

# **Effect of Horticultural Activities on the Mood and Physical–Mental Wellbeing of Rural- area Older Adults: A Case Study of the Greencare Station in Shoufeng, Hualien<sup>1</sup>**

Yi-Shan Wang<sup>2</sup> Yu-Shan Chiu<sup>3</sup> Chih-Ying Yu<sup>4</sup>

Shih-Ching Yeh<sup>3</sup> Cheng-Hua Sun<sup>5</sup> Hsing-Jung Liu<sup>6</sup>

## **Abstract**

Numerous studies have confirmed that horticultural activities positively affect the mood and physical–mental wellbeing of community-dwelling or institutionalized older adults. However, whether such activities also have a positive effect on older adults residing in rural areas warrants further investigation. Therefore, this study adopted a quasi-experimental design to examine 33 older adults in the greencare station sponsored by the Shoufeng Township Farmers' Association in Hualien, Taiwan. A 2-month program comprising eight horticultural activities involving the cultivation of medicinal plants was implemented, and a questionnaire with satisfactory reliability and validity was administered in one-group pretest and posttest to determine changes in the mood and physical–mental wellbeing of the participants. Regarding mood changes, the mood of the participants improved significantly in the posttest, suggesting that horticultural activities helped the older adults maintain a positive mood. Regarding physical–mental wellbeing, the scores of all relevant items dropped slightly in the posttest. Notably, the changes in two constructs, self-enhancement and physiological improvement, were significantly negative. This may be ascribed to the generally good health and motor ability of the participants, which made the horticultural activities in the program too easy for them to generate a positive effect, either on sense of achievement or on body coordination. Additionally, the experience of this study in recruiting participants with an indigenous background indicates that regional culture and ethnic diversity should be taken into consideration in the planning of horticultural activities to reduce the problems imposed by language barriers. Researchers are advised to expand the scope of research to progressively enrich the greencare database for older adults in rural areas, enabling it to serve as references for relevant policies and systems.

**Keywords:** greencare, older adult, horticultural activity, mood improvement, physical–mental wellbeing

- 
1. Research article No.301 of Hualien District of Agricultural Research and Extension Station.
  2. Assistant researcher of the Department of Agricultural Extension, HDARES and doctoral student, Department of Business Administration, National Dong Hwa University.
  3. Research assistant of the Department of Agricultural Extension, HDARES.
  4. Assistant researcher, Lanyang Branch, HDARES and doctoral student, Department of Horticulture and Landscape Architecture, National Taiwan University.
  5. Associate researcher of the Department of Agricultural Extension, HDARES.
  6. Associate researcher and leader of the Department of Agricultural Extension, HDARES.