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## The Effectiveness of Cognitive Group Play Therapy on Separation Anxiety of 7-12-Year-old Male Students in Bandar Abbas

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**Abstract** Separation anxiety illness stems from preschool period and may persist for years. Separation anxiety may occur in any situation where there is the possibility of separation. It is extremely motivated and inspires the person to avoid the situations that require separation. This study aimed to assess the effectiveness of group play therapy by cognitive method on separation anxiety 7-12 year-old male students. For this purpose, 32 children with separation anxiety were selected by available sampling method and were randomly placed in two groups of cognitive-behavioral group play therapy and the control group. Child Symptom Inventory CSI-4 was used to collect data. Covariance and Smirnov- Kolmogrov test were used to analyze the data. The results of the data analysis showed that cognitive-behavioral group play therapy is effective on reducing separation anxiety in 7 to 12 years children. The impact is significant with the amount of  $F= 217.60$  at alpha level of 0.01. In a brief conclusion of this research, it can be said that the methods of play therapy are effective in reducing separation anxiety in children.

**Keywords:** Separation anxiety, cognitive-behavioral group play therapy, students

### Introduction

Although terms such as fear, worry and anxiety are often used interchangeably, a clear difference can be seen between them in the empirical literature. These differences are related to definitions and description of the phenomenon. For example, fear is described as a reaction to a true understanding of the risks that are associated with unpleasant sensations. Worry is usually considered as the cognitive component of anxiety and is comprised of uncontrollable negative thoughts about future events. So, the main difference between these two phenomena with anxiety is that fear occurs in the presence of real threatening stimulants, while worry is associated with future-oriented thoughts about threatening stimuli and the absence of the stimulus (Essau and Petermann, 2001).

Finally, the anxiety is defined as a general term and includes physiological stress, threatening perception and behavioral avoidance. When a person faced with real dangerous stimuli, anxiety response has an adaptation value. However, when this reaction is an extreme one and unreasonable against the risk, it hurts the individual and is referred to as anxiety disorder. According to Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition, Text Revision, anxiety disorders have been divided into several categories including: panic disorder without agoraphobia, panic disorder with agoraphobia, agoraphobia without history of panic disorder, specific phobia, social phobia, obsessive-compulsive disorder, generalized anxiety disorder and separation anxiety disorder (Essau and Petermann, 2001).

Separation anxiety disorder is the most common anxiety disorder of childhood and about half of the children who refer for treatment have separation anxiety disorder (Talebpoor et al,

2013). It is estimated that the prevalence is between 3 to 7 percent (Lost and Strauss, 1989). Studies in Iran have shown the prevalence of the disorder among 7 to 9 years old children as 6 to 7 percent (Talebpour et al, 2013). Separation anxiety disorder is more prevalent in small kids than adolescents. Its prevalence has been reported the same among girls and boys. This disorder may be started in pre-school years, but often its age of onset is between 7 and 8 years old (Sadok, Sadok, 2003; translated by Pour Afkari, 2003).

The characteristic of separation anxiety disorder appears a severe anxiety when separated from parents, home or other familiar environments. The worry of the child is more than it should be naturally due to the level of his growth and is not significant with other disorders. Children with this disorder afraid that one of their dears suffers an injury in their absence or an important horrible thing happen to them when they are away from their caregivers. Many children are worried that their parents or themselves have accidents or be patient. Fear of lost, be stolen and never seeing parents again are common (Jalali and Maolavi, 2010). Common situations in which separation anxiety occurs are: refusing to go to school, to sleep alone at night or meeting a friend. When avoidance is impossible, children may resort to intrasigence behaviors such as wrangling, screaming, threatening and bringing excuses (Essau and Petermann, 2001).

In the fourth edition of Diagnostic and Statistical Manual of Mental Disorders (1999; translated by Nikkhoo et al., 2002), separation anxiety disorder based on the criteria of child's special needs is the only anxiety disorder. The rest of the anxiety disorder classes (panic disorder, particular social phobias, obsessive-compulsive disorder) are based on adult standards. Based on the outlined criteria in the Diagnostic Statistical Manual of Mental Disorders, the following criteria are considered as separation anxiety:

- 1) Excessive and persistent distress when separation from home or whom the child is attached to is occurred or predicted.
- 2) Excessive and persistent worry about possible loss or injuries of attachment.
- 3) Excessive and persistent worry about the occurrence of a sudden event that separates the person from whom they are mainly attached to (such as getting lost or being stolen).
- 4) Reluctance or refusal to go to school or other places because of fear of separation.
- 5) Resistance or persistent and excessive fear of staying at home alone or without those the child is attached to them.
- 6) Reluctance or refusal to sleep alone or in a place away from home.
- 7) Repeated nightmares the content of which is separation.
- 8) Repeated complaints of physical symptoms (such as headache, stomach ache, nausea and vomiting) at a time when separation is near or predicted.

Of the proposed signs, at least three marks should be continued constantly for a month to be recognized as separation anxiety (Diagnostic and Statistical Manual of Mental Disorders, 1999; translated by Nikkhoo et al., 2002).

To treat children's problems, we cannot act the same way with adults. Counseling method for children needs more attention and skill. One of the methods used in behavioral disorders in children is play therapy. Play Therapy relates the child's inner thoughts to the outside world and makes the child bring external objects under his control (Axline, a 1974; Landreth, 2009). Playing permits children to show the threatening experiences, thoughts, emotions and tendencies. Playing is a proper method for children because children often have difficulty in expressing their feelings verbally. Children could reduce the obstacles through playing and show their feelings better (Carmichael, 2006; Landreth, 2002; Pedro-Carrpll & Reddy, 2005; Axline, b 1974). Play therapy is done both individually and in a group (Connor, 2005). Group

play therapy is a natural link between two effective treatments. The combination of play therapy and group therapy is a psychological and social process in which children learn things about themselves through communication with each other in the play room. Group play therapy provides a chance for the therapist to help children learn to resolve conflicts. In the cognitive - behavioral therapy, it is been assumed that the person's perceptions and interpretations of situations determines his emotional and behavioral responses to the position (Prins, 2003; Rincon, Hoyos and Badiel, 2003; Wood, 2001). Theoretically, it is emphasizing the interaction of the individual and environment, rather than the individual or environment separately. Activities must be structure and target oriented and meanwhile make bringing the automaticity (spontaneous) factor possible for children for the group play therapy to be effective with this view (Azarnioshan, BehPazhoh and Ghobari Bonab, 2012).

Baggerly and Parker (2005) also stated that play therapy causes to improve social skills, self-esteem, self and others' acceptance, depression reduction and other disorders in children. AbdeKhodae and Sadeqi Ordoobady (2011) evaluated the amount of separation anxiety disorder in children and the effectiveness of play therapy by cognitive approach on the reduction of children's separation anxiety disorder. The results of their study showed that there is no significant difference between the control and test groups in the separation anxiety after using independent variables and behavioral-cognitive play therapy can significantly improve the separation anxiety disorder in children. In a general conclusion, it can be said that there are a variety of play therapy treatment methods (child-centered play therapy, puppet play therapy, and cognitive-behavioral play therapy) that are applied to problems of children. The important point that the present study has paid attention to is using cognitive-behavioral approach in group method and the main question that the researcher seeks to find an answer to is: whether group play therapy is effective on the reduction of separation anxiety disorder of male students (7 to 12 years)?

**Methodology**

The method of the present study is quasi-experimental. The study is done with pre-test and post-test and control group. In the interval between the two tests, cognitive - behavioral group play therapy of each procedure was carried out during the six sessions of 45 minutes. Play therapy sessions were held twice a week with three days interval during a month and a half. The following diagram shows the design of the study.

**Table1.** Pre-test - post-test diagram of the present study

Groups	Pre-test	Experimental action	Post-test
cognitive - behavioral group play therapy	T1	X	T2
Control group	T1	-	T2

The statistical population and sampling method:

The study's statistical population included all 7-12 year-old students with separation anxiety disorder in Bandar Abbas who were studying in 2014-15 academic years.

Sampling methods is available sampling. The study sample was selected among patients referred to the counseling center of Hormozgan province Department of Education, district one and two education departments in Bandar Abbas and family counseling clinic of parents-teachers association of district 2 in Bandar Abbas. 20 people were selected for each group and 40 people eventually formed the study sample. In general, 4 patients shrinkage was observed in the control group. In the child-centered play therapy group, 3 people and in the cognitive-behavioral group 4 people shrinkage was observed. Finally, with the equal

elimination in the cognitive-behavioral group, the sample size of each group was 16 patients and 32 people in total.

Necessary criteria for inclusion in the sample:

1. Lack of severe physical illness
2. Absence of disease or mental disorder
3. Having at least 6 years and at most 12 years
4. Having separation anxiety sub-scale score greater than 4 in the Child Symptom Inventory

The content of the therapy plan

3 cognitive-behavioral group play therapy

The method of cognitive-behavioral group play therapy is conducted in six one-hour sessions.

The session plan is based on the following:

Before starting group meetings, children will get familiar with play therapy room in an individual meeting. The purpose is to reduce anxiety in children and getting familiar with the play therapy room and the therapist in order for them to feel safe and relax.

First session: members of the group will be introduced to each other. In this meeting, the compatibility of children will be considered and friendship relationships will be stressed.

Second session: group dolls and puppets play to create favorable behavior.

Third session: doing group plays such as mini-basketball and balls pool for the creation of cooperation and social communication in children.

Fourth session: using animal toys to explore the fear of relationship with others, and removing the anxiety of children from others.

Fifth session: Using imaginary play to help children express fears, dreams and ideas verbally and nonverbally, playing with patterns based on child's request.

Sixth session: Using paste with the goal of expressing feelings and fears through sculptures and modeling the successful models to overcome the anxieties (AbdeKhodae and Sadeqi Ordoobady, 2011).

Data collection tools:

Child Symptom Inventory (CSI-4):

This questionnaire has two forms. Parents' form has 112 questions that is been designed into 11 major groups and an extra one of behavioral disorders and teachers' form has 77 questions that includes 9 major categories of behavioral disorders. Each of these subgroups has their own sub-categories and includes questions of its own. In this study, the parent form was used. Child Symptom Inventory has features such as simplicity of implementation and ease of understanding. Its questions are made understandable in a simple way and simpler terms have been replaced by technical psychiatry terms.

Two scoring methods are designed for CSI4. Screening section method and scoring based on the severity of symptoms. Screening section method is been used in most of the researches and is scored in a 4-point scale of never = 0, sometimes = 0, often = 1 and more often =1. The score for screening section in most disorders is obtained from the sum of the number of questions that have been answered as often or more often. Mohammad Ismail (2004) studied the validity and reliability Child Symptom Inventory (CSI-4) on 680 students at 6-11 years old in Tehran. CSI4 reliability evaluation by retest method of the questionnaires shows it as 0.88 using Cronbach's alpha coefficient. Regarding the content validity, the results of reviewing experts' judgments show homogeneity and appropriateness of the content of CSI4 with the evaluation domain.

**Results**

**Table2.** Frequency and age percentage of participants:

Child's age	Frequency	Percentage
7 years old	12	25
8 years old	12	25
9 years old	10	21
10 years old	6	12
11 years old	5	11
12 years old	3	6
<b>Sum</b>	48	100

The above observations show that children with separation anxiety at the age of 7 are with frequency of 12 people, children at the age of 8 are with the frequency of 12 people, 9-year-old children are with the frequency of 10 people, 10-year-old children are with the frequency of 6 people, 11-year-old children are with the frequency of 5 people, and 12-year-old children are with the frequency of 3 people, and 48 people are totally included in the sample size of this study. The percentage frequency of the above table is presented in the following graph.

**Table3.** Descriptive characteristics of the research variables

Groups	Separation anxiety variable		
	Index	Pre-test	Post-test
<b>Control</b>	Minimum	5	5
	Maximum	9	8
	Mean	6.93	6.46
	Standard deviation	1.34	1.07
<b>cognitive - behavioral group play therapy</b>	Minimum	5	2
	Maximum	9	5
	Mean	7.12	3
	Standard deviation	1.02	0.81

In the control group at the pre-test stage, the minimum score of separation anxiety disorder is 5 and the maximum is 9, and the mean is 6.93 and its standard deviation is 1.34. In the post-test stage, the minimum score of separation anxiety is 5 and the maximum is 8, the mean score is 6.46 and the standard deviation is 1.07.

In the cognitive-behavioral group play therapy at the pre-test stage, the minimum score of separation anxiety is 5 and the maximum score is 9, the mean is 7.12 and the standard deviation is 1.02. In the post-test stage, the minimum score of separation anxiety is 2 and the maximum is 5, the mean score is 3 and the standard deviation is 0.81.

Covariance was used in order for the analysis of study hypotheses. Therefore, pre-hypotheses of covariance analysis were used first (normality of the data and homogeneity of variances). Tow sample kolmogorov-Smirnov test was used to evaluate for the normality of assumptions and Levene's test was used for the consistency of variances. Then, the hypothesis was studied after the assurance of pre-hypothesis.

The research hypothesis: group play therapy by cognitive-behavioral approach causes the reduction of separation anxiety among male students of Bandar Abbas.

**Table4.** Kolmogorov-Smirnov test results in the first hypothesis

Absolute difference	Positive	Negative	Kolmogorov-Smirnov statistics	Level of significance
<b>0.12</b>	0.06	-0.12	0.35	0.1

Observations of the above table show the normal distribution of the data in separation anxiety variable. Kolmogorov-Smirnov test results show that its value as 0.35 is not significant is at the level of 0.1. So, the normal distribution of data is not established.

**Table5.** Levene's test results to evaluate the homology of the two groups' variances in the first hypothesis

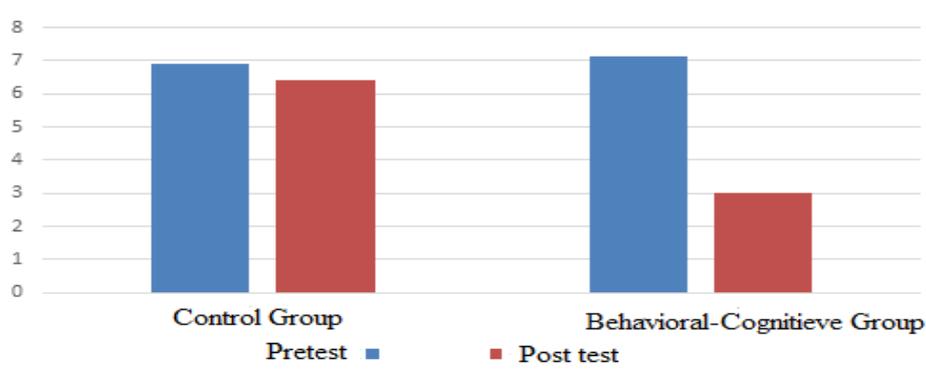
F	Degree of freedom 1	Degree of freedom 2	Level of significance
0.69	1	30	0.41

The above table's observations show Levene's test results for the separation anxiety disorder in the first hypothesis. The  $F = 0.69$ , at the alpha level of 0.41 is not significant. Therefore, the homology premise of the two groups of control and test variances is established. Therefore, the necessary premise for the implementation of covariance test is established.

**Table6.** Covariance test results in the first hypothesis of the research

Dependant variable	Change resources	Sum of squares	df	Mean of squares	F value	p	Atta square
<b>Separation anxiety</b>	Pre-test effect	13.91	1	13.91	29.78	0.01	0.50
	Group effect	101.62	1	101.62	217.60	0.01	0.88
	Error	13.54	29	0.46			
	Sum	840.97	32				
	corrected sum	123.71	31				

Observations of the table above showed the covariance test analysis results of the first research hypothesis. As it is clear from the above table in the first row after pre-test effect adjustment, the independent variable influence sign (cognitive-behavioral group play therapy) is on the separation anxiety dependent variable. This impact is significant with the amount of  $F=29.78$  at the alpha level of 0.01. Also, the second row of the above table shows the two groups of control and cognitive-behavioral play therapy. The difference is significant with the amount of  $F=217.60$ , at the alpha level of 0.01. Therefore, these findings suggest that cognitive-behavioral group play therapy has reduced the separation anxiety in children of the sample size of this study. The chart below provides the average score of pre-test and post-test in control and cognitive-behavioral group play therapy groups.



**Figure1.** The comparison of average scores of control and cognitive-behavioral group play therapy groups in the pre-test and post-test

As Figure 1 shows, the separation anxiety scores between the control group and cognitive-behavioral group play therapy had no significant difference in pre-test. But in the post-test stage, separation anxiety average score of cognitive-behavioral group play therapy has significantly reduced.

### **Discussion**

First hypothesis: cognitive-behavioral group play therapy reduces the separation anxiety disorder of male students in Bandar Abbas. The first hypothesis analysis results using ANCOVA showed that cognitive-behavioral group play therapy has caused to reduce the separation anxiety in 7-12 year old children.

The results of the present study are consistent with the results of Jalali and Maolavi (2010). They understood in their research that play therapy causes to reduce separation anxiety in children. On the other hand, the results of the present study are consistent with the findings of Jium Shin (2002) in a study evaluating the impact of short-term play therapy on the anxiety and depression of Chinese who have experienced earthquake. The results showed that play therapy causes the reduction of the level of anxiety, phobia and the risk of suicide in children. On the other hand, the findings of this study are consistent with the results of Jafari, Khalatbary, Todar and Abolfathi (2011); Jalali and Maolavi (2010); Jalali, KarAhmadi, Maolavi and Aghae (2011); Krenberg and Kazan (1999); and Baggerly and Parker (2005).

In explaining the findings of this study, it can be noted that group play therapy is a relationship between two effective treatments (cognitive-behavioral and grouping). This therapeutic approach for children provides a psychosocial process for themselves and others. The combination of cognitive-behavioral play therapy and group therapy is a psychological and social process in which children learn about themselves through communication with each other in the play room. Group play therapy provides a chance for the therapist to help children learn to resolve conflicts (Barzegar, 2013). On the other hand, the effectiveness of cognitive-behavioral group play therapy on separation anxiety in 7-12 years old children can be attributed to factors resulting from the application of cognitive-behavioral group play therapy. These include the improvement of imagination of children, creating harmony, harmony progress, manual skills enhancement, getting ready to cope with major life events, overcoming fears, familiarity with the world and the development of social skills (Barzegar, 2013).

The therapist teaches coping skills in this method and provides situations for him to practice these coping skills. These skills are protective factors in children with anxiety disorders. There are plans designed and performed for the treatment of anxiety disorders in this treatment which uses a variety of behavioral techniques. The first step in cognitive behavioral plans is identifying emotions. Then the child understands that there is a thought behind every emotion that would alter by the change of that thought. In cognitive-behavioral therapy, the child will be strengthened by the therapist and it is been tried to internalize theses reinforcements as well. The cognitive-behavioral therapist involves parents in the process of treatment of the child in order to get familiar with the correct practices of child's anxiety and help children to practice anxiety coping skills outside of therapy sessions (Ruhi, 2014).

It seems that the effectiveness of cognitive-behavioral therapy in reducing separation anxiety can be attributed to another factor. According to Friedberg, McClure and Garcia (2009), common myths among these children are around this theme that: "the worst will occur in case of the separation of the loved person and I will not be successful in my work alone". The combination of these factors seems to be due the domains of vulnerability, failure and being alone in case of separation from a loved one and therefore it expects a lot of anxiety in these

children when separated from the most important person in their life. Cognitive-behavioral therapy usually challenges these beliefs in order to make the necessary changes in the child.

#### **Limitations of the study:**

1. One of the limitations of this study is related to how to report the results of intervention. It is likely that parent (parents) have reported the impact of the intervention result more than what has happened actually. On the other hand, it is also possible to have reported the impact of the intervention lower than what has happened in the report form.
2. The limitation of the report of the amount of intervention effect to parents (mother) and the inconsideration of the teacher report form is also one of the numerous limitations of this study.
3. Inconsideration of variables such as income, occupation and the employment of both parents as a mediator in the effectiveness of treatment interventions in the separation anxiety.
4. Ignoring variables such as mental health of parents and a variable such as single-parent children are also one of the numerous limitations of this study.

#### **Research proposals:**

1. Teaching cognitive-behavioral play therapy as a group method to family counselors and child psychologists to address and treat the separation anxiety disorder in children.
2. Training and informing parents of the symptoms and consequences of separation anxiety in children.
3. Training of elementary schools and kindergarten trainers and teachers about the consequences and symptoms of separation anxiety.
4. Application of cognitive-behavioral group play therapy approach to reduce the separation anxiety disorder in children and other children disorders in counseling and psychotherapy centers.
5. The inclusion of symptoms and consequences of separation anxiety in children in family education or parents and teachers training sessions.
6. Comparing the effectiveness of child-centered play therapy with other approaches, for example consultant approach of Adler and family therapy.

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