

Evaluation of computerized virtual reality on functional ability and quality of life in elderly

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Statement of the Problem: The prevention strategies for dementia are needed because of the increasing prevalence of dementia. Cognitive/memory training programs have shown the potential positive effects for improving or maintaining the cognitive progression. However, the impact of those cognitive progressions on functional ability and quality of life is not well understood. The major aim of this total project is to evaluate the short and long term effects of computerized virtual reality training programs (Xavix Hot-Plus) on functional ability (cognition, physical and psychosocial function) and quality of life in older adults with mild cognitive impairment.

Methodology: The experimental research design with three groups, one pretest and four posttests will be conducted to examine the short-term and long-term effects on cognition (primary outcome), physical and psychosocial function and quality of life (secondary outcome). Independent adults will be recruited in Northern of Taiwan on sample criteria. The total subjects will be 162 to 192 older adults and all eligible participants will be randomly assigned into computerized virtual reality training programs group (Hot-Plus group) or social interaction group or control group. The subjects will be referred by neurological, psychiatric, or gerontological physicians. Participants who are in Hot-Plus group will divide several small group, receive computerized virtual reality training program by Hot-Plus as a group activity one hour, once a week for 12 weeks. The participants in the social interaction group will come as a group for social interaction one hour weekly for 12 weeks. The control group will maintain their regular activities.

Findings: The results will be expected to understand the effectiveness of the computerized virtual reality training, improving or maintaining cognition, physical and psychosocial function, enhancing quality of life and reducing the risk of developing disability even conversion into dementia in later life.

Biography

Chia-Chi Chang is currently Dean of College of Interdisciplinary Studies, Professor of School of Gerontology Health Management and Director of Research Center of Active Aging, College of Nursing at Taipei Medical University in Taiwan. Her main research area is the related issues of nutrition and food intake of older adults with dementia in Taiwan. She is also committed to promoting senior welfare and active in various academic community.

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