

Horticultural Therapy on Adults with Autism Spectrum Disorder comorbid with Intellectual Disabilities

Executive Summary

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Background

Horticultural therapy (HT) is an intervention through which gardening and cultivating activities are used as vehicles in treatment and rehabilitation programs. An increasing body of research has documented the benefits of HT on clients with special needs. In the present study, Fu Hong Society and Hong Kong Association of Therapeutic Horticulture have jointly organized the horticultural therapeutic program for adults with Autism Spectrum Disorder comorbid with Intellectual Disabilities, and aimed to investigate the effect of HT on this clinical population. It is suggested that HT will improve the social responsiveness and increase positive emotions of the participants.

Methods

A mixed method was employed to explore the effect of the HT program on participants with Autism Spectrum Disorder comorbid with Intellectual Disabilities. The quantitative part utilized a single group pre-post assessment design to assess the outcomes of the program. Measures included the Social Responsiveness Scale (SRS), Autism Treatment Evaluation Checklist (ATEC) and emotion assessment. The horticultural therapy program was delivered by a Registered Horticultural Therapist with an experienced HT intern. The performance of each participant was rated based on the Awaji Horticultural Therapy Assessment Sheet at the end of each session by the registered horticultural therapist. Additionally, care-giver checklists were completed by their care-giver to assess the progress of the participants after the 1st, 5th and 8th session. For the qualitative aspect, well trained research staff were involved in each group session as non-participants. The performance of participants was observed and field notes were taken by the staff. Semi-structured interviews were conducted with all participants individually within two weeks upon the completion of the program. Further, a focus group interview was conducted with the care-givers to obtain additional information about the effect of HT on participants.

Results

Despite the lack of success in reaching statistical significance in the differences in any of the measures in the pre-post assessment, a trend of improvement from social responsiveness scale and health/physical/behavior domain of ATEC can be observed. The anger level of participants was also shown to be on a downward inclination. Moreover, gradual improvements were observed from the horticultural therapist ratings and care-giver checklist.

The qualitative findings agreed considerably with the quantitative results above. The observation data from the group sessions showed that participants have improved in overall performance and displayed a decreasing trend on the frequency of destructive behaviors. Further, the semi-structured interview revealed that participants were more positive and they enjoyed participating in the program.

Discussion

The present study offers a different perspective to horticultural programs and provides additional means to evaluating the effects of horticultural therapy. The use of horticultural therapy has not been widely promoted among individuals with Autism Spectrum Disorder. The various positive effects of HT as observed in the present study are encouraging and indicate that HT can be a practical and feasible therapeutic intervention for participants with Autism

Spectrum Disorder comorbid with Intellectual Disabilities, especially in increasing their positive emotions and reducing their destructive behaviors.

Conclusion

The present study marks the start of the specific examination of the effect of HT on individuals with Autism Spectrum Disorder comorbid with Intellectual Disabilities. The results of this exploratory study suggest the therapeutic possibility of HT in alleviating the behavioral and emotional problems of participants with Autism Spectrum Disorder comorbid with Intellectual Disabilities. These pilot data also contribute vital information to further development of HT programs.