Abstract

Objectives: The central purpose of the current research is to identifying the effect of sand play therapy on parenting stress of mothers with young children and their maternal efficacy. The experimental and control group with 7 subjects each participated in the research. Methods/Statistical Analysis: A set of 10 sand play therapy sessions, once a week from April to July 2015, were provided to the experimental group. Statistical analysis of collected data was made with SPSS 20.0 (Statistical Package of Social Science) program and Mann-Whitney U test and Wilcoxon Signed Rank test were conducted to validate the effect of sand play therapy. Findings: The results of the research can be summarized as follows. First, it was found that sand play therapy resulted in a significant difference in their parenting stress, which was reduced in the subfactors: maternal role performance and dysfunctional interaction between mother and children. Second, it was found that sand play therapy also had a significant effect on their maternal efficacy: abilities in overall child-rearing, healthy parenting, study guidance and discipline. Improvements/Applications: The current research has made some important implications for the importance of sand play therapy and consulting/psychological therapy for parents as well as for children.

Keywords: Maternal Efficacy, Parenting Stress, Sand Play Therapy, Young Children

1. Introduction

Mother is the primary being for a direct model of various experiences of kids in early childhood and thus, as a consequence, plays crucial role in influencing her young children. Mother may experience great pressure and feel a variety of feelings about rearing her young children: difficulty, anxiety, stress and worry. Their parenting stress is closely related with their confidence in child rearing. Maternal efficacy, thus, might influence a mother’s parenting behavior and, as a consequence, development of her kids in early childhood. A mother should take a good care of herself, since, as expected, high parenting stress may lead to less confidence in parenting and consequently inappropriate parenting behavior.

The effectiveness of sand play therapy has been proved for a variety of subjects including adolescents, adults and old people as well as for children. It may lead mothers, with the help of a trustworthy relationship with the therapist, to display the process of facing their suppressed subconscious desires and emotions in sand boxes. Sand play therapy may help mothers express themselves in a nonverbal and nondirective way. Thus, it may be effective in expressing complicated problems which verbal expressions cannot well display. The image in a sand box is consciously expressed: it may be, however, a safe expression of unconsciousness. Mothers show their suppressed feelings and relax emotional hardship by projecting her negative emotions into a symbol. This may have an important influence on their relationship with
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The current research, thus, aims to identify how sand play therapy may help reduce the parenting stress of mothers with young children and improve their understanding of themselves. It is also expected that the results of this research would present base data for educating parents with young children, with the assumption that change in mothers would exert a meaningful influence on the development of children.

2. Methods

2.1 Research Subjects

The purpose of the current research was introduced and explained to a group of 81 mothers, of which 49 were mothers of young children attending ‘A’ daycare center in M-gu borough of Seoul and the rest were members of an online community established for mothers with young children to share parenting information. A preliminary test of parenting stress, maternal efficacy and self-understanding was conducted to select a finalized experimental group of 7 participants and a control of 7 participants.

2.2 Measurement Tools

2.2.1 Measurement of Parenting Stress

This research adopted K-PSI/SF: Korean version of Parenting Stress Index-Short Form, which is a slightly revised version of Abidin Parenting Stress Index (PSI). The tool consists of 36 measurement items: 12 items for maternal role performance, 12 for mother-child dysfunctional interaction, and 12 for children’s behavioral characteristics. Each item was measured on a 5-point Likert scale.

2.2.2 Measurement of Maternal Efficacy

Maternal efficacy, in turn, was measured by using Mother’s maternal efficacy scale developed by, of which the validity and reliability was verified. The tool consists of 18 items: 5 items for overall parenting ability, 3 for healthy parenting, 3 for communication ability, 3 for study guidance and 3 for discipline ability. Each measurement item was measured on a 5-point likert scale.

2.2.3 Research Design and Process

The current research employs a pre/post test controlled group design. A series of 10 therapy sessions, once a week, were provided to the subjects from April to July 2015. Each session was carried out with a sixty minute individual sand play therapy consulting. In each sand play therapy, the subjects were allowed to express their thoughts and feelings in a sand box in nondirectional and unstructured way. The role of the therapists/researchers was giving responses to their expressions in both verbal and nonverbal ways.

2.2.4 Data Analysis

A couple of nonparametric analytical methods were utilized to identify the change between pre- and post-sand play therapy: Mann-Whitney U analysis and Wilcoxon signed rank Test. Collected data were analyzed by the statistical program of SPSS 20.0.

3. Results

3.1 Effect of Sand Play Therapy on Parenting Stress of Mothers with Young Children

The results of analysis of the effect of sand play therapy on the parenting stress of mothers with young children were illustrated in Table 1. Parenting stress in terms of the sub-factor of overall maternal role performance significantly decreased after sand play therapy: M= 39.29 before therapy and M= 30.29 after therapy (Z= -2.02, p<.05).

| Categories                  | Experiment Group (n=7) | Control Group (n=7) | Z   |
|-----------------------------|------------------------|---------------------|-----|
|                             | M (SD)                 | M (SD)              |     |
| Maternal role performance   |                         |                     |     |
| Pre                         | 39.29 (9.53)           | 38.57 (6.95)        | -1.98*|
| Post                        | 30.29 (6.18)           | 38.43 (5.44)        | -1.98*|
| Z                           | -2.02*                 | -0.96               |     |
| Mother-child dysfunctional interaction |                       |                     |     |
| Pre                         | 27.00 (4.80)           | 29.86 (5.55)        | -1.03 |
| Post                        | 21.71 (5.35)           | 29.86 (3.98)        | -2.50*|
| Z                           | -2.37*                 | -2.96               |     |
| Children’s behavioral characteristics |                     |                     |     |
| Pre                         | 41.57 (8.24)           | 37.00 (4.76)        | -1.10 |
| Post                        | 35.71 (7.13)           | 36.00 (4.76)        | -0.13 |
| Z                           | -1.86                  | -1.59               |     |
| Total                       | Pre 107.86 (18.38)     | 105.43 (12.57)      | -0.57 |
|                            | Post 87.71 (16.08)     | 104.29 (11.83)      | -1.60 |
| Z                           | -2.37*                 | -1.86               |     |

*p<.05
The experimental group also showed significant change in mother-child dysfunctional interaction: M=27.00 before therapy and M=21.70 after therapy (Z = -2.37, p < .05). In contrast, there was no significant change in stress related with children’s behavioral characteristics, though it also decreased; M=41.57 before therapy and M=35.71 after therapy.

In total scoring, a statistically significant change was obtained between pre- and post- therapy: M= 107.86 and 105.43, respectively (Z= -2.37, p<.05). To conclude, sand play therapy would help reduce parenting stress related with maternal role performance and mother-child dysfunctional interaction.

### 3.2 Effect of Sand Play Therapy on Parenting Efficacy of Mothers with Young Children

Table 2 shows the results of analysis under discussion. As for overall parenting ability, the experimental group showed a significant increase after sand play therapy (M= 20.86) than before therapy (M= 16.86) (Z = -2.37, p < .05).

It was also found that their healthy parenting ability also improved significantly: M= 10.86 before therapy vs M= 11.71 after therapy (Z= -2.12, p<.05). As expected, their communication ability also marked a significant improvement: M= 10.43 before therapy and M= 12.14 after therapy (Z = -2.04, p<.05).

In sum, the total score in maternal efficacy had a significant improvement: M= 68.43 after therapy in comparison with M= 58.00 before therapy (Z= -2.37, p<.05). Thus, these results might lead us to come to the conclusion that sand play therapy did help enhance maternal efficacy in all the areas of overall parenting ability, communication ability, healthy parenting ability, study guidance ability and discipline ability.

### 4. Conclusions

The results and implications of the current research can be summarized as follows: First, it was found that sand play therapy helped reduce parenting stress of the mothers with young children. A significant difference in parenting stress was manifested between a pretest and a posttest. Their stress significantly reduced in the areas of maternal role performance and mother-child dysfunctional interaction.

Expressing mothers’ parenting stress verbally is only a part of the stream of consciousness. Thus, it would not adequately display the nature of overall parenting stress. Sand play therapy, in contrast, would help mothers naturally express the intrinsic causes of parenting stress by using nonverbal symbols. Also, sand play therapy effectively helped identify inter-individual differences, since it dealt with an individual's subjective parenting stress.

Second, it was found that sand play therapy helped enhance the maternal efficacy of mothers with young children. A significant change was obtained between pre- and post sand play therapy to the participants. Positive change was identified in the sub-factors of overall parenting ability, healthy parenting ability, communication ability, study guidance ability and discipline ability.

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**Table 2. Effect of sand play therapy on maternal efficacy.**

| Categories                 | Experiment group (n=7) | Control group (n=7) | Z       |
|----------------------------|------------------------|---------------------|---------|
|                            | M (SD) | M (SD) |        |
| Overall parenting ability  |         |        |        |
| Pre                        | 16.86 (1.95) | 16.43 (2.57) | -2.26 |
| Post                       | 20.86 (2.61) | 15.71 (2.29) | -2.77**|
| Z                          | -2.37* | -0.63  |        |
| Healthy rearing ability    |         |        |        |
| Pre                        | 10.86 (1.95) | 9.43 (0.98) | -1.57 |
| Post                       | 11.71 (1.50) | 10.43 (1.40) | -1.46 |
| Z                          | -2.12* | -1.73  |        |
| Communication              |         |        |        |
| Pre                        | 10.43 (2.76) | 8.43 (1.40) | -1.84 |
| Post                       | 12.71 (1.11) | 8.71 (1.38) | -3.19**|
| Z                          | -2.06* | -0.71  |        |
| Study guidance ability     |         |        |        |
| Pre                        | 9.00 (0.82) | 8.43 (1.27) | -0.81 |
| Post                       | 11.00 (1.15) | 8.86 (1.77) | -2.28*|
| Z                          | -2.23* | -1.13  |        |
| Discipline ability         |         |        |        |
| Pre                        | 10.86 (2.04) | 10.14 (1.07) | -0.40 |
| Post                       | 12.14 (1.46) | 9.86 (1.35) | -2.40*|
| Z                          | -2.04* | -0.82  |        |
| Total                      |         |        |        |
| Pre                        | 58.00 (6.73) | 52.86 (5.84) | -1.28 |
| Post                       | 68.43 (7.25) | 53.57 (6.00) | -3.01**|
| Z                          | 2.37*  | -0.11  |        |

*p<.05, **p<.01
It is worthwhile to note that some of the mothers were unconscious that they had experiences of having their heart hurt and of not receiving positive nurturing by their mothers, primary fosterers. Therefore, it would not be easy for mothers to exceed limitations in carrying out programs for new maternal role performance, unless they recognize their unsolved negative experiences anew.

Some suggestions are in order for future studies. First, a greater number of subjects should be involved in order to come to a generalization. Second, the current research focused on the change in mothers’ stress, but it might be necessary to make follow-up investigations into whether the change remains in their real lives.

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6. References

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