

D. OLIVEIRA SILVA, T. MARQUINE RAYMUNDO, C. SILVA SANTANA. Use of electronic devices in homes by elderly. Gerontechnology 2012;11(2):192; doi:10.4017/gt.2012.11.02.602.00 **Purpose** There is a growing presence of technology in the everyday life of the world's population. The elderly are among the most affected people by changes in activities mediated by these devices¹. This study aimed to identify which devices the elderly have in domestic environments and describe their difficulties in the use of electronic equipment on a daily basis. **Method** This is a prospective, descriptive, exploratory study that was developed in the period from May 2010 to March 2011. The procedures for data collection included: (i) a socio-economic questionnaire to obtain information on income and living situation; (ii) a questionnaire with half-open and closed questions to identify electronic products found in household; and (iii) the index of independence in activities of daily living (IADL) to identify daily self-care activities within an individual's residence. The questionnaires were organized containing examples of 62 electronic devices used in the household for housekeeping, self-care, entertainment, and work. All of the listed products and technologies are contained in the environmental aspects of classification of international classification of functioning, disability and health (ICF) of the World Health Organization². The choice of interviewees was random and the project was approved by the Ethics Committee of HCFMRP-USP. The sample consisted of 135 elderly people of different origins, gender, socio-economic class and education. For the data analysis, we used the following software: EpilInfo 3.4 and SPSS - Statistics Viewer. **Results & Discussion** The study identified that ignorance on the use many of the functions of devices is one of the reasons for the low frequency of use. The products and communication technologies (television, DVD, and mobile phone) are the most commonly used devices for elderly and are also those for which many difficulties are reported. Use of products and technologies for personal use on a daily basis presented difficulties, such as cooking appliances, e.g. the microwave oven, blender, and toaster. For products designed for the comfort and well-being, the difficulties reported concerned the iron and the washing machine. Among the products and technologies for work use, the computer was most troublesome to use for most participants, followed by the camera, calculator, and printer. With regard to equipment dedicated to healthcare, difficulties were reported in using blood glucose meter and blood pressure meter. It should be noted that many devices are not used in everyday life, because of their complexity and the number of functions that the elderly are unaware of. Most of the reported difficulties in the use of equipment were about the instruction manuals that include technical instructions that are hard to understand, lack of detailed information on the use of the device and descriptions in different languages. The data collected also suggest that the elderly have greater difficulty with the controls of the equipment due to the reduced font size and contrast between background, and the color of the buttons, making it difficult to view and use these particularly because of the many options of the buttons. There are many functions that are not used in everyday life by the elderly, partly because of the complexity and because there are numerous functions that the users is unaware of, or that require the need to refer to an instruction manual. The delay in completing the task for lack of knowledge of the device and the fear of damaging products results in the elderly asking for a younger person to perform the task for them. We recommended that studies are conducted on products directed to this target audience, for the development and adaptation of existing equipment and the development of digital inclusion programs focused on home electronics devices.

References

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Affiliation: Universidade de Sao Paulo, Sao Paulo, Brazil; **E:** danyosilva@yahoo.com.br

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