

Using factor analysis to analyse health-promoting activities

H. C-Y. LIU. Using factor analysis to analyse health-promoting activities of the elderly in the community: Lessons from the Senior Health and Activity Center in Taoyuan. Gerontechnology 2014; 13(2):251; doi:10.4017/gt.2014.13.02.279.00 **Purpose** For the elderly in the community, participating in health-promoting activities is not only beneficial to the maintenance of their health status, but these activities also alleviate the prevalence of physical dysfunction¹. Most important of all, health-promoting activities bring psychological and social satisfaction to seniors². Even though many scholars have taken notice that health-promoting activities have positive effects on the elderly, the reasons that seniors participate in such activities are still unclear. In fact, relying only on technological devices does not ensure that the needs of seniors will be satisfied. A comprehensive network that includes technological companies, aging services organizations, end-users, academics, and government representatives is necessary to fulfill the needs of the elderly³. Hence, in the community, combining the use of technology and health-promoting activities is beneficial for the needs of seniors. Moreover, Chen and Chan point out that the decision to use or not use gerontechnology results from different causes in three contexts: personal context, technological context, and environmental context⁴. Boise et al. focus on the willingness of older adults to use technological facilities at home in light of privacy concerns. Thus, seniors may have concerns regarding the use of technology¹. In the community, the health-promoting activities which incorporate the use of technology are an alternative way to attract the participation of the elderly. On the one hand, health-promoting activities can fulfill the needs of seniors in the community, while the combination of health-promoting activities and technology may reduce seniors' tensions and unfamiliarity toward new technology. In this research, we intend to show a program, which combines health-promoting activity and the use of technology, and explore its effects on seniors in the community. Furthermore, in this research, the causes that influence the elderly to participate in health-promoting activities in the community are discriminated into two main categories: internal motivation and external opportunities. Using a questionnaire survey and factor analysis method, we analyze these causes. **Method** In this research, we adopt quantitative research methods, including the questionnaire survey and factor analysis method. In addition, the sampling targets are the elderly in the Senior Health and Activity Center in Taoyuan. The sampling size, 40 seniors, is determined by the members of the Health and Activity Center in Taoyuan. Most of the members are residents living in the surrounding communities in Taoyuan. Hence, their participation in health-promoting activities appears to be a feature of the behavior of seniors in Taoyuan in addition to a result of internal motivation and external opportunities. **Results & Discussion** There are three main findings from this research. Firstly, this research demonstrates that seniors are able to accept health-promoting activities through using technology. That is, the use of technology is not a hindrance to the elderly to participate in health-promoting activities. Secondly, this research explores the internal factors and external factors that affect the participation of seniors in health-promoting activities in the community. The results show that in the community, the elderly in the Senior Health and Activity Center are interested in the combination of technology and health-promoting activities. Thirdly, through further categorizing and juxtaposing of these causes, the research shows that a program that combines the use of technology and the task of health promotion is more popular with seniors. These findings are meaningful for our future efforts to promote health activities for the elderly in the community through the use of technology.

References

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Keywords: health & self-esteem, health promotion, senior health and activity center

Address: Chang Gung University of Science and Technology, Taoyuan, Taiwan

E: cyliu@gw.cgust.edu.tw