

4. Study on Brain Gym® and Cognitive Function among Senior – A Journey to Empowerment

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Introduction:

Nowadays, more and more people are aware of the prevalence of Mild Cognitive Impairment (MCI) among seniors. The Hong Kong Sheng Kung Hui Welfare Council has conducted a series of studies on Brain Gym® and cognitive function among seniors from 2008 to 2010.

Method:

There were 3 phases. The first phase pilot group was run from Dec, 2008 to Mar, 2009 while the second phase pilot study was done from May - Sept, 2009. In the third phase which was conducted from Dec. 2009 to Feb, 2010, the Council has successfully collected results of 120 subjects in 5 elderly services units. All of the targets were assessed with the Montreal Cognitive Assessment – Hong Kong version (HK – MoCA) and Geriatric Depression Scale (GDS-4) before and after the intervention period. The intervention group needed to attend at least 3 times 10-minute Brain Gym® 5 movement training per week while the duration was 4 weeks.

Results:

One-hundred and twenty subjects participated with 70 and 50 subjects assigned to the control and intervention groups, respectively. There were no differences in age, sex and education between the two groups. There were no significant differences in the proportion of changes in the HK-MoCA total score or the GDS between the two groups. However, there was a significantly higher proportion of subjects in the intervention group having improved relative to the control group in the attention domain in the HK-MoCA ($p=0.004$). Multivariate logistic regression controlling for age, sex, education and baseline HK-MoCA and GDS scores showed that intervention is significantly associated with improvement in the HK-MoCA attention domain (OR=2.46; 95%CI 1.04-5.82, $p=.04$).

Follow up Campaign:

The Council continued to promote Brain Gym® to the seniors in the community. Workshops were organized for staff of elderly units, seniors and their family members. Pamphlets on Brain Gym® were distributed to the users and family members as well. As at March, 2010, more than 1500 seniors and family members have learned the Brain Gym® 5 movement, and they are glad that they can do something to maintain their brain health.

Conclusion:

In conclusion, the Brain-Gym intervention exerts beneficial effects in attention of the seniors. We will also say that seniors are empowered in the process with the support of their family members and the staff of the elderly units.