The Effect of Sand Play Therapy on Multicultural Mothers' Empathy Ability and their Child’s Depression and Self-Esteem

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Abstract
This study was intended to investigate the effect of sandplay therapy on multicultural mothers’ empathy ability and child’s depression and self-esteem. For this study, 14 Korean multicultural mothers were selected as study subjects that were 7 experiment group subjects and 7 control group subjects. The research was structured pre-post control group designing. Counseling was offered to them once a week for 2 hours from March to April 2013, a total of 8 sessions. The study results indicated that, first, Sand play therapy was effective in increasing the empathy ability of multicultural mothers, secondly, it affected their child’s low depression and high self-esteem. Therefore, the results of this study proved that sand play therapy was effective in increasing the multicultural mothers’ empathy ability that had suffered from child-rearing burden, and reducing the their child’s depression and increasing the self-esteem.

Keywords: Child, Depression, Empathy Ability, Multicultural Mothers, Self-Esteem

1. Introduction

The children with multicultural parents are exposed to the diverse difficulties and stresses, and they are affected psychologically and emotionally by the parents’ disability degree, economic factors, social status, etc. At the interaction with their parents. So the development of their self-esteem is influenced by these. As the child-rearing behavior of the multicultural mother was compassionate and receptive, the child showed high social capability. The children with multicultural parents feel confusion at home where self-concept begins, and they gain low self-esteem in general.

As the child experiences the emotional and behavioral problems at the family with multicultural parent, the program, which can prevent and mitigate problematic behavior of the child, is getting more important. There is no program for intervening in the multicultural woman’s difficulties experienced in the process of child birth and rearing.

Sand play therapy, in which a sand box, sand, and various figures are used to project one’s internal world, express it with concrete images in the box in order for participants to gain insight into themselves.

Therefore, this study carries out sand play therapy for the multicultural mothers, and investigates its effects in increasing the multicultural mothers’ empathy ability, reducing their children’s depression and increasing the self-esteem.

2. Methods

2.1 Subjects and Data Collection
The study subjects were collected by the informational advertisement about the purpose and contents of the sand play therapy to the NGO for multicultural support center. Multicultural women because they were easy to access, had difficulties in child-rearing, accepted the filial therapy program and had no cognitive problem.
Multicultural mothers voluntarily applied for the program. Counseling was offered to them for 2 hours once a week for 8 weeks from April 16, 2014 to May 30, 2014.

The selection criteria were the followings: (1) physically multicultural mothers, (2) mothers without current parent training program or child-rearing program, (3) mothers with 7 to 9 aged non-disabled children, (4) mothers agreeing to video filming of playing with their children for pre-post control, (5) mothers able to play the family games with their children once a week, and (6) mothers able to participate in the group meeting without absence. The study subjects were divided with the consent of the participants into 7 experiment group subjects and 7 control group subjects who did not participate in the program. Orientation and pre-test were made before beginning of the program and they had wrap-up time and the post-test after closing of the program. 7 mothers participated until the closing of the program.

2.2 Tools

2.2.1 Measurement of Empathy in Adult-Child Interaction (MEACI)

The present research utilized Measurement of Empathy in Adult-Child Interaction (MEACI) to identify how sand play therapy to multicultural mothers would affect their empathy ability with their children: Receptive communication, permission of children's self-guidance, and adult's intervention.

Among the adult-child interactions, 3 concrete adult behavior factors confirmed as empathic such as receptive communication, permission of children's self-guidance, and adult's intervention were measured. Receptive communication measured the parent's acceptance and denial of the child's emotion and behavior which occurred during the playing session. Permission of child's self-guidance measured the parent's behavior which willingly followed the child's guidance rather than controlling the child's behavior. Intervention measured the level of the parent's interest and participation in the child's activities.

The study measured the 3 adult behavior factors, using 5 point Likert scale, 6 times at 3 minute interval, while looking at the 20 minute video tape of filial therapy filmed in pre-test and post-test. The conformity degree of 3 measurers, who majored in the child counseling and psychotherapy and had experience in play therapy, was 0.95 - 0.97.

2.2.2 Children's Depression

Children's Depression Inventory (CDI) developed by was used for measuring the depression of child. This method was composed of 27 question items. The subject children mark the appropriate scale upon reading the items regarding depression, behavioral disability, loss of interest, self-humiliation and physiological symptoms. The 3 scale Likert method is to mark 0 point (I'm sometimes sad.) to 2 points (I'm always sad.) and the total score ranges from 0 to 54. The higher the score is, the higher the degree of depression is and shows diverse depression symptoms. We can evaluate the total score of 19-21 as very light depression, 22-25 as medium depression, 26-28 as significant depression, 29 as serious depression. Cronbach's α coefficient of the study was 0.81.

2.2.3 Children's Self-Esteem

The self-esteem measurement method validated by through the tests of structure validity, item goodness, reliability and official validity.

This method has 32 question items and is composed of 4 subdivisions: (1) general self-esteem (6 items), (2) social self-esteem (9 items), (3) family self-esteem (9 items), and (4) school self-esteem (8 items). The 4 point Likert method is to mark 1 point (not at all) to 4 points (always so) and the negative statement items (4, 8, 12, 16, 20, 24, 27, 30) are inversely converted. Cronbach's α coefficients were 0.75 for general self-esteem, 0.91 for family self-esteem, 0.93 for social self-esteem, 0.75 for school self-esteem and 0.94 for overall self-esteem.

2.3 Design and Process

The research design of this study was Pretest-Posttest Control Group Design and there were 7 experiment group subjects and 7 control group subjects. The pre-post tests of the program groups were made and videos of the play scenes of physically multicultural mother and non-disabled child were analyzed. The program was structured as orientation and pre-test for 1 week, wrap-up and post-test for 1 week and 8 sessions of once a week for 8 weeks. The duration time of the program was 2 hours and the total process of the program was filmed for the qualitative analysis.

For Measurement of Empathy in Adult-Child Interaction (MEACI), the physically multicultural mother's one to one play scene with the non-disabled
child was filmed for 20 minutes. In order to measure the changes of the Children’s Depression Inventory (CDI) and self-esteem, the program was processed to give the test materials to the physically multicultural mother and collect them again.

The physically multicultural mothers acquired the filial therapy techniques through the program while they performed the play session with the children for 20 minutes once a week. At the meeting they presented their experiences and got the feedback, encouragement and support from the instructors and group members.

2.4 Data Analysis
The frequency and percentage were calculated and the χ² test was made in order to compare the demographic social characteristics of the parents and children of the experiment group and control group. And the U test by Mann-Whitney, which is the non-parametric analysis, was done in order to see the effects of the filial therapy program on the empathy ability of the physically disabled mothers and the depression and self-esteem of the non-disabled children.

3. Results

3.1 Effect of Sand Play Therapy in Increasing the Empathy Ability of the Multicultural Mothers
Table 1. Effect of Sand play Therapy on the empathy ability

<table>
<thead>
<tr>
<th>Classification</th>
<th>Experiment Group (n=7)</th>
<th>Control Group (n=7)</th>
<th>Z</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Score Pre</td>
<td>34.1 (2.1)</td>
<td>34.2 (2.0)</td>
<td>-.08</td>
</tr>
<tr>
<td>Total Score Post</td>
<td>11.5 (1.5)</td>
<td>31.4 (2.3)</td>
<td>-3.15***</td>
</tr>
</tbody>
</table>

*** p< .01

Table 1 shows the result of pre homogeneity test on empathy ability levels of the physically multicultural mothers of the experiment group and control group. Both of the total score of empathy ability and the score of the sub-factors such as receptive communication, permission of child’s self-guidance and intervention do not show any statistically significant differences. So we can say that the physically multicultural mothers’ empathy ability levels of the experiment group and control group are composed homogeneously.

The study results indicated that the participation in the sand play therapy was effective in increasing the empathy ability between the multicultural mothers and the children. The result of the difference test on the post test of the experiment group and control group showed statistically significant difference (Z = -3.17, p < .01).

3.2 Depression and Self-Esteem of Children
Table 2. Depression and Self-Esteem of Children

Table 2 shows the result of pre homogeneity test on the depression and self-esteem levels of the children of the experiment group and control group. The depression level of the control group was a little higher than the experiment group but it did not show any statistically significant difference. Therefore, we investigated the effect of the sand play therapy program on reducing the depression and self-esteem of the children by comparing the results of the post test of the experiment group and control group.

The result of the difference test on the post depression test of the experiment group and control group showed statistically significant difference (Z = -3.16, p < .01). The result of the difference test on the post test of the experiment group and control group showed statistically significant difference (Z = -3.17, p < .01). Participation in the sand play therapy was effective in decreasing depression and increasing self-esteem of their children.

<table>
<thead>
<tr>
<th>Classification</th>
<th>Experiment Group (n=7)</th>
<th>Control Group (n=7)</th>
<th>Z</th>
</tr>
</thead>
<tbody>
<tr>
<td>Depression Pre</td>
<td>20.4 (2.8)</td>
<td>24.0 (3.3)</td>
<td>-1.88</td>
</tr>
<tr>
<td>Depression Post</td>
<td>10.9 (1.6)</td>
<td>25.4 (2.4)</td>
<td>-3.16**</td>
</tr>
<tr>
<td>Self-esteem Pre</td>
<td>64.7 6.6</td>
<td>62.2 6.5</td>
<td>-1.50</td>
</tr>
<tr>
<td>Self-esteem Post</td>
<td>96.3 4.2</td>
<td>61.1 6.2</td>
<td>-3.17**</td>
</tr>
</tbody>
</table>

** p< .01

4. Discussions
First, the analysis result on the difference of the empathy ability of the physically multicultural mothers with non-disabled children according to the participation. The sand play therapy showed that the empathy ability of the multicultural mothers with children of the experiment group was increased significantly.

Second, the analysis result on the difference of the pre-
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post depression of the non-disabled children according to the participation in the filial therapy program showed that the depression of the non-disabled children of the experiment group was reduced significantly comparing with the control group. The sand play therapy for the multicultural mother with child had positive effect in reducing the child’s depression.

Third, the analysis result on the difference of the pre-post self-esteem of the non-disabled children according to the participation in the filial therapy program showed that the self-esteem of the non-disabled children of the experiment group was increased significantly comparing with the control group. Among the sub-factors of self-esteem, general self-esteem, family self-esteem and social self-esteem of the non-disabled child with physically multicultural mother were increased. The sand play therapy for the multicultural mother with general mother had positive effect on the self-esteem of the child with multicultural mother. The sand play therapy, in which the multicultural mother with child participates, is an effective program for increasing the self-esteem (general, family and social self-esteem) of the child.

For the continuity of the effect of the program, this study needs the succeeding studies on the subsequent session after the closing of the program. Because the subjects of the sand play therapy are diverse including the mothers and fathers with various types of disabilities other than the physical disability, the more diversified studies have to be done about the wide range of parents and the children with multicultural parents.

This study is worthwhile in that it proposes an alternative education program for the parent as well as the child from the aspect of the non-disabled child with multicultural parents. A proposal for the succeeding studies is that it is difficult to generalize the study result because the study subjects are multicultural parents with non-disabled children as well as the uniqueness of multicultural mothers.

Finally, because this study uses the dynamic aspect of the psychological therapy, the success of the program including the quality and participation depends on the capability of the group leader. Therefore, the research on the intervention for improving the capability of the group leader is necessary.

5. Acknowledgement

This study was supported by the Research Program funded by the Namseoul University.

6. References