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The Effect of Musical Activities Program on Parenting Stress and Depression - Focused on Housewives with Preschool Children

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Abstract

Background/Objectives: This study aims to identify the effect of musical-activities-program on parenting stress and depression of housewives rearing preschoolers. Objectives are 25 for the experimental and 25 for control groups. **Methods/Statistical Analysis:** The experimental group participated in the music activities, such as listening to music and singing, for 50 min once a week for 8 weeks, meanwhile the control group was not involved none of these activities. The analysis of the collected sample data for this study was done with SPSS WIN 18.0 program. **Findings:** The result showed that the experimental group participating in the music activities program revealed statistically significant less parenting stress and depression test scores compared with those of the control group. This result suggests that musical activities provide emotionally supporting program useful to ease parenting stress and depression. **Application/Improvements:** A further study is required to evaluate more accurately the music activities program, where exogenous variables are controlled.

Keywords: Depression, Musical Activities Program, Parenting Stress

1. Introduction

Parenting responsibility and demand for parent role have been increased in modern society where economy shape has changed rapidly and the number of nuclear family has kept increasing. Since husband and wife have to nurture their children on their own with no help from other family members, parenting burden increases¹. Though mothers can get feelings of joy and satisfaction while nurturing their children, the parenting responsibility and its entailed burden as a mother negatively affect them by parenting stress². This stress is perceived everyday in a parent role³. The stress may come from the following reasons: first, specific behaviors and problems in children's devel-

opment; second, the feelings and thoughts about her role as a mother; third, her personal ailment, emotional problems, a lack of support from husband or other people, or a few particular events in relation with her family, such as divorce and lost of a spouse⁴. The studies regarding the effects of parenting stress on the parenting environment have shown that the stress affects adversely on the mental wellness of mothers, and results in the increase in depression and anxiety, which, in turn, affects the parenting behavior of mothers, which is depending upon their mental status⁵. Depression is a mental disorder making one's life in profound anguish, but in other case the disease is such a common disturbance often called psychological flu. In addition, it has been reported that depression

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reduces the ability and willingness of sufferers, making them difficult adapt to real life⁶. Adverse events in daily life caused by depression could be extended, which may amplify negative minds about oneself, making depression worse. Mild depression occurred by trivial incidents in daily life may be subject to become severe depression in a vicious cycle⁷. Since depression of married women is a mental disorder occurred in the midst of marriage and child delivery and rearing, which are key elements in their lives, the disorder influence the lives of not only themselves but also other family members. When one of the family members suffers depression, it negatively affects other members of the family, leading to a family crisis. Particularly, depression of a mother rearing children is related to the mentality and social development of the children, which is worthy to pay attention⁶.

It is suggested that the nature of music as a psychological intervention may be used to ease depression. Music in any society at all times has provided enjoyment and affected listeners to form a consensus. In addition, the pleasure it gives influences human mind and emotion and makes people have an aesthetic experience8. Music makes people to express their thoughts and emotion naturally, which have been unexpressed, providing them with emotional stability. Music activities let people express their desire and demand in psychologically more stable environment, which may convert negative emotions to positive ones9. For this reason music could be a safe and proper tool to treat the housewives suffering depression with parenting stress. Listening to music among music activities is the most widely used since listeners can experience music without physical and psychological burden, therefore it can be useful for the people who are fragile in body and mind¹⁰. Listening to music helps relax peoples' mind and resolve anxiety and depression by stable and familiar sensory stimulation¹¹. People can ease their troubled minds and express their dissatisfied past and present wishes, their happiness and loneliness through singing. In singing, people can recollect their sad and happy times, which may provide them insight into their current problems or help to get rid of their instant dissatisfaction (discomfort), such as stress and depression¹². In other words, singing can be a strong trigger to recollect experiences and feelings in addition to relax emotions¹³. Based on these observations, listening to music and singing provide an outlet for expression of emotions, desire and feelings, which may consequently take one's mind off the anxiety, depression and stress without burden on body.

In this study, housewives parenting preschoolers were subjected to measure the level of their parenting stress and depression. The purpose of this study is to determine whether musical activities program applying singing and listening to their favorite and soothing music affects the parenting stress and depression of the housewives.

2. Methodology

2.1 Subjects

The target subjects were the girl students of middle and high schools in Chungcheong Province, and a survey was conducted from Mar 14, 2014 to April 11, 2014 and was based on self-reporting questionnaires. A total of 244 returned questionnaires was analyzed.

2.2 Research Procedure and Design

This study was carried out in the Women Health Center of D city from Oct 4, 2013 to Nov 29, 2013, 50 min per session, once a week for 8 weeks. The experiments were conducted in a program room of the center, which was separated and protected from external noise or stimulation. Preliminary inspection for parenting stress and depression was carried out on both groups a week before the start of music activities program, at the same time with identical procedure by the researcher and three trained assistants. Post-inspection was conducted after completion of the program.

Nonequivalent control group pretest-posttest design was employed to explore the effect of musical activities program on the reduction of parenting stress and depression of the housewives nurturing preschoolers.

2.3 Research Tools

2.3.1 Parenting Stress

The translated and modified version by Minjung Kim of Parenting Stress Index Short Form (PSI/SF) of Abidin³ was further modified and supplemented in this study¹⁴. The survey consists of 36 questions, consisting of three subcomponents; 12 questions for very difficult child, 12 for suffering mother, and 12 for dysfunctional interaction between mother-children. The higher score in each

question indicates the higher stress of parenting, and the degree of confidence of this test was 0.87.

2.3.2 Beck Depression Inventory (BDI)

The Korean version of Center for Epidemological Studies Depression Scale (CES-D) translated by Jun Kyumgoo and Lee Minkyu¹⁵, which was originally developed by Radloff¹⁶, was used to measure the depression level. CES-D was developed to measure briefly the depression level of general people, and the survey consists of 20 questionnaires, 4 for positive and 16 for negative ones, in which how a subject has been feeling about gloomy mood, selfworthlessness, hopelessness, loss of appetite, and sleep disorder, in terms of the frequency of the symptoms, for the last one week. The scores of positive questionnaires were inversely calculated, and higher total scores indicate more severe depressive symptoms. The Cronbach's alpha coefficient was 0.90 in this survey.

2.4 Data Analysis

The analysis of the collected sample data for this study was done with SPSS WIN 18.0 program. The characteristics of the subjects were indicated in frequency and percentage, and independent t-test was carried out to test whether there is a homogeneity between the experiment and the control groups. After completion of the experiment, t-test was carried out to examine whether there are statistically significant differences in preliminary and post inspections between the two groups.

2.5 The Musical Activities Program

The musical activities program of the study consisted of 3 steps for 8 sessions, with 50 minutes each session, in the order of stress relaxation (10min) → music listening (20 minutes) → singing (20 minutes). Songs that had been used in the study of reference was also selected for this research. Mainly legato melody-focused music was chosen taking into account the characteristics of the soothing music for relaxation, with narrow range of notes, no sudden change in melody, and repeated and homozygous progress. Electro-Acoustics were rarely used, but flute and piano were mostly used for the music, which calm or peaceful feeling as a whole. For listening and singing, the music preferred by the subjects was used. After completing each session, questions and answers were made about the preferred genre, song and artist to help select the songs for the next session, and 3-4 songs was used each session for singing and listening. Most of the subject-favorite music was popular songs with lyrics; the facts of the songs used in each session was given to the subjects including lyrics, composers and names of singers for their information for the activities¹⁷.

3. Results

3.1 General Characteristics

The general feature of the subjects is indicated in Table 1.

Table	e 1.	General	Ch	aracteristics	of	the	sub	jects
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Characteristics	Category	Experimental group	Control group	
	20-25	3(12)	3(12)	
	26-30	8(32)	9(36)	
Age(years)	31-35	13(52)	11(44)	
	≥36	1(4)	2(8)	
	M(SD)	31.0(3.35)	30.56(3.36)	

	≤High school	2(8)	2(8)	
Education level	College	4(16)	5(20)	
Education level	University	16(64)	15(60)	
	Graduate school	3(12)	3(12)	
	1	10(12)	8(32)	
Number of child	2	8(32)	14(56)	
	3	2(8)	3(12)	

3.2 Equivalence Test

To identify equivalence between the experiment and the control groups selected for this study, t-test was carried out on parenting stress and depression prior to the experiment. The result showed the two groups are identical (Table 2).

3.3 Effect of Musical Activities Program on Parenting Stress

Effect of musical activities program on parenting stress of the housewives nurturing preschoolers was examined before and after the program on both the experiment and the control groups. The analysis and comparison of

Table 2. Homogeneity Comparison on Parenting stress and Depression

Cotonomi	Experimental group		Control group			
Category	M	SD	М	SD	τ	
Parenting stress	71.44	5.14	69.32	5.96	1.345	
Depression	33.32	4.11	34.04	3.64	655	

Table 3. The effect of musical activities program on Parenting stress

Catagawy	pre test	post test			
Category	M(SD)	M(SD)	t	Þ	
Experimental group	71.44(5.14)	69.28(4.61)	5.308	.000	
Control group	69.32(5.96)	69.60(5.94)	-1.319	.200	

the average stress of the subjects and standard deviation before and after the program showed that there was a statistically significant difference in the experiment group (Table 3).

3.4 Effect of Musical Activities Program on Depression

Effect of musical activities program on depression of the housewives nurturing preschoolers was examined before and after the program on both the experiment and the control groups. The analysis and comparison of the average stress of the subjects and standard deviation before and after the program showed that there was a statistically significant difference in the experiment group (Table 4).

was carried out to identify whether there is a difference in the level before and after the experiment and between the two groups. The conclusion obtained from the analysis of the results are as follows.

The analysis of the scores of parenting stress and depression before and after the experiment showed that there was a statistically significant difference between the two groups (p<.01). As has been seen in the result, there was a significant reduction in parenting stress and depression of the experimental group compared with the control, which is consistent with the previous research results, positive effects of musical activities including listening to music on parenting stress^{18,19} and depression with adults subjects^{20,21,22}.

Table 4.	The Effect of Musical	activities program	on Depression
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Catagoggy	pre test	post test		p	
Category	M(SD)	M(SD)	t		
Experimental group	33.32(4.11)	30.52(3.88)	7.074	.000	
Control group	34.04(3.64)	34.28(3.47)	-1.141	.265	

4. Discussion

This study aimed to identify whether musical activities program can affect the levels of parenting stress and depression of the housewives, who have to take care of preschoolers, and who need to seek happiness and to improve their mental health. In this research program the recruited subjects listened to the relaxing music selected by the researcher and subsequently to the music preferred by subjects and singing songs in the Women Health Center in D city, which had been carried out 50 min per session once a week for 8 weeks from Oct 4, 2013 to Nov 29, 2013. A total 50 subjects are comprised of 25 for the experiment and the other 25 for the control groups. The levels of parenting stress and depression of the two groups were measured before and after the experiment, and t-test

It is considered that music activities provided stability and comfort to the subjects who are responsible for difficult parenting. It is worth noting that the subjects mostly favored popular music for listening and singing, which reflect social-psychological characteristics of the current culture. Since the culture expressed in those songs influences the public, it is deemed, the popular music emphasized with the age of the subjects may encourage the participation of the subjects in music activities voluntarily and actively without hesitation^{8,23}.

This result suggests that music activities may have a therapeutic effect since physiological and emotional stress and depression can be relieved by the musical activities. Particularly, singing their favorite music was the first among the music activities in the survey, the listening to their favorite music was the next, and the last was listening to relaxing music, of which order was consistent with the research targeting childbearing mothers⁸. This result indicates that the group activity of singing affected positively on depression²⁴. In other words, music activities program including singing appears to be efficient intervention to alleviate parenting stress of housewives, implicating that its use to treat those people with the negative emotion can be widely applied.

It is necessary to find out the details for what housewives request for expanding practical use of the music activities program^{25,26}. The program reflecting those requests then needs to be evaluated for its effectiveness. Repeated studies supplementing detail procedures of the program with more variables need to be conducted and more researches for targeting wide subjects are also needed. In addition, diverse measures to overcome various psychological problems of housewives need to be prepared, and a program with social resources, such as the couple, family, local community and friends also needs to be developed. Exogenous variables such as small programs or events in the Health Center could not be controlled while implementing this study. Therefore, a further study is required to evaluate more accurately the music activities program, where exogenous variables are controlled. In addition, studies targeting various ages of subjects to expand its effect are also required.

5. FPGA

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