

MEDIA FACTSHEET B

Research programmes on benefits of greenery

The National Parks Board (NParks) has been conducting several ongoing research programmes to quantify the benefits of greenery on different segments of Singaporeans. The studies will also aid in enhancing the design of future therapeutic gardens and horticulture therapy programmes.

1) Effects of Horticultural Therapy On Asian Elderly's Mental Health

This is a joint research with the National University Health System (NUHS) on the effects of Horticulture Therapy on seniors' mental health. It aims to find out if horticultural therapy helps to increase life satisfaction and feelings of social connectedness, improve cognitive functioning and decrease the risk of psychopathology (mental illness).

The study is based on a sample size of 69 elderly living in Jurong. The participants were randomly assigned to receive horticultural therapy or to be on the waitlist, which served as a control group. Horticultural therapy comprises outdoor gardening, indoor horticultural activities and park visits. The horticultural therapy sessions were conducted weekly for 12 weeks, and then monthly for three months.

The participants' mental health was assessed through self-reports of depressive and anxiety symptomatology, social connectedness and psychological well-being and immunological markers. The participants were examined at three points of time: at the start (to establish a baseline), three months post-intervention (after therapy started), and six months post-intervention.

The study started in 2015 and is targeted to be completed by end 2016.

2) Dementia Prevention Program

This project is also jointly conducted with NUHS and People's Association (PA). It aims to evaluate the efficacy of community programmes in improving the psychological well-being and cognitive function of the elderly. The community programmes comprise of Mindfulness Awareness Practices (MAPs), Music Reminiscence Therapy (MRT), Meridian Flapping (MF) and horticultural therapy. In addition, health talks will be conducted on diet, nutrition, physical health, dental health and medications. The study is currently being conducted at Queenstown and Eunos Community Centres (CC) and there are plans to extend the study to include other CCs. Currently, 40 seniors have been recruited for the program, with more to be recruited once the study moves into Bukit Panjang CC.

The project started in 2015 and is targeted to be completed by end 2017.

3) Parks Prescription

The Parks Prescription study jointly conducted by NParks, National University of Singapore Saw Swee Hock School of Public Health and Khoo Teck Puat Hospital evaluates if there is improvement in the physical and mental well-being of

Singaporeans aged 40 to 65 years through increasing physical activity and park use. It is targeted to be completed by end 2018.

There are two phases to the study:

1. Formative research to develop park prescription intervention from users' perspective and test logistics
2. Randomised Control Trial to test the effectiveness of the park prescription interventions through objective assessments of body-mass index, blood sugar, systolic and diastolic blood pressure, lipid profile and standardised questionnaires

The study started in 2015 and is targeted to be completed by end 2018.

4) Surveying, Benchmarking, and Expanding the Wellbeing and Social Cohesion Impacts of Community Gardening Programmes in Singapore

This study by the Centre for Urban Greenery and Ecology (CUGE) aims to document the baseline status of community gardening programmes in Singapore (after 10 years of Community in Bloom), with a focus on gardens within HDB estates and thematic focus on the programmes' associated impacts on well-being and perceived community cohesion. Community cohesion is interpreted here to include self-reported and observed interaction amongst different generational and cultural groups.

The study started in 2015 and is targeted to be completed by mid-2017.