Active Ageing and Access to Technology: An Evolving Empirical Study

Envejecimiento activo y acceso a las tecnologías: Un estudio empírico evolutivo

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ABSTRACT

Researchers' interest in seeing the benefits of Internet in elderly people is now growing. The network helps this group to increase communication, avoid isolation and loneliness and to age actively. Europe decided 2012 to be the Year of Active ageing. This paper presents a descriptive study of time series analysis carried out between 2004 and 2012 with the aim of knowing how the evolution in the level, motives and needs of the use of computers and Internet by elderly people in an environment of university training focused on health and life quality is. To obtain results a question paper is to be handed out to a sample of 419 people aged between 55 and 94 and taking part in the «Inter-university Programs of Experiences» from the University of Burgos. The obtained results match up with previous studies that pointed a noticeable increase in the use of the Internet (in frequency, number of users and resources) caused by elderly people's desire to keep active, up-to-date and communicated, as well as their need to continue their learning process through tools linked to the network. Here some suggestions focused on the improvement of elderly people's formation and future research on the perception of the Internet as a tool for social participation.

RESUMEN

Es creciente el interés de los investigadores por constatar los beneficios para las personas mayores que conlleva el uso de Internet. La Red ayuda a este colectivo a incrementar la comunicación, evitar el aislamiento y la soledad y, en suma, a promover un envejecimiento activo, objetivo al que Europa dedicó el año 2012. Este trabajo presenta un estudio descriptivo de análisis de serie temporal realizado a lo largo de nueve años (2004 a 2012, ambos incluidos) con el objetivo de conocer la evolución en el nivel, motivos y necesidades del uso del ordenador y de Internet por personas mayores en un entorno de formación universitaria. Se aplica un cuestionario de diseño propio a una muestra de 419 personas con edades comprendidas entre los 55 y 94 años, alumnos del Programa Interuniversitario de la Experiencia en la Universidad de Burgos. Los resultados coinciden con estudios previos que apuntan hacia un notable incremento en el uso de Internet (en número de usuarios, frecuencia y recursos utilizados), motivados los mayores por el deseo de estar activos, actualizados y comunicados; así como por la necesidad percibida de seguir aprendiendo mediante herramientas vinculadas a la Red. Se plantean propuestas de mejora centradas en la formación de los mayores e investigaciones futuras sobre su percepción de Internet como herramienta para la participación social.

KEYWORDS | PALABRAS CLAVE

Education, elderly, education of adults, Internet, ageing, health education, digital divide.
Educación, personas mayores, educación de adultos, Internet, envejecimiento, educación para la salud, brecha digital.

1. Introduction and state of the question

We live in an information and communication society that has laid the groundwork for the so-called knowledge society (UNESCO, 2011). The technological advances that drive that society are swift, unceasing... Adapting to their speed, on occasions, causes vertigo. On the contrary, not adapting to them means sitting out the game on the touchline, and failing to adapt never favours personal health. We may therefore also talk about technologies and the health of older people, knowing that their needs and concerns as users of technological means of communication (computers, smartphones, tablets..) differ from those of younger people (Wagner, Hassanein & Head, 2010), while acknowledging that education helps to overcome those difficulties (Bélanger & Carter, 2011; Salvador, 2003).

Support for lifelong learning (Field, 2006) is also a common theme nowadays. In Spain, we found programmes for adults over 55 years of age, such as the University of Experience or the University for Older People, in both public and private universities. In particular, the Interuniversity Programme of Experience has been up and running since 2002/2003 in the Autonomous Region of Castilla y León, involving all of its universities. These institutions provide a common educational programme aimed at older people, with the collaboration of the regional social services (Palmero & Jiménez, 2008); learning among older people is promoted to strengthen active ageing. The WHO (2002, 2012) defines the concept of active ageing as an ongoing process of optimizing opportunities for health, participation, and security, in order to enhance quality of life as people age, facilitating active ageing in better conditions. The process is of such relevance that Europe dedicated 2012 to its promotion and its objectives are still alive today.

Education for health is a potent tool with which to encourage active ageing (Davey, 2002), traditionally developed in the classroom and now linked to virtual environments.

Active participation in technological environments can play an essential role in the improvement of health and quality of life for older people (Blazun, Saranto & Rissanen, 2012; Chen, Lee & Kirk, 2013; Sum, Mathews, Hughes & Campbell, 2008): 1) Favouring independence and creativity; 2) Creating new social networks and avoiding isolation and loneliness in society; 3) Allowing access to services related to health, culture, etc. Gracia and Herrero (2008) found that older Internet users maintained better physical health, experienced fewer problems associated with mental illness and showed higher levels of integration and participation than non-users. Meneses, Valente and Rodríguez (2004) confirmed that social activity on the Internet was not incompatible with face-to-face social activity, but that both forms of participation appeared to have similar effects.

The degree of Internet penetration in the population of older people varies notably. In the United States, Fox (2004) pointed out that 22% of Internet users were over 65 years old and around 44% were between 59 and 68 years old. Recently, Zickuhr and Madden (2012) pointed out that half of the people over the age of 65 in the United States, are already online. According to Eurostat (2012), in 2010, about 17% of Europeans aged between 65 and 74 were using the Internet in the Union of the 27 Member States. As of 2007, in Spain, 5.1% of users were aged between 65 and 74, and only 1.5% were older than 75 (INE, 2011; Red.es, 2012). The differences are even larger by gender.

Internet use among older people continues to be low in certain countries, so much so that they have been identified, together with disabled people, as those at greater risk of exclusion in the information society (Dobransky & Hargittai, 2006; Watling, 2011). The so-called digital divide increases, as people age (Fundación Vodafone España, 2011) and it constitutes a significant concern for professionals that work with this population (Abad-Alcalá, 2014). Low levels of computer literacy (Xie, 2011) is due to a multicausal effect. Wang, Rau & Salvendy (2011) found that perceived utility was the most important variable with which to predict the acceptance of technology, followed by ease of use.

In Spain, the Observatorio Fundación Vodafone-CERMI (2011) showed that the main reasons for the low use of technology are poor appreciation of its use in one's daily life; functional limitations; and economic limitations. Nevertheless, despite the barriers that they encounter, older people wish to learn (Aguiar & al. 2003).

Training in computer literacy is therefore needed by users (Norman & Skinner 2006; Xie, 2011). However, it is also noted that web designs are not usually well adapted, as problems of accessibility arise (European Commission, 2010; Czaja & al., 2013; Observatorio Fundación Vodafone-CERMI, 2011). The most significant difficulties found refer to small font sizes, an excess of information on each page, and a lack of clear instructions. Emphasis is therefore placed on the need to have codes of conduct for the improvement of web pages (Miller & Bell, 2012).

As teachers of Education for Health, our interest in education, health and technology led us to propose a practical problem as part of the Interuniversity Programme of Experience at the University of Burgos. On this subject, attention has traditionally been paid to topics such as those identified in the programme put forward by Berensson (2007): nutrition, physical activities, accident prevention. But, in the Spanish context at least, we rarely find a relation between the Information and Communications Technology (ICT), particularly the Internet, older people and active ageing. We therefore found it of interest to first understand the relationship that our older people have with ICTs, as a basis for the work in the Health Education classes and, subsequently, to analyse the evolution of that relation.

2. Materials and methods

The design of the research proposal, in response to the objectives of the study, was correlational and descriptive in nature, with information collected over 9 years, equivalent to 8 academic years (2004/05 to 2011/12). The proposed objectives are:

• To establish the evolution, from 2004 to 2012, of the development of basic ICT indicators (availability and use) in a population segment (people older than 55 years enrolled on programmes of experience at the University) defined by their age and cultural interest.

• To identify the reasons that these older people give for using or not using the Internet.

• To detect the main learning needs/desires of older people regarding the use of the Internet.

We designed an ad-hoc questionnaire, in order to collect information on these variables, without an excessively high number of questions (ten), so as not to overtire the older people. The questionnaires directed at this group have to be as short as possible, as older people easily become tired and a long questionnaire might reduce the quality of the test and the response rate (Wang, Rau & Salvendy, 2011). The test was drafted in plain language, to facilitate the understan-

ding of respondents, as they did not constitute a uniform group and differed in academic levels and age, which are diverse factors that have also been highlighted in various works (Gracia & Herrero, 2008; Imserso, 2011).

The contents of the test are related to the standard indicators on the presence of the ICTs in Spanish society (Gracia & Herrero, 2008). The majority of the items were closed questions (possession and use of a computer, Internet use, and place of access…). The

> We find a profile of users motivated by functionality, but also by enjoyment and leisure. The challenge, therefore, will be to maintain their interest in ICTs. It would be relevant to be able to confirm whether the 14% of the population that do not use them and the 26% of the population that do use them on a regular basis now will remain unchanged over the next few years. It would be fundamental, for the first group, to design activities for them to access the Internet that avoid isolation and promote social participation, on the Internet as well. Education will help them to identify the beneficial factors of ICT in their active ageing and to overcome the false belief that technology is only for young people.

open questions were: what activities do you do with the computer? If you do not use the computer, what are your reasons? Would you like to learn to use a computer and to access the Internet? Why?

Expert judgement was applied at two levels to control the validity of the questionnaire: 1) a review of other questionnaires administered to groups of older people (Aguiar & al., 2003, Gracia & Herrero, 2008; Imserso, 2011); and, 2) a final review by a panel of 8 experts directly linked to educational programmes for older people.

The reliability of the instrument was 0.847 (Cronbach's alpha).

In an initial phase, two researchers conducted the process separately, in order to ensure reliability in the coding of the qualitative questions. Subsequently, the

results were compared and agreement was reached on the few discrepancies that were found.

2.1. Population and sample

The population under study was constituted by the set of people over 55 years enrolled in the so-called Programme of Experience at the University of Burgos, at its main campuses at Burgos, Miranda de Ebro and Aranda de Duero, over eight academic years (2004/05 to 2011/12). The programme has received public funding from the Junta de Castilla y León. The selected sample consisted of 419 people who answered the questionnaire and who were following the «Education for an Active Life» study programme, as part of the Active Ageing and Quality of Life module.

All together 261 women, 62.29% of the sample, and 158 men or 37.71%, responded to the questionnaire.

Their ages varied between 55 and 94 years old. The average age was 65.42; the mode, 62 years old, and the median, 64. The standard deviation yielded a value of 6.18. By intervals, 58.1% of the sample was between 55-65 years of age; 23.9% between 66-70 years of age; 11.9% between 71-75 years of age; and, 6.1% between 76-94 years of age.

As regards the profession (current or pre-retirement) of the participants, we found a very broad variation in the responses; housewives predominated (22.7%) followed by those with jobs in the industrial sector, at 16.4%.

Classes were followed in both urban and rural environments: 211 of the people surveyed lived in Burgos (50.36% of the total); 133 in Aranda de Duero (31.74%); and 75 participants lived in Miranda de Ebro (17.9%).

3. Analysis and results

In this section, we explore the results obtained after the application of the descriptive statistical tests that are appropriate for the nature of the variables and the objectives of the study.

• Do you have a computer at home? Although on average, we found that 69.5% of the sample indicated that they had access to a computer at home, observation of the data and its evolution is revealing (figure 1). We noted a clearly positive trend in all cases, presenting an increase, on average, of 31%, which was slightly higher among women (34.6%) than among men (30.8%). Nevertheless, we should point out that

the increase remained constant in favour of men (observing a difference of over 10% practically every year), highlighting the disadvantages for women on this point.

Internet access from rural areas maintained these differences by gender, although it was 10% less than in the city.

• Computer ownership. The computer belonged to the survey respondent in 75% of all cases. If we analyse it by gender, 68% of women affirmed that it was their property, as opposed to 84.4% of men. Likewise, it is relevant to study the situation of those people that said the computer was not their own. The alternatives we found were: a) sons/daughters (13%); b) grandson/ granddaughters (0.7 %); c) Others (social organizations…) (0.7 %).

• Use of the computer. With regard to computer use (rated on a 5-point scale from «never» to «very often» in Figure 2), the average scores of the data present a certain balance, given that the values for «never», «a little», and «quite a lot» were very close to 20%, varying substantially from «sometimes» (close to
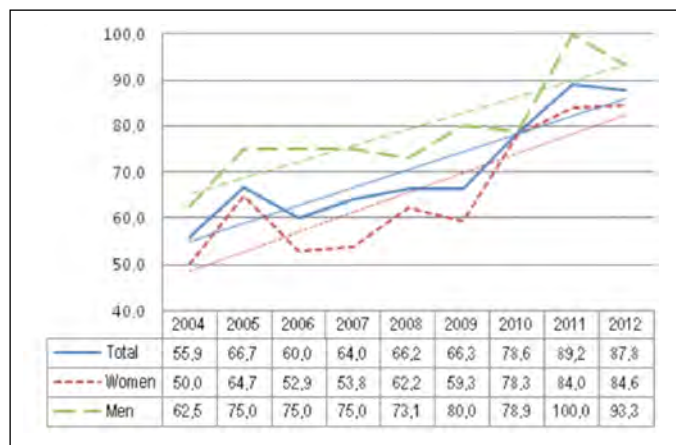

Figure 1. Evolution of the presence of the computer at home (percentage in each case, over the total by gender).

30%) to «very often» (a little more than 5%). However, when we analysed their temporal evolution, we found a substantial change. Thus, up until 2006, more than 50% of the participants indicated that they used the computer «a little» or «never». From 2008 to 2010, a greater tendency to value its use as mainly «sometimes» was observed. Finally, over the most recent years, 2011 and 2012, it appeared that almost 40% and 50% respectively used it «quite a lot» or «very often». Observing the data over the last 6 years, a rate of around 14% of the sample that «never»
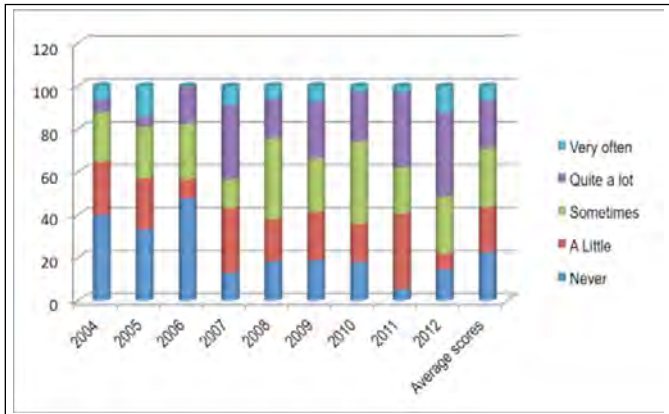
Figure 2. Evolution of computer use.

used the computer appeared to consolidate itself.

Levels of computer use fell as age increased. So, for the total average by age, the population over 76 years of age that used the computer «a little» or «never» was almost twice as high as that of those between 55 and 65 and those under 75 years of age. We found that those who used it «quite a lot» or «very often» tended to remain over 26%.

• Internet Access. A total of 65.1% of all participants accessed the Internet. We found a significant dependence (Chi Squared=64.22; p=0.000) among those who used the Internet and, at the same time, had a computer at home with an Internet connection. Nevertheless, we would point out that this relation was not statistically significant (Chi squared=3.06; p=0.08), in 2004.

The increase in Internet access, on average around 37.9%, was remarkable given that it was almost seven points higher than the increase in the presence of a computer in the household. However, the evolution of the sample varied notably, when we studied it by gender. Thus, in the case of women, it increased by 22%; while in the case of men, the increase was around 52.7%. The women, in the first few years, were those who accessed the Internet to a greater extent, but at present men surpass them by more than 20% (figure 3). In particular, we found that 57.7% of housewives had access to the Internet.

• Place of Access. On average, 48% of participants connect to the Internet from home. This piece of information reflects the progressive incorporation of Internet access in all homes, including in the case of older people. While, in 2004, 26.5% of participants accessed the

Internet from their home, at present more than 75% do so (figure 4, see the next page). In other words, the figure has tripled over the 9 years under discussion.

Other spaces were noted, such as at the University, public libraries, Internet cafés and day-centres for older people, although with very small percentages in all cases. The only highlighted case was the University, which was pointed out by 4% of the sample. The home, therefore, is the real reference for Internet use. In the specific case of housewives, the great majority of them accessed the Internet from the home (73.33%), followed by the University (17.77%).

• Internet activities. We found that the relation between access to the Internet and the use of e-mail was significant and positive (n.s.=0.05). When we merged the two variables in a contingency table and tested the hypothesis of independence with the Chi squared test, we obtained a value of 5.903; which, with one degree of freedom, means that the probability of non-rejection of the hypothesis is 0.015. In other words, there is a relation between both variables, although it is not significant at the level of 0.01. It is curious to observe that among the responses of the 6 older people who stated that they did not access the Internet, they nevertheless did consult their email in 4 cases; a statement that might be a symptom of computer literacy levels.

In summary, the majority of those who accessed the Internet did so mainly to use email. As with access to the Internet, the use of email has increased to a much higher rate among men than among women. The percentage of access of both men and women doubled between 2004 and 2012 (figure 5, see the

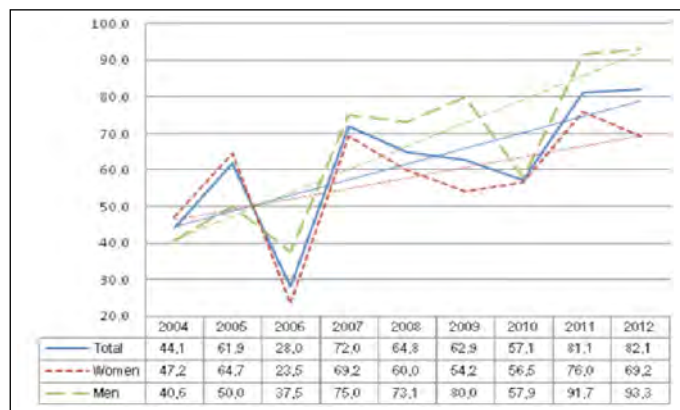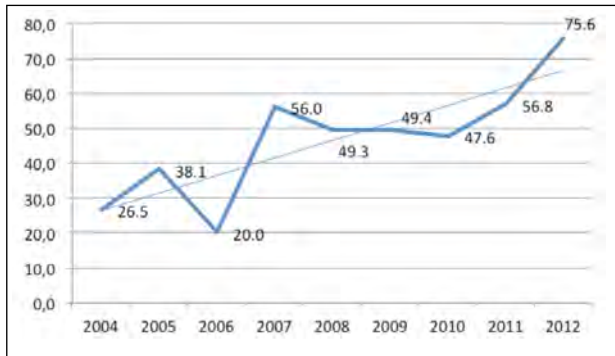|	2004	2005	2006	2007	2008	2009	2010	2011	2012
Total	44,1	61,9	28,0	72,0	64,8	62,9	57,1	81,1	82,1
Women	47,2	64,7	23,5	69,2	60,0	54,2	56,5	76,0	69,2
Men	40,6	50,0	37,5	75,0	73,1	80,0	57,9	91,7	93,3

Figure 3. Internet access by gender.

Figure 4. Internet Access from the home.

next page).

After the use of e-mail, the search for information (mainly on: health, cinema, music, and culture), or reading the press on-line, in both cases at 6.7%, represented the most widely practised activities (figure 6). A total of 2.4% reported office work (creative writing, photography), and 1.4% carried out searches related to travel; the same percentage went online to use social networks. This activity has emerged over the last three years: Facebook and Twitter were the most frequently mentioned networks. So, from 2004 to 2008, a small number of users indicated that they used Messenger, a situation that then receded and, we understand, was replaced by more recent synchronic data communication, linked to smartphones, or the aforementioned social networks. A total of 1.2%, men only, indicated that they used this medium for management (e-administration, electronic banking, etc.). Finally, 1% affirmed that they made use of other communication resources (chats and forums) and women related them directly to on-line communication with children.

• If you use neither the computer nor the Internet, what reasons might you give? A total of 34% of the sample that answered this question gave the following reasons (figure 7): lack of interest and lack of knowledge stand out at over 25%. A total of 20.4% indicated as a reason that they had no computer or Internet; reasons directly related to economic aspects. A total of 4.2% associated non-use with being an older person. This point is especially interesting, because that response was only given in the first few years of the study (2004-08). It is surprising that some affirmations are not consistent with the later responses to the same questions. So, for example, 50% of those who

expressed lack of interest expressed different arguments later on, to explain why they would like to learn to use the computer and the Internet.

• Would you like to learn to use a computer and to access the Internet? Why? A total of 82.7% of the sample (between 2004 and 2009) of those that made no use of the computer/Internet affirmed that they would like to learn how to use it and only 17.3% said that they would not like to learn how to use it. Figure 8 was constructed, after a coding process, on the basis of the responses to this open question.

The reasons given for wishing to learn are varied and an interest in the Internet may be highlighted, because, among other reasons, it opens new learning possibilities. Further reasons that they gave were: usefulness, the possibility of looking for information, entertainment, curiosity, current affairs and quality of life, as shown in Figure 8, which includes the single percentage response and that shared with other reasons.

4. Discussion and conclusions

Our study has presented a descriptive analysis over nine years, which corroborates that older people with a degree of motivation to remain active in the learning process, evidence of which is their enrolment on Programmes of Experience in the province of Burgos, were increasingly using the computer and accessing the Internet, as has also been reported in other national and international studies (Imserso, 2011; Zickuhr & Madden, 2012). The main point of access is the home, but there are also other points (University, and social centres for instance) (Aguiar & al., 2003). This access from outside the home occurs to a greater extent in the rest of the population in the
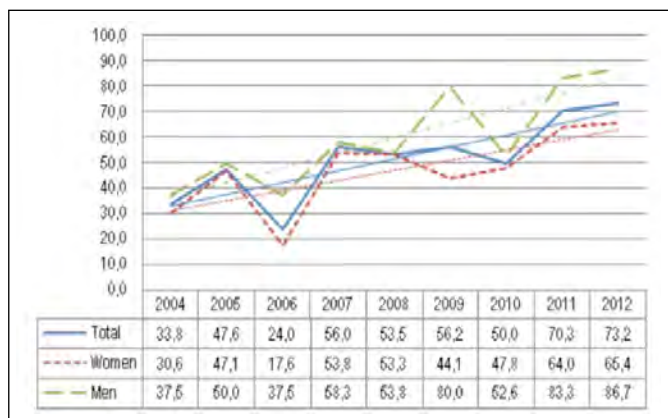

	2004	2005	2006	2007	2008	2009	2010	2011	2012
Total	33,8	47,6	24,0	56,0	53,5	56,2	50,0	70,3	73,2
Women	30,6	47,1	17,6	53,8	53,3	44,1	47,8	64,0	65,4
Men	37,5	50,0	37,5	58,3	53,8	80,0	52,6	83,3	86,7

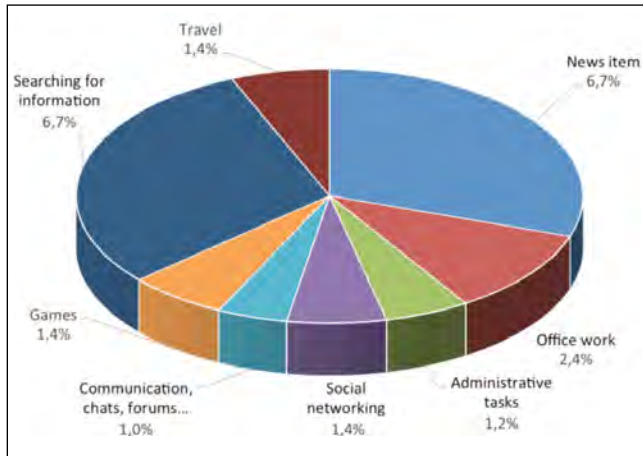Figure 5. Evolution of the use of e-mail by gender.

Figure 6. Activities carried out with the computer (percentages over the total since 2004 to 2009).

context of university programmes for older people (Imserso, 2011).

We also found an increase in the presence of computers at home. In 2007, 64% of our sample affirmed that they had one, close to the average in the EU27 (67%) (Red.es, 2012).

Our results differ from the reality of the general population of older people, as according to data from Imserso (2011:489), «only 16.7%» of them «have a computer», set against the figure of 78.6% from our sample in 2010; which shows almost five times more. This may be due to the characteristics of the population that participated in the survey.

Gender influences the presence of a computer in the home: women are clearly in a disadvantaged situation, both as regards the use and ownership of a computer (Imserso, 2011). In some cases, they appear in a somewhat submissive role, sharing that computer when they have one, or assuming that it belongs to the husband; attitudes which the men did not express.

The results match those of previous studies that pointed to a noticeable increase in the use of the Internet (in number of users, frequency, and resources). The Vodafone Foundation, Spain (2010), underlined that housewives and older people of over 80 years of age are the groups most distanced from ICTs. Housewives predominate in the sample of our study, but we have not found that they are distanced from the Internet. On the contrary, they show high levels of participation and evolution.

It should however be noted that the study concerns women who have demonstrated an interest in training in general, when attending a university programme.

We have a sample with almost twice as many women as men, but the figures are very different when we see the increase in the use of Internet: it is more than double in the case of men (52.7%) than in the case of women (22%). We may therefore say that «the use of ICT is more extensive among older men than among older women» (Imserso, 2011: 312)

We agree with different studies (Eurostat, 2012; Selwyn, Gorard, Furlong & Madden, 2003), in that the most frequent activity/service is, by far, e-mail consultation. In exactly the same way, we see that the contents by preference refer to culture, leisure and the media. A novelty that our study offers is the emergence of social networks (Facebook, Twitter) and their use in recent years, consistent with present day developments. This line of research starts to arouse interest when wishing to identify the perception of older people with regard to social networks and the educational strategies to teach older people how they may be used (Xie, Watkins, Golbeck & Huang, 2012).

We also found that among those who used the Internet and those who would like to begin to do so, the motivation for the participation in entertainment activities (on-line gaming) is on the increase. If functionality has been key to get closer to the Internet (Wang, Rau & Salendy, 2011), we find a new generation that associates the Internet with enjoyment in their free time, in contrast with other traditional models of leisure in this population.

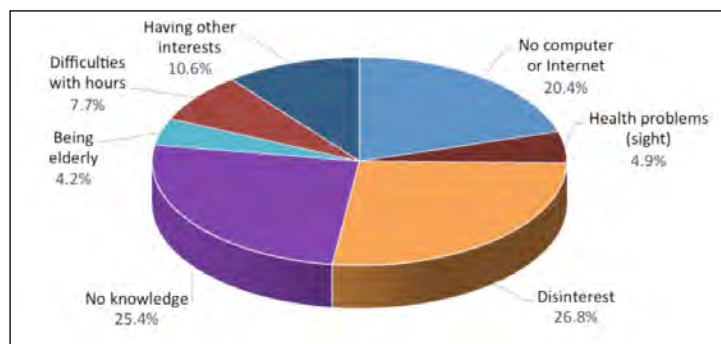The majority of our older people, who have no computer at home or do not use one, would like to

Figure 7. Reasons why the computer is not used (percentages over the total from 2004 to 2009).
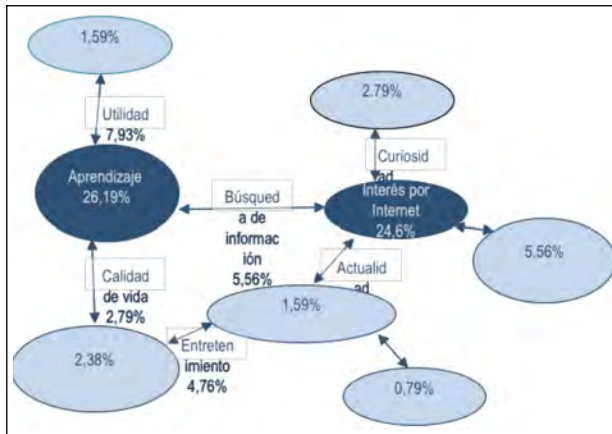
Figure 8. Arguments why respondents would like to learn to use the Internet (various reasons could be given).

learn how to use one and to access the Internet, as Gracia and Herrero (2008), and Aguiar and others (2003) also found. The technologies are of interest to them and they believe that they can be updated and that they can learn with them.

The reasons that they give for not using Internet coincide to a great extent with those presented by the Observatorio Fundación Vodafone-CERMI (2011): lack of interest, they do not expect it will contribute anything to their daily routines; they did not have to use computers in their working lives; they were scared of making a mistake and losing all the information; functional limits, etc.; and these reasons relate to the variables for the acceptance of the technology studied by Wang, Rau & Salvendy (2011).

Overall, we believe that we have achieved the proposed objectives, although we find limitations linked to the instrument and the context of its application. The questionnaire did not contemplate different variables (level of education, specific items related to the Internet and to health, etc.), which would have allowed us to broaden the study and look in greater depth at the results, contrasting them with similar studies, given that health is a topic of great interest for older people (Campbell, 2004; Karavidas, Lim & Katsikas, 2005).

With regard to the context, we consider that carrying out the survey in an almost formal education environment (a university classroom) might create insecurity when responding to questions, creating an uneasy feeling if, for instance, they had to declare their level of Internet literacy in front of others. This could lead to responses that reflect «social desirability» rather than reality, a problem of a methodological nature that subsequent studies may consider.

We consider it necessary to stimulate measures

that encourage the use of the Internet centred on education, accessibility, and a cross-cutting consideration of the female condition. Any measure, whether educational, technical, or of any other sort, has to consider women and their access to technological resources, in such a way as to advance towards equality, reducing the digital gender divide, as has indeed been happening (Instituto Nacional de Estadística, 2011), and the consideration of gender in active ageing (Foster & Walker, 2013). In our study, we found that the promotion of social relations, among both family (children) and friends, is a priority in the case of women, which may be used as a stimulus so that they gain greater familiarity with the Internet.

It appears that participation in training programmes for older people has been proven to increase the use of ICTs and their gradual inclusion in the household (Imseso, 2011; Xie, 2011). Training in various contexts is proposed in the Programmes of Experience (Pavón, 2000), including a course called «Introduction to the use of the computer and the Internet», directed at all students; moreover, increasing the use of ICTs in all subjects, implying greater involvement among older people (Internet platforms, emails, chats, forums, etc.). The results of training in this field are very positive if their needs are taken into account (Czaja & al., 2013; Villar, 2003). Moreover, we consider that peer tutoring can be an interesting didactic strategy that helps with training, as we found that some older people are already using more recent technological resources.

In the light of our findings and with regard to the population segment of older people that participated in the Programme of Experience at the University of Burgos, which might well share similarities with the same segment that participates in these programmes throughout the rest of Spain, we may conclude that:

• The presence of computers in the household and the level of Internet use increases with the number of years in the study.

• Older people use the computer and the Internet less as they advance in age.

• Women are at a disadvantage regarding aspects such as ownership and use of a computer and Internet access.

• Differences emerge between rural and urban areas in favour of the latter.

• The most frequent Internet activity is the consultation (receiving/sending) of email; the most searches were conducted in relation to culture, leisure and the media.

• Over recent years, the use of certain social networks has begun with this age group.

• The majority of older people wish to learn how to use computers and how to navigate on the Internet, as they consider that these are useful skills to acquire knowledge, stay up-to-date, and to participate in leisure activities.

In line with our results and conclusions, a study by the Fundación Vodafone, Spain (2010) warned that over the coming years we would see a natural increase in the use of ICTs among older people in Spain. As their use increases among the general population, the number of retired people who have previously used them at work will also increase. Within that population, we find a profile of users motivated by functionality, but also by enjoyment and leisure. The challenge, therefore, will be to maintain their interest in ICTs. It would be relevant to be able to confirm whether the 14% of the population that do not use them and the 26% of the population that do use them on a regular basis now will remain unchanged over the next few years. It would be fundamental, for the first group, to design activities for them to access the Internet that avoid isolation and promote social participation, on the Internet as well. Education will help them to identify the beneficial factors of ICT in their active ageing and to overcome the false belief that technology is only for young people.

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