Chapter 4

Improving the Quality of Life of Senior Citizens by Preventing and Reducing their Social Discrimination through Interactive Television and Ubiquitous Computing

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ABSTRACT

The problem of providing appropriate and effective medical care to the elderly has gained importance in recent years because of the exponential growth of people older than 65 years. This research work proposes using interactive television embedded in a ubiquitous computing environment to help mitigate some of the effects of discrimination and provide health services to older adults living alone in their homes who require timely medical attention.

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INTRODUCTION

The problem of providing appropriate and effective medical care to the elderly has gained importance in recent years due to the exponential growth of people older than 65 years. For example, we can mention the case of the United States, where it is estimated that by the year 2030 there will be over 4 million people older than 85 years of age (Anderson, 1999).

Most of the time, loneliness and depression are associated with old age, which in sum, could result in a reduced quality of life and other health problems (You and Lee, 2006). Senior citizens’ loneliness could be one of the consequences of changes that have been happening in the family structure, such as the maturing of children who leave their birth home to form their own families, the reduction of family size, and the migration of family members to other countries.

According to Erickson (1995), over 20% of senior citizens are unable to live alone; therefore, they need other people to take care of them. This represents a major change in their lives and has repercussions on their overall quality of life as they increasingly require special care that can become extremely costly.

BACKGROUND

An aging population is a phenomenon faced by a number of nations. It is estimated that over the next decades the world population will significantly age as a consequence of birth control during the 1950s and 1960s and a worldwide decline in fertility since the 1970s. The percentage of elderly increased from 5.2 in 1950 to 6.2 in 1995; it is projected that by 2050, one out of ten people worldwide will be 65 years or older (Heilig, 1996).

In Mexico, as in other countries, the elderly population is growing faster than ever. According to the Mexican National Council of Population (CONAPO, 2004), Mexico’s population will age faster than any other country in the region. In 2005, 7.5% of the Mexican population was 60 years or older; and it is estimated that by 2030 the number will double, reaching 17.5%. Currently, 10% of senior citizens live alone with no family members nearby. The elderly face particular challenges shaping the need for communication with family members living abroad. Their living conditions can be complicated as they are not able to visit or be visited by their families.

Society, industry and government are looking for new technological solutions to support the different needs of the elderly, facilitating and enabling them to cope with their loneliness. For instance, the Mexican government has created a portal named: eMexico. However, the use of technology to provide home care services is usually an unlikely alternative for older adults. Technology is often out of their reach and communication tools are not always designed with the elderly in mind. These elderly go through a natural progression of changes that some consider as age-related barriers that make accessing and adopting current technology more difficult. Other age-related barriers arise from social issues, such as the elderly persons’ greater resistance to new ways of doing things (Goodman, Brewster & Gray, 2004). As a consequence of not considering the technological needs of the elderly, this sector of the population continues to perceive technology as complex and will not benefit from what these tools can offer to help them cope with their aged-related needs, such as dealing with their loneliness (Goodman et al., 2004; Newell, 2004).

Social Discrimination

According to Mexico City’s human rights commission, the elderly living in this city represents the segment of the population suffering from the most brutal and paradigmatic cases of age discrimination in Mexico (CDHDF, 2009).

Discrimination can be defined as any distinction, exclusion or restriction based on different