



**Service Priorities and Programmes**  
**Electronic Presentations**

**Convention ID:** 138

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**The effectiveness of cognitive intervention by using tablet device in elderly**

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**Keywords:**

cognitive intervention

tablet device

elderly

**Introduction**

Cognitive intervention for elderly has been popular in both pharmacologic and non-pharmacologic aspects due to the growing aged population (Census and Statistics Department, 2012). Although researches on video games (Smith, et al., 2009) or computerized (Kueider, Parisi, Gross, & Rebok, 2012) training programme have been published, there is a lack of knowledge of application of tablet device, which is a new technology growing world-wide (Hickman, et al., 2007; Steinerman, 2010).

**Objectives**

This pilot study aims to investigate the potential effectiveness of using tablet device (iPad) in cognitive intervention for elderly.

**Methodology**

18 elderly people were recruited in the study (mean age=79, SD= 5.6). 13 community-dwelling elderly completed 6 weekly sessions of training in either iPad training group or traditional training group within a two-month period respectively. Pre-test and Post-test were completed before and after training. Mini-mental state examination (MMSE), Montreal cognitive assessment (MOCA-HK) and Chinese version of Dementia Rating Scale (CDRS) were conducted as the outcome measures. Subjects were randomly assigned to 2 groups. Traditional training includes paper & pencil tasks, puzzles, card games, calculations exercise; whereas iPad training involves using applications downloaded under categories of Education & Games.

**Result**

Tablet device training did not show significant difference in cognitive improvement compared to traditional training. From the percentage changes of scores, iPad training group scored higher in two subscales of Initiation/Perseveration (30.77%) and Perception (20.34%) in CDRS with a tendency to significance ( $Z = -1.826$  &  $p = 0.068$ ). The results suggested that there may be potential benefit for the use of tablet device in cognitive training. Further research in this area is recommended.