

# The psychological, cognitive and immunological effects of horticultural therapy on the elderly living in a nursing home

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The purpose of this study was to investigate the psychological cognitive and immunological effects of horticultural therapy (HT) for the elderly. We have conducted HT for 16 subjects and the control group without any intervention included 20 similarly matched subjects. We assessed the psychological functions before and after once-a-week therapy during a three month period with The Philadelphia Geriatric Center Morale Scale (PGC), the Geriatric Depression Scale (GDS), the State-Trait Anxiety Inventory (STAI), the revised version of Hasegawa's dementia scale (HDS-R), Mini-Mental State Examination (MMSE), the Frontal Assessment Battery at the bedside (FAB), and Salivary secretory immunoglobulin A (s-IgA). The post PGC and GDS scores of clients were significantly better than the initial scores. There were no improvement in HDS-R and MMSE but FAB were significantly increased. The results of the s-IgA showed that this HT was effective for levels of overload for the aged and that immunological functions have been maintained. These results suggested that HT for the elderly improved psychological cognitive and immunological aspects.

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