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Effects of Music Therapy and Horticultural Therapy Programs on Depression in Rural Seniors in Yeongam-gun, Jeollanam-do

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Abstract

Purpose: This study explored the impact of using a music and horticultural therapy program on depression among rural seniors living in Yeongam-gun and conducted a comparative analysis before and after the program to present basic data helpful for an integrated mental health promotion program tailored to rural areas. **Research methodology:** The analysis subjects of this study were users of the rural residential program of ‘Our Village Day Care Center’ in Yeongam-gun in 2023, with a total of 20 people, 10 seniors for each program. The research analysis used SPSS to determine the effect on participation and depression before and after the program was implemented. **Results:** As a result of the analysis, depression levels decreased after completion of the horticultural therapy program and music therapy program, and this was statistically significant. **Conclusion:** Three implications are presented based on the following research results. First, the need for programs that can improve not only the physical health but also the mental health of elderly people living in rural areas is suggested. Second, the need for programs that link cultural programs such as music and gardening activities with welfare programs is suggested. Third, the need for follow-up management and verification of periodic mental health checkups for rural elderly is suggested.

Keywords : Elderly people living in rural areas, Horticultural therapy program, Music therapy program, Depression, Yeongam-gun

JEL Classification Code: I13, I15, I31, I38

1. Introduction

In Korea, various problems arise due to rapid population stagnation. According to the “Survey on the Status of the Elderly” by Statistics Korea (2020), population aging is rapidly progressing, and people are experiencing social and psychological problems such as isolation and alienation, and

are increasingly becoming separated not only from their families but also from society. People with this tendency may feel they need support for financial and material support.

Programs symbolizing the improvement of old age memory pressure and life satisfaction include orphan therapy (Kim & Lee, 2016; Ryu & Jeon, 2016; Park & Park, 2010), crafts (Kim & Kim, 2022), and music therapy (Cho

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& Lee, 2012), food therapy, recreational therapy (Kim, 2010), and horticultural therapy (Kim & Lee, 2010; Park et al., 2016) are being treated in a variety of ways. Among these media, horticultural therapy and music therapy programs are steadily progressing as specialized care services for the elderly to prevent depression and suicide in welfare facilities for the elderly, so two programs were selectively investigated in this study.

Civic areas already exist as a super-aging society in 2010, and socialization is progressing faster than in cities. Considering that there is a quiet environment for people over 70 living in civic areas, it appears that there is consideration for the dispersion of mobility. Therefore, it is the mainland that affects the distribution of Yeongam-gun residents, provides horticultural therapy and music therapy programs, and expands their effectiveness, providing mental health keyboards for resident elderly residents and basic materials necessary for recovery of daily life and social service welfare. It can be said to be for research purposes. In this study, the following research questions were set to determine whether horticultural therapy and music therapy programs would have an effect on depression.

Research Question 1: Does the use of a lively horticultural therapy program among Yeongam-gun residents affect depression?

Research Question 2: Does the use of music therapy programs by Yeongam-gun residents affect depression.

2. Research Method

This study measured and treated feelings of expressing depressive emotions by testing before and after the start of the study to demonstrate the effectiveness of horticultural therapy and music therapy programs on feelings of recollection. It is said that the pre-test took into account pre-post issues by re-administering the depression scale and the Petergam scale in a way that would seem to be considered together for the first week of the session. The measurement tools used in this study are as follows:

2.1. Research Subjects and Data Collection of the Analysis Subjects of This Study

The subject of analysis in this study was the scope of the horticultural therapy and music therapy program at the 'Our Village Day Care Center' in Yeongam-gun in 2023, and there

were 20 people living in Yeongam-gun. From August to September 2023, horticultural therapy and music therapy programs were conducted three times each, and each time the program was useful for one hour. The preliminary survey was conducted one week prior to the first session and the management survey followed the month after the program was funded. The program was conducted by inviting main instructors and assistant instructors, and participants also participated as assistant instructors.

2.2. Research Tools

2.2.1 Korean form of geriatric depression Scale

This tool is the KGDS Korean Elderly Chair Scale developed by Jeong et al. (1998), which analyzes one's mood during the week by mentioning daily life problems. It is a short answer of yes or no, and the higher the score, the more excluded it is. relationship. It consists of 15 questions, 2 points each, and includes questions such as 'Do you often feel like crying?' and 'Do you feel like crying in the morning?' The spine scale indicates that the degree of decline increases as the score increases, and the reliability is .715.

2.2.2. Life satisfaction scale

The life satisfaction measurement tool developed by Diener (1985) utilized the Korean version of the exclusion range map of life by Lim (2013), which verified the reliability and validity. This tool is composed of 5 questions on a 7-point scale, with contents such as 'I am satisfied with my life' and 'Even if I am reborn, I will live like I do now.' The satisfaction scale means that life satisfaction improves as much as you can enjoy a life with a high score, and the reliability is .826.

2.2.3 Gardening interest list

The Gardening Interest Survey was used as a reference for the race by planning the program as well as a device designed to investigate participants' level of interest and interest in gardening and what thoughts they have about gardening.

2.2.4. Evaluation of horticultural activities

The gardening activity evaluation table is an adaptation of the one created by Oseas (1963) in occupational therapy to measure participants' participation, attitude, interest, etc.

during group activities. Organized into 9 areas, increasing your score means your participation in the activity will also improve.

2.2.5. Horticultural therapy program and composition for rural seniors living in Yeongam-gun

The composition of the gardening activity program for those with resident registration numbers in Yeongam-gun is shown in Table 1 below. Converted into a total of 3 sessions, it consists of taking care of my plants, organizing my own play decoration, and my own garden.

Table 1: Horticultural therapy program composition

Number	Date	Program
1	August 10th	Taking care of my plants
2	August 17th	Decorate your own pond
3	August 24th	Create your own garden

2.2.6. Music therapy program composition and procedures for rural seniors living in Yeongam-gun

The composition of the music activity program for those with resident registration numbers in Yeongam-gun is shown in Table 2 below. A total of 3 sessions are comprised of the myth of Gipo, the relationship between people who miss the North Pole, and the passionate joy of activities themed around their hometown.

Table 2: Music therapy program composition

Number	Date	Program
1	August 11th	Rapport formation
2	August 18th	Building relationships among members through rapport building and stretching
3	August 25th	Enhancing positive emotions through reminiscing activities with the theme of hometown

The music therapy program was conducted by a music therapist. The music therapist is a full member of the National Music Therapist Association with 3 years of experience and holds a music mediation expert certificate.

The instruments used were borrowed from the institution by the music therapist.

In the introductory stage of the music activity program, Arirang was chosen to signal the beginning, and in the arrangement stage, Nyliria was chosen to signal the end. Since songs with lyrics can be a hindrance to music activities, we performed music activities without lyrics in order to avoid focusing on the lyrics.

The music activity program implementation process consisted of a 10-minute plug-in portion, and each time, a hello song was sung to announce the start of the music activity and encourage participation. After performing a small number of activities focusing on Arirang music, a 35-minute centrifugal activity was conducted with the subjects performing various musical activities, and the centrifugal activities were conducted as different musical activities depending on the session. In the organizing stage, it gives strength to the music. The contents of the music activity program are shown in Table 3 below.

Table 3: Music therapy program contents

Progress	Program	Hour
introduction	Start with a hello song stretching to music	10 min
deployment	Core activities (different music programs depending on the session)	35 min
organize	Finish by stretching to the music of Nyliria	5 min

2.3. Data Analysis Research

Research analysis used SPSS to determine effects related to subject engagement before and after the horticultural therapy and music therapy programs, and paired samples t-tests were described to test for differences in reversals.

3. Results

3.1. Sociodemographic Characteristics of Research Subjects

3.1.1. Horticultural therapy program

The socio-demographic characteristics of those receiving

horticultural treatment are shown in Table 4 below.

Table 4: General characteristics of horticultural therapy recipients

Subject	Division	Frequency
gender	male	4(40)
	female	6(60)
age	under 80 years old	6(60)
	over 80 years old	4(40)
religion	Yes	8(80)
	No	2(20)
family	Yes	10(100)
	No	0
Admission period	less than 2 years	6(60)
	2 years or more	4(40)
degree of function	dependent	4(40)
	independent	6(60)
Hangul decoding	possible	8(80)
	inability	2(20)
Education level	uneducated	5(50)
	graduate	3(30)
	Middle school or high school	2(20)

There were 4 (40%) male seniors and 6 (60%) female seniors. 6 (60%) were under 80 years of age and 4 (40%) were over 80 years of age. There appear to be 8 family members (80%), 2 non-members (20%), and 10 family members (100%). The admission period was hidden for 6 people (60%) except for 2 years, 4 people (40%) for more than 2 years, and the level of anonymous function was 4 people (40%) dependent, 6 people (60%), partner, and reading comprehension was possible. 8 people found it impossible, 2 people said it was impossible. The level of education was as follows: 5 people were illiterate, 3 people (30%) graduated from elementary school, and 2 people (20%) graduated from middle school or high school.

3.1.2. Music therapy program

The population of the music therapy program is shown in Table 5 below.

Table 5: General characteristics of music therapy subjects

Subject	Division	Frequency
gender	male	2(20)
	female	8(80)
age	under 80 years old	6(60)
	over 80 years old	4(40)
religion	Yes	8(80)
	No	2(20)
family	Yes	10(100)
	No	0
Admission period	less than 2 years	6(60)
	2 years or more	4(40)
degree of function	dependent	3(30)
	independent	7(70)
Hangul decoding	possible	6(60)
	inability	4(40)
Education level	uneducated	6(60)
	graduate	3(30)
	Middle school or high school	1(10)

There are 2 men (20%), 8 women (80%), 6 (60%) under 80 years of age, 4 (40%) over 80 years of age, and 8 (80%) of women, there were 2 people (20%). The number of family members is 10 (100%), 6 (60%) have been in the hospital for less than 2 years, 4 (40%) have been in the hospital for more than 2 years, and the degree of zoom function is 3 (30%) cooperative and dependent. It was found to be 7 people (70%). It appears that 6 people (60%) can read Korean and 4 people (40%) cannot. The level of education was as follows: 5 people (50%) were illiterate, 3 people (30%) had graduated from elementary school, and 2 people (20%) had graduated from middle school or high school.

3.2. Effect of Gardening and Music Therapy Program Use on Depression among Rural Elderly Living in Yeongam-gun

3.2.1. Horticultural therapy program

To illustrate the effectiveness of the horticultural treatment program in reducing the variance of the variance, baseline measures taken before and after the program are included in Table 6.

Table 6: Changes in depression before and after horticultural treatment

Subordination variable	Pre-test Mean± standard deviation	Post-test Mean± standard deviation	Significance level
depressed	11.00±4.86	8.09±2.59	.021*

*p<.05

From 11.00 before the program to 8.09 after the program, 2.91 shows excellent performance. Therefore, this study was able to demonstrate that a horticultural therapy program is effective in improving the vacations that believers are giving up and taking on. Yoon and Kim (2003) reported that in cases where the therapist had many conversations and explained that he or she wanted to see flowers, the explanation was explained. In this study, while participating in a horticultural therapy program to relieve depressed mood, it was thought that positive feelings increased by forming a relationship with the therapist and participating with horticultural plants (flowers).

3.2.2. Music therapy program

A total of 10 subjects participated in the music therapy program for a total of 3 meetings, and 10 subjects were identified in advance and by the administrator by agreeing to the evaluation of emotional and daily life ability assessment tools before and after the start of the program. Because of music therapy, the results of the abbreviated off test are average. It was 20.23 ± 5.76, but after treatment, it was 12.20 ± 6.23, excluding significant improvement. The reduced short-form volatility impairment test before and after part-like music therapy precludes significant differences (p < 0.05). Results utilized for fundamental measures before and after the program to determine the effect of the music therapy program on derivative feelings of fluctuation are included in Table 7.

From 20.23 before the program to 12.20 after the program, the 8.03 is durable and performs amazingly. Therefore, this

study was able to prove that the music therapy program was effective in improving the claims of believers who were seeing believers give up and leave.

Table 7: Changes in depression before and after music therapy

Subordination variable	Pre-test	Post-test	Significance level
	Mean± standard deviation	Mean± standard deviation	
depressed	20.23±5.76	12.20±6.23	.013*

*p<.05

3.3. Effect of Horticultural Therapy Program on Gardening Activities of Elderly People

Working with programs targeting exit The results of changes in horticultural activities are shown in Table 8. All nine districts emerged as significant. Horticultural therapy programs, which were considered to have more derivatives in participation, conceptual agency, and interpersonal skills, were found to have a very positive effect on variable horticultural activities. Looking at the rejection, they could see that there was a positive effect on gardening activities in the early stages of the program.

Table 8: Changes in horticultural activities before and after horticultural treatment

Subordination variable	Pre-test	Post-test	Significance level
	Mean± standard deviation	Mean± standard deviation	
Participation	2.47±0.21	8.09±2.59	0.000**
Interest /helpful ness	2.47±0.34	4.35±0.49	0.001**
language communication technology	2.44±0.83	4.00±0.95	0.017*
Self- concept- subjectivity	2.89±0.36	4.75±0.56	0.000**
Desire- impulsivity adaptability	3.00±0.96	3.72±0.75	0.004**

interpersonal skills	3.00±0.47	4.20±0.78	0.001**
Cognition/ Problem Solving Ability	2.90±0.94	3.80±0.78	0.004**

Yoon and Kim (2003) started a program to start believing and either become passive in gardening activities or become interested in participating and talking with other subjects. Yoo and Jeong (2010) also reported that language communication skills improved significantly by having students talk about the contents of previous programs at the beginning of each program and present past memories of materials and results. In this study, questions and answers are encouraged at each session, and participation, concept, agency, and interpersonal relationships are greatly influenced positively through the time of conversation and presentation.

We were also able to see useful improvement in emotional development through the horticultural therapy activity evaluation table. A lot of my bad habits, like thinking about rejection periodically and only reacting to one thing, have improved. As mentioned above, horticultural therapy appears to be effective in stabilizing frail elderly people. The positive effects of using gardening as a therapeutic tool for estranged relationships are provided. In the future, more research and investigation will be done to make gardening a viable therapeutic tool. Because the subject that exists because it is standing is at the point of subjective limitation, the generalization shows that only the principle can show a positive response to the fact that horticultural therapy can move, and participation in horticultural activities is greatly improved and produces the same results. It is expected that further research will be conducted to develop a horticultural therapy program following the theme study, which accepts the logic that it is highly useful for improving cognitive function and depression by enhancing the wanderer's life story.

4. Conclusion and Implications

The purpose of this study was to explore the factors that affect depression in music and horticultural therapy-related programs among registered seniors living in Yeongam-gun and to provide basic data for support for an integrated local

integrated health management program by comparing and analyzing before and after the program. proceeded. The subjects of this study were 20 Yeongam-gun residents within the scope of the horticultural therapy and music therapy programs at the 'Our Village Day Care Center' in Yeongam-gun in 2023. From August to September 2023, horticultural therapy and music therapy programs were conducted three times each, and each time the program was useful for one hour. We compared withdrawal and life satisfaction scores for the programs to determine the impact of couch-dwellers' willingness to give and receive help in horticultural therapy and music therapy programs. We also analyzed changes in horticultural activity prior to the program's existence to increase the degree to which participants in the horticultural therapy program were audible. The results of this study are divided by heart as follows.

Looking at the impact of the use of the horticultural therapy program by registered seniors living in Yeongam-gun on herbs, the effect on conservation treatment is 2.91, from 11.00 before the program to 8.09 after the program ends. Therefore, this study was able to demonstrate that a horticultural therapy program is effective in improving the vacations that believers are giving up and taking on. Yoon and Kim (2003) reported that there is a breakdown in the conversation with the therapist and the reporting of flowers [14]. Despite this study, it was found that participating in a horticultural therapy program, coping with the relationship with the therapist and engaging with the plants, increased positivity.

Second, the use of music therapy programs will have an impact on elderly residents living in Yeongam-gun. From 20.23 before the program to 12.20 after the program, 8.03 becomes permanently statistically effective. Therefore, this study was able to prove that the music therapy program was effective in improving the claims of believers who were seeing believers give up and leave. A total of 10 participants in the music therapy program. A total of 3 meetings. 10 subjects who participated in the music therapy program, consented to evaluation of emotional and daily life skills assessment tools before and after starting the program, and were identified by both preliminary and visible investigators. The average rebound-type obstruction test was 20.23±5.76, but after treatment, it was 12.20±6.23, excluding any unusual improvement. This week, I want to try and review the shakiness of the music therapy program and somehow

improve it, so I'm revealing that it's difficult to set up. Nevertheless, this study presents meaningful clinical results and believes that the music therapy program has very reliable effects and is a good additional non-pharmacological treatment that improves performance in daily life. We plan to mainly conduct additional research to determine whether music therapy is effective in improving sensory function as well as the ability to perform daily life and aspects of music therapy that exist in elbows.

We are operating a horticultural therapy program for active seniors in Yeongam-gun, and as a representative result, participation in horticultural activities has increased significantly in all 9 areas. Horticultural therapy programs, which are thought to have greater ramifications in participation, conceptual agency, and interpersonal skills, have been shown to have a very positive impact on a variety of horticultural activities. Looking at the rejection response, it was seen that there was a positive impact on gardening activities in the early stages of the program. Yoon and Kim (2003) say that because people are passive in gardening activities in the program that starts with faith, they participate with interest and have conversations about other topics

Yoo and Jeong (2010) also reported that verbal communication skills were greatly improved by talking about the contents of previous programs and presenting past memories of data and results at the beginning of each program. In this study, it was determined that participation, self-concept, identity, and interpersonal relationships were significantly improved through Q&A, conversation, and presentation time in each session. According to the horticultural therapy activity evaluation chart, significant improvements were also seen in emotional development. According to my subjective observation log, my bad habits of always thinking negatively and obsessing over only one thing have improved a lot. As mentioned above, horticultural therapy has been shown to be effective in improving the emotional stability of frail elderly people. The positive effects of using gardening as a therapeutic tool for estranged relationships are offered. In the future, more research and investigation will be conducted to make gardening a viable therapeutic tool. Since the subject that exists because of standing is at the point of subjective limitation, it can be generalized that only the principle can show a positive response that horticultural therapy can move, and that participation in horticultural activities is greatly

improved and produces the same results. You can. result. We look forward to the development of a horticultural therapy program through additional research and thematic research that accepts the logic that it is very useful in increasing the Q of a wanderer's life and improving cognitive function and prediction ability.

Three implications are presented based on the following research results: First, the need for programs that can improve not only the physical health but also the mental health of elderly people living in rural areas is suggested. Second, the need for programs that link cultural programs such as music and gardening activities with welfare programs is suggested. Third, the need for follow-up management and verification of periodic mental health checkups for rural elderly is suggested.

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