

SEDUCE

Senior Citizen Use of computer mediated Communication and information in web Ecologies

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ABSTRACT

According to the United Nations the world population is aging, predicting that the demographic aging is further aggravated in developed countries by 2050, the youth population continues to decrease and the elderly population continues to increase [1].

According to EU (European Union) data by the year 2020, 25% of the EU population will be over 65 years old. Given this demographic growth and aiming to find answers to the challenge, the EU Council of Ministers approved a plan to promote a set of initiatives for the development of digital technologies to help senior citizens maintain an independent living at home.

The demographic situation in Portugal is similar to the European situation, presenting a population proportion very close to the European average (Portugal:17,3%, Europe:17,8% in 2006).

The aging population is exposed to greater vulnerability, due to the biopsychosocial losses that may be associated to the process of individual aging (organ aging, nervous system which is reflected in changes in the neurotransmitters in brain atrophy, in cell changes, in the reduction of oxygenation, cerebral blood flow, depression, social isolation, among others). We have to consider that the individual aging process is very heterogeneous, it can not be generalized, and each case is unique [2].

There are several studies pointing to the benefits of the use of information and communication technology (ICT) in the elderly population especially at the social support level [3] [4] [5] [6].

The project "SEDUCE's" main objective is to assess the impact of non-cognitive effects through the use of ICT among senior citizens in the social context of online social community and to build such a community with the participation of senior citizens. This project also aims to help and promote a better quality of life for seniors in the Portuguese national reality.

The study will be conducted in the context of a social community, both in co-presence, face-to-face communication, and online supported by technology-mediated information and communication services.

The impact study will assess the non-cognitive effects through a comparative study of the emotional variables such as, the Philadelphia Geriatric Moral Scale [7], the self-concept [8] and Quality of Life [9] [10] before and after the use of ICT by senior citizens integrated in an online social community.

The online social community for senior citizens will be developed within a Community Centred Design process [11].

Several studies indicate that the ratio of distance between the elderly and ICT is related to several factors, including the existing inappropriate Internet content for seniors, both at the information level and at its organizational level; difficulty to recognize the interaction paradigms on the Internet for those not familiar with current interaction languages and techniques, or for people who never worked with them; difficulty to understand the conceptual models of portal operation, increase in the complexity of interfaces, neglecting usability issues [12].

According to Preece [11] an online community is a group of people who interact socially in an attempt to meet their needs or have special rules (leadership or moderation), have a shared purpose, that is, interests, needs, information exchange and other services that work for the well-being of the community; there are a series of operation policies, namely, rituals, protocols, rules and laws governing the interaction between people; and are supported by computer systems in order to mediate social interaction and to facilitate the sense of union.

In order to promote quality of life of the senior citizens, the online social community should be built taking into account the specificities of the target audience for which it is designed with the active participation of senior citizens of the institutions' focus groups. The institutions are Day Care Centres and/or Seniors Center Homes of Aveiro's council.

This digital platform aims to promote communication, information sharing and entertainment among the seniors of the various institutions where focus groups are identified, mitigating some problems that can arise daily, such as, reduced or difficult mobility of some seniors; the absence of social events; promoting their health and well-being; reducing the feeling of loneliness and promoting the feeling of usefulness for the community.

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