

Evaluating the Impact of a Farm-to-Table Program on Persons with Dementia in a Singaporean Long Term Care Facility

CHEONG Zi Gi, WONG Zhan Yuan Nicholas, Mee Choo SOH

Introduction

Engagement in meaningful nature activities for persons with dementia (PWDs) contributes to the maintenance of physical and emotional wellness, which in turn improves their quality of life. (de Boer et al.,2017) Adapted from the original Farm-to-Table social movement where seasonal produce is brought directly from local farms to assemble the freshest meals on the table, Farm to Table at Apex Harmony Lodge in Singapore seeks to meaningfully engage persons with mild dementia. The program aims to provide a platform for PWDs to (re)discover their talents, promote physical and mental wellbeing and provide opportunities for socialization.

The wide range of activities included in the program are designed to appeal to interests of a diverse group of residents and activities are designed as rich tasks accessible to both ambulatory and non-ambulatory residents of different cognition level. Residents are given opportunities to be involved in various tasks such as planting, harvesting and cooking, which promote continuous learning in a naturalised manner (Fig 3). The activity has also been expanded to tap on residents' creative talents. Tasks such as propagating plants for succession and for sale, painting of plant pots, and 'floral' arrangements using herb varieties from the garden encourage free expression, reminiscence, mindfulness, cognitive and sensory stimulations. Other than engagement, opportunities for residents to socialize are also created during food and drinks preparation and during meal times as they talk about ways to prepare various ingredients and show care for each other.

Research Question

What is the impact of Farm to Table on the resident's well being?

Methodology

-  17 residents [10 Females and 7 Males]
-  A total of 271 timeframes were captured over two weeks
-  Average age was 77.8 years old [Range: 58 -99]
-  Modified Barthel Score indicated that most residents were fairly independent in their ADLs [M= 79.5, Range= 49 to 97]

Data Collection

Dementia Care Mapping (DCM) tool was used to assess PWDs' wellbeing, mood and engagement. Every five minutes, a Behaviour Category Codes (BCC) is used to code for the type of engagement the PWD is involved in. It is accompanied by a Mood and Engagement (ME) value where positive values (+5, +3, and +1) indicate positive mood or high engagement and negative values (-1, -3, -5) reflect negative mood or low engagement.

Observations of the how Farm to Table has benefitted the residents were also made by facilitators during the same two weeks period.

Discussion

Overall, Apex Harmony Lodge's Farm to Table Program was well-received by persons with mild dementia and was shown to provide high levels of mood or engagement for the participants involved. Participants also had a diverse selection of activities they could choose from, and was observed to benefit in various ways. This is consistent with literature on the benefits of farming and/or nature engagement for persons with dementia (Ibsen et al.,2019; Mmako, Courtney-Pratt and Marsh, 2020).

Implications

In future, the Farm to Table program has the potential to be scaled up to the community through the inclusion of volunteers and next-of-kin who can be involved in the various activities. In-community engagement further re-able PWDs. Through the exchange of new ideas and expertise in areas such as farming methods and cooking, more opportunities for social interaction can be created and facilitators can identify other tasks which can be added to enhance residents' engagement.

Selected References

de Boer, B., Hamers, J. P. H., Zwakhalen, S. M. G., Tan, F. E. S., Beerens, H. C., & Verbeek, H. (2017). Green Care Farms as innovative nursing homes, promoting activities and social interaction for people with dementia. *Journal of the American Medical Directors Association*, 18(1), 40-46. <https://doi.org/10.1016/j.jamda.2016.10.013>



Fig 1. Residents preparing the ingredients for the meals together



Fig 2. Residents eating lunch together in the garden.



Fig 3. Subtasks included in Farm to Table Program.

Findings

Across the board, residents appeared to be engaged in Farm in Table, with an overall average ME value of +2.66 for all timeframes. Pot Painting was the most engaging activity, with an average ME value of +3.29 while plant propagation was the least engaging activity with an average ME value of +1.57. No negative ME values were captured during the maps.

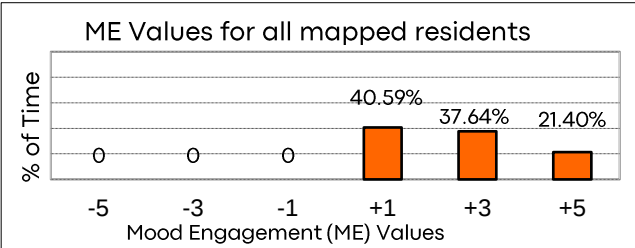


Fig 4. Frequency Table of the ME Values.

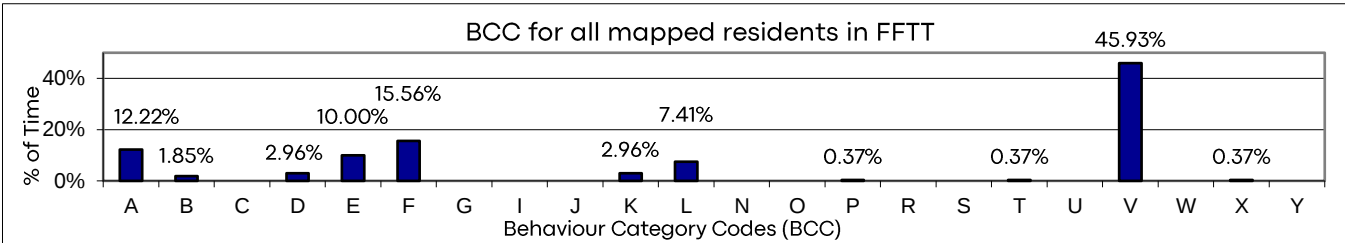


Fig 5. The breakdown of the Behavioural Category Codes (BCC)

The diversity of DCM codes recorded also highlight that Farm to Table has rich tasks that covers different domains (Fig 5). There were ten high potential codes recorded (A, D, E, F, K, L, P, T, V, X) and one moderate code (B) recorded out of 22 possible behavioural codes. The most frequent code was Vocational (V), which was coded for any work or work like activity. As Farm to Table was meant to serve as a naturalized therapy for the residents to engage in meaningful yet familiar tasks, the high occurrence of this behaviour category code was expected.

The observations made by the staff were then categorized and four large categories emerged. Staff observed that Farm to Table (1) Returned autonomy of choice back to residents; (2) Enabled residents to use their remaining abilities; (3) Promoted social connections between residents and (4) Facilitated sharing of knowledge. These four categories were aligned with the intended outcomes of Farm to Table, which seeks to increase wellness in persons with dementia.