

Effectiveness of Teaching Parenting and Behavior Modification Methods to Mothers on the Signs of Separation Anxiety in Elementary-School Children

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Abstract: The present study was aimed to study the effectiveness of teaching parenting and behavior modification methods to mothers on the signs of separation anxiety in elementary-school children. The present research was semi-experimental. Moreover, it was conducted in two stages of pre-test and post-test for two groups: control and experiment group. A sample of 30 elementary students (grades 1-4) and their mothers was selected using convenience sampling method. In order to measure the level of anxiety in students, an anxiety sub-scale was used in CSI-4 parent form questionnaire and to evaluate parenting methods of mothers, Bamrind's questionnaire was used.

Key words: Parenting methods, behavior modification, mothers, separation anxiety in elementary-school children, anxiety

INTRODUCTION

In certain periods of growth, almost all children experience a certain type of anxiety when they feel separated from their guardians. In fact, the incidence of separation anxiety in babies (18-24 months) is a natural and normal event. Normally, new-born babies start to cry when their parents step away from them; they stick to their parents and cry. Some children have even more intense separation anxiety signs. Children with this disorder find it very difficult to separate from those who they are very dependent on and when their parents want to step away they try hard to avoid such a separation (Motlagh *et al.*, 2007). Separation Anxiety Disorder (SAD) is the most common anxiety disorder in childhood. Estimations of its spread among children are from 3-5%. Anxiety disorders such as separation anxiety can become chronic issues if they are not cured.

Studies on anxious children and parents have shown that anxious children are more likely to have anxious mothers. Mothers with high levels of anxiety tend to excessively support their children, be less friendly with them and give them less autonomy and independence. They tend to minimize curiousness and being investigative in their children, leading to SAD in them. Since, many disorders in childhood result from negative interactions between parents and children, treatments for SAD can help treat other childhood disorders. Studies

show that improvement in functions of family members and an increase in positive parent-child interactions can help prevent children's SAD (Sadatian, 2011). For most children, imagination of being in a place without a mother is accompanied by stress but they can manage and control it. It seems that there isn't such ability in a child with SAD. Hence, for a child that is very dependent on his/her parents it is difficult to properly control and express emotions. Therefore, the level of children's dependence on their mothers has a significant relationship with their ability to control and manage separation anxiety (Mikulincer and Florian, 1998).

When facing anxiety resulting from being left alone, children's emotional/cognitive structures are formed based upon parent-child interactions and their active inner patterns rule their behavior and expectations (Crowell and Treboux, 1991). Therefore, interventions in the interactions of mothers and children change close and friendly relationships and the way children cope with stressful situations. This way their self-efficacy increases, their tensions decrease and their patterns of relationship with parents change (Lieberman, 2003). Study findings show that interventions based on children's dependence and anxiety management by parents play a positive role in reducing the signs of children's ASD (Lieberman, 2003). Parent-child trainings are based on two theories of dependence and social learning which teach parents to interact with their children in a friendly, affectionate and

responsive way. Modifying parent-child interactions helps parents to have warm and responsive relationships with their children and to manage their children's behavior effectively. This model is based on the idea that improvement in parent-child interactions lead to improvement in child-family performance. This type of training targets parents' excessive control which plays a big role in children's anxiety. The method of this research is based on the above-mentioned criteria and is provided with the assumption that children with anxiety disorder possess parents that show no interest in their autonomy and independence and are to some extent controlling. Other studies show that parents play a role in their children's evasive behavior and they do this by encouraging them to solve problems in an evasive manner, i.e., anxious children might show a little interest in evasion but when they discuss problems with their parents their tendency to evade increases (Miller and Feeny, 2003). It seems that child-parent interactions play a role in the development of children's anxiety problems. Thus, the researcher seeks to see if teaching effective parenting methods to mothers in proper ways can help improve child-parent interactions and reduce anxiety signs.

MATERIALS AND METHODS

Considering data-collection method this study is a semi-experimental research in which independent variable is modified in order to measure its effect on dependent variable. The design of the research is a pre and post-test design with a control group. The statistical population of the present study included all mothers and female and male elementary students of grades 1-4 who studied in Karaj from 2013-2014. Considering the scores of the study's questionnaire (CSI-4 parent form anxiety subscale) they received higher scores. In this research, from male and female elementary students of grades 1-4 in Karaj, 30 students were selected using a convenience sampling method and they were randomly divided into two groups-experiment group and control group. The number of respondents was equal in both the experiment group and the control group (15 members in the experiment group and 15 members in the control group). Statistics analysis methods of the present study included calculation of mean, standard deviation and covariance analysis. The tools used in this study were as follows:

Diana Bamrind's parenting methods questionnaire: This questionnaire was designed by Diana Bamrind in 1972. The 30 questions of this questionnaire evaluated three parenting methods; 10 questions evaluated powerfully

method, 10 questions evaluated autocratic method and 10 questions evaluated easy-taking method. The pattern for responding to questions is based on a Likert 5-point scale. This questionnaire has been examined in many studies, and its reliability and validity have been reported to be in a favorable level. Using a retest method, Buri (1991) calculated and reported the reliability of this tool in mothers and fathers to be 0.81, 0.77 and 0 for easy-taking method, 0.86 and 0.85 for autocratic method and 0.78 and 0.88 for powerful method. In addition he reported the diagnostic validity of the questionnaire to be favorable. Hence, fathers' autocratic method has a reverse relationship with their easy-taking (-0.38) and powerful method (-0.48) and mothers' autocratic method also has a reverse relationship with their easy-taking method (-0.50) and powerful method (-0.52). In Iran, Esfandiari (1995) reported the reliability and validity of the questionnaire to be favorable.

CSI-4 questionnaire: The last edition of this questionnaire has two forms for parents and teachers which compared to other methods have proved to be efficient. Additionally, its diagnostic criteria are based on diagnostic and statistical directory criteria of mental disorders; its terms are very simple and understandable. Two scoring methods have been designed for children's sickness signs questionnaire; a screening cut scoring method and a scoring method based on the intensity of sickness signs. In the screening method, scores are calculated through summing up the number of questions which have been responded to by saying "sometimes" and "most of the time". A score of "zero" was considered for responses such as "never" and "rarely" and a score of "1" as considered for responses such as "sometimes" and "most of the time". In the sign intensity scoring method, choices such as "never", "rarely", "sometimes" and "most of the time" receive scores of 0, 0, 1, 1, respectively. By summing the scores, the total score of sign intensity is calculated. In order to calculate the validity and reliability of this questionnaire, Mohammad Esmaeel selected two groups of normal children (between the ages of 6 and 14) from Tehran's elementary schools as respondents; this statistical population consisted of 1080 individuals. The results obtained from the analysis of the questionnaire's data showed that the parent form of CSI-4 questionnaire has favorable validity and fairly favorable reliability for Iranian children.

Treatment session schema of the research:

- Sessions 1 and 2: explanations on parenting styles, children's growth characteristics, peer pressure and explanations on emotional intelligence and discussion over emotional responses

- Session 3: explanations on practical methods for changing and modifying behavior with an emphasis on learning and using positive encouragement processes and positive encouragements
- Session 4: explanations on game-therapy based on a child-focused approach to basics of game sessions, and explanations on game-therapy and some rules and limitations
- Session 5: discussion and examination of common problems in game sessions
- Session 6: explanations on skills included in game sessions in discussions over common problems of game sessions
- Session 7: explanations on story-telling and teaching social skills through stories
- Session 8: holding story-therapy sessions; making up stories
- Session 9: explanations on choice; teaching responsibility and decision-making
- Final session: explanations on important events: what have I learned about my child? this method is in fact with child-parent interactions

RESULTS AND DISCUSSION

The results presented in Table 1 indicate that in the pre-test stage there is not a significant difference between the average scores of separation anxiety in the control group and the experiment group. However, in the post-test stage, the average scores of separation anxiety in the experiment group, compared to the control group have decreased.

The results given in Table 2 show that in the pre-test stage there is not a significant difference between the average scores of easy-taking and autocratic parenting styles in the control and the experiment group. However,

in the pre-test stage, the average scores of powerfully parenting styles in the control group are higher than in the experiment group. In spite of this in the post-test stage, the average scores of easy-taking and powerfully parenting styles in the experiment group have slightly increased, compared to the control group and the experiment group have decreased. The average scores of powerfully and autocratic parenting styles in both groups are higher than the average scores of easy-taking parenting styles.

According to the results given in Table 3 and considering the fact that the value of F calculated for the pre-test scores of separation anxiety signs in children of the control and experiment groups are significant ($F(27, 1) = 29/722$ $p < 0/01$), the value of F calculated for post-test scores of separation anxiety signs in children of the control and experiment groups is significant after keeping the effect of separation anxiety pre-test scores consistent ($F(27, 1) = 79/614$ $p < 0/01$). In conclusion, there is a significant difference between the separation anxiety signs pre-test average scores of children in the control and experiment groups. The comparison of adjusted average scores in both groups showed that the mean of separation anxiety signs in the experiment group ($M = 1/211$) is lower than that in the control group ($M = 4/859$). Therefore, interventions based on child-mother interactions (training program for parenting styles and behavior modification) have affected separation anxiety signs in elementary-school children of the experiment group whose mothers have participated in the program, compared to children of the control group whose mothers have not participated in the program, leading to a reduction in separation anxiety signs in children of the experiment group. The size of the calculated effect ($\eta^2 = 0/747$) shows the fairly intense

Table 1: Descriptive indexes of separation anxiety in the control group and the experiment group in pre and post-test stages

Variable	Stage	Experiment group (mean)	Standard deviation	Control group (mean)	Standard deviation
Separation anxiety	Pre-test	4.133	1.187	4.600	1.121
	Post-test	1.000	1.732	4.800	1.082

Table 2: Descriptive indexes of parenting style scores in the control and experiment groups in pre-test and post-test stages

Variables	Stage	Experiment group (mean)	Standard deviation	Control group (mean)	Standard deviation
Easy-taking	Pre-test	18.200	5.990	17.800	2.883
	Post-test	22.067	6.573	18.800	3.968
Autocratic	Pre-test	27.400	8.768	27.400	9.984
	Post-test	21.200	5.841	26.467	9.899
Powerful	Pre-test	24.933	4.008	29.467	1.727
	Post-test	30.000	5.843	28.267	3.218

Table 3: Results of covariance analysis for the scores of separation anxiety signs in the control and the experiment groups

Source change	Sum of squares	Degree of freedom	Mean square	F-values	Significance	Size of η^2 effect
Pre-test	30.601	1	30.601	29.722	0.001	0.524
Group	81.970	1	81.970	79.614	0.001	0.747
Error	27.799	27	1.030			
Total	166.700	29				

Table 4: Results of covariance analysis for the scores of parenting styles in two groups: control and experiment

Variables	Source of change	Sum of squares	Degree of freedom	Square mean	F-values	Significance	Size of η^2 effect
Style	Pre-test	58.462	1	58.462	2.058	0.163	
Easy-taking	Group	73.979	1	73.979	2.605	0.118	
	Error	766.872	27	28.403			
	Total	905.367	29				
Style	Pre-test	1394.115	1	1394.115	35.712	0.001	0.569
Autocratic	Group	208.033	1	208.033	5.329	0.029	0.165
	Error	1054.018	27	39.038			
	Total	2656.167	29				
Style	Pre-test	24.685	1	24.685	1.114	0.301	
Powerful	Group	46.047	1	46.047	2.078	0.161	
	Error	598.249	27	22.157			
	Total	645.467	29				

effect of the child-mother program (training program for parenting styles and behavior modification) on the reduction of separation anxiety signs in children. According to Cohen (1988), η^2 of 0/01 indicates a small effect, 0/06 indicates a medium effect and 0/138 indicates a big effect.

According to the results presented in Table 4 and considering the fact that the value of F is only significant for autocratic parenting pre-test scores of children's mothers in the control and experiment group ($F(27, 1) = 35/712$, $p < 0/01$), the F calculated for autocratic parenting post-test scores of children's mothers in the control and experiment group is significant after keeping the effect of autocratic parenting pre-test scores consistent ($F(27, 1) = 5/329$, $p < 0/01$). In conclusion by keeping the effect of pre-test scores there is a significant difference between the autocratic parenting post-test average scores of children's mothers in the control and experiment group. The comparison of adjusted average scores of both groups shows that the average score of autocratic parenting style in mothers of the experiment group ($M = 21/201$) are lower than that in mothers of the control group ($M = 26/46$). Therefore, this intervention which is based on child-mother interactions (training program for parenting styles and behavior modification) affects autocratic parenting style of elementary-school children's mothers in the experiment group, who have participated in the program, compared to children's mothers in the control group, who have not participated in the program, leading to a reduction in autocratic parenting style in children's mothers of the experiment group. The size of the calculated effect ($\eta^2 = 0/167$) indicates the fairly intense effect of child-mother interaction (training program for parenting styles and behavior modification) on reduction in autocratic parenting style of mothers; according to Cohen (1988), η^2 of 0/01 indicates a small effect, 0/06 indicates a medium effect and 0/138 indicates a big effect.

Methods which parents use for training their children play a basic role in providing mental health. It is healthy

relationships that help identify and fulfill children's needs. As mentioned earlier, each of these methods has a certain effect on children's behaviors; the negative and destructive effects of easy-taking and autocratic methods outnumber those of other methods. What is important here is that according to conducted studies, the best parenting style is powerfully parenting. In this style of parenting, parents are very powerful and controlling even though they have warm and friendly relationships with their children. This method helps children to better adapt with social norms, having a small effect on children's freedom. Such children are self-efficient, sensible, confident, active, self-disciplined and responsible. The result of the present study showed that teaching parenting styles affects children's anxiety level. Training families and mothers using autocratic parenting styles, and interactions based on child-parent interactions in pre and post-test stages had significant differences. This conclusion can be attributed to the characteristics of other parents such as sensible, easy-taking and powerful parents who have been less affected by short-term trainings offered by researcher; perhaps in order to become better in terms of parenting styles these parents need more and longer training sessions and perhaps they need more private training sessions. However, it is clear that when a sudden warning is given those who are in crisis experience the most effect. By giving simple warnings they step away from the edge of crisis; however, we need to take more time and energy to train those who are in the middle of their way to crisis and see no obvious danger. It is crystal clear that researcher's lessons have been able to have a temporary effect on mothers using autocratic parenting styles but the sustainability of such an effect requires more sessions. By putting mothers who use autocratic parenting styles and those who do not in the same group and by sharing and comparing their parenting experiences, mothers using autocratic parenting styles can rethink their approaches, helping to reduce stress and tension in children and families. The results obtained from the present research are in congruence

with the findings of other researchers. In their study, Grolnick and Ryan (1989) showed that powerfully parenting styles are associated with positive behavioral consequences such as self-discipline, great social abilities, positive social adaptability and low level of cognitive-behavioral dysfunction. Deslandes (2000) has shown that children of powerful mothers have higher levels of autonomy than children of autocratic and easy-taking mothers. Rezaie (1996) stated that there is a significant relationship between this parenting style and students' social maturity in all grades. In their study, Dekovic and Janssens (1992) stated that children's social status can be predicted through their parents' parenting styles. Examination of the relationship between powerfully parenting style (communication or support, discipline or control and autonomy or participation) and anxiety shows that all components of this training style have a significant, negative relationship with anxiety.

CONCLUSION

The statistical analysis of the data obtained from the research showed that intervention based on a training program for parenting and behavior modification affects the signs of separation anxiety in children of the experiment group whose mothers have experienced this program, compared to children in the control group whose mothers have not experienced the program, leading to a reduction in separation anxiety signs in the children of the experiment group. In addition, the obtained results showed that teaching parenting methods has had significant impacts on mothers' autocratic parenting methods.

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