

Regarding «online» shopping, its use is not found to be very widespread although some people use it to organize travel, to buy tickets for the cinema or the theatre, etc. Only one participant showed interest in buying products «online»: «I really like getting into buying and selling. I buy things from abroad [...] things I need that are more expensive in Spain» (group X, 2014).

### 3.4. Leisure and entertainment opportunities

Apart from facilitating information on leisure and entertainment, the Internet offers direct entertainment consumption, although these possibilities are the least exploited by this group. In this regard, some members of the discussion groups confess that they consume radio and television programs online, generally because they have missed the live broadcast; this is the most «widespread online» leisure consumption amongst the participants in the study.

A member of the group says: «Well, I do use it [...] also to play sudokus, to tell you the truth, I play to sharpen up my brain a little» (group X, 2014). In this

way, he shows his interest in promoting his cognitive activity.

Another member of a different group confesses that he uses Spotify to consume «online» music, although its use cannot be considered widespread amongst the old people who make up said groups.

#### 4. Discussion and conclusions

The results of the study carried out show that the elderly are becoming more and more interested in the Internet and technological devices; and are beginning to make them part of their lives as they have discovered the possibilities they offer, which they explain in their discussions.

In the specific case of the Internet, which is the focus of this research, the results are in accordance with the ideas of Juncos, Pereiro & Facal (2006), who conclude that the Internet is a new window onto the world which facilitates communication and cognitive activity for the elderly, by contributing to their greater autonomy and satisfying their demand for «space and a social voice» (IMSERSO, 2013: 16). The elderly make use of quite a few opportunities offered by the web, particularly for information and communication; but they are also beginning, in their day-to-day life, to use other possibilities for administrative processes and entertainment.

The information options are the most utilized by the elderly and promote greater autonomy of knowledge, thus improving their well-being by contributing to the implementation of their skills, broadening their knowledge and increasing their self-esteem. As Miranda (2004) declares, in general, the elderly are interested in similar topics to those which interest most of the population, but they also consult information that is relevant to their time of life. Consequently, current affairs and health are the key focuses in their searches. However, the elderly are cautious and try to use trustworthy sources. The National Telecommunications and Information Society Observatory (ONTSI) (2012) identifies uncertainty on the reliability of information (54.4%) and the risk of misinterpretation of same (28.7%) as the two main obstacles in the search of healthcare information by older people.

In general, the communication opportunities offered by the web facilitate social interaction that integrates the elderly into relationships that strengthen their social qualities and keep them out of danger of isolation; these effects favor their motivation and satisfaction. The elderly use the web to communicate by means of email and other types of «online» interaction which are adapted to mobility, such as WhatsApp or

Facebook. In this sense, the communication facilities offered by the Internet contribute to their social integration with peer groups and with their family members, which is essential to guarantee active ageing (Agudo, Pascual & Fombona, 2012).

As regards the transactional and administrative opportunities offered by the Internet, it may be concluded that they speed up the development of elderly people's everyday activities, involving them in a more dynamic environment. In addition, the Internet allows them to carry out actions that some of them would not be able to do because of physical impediments, thus contributing to their greater independence. Although Agudo, Pascual & Fombona (2012: 199) suggested that administrative processes were not very common amongst the elderly, this tendency is undergoing change.

Finally, the elderly define the potential for entertainment and leisure offered by the Internet as a playmate that contributes to their physical and psychosocial well-being (Blat, Arcos & Sayago, 2012). From this perspective, the Internet opens the doors to autotelic leisure in its ludic and creative dimensions (Cuenca, 1995), «in which freedom of choice, of expression and the development of non-utilitarian tasks prevail» (Goytia & Lázaro, 2007: 5). These possibilities, however, are not the most appreciated by the elderly, although they improve their cognitive activity and facilitate a positive attitude which strengthens their self-esteem.

Therefore, it can be concluded that the Internet is a source of opportunities for active ageing, as it has possibilities that optimize the quality of life of many different types of elderly people in its psychological dimension and also from a holistic perspective.

Among the limitations of the research we must mention that, although the methodology permits us to achieve the main objectives, allowing for a thorough and direct explanation of the establishment of the Internet as a source of opportunities for active ageing, some interesting questions demand additional treatment, as they are proposed as a first approach and require further in-depth study.

Thanks to our varied sample, we have found that elderly people with different levels of education and cognitive capacities «actively demand and make the most of learning from new technologies» (Requena, Pastrana & Salto, 2012: 17). For this reason, the encouragement of digital literacy amongst the elderly is of capital importance. They themselves demand training to facilitate this learning, and more accessible tools, as they are aware of the great opportunities offered

red by the web. Fernández-Campomanes & Fueyo (2014) consider that these training programs should be developed taking into account gender factors which will promote the participation of women in society from an empowering and not merely instrumental perspective. Regardless of gender, according to Macías-González & Manresa (2013), those older people who have had prior contact with ICT feel greater motivation to learn more about the subject and see these technologies as a helpful tool. Whatever the case, one of the main objectives which should be considered in this digital literacy program is to offer the elderly «a full and more participative life» in which ICT would be instruments that foster their civic participation (Abad, 2014: 179).

In a changing and technologically advanced world, lifelong learning is fundamental to avoid exclusion and to guarantee adaptation to the norm (Jiménez, 2011). This fact offers an interesting field for reflection for civic and institutional leaders, who should sponsor the development of policies to facilitate access to ICT and proper use by the collective studied. Such policies are what will promote and consolidate a change in our way of understanding and perceiving ageing, as a response to the legitimate rights of participation of the elderly. Hence, it is essential to optimize «e-inclusion» programs and to support the development of methodologies that will bring the Internet closer to older people by offering them training in skills which will allow them to exploit the potential offered by the Internet for active ageing to which this work has referred.

## Notes

<sup>1</sup> Profiles classified following the European Socio-economic Classification (<http://goo.gl/krmKrL>).

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