Social networks as support for the elderly in Spain

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Abstract

Aim. This article presents the results of research whose aim is to establish if social networks are useful tools to promote social relationships and support for the elderly citizens.

Method. One hundred thirty people over the age of 65 participated in the research. For this purpose, the scale "elderly people and social network" (elaborated *ad hoc*) was applied.

Results and conclusion. The results obtained through descriptive analysis of the gathered data indicate that social networks provide support for elderly people who had already acquired digital competence in the past. The study also reveals that there are personal variables, especially of an educational nature, that determine the acquisition of an active role as generators and producers of digital content (prosumers). In conclusion, it could be said that social networks have a positive influence on the well-being of the elderly and their fight against undesirable loneliness. The more heterogeneous the social network is, the more active the elderly people are.

Key words: elderly people, social networks, digital competences, participation

Introduction

Throughout the second half of the twentieth century, the population of older people increased significantly. According to the World Health Organization, between 2000 and 2050, the numer of the world's population over the age of 60 will double. This trend has consolidated in the new century, leading to a

remarkable increment in the number of the elderly. As a result, old age starts to be perceived as another, significant stage of life in our societies.

This fact invites to undertake a major restructuration in all spheres of society in which the population has changed due to external influences. Gradually, old-age policies are coming to the fore in economic, social, or educational strategies, changing the concept and the perception of the elderly.

In 1999, the International Year of Older Persons promoted activities and opportunities to be healthy at old age, which highlighted the need to create and maintain circumstances allowing the elderly to remain active (Kalache, 1999) since an active lifestyle at any age – especially old age – is associated with well-being and vital satisfaction (Boudiny, 2013; Foster & Walker, 2015; Marsillas et al., 2017). Furthermore, social relations in old age (Cumming & Henry, 1961) become a key factor in the fight against unwanted loneliness, which is a risk for physical, psychological or emotional health disorders. In a study conducted with adults over 62 years old, Gail J. McAvay, Teresa E. Seeman and Judith Rodin (1996) showed that the absence of social support is related to the decline in health. They concluded that the presence of a social network benefits the psychological condition of the elderly and improves their self-perception.

In this respect, Miguel Ánge Escobar Bravo, Dolores Puga and Martin Montserrat (2008) showed that the probability of suffering disabilities at the end of one's life decreases as the diversity of the social networks to which the person belongs increases.

When addressing the field of social relationships, it is fundamental to bear in mind that social network, social support and social participation (Holt-Lundstad et al., 2010) are discussed as key elements in the active ageing. Active aging is the process of optimisation of health and social participation which improves the quality of life as people grow older. It applies to both individuals and population groups. It allows people to develop their potential for physical, social and mental well-being throughout their entire life cycle and participate in society according to their needs, desires and abilities, while providing them with adequate protection, security and care when they need assistance (World Health Organization, 2002).

The promotion of the role of the elderly as active citizens is essential. However, it is worth asking whether highly technological societies favour social relations among the elderly, how they favour these relations and whether social networks are designed or created by the elderly themselves according to their interests, demands or needs. The increase in the population of older people and the influence of technology are likely to generate an effect on the use of virtual social networks. Consequently, there will be an increase in the number of elderly who use them (Ariyachandra, Crable, & Brodzinski, 2009).

Currently, many of the ways to participate fostered in society take place through Information and Communication Technologies (ICT). These are new forms of interacting with others and with our environment (e.g. e-administration, e-commercee, e-banking). Nonetheless, for some social groups, such as

the elderly (Prensky, 2001), ICT can constitute a real limitation and a social exclusion factor, commonly due to the generational gap.

In a positive perspective, Rosemarie Kurz (2011, p. 18) states that:

> Information Technology offers a unique opportunity to provide senior citizens with a specialized virtual network to facilitate their engagement in the Information Society and to empower their participation in all facets of society by enabling them to contribute with their knowledge, expertise, experience and wisdom.

Lisa F. Berkman et al. (2000) point out that all forms of social participation help improve people's health and well-being while allowing the strengthening of their role, their commitment to society and future generations. We are moving towards new ways of building relationships with others and the world. In this regard, several studies highlight the positive effect (Kraut, 2002) that social networks produce on people's psychological health (Gomes et al, 2014; Nitzburg & Farber, 2013; Reinecke, Vorderer, & Knop, 2014) as they are tools that facilitate social relationships with family and friends.

In this digital scenario, ICT are considered useful tools in citizen's participation processes in the community. As a consequence, all people (regardless of age) can satisfy their needs autonomically and independently, apart from sustaining social networks as a structural element of social relations and receiving the necessary social support.

Year after year the data obtained from the "Survey on Equipment and Uses of Information and Communication Technologies in the Households" (INE, 2017, 2019) state that the contact of elderly with information technologies is constantly increasing. Without a doubt, this increase is a necessary condition to be able to make use of ICT. Nevertheless, it is not enough to guarantee digital inclusion and the exercise of full and participatory digital citizenship (Rebollo, García-Pérez, & Sánchez-Franco, 2013).

In this regard, several investigations point out the advantages of using ICT in the education of the elderly (Barrio, Barrio, & Quintanilla, 2007; Cano & Expósito, 2006; De Arriba, 2008), showing that the Internet and ICT are allies in the promotion of active and healthy ageing. At the same time, they dismantle the myth that older people and ICT are incompatible (Wandke, Sengpiel, & Sönksen, 2012). Thus, Na'ama Shapira, Adi Barak and Iddo Gal (2007) claim that the Internet has a positive psycho-social impact on the elderly. Teun Aalbers, Maria A. E. Baars and Marcel G. M. Olde-Rikkert (2011) estimate that the use of the Internet can be a key factor in improving people's life conditions over the age of 50. As shown by Karin Slegers, Martin P. J. van Boxtel and Jelle Jolles (2007), the access to and use of the Internet favour the independence and autonomy of the elderly. The Internet also offers informative, communicative, administrative, leisure and entertainment possibilities to the older people (Llorente-Barroso, Viñarás-Abad, & Sánchez-Valle, 2015).

The key to avoiding the digital gap in the elderly is for them to know how to take advantage of ICT to improve their personal and social situation (Abad, 2014). It is at this stage of life when loneliness is more pronounced and its

effects are reflected in physical and psychological discomforts (Luanaigh & Lawlor, 2008). The positive influence of social relations on health (Umberson & Montez, 2010) and the lower risk of mortality have therefore been demonstrated (Holt-Lundstad et al., 2010).

The research by Janelle W. Myhre, Matthias R. Mehl and Elizabeth L. Glisky (2017) states that older people who remain active in their relationships and are socially and mentally engaged have better cognitive functions. As a result, they are not isolated or socially disconnected and, hence, they want to participate and seek the spaces to do so.

Social networks are understood as environments whose purpose is to allow users to interact, communicate, share content and create communities (Urueña, 2011). They also favour the dissemination of information while communicating in an intuitive and attractive way for the user. Facebook, Twitter and Tuenti are some examples. Applications for mobile devices such as Whatsapp or Viber are not social networks themselves but perform the same function. Some other tools dedicated to social interactions, such as Youtube, Vimeo, Dailymotion, Flickr or Picasa own a great capacity to favour social interation among population (De Juanas, Diestro, 2012).

The data collected in the survey "Equipment and Uses of Information and Communication Technologies in the Households" (INE, 2017, 2019) report that the use of virtual social networks by the Spanish (70%) is above the EU average (63%) (European Commission, 2017). Young people aged 16 to 24 (90%) are the most active in these networks, whereas regarding their gender, the participation of women (70%) is higher than that of men (65%). The presence of virtual social networks among the elderly (65 or more) is low compared to the youngest (16-24 years old) (Anderson & Perrin, 2017), so they have not adopted this technological tool as fast as the younger generations (Braun, 2013), not only as consumers but also as content producers. Despite the trend of being consumers of digital content, we are committed to the role of active producers as well, approaching the idea of prosumers, with which Alvin Toffler (1980) indicated that the historical gap between a producer and a consumer is closed, giving rise to a new kind of usage, especially among the elderly.

Based on the above, the objective of the research is to explore, in the first place, whether virtual social networks constitute social support and participation in old age as facilitators of social relations. Subsequently, it is investigated whether virtual social networks can be considered tools for promoting active and healthy ageing.

Methods

Participants

The participants in this study were one hundred thirty men and women over the age of 64 residing in Spain and having been selected through a non-probabilistic sample for convenience. Regarding gender, 36.4% were men

while the remaining 63.6% were women, which reflects the trend of the Spanish population. The highest percentage, 52.6% of respondents were men and women between 74 and 85 years; 25.4% respondents were between 85 and 94 years old; and 22% were between 65 and 74 years old. The respondents were mostly married (59.8%), while 40.2% lived without a partner (single, widowed, separated). Regarding the level of education, the majority (69.1%) fell into the category of finishing primary-secondary education; 25% of the participants completed the cycle of higher education. Finally, regarding the place of residence, most of the respondents lived in the urban area (63.6%), whereas 36.4% resided in rural areas.

Table 1.
Socio-Demographic data

Variables	Categories	N	%
Gender	Male	43	36.4
	Woman	75	63.6
Age	65 to 74 years	26	22
	75 to 84 years	62	52.5
	85 to 94 years	30	25.4
Level of education	No studies- Primary education	7	6
	Secondary education	81	69.2
	Higher education	29	24.8
Marital status	Single	8	6.8
	Married	70	59.8
	Divorced	10	8.5
	Widowed	29	24.8
Residence area	Rural	75	63.6
	Urban	43	36.4

Source: own research.

Research instrument and procedure

Data gathering was carried out through the questionnaire "Access and Use of Information and Communication Technologies among the Elderly" (Agudo, 2018). It contains socio-demographic data and information on five dimensions related to social relations (social networks, social support and participation).

The research instrument was provided directly to the elderly. They were also accompanied by a researcher to clarify any possible doubts and establish a close and trustworthy relationship. Thus, it was possible to collect complementary information (through observation and field notes) in the same space where the study occurred. All this reverts to the reliability of the data.

Data Analysis

The data analysis was performed with the SPSS Statistics 22 programme. First, descriptive analyses of frequencies, percentages and measures of central

tendency and variability were carried out. In the variables related to active participation through virtual social networks, a comparison was madewith the socio-demographic variables sex, age, level of studies and residence area. The Chi-Square statistic was used for obtaining the level of contrast significance. In this case, the size of the contrast effect was explored using Cramer's Phi and v statistic that classifies the results with a clinical relevance as negligible when v<.10, when v<.10 and v>.30 , average when v<.30 and v>.50 and high when v<.50 (Agresti, 1996). After finding significant differences regarding sex and the area of residence, the comparisons were performed for independent samples through Student's t distribution. Finally, when the results showed statistically significant differences in relation to the variables age and level of studies, an analysis of variance was carried.

RESULTS

In order to facilitate the reading and understanding of the results obtained, these are presented for each of the variables analysed at a general level. Later, the significant differences are presented according to the socio-demographic variables.

Older people's attitudes towards ICT: social networks

The elderly participating in the study consider ICTs to be necessary tools to feel integrated in today's society. They also regard virtual social networks as spaces that promote relationship and socialization (80%). The level of studies is presented as a determining variable when considering the challenge of using virtual social networks [X2(4)=6.428, p>.05] to facilitate or expand the circle of social relations.

The elderly with secondary or university education highlight their interest in exploring social networks and use them to keep in touch with family and/or friends, as well as to meet people sharing the same ideas and interests. There is an important element of desire to contribute to society and to be productive, so they do not reject the use of ICT. 90.7% of the respondents present a realistic vision of the transformations that have been taking place in Spanish society by adopting a positive attitude towards the use of virtual social networks.

The older people who participated in this study, without significant differences in relation to age [X2(1)=1,599, p>.05], marital status [X2(2)=1,165, p>.05] and level of education [X2(4)=2,165, p>.05], remark that they use social networks focusing on their personal sphere; thus 59% claims that they mainly use it for the family, whereas 41% links the main use to the friends. On the contrary, findings show timid percentages of respondents for whom virtual social networks are a means to achieve goals and feel useful in society. There is a proportional, statistical relationship between the level of education and participation in social networks. As the level of education is higher,

the number of prosumers increases (Toffler, 1980). The greatest differences are found among those who have not completed higher education and those who have.

Active participation in social networks

The performed descriptive analysis indicates that a significant number of older people participate actively in society through the development of different actions linked to social networks; thus, 66.9% reveals they are active users of social networks. The elderly are beginning to play an active role in the virtual social networks, which will most likely have a positive impact on the quality of life in old age (Ariyachandra et al, 2009). Social networks allow them to be more in touch with the community to which they belong and their participation is positively valued.

In the analysis performed according to the socio-demographic variables, no statistically significant differences were observed in the variables related to sex and level of education. On the contrary, the results obtained with the Chi-square statistical test indicate significant differences in the variables related to age ($\chi2$=31.792, p=.000; v=0.519) and area of residence ($\chi2$=15.843, p=.000; v=0.366). Regarding age, it is the people of younger ages (between 65 and 74 years) who participate more actively in social networks (F(2115)=21.210; p=.000). In this regard, some of them state that they are creators and administrators of some virtual groups where they share common interests, hence being active agents in the digital society.

Focusing on the area of residence, it is the elderly who reside in urban centres who are considered most active through virtual social networks (t(116)= -4.241; p=0.000).

Social participation is one of the most outstanding advantages of using social networks for this emerging community group. The percentage of people who asserts this equals to 60%. Other benefits are the ease of interaction and communication regardless of where one is and the possibilities for the exchange of information. In addition, social networks eliminate both geographical distances and generational gaps, favouring the relationships with people of other ages.

Paying attention to socio-demographic variables analysis, no statistically significant differences were observed regarding age and level of education. On the contrary, the results obtained with the Chi-square statistical test indicate significant differences in the variables related to sex ($\chi2$=5.998, p=.014; v=0.293) and the area of residence ($\chi2$=4.500, p=.034; v=0.254). Specifically, it is women in comparison to men (t(68)= -2,524; p=0.014) who consider that through social networks they can participate more actively in society, and the elderly living in the rural areas in comparison the ones living in the urban areas who also acknowledge empowerment (t(68)= -2.161; p=0.034). Virtual social networks allow them to deal with unwanted loneliness because they facilitate being in touch with family and friends. For the aforementioned reasons, they conclude that social networks can be a tool facilitating active ageing.

Conclusions

The investigation was initiated in response to the current challenges the society faces, especially the ones related to the social, biological and psychological ageing dimensions (Kobylarek, 2011). On the one hand, empirical evidence highlights the negative influence of undesirable loneliness, both on physical and psychological health (Constança, 2014; Yanguas, 2018). On the other hand, current society fosters other forms of virtual relationships which can be used to expand social networks and promote social participation in old age.

In R. Kurz's research, emerging technologies signify a new way to eliminate the generation gap; they

> "[b]ridge the gap that exists between modern days and traditional societies in terms of empowering senior citizens to contribute their wisdom and experience to society. Bridge that gap with new methods: the use of new technologies for networking, communication, linking and remote participation" (Kurz, 2011, p. 18).

The objective of the research was to verify whether virtual social networks favour active and healthy ageing, especially in terms of active participation promulgated by the World Health Organization (2002).

The findings suggest that a representative part of the elderly knows and makes use of virtual social networks such as WhatsApp, which is the social network most used by the Spanish population in general (IABSpain, 2017). They use Whatsapp as consumers of information mainly, although the level of studies is determining becoming prosumers (creators and generators of digital content).

Likewise, older people show a positive attitude towards virtual social networks and they do not fear their use and see possibilities of empowerment through them. In the study presented in this article, elderly people consider that the most remarkable advantage of social networks is their potential to facilitate communication and to promote autonomy. In some other research, social networks have been related to the empowerment of young people, whose voices are more powerful and visible thanks to social networks (Reig, 2013). The same approach may apply to the elderly. This empowerment, as argued by Dolors Reig (2013), is one of the great successes of the social networks as ideal instruments for the transmission of knowledge from elderly people, as well as for the legitimization of their productions regardless of distance, physical limitations or age.

To conclude, it is important to point out the interest expressed by the elderly participants towards communicating with their family and friends through virtual social networks, as Tamara Sims, Andrew E. Reed, Dawn C. Carr (2016) explain, is aimed at maintaining social relationships and fighting against unwanted loneliness (Vosner et al, 2016).

Loneliness is not only a challenge in old age but also an opportunity for social and educational innovation. It stands to explore other ways of favouring social relations, social support and social participation in this stage of life.

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