Horticultural Therapy for Mentally Handicapped Adults

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Background
Horticultural therapy (HT) has been found to be of benefit to different patient populations, but its use in people with intellectual disabilities has not been examined. The clinical experiences of horticultural therapists have revealed that HT can benefit people with intellectual disabilities by improving their self-efficacy and social skills, thereby enhancing their quality of life.

Purpose
The aim of this study was to examine the effects of horticultural therapy (HT) for adults with intellectual disabilities who are often regarded as incapable.

Methods
A mixed methods exploratory design was adopted. The quantitative arm was a single group pre- and post-test study of all eligible mentally handicapped adults residing in a managed hostel setting.

Inclusion Criteria
• Age 18 and above
• Able to communicate orally in Cantonese
• Diagnosed as mentally handicapped to a mild to moderate degree (e.g., MMSE >18)

Exclusion Criteria
• Bed-bound
• Have a history of mental illness;
• Allergic to pollen, plants, seeds, soil, and fertilizers
• Concurrently receiving other complementary therapies, e.g., cognitive behavioral therapy
• Those who work on a farm
• Those who have received HT within the last 6 months

The HT program consisted of 12 weekly group sessions, each lasting 75 minutes (60 minutes of HT and 15 minutes of sharing and debriefing). The outcome measures included (i) the Glasgow Social Self-Efficacy Scale (GSSS; Payne & Bauda, 2005), (ii) the Chinese Quality of Life Questionnaire - Intellectual Disability (CQOL-ID; Wong et al., 2011), and (iii) the Non-pharmaceutical Therapy Experience Scale (NPT-ES; Muniz et al., 2011). Data were collected at baseline (T0), immediately post-intervention (T1), and at 12 weeks post-intervention (T2). Concerning the qualitative arm, trained research personnel observed individual behavior and group dynamics in each session. Semi-structured interviews were conducted for all participants at T1 to explore their perceptions and experiences.

Results - Qualitative
The participants were mostly happy when engaged in different HT activities, e.g., watering the plants, sowing seeds, making prints, or other kinds of craft work. Changes were seen in various dimensions, e.g., team work, communication skills, attention span, and so on, among different individuals. Based on the field notes, six participants (4P2M, Sample = 5P7M) experienced positive outcomes after taking part in HT. These positive changes included improvements in their interactions with others, improved fine motor muscle coordination, saying that they were happy and smiling more often, being more confident about own abilities, and showing an increased sense of commitment in looking after the plants. More female participants than male participants seemed to have enjoyed HT.

Conclusions
No statistical significance was observed in the effect of HT over time except for the dimension of the CQOL-ID Competence subscale at T2. The qualitative data suggests that HT is a practical and pleasurable intervention for people with intellectual disabilities. It can have a role to play in enhancing their quality of life and not just their self-appraisal of their competency.

References

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