

## **Consumption | Individual communication**

### **IC - (21007) - GREEN EXPERIENCE: THE EFFECT OF HORTICULTURAL ACTIVITIES ON CHILDREN'S PHYSICAL AND MENTAL HEALTH AND DIETARY BEHAVIOR**

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#### **Background and objectives**

Childhood obesity is one of the most serious global public health issues in the 21st century. Due to the continuous increase in childhood obesity and long-term negative health consequences, it is more important to pay attention to children's eating behaviors and how to effectively improve children's health and quality of life. The objective with this study is to explore the effects of horticultural activities on the physical activities, natural connection, eating behavior and health of primary school students.

#### **Process and methods (for empirical research)**

The sample were 129 3<sup>rd</sup>-6<sup>th</sup> grade school students in the Hsinchu City who were divided into an experimental group and a control group. The total of 68 children of the experimental group members undertook school horticultural activities which was held once a week, each about 40 minutes, and a total of six times. Research tools are The Connection to Nature Index for children, Children's Physical Activity Scale, willing to try fruits and vegetables and Pediatric quality of life questionnaire, and these were taken pre- and post- intervention in two groups. The descriptive statistic and Analysis of Covariance were applied to analyze data.

#### **Main results (or main arguments in the case of critical reviews)**

The study found that there had significant difference of physical activity, natural connection and health between the groups; however willing to try fruits and vegetables had no significant difference. This study uses open-ended questions to further understand the main reasons that affect children's eating vegetables and fruits is the taste and appearance of the food itself, as well as the influence of parents. By interview, Children believed that gardening activities not only increased their knowledge and experience of gardening, but also found that they also significantly improved their feelings of pleasure and interpersonal social relationships.

#### **Implications for research and practice/policy | Importance and originality of the contribution**

This study suggests that the design of the primary school should adopt a natural environment concept.

**Palavras-chave :** Horticultural activities, Children, Physical and mental health , Dietary behavior